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LangTeng Design/13586836982

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HUACHENG HYDRAULIC MECHINERY





ADAPTER

ZHEJIANG HUACHENG HYDRAULIC MECHINERY CO.,LTD.

ZHEJIANG HUACHENG HYDRAULIC MECHINERY CO.,LTD.

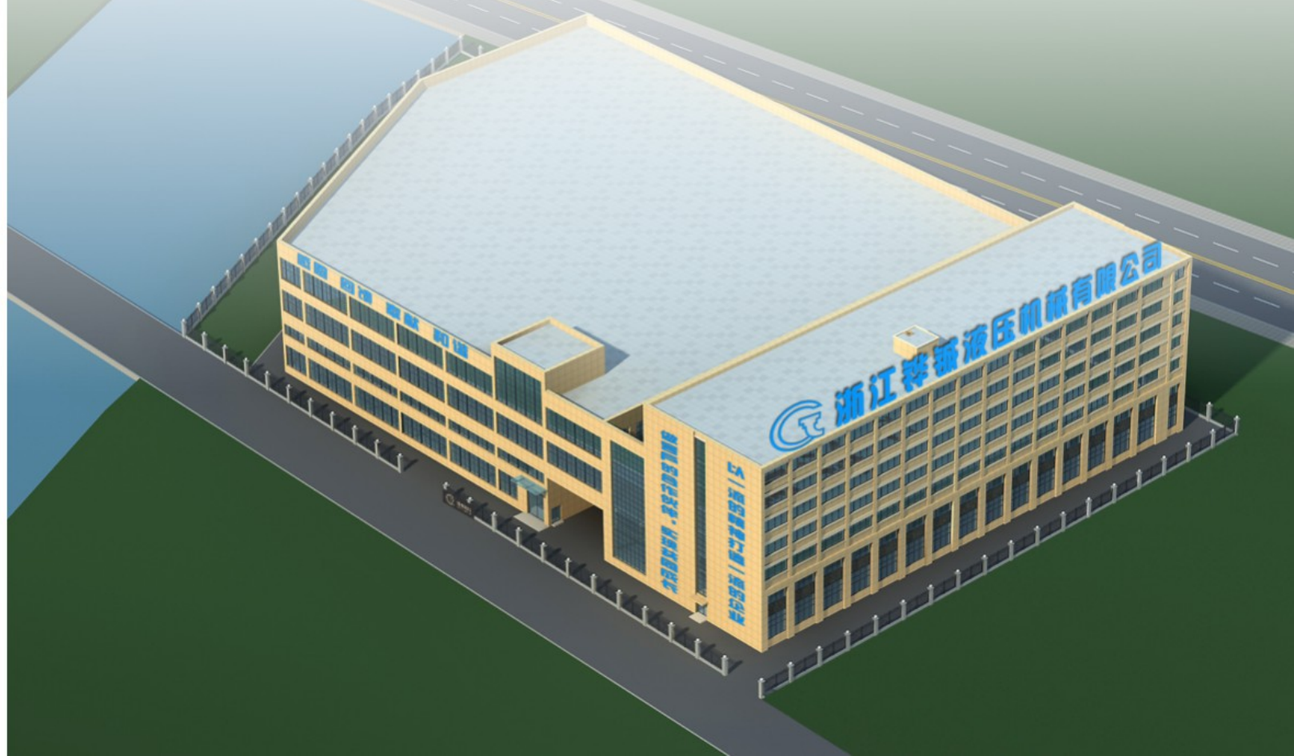
Zhejiang Huacheng Hydraulic Mechinery Co.,ltd. located in Diankou Industrial area which is well known as “South Hardware City” in China with amazing enviroments.It’s near Xiaoshan Intl.Airport to the north and Ningbo port to the east,with the convenient transportation,the econnomy is developing rapidly.

We are specialized in hydraulic fittings with more than ten years manufacturing experience in this field.The main products we are dealing with are hydraulic hose fittings,all kinds of adaptors and fittings.flange.and so on.

We have a group of professional and well-educated engineers and staffs with excellent occupational ethics,excellent occupational skills and collaborative spirits.In order to improve the quality.We introduced and imported many advanced machine such as CNC machine,multi-spindle automatic machine,turret lathe,electroheating tube blending machine and many other machines from Taiwan,France,Finland,Japan etc.Now our products are very popular in many countries such as Iran,Arab,India,Brazil,Russia and many other countries.

“Quality-frist,Integrity-based,Customer-foremost,Service-Best” as our mission,we are one of the first companies who got the approval of ISO9001:2008 quality system.

We will consistently cooperate with vast customers basing on superior products and best service and price.Warmly welcome frequent and new customers to call us or visit our company and negotiate with us for the sincere cooperation and bright future!



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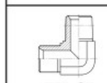
<tr><td> 
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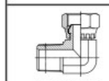
<tr><td> 
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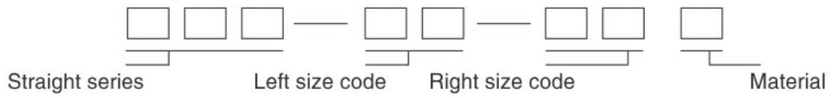
How to order adapter

1 Straight part NO.

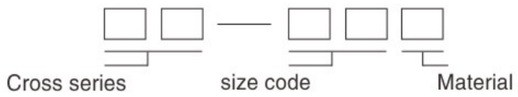


2 Elbow part NO.:Add suffix "4"for 45° elbow and suffix "9"for 90° elbow to the straight part number e.g, 1BG9−04OG and 1JT4−08−06SP.

3 Tee part NO.



4 Cross part NO.



In general for cross fitting,the four ends is the same.If different,the,the first group means left,the second group means up,the third group means right and the fourth group means down.

5 If the material is carbon steel, its code needn't be marked; other material codes are as below.

Material	Carbon steel	Brass	Stainless steel
Code	——	BR	SS

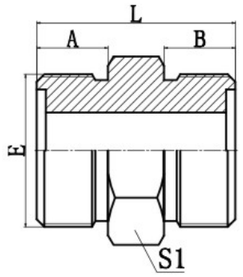
6 Size code table:

BSP Thread	G1/8" x28	G1/4" x19	_	G3/8" x19	G1/2" x14	G5/8 x14	G3/4" x14	G1" x11	G1.1/4" x11	G1.1/2" x11	G2" x11
BSPT Thread	R1/8" x28	R1/4 x19	_	R3/8" x19	R1/2" x14	_	R3/4" x14	R1" x11	R1.1/4" x11	R1.1/2" x11	R2" x11
NPT Thread	Z1/8" x27	Z1/4" x18	_	Z3/8" x18	Z1/2" x14	_	Z3/4" x14	Z1" x11.5	Z1.1/4" x11.5	Z1.1/2" x11.5	Z2 x11.5
JIC Thread	_	7/16" x20	1/2" x20	9x16" x18	3/4" x16	7/8" x14	1.1/16" x12	1.5/16" x12	1.5/8" x12	1.7/8" x12	2.1/2" x12
ORFS Thread	_	9/16" x18	_	11/16" x16	13/16" x16	1" x14	1.3/16" x12	1.7/16" x12	1.11/16" x12	2" x12	_
SAE Thread	–	–	–	5/8" x18	–	–	1.1/16" x14	–	–	–	–
Fiange size	–	–	–	–	1/2"	5/8"	3/4"	1"	1.1/4"	1.1/2"	2"
Size code	02	04	05	06	08	10	12	16	20	24	32
Note:The size of metric thread accords with the O.D. of thread.											

Example of order:

If 1BG' left end thread is G1/2" x14and right endthread is G3/4" x14,the fitting numberis 1BG−08−12.If made of stainless steel,the fitting numberis 1BG−08−12SS.

If AJJN' left end thread is 9/16" x18,mid end threadis 9/16" x18 and right end threadisZ1/2" x14,the fitting numberis AJJN−06−06−08.

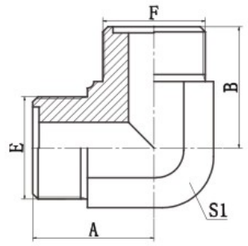


1E

METRIC MALE O–RING

PART NO.	THREAD	O–RING	DIMENSIONS			
	E、F	E、F	A	B	L	S1
1E–12	M12 × 1.25	8 × 1.9	11	11	28	14
1E–14	M14 × 1.5	10 × 1.9	11	11	28	17
1E–16	M16 × 1.5	11 × 1.9	11	11	28	17
1E–18	M18 × 1.5	13 × 1.9	11	11	28	19
1E–22	M22 × 1.5	16 × 2.4	12	12	32	24
1E–27	M27 × 1.5	20 × 2.4	13	13	36	30
1E–30	M30 × 1.5	24 × 2.4	14	14	39	32
1E–36	M36 × 2	30 × 3.1	16	16	43	38
1E–39	M39 × 2	32 × 3.1	18	18	49	41
1E–42	M42 × 2	35 × 3.1	20	20	53	46
1E–45	M45 × 2	38 × 3.1	21	21	55	46
1E–52	M52 × 2	40 × 3.1	22	22	59	55
1E–60	M60 × 2	45 × 3.1	24	24	65	65
1E–64	M64 × 2	50 × 3.1	27	27	71	70

Note:The parameter of O–Ring is ring outside diameter and ring width.

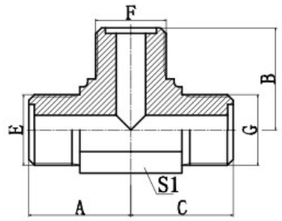


1E9

90° ELBOW METRIC MALE O–RING

PART NO.	THREAD	O–RING	DIMENSIONS		
	E、F	E、F	A	B	S1
1E9–12	M12 × 1.25	8 × 1.9	20.5	20.5	12
1E9–14	M14 × 1.5	10 × 1.9	22.5	22.5	14
1E9–16	M16 × 1.5	11 × 1.9	24	24	17
1E9–18	M18 × 1.5	13 × 1.9	26	26	19
1E9–22	M22 × 1.5	16 × 2.4	29	29	22
1E9–27	M27 × 1.5	20 × 2.4	32.5	32.5	27
1E9–30	M30 × 1.5	24 × 2.4	35.5	35.5	30
1E9–36	M36 × 2	30 × 3.1	42	42	36
1E9–39	M39 × 2	32 × 3.1	47.5	47.5	41
1E9–42	M42 × 2	35 × 3.1	49.5	49.5	41
1E9–45	M45 × 2	38 × 3.1	52.5	52.5	46
1E9–52	M52 × 2	40 × 3.1	57	57	50

Note:The parameter of O–Ring is ring outside diameter and ring width.

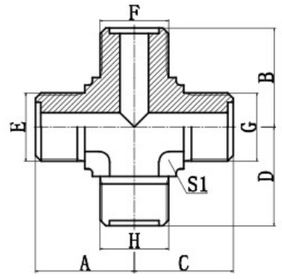


AE

METRIC MALE O–RING TEE

PART NO.	THREAD	O–RING	DIMENSIONS			
	E、F、G	E、F、G	A	B	C	S1
AE–14	M14 × 1.5	10 × 1.9	22.5	22.5	22.5	14
AE–16	M16 × 1.5	11 × 1.9	24	24	24	17
AE–18	M18 × 1.5	13 × 1.9	26	26	26	19
AE–22	M22 × 1.5	16 × 2.4	29	29	29	22
AE–27	M27 × 1.5	20 × 2.4	32.5	32.5	32.5	27
AE–30	M30 × 1.5	24 × 2.4	35.5	35.5	35.5	30
AE–36	M36 × 2	30 × 3.1	42	42	42	36
AE–39	M39 × 2	32 × 3.1	47.5	47.5	47.5	41
AE–42	M42 × 2	35 × 3.1	49.5	49.5	49.5	41
AE–45	M45 × 2	38 × 3.1	52.5	52.5	52.5	46
AE–52	M52 × 2	40 × 3.1	57	57	57	50

Note:The parameter of O–Ring is ring outside diameter and ring width.

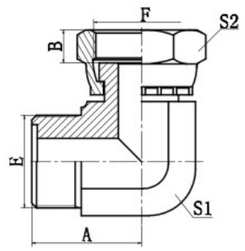


XE

METRIC MALE O–RING CROSS

PART NO.	THREAD	O–RING	DIMENSIONS				
	E、F、G、H	E、F、G、H	A	B	C	D	S1
XE–14	M14 × 1.5	10 × 1.9	22.5	22.5	22.5	22.5	14
XE–16	M16 × 1.5	11 × 1.9	24	24	24	24	17
XE–18	M18 × 1.5	13 × 1.9	26	26	26	26	19
XE–22	M22 × 1.5	16 × 2.4	29	29	29	29	22
XE–27	M27 × 1.5	20 × 2.4	32.5	32.5	32.5	32.5	27
XE–30	M30 × 1.5	24 × 2.4	35.5	35.5	35.5	35.5	30
XE–36	M36 × 2	30 × 3.1	42	42	42	42	36
XE–39	M39 × 2	32 × 3.1	47.5	47.5	47.5	47.5	41
XE–42	M42 × 2	35 × 3.1	49.5	49.5	49.5	49.5	41
XE–45	M45 × 2	38 × 3.1	52.5	52.5	52.5	52.5	46
XE–52	M52 × 2	40 × 3.1	57	57	57	57	50

Note:The parameter of O–Ring is ring outside diameter and ring width.

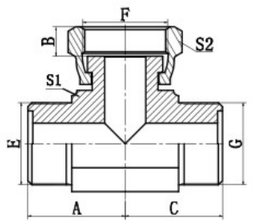


2E9

90° ELBOW METRIC O–RING

PART NO.	THREAD	O–RING	DIMENSIONS			
	E、F	E	A	B	S1	S2
2E9–12	M12 × 1.25	8 × 1.9	20.5	8	12	17
2E9–14	M14 × 1.5	10 × 1.9	22.5	8.5	14	19
2E9–16	M16 × 1.5	11 × 1.9	24	8.5	17	22
2E9–18	M18 × 1.5	13 × 1.9	26	8.5	19	24
2E9–22	M22 × 1.5	16 × 2.4	29	10	22	27
2E9–27	M27 × 1.5	20 × 2.4	32.5	10	27	32
2E9–30	M30 × 1.5	24 × 2.4	35.5	11	30	36
2E9–36	M36 × 2	30 × 3.1	42	13	36	41
2E9–39	M39 × 2	32 × 3.1	47.5	13	41	46
2E9–42	M42 × 2	35 × 3.1	49.5	15	41	50
2E9–45	M45 × 2	38 × 3.1	52.5	15	46	55
2E9–52	M52 × 2	40 × 3.1	57	17	50	60

Note:The parameter of O–Ring is ring outside diameter and ring width.

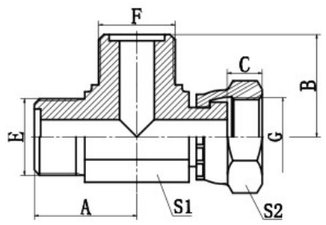


BE

METRIC MALE O–RING / METRIC FEMALE BRANCH TEE

PART NO.	THREAD	O–RING	DIMENSIONS				
	E、F、G	E、G	A	B	C	S1	S2
BE–14	M14 × 1.5	10 × 1.9	22.5	8.5	22.5	14	19
BE–16	M16 × 1.5	11 × 1.9	24	8.5	24	17	22
BE–18	M18 × 1.5	13 × 1.9	26	8.5	26	19	24
BE–22	M22 × 1.5	16 × 2.4	29	10	29	22	27
BE–27	M27 × 1.5	20 × 2.4	32.5	10	32.5	27	32
BE–30	M30 × 1.5	24 × 2.4	35.5	11	35.5	30	36
BE–36	M36 × 2	30 × 3.1	42	13	42	36	41
BE–39	M39 × 2	32 × 3.1	47.5	13	47.5	41	46
BE–42	M42 × 2	35 × 3.1	49.5	15	49.5	41	50
BE–45	M45 × 2	38 × 3.1	52.5	15	52.5	46	55
BE–52	M52 × 2	40 × 3.1	57	17	57	50	60

Note:The parameter of O–Ring is ring outside diameter and ring width.

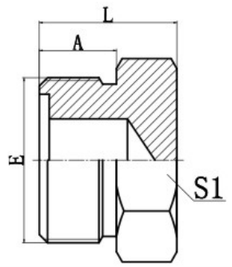


CE

METRIC MALE O–RING / METRIC FEMALE RUN TEE

PART NO.	THREAD	O–RING	DIMENSIONS				
	E、F、G	E、F	A	B	C	S1	S2
CE–14	M14 × 1.5	10 × 1.9	22.5	22.5	8.5	14	19
CE–16	M16 × 1.5	11 × 1.9	24	24	8.5	17	22
CE–18	M18 × 1.5	13 × 1.9	26	26	8.5	19	24
CE–22	M22 × 1.5	16 × 2.4	29	29	10	22	27
CE–27	M27 × 1.5	20 × 2.4	32.5	32.5	10	27	32
CE–30	M30 × 1.5	24 × 2.4	35.5	35.5	11	30	36
CE–36	M36 × 2	30 × 3.1	42	42	13	36	41
CE–39	M39 × 2	32 × 3.1	47.5	47.5	13	41	46
CE–42	M42 × 2	35 × 3.1	49.5	49.5	15	41	50
CE–45	M45 × 2	38 × 3.1	52.5	52.5	15	46	55
CE–52	M52 × 2	40 × 3.1	57	57	17	50	60

Note:The parameter of O–Ring is ring outside diameter and ring width.

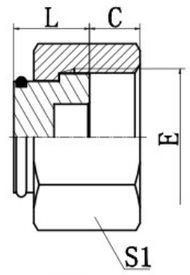


4E

METRIC MALE O–RING PLUG

PART NO.	THREAD	O–RING	DIMENSIONS		
	E	E	A	L	S1
4E–14	M14 × 1.5	10 × 1.9	11	17	17
4E–16	M16 × 1.5	11 × 1.9	11	17	17
4E–18	M18 × 1.5	13 × 1.9	11	17	19
4E–22	M22 × 1.5	16 × 2.4	12	20	24
4E–27	M27 × 1.5	20 × 2.4	13	23	30
4E–30	M30 × 1.5	24 × 2.4	14	25	32
4E–36	M36 × 2	30 × 3.1	16	29	38
4E–39	M39 × 2	32 × 3.1	18	31	41
4E–42	M42 × 2	35 × 3.1	20	33	46
4E–45	M45 × 2	38 × 3.1	21	34	46
4E–52	M52 × 2	40 × 3.1	22	37	55
4E–60	M60 × 2	45 × 3.1	24	41	65

Note:The parameter of O–Ring is ring outside diameter and ring width.

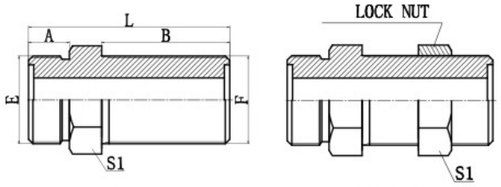


9E

METRIC FEMALE FACE PLUG

PART NO.	THREAD	DIMENSIONS		
	E	C	L	S2
9E–12	M12 × 1.25	8	10	14
9E–14	M14 × 1.5	8.5	10.5	17
9E–16	M16 × 1.5	8.5	11.5	19
9E–18	M18 × 1.5	8.5	13	22
9E–22	M22 × 1.5	10	13	27
9E–27	M27 × 1.5	10	15	32
9E–30	M30 × 1.5	11	15	36
9E–36	M36 × 2	13	15.5	41
9E–39	M39 × 2	13	17.5	46
9E–42	M42 × 2	15	18.5	50
9E–45	M45 × 2	15	18.5	55
9E–52	M52 × 2	17	18.5	60

Note:The parameter of O–Ring is ring outside diameter and ring width.

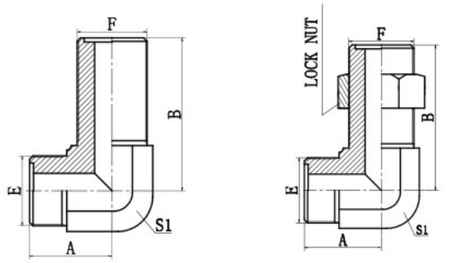


6E　　6E–LN

METRIC MALE O–RING BULKHEAD

PART NO.	THREAD		O–RING		DIMENSIONS				
	E	F	E	F	A	B	L	S1	S2
6E–12	M12 × 1.25	M12 × 1.25	8 × 1.9	8 × 1.9	11	31.5	47.5	17	17
6E–14	M14 × 1.5	M14 × 1.5	10 × 1.9	10 × 1.9	11	32.5	49.5	19	19
6E–16	M16 × 1.5	M16 × 1.5	11 × 1.9	11 × 1.9	11	32.5	51.5	22	22
6E–18	M18 × 1.5	M18 × 1.5	13 × 1.9	13 × 1.9	11	33	52	24	24
6E–22	M22 × 1.5	M22 × 1.5	16 × 2.4	16 × 2.4	12	35.5	58	27	30
6E–27	M27 × 1.5	M27 × 1.5	20 × 2.4	20 × 2.4	13	37	61	32	36
6E–30	M30 × 1.5	M30 × 1.5	24 × 2.4	24 × 2.4	14	38	63	36	41
6E–36	M36 × 2	M36 × 2	30 × 3.1	30 × 3.1	16	42	71	41	46
6E–39	M39 × 2	M39 × 2	32 × 3.1	32 × 3.1	18	44	75	46	50
6E–42	M42 × 2	M42 × 2	35 × 3.1	35 × 3.1	20	46	81	50	50
6E–45	M45 × 2	M45 × 2	38 × 3.1	38 × 3.1	21	46	81	55	55
6E–52	M52 × 2	M52 × 2	40 × 3.1	40 × 3.1	22	49	86	60	65

Note:1 The parameter of O–ring is ring outside diameter and ring width.　2 In case if you are interested to order the adapter with lock nut,please insert suffi x　"LN" after our part NO., for e x ample 6E–30LN, The lock nut NO. is 8C.

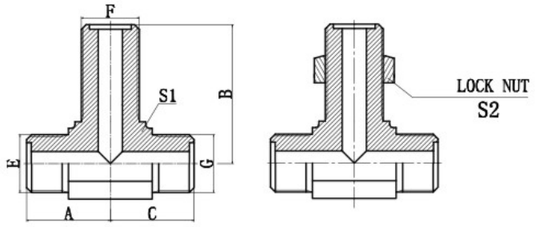


6E9　　6E9–LN

90°　METRIC MALE O–RING BULKHEAD

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
6E9–12	M12 × 1.25	M12 × 1.25	8 × 1.9	8 × 1.9	20.5	44.5	12	17
6E9–14	M14 × 1.5	M14 × 1.5	10 × 1.9	10 × 1.9	22.5	46.5	14	19
6E9–16	M16 × 1.5	M16 × 1.5	11 × 1.9	11 × 1.9	24	48	17	22
6E9–18	M18 × 1.5	M18 × 1.5	13 × 1.9	13 × 1.9	26	50	19	24
6E9–22	M22 × 1.5	M22 × 1.5	16 × 2.4	16 × 2.4	29	54	22	30
6E9–27	M27 × 1.5	M27 × 1.5	20 × 2.4	20 × 2.4	32.5	58.5	27	36
6E9–30	M30 × 1.5	M30 × 1.5	24 × 2.4	24 × 2.4	35.5	61.5	30	41
6E9–36	M36 × 2	M36 × 2	30 × 3.1	30 × 3.1	42	71	36	46
6E9–39	M39 × 2	M39 × 2	32 × 3.1	32 × 3.1	47.5	76	41	50
69E–42	M42 × 2	M42 × 2	35 × 3.1	35 × 3.1	49.5	78	41	50
6E9–45	M45 × 2	M45 × 2	38 × 3.1	38 × 3.1	52.5	81	46	55
6E9–52	M52 × 2	M52 × 2	40 × 3.1	40 × 3.1	57	86	50	65

Note:1 The parameter of O–ring is ring outside diameter and ring width.　2 In case if you are interested to order the adapter with lock nut,please insert suffi x　"LN" after our part NO., for e x ample 6E9–30LN, The lock nut NO. is 8C.

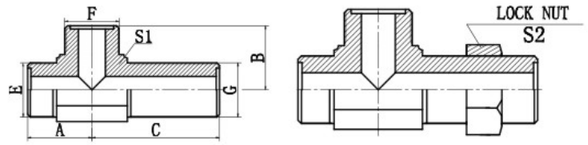


AE6EE　　AE6EE–LN

METRIC MALE O–RING BULKHEAD BRANCH TEE

PART NO.	THREAD	O–RING	DIMENSIONS				
	E、F、G	E、F、G	A	B	C	S1	S2
AE6EE–12	M12 × 1.25	8 × 1.9	20.5	44.5	20.5	12	17
AE6EE–14	M14 × 1.5	10 × 1.9	22.5	46.5	22.5	14	19
AE6EE–16	M16 × 1.5	11 × 1.9	24	48	24	17	22
AE6EE–18	M18 × 1.5	13 × 1.9	26	50	26	19	24
AE6EE–22	M22 × 1.5	16 × 2.4	29	54	29	22	30
AE6EE–27	M27 × 1.5	20 × 2.4	32.5	58.5	32.5	27	36
AE6EE–30	M30 × 1.5	24 × 2.4	35.5	61.5	35.5	30	41
AE6EE–36	M36 × 2	30 × 3.1	42	71	42	36	46
AE6EE–39	M39 × 2	32 × 3.1	47.5	76	47.5	41	50
AE6EE–42	M42 × 2	35 × 3.1	49.5	78	49.5	41	50
AE6EE–45	M45 × 2	38 × 3.1	52.5	81	52.5	46	55

Note:1 The parameter of O–ring is ring outside diameter and ring width.　2 In case if you are interested to order the adapter with lock nut,please insert suffi x　"LN" after our part NO., for e x ample AE6EE–30LN.

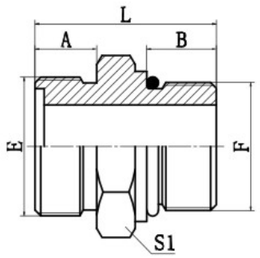


AEE6E　　AEE6E–LN

METRIC MALE O–RING BULKHEAD RUN TEE

PART NO.	THREAD	O–RING	DIMENSIONS				
	E、F、G	E、F、G	A	B	C	S1	S2
AEE6E–12	M12 × 1.25	8 × 1.9	20.5	20.5	44.5	12	17
AEE6E–14	M14 × 1.5	10 × 1.9	22.5	22.5	46.5	14	19
AEE6E–16	M16 × 1.5	11 × 1.9	24	24	48	17	22
AEE6E–18	M18 × 1.5	13 × 1.9	26	26	50	19	24
AEE6E–22	M22 × 1.5	16 × 2.4	29	29	54	22	30
AEE6E–27	M27 × 1.5	20 × 2.4	32.5	32.5	58.5	27	36
AEE6E–30	M30 × 1.5	24 × 2.4	35.5	35.5	61.5	30	41
AEE6E–36	M36 × 2	30 × 3.1	42	42	71	36	46
AEE6E–39	M39 × 2	32 × 3.1	47.5	47.5	76	41	50
AEE6E–42	M42 × 2	35 × 3.1	49.5	49.5	78	41	50
AEE6E–45	M45 × 2	38 × 3.1	52.5	52.5	81	46	55

Note:1 The parameter of O–ring is ring outside diameter and ring width.　2 In case if you are interested to order the adapter with lock nut,please insert suffi x　"LN" after our part NO., for e x ample AEE6E–30LN.

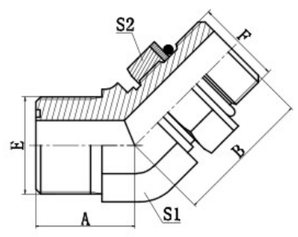


1EH

METRIC MALE O–RING /
METIRC MALE S–SERIES ISO 6149–2

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	L	S1
1EH–12–10	M12 × 1.25	M10 × 1	8 × 1.9	O08.1 × 1.6	11	9.5	28	14
1EH–14–12	M14 × 1.5	M12 × 1.5	10 × 1.9	O09.3 × 2.4	11	11	29.5	17
1EH–16–14	M16 × 1.5	M14 × 1.5	11 × 1.9	O11.3 × 2.4	11	11	29.5	19
1EH–18–16	M18 × 1.5	M16 × 1.5	13 × 1.9	O13.3 × 2.4	11	11.5	31.5	22
1EH–22–18	M22 × 1.5	M18 × 1.5	16 × 2.4	O15.3 × 2.4	12	12.5	34.5	24
1EH–27–22	M27 × 1.5	M22 × 1.5	20 × 2.4	O19.3 × 2.4	13	15	38	30
1EH–30–27	M30 × 1.5	M27 × 2	24 × 2.4	O23.5 × 3.0	14	18.5	43.5	32
1EH–36–33	M36 × 2	M33 × 2	30 × 3.1	O29.5 × 3.0	16	18.5	47.5	41
1EH–39–33	M39 × 2	M33 × 2	32 × 3.1	O29.5 × 3.0	18	18.5	49.5	41
1EH–42–42	M42 × 2	M42 × 2	35 × 3.1	O38.5 × 3.0	20	19	54	50
1EH–45–42	M45 × 2	M42 × 2	38 × 3.1	O38.5 × 3.0	20	19	54	50
1EH–52–48	M52 × 2	M48 × 2	40 × 3.1	O44.5 × 3.0	22	21.5	58.5	55

Note:1 The parameters of E end O–ring are ring outside diameter and ring width. 2 F end is fit for ISO 6149–1 port.

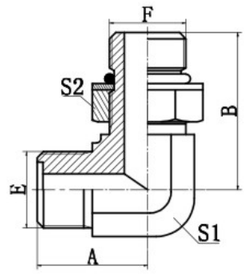


1EH4–OG

45° ELBOW METRIC MALE O–RING /
METIRC MALE ADJUSTABLE STUD END
S–SERIES ISO 6149–2

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
1EH4–12–10OG	M12 × 1.25	M10 × 1	8 × 1.9	O08.1 × 1.6	18	25.5	12	14
1EH4–14–12OG	M14 × 1.5	M12 × 1.5	10 × 1.9	O09.3 × 2.4	19.5	30	14	17
1EH4–16–14OG	M16 × 1.5	M14 × 1.5	11 × 1.9	O11.3 × 2.4	20	30.5	17	19
1EH4–18–16OG	M18 × 1.5	M16 × 1.5	13 × 1.9	O13.3 × 2.4	21.5	34	19	22
1EH4–22–18OG	M22 × 1.5	M18 × 1.5	16 × 2.4	O15.3 × 2.4	23	38	22	24
1EH4–27–22OG	M27 × 1.5	M22 × 1.5	20 × 2.4	O19.3 × 2.4	24.5	40.5	27	27
1EH4–30–27OG	M30 × 1.5	M27 × 2	24 × 2.4	O23.5 × 3.0	26	48	30	32
1EH4–36–33OG	M36 × 2	M33 × 2	30 × 3.1	O29.5 × 3.0	30.5	49.5	36	41
1EH4–39–33OG	M39 × 2	M33 × 2	32 × 3.1	O29.5 × 3.0	36	52	41	41
1EH4–42–42OG	M42 × 2	M42 × 2	35 × 3.1	O38.5 × 3.0	38	53	41	50
1EH4–45–42OG	M45 × 2	M42 × 2	38 × 3.1	O38.5 × 3.0	39	54	46	50
1EH4–52–48OG	M52 × 2	M48 × 2	40 × 3.1	O44.5 × 3.0	42	58.5	50	55

Note:1 The parameters of E end O–ring are ring outside diameter and ring width. 2 F end is fit for ISO 6149–1 port.

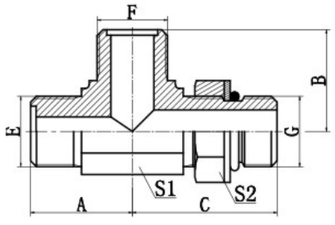


1EH9–OG

90° ELBOW METRIC MALE O–RING /
METIRC MALE ADJUSTABLE STUD END
S–SERIES ISO 6149–2

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
1EH9–12–10OG	M12 × 1.25	M10 × 1	8 × 1.9	O08.1 × 1.6	20.5	28.5	12	14
1EH9–14–12OG	M14 × 1.5	M12 × 1.5	10 × 1.9	O09.3 × 2.4	22.5	33.2	14	17
1EH9–16–14OG	M16 × 1.5	M14 × 1.5	11 × 1.9	O11.3 × 2.4	24	36	17	19
1EH9–18–16OG	M18 × 1.5	M16 × 1.5	13 × 1.9	O13.3 × 2.4	26	39	19	22
1EH9–22–18OG	M22 × 1.5	M18 × 1.5	16 × 2.4	O15.3 × 2.4	29	44	22	24
1EH9–27–22OG	M27 × 1.5	M22 × 1.5	20 × 2.4	O19.3 × 2.4	32.5	48	27	27
1EH9–30–27OG	M30 × 1.5	M27 × 2	24 × 2.4	O23.5 × 3.0	35.5	57	30	32
1EH9–36–33OG	M36 × 2	M33 × 2	30 × 3.1	O29.5 × 3.0	42	60.5	36	41
1EH9–39–33OG	M39 × 2	M33 × 2	32 × 3.1	O29.5 × 3.0	47.5	64	41	41
1EH9–42–42OG	M42 × 2	M42 × 2	35 × 3.1	O38.5 × 3.0	49.5	65	41	50
1EH9–45–42OG	M45 × 2	M42 × 2	38 × 3.1	O38.5 × 3.0	52.5	67.5	46	50
1EH9–52–48OG	M52 × 2	M48 × 2	40 × 3.1	O44.5 × 3.0	57	73.5	50	55

Note:1 The parameters of E end O–ring are ring outside diameter and ring width. 2 F end is fit for ISO 6149–1 port.

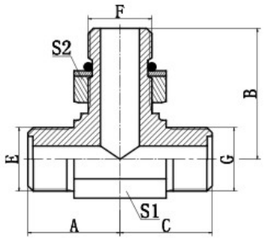


AEEH–OG

METRIC MALE O–RING /
METIRC MALE ADJUSTABLE STUD END
S–SERIES ISO 6149–2 RUN TEE

PART NO.	THREAD		O–RING		DIMENSIONS				
	E、F	G	E、F	G	A	B	C	S1	S2
AEEH–12–12–10OG	M12 × 1.25	M10 × 1	10 × 1.9	O08.1 × 1.6	20.5	20.5	28.5	12	14
AEEH–14–14–12OG	M14 × 1.5	M12 × 1.5	11 × 1.9	O09.3 × 2.4	22.5	22.5	33.2	14	17
AEEH–16–16–14OG	M16 × 1.5	M14 × 1.5	13 × 1.9	O11.3 × 2.4	24	24	36	17	19
AEEH–18–18–16OG	M18 × 1.5	M16 × 1.5	16 × 2.4	O13.3 × 2.4	26	26	39	19	22
AEEH–22–22–18OG	M22 × 1.5	M18 × 1.5	18 × 2.4	O15.3 × 2.4	29	29	44	22	24
AEEH–27–27–22OG	M27 × 1.5	M22 × 1.5	20 × 2.4	O19.3 × 2.4	32.5	32.5	48	27	27
AEEH–30–30–27OG	M30 × 1.5	M27 × 2	24 × 2.4	O23.5 × 3.0	35.5	35.5	57	30	32
AEEH–36–36–33OG	M36 × 2	M33 × 2	30 × 3.1	O29.5 × 3.0	42	42	60.5	36	41
AEEH–39–39–33OG	M39 × 2	M33 × 2	35 × 3.1	O29.5 × 3.0	47.5	47.5	64	41	41
AEEH–42–42–42OG	M42 × 2	M42 × 2	38 × 3.1	O38.5 × 3.0	49.5	49.5	65	41	50
AEEH–45–45–42OG	M45 × 2	M42 × 2	40 × 3.1	O38.5 × 3.0	52.5	52.5	67.5	46	50

Note:1 The parameters of E、F end O–ring are ring outside diameter and ring width. 2 G end is fit for ISO 6149–1 port.

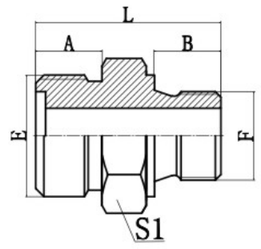


AEHE–OG

METRIC MALE O–RING /
METRIC MALE ADJUSTABLE STUD END
S–SERIES ISO 6149–2 BRANCH TEE

PART NO.	THREAD		O–RING		DIMENSIONS				
	E、G	F	E、G	F	A	B	C	S1	S2
AEHE–12–10–12OG	M12 × 1.25	M10 × 1	10 × 1.9	O08.1 × 1.6	20.5	28.5	20.5	12	14
AEHE–14–12–14OG	M14 × 1.5	M12 × 1.5	11 × 1.9	O09.3 × 2.4	22.5	33.2	22.5	14	17
AEHE–16–14–16OG	M16 × 1.5	M14 × 1.5	13 × 1.9	O11.3 × 2.4	24	36	24	17	19
AEHE–18–16–18OG	M18 × 1.5	M16 × 1.5	16 × 2.4	O13.3 × 2.4	26	39	26	19	22
AEHE–22–18–22OG	M22 × 1.5	M18 × 1.5	18 × 2.4	O15.3 × 2.4	29	44	29	22	24
AEHE–27–22–27OG	M27 × 1.5	M22 × 1.5	20 × 2.4	O19.3 × 2.4	32.5	48	32.5	27	27
AEHE–30–27–30OG	M30 × 1.5	M27 × 2	24 × 2.4	O23.5 × 3.0	35.5	57	35.5	30	32
AEHE–36–33–36OG	M36 × 2	M33 × 2	30 × 3.1	O29.5 × 3.0	42	60.5	42	36	41
AEHE–39–33–39OG	M39 × 2	M33 × 2	35 × 3.1	O29.5 × 3.0	47.5	64	47.5	41	41
AEHE–42–42–42OG	M42 × 2	M42 × 2	38 × 3.1	O38.5 × 3.0	49.5	65	49.5	41	50
AEHE–45–42–45OG	M45 × 2	M42 × 2	40 × 3.1	O38.5 × 3.0	52.5	67.5	52.5	46	50

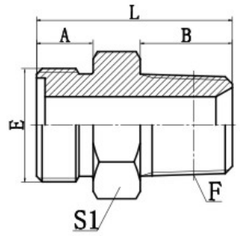
Note:1 The parameters of E、G end O–ring are ring outside diameter and ring width. 2 F end is fit for ISO 6149–1 port.



1EL

METRIC MALE O–RING /
METRIC MALE WITH BONDED SEAL

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	L	S1
1EL–14	M14 × 1.5	M14 × 1.5	10 × 1.9	ZHD–14	11	12	30.5	19
1EL–14–16	M14 × 1.5	M16 × 1.5	10 × 1.9	ZHD–16	11	12	31	22
1EL–14–18	M14 × 1.5	M18 × 1.5	10 × 1.9	ZHD–18	11	12	32.5	24
1EL–14–22	M14 × 1.5	M22 × 1.5	10 × 1.9	ZHD–22	11	14	36.5	27
1EL–16–14	M16 × 1.5	M14 × 1.5	11 × 1.9	ZHD–14	11	12	29	19
1EL–16–18	M16 × 1.5	M18 × 1.5	11 × 1.9	ZHD–16	11	12	31	24
1EL–22–18	M22 × 1.5	M18 × 1.5	16 × 2.4	ZHD–18	12	12	33.5	24
1EL–27–22	M27 × 1.5	M22 × 1.5	18 × 2.4	ZHD–22	13	14	38.5	30
1EL–27–33	M27 × 1.5	M33 × 2	18 × 2.4	ZHD–33	13	18	44	41
1EL–30–18	M30 × 1.5	M18 × 1.5	24 × 2.4	ZHD–18	14	12	38.5	32
1EL–30–27	M30 × 1.5	M27 × 2	24 × 2.4	ZHD–27	14	16	41	34
1EL–36–33	M36 × 2	M33 × 2	30 × 3.1	ZHD–33	16	18	49	41
1EL–36–48	M36 × 2	M48 × 2	30 × 3.1	ZHD–48	16	22	53	60
1EL–45–42	M45 × 2	M42 × 2	38 × 3.1	ZHD–42	21	20	56	50
1EL–52–48	M52 × 2	M48 × 2	40 × 3.1	ZHD–48	22	22	61	60

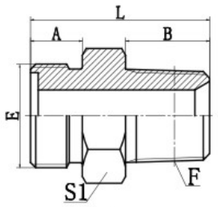


1EN

METRIC MALE O–RING / NPT MALE

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	E	A	B	L	S1
1EN–14–04	M14 × 1.5	Z1/4" × 18	10 × 1.9	11	15	31	17
1EN–14–06	M14 × 1.5	Z3/8" × 18	10 × 1.9	11	16	33	19
1EN–16–04	M16 × 1.5	Z1/4" × 18	11 × 1.9	11	15	32	17
1EN–16–06	M16 × 1.5	Z3/8" × 18	11 × 1.9	11	16	33	19
1EN–16–08	M16 × 1.5	Z1/2" × 14	11 × 1.9	11	19.5	38.5	24
1EN–18–04	M18 × 1.5	Z1/4" × 18	13 × 1.9	11	15	31	19
1EN–18–06	M18 × 1.5	Z3/8" × 18	13 × 1.9	11	16	33	19
1EN–18–08	M18 × 1.5	Z1/2" × 14	13 × 1.9	11	19.5	38.5	24
1EN–22–08	M22 × 1.5	Z1/2" × 14	16 × 2.4	12	19.5	39.5	24
1EN–22–12	M22 × 1.5	Z3/4" × 14	16 × 2.4	12	19.5	41.5	27
1EN–24–06	M24 × 1.5	Z3/8" × 18	18 × 2.4	12	15	37	27
1EN–24–08	M24 × 1.5	Z1/2" × 14	18 × 2.4	12	19.5	41.5	27
1EN–27–08	M27 × 1.5	Z1/2" × 14	20 × 2.4	13	19.5	42.5	30
1EN–27–12	M27 × 1.5	Z3/4" × 14	20 × 2.4	13	19.5	42.5	30
1EN–30–12	M30 × 1.5	Z3/4" × 14	24 × 2.4	14	19.5	44.5	32
1EN–36–12	M36 × 2	Z3/4" × 14	30 × 3.1	16	19.5	46.5	38
1EN–36–16	M36 × 2	Z1" × 11.5	30 × 3.1	16	25.5	52.5	38
1EN–39–16	M39 × 2	Z1" × 11.5	32 × 3.1	18	25.5	56.5	41
1EN–39–20	M39 × 2	Z1.1/4" × 11.5	32 × 3.1	18	26.5	57.5	46
1EN–42–16	M42 × 2	Z1" × 11.5	35 × 3.1	20	25.5	58.5	46
1EN–42–20	M42 × 2	Z1.1/4" × 11.5	35 × 3.1	20	26.5	59.5	46
1EN–45–20	M45 × 2	Z1.1/4" × 11.5	38 × 3.1	21	26.5	60.5	46
1EN–52–20	M52 × 2	Z1.1/4" × 11.5	40 × 3.1	22	26.5	63.5	55
1EN–60–24	M60 × 2	Z1.1/2" × 11.5	45 × 3.1	24	27.5	68.5	65

Note:The parameter of E end O–ring is ring outside diameter and ring width.

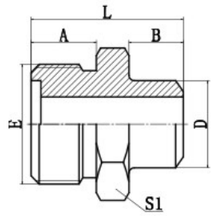


1ET–SP

METRIC MALE O–RING / BSPT MALE

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	E	A	B	L	S1
1ET–14–04SP	M14×1.5	R1/4"×19	10×1.9	11	14.5	31.5	14
1ET–14–06SP	M14×1.5	R3/8"×19	10×1.9	11	15	32	17
1ET–16–04SP	M16×1.5	R1/4"×19	11×1.9	11	14.5	31.5	17
1ET–16–06SP	M16×1.5	R3/8"×19	11×1.9	11	15	32	17
1ET–18–06SP	M18×1.5	R3/8"×19	13×1.9	11	15	32	19
1ET–18–08SP	M18×1.5	R1/2"×14	13×1.9	11	20	37	22
1ET–22–08SP	M22×1.5	R1/2"×14	16×2.4	12	20	40	24
1ET–22–12SP	M22×1.5	R3/4"×14	16×2.4	12	20	40	27
1ET–24–06SP	M24×1.5	R3/8"×19	18×2.4	13	15	38	27
1ET–24–08SP	M24×1.5	R1/2"×14	18×2.4	13	20	43	27
1ET–27–08SP	M27×1.5	R1/2"×14	20×2.4	13	20	43	30
1ET–27–12SP	M27×1.5	R3/4"×14	20×2.4	13	20	43	30
1ET–30–12SP	M30×1.5	R3/4"×14	24×2.4	14	20	45	32
1ET–36–12SP	M36×2	R3/4"×14	30×3.1	16	20	47	38
1ET–36–16SP	M36×2	R1"×11	30×3.1	16	25.5	52.5	38
1ET–39–16SP	M39×2	R1"×11	32×3.1	18	25.5	56.5	41
1ET–39–20SP	M39×2	R1.1/4"×11	32×3.1	18	26.5	57.5	46
1ET–42–20SP	M42×2	R1.1/4"×11	35×3.1	20	26.5	59.5	46
1ET–45–20SP	M45×2	R1.1/4"×11	38×3.1	21	26.5	60.5	46
1ET–52–24SP	M52×2	R1.1/2"×11	40×3.1	22	26.5	63.5	55

Note:The parameter of E end O–Ring is ring outside diameter and ring width.

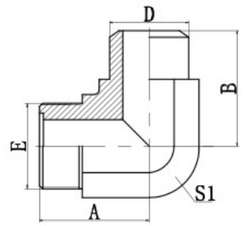


1EW

METRIC MALE O–RING / BUTT–WELD TUBE

PART NO.	THREAD	TUBE O.D.	O–RING	DIMENSIONS				
	E		E	A	B	D	L	S1
1EW–12–06	M12×1.25	6	8×1.9	11	8	6	24	14
1EW–14–08	M14×1.5	8	10×1.9	11	8	8	25	17
1EW–16–10	M16×1.5	10	11×1.9	11	8	10	25	17
1EW–18–12	M18×1.5	12	13×1.9	11	12	12	29	19
1EW–22–14	M22×1.5	14	16×2.4	12	12	14	32.5	24
1EW–27–18	M27×1.5	18	20×2.4	13	12	18	35	30
1EW–30–22	M30×1.5	22	24×2.4	14	14	22	39	32
1EW–36–28	M36×2	28	30×3.1	16	16	28	43	38
1EW–39–30	M39×2	30	32×3.1	18	16	30	47	41
1EW–42–34	M42×2	34	35×3.1	20	16	34	49	46
1EW–45–38	M45×2	38	38×3.1	21	18	38	51	46
1EW–52–42	M52×2	42	40×3.1	22	18	42	55	55

Note:The parameter of E end O–Ring is ring outside diameter and ring width.

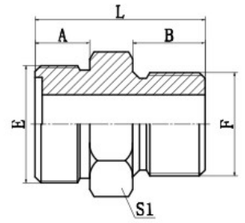


1EW9

90° ELBOW METRIC MALE O–RING / BUTT–WELD TUBE

PART NO.	THREAD	TUBE O.D.	O–RING	DIMENSIONS			
	E		E	A	B	D	S1
1EW9–12–06	M12×1.25	6	8×1.9	20.5	16.5	6	12
1EW9–14–08	M14×1.5	8	10×1.9	22.5	17.5	8	14
1EW9–16–10	M16×1.5	10	11×1.9	24	19.5	10	17
1EW9–18–12	M18×1.5	12	13×1.9	26	25	12	19
1EW9–22–14	M22×1.5	14	16×2.4	29	27	14	22
1EW9–27–18	M27×1.5	18	20×2.4	32.5	29.5	18	27
1EW9–30–22	M30×1.5	22	24×2.4	35.5	33.5	22	30
1EW9–36–28	M36×2	28	30×3.1	42	39	28	36
1EW9–39–30	M39×2	30	32×3.1	47.5	43	30	41
1EW9–42–34	M42×2	34	35×3.1	49.5	43	34	41
1EW9–45–38	M45×2	38	38×3.1	52.5	47.5	38	46
1EW9–52–42	M52×2	42	40×3.1	57	50	42	50

Note:The parameter of E end O–Ring is ring outside diameter and ring width.

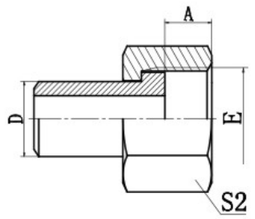


1EZ

METRIC MALE O–RING / BSP MALE DIN 3852–2 TYPE A

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	L	S1
1EZ–14–06	M14×1.5	G1/4"×1.9	10×1.9	ZHD–14	11	12	29	19
1EZ–16–04	M16×1.5	G1/4"×1.9	11×1.9	ZHD–14	11	12	29	19
1EZ–16–06	M16×1.5	G3/8"×1.9	11×1.9	ZHD–18	11	12	31	22
1EZ–18–06	M18×1.5	G3/8"×1.9	13×1.9	ZHD–18	11	12	31	22
1EZ–18–08	M18×1.5	G1/2"×14	13×1.9	ZHD–22	11	14	35	30
1EZ–22–08	M22×1.5	G1/2"×14	16×2.4	ZHD–22	12	14	35	27
1EZ–27–08	M27×1.5	G1/2"×14	20×2.4	ZHD–22	13	14	37	30
1EZ–27–12	M27×1.5	G3/4"×14	20×2.4	ZHD–27	13	16	40	32
1EZ–30–12	M30×1.5	G3/4"×14	24×2.4	ZHD–27	14	16	41	32
1EZ–30–16	M30×1.5	G1"×11	24×2.4	ZHD–33	14	18	48	41
1EZ–36–16	M36×2	G1"×11	30×3.1	ZHD–33	16	18	50	41

Note:The parameter of E end O–Ring is ring outside diameter and ring width.

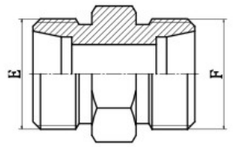


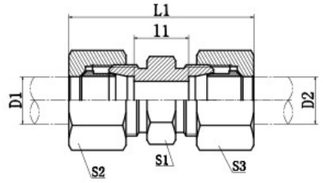
2WE

BUTT–WELD TUBE / METRIC FEMALE O–RING

PART NO.	THREAD	TUBE O.D.	DIMENSIONS		
	E		A	B	S2
2WE–06–12	M12 × 1.25	6	8	6	14
2WE–08–14	M14 × 1.5	8	8.5	8	17
2WE–10–16	M16 × 1.5	10	8.5	10	19
2WE–12–18	M18 × 1.5	12	8.5	12	22
2WE–14–22	M22 × 1.5	14	10	14	27
2WE–18–27	M27 × 1.5	18	10	18	32
2WE–22–30	M30 × 1.5	22	11	22	36
2WE–28–36	M36 × 2	28	13	28	41
2WE–30–39	M39 × 2	30	13	30	46
2WE–34–42	M42 × 2	34	15	34	50
2WE–38–45	M45 × 2	38	15	38	55
2WE–42–52	M52 × 2	42	17	42	60
2WE–50–60	M60 × 2	50	20	50	70
2WE–52–64	M64 × 2	52	23	52	75

Note:The parameter of E end O–Ring is ring outside diameter and ring width.





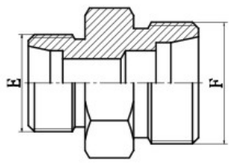
1C
1D

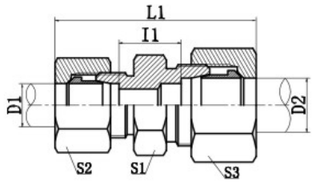
1C–RN
1D–RN

STRAIGHT FITTINGS

PART NO.	THREAD		TUBE O.D.		DIMENSIONS					PN BAR
	E	F	D1	D2	l1	L1	S1	S2	S3	MPa
1C–12	M12 × 1.5	M12 × 1.5	6	6	10	37	12	14	14	31.5 L–series
1C–14	M14 × 1.5	M14 × 1.5	8	8	11	40	14	17	17	
1C–16	M16 × 1.5	M16 × 1.5	10	10	13	42	17	19	19	
1C–18	M18 × 1.5	M18 × 1.5	12	12	14	43	19	22	22	
1C–22	M22 × 1.5	M22 × 1.5	15	15	16	46	24	27	27	
1C–26	M26 × 1.5	M26 × 1.5	18	18	16	48	27	32	32	
1C–30	M30 × 2	M30 × 2	22	22	20	52	32	36	36	16 L–series
1C–36	M36 × 2	M36 × 2	28	28	21	54	41	41	41	
1C–45	M45 × 2	M45 × 2	35	35	20	63	46	50	50	
1C–52	M52 × 2	M52 × 2	42	42	21	66	55	60	60	
1D–14	M14 × 1.5	M14 × 1.5	6	6	16	45	14	17	17	63 S–series
1D–16	M16 × 1.5	M16 × 1.5	8	8	18	47	17	19	19	
1D–18	M18 × 1.5	M18 × 1.5	10	10	17	49	19	22	22	
1D–20	M20 × 1.5	M20 × 1.5	12	12	19	51	22	24	24	
1D–22	M22 × 1.5	M22 × 1.5	14	14	22	57	24	27	27	
1D–24	M24 × 1.5	M24 × 1.5	16	16	21	57	27	30	30	40 S–series
1D–30	M30 × 2	M30 × 2	20	20	23	66	32	36	36	
1D–36	M36 × 2	M36 × 2	25	25	26	74	41	46	46	
1D–42	M42 × 2	M42 × 2	30	30	27	80	46	50	50	
1D–52	M52 × 2	M52 × 2	38	38	29	90	55	60	60	31.5 S–series

Note： In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example 1C–30RN.





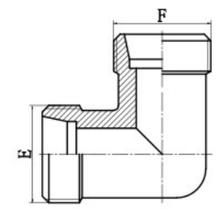
1C
1D

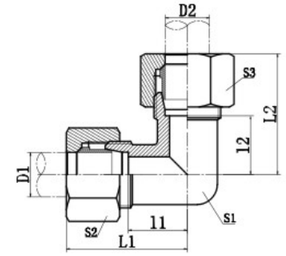
1C–RN
1D–RN

STRAIGHT REDUCERS

PART NO.	THREAD		TUBE O.D.		DIMENSIONS					PN BAR MPa
	E	F	D1	D2	L1	l1	S1	S2	S3	
1C–12–14	M12×1.5	M14×1.5	6	8	40	11	14	15	17	31.5 L–series
1C–12–16	M12×1.5	M16×1.5	6	10	41	12	17	15	19	
1C–12–18	M12×1.5	M18×1.5	6	12	42	13	19	15	22	
1C–14–16	M14×1.5	M16×1.5	8	10	41	13	17	17	19	
1C–14–18	M14×1.5	M18×1.5	8	12	42	13	19	17	22	
1C–16–18	M16×1.5	M18×1.5	10	12	43	14	19	19	22	
1C–16–22	M16×1.5	M22×1.5	10	15	44.5	15	24	19	27	
1C–16–26	M16×1.5	M26×1.5	10	18	46	15.5	27	19	32	
1C–18–22	M18×1.5	M22×1.5	12	15	44.5	15	24	22	27	
1C–18–26	M18×1.5	M26×1.5	12	18	46	15.5	27	22	32	
1C–18–30	M18×1.5	M30×2	12	22	48	17.5	32	22	36	
1C–22–26	M22×1.5	M26×1.5	15	18	47.5	16.5	27	27	32	16 L–series
1C–22–30	M22×1.5	M30×2	15	22	49.5	18.5	32	27	36	
1C–26–30	M26×1.5	M30×2	18	22	50.	18	32	32	36	
1C–26–36	M26×1.5	M36×2	18	28	51.5	19	41	32	41	
1C–30–36	M30×2	M36×2	22	28	53.5	21	41	36	41	
1C–30–45	M30×2	M45×2	22	35	58.5	21	46	36	50	
1C–36–45	M36×2	M45×2	28	35	59	21	46	41	50	
1D–14–16	M14×1.5	M16×1.5	6	8	47	18	17	17	19	63 S–series
1D–14–18	M14×1.5	M18×1.5	6	10	48	17.5	19	17	22	
1D–14–20	M14×1.5	M20×1.5	6	12	50	19.5	22	17	24	
1D–16–18	M16×1.5	M18×1.5	8	10	48	17.5	19	19	22	
1D–16–20	M16×1.5	M20×1.5	8	12	50	19.5	22	19	24	
1D–18–20	M18×1.5	M20×1.5	10	12	51	19	22	22	24	
1D–18–22	M18×1.5	M22×1.5	10	14	54	20.5	24	22	27	
1D–18–30	M18×1.5	M30×2	10	20	59.5	22	32	22	36	
1D–20–22	M20×1.5	M22×1.5	12	14	54	20.5	24	24	27	40 S–series
1D–20–24	M20×1.5	M24×1.5	12	16	54	20	27	24	30	
1D–20–30	M20×1.5	M30×2	12	20	59.5	22	32	24	36	
1D–22–24	M22×1.5	M24×1.5	14	16	57	21.5	27	27	30	
1D–24–30	M24×1.5	M30×2	16	20	62.5	23	32	30	36	
1D–24–36	M24×1.5	M36×2	16	25	67.5	25.5	41	30	46	
1D–30–36	M30×2	M36×2	20	25	71	25.5	41	36	46	
1D–30–42	M30×2	M42×2	20	30	74	26	46	36	50	
1D–36–42	M36×2	M42×2	25	30	77	26.5	46	46	50	
1D–42–52	M42×2	M52×2	30	38	86.5	28.5	55	50	60	31.5 S–series

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example 1C–30–36RN.





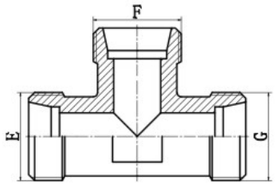
1C9
1D9

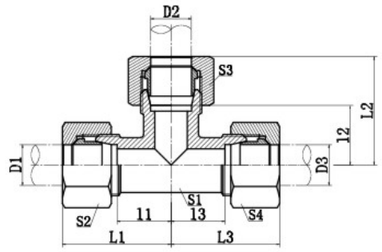
1C9–RN
1D9–RN

90° ELBOW FITTINGS

PART NO.	THREAD		TUBE O.D.		DIMENSIONS				PN BAR MPa
	E	F	D1	D2	l1,l2	L1,L2	S1	S2,S3	
1C9–12	M12×1.5	M12×1.5	6	6	12	27	12	14	31.5 L–series
1C9–14	M14×1.5	M14×1.5	8	8	14	29	12	17	
1C9–16	M16×1.5	M16×1.5	10	10	15	30	14	19	
1C9–18	M18×1.5	M18×1.5	12	12	17	32	17	22	
1C9–22	M22×1.5	M22×1.5	15	15	21	36	19	27	
1C9–26	M26×1.5	M26×1.5	18	18	23.5	40	24	32	
1C9–30	M30×2	M30×2	22	22	27.5	44	27	36	16 L–series
1C9–36	M36×2	M36×2	28	28	30.5	47	36	41	
1C9–45	M45×2	M45×2	35	35	34.5	56	41	50	
1C9–52	M52×2	M52×2	42	42	40	63	50	60	
1D9–14	M14×1.5	M14×1.5	6	6	16	31	12	17	63 S–series
1D9–16	M16×1.5	M16×1.5	8	8	17	32	14	19	
1D9–18	M18×1.5	M18×1.5	10	10	17.5	34	17	22	
1D9–20	M20×1.5	M20×1.5	12	12	21.5	38	17	24	
1D9–22	M22×1.5	M22×1.5	14	14	22	40	19	27	
1D9–24	M24×1.5	M24×1.5	16	16	24.5	43	24	30	40 S–series
1D9–30	M30×2	M30×2	20	20	26.5	48	27	36	
1D9–36	M36×2	M36×2	25	25	30	54	36	46	
1D9–42	M42×2	M42×2	30	30	35.5	62	41	50	
1D9–52	M52×2	M52×2	38	38	41	72	50	60	31.5 S–series

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example 1C9–30RN.



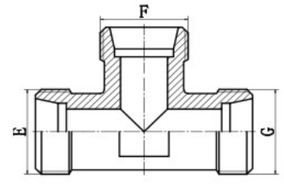


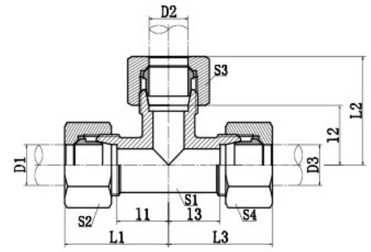
EQUAL TEES

AC **AC–RN**
AD **AD–RN**

PART NO.	THREAD	TUBE O.D.	DIMENSIONS				PN BAR MPa
	E ,F ,G	D1 , D2 ,D3	l1,l2,l3	L1,L2,L3	S1	S2,S3,S4	
AC–08	M8 × 1	4	11	21	9	10	10 L–series
AC–10	M10 × 1	5	9.5	21	9	12	
AC–10LL	M10 × 1	6	9.5	21	9	12	
AC–12LL	M12 × 1	8	11.5	23	12	14	
AC–12	M12 × 1.5	6	12	27	12	14	25 L–series
AC–14	M14 × 1.5	8	14	29	12	17	
AC–16	M16 × 1.5	10	15	30	14	19	
AC–18	M18 × 1.5	12	17	32	17	22	
AC–22	M22 × 1.5	15	21	36	19	27	
AC–26	M26 × 1.5	18	23.5	40	24	32	
AC–30	M30 × 2	22	27.5	44	27	36	16 L–series
AC–36	M36 × 2	28	30.5	47	36	41	
AC–45	M45 × 2	35	34.5	56	41	50	
AC–52	M52 × 2	42	40	63	50	60	
AD–14	M14 × 1.5	6	16	31	12	17	63 S–series
AD–16	M16 × 1.5	8	17	32	14	19	
AD–18	M18 × 1.5	10	17.5	34	17	22	
AD–20	M20 × 1.5	12	21.5	38	17	24	
AD–22	M22 × 1.5	14	22	40	19	27	
AD–24	M24 × 1.5	16	24.5	43	24	30	40 S–series
AD–30	M30 × 2	20	26.5	48	27	36	
AD–36	M36 × 2	25	30	54	36	46	
AD–42	M42 × 2	30	35.5	62	41	50	
AD–52	M52 × 2	38	41	72	50	60	31.5 S–series

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example AC–22RN.





TEE REDUCERS

AC **AC–RN**
AD **AD–RN**

PART NO.	THREAD			TUBE O.D.			DIMENSIONS										PN BAR MPa
	E	F	G	D1	D2	D3	l1	l2	l3	L1	L2	L3	S1	S2	S3	S4	
AC–12–14–12	M12 × 1.5	M14 × 1.5	M12 × 1.5	6	8	6	14	14	14	29	29	29	14	14	17	14	25 L–series
AC–12–16–12	M12 × 1.5	M16 × 1.5	M12 × 1.5	6	10	6	15	15	15	30	30	30	14	14	19	14	
AC–12–16–16	M12 × 1.5	M16 × 1.5	M16 × 1.5	6	10	10	15	15	15	30	30	30	14	14	19	19	
AC–14–12–14	M14 × 1.5	M12 × 1.5	M14 × 1.5	8	6	8	14	14	14	29	29	29	14	17	14	17	
AC–14–14–18	M14 × 1.5	M14 × 1.5	M18 × 1.5	8	8	12	17	17	17	32	32	32	17	17	17	22	
AC–14–16–14	M14 × 1.5	M16 × 1.5	M14 × 1.5	8	10	8	15	15	15	30	30	30	14	17	19	17	
AC–14–18–14	M14 × 1.5	M18 × 1.5	M14 × 1.5	8	12	8	17	17	17	32	32	32	17	17	22	17	
AC–16–12–16	M16 × 1.5	M12 × 1.5	M16 × 1.5	10	6	10	15	15	15	30	30	30	14	19	14	19	
AC–16–14–16	M16 × 1.5	M14 × 1.5	M16 × 1.5	10	8	10	15	15	15	30	30	30	14	19	17	19	
AC–16–16–18	M16 × 1.5	M16 × 1.5	M18 × 1.5	10	10	12	17	17	17	32	32	32	17	19	19	22	
AC–16–16–26	M16 × 1.5	M16 × 1.5	M26 × 1.5	10	10	18	24	24	24	39	39	40	24	19	19	32	
AC–16–18–16	M16 × 1.5	M18 × 1.5	M16 × 1.5	10	12	10	17	17	17	32	32	32	17	19	22	19	
AC–16–18–18	M16 × 1.5	M18 × 1.5	M18 × 1.5	10	12	12	17	17	17	32	32	32	17	19	22	22	
AC–16–22–16	M16 × 1.5	M22 × 1.5	M16 × 1.5	10	15	10	21	21	21	36	36	36	19	19	27	19	
AC–16–26–26	M16 × 1.5	M26 × 1.5	M26 × 1.5	10	18	18	24	24	24	39	40	40	24	19	32	32	
AC–18–12–18	M18 × 1.5	M12 × 1.5	M18 × 1.5	12	6	12	17	17	17	32	32	32	17	22	14	22	
AC–18–14–18	M18 × 1.5	M14 × 1.5	M18 × 1.5	12	8	12	17	17	17	32	32	32	17	22	17	22	
AC–18–16–18	M18 × 1.5	M16 × 1.5	M18 × 1.5	12	10	12	17	17	17	32	32	32	17	22	19	22	
AC–18–18–22	M18 × 1.5	M18 × 1.5	M22 × 1.5	12	12	15	21	21	21	36	36	36	19	22	22	27	
AC–18–22–18	M18 × 1.5	M22 × 1.5	M18 × 1.5	12	15	12	21	21	21	36	36	36	19	22	27	22	
AC–18–22–22	M18 × 1.5	M22 × 1.5	M22 × 1.5	12	15	15	21	21	21	36	36	36	19	22	27	27	
AC–18–22–30	M18 × 1.5	M22 × 1.5	M30 × 2	12	15	22	28	28	28	43	43	44	27	22	27	36	
AC–18–26–18	M18 × 1.5	M26 × 1.5	M18 × 1.5	12	18	12	24	24	24	39	40	39	24	22	32	22	
AC–22–12–22	M22 × 1.5	M12 × 1.5	M22 × 1.5	15	6	15	21	21	21	36	36	36	19	27	14	27	
AC–22–16–22	M22 × 1.5	M16 × 1.5	M22 × 1.5	15	10	15	21	21	21	36	36	36	19	27	19	27	
AC–22–18–22	M22 × 1.5	M18 × 1.5	M22 × 1.5	15	12	15	21	21	21	36	36	36	19	27	22	27	

c.o.

b.f.

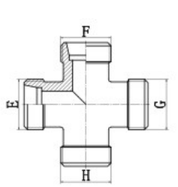
PART NO.	THREAD			TUBE O.D.			DIMENSIONS										PN BAR MPa
	E	F	G	D1	D2	D3	I1	I2	I3	L1	L2	L3	S1	S2	S3	S4	
AC–22–22–30	M22×1.5	M22×1.5	M30×2	15	15	22	28	28	28	43	43	44	27	27	27	36	25 L-series
AC–22–26–22	M22×1.5	M26×1.5	M22×1.5	15	18	15	24	24	24	39	40	39	24	27	32	27	
AC–26–16–26	M26×1.5	M16×1.5	M26×1.5	18	10	18	23.5	24	23.5	40	39	40	24	32	19	32	
AC–26–18–26	M26×1.5	M18×1.5	M26×1.5	18	12	18	23.5	24	23.5	40	39	40	24	32	22	32	
AC–26–22–26	M26×1.5	M22×1.5	M26×1.5	18	15	18	24	24	24	40	39	40	24	32	27	32	
AC–26–26–30	M26×1.5	M26×1.5	M30×2	18	18	22	27.5	27.5	27.5	44	44	44	27	32	32	36	16 L-series
AC–26–30–30	M26×1.5	M30×2	M30×2	18	22	22	27.5	27.5	27.5	44	44	44	27	32	36	36	
AC–30–16–30	M30×2	M16×1.5	M30×2	22	10	22	27.5	28	27.5	44	43	44	27	36	19	36	
AC–30–18–30	M30×2	M18×1.5	M30×2	22	12	22	27.5	28	27.5	44	43	44	27	36	22	36	
AC–30–22–30	M30×2	M22×1.5	M30×2	22	15	22	27.5	28	27.5	44	43	44	27	36	27	36	
AC–30–26–30	M30×2	M26×1.5	M30×2	22	18	22	27.5	27.5	27.5	44	44	44	27	36	32	36	
AC–30–30–36	M30×2	M30×2	M36×2	22	22	28	30.5	30.5	30.5	47	47	47	36	36	36	41	
AC–36–16–36	M36×2	M16×1.5	M36×2	28	10	28	30.5	31	30.5	47	46	47	36	41	19	41	
AC–36–18–36	M36×2	M18×1.5	M36×2	28	12	28	30.5	31	30.5	47	46	47	36	41	22	41	
AC–36–22–36	M36×2	M22×1.5	M36×2	28	15	28	30.5	31	30.5	47	46	47	36	41	27	41	
AC–36–26–36	M36×2	M26×1.5	M36×2	28	18	28	30.5	30.5	30.5	47	47	47	36	41	32	41	
AC–36–30–36	M36×2	M30×2	M36×2	28	22	28	30.5	30.5	30.5	47	47	47	36	41	36	41	
AD–16–16–20	M16×1.5	M16×1.5	M20×1.5	8	8	12	22	22	22	37	37	38	17	19	19	24	63 S-series
AD–18–14–18	M18×1.5	M14×1.5	M18×1.5	10	6	10	17.5	18	17.5	34	33	34	17	22	17	22	
AD–20–16–20	M20×1.5	M16×1.5	M20×1.5	12	8	12	21.5	22	21.5	38	37	38	17	24	19	24	
AD–20–18–20	M20×1.5	M18×1.5	M20×1.5	12	10	12	21.5	21.5	21.5	38	38	38	17	24	22	24	
AD–20–20–30	M20×1.5	M20×1.5	M30×2	12	12	20	26.5	26.5	29.5	46	46	48	27	24	24	36	
AD–20–24–20	M20×1.5	M24×1.5	M20×1.5	12	16	12	25.5	24.5	25.5	42	43	42	24	24	30	24	40 S-series
AD–20–30–20	M20×1.5	M30×2	M20×1.5	12	20	12	26.5	29.5	26.5	46	48	46	27	24	36	24	
AD–20–30–30	M20×1.5	M30×2	M30×2	12	20	20	26.5	29.5	26.5	46	48	48	27	24	36	36	
AD–24–14–24	M24×1.5	M14×1.5	M24×1.5	16	6	16	24.5	26	24.5	43	41	43	24	30	17	30	
AD–24–16–24	M24×1.5	M16×1.5	M24×1.5	16	8	16	24.5	26	24.5	43	41	43	24	30	19	30	
AD–24–18–24	M24×1.5	M18×1.5	M24×1.5	16	10	16	24.5	25.5	24.5	43	42	43	24	30	22	30	
AD–24–20–24	M24×1.5	M20×1.5	M24×1.5	16	12	16	24.5	25.5	24.5	43	42	43	24	30	24	30	
AD–24–30–24	M24×1.5	M30×2	M24×1.5	16	20	16	28.5	26.5	28.5	47	48	47	27	30	36	30	
AD–30–18–30	M30×2	M18×1.5	M30×2	20	10	20	26.5	29.5	26.5	48	46	48	27	36	22	36	
AD–30–20–30	M30×2	M20×1.5	M30×2	20	12	20	26.5	29.5	26.5	48	46	48	27	36	24	36	
AD–30–24–30	M30×2	M24×1.5	M30×2	20	16	20	26.5	28.5	26.5	48	47	48	27	36	30	36	
AD–30–36–30	M30×2	M36×2	M30×2	20	25	20	31.5	30	31.5	53	54	53	36	36	46	36	
AD–36–24–36	M36×2	M24×1.5	M36×2	25	16	25	30	33.5	30	54	52	54	36	46	30	46	

c.o.

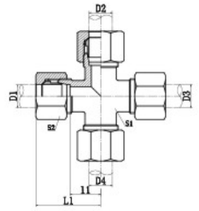
b.f.

PART NO.	THREAD			TUBE O.D.			DIMENSIONS										PN BAR MPa
	E	F	G	D1	D2	D3	I1	I2	I3	L1	L2	L3	S1	S2	S3	S4	
AD–36–30–36	M36×2	M30×2	M36×2	25	20	25	30	31.5	30	54	53	54	36	46	36	46	40 S-series
AD–36–42–36	M36×2	M42×2	M36×2	25	30	25	37	35.5	37	61	62	61	41	46	50	46	

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffi× "RN"after our part no.,for e×ample AC–26–26–30RN.



XC
XD

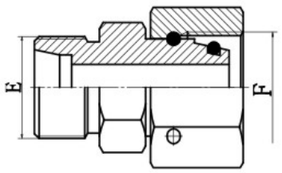


XC–RN
XD–RN

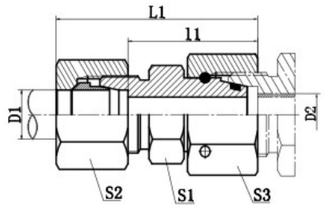
CROSS FITTINGS

PART NO.	THREAD	TUBE O.D.	DIMENSIONS				PN BAR MPa
	E,F,G,H	D1,D2,D3,D4	I1	L1	S1	S2	
XC–12	M12×1.5	6	12	27	12	14	31.5 L-series
XC–14	M14×1.5	8	14	29	12	17	
XC–16	M16×1.5	10	15	30	14	19	
XC–18	M18×1.5	12	17	32	17	22	
XC–22	M22×1.5	15	21	36	19	27	
XC–26	M26×1.5	18	23.5	40	24	32	
XC–30	M30×2	22	27.5	44	27	36	16 L-series
XC–36	M36×2	28	30.5	47	36	41	
XC–45	M45×2	35	34.5	56	41	50	
XC–52	M52×2	42	40	63	50	60	
XD–14	M14×1.5	6	16	31	12	17	63 S-series
XD–16	M16×1.5	8	17	32	14	19	
XD–18	M18×1.5	10	17.5	34	17	22	
XD–20	M20×1.5	12	21.5	38	17	24	
XD–22	M22×1.5	14	22	40	19	27	
XD–24	M24×1.5	16	24.5	43	24	30	40 S-series
XD–30	M30×2	20	26.5	48	27	36	
XD–36	M36×2	25	30	54	36	46	
XD–42	M42×2	30	35.5	62	41	50	
XD–52	M52×2	38	41	72	50	60	31.5 S-series

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffi× "RN"after our part no.,for e×ample ×C–30RN.



2C



2C–RN

REDUCER TUBE ADAPTOR WITH SWIVEL NUT

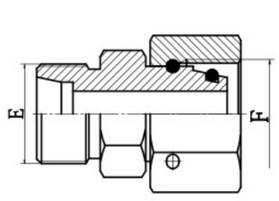
PART NO.	THREAD		TUBE O.D.		DIMENSIONS					PN BAR MPa
	E	F	D1	D2	l1	L1	S1	S2	S3	
2C–12–14	M12×1.5	M14×1.5	6	8	23.5	38	12	14	17	31.5 L–series
2C–12–16	M12×1.5	M16×1.5	6	10	25	40	14	14	19	
2C–14–16	M14×1.5	M16×1.5	8	10	25	40	14	17	19	
2C–12–18	M12×1.5	M18×1.5	6	12	25	40	17	14	22	
2C–14–18	M14×1.5	M18×1.5	8	12	25	40	17	17	22	
2C–16–18	M16×1.5	M18×1.5	10	12	26	41	17	19	22	
2C–12–22	M12×1.5	M22×1.5	6	15	28.5	43	19	14	27	
2C–14–22	M14×1.5	M22×1.5	8	15	28.5	43	19	17	27	
2C–16–22	M16×1.5	M22×1.5	10	15	29.5	44	19	19	27	
2C–18–22	M18×1.5	M22×1.5	12	15	29.5	44	19	22	27	
2C–12–26	M12×1.5	M26×1.5	6	18	28	43	24	14	32	
2C–14–26	M14×1.5	M26×1.5	8	18	28	43	24	17	32	
2C–16–26	M16×1.5	M26×1.5	10	18	29	44	24	19	32	
2C–18–26	M18×1.5	M26×1.5	12	18	29	44	24	22	32	
2C–22–26	M22×1.5	M26×1.5	15	18	30	45	24	27	32	
2C–12–30	M12×1.5	M30×2	6	22	32	47	27	14	36	16 L–series
2C–14–30	M14×1.5	M30×2	8	22	32	47	27	17	36	
2C–14–30	M14×1.5	M30×2	10	22	33	48	27	19	36	
2C–18–30	M16×1.5	M30×2	12	22	33	48	27	22	36	
2C–22–30	M18×1.5	M30×2	15	22	34	49	27	27	36	
2C–26–30	M26×1.5	M30×2	18	22	33.5	50	27	32	36	
2C–12–36	M12×1.5	M36×2	6	28	34	49	36	14	41	
2C–14–36	M14×1.5	M36×2	8	28	34	49	36	17	41	
2C–16–36	M16×1.5	M36×2	10	28	35	50	36	19	41	
2C–18–36	M18×1.5	M36×2	12	28	35	50	36	22	41	
2C–22–36	M22×1.5	M36×2	15	28	36	51	26	27	41	

c.o.

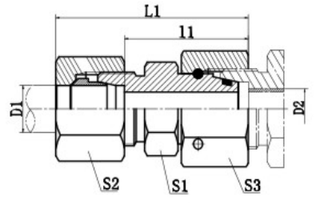
b.f.

PART NO.	THREAD		TUBE O.D.		DIMENSIONS					PN BAR MPa
	E	F	D1	D2	l1	L1	S1	S2	S3	
2C–26–36	M26×1.5	M36×2	18	28	35.5	52	36	32	41	16 L–series
2C–30–36	M30×2	M36×2	22	28	37.5	54	36	36	41	
2C–12–45	M12×1.5	M45×2	6	35	37	52	41	14	50	
2C–14–45	M14×1.5	M45×2	8	35	37	52	41	17	50	
2C–16–45	M16×1.5	M45×2	10	35	38	53	41	19	50	
2C–18–45	M18×1.5	M45×2	12	35	38	53	41	22	50	
2C–22–45	M22×1.5	M45×2	15	35	39	54	41	27	50	
2C–26–45	M26×1.5	M45×2	18	35	38.5	55	41	32	50	
2C–30–45	M30×2	M45×2	22	35	40.5	57	41	36	50	
2C–36–45	M36×2	M45×2	28	35	40.5	57	41	41	50	
2C–12–52	M12×1.5	M52×2	6	42	40.5	55	50	14	60	
2C–14–52	M14×1.5	M52×2	8	42	40.5	55	50	17	60	
2C–16–52	M16×1.5	M52×2	10	42	41.5	56	50	19	60	
2C–18–52	M28×1.5	M52×2	12	42	41.5	56	50	22	60	
2C–22–52	M22×1.5	M52×2	15	42	42.5	58	50	27	60	
2C–26–52	M26×1.5	M52×2	18	42	42	58	50	32	60	
2C–30–52	M30×2	M52×2	22	42	44	60	50	36	60	
2C–36–52	M36×2	M52×2	28	42	44	61	50	41	60	
2C–45–52	M45×2	M52×2	35	42	43	65	50	50	60	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example 2C–30–52RN.



2D



2D–RN

REDUCER TUBE ADAPTOR WITH SWIVEL NUT

PART NO.	THREAD		TUBE O.D.		DIMENSIONS					PN BAR MPa
	E	F	D1	D2	l1	L1	S1	S2	S3	
2D–14–16	M14×1.5	M16×1.5	6	8	27	42	14	17	19	63 S–series
2D–14–18	M14×1.5	M18×1.5	6	10	27.5	42	17	17	22	

c.o.

b.f.

PART NO.	THREAD		TUBE O.D.		DIMENSIONS					PN BAR MPa
	E	F	D1	D2	l1	L1	S1	S2	S3	
2D–16–18	M16 × 1.5	M18 × 1.5	8	10	27.5	42	17	19	22	
2D–14–20	M14 × 1.5	M20 × 1.5	6	12	29	44	17	17	24	
2D–16–20	M16 × 1.5	M20 × 1.5	8	12	29	44	17	19	24	
2D–18–20	M18 × 1.5	M20 × 1.5	10	12	31	46	19	22	24	
2D–14–22	M14 × 1.5	M22 × 1.5	6	14	31.5	46	19	17	27	
2D–16–22	M16 × 1.5	M22 × 1.5	8	14	31.5	46	19	19	27	
2D–18–22	M18 × 1.5	M22 × 1.5	10	14	31	47	19	22	27	
2D–20–22	M20 × 1.5	M22 × 1.5	12	14	31	47	22	24	27	
2D–14–24	M14 × 1.5	M24 × 1.5	6	16	32	47	22	17	30	
2D–16–24	M16 × 1.5	M24 × 1.5	6	16	32	47	22	19	30	
2D–18–24	M18 × 1.5	M24 × 1.5	10	16	31.5	48	22	22	30	
2D–20–24	M20 × 1.5	M24 × 1.5	12	16	33.5	50	22	24	30	
2D–22–24	M22 × 1.5	M24 × 1.5	14	16	33	51	24	27	30	
2D–14–30	M14 × 1.5	M30 × 2	6	20	36	51	27	17	36	
2D–16–30	M16 × 1.5	M30 × 2	8	20	36	51	27	19	36	
2D–18–30	M18 × 1.5	M30 × 2	10	20	35.5	52	27	22	36	40 S–series
2D–20–30	M20 × 1.5	M30 × 2	12	20	35.5	52	27	24	36	
2D–22–30	M22 × 1.5	M30 × 2	14	20	37	55	27	27	36	
2D–24–30	M24 × 1.5	M30 × 2	16	20	37.5	55	30	30	36	
2D–14–36	M14 × 1.5	M36 × 2	6	25		53	36	17	46	
2D–16–36	M16 × 1.5	M36 × 2	8	25	38.5	53	36	19	46	
2D–18–36	M18 × 1.5	M36 × 2	10	25		54	36	22	46	
2D–20–36	M20 × 1.5	M36 × 2	12	25	38	54	36	24	46	
2D–22–36	M22 × 1.5	M36 × 2	14	25		57	36	27	46	
2D–24–36	M24 × 1.5	M36 × 2	16	25	39	57	36	30	46	
2D–30–36	M30 × 2	M36 × 2	20	25		61	36	36	46	
2D–14–42	M14 × 1.5	M42 × 2	6	30	44	59	41	17	50	
2D–16–42	M16 × 1.5	M42 × 2	8	30		59	41	19	50	
2D–18–42	M18 × 1.5	M42 × 2	10	30	43.5	60	41	22	50	
2D–20–42	M20 × 1.5	M42 × 2	12	30		60	41	24	50	
2D–22–42	M22 × 1.5	M42 × 2	14	30	45	63	41	27	50	
2D–24–42	M24 × 1.5	M42 × 2	16	30		63	41	30	50	

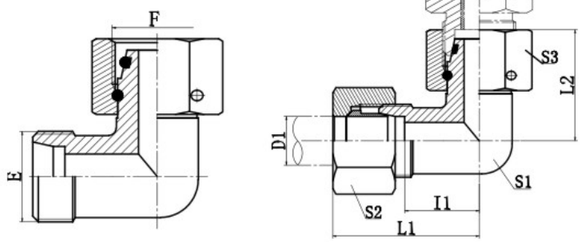
c.o.

Metric Thread Bite Type Tube Fittings

b.f.

PART NO.	THREAD		TUBE O.D.		DIMENSIONS					PN BAR MPa
	E	F	D1	D2	l1	L1	S1	S2	S3	
2D–30–42	M30 × 2	M42 × 2	20	30	44.5	66	41	36	50	40 S–series
2D–36–42	M36 × 2	M42 × 2	25	30	44	69	41	46	50	
2D–14–52	M14 × 1.5	M52 × 2	6	38	47.5	62	50	17	60	31.5 S–series
2D–16–52	M16 × 1.5	M52 × 2	8	38	47.5	62	50	19	60	
2D–18–52	M18 × 1.5	M52 × 2	10	38	47	63	50	22	60	
2D–20–52	M20 × 1.5	M52 × 2	12	38	47	63	50	24	60	
2D–22–52	M22 × 1.5	M52 × 2	14	38	48.5	66	50	27	60	
2D–24–52	M24 × 1.5	M52 × 2	16	38	48	66	50	30	60	
2D–30–52	M30 × 2	M52 × 2	20	38	48	70	50	36	60	
2D–36–52	M36 × 2	M52 × 2	25	38	48.5	73	50	46	60	
2D–42–52	M42 × 2	M52 × 2	30	38	49	76	50	50	60	

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffi x "RN"after our part no.,for e x ample 2D–30–52RN.

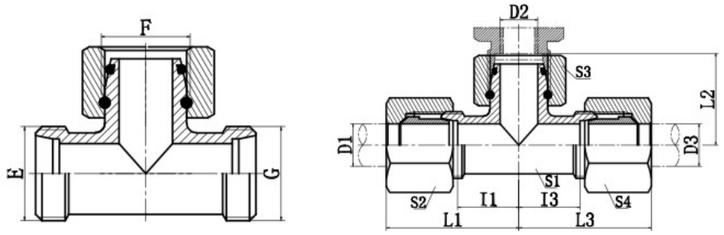


2C9 **2C9–RN**
2D9 **2D9–RN**

90° ELBOW REDUCER TUBE ADAPTOR WITH SWIVEL NUT

PART NO.	THREAD		TUBE O.D.		DIMENSIONS						PN BAR MPa
	E	F	D1	D2	I1	L1	L2	S1	S2	S3	
2C9–12	M12 × 1.5	M12 × 1.5	6	6	12	27	26	12	14	14	25 L–series
2C9–14	M14 × 1.5	M14 × 1.5	8	8	14	29	27.5	12	17	17	
2C9–16	M16 × 1.5	M16 × 1.5	10	10	15	30	29	14	19	19	
2C9–18	M18 × 1.5	M18 × 1.5	12	12	17	32	29.5	17	22	22	
2C9–22	M22 × 1.5	M22 × 1.5	15	15	21	36	32.5	19	27	27	
2C9–26	M26 × 1.5	M26 × 1.5	18	18	23.5	40	35.5	24	32	32	
2C9–30	M30 × 2	M30 × 2	22	22	27.5	44	38.5	27	36	36	16 L–series
2C9–36	M36 × 2	M36 × 2	28	28	30.5	47	41.5	36	41	41	
2C9–45	M45 × 2	M45 × 2	35	35	34.5	56	51	41	50	50	
2C9–52	M52 × 2	M52 × 2	42	42	40	63	56	50	60	60	
2D9–14	M14 × 1.5	M14 × 1.5	6	6	16	31	27	12	17	17	63 S–series
2D9–16	M16 × 1.5	M16 × 1.5	8	8	17	32	27.5	14	19	19	
2D9–18	M18 × 1.5	M18 × 1.5	10	10	17.5	34	30	17	22	22	
2D9–20	M20 × 1.5	M20 × 1.5	12	12	21.5	38	31	17	24	24	
2D9–22	M22 × 1.5	M22 × 1.5	14	14	22	40	35	19	27	27	
2D9–24	M24 × 1.5	M24 × 1.5	16	16	24.5	43	36.5	24	30	30	40 S–series
2D9–30	M30 × 2	M30 × 2	20	20	26.5	48	44.5	27	36	36	
2D9–36	M36 × 2	M36 × 2	25	25	30	54	50	36	46	46	
2D9–42	M42 × 2	M42 × 2	30	30	35.5	62	55	41	50	50	
2D9–52	M52 × 2	M52 × 2	38	38	41	72	63	50	60	60	31.5 S–series

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no., for example 2C9–30RN.

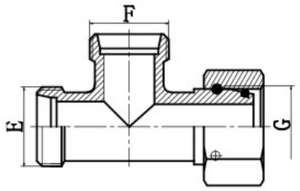


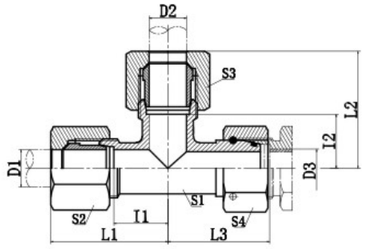
BC **BC–RN**
BD **BD–RN**

BRANCH TEE FITTINGS WITH SWIVEL NUT

PART NO.	THREAD		TUBE O.D.		DIMENSIONS						PN BAR MPa
	E,G	F	D1,D3	D2	I1,I3	L1,L3	L2	S1	S2,S4	S3	
BC–12	M12 × 1.5	M12 × 1.5	6	6	12	27	26	12	14	14	31.5 L–series
BC–14	M14 × 1.5	M14 × 1.5	8	8	14	29	27.5	12	17	17	
BC–16	M16 × 1.5	M16 × 1.5	10	10	15	30	29	14	19	19	
BC–18	M18 × 1.5	M18 × 1.5	12	12	17	32	29.5	17	22	22	
BC–22	M22 × 1.5	M22 × 1.5	15	15	21	36	32.5	19	27	27	
BC–26	M26 × 1.5	M26 × 1.5	18	18	23.5	40	35.5	24	32	32	
BC–30	M30 × 2	M30 × 2	22	22	27.5	44	38.5	27	36	36	16 L–series
BC–36	M36 × 2	M36 × 2	28	28	30.5	47	41.5	36	41	41	
BC–45	M45 × 2	M45 × 2	35	35	34.5	56	51	41	50	50	
BC–52	M52 × 2	M52 × 2	42	42	40	63	56	50	60	60	
BD–14	M14 × 1.5	M14 × 1.5	6	6	16	31	27	12	17	17	63 S–series
BD–16	M16 × 1.5	M16 × 1.5	8	8	17	32	27.5	14	19	19	
BD–18	M18 × 1.5	M18 × 1.5	10	10	17.5	34	30	17	22	22	
BD–20	M20 × 1.5	M20 × 1.5	12	12	21.5	38	31	17	24	24	
BD–22	M22 × 1.5	M22 × 1.5	14	14	22	40	35	19	27	27	
BD–24	M24 × 1.5	M24 × 1.5	16	16	24.5	43	36.5	24	30	30	40 S–series
BD–30	M30 × 2	M30 × 2	20	20	26.5	48	44.5	27	36	36	
BD–36	M36 × 2	M36 × 2	25	25	30	54	50	36	46	46	
BD–42	M42 × 2	M42 × 2	30	30	35.5	62	55	41	50	50	
BD–52	M52 × 2	M52 × 2	38	38	41	72	63	50	60	60	31.5 S–series

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no., for example BC–30RN.





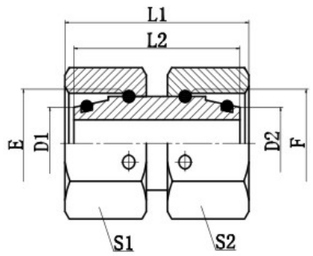
CC
CD

CC–RN
CD–RN

RUN TEE FITTINGS WITH SWIVEL NUT

PART NO.	THREAD		TUBE O.D.		DIMENSIONS						PN BAR MPa
	E,F	G	D1,D2	D3	l1,l2	L1,L2	L3	S1	S2,S3	S4	
CC–12	M12 × 1.5	M12 × 1.5	6	6	12	27	26	12	14	14	31.5 L–series
CC–14	M14 × 1.5	M14 × 1.5	8	8	14	29	27.5	12	17	17	
CC–16	M16 × 1.5	M16 × 1.5	10	10	15	30	29	14	19	19	
CC–18	M18 × 1.5	M18 × 1.5	12	12	17	32	29.5	17	22	22	
CC–22	M22 × 1.5	M22 × 1.5	15	15	21	36	32.5	19	27	27	
CC–26	M26 × 1.5	M26 × 1.5	18	18	23.5	40	35.5	24	32	32	
CC–30	M30 × 2	M30 × 2	22	22	27.5	44	38.5	27	36	36	16 L–series
CC–36	M36 × 2	M36 × 2	28	28	30.5	47	41.5	36	41	41	
CC–45	M45 × 2	M45 × 2	35	35	34.5	56	51	41	50	50	
CC–52	M52 × 2	M52 × 2	42	42	40	63	56	50	60	60	
CD–14	M14 × 1.5	M14 × 1.5	6	6	16	31	27	12	17	17	63 S–series
CD–16	M16 × 1.5	M16 × 1.5	8	8	17	32	27.8	14	19	19	
CD–18	M18 × 1.5	M18 × 1.5	10	10	17.5	34	30	17	22	22	
CD–20	M20 × 1.5	M20 × 1.5	12	12	21.5	38	31	17	24	24	
CD–22	M22 × 1.5	M22 × 1.5	14	14	22	40	35	19	27	27	
CD–24	M24 × 1.5	M24 × 1.5	16	16	24.5	43	36.5	24	30	30	40 S–series
CD–30	M30 × 2	M30 × 2	20	20	26.5	48	44.5	27	36	36	
CD–36	M36 × 2	M36 × 2	25	25	30	54	50	36	46	46	
CD–42	M42 × 2	M42 × 2	30	30	35.5	62	55	41	50	50	
CD–52	M52 × 2	M52 × 2	38	38	41	72	63	50	60	60	31.5 S–series

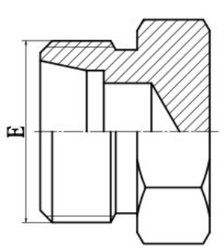
Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no., for example CC–30RN.



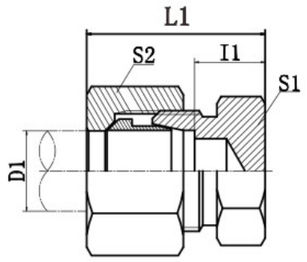
3C
3D

STRAIGHT TUBE ADAPTERS WITH SWIVEL NUT

PART NO.	THREAD	TUBE O.D.	DIMENSIONS			PN BAR MPa
	E,F	D1,D2	L1	L2	S1,S2	
3C–12	M12 × 1.5	6	33	32	14	31.5 L–series
3C–14	M14 × 1.5	8	33	32	17	
3C–16	M16 × 1.5	10	34	33	19	
3C–18	M18 × 1.5	12	34	33	22	
3C–22	M22 × 1.5	15	39	38	27	
3C–26	M26 × 1.5	18	41	39	32	
3C–30	M30 × 2	22	44	42	36	16 L–series
3C–36	M36 × 2	28	48	46	46	
3C–45	M45 × 2	35	52	48	50	
3C–52	M52 × 2	42	57	52	60	
3D–14	M14 × 1.5	6	33	32	17	63 S–series
3D–16	M16 × 1.5	8	34	33	19	
3D–18	M18 × 1.5	10	35	33	22	
3D–20	M20 × 1.5	12	38	36	24	
3D–22	M22 × 1.5	14	41	39	27	
3D–24	M24 × 1.5	16	42	39	30	40 S–series
3D–30	M30 × 2	20	48	44	36	
3D–36	M36 × 2	25	53	46	46	
3D–42	M42 × 2	30	62	52	50	
3D–52	M52 × 2	38	67	52	60	31.5 S–series



4C
4D

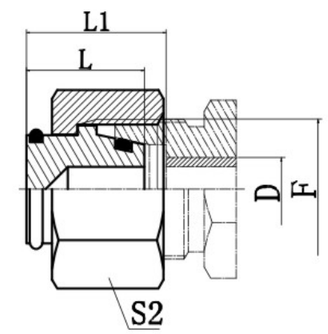


4C–RN
4D–RN

PLUG

PART NO.	THREAD	TUBE O.D.	DIMENSIONS				PN BAR MPa
	E	D1	I1	L1	S1	S2	
4C–12	M12×1.5	6	7	22	12	14	31.5 L–series
4C–14	M14×1.5	8	8	23	14	17	
4C–16	M16×1.5	10	9	24	17	19	
4C–18	M18×1.5	12	10	25	19	22	
4C–22	M22×1.5	15	11	26	24	27	
4C–26	M26×1.5	18	11.5	28	27	32	
4C–30	M30×2	22	13.5	30	32	36	16 L–series
4C–36	M36×2	28	14.5	31	41	41	
4C–45	M45×2	35	14.5	36	46	50	
4C–52	M52×2	42	16	39	55	60	
4D–14	M14×1.5	6	11	26	14	17	63 S–series
4D–16	M16×1.5	8	13	28	17	19	
4D–18	M18×1.5	10	12.5	29	19	22	
4D–20	M20×1.5	12	14.5	31	22	24	
4D–22	M22×1.5	14	16	34	24	27	
4D–24	M24×1.5	16	15.5	34	27	30	40 S–series
4D–30	M30×2	20	17.5	39	32	36	
4D–36	M36×2	25	20	44	38	46	
4D–42	M42×2	30	20.5	47	46	50	
4D–52	M52×2	38	23	54	55	60	31.5 S–series

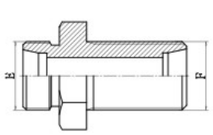
Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no., for example 4C–30RN.



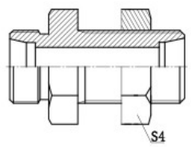
9C
9D

FEMALE PLUG

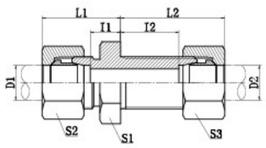
PART NO.	THREAD	TUBE O.D.	DIMENSIONS			PN BAR MPa
	F	D	L	L1	S2	
9C–12	M12×1.5	6	15.5	17.5	14	31.5 L–series
9C–14	M14×1.5	8	15.5	18	17	
9C–16	M16×1.5	10	16.5	18	19	
9C–18	M18×1.5	12	18	19.5	22	
9C–22	M22×1.5	15	19.5	20	27	
9C–26	M26×1.5	18	20	22	32	
9C–30	M30×2	22	21.5	22.5	36	16 L–series
9C–36	M36×2	28	22.5	24.5	41	
9C–45	M45×2	35	25	29	55	
9C–52	M52×2	42	27	31.5	60	
9D–14	M14×1.5	6	16	18	17	63 S–series
9D–16	M16×1.5	8	16.5	18.5	19	
9D–18	M18×1.5	10	18	20	22	
9D–20	M20×1.5	12	18.5	20.5	24	
9D–22	M22×1.5	14	19	21.5	27	
9D–24	M24×1.5	16	18.5	21.5	30	40 S–series
9D–30	M30×2	20	22.5	25	36	
9D–36	M36×2	25	23.5	28.5	46	
9D–42	M42×2	30	25.5	32	50	
9D–52	M52×2	38	26.5	36	60	31.5 S–series



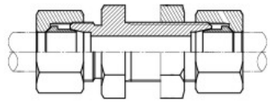
6C
6D



6C–LN
6D–LN



6C–RN
6D–RN

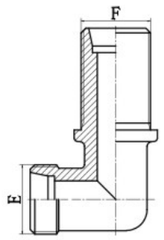


6C–LN/RN
6D–LN/RN

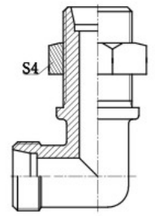
STRAIGHT BULKHEAD FITTINGS

PART NO.	THREAD		TUBE O.D.		DIMENSIONS							PN BAR MPa
	E	F	D1	D2	l1	l2	L1	L2	S1	S2,S3	S4	
6C–12	M12 × 1.5	M12 × 1.5	6	6	7	27	22	42	17	14	17	31.5 L–series
6C–14	M14 × 1.5	M14 × 1.5	8	8	8	27	23	42	19	17	19	
6C–16	M16 × 1.5	M16 × 1.5	10	10	10	28	25	43	22	19	22	
6C–18	M18 × 1.5	M18 × 1.5	12	12	10	29	25	44	24	22	24	
6C–22	M22 × 1.5	M22 × 1.5	15	15	12	31	27	46	27	27	30	
6C–26	M26 × 1.5	M26 × 1.5	18	18	13.5	32.5	30	49	32	32	36	
6C–30	M30 × 2	M30 × 2	22	22	16.5	34.5	33	51	36	36	41	16 L–series
6C–36	M36 × 2	M36 × 2	28	28	18.5	35.5	35	52	41	41	46	
6C–45	M45 × 2	M45 × 2	35	35	18.5	36.5	40	58	50	50	55	
6C–52	M52 × 2	M52 × 2	42	42	19	36	42	59	60	60	65	
6D–14	M14 × 1.5	M14 × 1.5	6	6	12	29	27	44	19	17	19	63 S–series
6D–16	M16 × 1.5	M16 × 1.5	8	8	13	29	28	44	22	19	22	
6D–18	M18 × 1.5	M18 × 1.5	10	10	14.5	29.5	31	46	24	22	24	
6D–20	M20 × 1.5	M20 × 1.5	12	12	14.5	30.5	31	47	27	24	27	
6D–22	M22 × 1.5	M22 × 1.5	14	14	17	32	35	50	30	27	30	
6D–24	M24 × 1.5	M24 × 1.5	16	16	16.5	31.5	35	50	32	30	32	40 S–series
6D–30	M30 × 2	M30 × 2	20	20	17.5	33.5	39	55	41	36	41	
6D–36	M36 × 2	M36 × 2	25	25	20	35	44	59	46	46	46	
6D–42	M42 × 2	M42 × 2	30	30	21.5	37.5	48	64	50	50	50	
6D–52	M52 × 2	M52 × 2	38	38	22	37	53	68	65	60	65	31.5 S–series

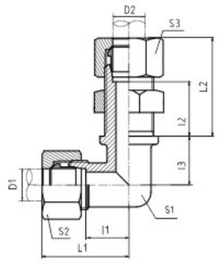
Note：In case if you are interested to order the adapter with lock nut,please insert suffix "LN" after our part no. for example 6C–30LN,order the adapter with cutting ring and nut,insert suffix "RN" after part no.,for example 6C–30RN,order the adapter with lock nut and cutting ring and nut,insert suffix "LN/RN" after part no.,for example 6C–30LN/RN.



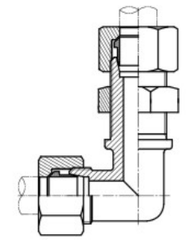
6C9
6D9



6C9–LN
6D9–LN



6C9–RN
6D9–RN

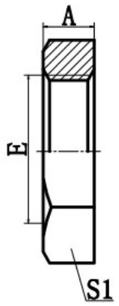


6C9–LN/RN
6D9–LN/RN

90° ELBOW BULKHEAD FITTINGS

PART NO.	THREAD		TUBE O.D.		DIMENSIONS								PN BAR MPa
	E	F	D1	D2	l1	l2	l3	L1	L2	S1	S2,S3	S4	
6C9–12	M12X1.5	M12X1.5	6	6	27	12	14	42	27	12	14	17	31.5 L–series
6C9–14	M14X1.5	M14X1.5	8	8	27	14	17	42	29	12	17	19	
6C9–16	M16X1.5	M16X1.5	10	10	28	15	18	43	30	14	19	22	
6C9–18	M18X1.5	M18X1.5	12	12	29	17	20	44	32	17	22	24	
6C9–22	M22X1.5	M22X1.5	15	15	31	21	23	46	36	19	27	30	
6C9–26	M26X1.5	M26X1.5	18	18	32.5	23.5	24	49	40	24	32	36	
6C9–30	M30X2	M30X2	22	22	34.5	27.5	30	51	44	27	36	41	16 L–series
6C9–36	M36X2	M36X2	28	28	35.5	30.5	34	52	47	36	41	46	
6C9–45	M45X2	M45X2	35	35	36.5	34.5	39	58	56	41	50	55	
6C9–52	M52X2	M52X2	42	42	36	40	43	59	63	50	60	65	
6D9–14	M14X1.5	M14X1.5	6	6	29	16	17	44	31	12	17	19	63 S–series
6D9–16	M16X1.5	M16X1.5	8	8	29	17	18	44	32	14	19	22	
6D9–18	M18X1.5	M18X1.5	10	10	29.5	17.5	20	46	34	17	22	24	
6D9–20	M20X1.5	M20X1.5	12	12	30.5	21.5	21	47	38	17	24	27	
6D9–22	M22X1.5	M22X1.5	14	14	32	22	23	50	40	19	27	30	
6D9–24	M24X1.5	M24X1.5	16	16	31.5	24.5	24	50	43	24	30	32	40 S–series
6D9–30	M30X2	M30X2	20	20	33.5	26.5	30	55	48	27	36	41	
6D9–36	M36X2	M36X2	25	25	35	30	34	59	54	36	46	46	
6D9–42	M42X2	M42X2	30	30	37.5	35.5	39	64	62	41	50	50	
6D9–52	M52X2	M52X2	38	38	37	41	43	68	72	50	60	65	31.5 S–series

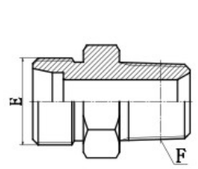
Note：In case if you are interested to order the adapter with lock nut,please insert suffix "LN" after our part no. for example 6C9–30LN,order the adapter with cutting ring and nut,insert suffix "RN" after part no.,for example 6C9–30RN,order the adapter with lock nut and cutting ring and nut,insert suffix "LN/RN" after part no.,for example 6C9–30LN/RN.

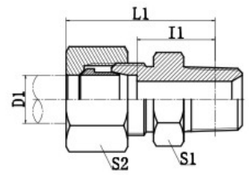


8C

METRIC LOCK NUT

PART NO.	THREAD	DIMENSIONS	
	E	A	S1
8C–10	M10 × 1	6	14
8C–12	M12 × 1.5	7.5	17
8C–14	M14 × 1.5	7.5	19
8C–16	M16 × 1.5	7.5	22
8C–18	M18 × 1.5	7.5	24
8C–20	M20 × 1.5	8	27
8C–22	M22 × 1.5	8	27
8C–24	M24 × 1.5	8	30
8C–26	M26 × 1.5	8	32
8C–27D	M27 × 1.5	10	32
8C–27	M27 × 2	10	32
8C–30	M30 × 2	10	36
8C–30D	M30 × 1.5	10	36
8C–33	M33 × 2	10	41
8C–36	M36 × 2	10	41
8C–39	M39 × 2	10	46
8C–42	M42 × 2	10	50
8C–45	M45 × 2	10	55
8C–52	M52 × 2	10	60





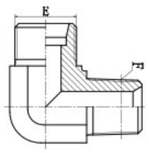
1CN
1DN

1CN–RN
1DN–RN

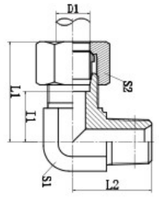
NPT MALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				PN BAR MPa
	E	F	D1	I1	L1	S1	S2	
1CN–12–02	M12 × 1.5	Z1/8" × 27	6	13.4	28.4	12	14	25 L–series
1CN–12–04	M12 × 1.5	Z1/4" × 18	6	17.2	32.2	17	14	
1CN–14–04	M14 × 1.5	Z1/4" × 18	8	17.2	32.2	14	17	
1CN–16–04	M16 × 1.5	Z1/4" × 18	10	18.2	33.2	17	19	
1CN–16–06	M16 × 1.5	Z3/8" × 18	10	19.9	53.0	19	19	
1CN–18–04	M18 × 1.5	Z1/4" × 18	12	19.2	34.2	19	22	
1CN–18–06	M18 × 1.5	Z3/8" × 18	12	19.9	34.9	19	22	
1CN–18–08	M18 × 1.5	Z1/2" × 14	12	21.4	36.4	22	22	
1CN–22–08	M22 × 1.5	Z1/2" × 14	15	22.4	37.4	24	27	
1CN–22–20	M22 × 1.5	Z1.1/4" × 11.5	15	29.8	37.4	46	27	
1CN–26–08	M26 × 1.5	Z1/2" × 14	18	22.9	39.4	27	32	
1CN–26–12	M26 × 1.5	Z3/4" × 14	18	22.4	38.9	30	32	16 L–series
1CN–30–08	M30 × 2	Z1/2" × 14	22	24.4	40.5	32	36	
1CN–30–12	M30 × 2	Z3/4" × 14	22	24.4	40.9	32	36	
1CN–36–16	M36 × 2	Z1" × 11.5	28	29.8	46.3	41	41	
1CN–36–20	M36 × 2	Z1.1/4" × 11.5	28	31.3	46.3	46	41	
1CN–45–20	M45 × 2	Z1.1/4" × 11.5	35	30.3	51.8	46	50	
1CN–52–20	M52 × 2	Z1.1/4" × 11.5	42	31.8	55.8	55	60	
1CN–52–24	M52 × 2	Z1.1/2" × 11.5	42	32.8	55.8	55	60	
1DN–14–04	M14 × 1.5	Z1/4" × 18	6	22.2	37.2	17	17	40 S–series
1DN–16–04	M16 × 1.5	Z1/4" × 18	8	22.2	37.2	17	19	
1DN–18–04	M18 × 1.5	Z1/4" × 18	10	21.7	38.2	19	22	
1DN–18–06	M18 × 1.5	Z3/8" × 18	10	22.4	38.9	19	22	
1DN–20–04	M20 × 1.5	Z1/4" × 18	12	23.7	40.2	22	24	
1DN–20–06	M20 × 1.5	Z3/8" × 18	12	24.4	40.9	22	24	
1DN–20–08	M20 × 1.5	Z1/2" × 14	12	25.9	42.4	22	24	
1DN–22–08	M22 × 1.5	Z1/2" × 14	14	27.4	45.4	24	27	
1DN–24–08	M24 × 1.5	Z1/2" × 14	16	26.9	45.4	27	30	
1DN–30–12	M30 × 2	Z3/4" × 14	20	28.4	49.9	32	36	25 S–series
1DN–36–12	M36 × 2	Z3/4" × 14	25	30.9	34.0	41	46	
1DN–36–16	M36 × 2	Z1" × 11.5	25	35.3	59.3	41	46	
1DN–42–16	M42 × 2	Z1" × 11.5	25	35.8	59.3	46	46	
1DN–42–20	M42 × 2	Z1.1/4" × 11.5	30	36.3	62.8	46	50	
1DN–52–24	M52 × 2	Z1.1/2" × 11.5	38	39.8	70.8	55	60	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.，for example 1DN–30–12RN.



1CN9
1DN9

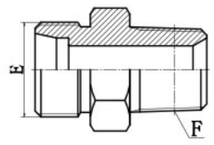


1CN9-RN
1DN9-RN

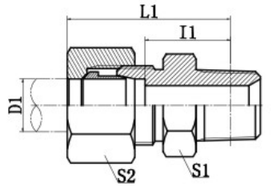
90° ELBOW NPT MALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					PN BAR MPa
	E	F	D1	I1	L1	L2	S1	S2	
1CN9-12-02	M12×1.5	Z1/8"×27	6	13	28	21	11	14	25 L-series
1CN9-12-04	M12×1.5	Z1/4"×18	6	15.5	30.5	25.5	14	14	
1CN9-14-04	M14×1.5	Z1/4"×18	8	15.5	30.5	25.5	14	17	
1CN9-16-06	M16×1.5	Z3/8"×18	10	17.5	32.5	29.5	16	19	
1CN9-18-04	M18×1.5	Z1/4"×18	12	19	34	28	19	22	
1CN9-18-06	M18×1.5	Z3/8"×18	12	19	34	31	19	22	
1CN9-18-08	M18×1.5	Z1/2"×14	12	21	36	36.7	22	22	
1CN9-22-06	M22×1.5	Z3/8"×18	15	22	37	32.5	22	27	
1CN9-22-08	M22×1.5	Z1/2"×14	15	22	37	36.7	22	27	
1CN9-26-08	M26×1.5	Z1/2"×14	18	25.5	42	40	27	32	16 L-series
1CN9-26-12	M26×1.5	Z3/4"×14	18	25.5	42	44	27	32	
1CN9-30-12	M30×2	Z3/4"×14	22	29.3	45.8	45	30	36	
1CN9-30-16	M30×2	Z1"×11.5	22	32	48.5	50	33	36	
1CN9-36-16	M36×2	Z1"×11.5	28	33.3	49.8	51.5	36	41	
1CN9-45-20	M45×2	Z1.1/4"×11.5	35	39.2	60.7	63	48	50	
1CN9-52-24	M52×2	Z1.1/4"×11.5	42	44.8	67.8	65	55	60	
1DN9-14-04	M14×1.5	Z1/4"×18	6	17.5	32.5	25.5	14	17	40 S-series
1DN9-16-04	M16×1.5	Z1/4"×18	8	18.5	33.7	26.5	16	19	
1DN9-18-06	M18×1.5	Z3/8"×18	10	19.5	36	31	19	22	
1DN9-20-04	M20×1.5	Z1/4"×18	12	19.5	36	28	19	24	
1DN9-20-06	M20×1.5	Z3/8"×18	12	19.5	36	31	19	24	
1DN9-22-06	M22×1.5	Z3/8"×18	14	23	41	32.5	22	27	
1DN9-22-08	M22×1.5	Z1/2"×14	14	23	41	36.7	22	27	
1DN9-24-06	M24×1.5	Z3/8"×18	16	24	42.5	33.5	24	30	
1DN9-24-08	M24×1.5	Z1/2"×14	16	24	42.5	37.5	24	30	
1DN9-30-08	M30×2	Z1/2"×14	20	28	49.8	41	30	36	25 S-series
1DN9-30-12	M30×2	Z3/4"×14	20	28	49.8	45	30	36	
1DN9-36-12	M36×2	Z3/4"×14	25	32.8	56.8	49	36	46	
1DN9-36-16	M36×2	Z1"×11.5	25	32.8	56.8	51.5	36	46	
1DN9-42-16	M42×2	Z1"×11.5	30	36.2	62.7	54.5	41	50	
1DN9-42-20	M42×2	Z1.1/4"×11.5	30	36.2	62.7	54.5	41	50	
1DN9-52-20	M52×2	Z1.1/4"×11.5	38	45.8	76.8	65	55	60	
1DN9-52-24	M52×2	Z1.1/2"×11.5	38	45.8	76.8	65	55	60	

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no., for example 1CN9-30-12RN.



1CT-SP
1DT-SP

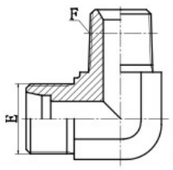


1CT-SP/RN
1DT-SP/RN

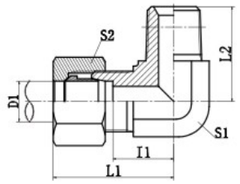
BSPT MALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				PN BAR MPa
	E	F	D	I1	L1	S1	S2	
1CT-12-02SP	M12×1.5	R1/8"×28	6	13	28	12	14	25 L-series
1CT-12-04SP	M12×1.5	R1/4"×19	6	8		14	14	
1CT-14-04SP	M14×1.5	R1/4"×19	8	16.5	31.5	14	17	
1CT-14-06SP	M14×1.5	R3/8"×19	8	17.6	32.6	19	17	
1CT-16-04SP	M16×1.5	R1/4"×19	10	17.5	32.5	17	19	
1CT-16-06SP	M16×1.5	R3/8"×19	10	18.6	33.6	19	19	
1CT-16-08SP	M16×1.5	R1/2"×14	10	21.8	36.8	22	19	
1CT-16-12SP	M16×1.5	R3/4"×14	10	21.5	36.5	30	19	
1CT-18-04SP	M18×1.5	R1/4"×19	12	18.5	33.5	19	22	
1CT-18-06SP	M18×1.5	R3/8"×19	12	18.6	33.6	19	22	
1CT-18-08SP	M18×1.5	R1/2"×14	12	21.8	36.8	22	22	
1CT-22-08SP	M22×1.5	R1/2"×14	15	22.8	37.8	24	27	
1CT-26-08SP	M26×1.5	R1/2"×14	18	23.3	39.8	27	32	16 L-series
1CT-26-12SP	M26×1.5	R3/4"×14	18	22	38.5	30	32	
1CT-30-12SP	M30×2	R3/4"×14	22	24	40.5	32	36	
1CT-36-16SP	M36×2	R1"×11	28	29.6	46.1	38	41	
1CT-36-20SP	M36×2	R1.1/4"×11	28	29.3	45.8	46	41	
1CT-45-16SP	M45×2	R1"×11	35	29.6	51.1	46	50	
1CT-45-20SP	M45×2	R1.1/4"×11	35	28.3	49.8	46	50	
1CT-52-20SP	M52×2	R1.1/4"×11	42	29.8	52.8	55	60	
1CT-52-24SP	M52×2	R1.1/2"×11	42	29.8	52.8	55	60	
1DT-14-04SP	M14×1.5	R1/4"×19	6	13	36.5	17	17	40 S-series
1DT-16-04SP	M16×1.5	R1/4"×19	8	21.5	36.5	17	19	
1DT-18-04SP	M18×1.5	R1/4"×19	10	21	37.5	19	22	
1DT-20-04SP	M20×1.5	R1/4"×19	12	23	39.5	22	24	
1DT-20-06SP	M20×1.5	R3/8"×19	12	23.1	39.6	22	24	
1DT-22-06SP	M22×1.5	R3/8"×19	14	24.6	42.6	24	27	
1DT-22-08SP	M22×1.5	R1/2"×14	14	27.8	45.8	24	27	
1DT-24-06SP	M24×1.5	R3/8"×19	16	24.1	42.6	27	30	
1DT-24-08SP	M24×1.5	R1/2"×14	16	27.3	45.8	27	30	
1DT-30-12SP	M30×2	R3/4"×14	20	28	49.5	32	36	25 S-series
1DT-36-12SP	M36×2	R3/4"×14	25	29.5	53.5	38	46	
1DT-36-16SP	M36×2	R1"×11	25	34.1	58.1	38	46	
1DT-42-16SP	M42×2	R1"×11	30	35.6	62.1	46	50	
1DT-42-20SP	M42×2	R1.1/4"×11	30	34.3	60.8	46	50	
1DT-52-20SP	M52×2	R1.1/4"×11	38	36.8	67.8	55	60	
1DT-52-24SP	M52×2	R1.1/2"×11	38	36.8	67.8	55	60	

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no., for example 1DT-22-08SP/RN.



1CT9–SP
1DT9–SP

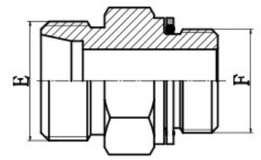


1CT9–SP/RN
1DT9–SP/RN

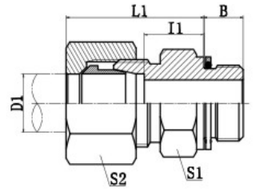
90° ELBOWBSPT MALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					PN BAR MPa
	E	F	D	I1	L1	L2	S1	S2	
1CT9–12–02SP	M12 × 1.5	R1/8" × 28	6	13	28	21	11	14	25 L–series
1CT9–12–04SP	M12 × 1.5	R1/4" × 19	6	15.5	30.5	25.5	14	14	
1CT9–14–02SP	M14 × 1.5	R1/8" × 28	8	15.5	30.5	23.5	14	17	
1CT9–14–04SP	M14 × 1.5	R1/4" × 19	8	15.5	30.5	25.5	14	17	
1CT9–16–04SP	M16 × 1.5	R1/4" × 19	10	17.5	32.5	26.5	16	19	
1CT9–16–06SP	M16 × 1.5	R3/8" × 19	10	17.5	32.5	28.5	16	19	
1CT9–16–08SP	M16 × 1.5	R1/2" × 14	10	21	36	36	22	19	
1CT9–18–04SP	M18 × 1.5	R1/4" × 19	12	21	34	28	19	22	
1CT9–18–06SP	M18 × 1.5	R3/8" × 19	12	19	34	30.5	19	22	
1CT9–18–08SP	M18 × 1.5	R1/2" × 14	12	21	36	36	22	22	
1CT9–22–06SP	M22 × 1.5	R3/8" × 19	15	22	37	32.5	22	27	
1CT9–22–08SP	M22 × 1.5	R1/2" × 14	15	22	37	36	22	27	
1CT9–22–12SP	M22 × 1.5	R3/4" × 14	15	25.5	40.5	43.5	27	27	
1CT9–26–08SP	M26 × 1.5	R1/2" × 14	18	25.5	42	39.5	27	32	16 L–series
1CT9–26–12SP	M26 × 1.5	R3/4" × 14	18	25.5	42	43.5	27	32	
1CT9–30–12SP	M30 × 2	R3/4" × 14	22	29.5	45.8	45.3	30	36	
1CT9–30–16SP	M30 × 2	R1" × 11	22	31.5	48	50	33	36	
1CT9–36–16SP	M36 × 2	R1" × 11	28	33.3	49.8	52	36	41	
1CT9–36–20SP	M36 × 2	R1.1/4" × 11	28	36.2	52.7	57	41	41	
1CT9–45–20SP	M45 × 2	R1.1/4" × 11	35	39.2	60.7	61	48	50	
1CT9–52–24SP	M52 × 2	R1.1/2" × 11	42	44.8	67.8	68	55	60	
1DT9–14–04SP	M14 × 1.5	R1/4" × 19	6	17.5	32.5	25.5	14	17	40 S–series
1DT9–16–04SP	M16 × 1.5	R1/4" × 19	8	18.7	33.7	26.5	16	19	
1DT9–18–06SP	M18 × 1.5	R3/8" × 19	10	19.5	36	30.5	19	22	
1DT9–20–04SP	M20 × 1.5	R1/4" × 19	12	19.5	36	28	19	24	
1DT9–20–06SP	M20 × 1.5	R3/8" × 19	12	19.5	36	30.5	19	24	
1DT9–22–06SP	M22 × 1.5	R3/8" × 19	14	23	41	32.5	22	27	
1DT9–22–08SP	M22 × 1.5	R1/2" × 14	14	23	41	36	22	27	
1DT9–24–06SP	M24 × 1.5	R3/8" × 19	16	24	42.5	33.5	24	30	
1DT9–24–08SP	M24 × 1.5	R1/2" × 14	16	24	42.5	37.3	24	30	
1DT9–30–08SP	M30 × 2	R1/2" × 14	20	28.3	49.8	41	30	36	25 S–series
1DT9–30–12SP	M30 × 2	R3/4" × 14	20	28.3	49.8	45.3	30	36	
1DT9–36–12SP	M36 × 2	R3/4" × 14	25	33.3	57.3	52	36	46	
1DT9–36–16SP	M36 × 2	R1" × 11	25	32.8	56.8	52.5	36	46	
1DT9–42–16SP	M42 × 2	R1" × 11	30	36.2	62.7	56.5	41	50	
1DT9–42–20SP	M42 × 2	R1.1/4" × 11	30	36.2	62.7	57	41	50	
1DT9–52–20SP	M52 × 2	R1.1/4" × 11	38	45.8	76.8	67	55	60	
1DT9–52–24SP	M52 × 2	R1.1/2" × 11	38	45.8	76.8	68	55	60	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example 1CT9–30–12SP/RN.



1CH
1DH



1CH–RN
1DH–RN

METRIC THREAD STUD ENDS
ISO 6149

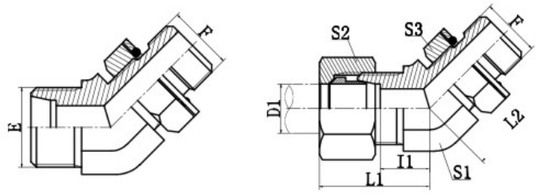
PART NO.	THREAD		TUBE O.D.	O RING	DIMENSIONS					PN BAR MPa
	E	F	D1		B	I1	L1	S1	S2	
1CH–12–10	M12 × 1.5	M10 × 1	6	O08.1 × 1.6	8.5	9.5	23	14	14	31.5 L–series
1CH–14	M14 × 1.5	M14 × 1.5	8	O11.3 × 2.4	11	10	25	19	17	
1CH–14–12	M14 × 1.5	M12 × 1.5	8	O09.3 × 2.4	11	10	25	17	17	
1CH–16–14	M16 × 1.5	M14 × 1.5	10	O11.3 × 2.4	11	13	26	19	19	
1CH–18–14	M18 × 1.5	M14 × 1.5	12	O11.3 × 2.4	11	11	25.5	19	22	
1CH–14–18	M14 × 1.5	M18 × 1.5	8	O15.3 × 2.4	12.5	11.5	26.5	24	17	
1CH–16	M16 × 1.5	M16 × 1.5	10	O13.3 × 2.4	11.5	13	28	22	19	
1CH–16–18	M16 × 1.5	M18 × 1.5	10	O15.3 × 2.4	12.5	12.5	28	24	19	
1CH–18–16	M18 × 1.5	M16 × 1.5	12	O13.3 × 2.4	11.5	12	27	22	22	
1CH–22–16	M22 × 1.5	M16 × 1.5	12	O13.3 × 2.4	11.5	13.5	29.5	24	27	
1CH–22–18	M22 × 1.5	M18 × 1.5	15	O15.3 × 2.4	12.5	13.5	29	24	27	
1CH–16–22	M16 × 1.5	M22 × 1.5	10	O19.3 × 2.4	13	14	29.5	27	19	
1CH–22–20	M22 × 1.5	M20 × 1.5	15	O17.3 × 2.4	12	15	30.5	27	27	
1CH–22	M22 × 1.5	M22 × 1.5	12	O19.3 × 2.4	13	15	31	27	27	
1CH–26–22	M26 × 1.5	M22 × 1.5	18	O19.3 × 2.4	13	14.5	31	27	32	
1CH–26	M26 × 1.5	M26 × 1.5	18	O23.5 × 3.0	13.5	13.5	31	32	32	
1CH–26–27	M26 × 1.5	M27 × 2	18	O23.5 × 3.0	16	14.5	32	32	32	
1CH–26–33	M26 × 1.5	M33 × 2	18	O29.5 × 3.0	16	15.5	33	41	32	
1CH–30–22	M30 × 2	M22 × 1.5	22	O19.3 × 2.4	13	17.5	33	32	41	16 L–series
1CH–30–27	M30 × 2	M27 × 2	22	O23.5 × 3.0	16	16.5	33	32	36	
1CH–30	M30 × 2	M30 × 2	22	O26.5 × 3.0	16	17.5	33	36	36	
1CH–36–27	M36 × 2	M27 × 2	28	O23.5 × 3.0	16	17.5	34	41	41	
1CH–36–33	M36 × 2	M33 × 2	28	O29.5 × 3.0	16	17.5	34	41	41	
1CH–36–42	M36 × 2	M42 × 2	28	O38.5 × 3.0	16	18.5	35	50	41	
1CH–45–33	M45 × 2	M33 × 2	35	O29.5 × 3.0	16	17.5	37	46	50	
1CH–45–42	M45 × 2	M42 × 2	35	O38.5 × 3.0	16	17.5	37	50	50	
1CH–52–48	M52 × 2	M48 × 2	42	O44.5 × 3.0	17.5	19		55	60	
1DH–14	M14 × 1.5	M14 × 1.5	6	O11.3 × 2.4	11	15	28	19	17	63 S–series
1DH–14–12	M14 × 1.5	M12 × 1.5	6	O09.3 × 2.4	11	13	28	17	17	
1DH–16–14	M16 × 1.5	M14 × 1.5	8	O11.3 × 2.4	11	15	30	19	19	
1DH–18–16	M18 × 1.5	M16 × 1.5	10	O13.3 × 2.4	11.5	15	31	22	22	
1DH–20–14	M20 × 1.5	M14 × 1.5	12	O11.3 × 2.4	11	15	31	22	24	
1DH–20–16	M20 × 1.5	M16 × 1.5	12	O13.3 × 2.4	11.5	15	31	22	24	
1DH–20–18	M20 × 1.5	M18 × 1.5	12	O15.3 × 2.4	12.5	17	33	24	24	
1DH–20–22	M20 × 1.5	M22 × 1.5	12	O19.3 × 2.4	13	17.5	35	27	30	

c.o.

b.f.

PART NO.	THREAD		TUBE O.D.	O RING	DIMENSIONS					PN BAR MPa
	E	F	D1		B	I1	L1	S1	S2	
1DH–24–22	M24 × 1.5	M22 × 1.5	16	O19.3 × 2.4	13	18.5	37	27	30	40 S–series
1DH–30	M30 × 2	M30 × 2	20	O26.5 × 3.0	16	20.5	42	36	36	
1DH–30–27	M30 × 2	M27 × 2	20	O23.5 × 3.0	16	20.5	42	32	36	
1DH–30–33	M30 × 2	M33 × 2	20	O29.5 × 3.0	16	22.5	42	41	36	
1DH–36–27	M36 × 2	M27 × 2	25	O23.5 × 3.0	16	23	47	41	46	
1DH–36–33	M36 × 2	M33 × 2	25	O29.5 × 3.0	16	23	47	41	46	
1DH–42	M42 × 2	M42 × 2	30	O38.5 × 3.0	16	23.5	50	50	50	
1DH–42–48	M42 × 2	M48 × 2	30	O44.5 × 3.0	17.5	26.5	52	55	50	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part NO.，for example 1DH–20–18RN.

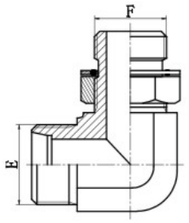


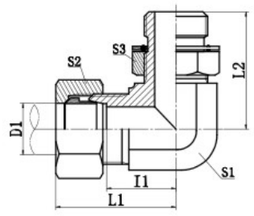
1CH4–OG **1CH4–OG/RN**
1DH4–OG **1DH4–OG/RN**

45° ELBOW MALE ADJUSTABLE STUD END ISO 6149

PART NO.	THREAD		TUBE O.D.	O RING	DIMENSIONS						PN BAR MPa
	E	F	D1		I1	L1	L2	S1	S2	S3	
1CH4–12–10OG	M12 × 1.5	M10 × 1	6	O08.1 × 1.6	10	25	25.5	11	14	14	31.5 L–series
1CH4–14–12OG	M14 × 1.5	M12 × 1.5	8	O09.3 × 2.4	11	26	30	14	17	17	
1CH4–16–14OG	M16 × 1.5	M14 × 1.5	10	O11.3 × 2.4	12.3	27.3	30.5	16	19	19	
1CH4–18–16OG	M18 × 1.5	M16 × 1.5	12	O13.3 × 2.4	13	28	34	19	22	22	
1CH4–22–18OG	M22 × 1.5	M18 × 1.5	15	O15.3 × 2.4	15	30	38	22	27	24	
1CH4–26–22OG	M26 × 1.5	M22 × 1.5	18	O19.3 × 2.4	16.5	33	40.5	27	32	27	
1CH4–30–27OG	M30 × 2	M27 × 2	22	O23.5 × 3.0	19.7	36.2	48	30	36	32	16 L–series
1CH4–36–33OG	M36 × 2	M33 × 2	28	O29.5 × 3.0	21.5	38	49.5	36	41	41	
1CH4–45–42OG	M45 × 2	M42 × 2	35	O38.5 × 3.0	25.5	47	55	48	50	50	
1DH4–14–12OG	M14 × 1.5	M12 × 1.5	6	O09.3 × 2.4	13	28	30	14	17	17	40 S–series
1DH4–16–14OG	M16 × 1.5	M14 × 1.5	8	O11.3 × 2.4	13.5	28.3	30.5	16	19	19	
1DH4–18–16OG	M18 × 1.5	M16 × 1.5	10	O13.3 × 2.4	13.5	30	34	19	22	22	
1DH4–20–18OG	M20 × 1.5	M18 × 1.5	12	O15.3 × 2.4	13.5	30	37	19	24	24	
1DH4–24–22OG	M24 × 1.5	M22 × 1.5	16	O19.3 × 2.4	16.2	34.7	40	24	30	27	
1DH4–30–27OG	M30 × 2	M27 × 2	20	O23.5 × 3.0	18.7	40.2	48	30	36	32	
1DH4–36–33OG	M36 × 2	M33 × 2	25	O29.5 × 3.0	21	45	49.5	36	46	41	31.5 S–series
1DH4–42–42OG	M42 × 2	M42 × 2	30	O38.5 × 3.0	24.3	50.8	54	41	50	50	25 S–series

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffi x "RN"after our part no.,for e x ample 1CH4–30–27OG/RN.



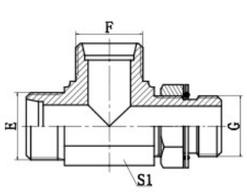


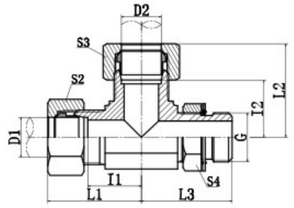
1CH9–OG **1CH9–OG/RN**
1DH9–OG **1DH9–OG/RN**

90° ELBOW METRIC THREAD ADJUSTABLE STUD ENDS ISO 6149

PART NO.	THREAD		TUBE O.D.	O RING	DIMENSIONS						PN BAR MPa
	E	F	D1		I1	L1	L2	S1	S2	S3	
1CH9–12–10OG	M12 × 1.5	M10 × 1	6	O08.1 × 1.6	13	28	26.5	11	14	14	31.5 L–series
1CH9–14–12OG	M14 × 1.5	M12 × 1.5	8	O09.3 × 2.4	15.5	30.5	32	14	17	17	
1CH9–16–14OG	M16 × 1.5	M14 × 1.5	10	O11.3 × 2.4	17.5	32.5	34	16	19	19	
1CH9–18–16OG	M18 × 1.5	M16 × 1.5	12	O13.3 × 2.4	19	34	36	19	22	22	
1CH9–22–18OG	M22 × 1.5	M18 × 1.5	15	O15.3 × 2.4	22	37	39.5	22	27	24	
1CH9–26–22OG	M26 × 1.5	M22 × 1.5	18	O19.3 × 2.4	25.5	42	43.5	27	32	27	
1CH9–30–27OG	M30 × 2	M27 × 2	22	O23.5 × 3.0	29.3	45.8	50	30	36	32	16 L–series
1CH9–36–33OG	M36 × 2	M33 × 2	28	O29.5 × 3.0	33.3	49.8	54	36	41	41	
1DH9–14–12OG	M14 × 1.5	M12 × 1.5	6	O09.3 × 2.4	17.5	32.5	32	14	17	17	63 S–series
1DH9–16–14OG	M16 × 1.5	M14 × 1.5	8	O11.3 × 2.4	18.7	33.7	34	16	19	19	
1DH9–18–16OG	M18 × 1.5	M16 × 1.5	10	O13.3 × 2.4	19.5	36	36	19	22	22	
1DH9–20–18OG	M20 × 1.5	M18 × 1.5	12	O15.3 × 2.4	19.5	36	37	19	24	24	
1DH9–22–20OG	M22 × 1.5	M20 × 1.5	14	O17.3 × 2.4	23	41	40	22	27	27	
1DH9–24–22OG	M24 × 1.5	M22 × 1.5	16	O19.3 × 2.4	24	42	37.5	24	30	27	
1DH9–30–27OG	M30 × 2	M27 × 2	20	O23.5 × 3.0	28.3	49.8	50	30	36	32	40 S–series
1DH9–36–33OG	M36 × 2	M33 × 2	25	O29.5 × 3.0	32.8	56.8	54	36	46	41	
1DH9–42OG	M42 × 2	M42 × 2	30	O38.5 × 3.0	36.2	62.7	57.2	41	50	50	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part NO.，for example 1DH9–20–18OG/RN.





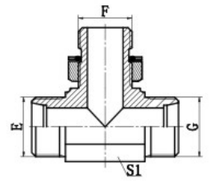
ACCH–OG
ADDH–OG

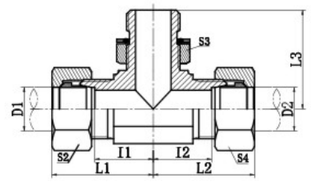
ACCH–OG/RN
ADDH–OG/RN

METRIC MALE ADJUSTABLE STUD END
ISO 6149 RUN TEE

PART NO.	THREAD		TUBE O.D.	O RING	DIMENSIONS						PN BAR MPa
	E, F	G	D1,D2		I1,I2	L1,L2	L3	S1	S2,S3	S4	
ACCH–12–12–10OG	M12×1.5	M10×1	6	O08.1×1.6	13	28	26.5	11	14	14	31.5 L–series
ACCH–14–14–12OG	M14×1.5	M12×1.5	8	O09.3×2.4	15.5	30.5	32	14	17	17	
ACCH–16–16–14OG	M16×1.5	M14×1.5	10	O11.3×2.4	17.5	32.5	34	16	19	19	
ACCH–18–18–16OG	M18×1.5	M16×1.5	12	O13.3×2.4	19	34	36	19	22	22	
ACCH–22–22–18OG	M22×1.5	M18×1.5	15	O15.3×2.4	22	37	39.5	22	27	24	
ACCH–26–26–22OG	M26×1.5	M22×1.5	18	O19.3×2.4	25.5	42	43.5	27	32	27	
ACCH–30–30–27OG	M30×2	M27×2	22	O23.5×3.0	29.3	45.8	50	30	36	32	16 L–series
ACCH–36–36–33OG	M36×2	M33×2	28	O29.5×3.0	33.3	49.8	54	36	41	41	
ADDH–14–14–12OG	M14×1.5	M12×1.5	6	O09.3×2.4	17.5	32.5	32	14	17	17	63 S–series
ADDH–16–16–14OG	M16×1.5	M14×1.5	8	O11.3×2.4	18.7	33.7	34	16	19	19	
ADDH–18–18–16OG	M18×1.5	M16×1.5	10	O13.3×2.4	19.5	36	36	19	22	22	
ADDH–20–20–18OG	M20×1.5	M18×1.5	12	O15.3×2.4	19.5	36	37	19	24	24	
ADDH–24–24–22OG	M24×1.5	M22×1.5	16	O19.3×2.4	24	42	37.5	24	30	27	
ADDH–30–30–27OG	M30×2	M27×2	20	O23.5×3.0	28.3	49.8	50	30	36	32	40 S–series
ADDH–36–36–33OG	M36×2	M33×2	25	O29.5×3.0	32.8	56.8	54	36	46	41	
ADDH–42–42–42OG	M42×2	M42×2	30	O38.5×3.0	36.2	62.7	57.2	41	50	50	

Note：In case if you are interested to order the adapter in complete set withcutting ring and nut , it is necessory to inset suffix "RN" in after of part no.,for example ACCH–30–30–27OG/RN.





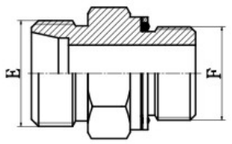
ACHC–OG
ADHD–OG

ACHC–OG/RN
ADHD–OG/RN

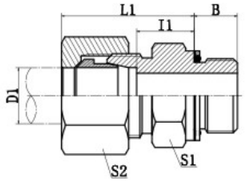
METRIC MALE ADJUSTABLE STUD END
ISO 6149 BRANCH TEE

PART NO.	THREAD		TUBE O.D.	O RING	DIMENSIONS						PN BAR MPa
	E,G	F	D1,D2		I1,I2	L1,L2	L3	S1	S2,S4	S3	
ACHC–12–10–12OG	M12×1.5	M10×1	6	O08.1×1.6	13	28	26.5	11	14	14	31.5 L–series
ACHC–14–12–14OG	M14×1.5	M12×1.5	8	O09.3×2.4	15.5	30.5	32	14	17	17	
ACHC–16–14–16OG	M16×1.5	M14×1.5	10	O11.3×2.4	17.5	32.5	34	16	19	19	
ACHC–18–16–18OG	M18×1.5	M16×1.5	12	O13.3×2.4	19	34	36	19	22	22	
ACHC–22–18–22OG	M22×1.5	M18×1.5	15	O15.3×2.4	22	37	39.5	22	27	24	
ACHC–26–22–26OG	M26×1.5	M22×1.5	18	O19.3×2.4	25.5	42	43.5	27	32	27	
ACHC–30–27–30OG	M30×2	M27×2	22	O23.5×3.0	29.3	45.8	50	30	36	32	16 L–series
ACHC–36–33–36OG	M36×2	M33×2	28	O29.5×3.0	33.3	49.8	54	36	41	41	
ADHD–14–12–14OG	M14×1.5	M12×1.5	6	O09.3×2.4	17.5	32.5	32	14	17	17	63 S–series
ADHD–16–14–16OG	M16×1.5	M14×1.5	8	O11.3×2.4	18.7	33.7	34	16	19	19	
ADHD–18–16–18OG	M18×1.5	M16×1.5	10	O13.3×2.4	19.5	36	36	19	22	22	
ADHD–20–18–20OG	M20×1.5	M18×1.5	12	O15.3×2.4	19.5	36	37	19	24	24	
ADHD–24–22–24OG	M24×1.5	M22×1.5	16	O19.3×2.4	24	42	37.5	24	30	27	
ADHD–30–27–30OG	M30×2	M27×2	20	O23.5×3.0	28.3	49.8	50	30	36	32	40 S–series
ADHD–36–33–36OG	M36×2	M33×2	25	O29.5×3.0	32.8	56.8	54	36	46	41	
ADHD–42–42–42OG	M42×2	M42×2	30	O38.5×3.0	36.2	62.7	57.2	41	50	50	

Note： In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example ACHC–30–27–30OG/RN.



1CG
1DG

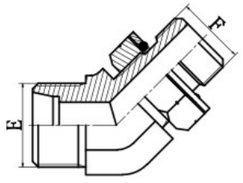


1CG–RN
1DG–RN

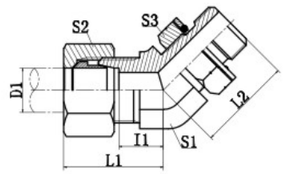
BSP THREAD STUD ENDS WITH O–RING SEALING

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					PN BAR MPa
	E	F	D1	B	I1	L1	S1	S2	
1CG–12–02	M12×1.5	G1/8"×28	6	9.5	8.5	23	14	14	31.5 L–series
1CG–12–04	M12×1.5	G1/4"×19	6	10	10	25	19	14	
1CG–14–04	M14×1.5	G1/4"×19	8	10	10	25	19	17	
1CG–14–06	M14×1.5	G3/8"×19	8	11.5	11.5	26	22	17	
1CG–14–08	M14×1.5	G1/2"×14	8	14	13	27.5	27	34	
1CG–16–04	M16×1.5	G1/4"×19	10	10	11	26	19	19	
1CG–16–06	M16×1.5	G3/8"×19	10	11.5	12.5	27	22	19	
1CG–16–08	M16×1.5	G1/2"×14	10	14	14	29	27	19	
1CG–18–06	M18×1.5	G3/8"×19	12	11.5	12.5	27	22	22	
1CG–18–08	M18×1.5	G1/2"×14	12	14	13	28	27	22	
1CG–22–06	M22×1.5	G3/8"×19	15	11.5	13.5	29	24	27	
1CG–22–08	M22×1.5	G1/2"×14	15	14	14	29	27	27	
1CG–22–12	M22×1.5	G3/4"×14	15	15.5	20	30	32	32	
1CG–26–08	M26×1.5	G1/2"×14	18	14	14.5	31	27	32	
1CG–26–12	M26×1.5	G3/4"×14	18	15.5	14.5	32	32	32	
1CG–30–12	M30×2	G3/4"×14	22	15.5	16.5	33	32	36	16 L–series
1CG–30–16	M30×2	G1"×11	22	18	17.5	35	41	36	
1CG–36–16	M36×2	G1"×11	28	18	17.5	34	41	41	
1CG–45–20	M45×2	G1.1/4"×11	35	20	17.5	39	50	50	
1CG–52–20	M52×2	G1.1/4"×11	42	20	19	42	55	60	
1CG–52–24	M52×2	G1.1/2"×11	42	21.5	19	42	55	60	
1CG–52–32	M52×2	G2"×11	42	24.5	25	44	70	60	
1DG–14–04	M14×1.5	G1/4"×19	6	10	13	28	19	17	63 S–series
1DG–16–04	M16×1.5	G1/4"×19	8	10	15	31	19	19	
1DG–18–04	M18×1.5	G1/4"×19	10	10	14.5	31	19	22	
1DG–18–06	M18×1.5	G3/8"×19	10	11.5	15	31	22	22	
1DG–20–06	M20×1.5	G3/8"×19	12	11.5	17	32	22	24	
1DG–20–08	M20×1.5	G1/2"×14	12	14	17.5	34	27	24	
1DG–22–06	M22×1.5	G3/8"×19	14	11.5	19	37	24	27	
1DG–22–08	M22×1.5	G1/2"×14	14	14	19	37	27	27	
1DG–24–04	M24×1.5	G1/4"×19	16	11	18	37	27	30	
1DG–24–08	M24×1.5	G1/2"×14	16	14	18.5	37	27	30	40 S–series
1DG–30–12	M30×2	G3/4"×14	20	15.5	20.5	42	32	36	
1DG–36–12	M36×2	G3/4"×14	25	15.5	23	47	41	46	
1DG–36–16	M36×2	G1"×11	25	18	17.5	47	41	46	
1DG–42–16	M42×2	G1"×11	30	18	23.5	48	46	50	
1DG–42–20	M42×2	G1.1/4"×11	30	20	23.5	50	50	50	
1DG–52–24	M52×2	G1.1/2"×11	38	21.2	26	57	55	60	31.5 S–series

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.，for example 1DG–20–08RN.



1CG4–OG
1DG4–OG

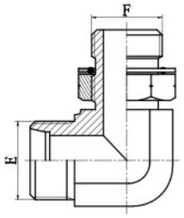


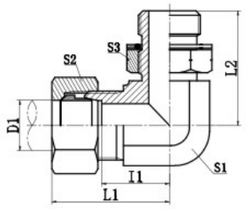
1CG4–OG/RN
1DG4–OG/RN

45° ELBOW BSP THREAD ADJUSTABLE STUD ENDS WITH O–RING SEALING

PART NO.	THREAD		TUBE O.D.	DIMENSIONS						PN BAR MPa
	E	F	D1	I1	L1	L2	S1	S2	S3	
1CG4–12–02OG	M12×1.5	G1/8"×28	6	10	25	24	11	14	14	31.5 L–series
1CG4–14–04OG	M14×1.5	G1/4"×19	8	11	26	27	14	17	19	
1CG4–16–04OG	M16×1.5	G1/4"×19	10	12.3	27.3	27	16	19	19	
1CG4–16–06OG	M16×1.5	G3/8"×19	10	12.3	27.3	30	16	19	22	
1CG4–18–06OG	M18×1.5	G3/8"×19	12	13	28	31	19	22	22	
1CG4–22–08OG	M22×1.5	G1/2"×14	15	15	30	36	22	27	27	
1CG4–26–08OG	M26×1.5	G1/2"×14	18	16.5	33	37.5	27	32	27	
1CG4–26–12OG	M26×1.5	G3/4"×14	18	16.5	33	42	27	32	32	
1CG4–30–12OG	M30×2	G3/4"×14	22	19.7	36.2	42.5	30	36	32	16 L–series
1CG4–36–16OG	M36×2	G1"×11	28	21.5	38	44.5	36	41	41	
1CG4–45–20OG	M45×2	G1.1/4"×11	35	25.5	47	50.5	48	50	50	
1DG4–14–04OG	M14×1.5	G1/4"×19	6	13	28	27	14	17	19	63 S–series
1DG4–16–04OG	M16×1.5	G1/4"×19	8	13.3	28.3	27	16	19	19	
1DG4–18–06OG	M18×1.5	G3/8"×19	10	13.5	30	31	19	22	22	
1DG4–20–06OG	M20×1.5	G3/8"×19	12	13.5	30	31	19	24	22	
1DG4–22–08OG	M22×1.5	G1/2"×14	14	16.3	34.3	36	22	27	27	
1DG4–24–08OG	M24×1.5	G1/2"×14	16	16.2	34.7	36.5	24	30	27	40 S–series
1DG4–30–12OG	M30×2	G3/4"×14	20	18.7	40.2	42.5	30	36	32	
1DG4–36–16OG	M36×2	G1"×11	25	21	45	44.5	36	46	41	
1DG4–42–20OG	M42×2	G1.1/4"×11	30	24.3	50.8	47.5	41	50	50	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffi x "RN"after our part no.,for e x ample 1CG4–30–12OG/RN.



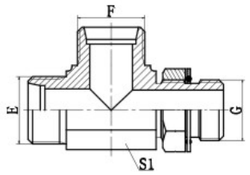


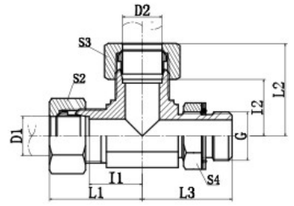
90° ELBOW BSP THREAD ADJUSTABLE STUD ENDS WITH O-RING SEALING

1CG9-OG **1CG9-OG/RN**
1DG9-OG **1DG9-OG/RN**

PART NO.	THREAD		TUBE O.D.	DIMENSIONS						PN BAR MPa
	E	F	D1	I1	L1	L2	S1	S2	S3	
1CG9-12-02OG	M12×1.5	G1/8"×28	6	13	28	26.2	11	14	14	31.5 L-series
1CG9-14-04OG	M14×1.5	G1/4"×19	8	15.5	30.5	31.3	14	17	19	
1CG9-16-04OG	M16×1.5	G1/4"×19	10	17.5	32.5	32.5	16	19	19	
1CG9-16-06OG	M16×1.5	G3/8"×19	10	17.5	32.5	35.8	16	19	22	
1CG9-18-06OG	M18×1.5	G3/8"×19	12	19	34	36.8	19	22	22	
1CG9-22-08OG	M22×1.5	G1/2"×14	15	22	37	43.2	22	27	27	
1CG9-26-08OG	M26×1.5	G1/2"×14	18	25.5	42	46	27	32	27	
1CG9-26-12OG	M26×1.5	G3/4"×14	18	25.5	42	49.3	27	32	32	
1CG9-30-12OG	M30×2	G3/4"×14	22	29.3	45.8	52	30	36	32	16 L-series
1CG9-30-16OG	M30×2	G1"×11	22	31.5	48	53	33	36	41	
1CG9-36-16OG	M36×2	G1"×11	28	33	49.8	56	36	41	41	
1CG9-36-20OG	M36×2	G1.1/4"×11	28	36	52.8	59	41	41	50	
1CG9-45-20OG	M45×2	G1.1/4"×11	35	39.2	60.7	63	48	50	50	
1CG9-52-24OG	M52×2	G1.1/2"×11	42	44.8	67.8	68.5	55	60	55	
1DG9-14-04OG	M14×1.5	G1/4"×19	6	17.5	32.5	31.3	14	17	19	63 S-series
1DG9-16-04OG	M16×1.5	G1/4"×19	8	18.7	33.7	32.5	16	19	19	
1DG9-16-06OG	M16×1.5	G3/8"×19	8	18.7	33.7	35.8	16	19	22	
1DG9-18-06OG	M18×1.5	G3/8"×19	10	19.5	36	36.8	19	22	22	
1DG9-20-06OG	M20×1.5	G3/8"×19	12	19.5	36	36.8	19	24	22	
1DG9-22-08OG	M22×1.5	G1/2"×14	14	23	41	43.2	22	27	27	
1DG9-24-08OG	M24×1.5	G1/2"×14	16	24	42.5	43	24	30	27	40 S-series
1DG9-30-12OG	M30×2	G3/4"×14	20	28	49.5	52	30	36	32	
1DG9-36-16OG	M36×2	G1"×11	25	32.8	56.8	56	36	46	41	
1DG9-42-20OG	M42×2	G1.1/4"×11	30	36.2	62.7	58	41	50	50	
1DG9-52-24OG	M52×2	G1.1/2"×11	38	45.8	76.8	68.5	55	60	55	31.5 S-series

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no., for example 1CG9-30-12OG/RN.



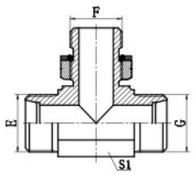


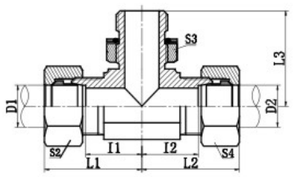
BSP THREAD ADJUSTABLE STUD END WITH O-RING SEALING RUN TEE

ACCG-OG **ACCG-OG/RN**
ADDG-OG **ADDG-OG/RN**

PART NO.	THREAD		TUBE O.D.	DIMENSIONS						PN BAR MPa
	E,F	G	D1,D2	I1,I2	L1,L2	L3	S1	S2,S3	S4	
ACCG-12-12-02OG	M12×1.5	G1/8"×28	6	13	28	26.2	11	14	14	31.5 L-series
ACCG-14-14-04OG	M14×1.5	G1/4"×19	8	15.5	30.5	31.3	14	17	19	
ACCG-16-16-04OG	M16×1.5	G1/4"×19	10	17.5	32.5	32.5	16	19	19	
ACCG-18-18-06OG	M18×1.5	G3/8"×19	12	19	34	36.8	19	22	22	
ACCG-22-22-08OG	M22×1.5	G1/2"×14	15	22	37	43.2	22	27	27	
ACCG-26-26-08OG	M26×1.5	G1/2"×14	18	25.5	42	46.5	27	32	27	
ACCG-30-30-12OG	M30×2	G3/4"×14	22	29.3	45.8	52	30	36	32	16 L-series
ACCG-36-36-16OG	M36×2	G1"×11	28	33.3	49.8	56	36	41	41	
ACCG-45-45-20OG	M45×2	G1.1/4"×11	35	39.2	60.7	63	48	50	50	
ADDG-14-14-04OG	M14×1.5	G1/4"×19	6	17.5	32.5	31.3	14	17	19	63 S-series
ADDG-16-16-04OG	M16×1.5	G1/4"×19	8	18.7	33.7	32.5	16	19	19	
ADDG-18-18-06OG	M18×1.5	G3/8"×19	10	19.5	36	36.8	19	22	22	
ADDG-20-20-06OG	M20×1.5	G3/8"×19	12	19.5	36	36.8	19	24	22	
ADDG-22-22-08OG	M22×1.5	G1/2"×14	14	23	41	43.2	22	27	27	
ADDG-24-24-08OG	M24×1.5	G1/2"×14	16	24	42.5	44	24	30	27	40 S-series
ADDG-30-30-12OG	M30×2	G3/4"×14	20	28.3	49.5	52	30	36	32	
ADDG-36-36-16OG	M36×2	G1"×11	25	32.8	56.8	56	36	46	41	
ADDG-42-42-20OG	M42×2	G1.1/4"×11	30	36.2	62.7	58	41	50	50	

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our Part No., for example ACCG-18-18-06OG/RN.



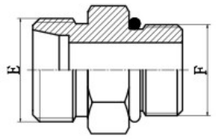


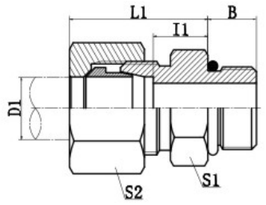
ACGC–OG **ACGC–OG/RN**
ADGD–OG **ADGD–OG/RN**

BSP THREAD ADJUSTABLE STUD ENDS WITH O–RING SEALING BRANCH TEE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS						PN BAR MPa
	E,F	G	D1,D2	I1,I2	L1,L2	L3	S1	S2,S3	S4	
ACGC–12–02–12OG	M12×1.5	G1/8"×28	6	13	28	26.2	11	14	14	31.5 L–series
ACGC–14–04–14OG	M14×1.5	G1/4"×19	8	15.5	30.5	31.3	14	17	19	
ACGC–16–04–16OG	M16×1.5	G1/4"×19	10	17.5	32.5	32.5	16	19	19	
ACGC–18–06–18OG	M18×1.5	G3/8"×19	12	19	34	36.8	19	22	22	
ACGC–22–08–22OG	M22×1.5	G1/2"×14	15	22	37	43.2	22	27	27	
ACGC–26–08–26OG	M26×1.5	G1/2"×14	18	25.5	42	46.5	27	32	27	
ACCG–30–12–30OG	M30×2	G3/4"×14	22	29.3	45.8	52	30	36	32	16 L–series
ACGC–36–16–36OG	M36×2	G1"×11	28	33.3	49.8	56	36	41	41	
ACGC–45–20–45OG	M45×2	G1.1/4"×11	35	39.2	60.7	63	48	50	50	
ADGD–14–04–14OG	M14×1.5	G1/4"×19	6	17.5	32.5	31.3	14	17	19	63 S–series
ADGD–16–04–16OG	M16×1.5	G1/4"×19	8	18.7	33.7	32.5	16	19	19	
ADGD–18–06–18OG	M18×1.5	G3/8"×19	10	19.5	36	36.8	19	22	22	
ADGD–20–06–20OG	M20×1.5	G3/8"×19	12	19.5	36	36.8	19	24	22	
ADGD–22–08–22OG	M22×1.5	G1/2"×14	14	23	41	43.2	22	27	27	
ADGD–24–08–24OG	M24×1.5	G1/2"×14	16	24	42.5	44	24	30	27	40 S–series
ADGD–30–12–30OG	M30×2	G3/4"×14	20	28.3	49.5	52	30	36	32	
ADGD–36–16–36OG	M36×2	G1"×11	25	32.8	56.8	56	36	46	41	
ADGD–42–20–42OG	M42×2	G1.1/4"×11	30	36.2	62.7	58	41	50	50	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example ACGC–18–06–18OG/RN.



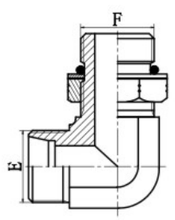


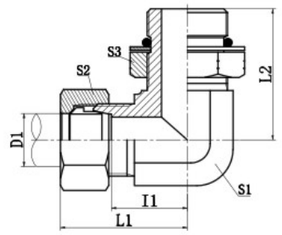
1CO **1CO–RN**
1DO **1DO–RN**

UN、UNF THREAD STUD ENDS WITH O–RING SEALING ISO 11926

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					PN BAR MPa
	E	F	D1	B	I1	L1	S1	S2	
1CO–14–04	M14×1.5	7/16"×20	8	9	10	25	17	17	31.5 L–series
1CO–16–04	M16×1.5	7/16"×20	10	9	11	26	17	19	
1CO–18–06	M18×1.5	9/16"×18	12	10	11	26	19	22	
1CO–18–08	M18×1.5	3/4"×16	12	11	13	28	24	22	
1CO–18–10	M18×1.5	7/8"×14	12	12.7	14.3	29	27	22	
1CO–22–08	M22×1.5	3/4"×16	15	11	14	29	24	27	
1CO–22–10	M22×1.5	7/8"×14	15	12.7	15.3	30	27	27	
1CO–22–12	M22×1.5	1.1/16"×12	15	15.09	11.91	30	32	27	
1CO–26–08	M26×1.5	3/4"×16	18	11	14.5	31	27	32	
1CO–26–10	M26×1.5	7/8"×14	18	12.7	14.8	31	27	32	
1CO–30–08	M30×2	3/4"×16	18	11.13	13.87	33	32	36	16 L–series
1CO–30–10	M30×2	7/8"×14	22	12.7	16.8	33	32	36	
1CO–30–12	M30×2	1.1/16"×12	22	15	16.5	33	32	36	
1CO–30–16	M30×2	1.5/16"×12	22	15	17.5	34	41	36	
1CO–36–12	M36×2	1.1/16"×12	28	15.09	14.41	34	41	41	
1CO–36–16	M36×2	1.5/16"×12	28	15	17.5	34	41	41	
1CO–45–16	M45×2	1.5/16"×12	35	15	17.5	39	46	50	
1CO–45–20	M45×2	1.5/8"×12	35	15.09	16.41	39	50	50	
1CO–52–20	M52×2	1.5/8"×12	42	15.09	15.91	42	55	60	
1DO–16–04	M16×1.5	7/16"×20	8	9	15	30	17	19	63 S–series
1DO–18–06	M18×1.5	9/16"×18	10	10	14.5	31	19	22	
1DO–20–06	M20×1.5	9/16"×18	12	10	14.5	31	22	24	
1DO–20–08	M20×1.5	3/4"×16	12	11	17.5	34	24	24	
1DO–24–08	M24×1.5	3/4"×16	16	11	15.5	34	24	30	40 S–series
1DO–24–10	M24×1.5	7/8"×14	16	12.7	18.8	37	27	30	
1DO–30–08	M30×2	3/4"×16	20	11	20.5	42	32	36	
1DO–30–10	M30×2	7/8"×14	20	12.7	20.8	42	32	36	
1DO–30–12	M30×2	1.1/16"×12	20	15	20.5	42	32	36	
1DO–36–12	M36×2	1.1/16"×12	25	15.09	19.91	47	41	46	
1DO–36–16	M36×2	1.5/16"×12	25	15	23	47	41	46	
1DO–42–16	M42×2	1.5/16"×12	30	15	23.5	50	46	50	
1DO–42–20	M42×2	1.5/8"×12	30	15	23.5	50	50	50	
1DO–52–20	M52×2	1.5/8"×12	38	15.09	22.9	53.9	55	60	31.5 S–series

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example 1DO–30–12RN.



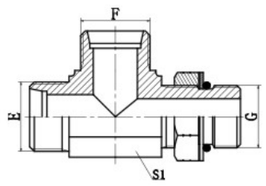


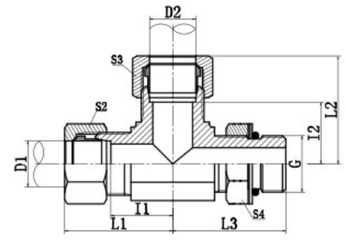
1CO9–OG **1CO9–OG/RN**
1DO9–OG **1DO9–OG/RN**

90° ELBOW UN、UNF THREAD ADJUSTABLE STUD ENDS WITH O–RING SEALING ISO 11926

PART NO.	THREAD		TUBE O.D.	DIMENSIONS						PN BAR MPa
	E	F	D1	I1	L1	L2	S1	S2	S3	
1CO9–12–04OG	M12 × 1.5	7/16" × 20	6	13	28	27.2	11	14	17	
1CO9–14–06OG	M14 × 1.5	9/16" × 18	8	15.5	30.5	31.8	14	17	19	
1CO9–16–16OG	M16 × 1.5	9/16" × 18	10	17.5	32.5	33.3	16	19	19	31.5 L–series
1CO9–18–08OG	M18 × 1.5	3/4" × 16	12	19	34	37.5	19	22	24	
1CO9–22–10OG	M22 × 1.5	7/8" × 14	15	22	37	44	22	27	27	
1CO9–22–08OG	M22 × 1.5	3/4" × 16	15	22	37	39.5	22	27	24	
1CO9–26–12OG	M26 × 1.5	1.1/16" × 12	18	25.5	42	51	27	32	32	
1CO9–30–12OG	M30 × 2	1.1/16" × 12	22	29.3	45.8	53.5	30	36	32	
1CO9–36–12OG	M36 × 2	1.1/16" × 12	28	33.5	47.8	57.5	36	41	41	16 L–series
1CO9–36–16OG	M36 × 2	1.5/16" × 12	28	33.3	49.8	57.5	36	41	41	
1CO9–45–20OG	M42 × 2	1.5/8" × 12	35	39.2	60.7	63	48	50	50	
1CO9–52–24OG	M52 × 2	1.7/8" × 12	42	44.8	67.8	70.5	55	60	55	
1DO9–14–04OG	M14 × 1.5	7/16" × 20	6	17.5	32.5	30	14	17	17	
1DO9–16–06OG	M16 × 1.5	9/16" × 18	8	18.7	33.7	33.3	16	19	19	
1DO9–18–06OG	M18 × 1.5	9/16" × 18	10	19.5	36	33.5	19	22	19	63 S–series
1DO9–18–08OG	M18 × 1.5	3/4" × 16	10	19.5	36	37.5	19	22	24	
1DO9–20–08OG	M20 × 1.5	3/4" × 16	12	19.5	36	37.5	19	24	24	
1DO9–22–10OG	M22 × 1.5	7/8" × 14	14	23	41	44	22	27	27	
1DO9–24–10OG	M24 × 1.5	7/8" × 14	16	24	42.5	46.5	24	30	27	
1DO9–30–12OG	M30 × 2	1.1/16" × 12	20	28.3	49.5	53.5	30	36	32	40 S–series
1DO9–36–16OG	M36 × 2	1.5/16" × 12	25	32.8	56.8	57.5	36	46	41	
1DO9–42–20OG	M42 × 2	1.5/8" × 12	30	36.2	62.7	59.5	41	50	50	
1DO9–52–24OG	M52 × 2	1.7/8" × 12	38	45.8	76.8	70.5	55	60	55	31.5 S–series

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.，for example 1CO9–30–12OG/RN.



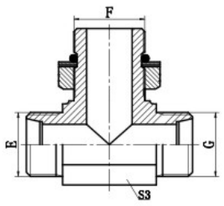


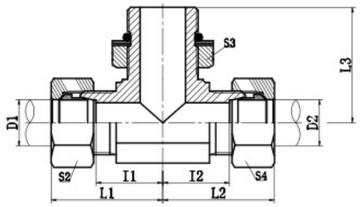
ACCO–OG **ACCO–OG/RN**
ADDO–OG **ADDO–OG/RN**

UN、UNF THREAD ADJUSTABLE STUD ENDS WITH O–RING SEALING RUN TEE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS						PN BAR MPa
	E,F	G	D1,D2	I1,I2	L1,L2	L3	S1	S2,S3	S4	
ACCO–12–12–04OG	M12 × 1.5	7/16" × 20	6	13	28	27.2	11	14	17	
ACCO–14–14–06OG	M14 × 1.5	9/16" × 18	8	15.5	30.5	31.8	14	17	19	
ACCO–16–16–06OG	M16 × 1.5	9/16" × 18	10	17.5	32.5	33.3	16	19	19	31.5 L–series
ACCO–18–18–08OG	M18 × 1.5	3/4" × 16	12	19	34	37.5	19	22	24	
ACCO–22–22–10OG	M22 × 1.5	7/8" × 14	15	22	37	44	22	27	27	
ACCO–26–26–12OG	M26 × 1.5	1.1/16" × 12	18	25.5	42	51	27	32	32	
ACCO–30–30–12OG	M30 × 2	1.1/16" × 12	22	29.3	45.8	53.5	30	36	32	
ACCO–36–36–16OG	M36 × 2	1.5/16" × 12	28	33.3	49.8	57.5	36	41	41	16 L–series
ACCO–45–45–20OG	M45 × 2	1.5/8" × 12	35	39.2	60.7	63	48	50	50	
ADDO–14–14–04OG	M14 × 1.5	7/16" × 20	6	17.5	32.5	30	14	17	17	
ADDO–16–16–06OG	M16 × 1.5	9/16" × 18	8	18.7	33.7	33.3	16	19	19	
ADDO–18–18–06OG	M18 × 1.5	9/16" × 18	10	19.5	36	33.5	19	22	19	63 S–series
ADDO–20–20–08OG	M20 × 1.5	3/4" × 16	12	19.5	36	37.5	19	24	24	
ADDO–22–22–10OG	M22 × 1.5	7/8" × 14	14	23	41	44	22	27	27	
ADDO–24–24–10OG	M24 × 1.5	7/8" × 14	16	24	42.5	46.5	24	30	27	
ADDO–30–30–12OG	M30 × 2	1.1/16" × 12	20	28.3	49.8	53.5	30	36	32	40 S–series
ADDO–36–36–16OG	M36 × 2	1.5/16" × 12	25	32.8	56.8	57.5	36	46	41	
ADDO–42–42–20OG	M42 × 2	1.5/8" × 12	30	36.2	62.7	59.5	41	50	50	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.，for example ACCO–30–30–12OG/RN.





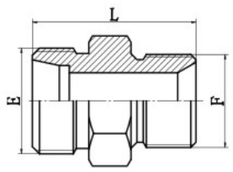
ACOC–OG
ADOD–OG

ACOC–OG/RN
ADOD–OG/RN

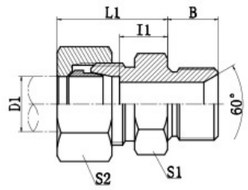
UN、UNF THREAD ADJUSTABLE STUD ENDS WITH O–RING SEALING BRANCH TEE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS						PN BAR
	E,G	F	D1,D2	I1,I2	L1,L2	L3	S1	S2,S4	S3	MPa
ACOC–12–04–12OG	M12 × 1.5	7/16" × 20	6	13	28	27.2	11	14	17	
ACOC–14–06–14OG	M14 × 1.5	9/16" × 18	8	15.5	30.5	31.8	14	17	19	
ACOC–16–06–16OG	M16 × 1.5	9/16" × 18	10	17.5	32.5	33.3	16	19	19	31.5
ACOC–18–08–18OG	M18 × 1.5	3/4" × 16	12	19	34	37.5	19	22	24	L–series
ACOC–22–10–22OG	M22 × 1.5	7/8" × 14	15	22	37	44	22	27	27	
ACOC–26–12–26OG	M26 × 1.5	1.1/16" × 12	18	25.5	42	51	27	32	32	
ACOC–30–12–30OG	M30 × 2	1.1/16" × 12	22	29.3	45.8	53.5	30	36	32	
ACOC–36–16–36OG	M36 × 2	1.5/16" × 12	28	33.3	49.8	57.5	36	41	41	16
ACOC–45–20–45OG	M45 × 2	1.5/8" × 12	35	39.2	60.7	63	48	50	50	L–series
ADOD–14–04–14OG	M14 × 1.5	7/16" × 20	6	17.5	32.5	30	14	17	17	
ADOD–16–06–16OG	M16 × 1.5	9/16" × 18	8	18.7	33.7	33.3	16	19	19	
ADOD–18–06–18OG	M18 × 1.5	9/16" × 18	10	19.5	36	33.5	19	22	19	63
ADOD–20–08–20OG	M20 × 1.5	3/4" × 16	12	19.5	36	37.5	19	24	24	S–series
ADOD–22–10–22OG	M22 × 1.5	7/8" × 14	14	23	41	44	22	27	27	
ADOD–24–10–24OG	M24 × 1.5	7/8" × 14	16	24	42.5	46.5	24	30	27	
ADOD–30–12–30OG	M30 × 2	1.1/16" × 12	20	28.3	49.8	53.5	30	36	32	40
ADOD–36–16–36OG	M36 × 2	1.5/16" × 12	25	32.8	56.8	57.5	36	46	41	S–series
ADOD–42–20–42OG	M42 × 2	1.5/8" × 12	30	36.2	62.7	59.5	41	50	50	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.，for example ACOC–30–12–30OG/RN.



1CB
1DB

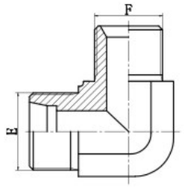


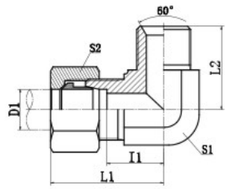
1CB–RN
1DB–RN

BSP THREAD 60° CONE SEALING OR BONDED SEAL STUD ENDS

PART NO.	THREAD		TUBE O.D.	DIMENSIONS						PN BAR
	E	F	D1	B	I1	L1	L	S1	S2	MPa
1CB–12–02	M12 × 1.5	G1/8" × 28	6	10	8	23	24	14	14	
1CB–12–04	M12 × 1.5	G1/4" × 19	6	12	9	24	28	19	14	
1CB–14–02	M14 × 1.5	G1/8" × 28	8	10	8	23	25	14	17	
1CB–14–04	M14 × 1.5	G1/4" × 19	8	12	9	25	28	19	17	
1CB–14–06	M14 × 1.5	G3/8" × 19	8	13.5	9	24	28.5	22	17	
1CB–16–04	M16 × 1.5	G1/4" × 19	10	12	10	25	28	19	19	
1CB–16–06	M16 × 1.5	G3/8" × 19	10	13.5	12.5	25	33	22	19	
1CB–16–08	M16 × 1.5	G1/2" × 14	10	16	11	26	32	27	19	31.5
1CB–18–04	M18 × 1.5	G1/4" × 19	12	12	10	25	29	19	22	L–series
1CB–18–06	M18 × 1.5	G3/8" × 19	12	13.5	10	25	30.5	22	22	
1CB–18–08	M18 × 1.5	G1/2" × 14	12	16	11	26	33	27	22	
1CB–18–12	M18 × 1.5	G3/4" × 14	12	18.5	11	26	36.5	32	22	
1CB–22–06	M22 × 1.5	G3/8" × 19	15	13.5	11	26	31.5	24	27	
1CB–22–08	M22 × 1.5	G1/2" × 14	15	16	12	27	34	27	27	
1CB–26–08	M26 × 1.5	G1/2" × 14	18	16	11.5	28	35	27	32	
1CB–26–12	M26 × 1.5	G3/4" × 14	18	18.5	11.5	28	35.5	32	32	
1CB–30–12	M30 × 2	G3/4" × 14	22	18.5	13.5	30	39.5	32	36	
1CB–36–12	M36 × 2	G1" × 11	28	20.5	14.5	31	42.5	41	41	16
1CB–45–20	M45 × 2	G1.1/4" × 11	35	20.5	15.5	37	45.5	50	50	L–series
1CB–52–24	M52 × 2	G1.1/2" × 11	42	23	16	39	50	55	60	
1DB–14–04	M14 × 1.5	G1/4" × 19	6	12	13	28	30	19	17	
1DB–16–04	M16 × 1.5	G1/4" × 19	8	12	13	28	32	19	19	
1DB–16–06	M16 × 1.5	G3/8" × 19	8	13.5	15	32	35.5	22	19	
1DB–18–04	M18 × 1.5	G1/4" × 19	10	12	12.5	29	32	19	22	
1DB–18–06	M18 × 1.5	G3/8" × 19	10	13.5	14.5	31	33.5	22	22	63
1DB–18–08	M18 × 1.5	G1/2" × 14	10	16	14.5	31	36	27	22	S–series
1DB–20–04	M20 × 1.5	G1/4" × 19	12	12	14.5	31	34	22	24	
1DB–20–06	M20 × 1.5	G3/8" × 19	12	13.5	14.5	31	35.5	22	24	
1DB–20–08	M20 × 1.5	G1/2" × 14	12	16	14.5	31	38	27	24	
1DB–22–08	M22 × 1.5	G1/2" × 14	14	16	16	34	40	27	27	
1DB–24–06	M24 × 1.5	G3/8" × 19	16	13.5	15.5	34	37.5	27	30	
1DB–24–08	M24 × 1.5	G1/2" × 14	16	16	15.5	34	40	27	30	
1DB–24–12	M24 × 1.5	G3/4" × 14	16	18.5	17.5	36	44.5	32	30	
1DB–30–12	M30 × 2	G3/4" × 14	20	18.5	17.5	39	48.5	32	36	40
1DB–36–08	M36 × 2	G1/2" × 14	25	16	19	43	48	38	46	S–series
1DB–36–12	M36 × 2	G3/4" × 14	25	18.5	19	43	50.5	38	46	
1DB–36–16	M36 × 2	G1" × 11	25	20.5	20	44	52.5	41	46	
1DB–42–20	M42 × 2	G1.1/4" × 11	30	20.5	21.5	48	54.5	50	50	
1DB–52–24	M52 × 2	G1.1/2" × 11	38	23	23	54	62	55	60	31.5 S–series

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.，for example 1DB–20–08RN.





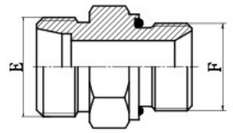
1CB9
1DB9

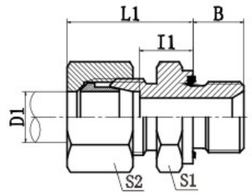
1CB9–RN
1DB9–RN

90° ELBOW BSP THREAD 60° CONE SEALING

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					PN BAR MPa
	E	F	D1	I1	L1	L2	S1	S2	
1CB9–12–04	M12 × 1.5	G1/4" × 19	6	15.5	30.5	24.5	14	14	
1CB9–14–04	M14 × 1.5	G1/4" × 19	8	15.5	30.5	24.5	14	17	
1CB9–14–06	M14 × 1.5	G3/8" × 19	8	16.5	31.5	27.5	16	17	
1CB9–16–04	M16 × 1.5	G1/4" × 19	10	17.5	32.5	26.5	16	19	
1CB9–16–06	M16 × 1.5	G3/8" × 19	10	17.5	32.5	27.5	16	19	
1CB9–16–08	M16 × 1.5	G1/2" × 14	10	21	36	34.5	22	19	31.5
1CB9–18–04	M18 × 1.5	G1/4" × 19	12	19	34	27.5	19	22	L–series
1CB9–18–06	M18 × 1.5	G3/8" × 19	12	19	36	28.5	19	22	
1CB9–18–08	M18 × 1.5	G1/2" × 14	12	21	35.5	34.5	22	22	
1CB9–22–06	M22 × 1.5	G3/8" × 19	15	22	37	31	22	27	
1CB9–22–08	M22 × 1.5	G1/2" × 14	15	22	37	34.5	22	27	
1CB9–26–08	M26 × 1.5	G1/2" × 14	18	25.5	42	37.8	27	32	
1CB9–30–12	M30 × 2	G3/4" × 14	22	29.5	46	41	30	36	
1CB9–36–12	M36 × 2	G1" × 11	28	33.3	49.8	47.5	36	41	16
1CB9–45–20	M45 × 2	G1.1/4" × 11	35	39.2	60.7	54.5	48	50	L–series
1CB9–52–24	M52 × 2	G1.1/2" × 11	42	44.8	67.8	63	55	60	
1DB9–14–04	M14 × 1.5	G1/4" × 19	6	17.5	32.5	24.5	14	17	
1DB9–16–04	M16 × 1.5	G1/4" × 19	8	18.7	33.7	26.5	16	19	
1DB9–16–06	M16 × 1.5	G3/8" × 19	8	18.7	33.7	27.5	16	19	
1DB9–18–04	M18 × 1.5	G1/4" × 19	10	19.5	36	27.5	19	22	
1DB9–18–06	M18 × 1.5	G3/8" × 19	10	19.5	36	28.5	19	22	63
1DB9–18–08	M18 × 1.5	G1/2" × 14	10	21.5	38	34.5	22	22	S–series
1DB9–20–04	M20 × 1.5	G1/4" × 19	12	19.5	36	27.5	19	24	
1DB9–20–06	M20 × 1.5	G3/8" × 19	12	19.5	36	28.5	19	24	
1DB9–20–08	M20 × 1.5	G1/2" × 14	12	21.5	38	34.5	22	24	
1DB9–22–08	M22 × 1.5	G1/2" × 14	14	23	41	34.5	22	27	
1DB9–24–06	M24 × 1.5	G3/8" × 19	16	24	42.5	32	24	30	
1DB9–24–08	M24 × 1.5	G1/2" × 14	16	24	42.5	35	24	30	
1DB9–24–12	M24 × 1.5	G3/4" × 14	16	26	44.5	40	27	30	
1DB9–30–12	M30 × 2	G3/4" × 14	20	28.3	49.8	41	30	36	
1DB9–36–08	M36 × 2	G1/2" × 14	25	32.8	56.8	42.5	36	46	40
1DB9–36–12	M36 × 2	G3/4" × 14	25	32.8	56.8	43.5	36	46	S–series
1DB9–36–16	M36 × 2	G1" × 11	25	32.8	56.8	47.5	36	46	
1DB9–42–20	M42 × 2	G1.1/4" × 11	30	36.2	62.7	50.5	41	50	
1D9B–52–24	M52 × 2	G1.1/2" × 11	38	45.8	67.8	63	55	60	31.5 S–series

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.,for example 1DB9–24–12RN.





1CB–WD
1DB–WD

1CB–WD/RN
1DB–WD/RN

BSP THREAD WITH CAPTIVE SEAL

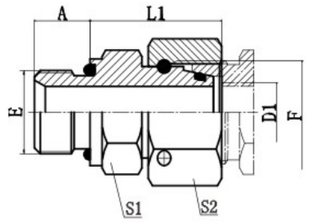
PART NO.	THREAD		TUBE O.D.	SEAL	DIMENSIONS					PN BAR MPa
	E	F	D1		B	I1	L1	S1	S2	
1CB–12–02WD	M12 × 1.5	G1/8" × 28	6	WD–B02	8	8.5	23.5	14	14	
1CB–12–04WD	M12 × 1.5	G1/4" × 19	6	WD–B04	12	10	25	19	14	
1CB–12–06WD	M12 × 1.5	G3/8" × 19	6	WD–B06	12	11.5	26.5	22	14	
1CB–14–02WD	M14 × 1.5	G1/8" × 28	8	WD–B02	8	9	24	14	17	
1CB–14–04WD	M14 × 1.5	G1/4" × 19	8	WD–B04	12	10	24	19	17	
1CB–14–06WD	M14 × 1.5	G3/8" × 19	8	WD–B06	12	11	26	22	17	
1CB–16–04WD	M16 × 1.5	G1/4" × 19	10	WD–B04	12	11	24.5	19	19	
1CB–16–06WD	M16 × 1.5	G3/8" × 19	10	WD–B06	12	12.5	26	22	19	
1CB–16–08WD	M16 × 1.5	G1/2" × 14	10	WD–B08	14	13	28	27	19	31.5
1CB–18–04WD	M18 × 1.5	G1/4" × 19	12	WD–B04	12	12	27	19	22	L–series
1CB–18–06WD	M18 × 1.5	G3/8" × 19	12	WD–B06	12	12.5	26	22	22	
1CB–18–08WD	M18 × 1.5	G1/2" × 14	12	WD–B08	14	14	28	27	22	
1CB–22–04WD	M22 × 1.5	G1/4" × 19	15	WD–B04	12	13	28	24	27	
1CB–22–06WD	M22 × 1.5	G3/8" × 19	15	WD–B06	12	13.5	28	24	27	
1CB–22–08WD	M22 × 1.5	G1/2" × 14	15	WD–B08	14	14	29	27	27	
1CB–22–12WD	M22 × 1.5	G3/4" × 14	15	WD–B12	16	15	29	32	27	
1CB–26–08WD	M26 × 1.5	G1/2" × 14	18	WD–B08	14	14.5	31	27	32	
1CB–26–12WD	M26 × 1.5	G3/4" × 14	18	WD–B12	16	14.5	31	32	32	
1CB–30–12WD	M30 × 2	G3/4" × 14	22	WD–B12	16	16.5	33	32	36	
1CB–36–16WD	M36 × 2	G1" × 11	28	WD–B16	18	17.5	34	41	41	16
1CB–45–20WD	M45 × 2	G1.1/4" × 11	35	WD–B20	20	17.5	39	50	50	L–series
1CB–52–24WD	M52 × 2	G1.1/2" × 11	42	WD–B24	22	19	42	55	60	
1DB–14–04WD	M14 × 1.5	G1/4" × 19	6	WD–B04	12	15		19	17	
1DB–16–04WD	M16 × 1.5	G1/4" × 19	8	WD–B04	12	15	30	19	19	
1DB–16–06WD	M16 × 1.5	G3/8" × 19	8	WD–B06	12	15.5	30	22	19	
1DB–18–04WD	M18 × 1.5	G1/4" × 19	10	WD–B04	12	14.5	31	19	22	
1DB–18–06WD	M18 × 1.5	G3/8" × 19	10	WD–B06	12	14.5	31	22	22	63
1DB–18–08WD	M18 × 1.5	G1/2" × 14	10	WD–B08	14	17.5	34	27	22	S–series
1DB–20–04WD	M20 × 1.5	G1/4" × 19	12	WD–B04	12	16.5	33	22	24	
1DB–20–06WD	M20 × 1.5	G3/8" × 19	12	WD–B06	12	15	33	22	24	
1DB–20–08WD	M20 × 1.5	G1/2" × 14	12	WD–B08	14	17.5	34	27	24	
1DB–22–08WD	M22 × 1.5	G1/2" × 14	14	WD–B08	14	19	37	27	27	
1DB–24–06WD	M24 × 1.5	G3/8" × 19	16	WD–B06	12	18	36.5	27	30	
1DB–24–08WD	M24 × 1.5	G1/2" × 14	16	WD–B08	14	18.5	37	27	30	40
1DB–24–12WD	M24 × 1.5	G3/4" × 14	16	WD–B12	16	20.5	39	32	30	S–series
1DB–30–12WD	M30 × 2	G3/4" × 14	20	WD–B12	16	20.5	42	32	36	

c.o.

b.f.

PART NO.	THREAD		TUBE O.D.	SEAL	DIMENSIONS					PN BAR MPa
	E	F	D1		B	l1	L1	S1	S2	
1DB–36–08WD	M36 × 2	G1/2" × 14	25	WD–B08	14	23	47	41	46	40 S–series
1DB–36–12WD	M36 × 2	G3/4" × 14	25	WD–B12	16	23	47	41	46	
1DB–36–16WD	M36 × 2	G1" × 11	25	WD–B16	18	23	47	41	46	
1DB–42–20WD	M42 × 2	G1.1/4" × 11	30	WD–B20	20	23.5	50	50	50	
1DB–52–24WD	M52 × 2	G1.1/2" × 11	38	WD–B24	22	26	57	55	60	

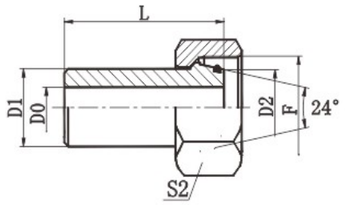
Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix “RN” after our part no.,for example 1DB–20–08WD/RN.



2BC–WD
2BD–WD

BSP THREAD WITH CAPTIVE SEAL / METRIC FEMALE 24° CONE O–RING SEALING

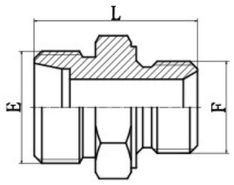
PART NO.	THREAD		TUBE O.D.	SEAL	DIMENSIONS				PN BAR MPa
	E	F	D1		A	L1	S1	S2	
2BC–02–12WD	G1/8" × 28	M12 × 1.5	6	WD–B02	8	24.5	14	14	31.5 L–series
2BC–04–14WD	G1/4" × 19	M14 × 1.5	8	WD–B04	12	29.5	19	17	
2BC–04–16WD	G1/4" × 19	M16 × 1.5	10	WD–B04	12	27.5	19	19	
1BC–06–18WD	G3/8" × 19	M18 × 1.5	12	WD–B06	12	34	22	22	
2BC–08–22WD	G1/2" × 14	M22 × 1.5	15	WD–B08	14	32	27	27	
2BC–08–26WD	G1/2" × 14	M26 × 1.5	18	WD–B08	14	31.5	27	32	
2BC–12–30WD	G3/4" × 14	M30 × 2	22	WD–B12	16	32.5	32	36	16 L–series
2BC–16–36WD	G1" × 11	M36 × 2	28	WD–B16	18	35	41	41	
2BC–20–45WD	G1.1/4" × 11	M45 × 2	35	WD–B20	20	42.5	50	50	
2BC–24–52WD	G1.1/2" × 11	M52 × 2	42	WD–B24	22	46.5	55	60	
2BD–04–14WD	G1/4" × 19	M14 × 1.5	6	WD–B04	12	27	19	17	63 S–series
2BD–04–16WD	G1/4" × 19	M16 × 1.5	8	WD–B04	12	29.5	19	19	
2BD–06–18WD	G3/8" × 19	M18 × 1.5	10	WD–B06	12	32	22	22	
2BD–06–20WD	G3/8" × 19	M20 × 1.5	12	WD–B06	12	34	22	24	
2BD–08–22WD	G1/2" × 14	M22 × 1.5	14	WD–B08	14	36.5	27	27	
2BD–08–24WD	G1/2" × 14	M24 × 1.5	16	WD–B08	14	37	27	30	40 S–series
2BD–12–30WD	G3/4" × 14	M30 × 2	20	WD–B12	16	43	32	36	
2BD–16–36WD	G1" × 11	M36 × 2	25	WD–B16	18	48	41	46	
2BD–20–42WD	G1.1/4" × 11	M42 × 2	30	WD–B20	20	51	50	50	
2BD–24–52WD	G1.1/2" × 11	M52 × 2	38	WD–B24	22	60	55	60	31.5 S–series

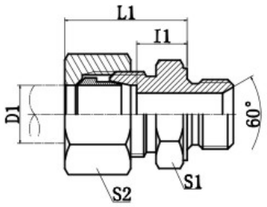


2WC
2WD

WELE FITTINGS

PART NO.	THREAD	TUBE SIZE	DIMENSIONS				PN BAR MPa
	F	D1xt	L	D0	D2	S2	
2WC–6X1.5	M12X1.5	6X1.5	30	2.5	6	14	31.5 L–series
2WC–8X2.0	M14X1.5	8X2.0	30	4	8	17	
2WC–12X2.0	M18X1.5	12X2.0	31	7.5	12	22	
2WC–15X2.0	M22X1.5	15X2.0	35	10	15	27	
2WC–18X2.0	M26X1.5	18X2.0	35	13	18	32	
2WC–22X2.0	M30X2	22X2.0	35	17	22	36	16 L–series
2WC–28X2.5	M36X2	28X2.5	41	23	28	41	
2WC–35X3.0	M45X2	35X3.0	48	29	35	50	
2WC–42X3.0	M52X2	42X3.0	50.5	36	42	60	
2WD–6X1.5	M14X1.5	6X1.5	28.5	2.5	6	17	63 S–series
2WD–8X2.0	M16X1.5	8X2.0	29	4	8	19	
2WD–10X1.0	M18X1.5	10X1.0	32	6.5	10	22	
2WD–10X1.5	M18X1.5	10X1.5	32	6.5	10	22	
2WD–10X2.0	M18X1.5	10X2.0	32	6	10	22	
2WD–12X1.5	M20X1.5	12X1.5	32.5	8	12	27	
2WD–12X2.0	M20X1.5	12X2.0	32.5	8	12	27	
2WD–12X2.5	M20X1.5	12X2.5	32.5	7	12	27	
2WD–16X1.5	M24X1.5	16X1.5	39	13	16	30	40 S–series
2WD–16X2.0	M24X1.5	16X2.0	39	12	16	30	
2WD–16X2.5	M24X1.5	16X2.5	39	11	16	30	
2WD–16X3.0	M24X1.5	16X3.0	39	10	16	30	
2WD–20X2.0	M30X2	20X2.0	43	15	20	36	
2WD–20X2.5	M30X2	20X2.5	43	15	20	36	
2WD–20X3.0	M30X2	20X3.0	43	14	20	36	
2WD–20X4.0	M30X2	20X4.0	43	12	20	36	
2WD–25X2.5	M36X2	25X2.5	50	20	25	46	
2WD–25X3.0	M36X2	25X3.0	50	19	25	46	
2WD–25X4.0	M36X2	25X4.0	50	17	25	46	
2WD–25X5.0	M36X2	25X5.0	50	15	25	46	
2WD–30X3.0	M42X2	30X3.0	52	24	30	50	25 S–series
2WD–30X4.0	M42X2	30X4.0	52	22	30	50	
2WD–30X5.0	M42X2	30X5.0	52	20	30	50	
2WD–30X6.0	M42X2	30X6.0	52	18	30	50	
2WD–38X4.0	M52X2	38X4.0	56.5	30	38	60	
2WD–38X5.0	M52X2	38X5.0	56.5	28	38	60	
2WD–38X6.0	M52X2	38X6.0	56.5	26	38	60	
2WD–38X7.0	M52X2	38X7.0	56.5	24	38	60	



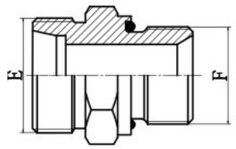


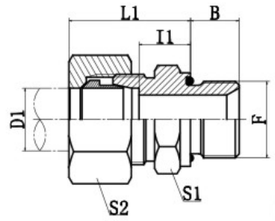
METRIC MALE 60° SEAT SEALING OR BONDED SEAL STUD ENDS

1CM **1CM–RN**
1DM **1DM–RN**

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					PN BAR MPa
	E	F	D1	B	I1	L1	S1	S2	
1CM–12–10	M12×1.5	M10×1	6	8	8.5	23	14	14	
1CM–14–12	M14×1.5	M12×1.5	8	12	10	25	17	17	
1CM–14–18	M14×1.5	M18×1.5	8	12	11.5	26	24	17	
1CM–16–14	M16×1.5	M14×1.5	10	12	11	26	19	19	
1CM–16	M16×1.5	M16×1.5	10	12	12	27	22	19	
1CM–16–18	M16×1.5	M18×1.5	10	12	12.5	27	24	19	
1CM–16–22	M16×1.5	M22×1.5	10	14	14	29	27	19	
1CM–18–14	M18×1.5	M14×1.5	12	12	11	26	19	22	31.5
1CM–18–16	M18×1.5	M16×1.5	12	12	12	27	22	22	L–series
1CM–18	M18×1.5	M18×1.5	12	12	12.5	27	24	22	
1CM–18–22	M18×1.5	M22×1.5	12	14	14	29	27	22	
1CM–22–16	M22×1.5	M16×1.5	15	12	13	28	24	27	
1CM–22–18	M22×1.5	M18×1.5	15	12	13.5	29	24	27	
1CM–22	M22×1.5	M22×1.5	15	14	15	30	27	27	
1CM–26–18	M26×1.5	M18×1.5	18	12	14	30	27	32	
1CM–26–22	M26×1.5	M22×1.5	18	14	14.5	31	27	32	
1CM–30–22	M30×2	M22×1.5	22	14	16.5	33	32	36	
1CM–30–26	M30×2	M26×1.5	22	16	16.5	33	32	36	
1CM–30–27	M30×2	M27×2	22	16	18.5	35	32	36	16
1CM–36–33	M36×2	M33×2	28	18	17.5	34	41	41	L–series
1CM–45–42	M45×2	M42×2	35	20	17.5	39	50	50	
1CM–52–48	M52×2	M48×2	42	22	19	42	55	60	
1DM–14–12	M14×1.5	M12×1.5	6	12	13	28	17	17	
1DM–16–14	M16×1.5	M14×1.5	8	12	15	30	19	19	
1DM–18–16	M18×1.5	M16×1.5	10	12	15	31	22	22	63
1DM–20–18	M20×1.5	M18×1.5	12	12	17	33	24	24	S–series
1DM–20–22	M20×1.5	M22×1.5	12	14	17.5	34	27	24	
1DM–22–20	M22×1.5	M20×1.5	14	14	19	37	27	27	
1DM–24–18	M24×1.5	M18×1.5	16	12	18	36	27	30	
1DM–24–22	M24×1.5	M22×1.5	16	14	18.5	37	27	30	40
1DM–30–27	M30×2	M27×2	20	16	20.5	42	32	36	S–series
1DM–36–33	M36×2	M33×2	25	18	23	47	41	46	
1CM–42	M42×2	M42×2	25	20	23.5	50	50	50	25
1DM–52–48	M52×2	M48×2	38	22	57	55	60		S–series

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.,for example 1DM–20–18RN.



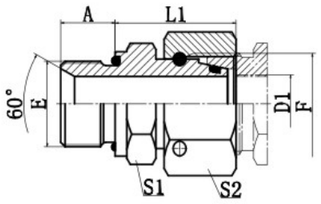


METRIC THREAD WITH CAPTIVE SEAL

1CM–WD **1CM–WD/RN**
1DM–WD **1DM–WD/RN**

PART NO.	THREAD		TUBE O.D.	SEAL	DIMENSIONS					PN BAR MPa
	E	F	D1		B	I1	L1	S1	S2	
1CM–12–10WD	M12×1.5	M10×1	6	WD–B02	8	8.5	23	14	14	
1CM–14–12WD	M14×1.5	M12×1.5	8	WD–M12	12	10	25	17	17	
1CM–16–12WD	M16×1.5	M12×1.5	10	WD–M12	12	11	25	17	19	
1CM–16–14WD	M16×1.5	M14×1.5	10	WD–B04	12	11	26	19	19	
1CM–16–18WD	M16×1.5	M18×1.5	10	WD–M18	12	12.5	27	24	19	31.5
1CM–18–16WD	M18×1.5	M16×1.5	12	WD–M16	12	12.5	27	22	22	L–series
1CM–18WD	M18×1.5	M18×1.5	12	WD–M18	12	12.5	27	24	22	
1CM–18–22WD	M18×1.5	M22×1.5	12	WD–M22	14	14	29	27	22	
1CM–22–18WD	M22×1.5	M18×1.5	15	WD–M18	12	13.5	29	24	27	
1CM–22WD	M22×1.5	M22×1.5	15	WD–M22	14	15	30	27	27	
1CM–26–22WD	M26×1.5	M22×1.5	18	WD–M22	14	14.5	31	27	32	
1CM–30–26WD	M30×2	M26×1.5	22	WD–B12	16	16.5	33	32	36	
1CM–30–27WD	M30×2	M27×2	22	WD–B12	16	16.5	33	32	36	16
1CM–36–33WD	M36×2	M33×2	28	WD–B16	18	17.5	34	41	41	L–series
1CM–45–42WD	M45×2	M42×2	35	WD–B20	20	17.5	39	50	50	
1CM–52–48WD	M52×2	M48×2	42	WD–B24	22	19	42	55	60	
1DM–14–12WD	M14×1.5	M12×1.5	6	WD–M12	12	13	28	17	17	
1DM–16–14WD	M16×1.5	M14×1.5	8	WD–B04	12	15	30	19	19	63
1DM–18–16WD	M18×1.5	M16×1.5	10	WD–M16	12	15	31	22	22	S–series
1DM–20–18WD	M20×1.5	M18×1.5	12	WD–M18	12	17	33	24	24	
1DM–22–20WD	M22×1.5	M20×1.5	14	WD–M20	14	19	37	27	27	
1DM–24–22WD	M24×1.5	M22×1.5	16	WD–M22	14	18.5	37	27	30	
1DM–30–27WD	M30×2	M27×2	20	WD–B12	16	20.5	42	32	36	40
1DM–36–33WD	M36×2	M33×2	25	WD–B16	18	23	47	41	46	S–series
1DM–42WD	M42×2	M42×2	25	WD–B20	20	23.5	50	50	50	
1DM–52–48WD	M52×2	M48×2	38	WD–B24	22	26	57	55	60	31.5 S–series

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.,for example 1DM–20–18WD/RN.

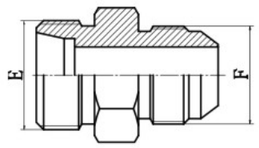


2MC–WD
2MD–WD

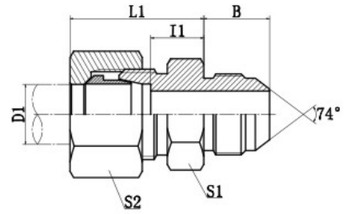
METRIC THREAD WITH CAPTIVE SEAL /
METRIC FEMALE 24° CONE O–RING SEALING

PART NO.	THREAD		TUBE O.D.	SEAL	DIMENSIONS				PN BAR MPa
	E	F	D1		A	L1	S1	S2	
2MC–10–12WD	M10 × 1	M12 × 1.5	6	WD–B02	8	24.5	14	14	31.5 L–series
2MC–12–14WD	M12 × 1.5	M14 × 1.5	8	WD–M12	12	26.5	17	17	
2MC–14–16WD	M14 × 1.5	M16 × 1.5	10	WD–B04	12	27.5	19	19	
2MC–16–18WD	M16 × 1.5	M18 × 1.5	12	WD–M16	12	30.5	22	22	
2MC–18–22WD	M18 × 1.5	M22 × 1.5	15	WD–M18	12	31.5	24	27	
2MC–22–26WD	M22 × 1.5	M26 × 1.5	18	WD–M22	14	31.5	27	32	
2MC–26–30WD	M26 × 1.5	M30 × 2	22	WD–M22	16	32.5	32	36	
2MC–33–36WD	M33 × 2	M36 × 2	28	WD–B16	18	35	41	41	16 L–series
2MC–42–45WD	M42 × 2	M45 × 2	35	WD–B20	20	42.5	50	50	
2MC–48–52WD	M48 × 2	M52 × 2	42	WD–B24	22	46.5	55	60	
2MD–12–14WD	M12 × 1.5	M14 × 1.5	6	WD–M12	12	27	17	17	63 S–series
2MD–14–16WD	M14 × 1.5	M16 × 1.5	8	WD–B04	12	29.5	19	19	
2MD–16–18WD	M16 × 1.5	M18 × 1.5	10	WD–M16	12	32	22	22	
2MD–18–20WD	M18 × 1.5	M20 × 1.5	12	WD–M18	12	34	24	24	
2MD–20–22WD	M20 × 1.5	M22 × 1.5	14	WD–M20	14	36.5	27	27	
2MD–22–24WD	M22 × 1.5	M24 × 1.5	16	WD–M22	14	37	27	30	40 S–series
2MD–27–30WD	M27 × 2	M30 × 2	20	WD–B12	16	43	32	36	
2MD–33–36WD	M33 × 2	M36 × 2	25	WD–B16	18	48	41	46	
2MD–42–42WD	M42 × 2	M42 × 2	30	WD–B20	20	51	50	50	
2MD–48–52WD	M48 × 2	M52 × 2	38	WD–B24	22	60	55	60	31.5 S–series

Metric Thread Bite Type Tube Fittings



1CJ
1DJ

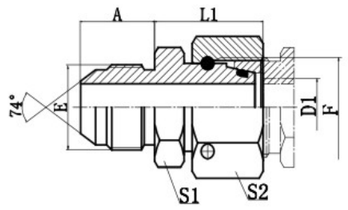


1CJ–RN
1DJ–RN

JIC 74° CONE SEALING

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					PN BAR MPa
	E	F	D1	B	I1	L1	S1	S2	
1CJ–12–04	M12 × 1.5	7/16" × 20	6	14	9	24	14	14	31.5 L–series
1CJ–14–04	M14 × 1.5	7/16" × 20	8	14	8	23	15	17	
1CJ–14–06	M14 × 1.5	9/16" × 18	8	14.1	8	23	15	17	
1CJ–16–06	M16 × 1.5	9/16" × 18	10	14.1	9	24	17	19	
1CJ–18–06	M18 × 1.5	9/16" × 18	12	14.1	10	25	19	22	
1CJ–18–08	M18 × 1.5	3/4" × 16	12	16.7	10	25	22	22	
1CJ–22–08	M22 × 1.5	3/4" × 16	15	1.7	10.8	26	24	27	
1CJ–22–10	M22 × 1.5	7/8" × 14	15	19.3	11	26	24	27	
1CJ–26–10	M26 × 1.5	7/8" × 14	18	19.3	11.5	28	27	32	
1CJ–26–12	M26 × 1.5	1.1/16" × 12	18	21.9	11.6	28	30	32	
1CJ–30–12	M30 × 2	1.1/16" × 12	22	21.9	13.5	30	32	36	16 L–series
1CJ–36–16	M36 × 2	1.5/16" × 12	28	23.1	14.5	31	41	41	
1CJ–45–20	M45 × 2	1.5/8" × 12	35	24.3	14.5	36	46	50	
1CJ–52–20	M52 × 2	1.5/8" × 12	42	24.3	16	39	55	60	
1CJ–52–24	M52 × 2	1.7/8" × 12	42	27.5	16	39	55	60	
1DJ–14–04	M14 × 1.5	7/16" × 20	6	14	11	26	14	14	63 S–series
1DJ–16–04	M16 × 1.5	7/16" × 20	8	14	13	28	17	19	
1DJ–16–06	M16 × 1.5	9/16" × 18	8	14.1	12.9	28	17	34	
1DJ–18–04	M18 × 1.5	7/16" × 20	10	14	12.5	29	19	22	
1DJ–18–06	M18 × 1.5	9/16" × 18	10	14.1	12.5	29	19	22	
1DJ–20–06	M20 × 1.5	9/16" × 18	12	14.1	14.5	31	22	24	
1DJ–20–08	M20 × 1.5	3/4" × 16	12	16.7	14.3	31	22	24	
1DJ–22–08	M22 × 1.5	3/4" × 16	14	16.7	16	34	24	27	
1DJ–24–08	M24 × 1.5	3/4" × 16	16	16.7	15.5	34	27	30	40 S–series
1DJ–24–10	M24 × 1.5	7/8" × 14	16	19.3	15.5	34	27	30	
1DJ–30–12	M30 × 2	1.1/16" × 12	20	21.9	17.5	39	32	36	
1DJ–36–12	M36 × 2	1.1/16" × 12	25	21.9	19	43	38	46	
1DJ–36–16	M36 × 2	1.5/16" × 12	25	23.1	19	43	38	46	
1DJ–42–20	M42 × 2	1.5/8" × 12	30	24.3	20.5	47	46	50	
1DJ–52–24	M52 × 2	1.7/8" × 12	38	27.5	23	54	55	60	31.5 S–series

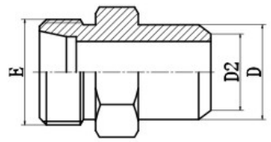
Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.,for example 1DJ–20–08RN.



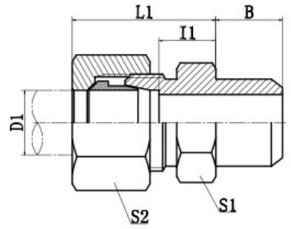
2JC
2JD

JIC 74° CONE SEALING /
METRIC FEMALE 24° CONE O-RING SEALING

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				PN BAR MPa
	E	F	D1	A	L1	S1	S2	
2JC-04-12	7/16" × 20	M12 × 1.5	6	14	23.5	14	17	
2JC-04-14	7/16" × 20	M14 × 1.5	8	14	21.5	14	19	
2JC-05-14	1/2" × 20	M14 × 1.5	8	14	21.5	14	19	
2JC-05-16	1/2" × 20	M16 × 1.5	10	14	22	17	22	
2CJ-06-14	9/16" × 18	M14 × 1.5	8	14.1	21.5	17	19	
2JC-06-16	9/16" × 18	M16 × 1.5	10	14.1	22	17	22	31.5
2JC-06-18	9/16" × 18	M18 × 1.5	12	14.1	22	17	24	L-series
2JC-08-18	3/4" × 16	M18 × 1.5	12	16.7	23	22	24	
2JC-08-22	3/4" × 16	M22 × 1.5	15	16.7	25.5	22	27	
2JC-10-22	7/8" × 14	M22 × 1.5	15	19.3	25.5	24	27	
2JC-10-26	7/8" × 14	M26 × 1.5	18	19.3	26	27	32	
2JC-12-26	1.1/16" × 12	M26 × 1.5	18	21.9	26	30	32	
2JC-12-30	1.1/16" × 12	M30 × 2	22	21.9	29	30	36	
2JC-16-36	1.5/16" × 12	M36 × 2	28	23.1	32	36	41	
2JC-16-45	1.5/16" × 12	M45 × 2	35	23.1	39	41	50	16
2JC-20-45	1.5/8" × 12	M45 × 2	35	24.3	39	46	50	L-series
2JC-20-52	1.5/8" × 12	M52 × 2	42	24.3	43	50	60	
2JC-24-52	1.7/8" × 12	M52 × 2	42	27.5	43	50	60	
2JD-04-14	7/16" × 20	M14 × 1.5	6	14	24	14	17	
2JD-04-16	7/16" × 20	M16 × 1.5	8	14	24.5	17	19	
2JD-04-18	7/16" × 20	M18 × 1.5	10	14	22.5	17	24	
2JD-05-18	1/2" × 20	M18 × 1.5	10	14	22.5	17	24	
2JD-06-16	9/16" × 18	M16 × 1.5	8	14.1	24.5	17	19	63
2JD-06-18	9/16" × 18	M18 × 1.5	10	14.1	22.5	17	24	S-series
2JD-06-20	9/16" × 18	M20 × 1.5	12	14.1	24	19	27	
2JD-06-22	9/16" × 18	M22 × 1.5	14	14.1	28.5	22	27	
2JD-08-22	3/4" × 16	M22 × 1.5	14	16.7	28.5	22	27	
2JD-08-24	3/4" × 16	M24 × 1.5	16	16.7	27	24	30	
2JD-10-30	7/8" × 14	M30 × 2	20	19.3	31	30	36	
2JD-10-36	7/8" × 14	M36 × 2	25	19.3	34.5	36	46	
2JD-12-30	1.1/16" × 12	M30 × 2	20	21.9	31	30	36	
2DJ-12-36	1.1/16" × 12	M36 × 2	25	21.9	34.5	36	46	40
2JD-16-42	1.5/16" × 12	M42 × 2	30	23.1	43.5	41	50	S-series
2JD-20-42	1.5/8" × 12	M42 × 2	30	24.3	43	46	50	
2JD-20-52	1.5/8" × 12	M52 × 2	38	24.3	47.5	50	60	
2JD-24-52	1.7/8" × 12	M52 × 2	38	27.5	47	50	60	



1CW
1DW

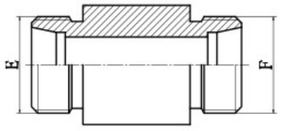


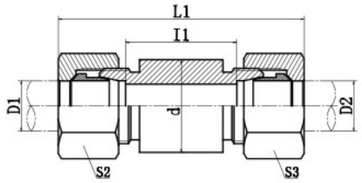
1CW-RN
1DW-RN

WELD FITTINGS

PART NO.	THREAD	TUBE O.D.		DIMENSIONS						PN BAR MPa
	E	D1	D2	B	D	I1	L1	S1	S2	
1CW-12-06	M12 × 1.5	6	6	7	10	7	22	12	14	
1CW-14-08	M14 × 1.5	8	8	8	12	8	23	14	17	
1CW-16-10	M16 × 1.5	10	10	8	14	9	24	17	19	31.5
1CW-18-12	M18 × 1.5	12	12	8	16	10	25	19	22	L-series
1CW-22-15	M22 × 1.5	15	15	10	19	11	26	22	27	
1CW-26-18	M26 × 1.5	18	18	10	22	11.5	28	27	32	
1CW-26-22	M26 × 1.5	18	22	10	27	13.5	28	27	32	
1CW-30-22	M30 × 2	22	22	12	27	13.5	30	32	36	
1CW-30-25	M30 × 2	22	25	12	31	13.5	30	32	36	16
1CW-36-28	M36 × 2	28	28	12	32	16.5	33	38	41	L-series
1CW-45-35	M45 × 2	35	35	14	40	14.5	36	46	50	
1CW-52-42	M52 × 2	42	42	16	46	16	39	55	60	
1DW-14-06	M14 × 1.5	6	6	7	11	11	26	14	17	
1DW-16-08	M16 × 1.5	8	8	8	13	13	28	17	19	
1DW-18-10	M18 × 1.5	10	10	8	15	12.5	29	19	22	63
1DW-20-12	M20 × 1.5	12	12	10	17	14.5	31	22	24	S-series
1DW-22-14	M22 × 1.5	14	14	10	19	16	34	24	27	
1DW-24-16	M24 × 1.5	16	16	10	21	15.5	34	27	30	
1DW-30-20	M30 × 2	20	20	12	26	17.5	39	32	36	40
1DW-36-25	M36 × 2	25	25	12	31	20	44	41	46	S-series
1DW-42-30	M42 × 2	30	30	14	36	20.5	47	46	50	
1DW-52-38	M52 × 2	38	38	16	44	23	54	55	60	31.5 S-series

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.,for example 1DW-20-12RN.





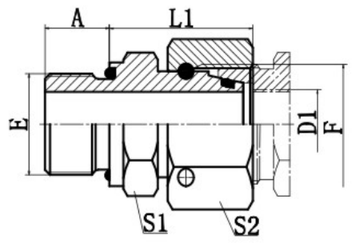
1C–Y
1D–Y

1C–Y/RN
1D–Y/RN

CYLINDER STRAIGHT BULKHEAD

PART NO.	THREAD		TUBE O.D.		DIMENSIONS				PN BAR MPa
	E	F	D1	D2	l1	L1	d	S2,S3	
1C–12Y	M12×1.5	M12×1.5	6	6	56	85	18	14	31.5 L–series
1C–14Y	M14×1.5	M14×1.5	8	8	56	85	20	17	
1C–16Y	M16×1.5	M16×1.5	10	10	58	87	22	19	
1C–18Y	M18×1.5	M18×1.5	12	12	58	87	25	22	
1C–22Y	M22×1.5	M22×1.5	15	15	70	100	28	27	
1C–26Y	M26×1.5	M26×1.5	18	18	69	101	32	32	
1C–30Y	M30×2	M30×2	22	22	73	105	36	36	16 L–series
1C–36Y	M36×2	M36×2	28	28	73	106	40	41	
1C–45Y	M45×2	M45×2	35	35	71	114	50	50	
1C–52Y	M52×2	M52×2	42	42	70	115	60	60	
1D–14Y	M14×1.5	M14×1.5	6	6	60	89	20	17	63 S–series
1D–16Y	M16×1.5	M16×1.5	8	8	60	89	22	19	
1D–18Y	M18×1.5	M18×1.5	10	10	59	91	25	22	
1D–20Y	M20×1.5	M20×1.5	12	12	59	91	28	24	
1D–22Y	M22×1.5	M22×1.5	14	14	72	107	30	27	
1D–24Y	M24×1.5	M24×1.5	16	16	71	107	35	30	40 S–series
1D–30Y	M30×2	M30×2	20	20	71	114	38	36	
1D–36Y	M36×2	M36×2	25	25	72	120	45	46	
1D–42Y	M42×2	M42×2	30	30	73	126	50	50	
1D–52Y	M52×2	M52×2	38	38	72	133	60	60	31.5 S–series

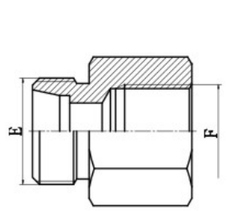
Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.,for example 1D–36Y/RN.

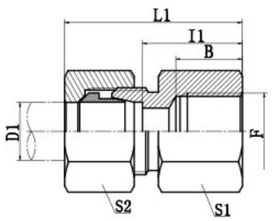


2GC
2GD

BSP THREAD STUD ENDS WITH O–RING SEALING / METRIC FEMALE 24° CONE O–RING SEALING

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				PN BAR MPa
	E	F	D1	A	L1	S1	S2	
2GC–02–12	G1/8"×28	M12×1.5	6	9.5	20.5	14	14	31.5 L–series
2GC–04–14	G1/4"×19	M14×1.5	8	10	23.5	19	17	
2GC–04–16	G1/4"×19	M16×1.5	10	10	24	19	19	
2GC–06–18	G3/8"×19	M18×1.5	12	11.5	25.5	22	27	
2GC–08–22	G1/2"×14	M22×1.5	15	14	28.5	27	22	
2GC–08–26	G1/2"×14	M26×1.5	18	14	29	27	32	
2GC–12–30	G3/4"×14	M30×2	22	15.5	32	32	36	16 L–series
2GC–16–36	G1"×11	M36×2	28	18	35	41	41	
2GC–20–45	G1.1/4"×11	M45×2	35	20	38	50	50	
2GC–24–52	G1.1/2"×11	M52×2	42	21.5	41.5	55	60	
2GD–04–14	G1/4"×19	M14×1.5	6	10	23	19	17	63 S–series
2GD–04–16	G1/4"×19	M16×1.5	8	10	26	19	19	
2GD–06–18	G3/8"×19	M18×1.5	10	11.5	25	22	22	
2GD–06–20	G3/8"×19	M20×1.5	12	11.5	28.5	22	24	
2GD–08–22	G1/2"×14	M22×1.5	14	14	31.5	27	27	
2GD–08–24	G1/2"×14	M24×1.5	16	14	30	27	30	40 S–series
2GD–12–30	G3/4"×14	M30×2	20	15.5	36	32	36	
2GD–16–36	G1"×11	M36×2	25	18	38.5	41	46	
2GD–20–42	G1.1/4"×11	M42×2	30	20	42	50	50	
2GD–24–52	G1.1/2"×11	M52×2	38	21.5	47.5	55	60	31.5 S–series





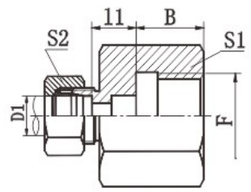
5CB
5DB

5CB–RN
5DB–RN

BSP FEMALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					PN BAR MPa
	E	F	D1	B	I1	L1	S1	S2	
5CB–12–02	M12×1.5	G1/8"×28	6	12	19	34	14	14	
5CB–12–04	M12×1.5	G1/4"×19	6	16	23	36	19	17	
5CB–14–04	M14×1.5	G1/4"×19	8	17	24	39	19	17	
5CB–14–06	M14×1.5	G3/8"×19	8	17	25	40	24	17	
5CB–14–08	M14×1.5	G1/2"×14	8	20	29	44	27	17	
5CB–16–04	M16×1.5	G1/4"×19	10	17	25	40	19	19	
5CB–16–06	M16×1.5	G3/8"×19	10	17	26	41	24	19	31.5
5CB–16–08	M16×1.5	G1/2"×14	10	20	30	45	27	19	L–series
5CB–18–04	M18×1.5	G1/4"×19	12	17	23	38	19	22	
5CB–18–06	M18×1.5	G3/8"×19	12	17	26	41	24	22	
5CB–18–08	M18×1.5	G1/2"×14	12	20	30	45	27	22	
5CB–22–06	M22×1.5	G3/8"×19	15	17	28	43	24	27	
5CB–22–08	M22×1.5	G1/2"×14	15	20	31	46	27	27	
5CB–26–08	M26×1.5	G1/2"×14	18	20	30.5	47	27	32	
5CB–30–12	M30×2	G3/4"×14	22	22	35.5	52	36	36	
5CB–36–16	M36×2	G1"×11	28	24.5	38	55	41	41	16
5CB–45–20	M45×2	G1.1/4"×11	35	26.5	41	63	55	50	L–series
5CB–52–24	M52×2	G1.1/2"×11	42	28.5	42.5	65	60	60	
5DB–14–04	M14×1.5	G1/4"×19	6	17	26	41	19	17	
5DB–16–04	M16×1.5	G1/4"×19	8	17	26	41	19	19	
5DB–18–06	M18×1.5	G3/8"×19	10	17	26.5	43	24	22	63
5DB–20–06	M20×1.5	G3/8"×19	12	17	27.5	28	24	24	S–series
5DB–20–08	M20×1.5	G1/2"×14	12	20	30.5	31	24	24	
5DB–22–08	M22×1.5	G1/2"×14	14	20	32	50	30	27	
5DB–24–08	M24×1.5	G1/2"×14	16	20	31.5	50	30	30	
5DB–30–12	M30×2	G3/4"×14	20	22	34.5	56	36	36	40
5DB–36–16	M36×2	G1"×11	25	24.5	37.5	62	41	46	S–series
5DB–42–20	M42×2	G1.1/4"×11	30	26.5	42	69	55	50	
5DB–52–24	M52×2	G1.1/2"×11	38	28.5	43.5	74	60	60	31.5 S–series

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix “RN” after our part no.,for example 5CB–45–20RN.

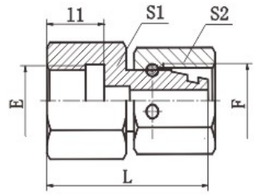


5CB–G **5CB–GRN**
5DB–G **5DB–GRN**

BSP PRESSURE GAUGE CONNECTOR WITH COPPER SEALING RING

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				SEALING RING	PN BAR MPa
	E	F	D1	I1	B	S1	S2		
5CB–12–04G	M12X1.5	G1/4"X19	6	9	11	19	14	DP–B04G	
5CB–14–04G	M14X1.5	G1/4"X19	8	9	11	19	17	DP–B04G	31.5
5CB–16–04G	M16X1.5	G1/4"X19	10	9	11	19	19	DP–B04G	L–series
5CB–18–04G	M18X1.5	G1/4"X19	12	10	11	19	22	DP–B04G	
5DB–14–08G	M14X1.5	G1/2"X14	6	10	17	27	17	DP–B08G	
5DB–16–08G	M16X1.5	G1/2"X14	8	10	17	27	19	DP–B08G	63
5DB–18–08G	M18X1.5	G1/2"X14	10	10	17	27	22	DP–B08G	S–series
5DB–20–08G	M20X1.5	G1/2"X14	12	9	17	27	24	DP–B08G	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example 5CB–18–04GRN.

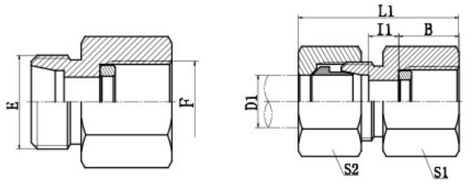


7BC–GS
7BD–GS

BSP PRESSURE GAUGE CONNECTOR WITH COPPER SEALING RING

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					SEALING RING	PN BAR MPa
	E	F	D1	I1	L	S1	S2			
7BC–04–12GS	G1/4"X19	M12X1.5	6	11	30.5	19	14		DP–B04G	
7BC–04–14GS	G1/4"X19	M14X1.5	8	11	31	19	17		DP–B04G	31.5
7BC–04–16GS	G1/4"X19	M16X1.5	10	11	31	19	19		DP–B04G	L–series
7BC–04–18GS	G1/4"X19	M18X1.5	12	11	32	19	22		DP–B04G	
7BD–04–14GS	G1/4"X19	M14X1.5	6	11	31	19	17		DP–B04G	
7BD–04–16GS	G1/4"X19	M16X1.5	8	11	31	19	19		DP–B04G	
7BD–04–18GS	G1/4"X19	M18X1.5	10	11	31.5	19	22		DP–B04G	
7BD–04–20GS	G1/4"X19	M20X1.5	12	11	31	19	24		DP–B04G	63
7BD–08–14GS	G1/2"X14	M14X1.5	6	17	39	27	17		DP–B08G	S–series
7BD–08–16GS	G1/2"X14	M16X1.5	8	17	39	27	19		DP–B08G	
7BD–08–18GS	G1/2"X14	M18X1.5	10	17	38.5	27	22		DP–B08G	
7BD–08–20GS	G1/2"X14	M20X1.5	12	17	39	27	24		DP–B08G	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.， for example 7BC–04–18GRN.

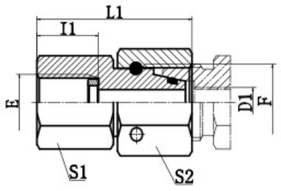


5CB–GDK **5CB–GDK/RN**
5DB–GDK **5DB–GDK/RN**

BSP PRESSURE GAUGE CONNECTOR WITH DKI SEALING RING

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					SEALING RING DKI	PN BAR MPa
	E	F	D1	I1	L1	B	S1	S2		
5CB–12–04GDK	M12 × 1.5	G1/4" × 19	6	7.5	37	14.5	19	14	DP–B04DK	31.5 L–series
5CB–14–04GDK	M14 × 1.5	G1/4" × 19	8	7.5	37	14.5	19	17	DP–B04DK	
5CB–16–04GDK	M16 × 1.5	G1/4" × 19	10	8.5	38	14.5	19	19	DP–B04DK	
5CB–118–04GDK	M18 × 1.5	G1/4" × 19	12	8.5	38	14.5	19	22	DP–B04DK	
5DB–14–08GDK	M14 × 1.5	G1/2" × 14	6	11	46	20	27	17	DP–B08DK	63 S–series
5DB–16–08GDK	M16 × 1.5	G1/2" × 14	8	11	46	20	27	19	DP–B08DK	
5DB–18–08GDK	M18 × 1.5	G1/2" × 14	10	10.5	47	20	27	22	DP–B08DK	
5DB–20–08GDK	M20 × 1.5	G1/2" × 14	12	10.5	47	20	27	24	DP–B08DK	

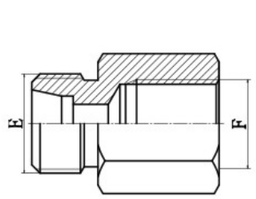
Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.,for example 5CB–18–04GDK/RN.

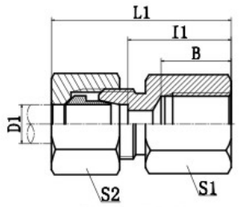


7BC–GDK/S
7BD–GDK/S

BSP PRESSURE GAUGE CONNECTOR WITH DKI SEALING RING

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				SEALING RING DKI	PN BAR MPa
	E	F	D1	I1	L1	S1	S2		
7BC–04–12GDK/S	G1/4" × 19	M12 × 1.5	6	14.5	35.5	19	14	DP–B04DK	31.5 L–series
7BC–04–14GDK/S	G1/4" × 19	M14 × 1.5	8	14.5	35.5	19	17	DP–B04DK	
7BC–04–16GDK/S	G1/4" × 19	M16 × 1.5	10	14.5	36	19	19	DP–B04DK	
7BC–04–18GDK/S	G1/4" × 19	M18 × 1.5	12	14.5	36	19	22	DP–B04DK	
7BD–04–14GDK/S	G1/4" × 19	M14 × 1.5	6	14.5	35.5	19	17	DP–B04DK	63 S–series
7BD–04–16GDK/S	G1/4" × 19	M16 × 1.5	8	14.5	35.5	19	19	DP–B04DK	
7BD–04–18GDK/S	G1/4" × 19	M18 × 1.5	10	14.5	36	19	22	DP–B04DK	
7BD–04–20GDK/S	G1/4" × 19	M20 × 1.5	12	14.5	39	19	24	DP–B04DK	
7BD–08–14GDK/S	G1/2" × 14	M14 × 1.5	6	20	42.5	27	17	DP–B08DK	
7BD–08–16GDK/S	G1/2" × 14	M16 × 1.5	8	20	43	27	19	DP–B08DK	
7BD–08–18GDK/S	G1/2" × 14	M18 × 1.5	10	20	43.5	27	22	DP–B08DK	
7BD–08–20GDK/S	G1/2" × 14	M14 × 1.5	12	20	45	27	24	DP–B08DK	



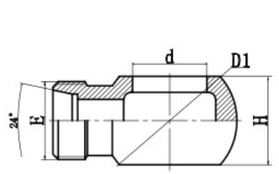


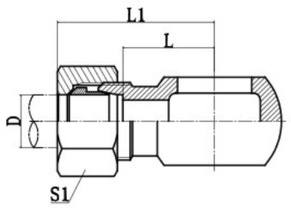
5CM **5CM–RN**
5DM **5DM–RN**

METRIC FEMALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					PN BAR MPa
	E	F	D1	B	I1	L1	S1	S2	
5CM–12–10	M12 × 1.5	M10 × 1	6	12.5	19.5	34	14	14	25 L–series
5CM–14–12	M14 × 1.5	M12 × 1.5	8	17	24	39	17	17	
5CM–16–14	M16 × 1.5	M14 × 1.5	10	17	25	40	19	19	
5CM–18–16	M18 × 1.5	M16 × 1.5	12	17	26	41	22	22	
5CM–22–18	M22 × 1.5	M18 × 1.5	15	17	28	43	24	27	
5CM–26–22	M26 × 1.5	M22 × 1.5	18	19	29.5	46	30	32	
5CM–30–26	M30 × 2	M26 × 1.5	22	21	34.5	51	32	36	16 L–series
5CM–36–33	M36 × 2	M33 × 2	28	24	37.5	54	41	41	
5CM–45–42	M45 × 2	M42 × 2	35	26	40.5	62	55	50	
5CM–52–48	M52 × 2	M48 × 2	42	28	42	65	60	60	
5DM–14–12	M14 × 1.5	M12 × 1.5	6	17	26	41	17	17	63 S–series
5DM–16–14	M16 × 1.5	M14 × 1.5	8	17	26	41	19	19	
5DM–18–16	M18 × 1.5	M16 × 1.5	10	17	26.5	43	22	22	
5DM–20–18	M20 × 1.5	M18 × 1.5	12	17	27.5	44	24	24	
5DM–22–20	M22 × 1.5	M20 × 1.5	14	19	31	49	27	27	
5DM–24–22	M24 × 1.5	M22 × 1.5	16	19	30.5	49	30	30	40 S–series
5DM–30–27	M30 × 2	M27 × 2	20	22	34.5	56	36	36	
5DM–36–33	M36 × 2	M33 × 2	25	24	37	61	41	46	
5DM–42	M42 × 2	M42 × 2	30	26	41.5	68	55	50	
5DM–52–48	M52 × 2	M48 × 2	38	28	43	74	60	60	31.5 S–series

Note: In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix "RN" after our part no.,for example 5DM–30–27RN.





BSP BANJO

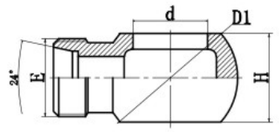
1CI–B
1DI–B

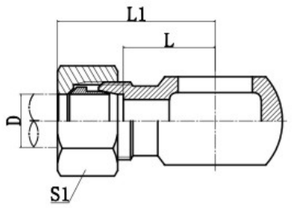
1CI–B/RN
1DI–B/RN

PART NO.	THREAD	TUBE O.D.	BOLT	DIMENSIONS						PN BAR
	E	D		D1	d	H	L	L1	S1	MPa
1CI–12–B02	M12 × 1.5	6	720B–02	24	9.9	16	15	30	14	16 L–series
1CI–14–B04	M14 × 1.5	8	720B–04	24	13.3	15	16	31	17	
1CI–16–B04	M16 × 1.5	10	720B–04	24	13.3	15	18	33	19	
1CI–18–B06	M18 × 1.5	12	720B–06	29	16.7	20	22	37	22	10 L–series
1CI–22–B08	M22 × 1.5	15	720B–08	38	21	25	26	41	27	
1CI–26–B08	M26 × 1.5	18	720B–08	38	21	25	27	42	32	
1CI–30–B12	M30 × 2	22	720B–12	48	26.5	26.5	31	47	36	
1DI–14–B04	M14 × 1.5	6	720B–04	24	13.3	15	17.5	32	17	16 S–series
1DI–16–B04	M16 × 1.5	8	720B–04	24	13.3	15	19	34	19	
1DI–18–B06	M18 × 1.5	10	720B–06	29	16.7	20	23	38	22	10 S–series
1DI–20–B06	M20 × 1.5	12	720B–06	29	16.7	20	24	39	24	
1DI–22–B08	M22 × 1.5	14	720B–08	38	21	25	27	42	27	
1DI–24–B08	M24 × 1.5	16	720B–08	38	21	25	28	43	30	
1DI–30–B12	M30 × 2	20	720B–12	48	31	26.5	32	49	36	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix “RN” after our part no.,for example 1DI–30–B12/RN.

Metric Thread Bite Type Tube Fittings





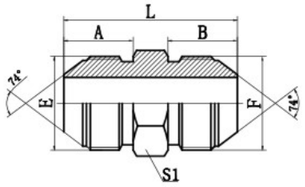
METRIC BANJO DIN 7642

1CI
1DI

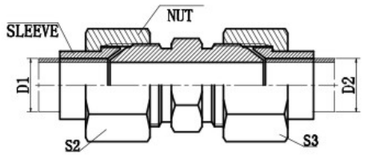
1CI–RN
1DI–RN

PART NO.	THREAD	TUBE O.D.	BOLT	DIMENSIONS						PN BAR
	E	D		D1	d	H	L	L1	S1	MPa
1CI–12–10	M12 × 1.5	6	700M–10	17	10	10	16	31	14	16 L–series
1CI–14–12	M14 × 1.5	8	700M–12	20	12	12	18.5	33	17	
1CI–16–14	M16 × 1.5	10	700M–14	24	14	14	20.5	35	19	
1CI–18–16	M18 × 1.5	12	700M–16	28	16	16	22	37	22	10 L–series
1CI–22–18	M22 × 1.5	15	700M–18	32	18	20	23	38	27	
1CI–26–22	M26 × 1.5	18	700M–22	39	22	25	27.5	43.5	32	
1CI–30–26	M30 × 2	22	700M–26	46	26	30	34	50.5	36	
1DI–14–12	M14 × 1.5	6	700M–12	20	12	12	20.5	35	17	16 S–series
1DI–16–14	M16 × 1.5	8	700M–14	24	14	14	22.5	36	19	
1DI–18–16	M18 × 1.5	10	700M–16	28	16	16	23	39.5	22	10 S–series
1DI–20–18	M20 × 1.5	12	700M–18	32	20	20	25	41	24	
1DI–22–18	M22 × 1.5	14	700M–18	32	20	20	28	46	27	
1DI–24–22	M24 × 1.5	16	700M–22	39	25	25	28.5	46.5	30	
1DI–30–26	M30 × 2	20	700M–26	46	30	30	37	58.5	36	

Note：In case if you are interested to order the adapter in complete set with cutting ring and nut ,it is necessary to insert suffix “RN” after our part no.,for example 1DI–30–26/RN.



1Q

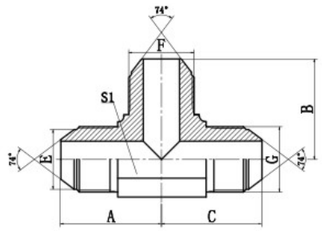


1Q–RN

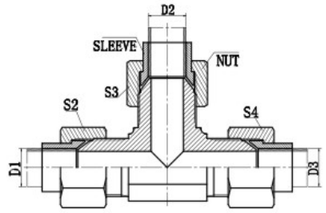
METRIC MALE 74° CONE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				
	E	F	D1,D2	A	B	L	S1	S2, S3
1Q–10	M10×1	M10×1	5	12	12	30	12	14
1Q–12	M12×1.5	M12×1.5	6	15.7	15.7	37.5	14	14
1Q–14	M14×1.5	M14×1.5	8	17	17	40	17	17
1Q–16	M16×1.5	M16×1.5	10	18	18	42	17	19
1Q–18	M18×1.5	M18×1.5	12	18	18	42	19	22
1Q–22	M22×1.5	M22×1.5	14	19.5	19.5	47	24	27
1Q–24	M24×1.5	M24×1.5	16	20	20	50	27	30
1Q–27	M27×1.5	M27×1.5	18	20	20	50	30	32
1Q–30	M30×1.5	M30×1.5	20	23	23	57	32	36
1Q–30E	M30×2	M30×2	20	26	26	63	32	36
1Q–33	M33×2	M33×2	22	26	26	63	36	38
1Q–36	M36×2	M36×2	25	26	26	63	38	41
1Q–39	M39×2	M39×2	28	26	26	65	41	46
1Q–42	M42×2	M42×2	32	28.5	28.5	70	46	50
1Q–45	M45×2	M45×2	34	28.5	28.5	70	46	55

Note:In case if you are interested to order the adapter in complete set with sleeve and nut ,it is necessary to insert suffix “RN” after our part NO.,for example 1Q–18RN,The sleeve NO. is NB500–Q AND the nut NO. is NB200–Q.



AQ

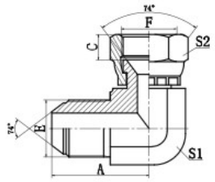


AQ–RN

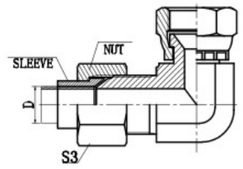
METRIC MALE 74° CONE TEE

PART NO.	THREAD			TUBE O.D.	DIMENSIONS				
	E	F	G	D1,D2,D3	A	B	C	S1	S2,S3,S4
AQ–14	M14×1.5	M14×1.5	M14×1.5	8	27	27	27	14	17
AQ–16	M16×1.5	M16×1.5	M16×1.5	10	29.5	29.5	29.5	16	19
AQ–18	M18×1.5	M18×1.5	M18×1.5	12	34	34	34	19	22
AQ–22	M22×1.5	M22×1.5	M22×1.5	14	37.5	37.5	37.5	22	27
AQ–27	M27×1.5	M27×1.5	M27×1.5	18	41.5	41.5	41.5	27	32
AQ–30	M30×1.5	M30×1.5	M30×1.5	20	42.8	42.8	42.8	30	36
AQ–33	M33×2	M33×2	M33×2	22	49.5	49.5	49.5	33	38

Note:In case if you are interested to order the adapter in complete set with sleeve and nut ,it is necessary to insert suffix “RN” after our part NO.,for example AQ–18RN,The sleeve NO. is NB500–Q AND the nut NO. is NB200–Q.



2Q9



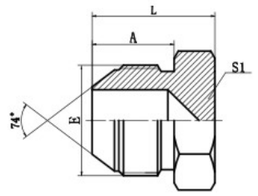
2Q9–RN

METRIC MALE 74° CONE / METRIC FEMALE 74° SEAT

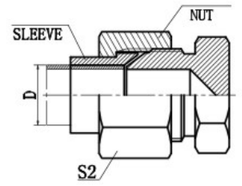
PART NO.	THREAD		TUBE O.D.	DIMENSIONS				
	E	F	D	A	C	S1	S2	S3
2Q9–14	M14×1.5	M14×1.5	8	30.2	8.5	14	19	17
2Q9–16	M16×1.5	M16×1.5	10	32.5	8	16	22	19
2Q9–18	M18×1.5	M18×1.5	12	34	8	19	24	22
2Q9–22	M22×1.5	M22×1.5	14	37.5	10	22	27	27
2Q9–27	M27×1.5	M27×1.5	18	41.5	10	27	32	32
2Q9–30	M30×1.5	M30×1.5	20	45.8	11	30	36	36
2Q9–33	M33×2	M33×2	22	49.5	13	33	41	38
2Q9–36	M36×2	M36×2	25	51.5	13	36	41	41
2Q9–39	M39×2	M39×2	28	55.5	13	41	46	46
2Q9–45	M45×2	M45×2	34	62.5	15	48	55	55

Note:In case if you are interested to order the adapter in complete set with sleeve and nut ,it is necessary to insert suffix “RN” after our part NO.,for example 2Q9–18RN,The sleeve NO. is NB500–Q AND the nut NO. is NB200–Q.

Metric Thread 74° Cone Flared Tube Fittings



4Q

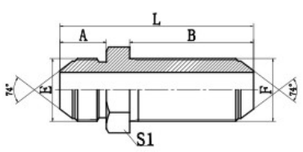


4Q–RN

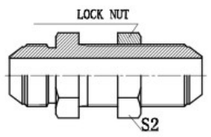
METRIC MALE 74° CONE PLUG

PART NO.	THREAD	TUBE O.D.	DIMENSIONS			
	E	D	A	L	S1	S2
4Q–10	M10×1	5	12	18	12	14
4Q–12	M12×1.5	6	15.7	21.5	14	14
4Q–14	M14×1.5	8	17	23	17	17
4Q–16	M16×1.5	10	18	24	17	19
4Q–18	M18×1.5	12	18	24	19	22
4Q–22	M22×1.5	14	19.5	27.5	24	27
4Q–24	M24×1.5	16	20	30	27	30
4Q–27	M27×1.5	18	20	30	30	32
4Q–30	M30×1.5	20	23	34	32	36
4Q–30E	M30×2	20	26	37	32	36
4Q–33	M33×2	22	26	37	36	38
4Q–36	M36×2	25	26	38	38	41
4Q–39	M39×2	28	26	39	41	46
4Q–42	M42×2	32	28.5	41.5	46	50
4Q–45	M45×2	34	28.5	41.5	46	55

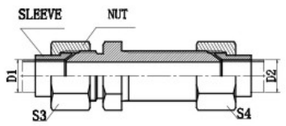
Note:In case if you are interested to order the adapter in complete set with sleeve and nut ,it is necessary to insert suffix “RN” after our part NO.,for example 4Q–18RN,The sleeve NO. is NB500–Q AND the nut NO. is NB200–Q.



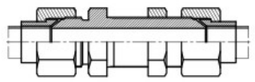
6Q



6Q–LN



6Q–RN

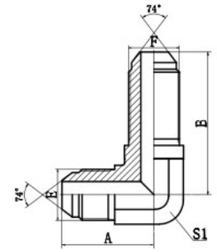


6Q–LN/RN

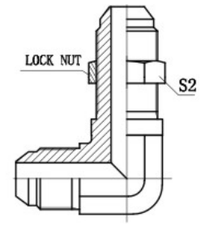
METRIC MALE 74° CONE BULKHEAD

PART NO.	THREAD		TUBE O.D.	DIMENSIONS					
	E	F	D1, D2	A	B	L	S1	S2	S3, S4
6Q–10	M10×1	M10×1	5	12.5	34	52.5	14	14	14
6Q–12	M12×1.5	M12×1.5	6	15.7	38	59.7	17	17	14
6Q–14	M14×1.5	M14×1.5	8	17	40	64	17	19	17
6Q–16	M16×1.5	M16×1.5	10	18	41	65	19	22	19
6Q–18	M18×1.5	M18×1.5	12	18	43	69	24	24	22
6Q–22	M22×1.5	M22×1.5	14	19.5	44	73.5	27	27	27
6Q–24	M24×1.5	M24×1.5	16	20	45	75	27	30	30
6Q–27	M27×1.5	M27×1.5	18	20	48	78	30	32	32
6Q–30	M30×1.5	M30×1.5	20	23	53	87	34	36	36
6Q–33	M33×2	M33×2	22	26	55	92	36	41	38
6Q–36	M36×2	M36×2	25	25	56	94	41	41	41
6Q–39	M39×2	M39×2	28	26	58	97	41	46	46
6Q–42	M42×2	M42×2	32	28.5	59	102.5	50	50	50
6Q–45	M45×2	M45×2	34	28.5	60	103.5	50	50	55

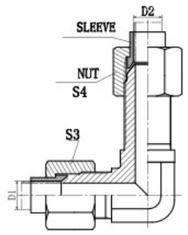
Note:In case if you are interested to order the adapter with lock nut , please insert suffix “LN” after our part NO.,for example 6Q–18LN ; order the adapter with sleeve and nut, please insert suffix “RN” after our part NO., for example 6Q–18RN order the adapter with lock nut and sleeve and nut, insert suffix “LN/RN” after part NO., for example 6Q–18LN/RN; The sleeve NO. is NB500–Q and the nut NO. is NB200–Q and the lock nut NO. is 8C.



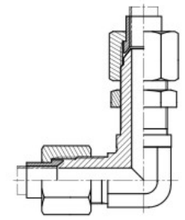
6Q9



6Q9–LN



6Q9–RN

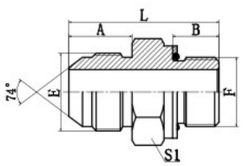


6Q9–LN/RN

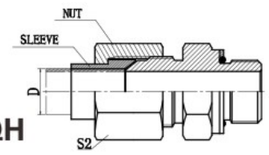
90° ELBOW METRIC MALE 74° CONE BULKHEAD

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				
	E	F	D1, D2	A	B	S1	S2	S3, S4
6Q9–12	M12×1.5	M12×1.5	6	25.5	52	11	17	14
6Q9–14	M14×1.5	M14×1.5	8	30.2	56	14	19	17
6Q9–16	M16×1.5	M16×1.5	10	32	58	16	22	19
6Q9–18	M18×1.5	M18×1.5	12	34	62	19	24	22
6Q9–22	M22×1.5	M22×1.5	14	37.5	64	22	27	27
6Q9–27	M27×1.5	M27×1.5	18	41.5	72	27	32	32
6Q9–30	M30×1.5	M30×1.5	20	45.8	78	30	36	36
6Q9–33	M33×2	M33×2	22	51.5	82	33	41	38
6Q9–36	M36×2	M36×2	25	51.5	86	36	41	41
6Q9–39	M39×2	M39×2	28	55.5	88	41	46	46
6Q9–42	M42×2	M42×2	32	57	95	41	50	50
6Q9–45	M45×2	M45×2	34	62.5	96	48	55	55

Note:In case if you are interested to order the adapter with lock nut , please insert suffix “LN” after our part NO.,for example 6Q9–18LN ; order the adapter with sleeve and nut, please insert suffix “RN” after our part NO., for example 6Q9–18RN order the adapter with lock nut and sleeve and nut, insert suffix “LN/RN” after part NO., for example 6Q9–18LN/RN; The sleeve NO. is NB500–Q and the nut NO. is NB200–Q and the lock nut NO. is 8C.



1QH

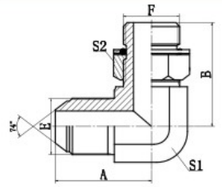


1QH-RN

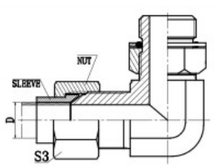
METRIC 74° CONE / METIRC MALE L-SERIES ISO 6149-3

PART NO.	THREAD		TUBE O.D.	O-RING	DIMENSIONS				
	E	F	D	F	A	B	L	S1	S2
1QH-14-12	M14×1.5	M12×1.5	8	O09.3×2.4	17	11.0	36.5	17	17
1QH-16-14	M16×1.5	M14×1.5	10	O11.3×2.4	18	11.0	37.5	19	19
1QH-18-16	M18×1.5	M16×1.5	12	O13.3×2.4	18	11.5	38	22	22
1QH-22-18	M22×1.5	M18×1.5	14	O15.3×2.4	19.5	12.5	40.5	24	27
1QH-27-22	M27×1.5	M22×1.5	18	O19.3×2.4	20	13.0	44	27	32
1QH-30-27	M30×1.5	M27×2	20	O23.5×3.0	23	16.0	50	32	36
1QH-33-27	M33×2	M27×2	22	O23.5×3.0	26	16.0	53	34	38
1QH-36-33	M36×2	M33×2	25	O29.5×3.0	26	16.0	55	41	41
1QH-39-33	M39×2	M33×2	28	O29.5×3.0	26	16.0	55	41	46
1QH-45-42	M45×2	M42×2	34	O38.5×3.0	28.5	16.0	59.5	50	55

Note: 1 In case if you are interested to order the adapter in complete set with sleeve and nut, it is necessary to insert suffix "RN" after our part NO., for example 1QH-22-18/RN, The sleeve NO. is NB500-Q and the nut ni.is NB200-Q. 2 F end is connected with ISO 9974-1 port and connected with ISO 6149-1 port without retaining ring.



1QH9-OG

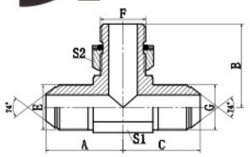


1QH9-OG/RN

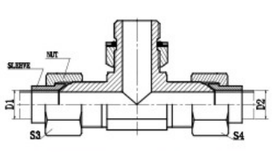
90° ELBOW METRIC 74° CONE / METIRC MALE ADJUSTABLE STUD END L-SERIES ISO 6149-3

PART NO.	THREAD		TUBE O.D.	O-RING	DIMENSIONS				
	E	F	D	F	A	B	S1	S2	S3
1QH9-14-12OG	M14×1.5	M12×1.5	8	O09.3×2.4	30.2	32	14	17	17
1QH9-16-14OG	M16×1.5	M14×1.5	10	O11.3×2.4	32	35.5	16	19	19
1QH9-18-16OG	M18×1.5	M16×1.5	12	O13.3×2.4	34	36	19	22	22
1QH9-22-18OG	M22×1.5	M18×1.5	14	O15.3×2.4	37.5	39.5	22	24	27
1QH9-27-22OG	M27×1.5	M22×1.5	18	O19.3×2.4	41.5	43.5	27	27	32
1QH9-30-27OG	M30×1.5	M27×2	20	O23.5×3.0	45.8	50	30	32	36
1QH9-33-27OG	M33×2	M27×2	22	O23.5×3.0	49.5	52	33	32	41
1QH9-36-33OG	M36×2	M33×2	25	O29.5×3.0	51.5	54	36	41	41
1QH9-39-33OG	M39×2	M33×2	28	O29.5×3.0	55.5	57.2	41	41	46
1QH9-45-42OG	M45×2	M42×2	34	O38.5×3.0	62.5	61	48	50	50

Note: 1 In case if you are interested to order the adapterin complete set with sleeve and nut, it is necessary to insert suffix "RN" after our part NO., for example 1QH9-22-18/RN, The sleeve NO. is NB500-Q and the nut ni.is NB200-Q. 2 F end is connected with ISO 9974-1 port and connected with ISO 6149-1 port without retaining ring.



AQHQ-OG

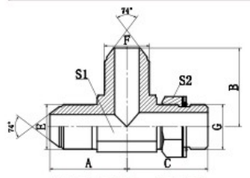


AQHQ-OG/RN

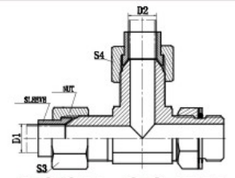
METRIC 74° CONE / METIRC MALE ADJUSTABLE STUD END L-SERIES ISO 6149-3 BRANCH TEE

PART NO.	THREAD		TUBE O.D.	O-RING	DIMENSIONS				
	E, G	F	D1, D2	F	A, C	B	S1	S2	S3, S4
AQHQ-14-12-14OG	M14×1.5	M12×1.5	8	O09.3×2.4	29	32	14	17	17
AQHQ-16-14-16OG	M16×1.5	M14×1.5	10	O11.3×2.4	33	35.5	16	19	19
AQHQ-18-16-18OG	M18×1.5	M16×1.5	12	O13.3×2.4	34	36	19	22	22
AQHQ-22-18-22OG	M22×1.5	M18×1.5	14	O15.3×2.4	37.5	39.5	22	24	27
AQHQ-27-22-27OG	M27×1.5	M22×1.5	18	O19.3×2.4	41.5	43.5	27	27	32
AQHQ-30-27-30OG	M30×1.5	M27×2	20	O23.5×3.0	45.8	50	30	32	36
AQHQ-33-27-33OG	M33×2	M27×2	22	O23.5×3.0	49.5	52	33	32	38
AQHQ-36-33-36OG	M36×2	M33×2	25	O29.5×3.0	51.5	54	36	41	41
AQHQ-39-33-39OG	M39×2	M33×2	28	O29.5×3.0	55.5	57.2	41	41	46
AQHQ-45-42-45OG	M45×2	M42×2	34	O38.5×3.0	62.5	61	48	50	55

Note: 1 In case if you are interested to order the adapter in complete set with sleeve and nut, it is necessary to insert suffix "RN" after our part NO., for example AQHQ-22-18-22OG/RN, The sleeve NO. is NB500-Q and the nut ni.is NB200-Q. 2 F end is connected with ISO 9974-1 port and connected with ISO 6149-1 port without retaining ring.



AQQH-OG

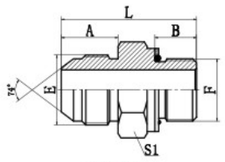


AQQH-OG/RN

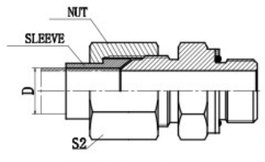
METRIC 74° CONE / METIRC MALE ADJUSTABLE STUD END L-SERIES ISO 6149-3 RUN TEE

PART NO.	THREAD		TUBE O.D.	O-RING	DIMENSIONS				
	E, F	G	D1, D2	G	A, B	C	S1	S2	S3, S4
AQQH-14-14-12OG	M14×1.5	M12×1.5	8	O09.3×2.4	29	32	14	17	17
AQQH-16-16-14OG	M16×1.5	M14×1.5	10	O11.3×2.4	33	35.5	16	19	19
AQQH-18-18-16OG	M18×1.5	M16×1.5	12	O13.3×2.4	34	36	19	22	22
AQQH-22-22-18OG	M22×1.5	M18×1.5	14	O15.3×2.4	37.5	39.5	22	24	27
AQQH-27-27-22OG	M27×1.5	M22×1.5	18	O19.3×2.4	41.5	43.5	27	27	32
AQQH-30-30-27OG	M30×1.5	M27×2	20	O23.5×3.0	45.8	50	30	32	36
AQQH-33-33-27OG	M33×2	M27×2	22	O23.5×3.0	49.5	52	33	32	38
AQQH-36-36-33OG	M36×2	M33×2	25	O29.5×3.0	51.5	54	36	41	41
AQQH-39-39-33OG	M39×2	M33×2	28	O29.5×3.0	55.5	57.2	41	41	46
AQQH-45-45-42OG	M45×2	M42×2	34	O38.5×3.0	62.5	61	48	50	55

Note: 1 In case if you are interested to order the adapter in complete set with sleeve and nut, it is necessary to insert suffix "RN" after our part NO., for example AQQH-22-22-18OG/RN, The sleeve NO. is NB500-Q and the nut ni.is NB200-Q. 2 F end is connected with ISO 9974-1 port and connected with ISO 6149-1 port without retaining ring.



1QG

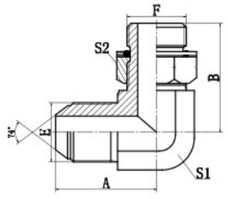


1QG-RN

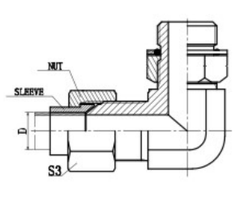
METRIC MALE 74° CONE / BSP MALE O-RING

PART NO.	THREAD		TUBE O.D.	O-RING	DIMENSIONS				
	E	F	D	F	A	B	L	S1	S2
1QG-14-04	M14 × 1.5	G1/4" × 19	8	O111	17	11	36	19	17
1QG-16-06	M16 × 1.5	G3/8" × 19	10	O113	18	11.5	40	22	19
1QG-18-06	M18 × 1.5	G3/8" × 19	12	O113	18	11.5	40	22	22
1QG-18-08	M18 × 1.5	G1/2" × 14	12	O115	18	14	43	27	22
1QG-22-08	M22 × 1.5	G1/2" × 14	14	O115	19.5	14	44.5	27	27
1QG-27-12	M27 × 1.5	G3/4" × 14	18	O119	20	15.5	49.5	32	32
1QG-30-12	M30 × 1.5	G3/4" × 14	20	O119	23	15.5	52.5	32	36
1QG-39-16	M39 × 2	G1" × 11	28	O217	26	18	60	41	46
1QG-45-20	M45 × 2	G1.1/4" × 11	34	O222	28.5	20	66.5	50	55

Note: 1 In case if you are interested to order the adapter in complete set with sleeve and nut, it is necessary to insert suffix "RN" after our part NO., for example 1QG-18-06RN, The sleeve NO. is NB500-Q and the nut ni.is NB200-Q.
2 F end is connected with DIN 3852 port.



1QG9-OG

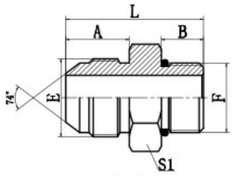


1QG9-OG/RN

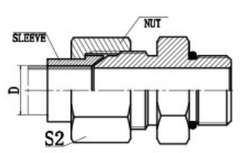
90° ELBOW METRIC MALE 74° CONE / BSP MALE O-RING ADJUSTABLE STUD END

PART NO.	THREAD		TUBE O.D.	O-RING	DIMENSIONS				
	E	F	D	F	A	B	S1	S2	S3
1QG9-14-04OG	M14 × 1.5	G1/4" × 19	8	O111	29	31.3	14	19	17
1QG9-16-06OG	M16 × 1.5	G3/8" × 19	10	O113	33	35.8	16	22	19
1QG9-18-06OG	M18 × 1.5	G3/8" × 19	12	O113	34	36.8	19	22	22
1QG9-18-08OG	M18 × 1.5	G1/2" × 14	12	O115	36	43.2	22	27	22
1QG9-22-08OG	M22 × 1.5	G1/2" × 14	14	O115	37.5	43.2	22	27	27
1QG9-27-12OG	M27 × 1.5	G3/4" × 14	18	O119	41.5	49.3	27	32	32
1QG9-30-12OG	M30 × 1.5	G3/4" × 14	20	O119	45.8	52	30	32	36
1QG9-39-16OG	M39 × 2	G1" × 11	28	O217	55.5	58	41	41	46
1QG9-45-20OG	M45 × 2	G1.1/4" × 11	34	O222	62.5	63	48	50	55

Note: 1 In case if you are interested to order the adapter in complete set with sleeve and nut, it is necessary to insert suffix "RN" after our part NO., for example 1QG9-22-08OG/RN, The sleeve NO. is NB500-Q and the nut ni.is NB200-Q.
2 F end is connected with DIN 3852 port.



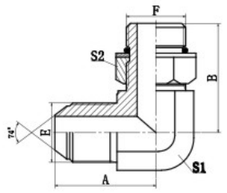
1QO



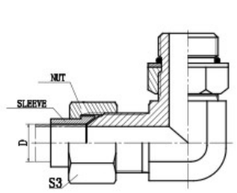
1QO-RN

METRIC MALE 74° CONE / SAE O-RING BOSS L-SERIES ISO 11926-3

PART NO.	THREAD		TUBE O.D.	O-RING	DIMENSIONS				
	E	F	D	F	A	B	L	S1	S2
1QO-16-06	M16 × 1.5	9/16" × 18	10	O906	18	9.9	35	17	19
1QO-18-08	M18 × 1.5	3/4" × 16	12	O908	18	11.1	37	22	22
1QO-22-10	M22 × 1.5	7/8" × 14	14	O910	19.5	12.7	42	27	27
1QO-27-12	M27 × 1.5	1.1/16" × 12	18	O912	20	15.1	46	32	32
1QO-30-12	M30 × 1.5	1.1/16" × 12	20	O912	23	15.1	49	32	36
1QO-33-16	M33 × 2	1.5/16" × 12	22	O916	26	15.1	54	38	38
1QO-39-16	M39 × 2	1.5/16" × 12	28	O916	26	15.1	58	41	46
1QO-42-20	M42 × 2	1.5/8" × 12	32	O920	28.5	15.1	58	50	50



1QO9-OG

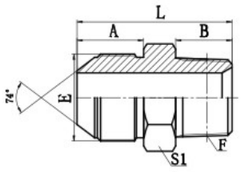


1QO9-OG/RN

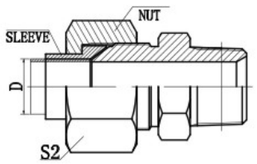
90° METRIC MALE 74° CONE / SAE O-RING BOSS L-SERIES ISO 11926-3

PART NO.	THREAD		TUBE O.D.	O-RING	DIMENSIONS				
	E	F	D	F	A	B	S1	S2	S3
1QO9-16-06	M16 × 1.5	9/16" × 18	10	O906	32	31.8	16	19	19
1QO9-18-08	M18 × 1.5	3/4" × 16	12	O908	34	36.8	19	24	22
1QO9-22-10	M22 × 1.5	7/8" × 14	14	O910	37.5	44	22	27	27
1QO9-27-12	M27 × 1.5	1.1/16" × 12	18	O912	41.5	51	27	32	32
1QO9-30-12	M30 × 1.5	1.1/16" × 12	20	O912	45.8	53	30	32	36
1QO9-33-16	M33 × 2	1.5/16" × 12	22	O916	51	54.5	33	41	38
1QO9-39-16	M39 × 2	1.5/16" × 12	28	O916	55.5	59.5	41	41	46
1QO9-42-20	M42 × 2	1.5/8" × 12	32	O920	58.5	59	41	50	50

Note: 1 In case if you are interested to order the adapter in complete set with sleeve and nut, it is necessary to insert suffix "RN" after our part NO., for example 1QO9-22-10OG/RN, The sleeve NO. is NB500-Q and the nut ni.is NB200-Q.
2 F end is connected with DIN 3852 port.



1QN

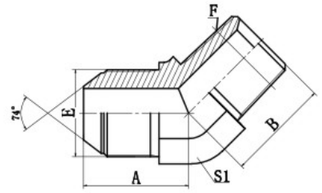


1QN–RN

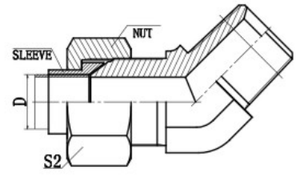
METRIC MALE 74° CONE / NPT MALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				
	E	F	D	A	B	L	S1	S2
1QN–12–02	M12×1.5	Z1/8"×27	6	15.7	10.5	32	14	14
1QN–12–04	M12×1.5	Z1/4"×18	6	15.7	15	36.5	14	14
1QN–14–02	M14×1.5	Z1/8"×27	8	17	10.5	33	17	17
1QN–14–04	M14×1.5	Z1/4"×18	8	17	15	38	17	17
1QN–16–04	M16×1.5	Z1/4"×18	10	18	15	39	19	19
1QN–16–06	M16×1.5	Z3/8"×18	10	18	16	40	19	19
1QN–18–04	M18×1.5	Z1/4"×18	12	18	15	39	19	22
1QN–18–06	M18×1.5	Z3/8"×18	12	18	16	40	19	22
1QN–18–08	M18×1.5	Z1/2"×14	12	18	19.5	45.5	24	22
1QN–22–06	M22×1.5	Z3/8"×18	14	19.5	16	43.5	24	27
1QN–22–08	M22×1.5	Z1/2"×14	14	19.5	19.5	47	24	27
1QN–27–06	M27×1.5	Z3/8"×18	18	20	16.5	46	30	32
1QN–27–08	M27×1.5	Z1/2"×14	18	20	19	49	30	32
1QN–27–12	M27×1.5	Z3/4"×14	18	20	19.5	49.5	30	32
1QN–27–16	M27×1.5	Z1"×11.5	18	20	24	55	36	32
1QN–30–12	M30×1.5	Z3/4"×14	20	23	19.5	53.5	32	36
1QN–33–12	M33×2	Z3/4"×14	22	26	19.5	56.5	36	41
1QN–36–16	M36×2	Z1"×11.5	25	25	25.5	63	41	41
1QN–39–16	M39×2	Z1"×11.5	28	26	25.5	64.5	41	46
1QN–45–16	M45×2	Z1"×11.5	34	28.5	25.5	67	46	50
1QN–45–20	M45×2	Z1.1/4"×11.5	34	28.5	26.5	68	46	50
1QN–45–24	M45×2	Z1.1/2"×11.5	34	28.5	27.5	71	50	50
1QN–52–20	M52×2	Z1.1/4"×11.5	42	30	26.5	71.5	55	60

Note:In case if you are interested to order the adapter in complete set with sleeve and nut ,it is necessary to insert suffix "RN" after our part NO.,for example 1QN–18–08RN,The sleeve NO. is NB500–Q AND the nut NO. is NB200–Q.



1QN4

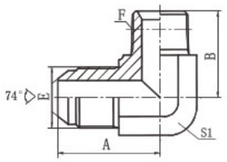


1QN4–RN

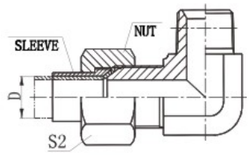
45° ELBOW METRIC MALE 74° CONE / NPT MALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS			
	E	F	D	A	B	S1	S2
1QN4–12–02	M12×1.5	Z1/8"×27	6	23	17	11	14
1QN4–14–02	M14×1.5	Z1/8"×27	8	26	18	14	17
1QN4–14–04	M14×1.5	Z1/4"×18	8	26	21	14	17
1QN4–16–06	M16×1.5	Z3/8"×18	10	24	24	16	19
1QN4–18–06	M18×1.5	Z3/8"×18	12	28	24	19	22
1QN4–22–08	M22×1.5	Z1/2"×14	14	30.5	29.5	22	27
1QN4–27–08	M27×1.5	Z1/2"×14	18	33	31	27	32
1QN4–27–12	M27×1.5	Z3/4"×14	18	33	35	27	32
1QN4–30–12	M30×1.5	Z3/4"×14	20	36.2	35.5	30	36
1QN4–36–16	M36×2	Z1"×11.5	25	42	41	36	41
1QN4–39–16	M39×2	Z1"×11.5	28	44.5	42.5	41	46
1QN4–42–20	M42×2	Z1.1/4"×11.5	32	47	43	41	50

Note:In case if you are interested to order the adapter in complete set with sleeve and nut ,it is necessary to insert suffix "RN" after our part NO.,for example 1QN4–22–08RN,The sleeve NO. is NB500–Q AND the nut NO. is NB200–Q.



1QN9

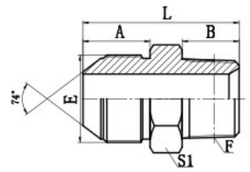


1QN9–RN

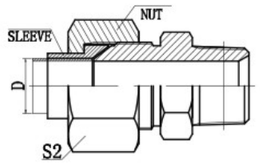
90° ELBOW METRIC MALE 74° CONE / NPT MALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS			
	E	F	D	A	B	S1	S2
1QN9–12–02	M12 × 1.5	Z1/8" × 27	6	25.5	21	11	14
1QN9–12–04	M12 × 1.5	Z1/4" × 18	6	28	25.5	14	14
1QN9–14–02	M14 × 1.5	Z1/8" × 27	8	30.2	23.5	14	17
1QN9–14–04	M14 × 1.5	Z1/4" × 18	8	30.2	25.5	14	17
1QN9–16–04	M16 × 1.5	Z1/4" × 18	10	32	26.5	16	19
1QN9–16–06	M16 × 1.5	Z3/8" × 18	10	32	30	16	19
1QN9–16–08	M16 × 1.5	Z1/2" × 14	10	36	36.7	22	19
1QN9–18–04	M18 × 1.5	Z1/4" × 18	12	34	28.7	19	22
1QN9–18–06	M18 × 1.5	Z3/8" × 18	12	34	31	19	22
1QN9–22–06	M22 × 1.5	Z3/8" × 18	14	37.5	32.5	22	27
1QN9–22–08	M22 × 1.5	Z1/2" × 14	14	37.5	36.7	22	27
1QN9–27–08	M27 × 1.5	Z1/2" × 14	18	41.5	40	27	32
1QN9–27–12	M27 × 1.5	Z3/4" × 14	18	41.5	44	27	32
1QN9–27–16	M27 × 1.5	Z1" × 11.5	18	45	49	33	32
1QN9–30–12	M30 × 1.5	Z3/4" × 14	20	45.8	45	30	36
1QN9–36–16	M36 × 2	Z1" × 11.5	25	51.5	51.5	36	41
1QN9–39–16	M39 × 2	Z1" × 11.5	28	55.5	54.5	41	46
1QN9–42–20	M42 × 2	Z1.1/4" × 11.5	32	57	54.5	41	50
1QN9–45–16	M45 × 2	Z1" × 11.5	34	62.5	58.5	48	55
1QN9–45–20	M45 × 2	Z1.1/4" × 11.5	34	62.5	58.5	48	55
1QN9–45–24	M45 × 2	Z1.1/2" × 11.5	34	62.5	63	48	55

Note:In case if you are interested to order the adapter in complete set with sleeve and nut ,it is necessary to insert suffix "RN" after our part NO.,for example 1QN9–22–08RN,The sleeve NO. is NB500–Q AND the nut NO. is NB200–Q.



1QT–SP

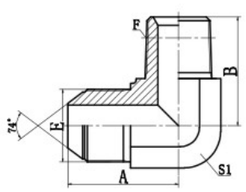


1QT–SP/RN

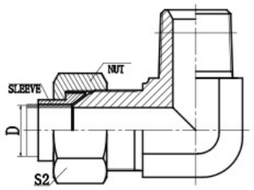
METRIC MALE 74° CONE / BSPT MALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				
	E	F	D	A	B	L	S1	S2
1QT–10–02SP	M10 × 1	R1/8" × 28	5	12	10	28	12	14
1QT–14–04SP	M14 × 1.5	R1/4" × 19	8	17	14.5	37.5	17	17
1QT–14–06SP	M14 × 1.5	R3/8" × 19	8	17	15	38	17	17
1QT–16–04SP	M16 × 1.5	R1/4" × 19	10	18	14.5	38.5	17	19
1QT–16–06SP	M16 × 1.5	R3/8" × 19	10	18	15	39	17	19
1QT–18–04SP	M18 × 1.5	R1/4" × 19	12	18	14.5	38.5	19	22
1QT–18–06SP	M18 × 1.5	R3/8" × 19	12	18	15	39	19	22
1QT–22–08SP	M22 × 1.5	R1/2" × 14	14	19.5	20	47.5	24	27
1QT–27–08SP	M27 × 1.5	R1/2" × 14	18	20	20	50	30	32
1QT–27–12SP	M27 × 1.5	R3/4" × 14	18	20	20	50	30	32
1QT–30–12SP	M30 × 1.5	R3/4" × 14	20	23	20	54	32	36
1QT–33–12SP	M33 × 2	R3/4" × 14	22	26	20	57	36	38
1QT–36–16SP	M36 × 2	R1" × 11	25	26	25.5	61.5	38	41
1QT–39–16SP	M39 × 2	R1" × 11	28	26	25.5	64.5	41	46
1QT–45–20SP	M45 × 2	R1.1/4" × 11	34	28.5	26.5	68	46	55

Note:In case if you are interested to order the adapter in complete set with sleeve and nut ,it is necessary to insert suffix "RN" after our part NO.,for example 1QT–22–08SP/RN,The sleeve NO. is NB500–Q AND the nut NO. is NB200–Q.



1QT9–SP

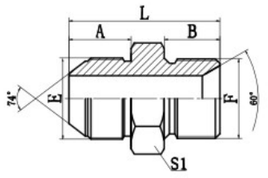


1QT9–SP/RN

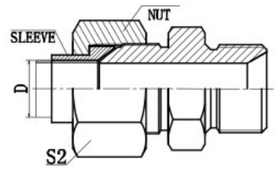
90° ELBOW METRIC MALE 74° CONE / BSPT MALE

PART NO.	THREAD		TUBE O.D.	DIMENSIONS			
	E	F	D	A	B	S1	S2
1QT9–14–04SP	M14 × 1.5	R1/4" × 19	8	30.2	25.5	14	17
1QT9–16–04SP	M16 × 1.5	R1/4" × 19	10	32	26.5	16	19
1QT9–18–06SP	M18 × 1.5	R3/8" × 19	12	34	29	19	22
1QT9–18–08SP	M18 × 1.5	R1/2" × 14	12	36	36	22	22
1QT9–22–08SP	M22 × 1.5	R1/2" × 14	14	37.5	36	22	27
1QT9–27–08SP	M27 × 1.5	R1/2" × 14	18	41.5	39.5	27	32
1QT9–27–12SP	M27 × 1.5	R3/4" × 14	18	41.5	44	27	32
1QT9–30–12SP	M30 × 1.5	R3/4" × 14	20	45.8	45.5	30	36
1QT9–33–12SP	M33 × 2	R3/4" × 14	22	49.8	47.5	33	38
1QT9–36–16SP	M36 × 2	R1" × 11	25	51.5	52	36	41
1QT9–39–16SP	M39 × 2	R1" × 11	28	55.5	55.2	41	46
1QT9–45–20SP	M45 × 2	R1.1/4" × 11	34	62.5	61	48	55

Note:In case if you are interested to order the adapter in complete set with sleeve and nut ,it is necessary to insert suffix "RN" after our part NO.,for example 1QT9–22–08SP/RN,The sleeve NO. is NB500–Q AND the nut NO. is NB200–Q.



1QB

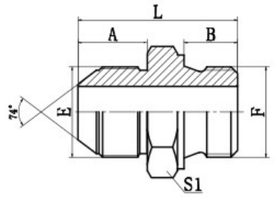


1QB–RN

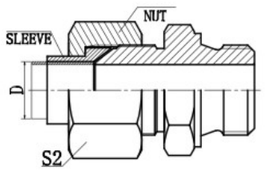
METRIC MALE 74° CONE / BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL

PART NO.	THREAD		TUBE O.D.	DIMENSIONS				
	E	F	D	A	B	L	S1	S2
1QB–12–02	M12 × 1.5	G1/8" × 28	6	15.7	10	32	14	14
1QB–14–04	M14 × 1.5	G1/4" × 19	8	17	12	35	19	17
1QB–16–06	M16 × 1.5	G3/8" × 19	10	18	13.5	39.5	22	19
1QB–18–06	M18 × 1.5	G3/8" × 19	12	18	13.5	39.5	22	22
1QB–22–08	M22 × 1.5	G1/2" × 14	14	19.5	16	45.5	27	27
1QB–24–10	M24 × 1.5	G5/8" × 14	16	20	17.5	47.5	30	30
1QB–27–12	M27 × 1.5	G3/4" × 14	18	20	18.5	49.5	32	32
1QB–30–12	M30 × 1.5	G3/4" × 14	20	23	18.5	52.5	32	36
1QB–30E–12	M30 × 2	G3/4" × 14	20	26	18.5	55.5	32	36
1QB–33–16	M33 × 2	G1" × 11	22	26	20.5	59.5	41	38
1QB–39–16	M39 × 2	G1" × 11	28	26	20.5	59.5	41	46
1QB–45–20	M45 × 2	G1.1/4" × 11	34	28.5	20.5	64	50	55

Note:In case if you are interested to order the adapter in complete set with sleeve and nut ,it is necessary to insert suffix "RN" after our part NO.,for example 1QB–18–06RN,The sleeve NO. is NB500–Q AND the nut NO. is NB200–Q.



1QL

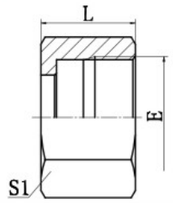


1QL–RN

METRIC MALE 74° CONE /
METRIC MALE WITH BONDED SEAL

PART NO.	THREAD		TUBE O.D.	BONDED SEAL	DIMENSIONS				
	E	F	D		A	B	L	S1	S2
1QL–10	M10×1	M10×1	5	ZHD–10	12	8	27	17	14
1QL–12	M12×1.5	M12×1.5	6	ZHD–12	15.7	12	35.2	17	14
1QL–12–10	M12×1.5	M10×1	6	ZHD–10	15.7	8	30.5	17	14
1QL–14	M14×1.5	M14×1.5	8	ZHD–14	17	12	36.5	19	17
1QL–14–10	M14×1.5	M10×1	8	ZHD–10	17	8	32	17	17
1QL–14–12	M14×1.5	M12×1.5	8	ZHD–12	17	12	36.5	17	17
1QL–14–16	M14×1.5	M16×1.5	8	ZHD–16	17	12	37	22	17
1QL–16	M16×1.5	M16×1.5	10	ZHD–16	18	12	38	22	19
1QL–16–14	M16×1.5	M14×1.5	10	ZHD–14	18	12	37	19	19
1QL–18	M18×1.5	M18×1.5	12	ZHD–18	18	12	39.5	24	22
1QL–18–16	M18×1.5	M16×1.5	12	ZHD–16	18	12	38	22	22
1QL–22	M22×1.5	M22×1.5	14	ZHD–22	19.5	14	43.5	27	27
1QL–22–18	M22×1.5	M18×1.5	14	ZHD–18	19.5	12	41	24	27
1QL–27	M27×1.5	M27×1.5	18	ZHD–27	20	16	49	34	32
1QL–27–12	M27×1.5	M12×1.5	18	ZHD–22	20	14	44	30	32
1QL–30–27	M30×1.5	M27×1.5	20	ZHD–27	23	16	50	34	36
1QL–33	M33×2	M33×2	22	ZHD–33	26	18	57	41	38
1QL–33–27	M33×2	M27×1.5	22	ZHD–27	26	16	55	34	38
1QL–36–33	M36×2	M33×2	25	ZHD–33	26	18	58	41	41
1QL–39–33	M39×2	M33×2	28	ZHD–33	26	18	59	41	46
1QL–42	M42×2	M42×2	32	ZHD–42	28.5	20	65.5	50	50
1QL–45–42	M45×2	M42×2	34	ZHD–42	28.5	20	65.5	50	55

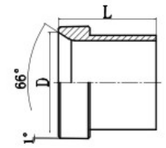
Note: 1 In case if you are interested to order the adapter in complete set with sleeve and nut, it is necessary to insert suffix "RN" after our part NO., for example 1QL–18RN, The sleeve NO. is NB500–Q and the nut ni.is NB200–Q. 2 F end is connected with ISO 9974–1 port and connected with ISO 6149–1 port without retaining ring.



NB200–Q

METRIC 74° CONE FLARED NUT GB/T 5647

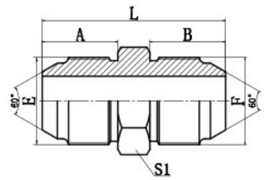
PART NO.	THREAD	TUBE O.D.	DIMENSIONS	
	E	mm	L	S2
NB200–10Q	M10×1	5	13.5	14
NB200–12Q	M12×1.5	6	16.5	14
NB200–14Q	M14×1.5	8	18.5	17
NB200–16Q	M16×1.5	10	19.5	19
NB200–18Q	M18×1.5	12	19.5	22
NB200–22Q	M22×1.5	14	19.5	27
NB200–24Q	M24×1.5	16	20	30
NB200–27Q	M27×1.5	18	20	32
NB200–30Q	M30×1.5	20	24.5	36
NB200–30EQ	M30×2	20	24.5	36
NB200–33Q	M33×2	22	25.5	38
NB200–36Q	M36×2	25	26	41
NB200–39Q	M39×2	28	27.5	46
NB200–42Q	M42×2	32	28.5	50
NB200–45Q	M45×2	34	29	55



NB500–Q

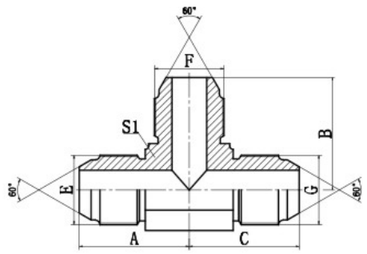
METRIC 74° CONE FLARED SLEEVE GB/T 5646

PART NO.	TUBE O.D.	DIMENSIONS		NUT
		D	L	
NB500–05Q	5	8.7	10	NB200–10Q
NB500–06Q	6	10.3	11	NB200–12Q
NB500–08Q	8	12.1	12	NB200–14Q
NB500–10Q	10	14.1	13	NB200–16Q
NB500–12Q	12	16.1	14	NB200–18Q
NB500–14Q	14	20.1	15	NB200–22Q
NB500–16Q	16	22.1	16	NB200–24Q
NB500–18Q	18	25.1	17	NB200–27Q
NB500–20Q	20	28.1	18	NB200–30Q、NB200–30EQ
NB500–22Q	22	30.5	20	NB200–33Q
NB500–25Q	25	33.5	20	NB200–36Q
NB500–28Q	28	36.5	22	NB200–39Q
NB500–32Q	34	39.5	23	NB200–42Q
NB500–34Q	34	42.5	23	NB200–45Q



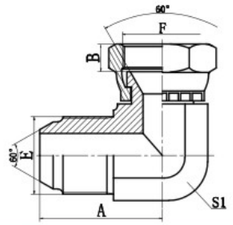
1K
JIS METRIC MALE 60° CONE

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1K–14	M14 × 1.5	M14 × 1.5	17	17	40	17
1K–16	M16 × 1.5	M16 × 1.5	18	18	42	17
1K–18	M18 × 1.5	M18 × 1.5	18	18	42	19
1K–20	M20 × 1.5	M20 × 1.5	20	20	48	22
1K–22	M22 × 1.5	M22 × 1.5	20	20	48	24
1K–24	M24 × 1.5	M24 × 1.5	21.5	21.5	53	27
1K–30	M30 × 1.5	M30 × 1.5	26	26	63	32
1K–33	M33 × 1.5	M33 × 1.5	30	30	71	36
1K–36	M36 × 1.5	M36 × 1.5	33	33	79	41
1K–42	M42 × 1.5	M42 × 1.5	36	36	85	46



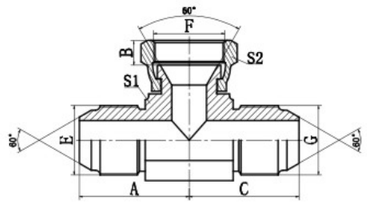
AK
JIS METRIC MALE 60° CONE TEE

PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
AK–14	M14 × 1.5	M14 × 1.5	M14 × 1.5	26.5	26.5	26.5	14
AK–16	M16 × 1.5	M16 × 1.5	M16 × 1.5	29.5	29.5	29.5	16
AK–18	M18 × 1.5	M18 × 1.5	M18 × 1.5	30.8	30.8	30.8	19
AK–22	M22 × 1.5	M22 × 1.5	M22 × 1.5	35.5	35.5	35.5	22
AK–24	M24 × 1.5	M24 × 1.5	M24 × 1.5	37	37	37	22
AK–30	M30 × 1.5	M30 × 1.5	M30 × 1.5	45	45	45	30
AK–33	M33 × 1.5	M33 × 1.5	M33 × 1.5	50	50	50	33



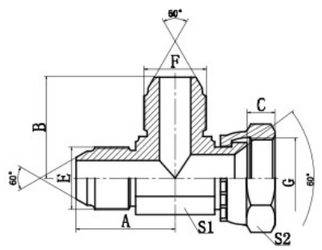
2K9
90° ELBOW JIS METRIC 60° CONE

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
2K9–14	M14 × 1.5	M14 × 1.5	29	10.5	14	19
2K9–16	M16 × 1.5	M16 × 1.5	31.5	10	16	22
2K9–18	M18 × 1.5	M18 × 1.5	33.8	11.5	19	24
2K9–22	M22 × 1.5	M22 × 1.5	38	14	22	27
2K9–24	M24 × 1.5	M24 × 1.5	41.2	15	24	30
2K9–30–24	M30 × 1.5	M24 × 1.5	48	15	30	30
2K9–30	M30 × 1.5	M30 × 1.5	48	18.3	30	36
2K9–33	M33 × 1.5	M33 × 1.5	55	21.3	33	41



BK
JIS METRIC MALE 60° CONE /
JIS METRIC FEMALE60° SEAT BRANCH TEE

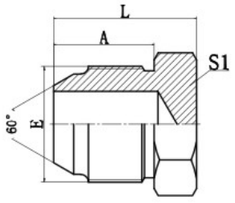
PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2
BK–14	M14 × 1.5	M14 × 1.5	M14 × 1.5	26.5	10.5	26.5	14	19
BK–16	M16 × 1.5	M16 × 1.5	M16 × 1.5	29.5	10	29.5	16	22
BK–18	M18 × 1.5	M18 × 1.5	M18 × 1.5	30.8	11.5	30.8	19	24
BK–22	M22 × 1.5	M22 × 1.5	M22 × 1.5	35.5	14	35.5	22	27
BK–24	M24 × 1.5	M24 × 1.5	M24 × 1.5	37	15	37	22	32
BK–30	M30 × 1.5	M30 × 1.5	M30 × 1.5	45	18.3	45	30	36
BK–33	M33 × 1.5	M33 × 1.5	M33 × 1.5	50	21.3	50	33	41



CK

JIS METRIC MALE 60° CONE /
JIS METRIC FEMALE60° SEAT RUN TEE

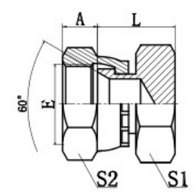
PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2
CK–14	M14 × 1.5	M14 × 1.5	M14 × 1.5	26.5	26.5	10.5	14	19
CK–16	M16 × 1.5	M16 × 1.5	M16 × 1.5	29.5	29.5	10	16	22
CK–18	M18 × 1.5	M18 × 1.5	M18 × 1.5	30.8	30.8	11.5	19	24
CK–22	M22 × 1.5	M22 × 1.5	M22 × 1.5	35.5	35.5	14	22	27
CK–24	M24 × 1.5	M24 × 1.5	M24 × 1.5	37	37	15	22	32
CK–30	M30 × 1.5	M30 × 1.5	M30 × 1.5	45	45	18.3	30	36
CK–33	M33 × 1.5	M33 × 1.5	M33 × 1.5	50	50	21.3	33	41



4K

JIS METRIC MALE 60° CONE PLUG

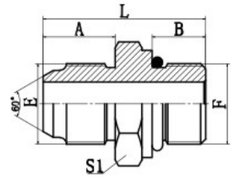
PART NO.	THREAD	DIMENSIONS		
	E	A	L	S1
4K–14	M14 × 1.5	17	23	17
4K–16	M16 × 1.5	18	24	17
4K–18	M18 × 1.5	18	25	19
4K–20	M20 × 1.5	20	28	22
4K–22	M22 × 1.5	20	28	24
4K–24	M24 × 1.5	21.5	31.5	27
4K–30	M30 × 1.5	26	37	32
4K–33	M33 × 1.5	30	41	36



9K

JIS METRIC FEMALE 60° SEAT PLUG

PART NO.	THREAD	DIMENSIONS			
	E	A	B	S1	S2
9K–14	M14 × 1.5	10.5	15	19	19
9K–16	M16 × 1.5	10	17.5	22	22
9K–18	M18 × 1.5	11.5	18.5	24	24
9K–22	M22 × 1.5	14	21	27	27
9K–24	M24 × 1.5	15	22.5	32	32
9K–30	M30 × 1.5	18.3	25	36	36
9K–33	M33 × 1.5	21.3	25.5	41	41

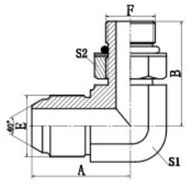


1KH

JIS METRIC MALE 60° CONE / METIRC MALE
ADJUSTABLE STUD END S–SERIES ISO6149–2

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1KH–14–12	M14 × 1.5	M12 × 1.5	O09.3 × 2.4	17	11.0	39	17
1KH–14	M14 × 1.5	M14 × 1.5	O11.3 × 2.4	17	11.0	39	19
1KH–16–14	M16 × 1.5	M14 × 1.5	O11.3 × 2.4	18	11.0	40	19
1KH–18–14	M18 × 1.5	M14 × 1.5	O11.3 × 2.4	18	11.0	40	19
1KH–18–16	M18 × 1.5	M16 × 1.5	O13.3 × 2.4	18	12.5	42	22
1KH–18–20	M18 × 1.5	M20 × 1.5	O17.3 × 2.4	18	14.0	45	27
1KH–20–18	M20 × 1.5	M18 × 1.5	O15.3 × 2.4	20	14.0	47	24
1KH–22–20	M22 × 1.5	M20 × 1.5	O17.3 × 2.4	20	14.0	47	27
1KH–24–20	M24 × 1.5	M20 × 1.5	O17.3 × 2.4	21.5	14.0	48.5	27
1KH–24–22	M24 × 1.5	M22 × 1.5	O19.3 × 2.4	21.5	15.0	50	27
1KH–30–27	M30 × 1.5	M27 × 2	O23.5 × 3.0	26	18.5	60.5	32
1KH–33	M33 × 1.5	M33 × 2	O29.5 × 3.0	30	18.5	65	41
1KH–36–33	M36 × 1.5	M33 × 2	O29.5 × 3.0	33	18.5	68	41

Note: F end is fit for ISO 6149–1 port.

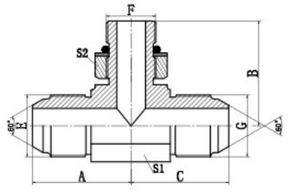


1KH9–OG

90° JIS METRIC MALE 60° CONE / METIRC MALE ADJUSTABLE STUD END S–SERIES ISO6149–2

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	L	S1	S2
1KH9–14–12OG	M14 × 1.5	M12 × 1.5	O09.3 × 2.4	25.5	33.5	14	17
1KH9–14OG	M14 × 1.5	M14 × 1.5	O11.3 × 2.4	27.5	34.5	14	19
1KH9–16–14OG	M16 × 1.5	M14 × 1.5	O11.3 × 2.4	28.5	35.5	16	19
1KH9–18–14OG	M18 × 1.5	M14 × 1.5	O11.3 × 2.4	30.8	37.5	19	19
1KH9–18–16OG	M18 × 1.5	M16 × 1.5	O13.3 × 2.4	30.8	39.5	19	22
1KH9–18–20OG	M18 × 1.5	M20 × 1.5	O17.3 × 2.4	30.8	44	19	27
1KH9–20–18OG	M20 × 1.5	M18 × 1.5	O15.3 × 2.4	33	42.5	19	24
1KH9–22–20OG	M22 × 1.5	M20 × 1.5	O17.3 × 2.4	35	45.5	22	27
1KH9–24–20OG	M24 × 1.5	M20 × 1.5	O17.3 × 2.4	40	47	24	27
1KH9–24–22OG	M24 × 1.5	M22 × 1.5	O19.3 × 2.4	40	47	24	27
1KH9–30–27OG	M30 × 1.5	M27 × 2	O23.5 × 3.0	48	57	30	32
1KH9–33OG	M33 × 1.5	M33 × 2	O29.5 × 3.0	54.5	59	33	41
1KH9–36–33OG	M36 × 1.5	M33 × 2	O29.5 × 3.0	57	60.5	36	41

Note: F end is fit for ISO 6149–1 port.

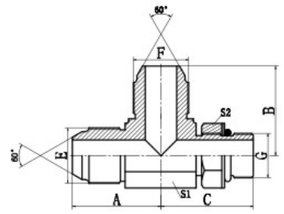


AKHK–OG

JIS METRIC MALE 60° CONE / METIRC MALE ADJUSTABLE STUD END S–SERIES ISO6149–2 BRANCH TEE

PART NO.	THREAD			O–RING	DIMENSIONS			
	E	F	G	F	A	B	C	S1
AKHK–14–12–14OG	M14 × 1.5	M12 × 1.5	M14 × 1.5	O09.3 × 2.4	25.5	33.5	25.5	14
AKHK–14OG	M14 × 1.5	M14 × 1.5	M14 × 1.5	O11.3 × 2.4	27.5	34.5	27.5	14
AKHK–16–14–16OG	M16 × 1.5	M14 × 1.5	M16 × 1.5	O11.3 × 2.4	28.5	35.5	28.5	16
AKHK–18–14–18OG	M18 × 1.5	M14 × 1.5	M18 × 1.5	O11.3 × 2.4	30.8	37.5	30.8	19
AKHK–18–16–18OG	M18 × 1.5	M16 × 1.5	M18 × 1.5	O13.3 × 2.4	30.8	39.5	30.8	19
AKHK–18–20–18OG	M18 × 1.5	M20 × 1.5	M18 × 1.5	O17.3 × 2.4	30.8	44	30.8	19
AKHK–20–18–20OG	M20 × 1.5	M18 × 1.5	M20 × 1.5	O15.3 × 2.4	33	42.5	33	19
AKHK–22–20–22OG	M22 × 1.5	M20 × 1.5	M22 × 1.5	O17.3 × 2.4	35	45.5	35	22
AKHK–24–20–24OG	M24 × 1.5	M20 × 1.5	M24 × 1.5	O17.3 × 2.4	40	47	40	24
AKHK–24–22–24OG	M24 × 1.5	M22 × 1.5	M24 × 1.5	O19.3 × 2.4	40	47	40	24
AKHK–30–27–30OG	M30 × 1.5	M27 × 2	M30 × 1.5	O23.5 × 3.0	48	57	48	30
AKHK–33OG	M33 × 1.5	M33 × 2	M33 × 1.5	O29.5 × 3.0	54.5	59	54.5	33

Note: F end is fit for ISO 6149–1 port.

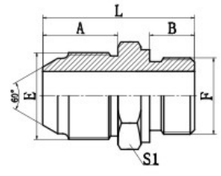


AKKH–OG

JIS METRIC MALE 60° CONE / METIRC MALE ADJUSTABLE STUD END S–SERIES ISO6149–2 RUN TEE

PART NO.	THREAD			O–RING	DIMENSIONS				
	E	F	G	F	A	B	C	S1	S2
AKKH–14–14–12OG	M14 × 1.5	M14 × 1.5	M12 × 1.5	O09.3 × 2.4	25.5	25.5	33.5	14	17
AKKH–14OG	M14 × 1.5	M14 × 1.5	M14 × 1.5	O11.3 × 2.4	27.5	27.5	34.5	14	19
AKKH–16–16–14OG	M16 × 1.5	M16 × 1.5	M14 × 1.5	O11.3 × 2.4	28.5	28.5	35.5	16	19
AKKH–18–18–14OG	M18 × 1.5	M18 × 1.5	M14 × 1.5	O11.3 × 2.4	30.8	30.8	37.5	19	19
AKKH–18–18–16OG	M18 × 1.5	M18 × 1.5	M16 × 1.5	O13.3 × 2.4	30.8	30.8	39.5	19	22
AKKH–18–18–20OG	M18 × 1.5	M18 × 1.5	M20 × 1.5	O17.3 × 2.4	30.8	30.8	44	19	27
AKKH–20–20–18OG	M20 × 1.5	M20 × 1.5	M18 × 1.5	O15.3 × 2.4	33	33	42.5	19	24
AKKH–22–22–20OG	M22 × 1.5	M22 × 1.5	M20 × 1.5	O17.3 × 2.4	35	35	45.5	22	27
AKKH–24–24–20OG	M24 × 1.5	M24 × 1.5	M20 × 1.5	O17.3 × 2.4	40	40	47	24	27
AKKH–24–24–22OG	M24 × 1.5	M24 × 1.5	M22 × 1.5	O19.3 × 2.4	40	40	47	24	27
AKKH–30–30–27OG	M30 × 1.5	M30 × 1.5	M27 × 2	O23.5 × 3.0	48	48	57	30	32
AKKH–33OG	M33 × 1.5	M33 × 1.5	M33 × 2	O29.5 × 3.0	54.5	54.5	59	33	41
AKKH–36–36–33OG	M36 × 1.5	M36 × 1.5	M33 × 2	O29.5 × 3.0	57	57	60.5	36	41

Note: G end is fit for ISO 6149–1 port.

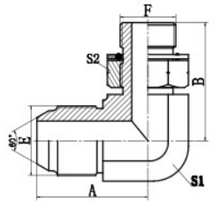


1KG

JIS METRIC MALE 60° CONE / BSP MALE–RING

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1KG–14–04	M14 × 1.5	G1/4" × 19	O111	17	11	36	19
1KG–14–06	M14 × 1.5	G3/8" × 19	O113	17	11.5	36.5	22
1KG–16–06	M16 × 1.5	G3/8" × 19	O113	18	11.5	38	22
1KG–18–06	M18 × 1.5	G3/8" × 19	O113	18	11.5	38	22
1KG–22–08	M22 × 1.5	G1/2" × 14	O115	20	14	47	27
1KG–30–12	M30 × 1.5	G3/4" × 14	O119	26	15.5	52.5	32
1KG–33–12	M33 × 1.5	G3/4" × 14	O119	30	15.5	59.5	36
1KG–33–16	M33 × 1.5	G1" × 11	O217	30	18	62	41

Note: F end is connected with DIN 3852 port.

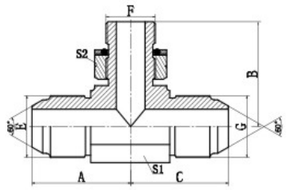


1KG9–OG

90° JIS METRIC MALE / BSP MALE O–RING ADJUSTABLE STUD END RUN TEE

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1KG9–14–04OG	M14 × 1.5	G1/4" × 19	O111	26.5	31.3	14	19
1KG9–14–06OG	M14 × 1.5	G3/8" × 19	O113	28.5	35.8	16	22
1KG9–16–06OG	M16 × 1.5	G3/8" × 19	O113	28	35.8	16	22
1KG9–18–06OG	M18 × 1.5	G3/8" × 19	O113	30.8	37	19	22
1KG9–22–08OG	M22 × 1.5	G1/2" × 14	O115	35.5	43.2	22	27
1KG9–24–08OG	M24 × 1.5	G1/2" × 14	O115	37	46	24	27
1KG9–24–12OG	M24 × 1.5	G3/4" × 14	O119	40	49.3	27	32
1KG9–30–12OG	M30 × 1.5	G3/4" × 14	O119	47.5	53	30	32
1KG9–33–16OG	M33 × 1.5	G1" × 11	O217	50	53	33	41
1KG9–42–20OG	M42 × 1.5	G1.1/4" × 11	O222	63	59	41	50

Note: F end is connected with DIN 3852 port.

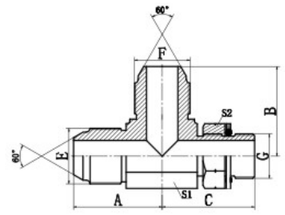


AKGK–OG

JIS METRIC MALE / BSP MALE O–RING ADJUSTABLE STUD END BRANCH TEE

PART NO.	THREAD		O–RING	DIMENSIONS				
	E、G	F	F	A	B	C	S1	S2
AKGK–14–04–14OG	M14 × 1.5	G1/4" × 19	O111	26.5	31.3	26.5	14	19
AKGK–14–06–14OG	M14 × 1.5	G3/8" × 19	O113	28.5	35.8	28.5	16	22
AKGK–16–06–16OG	M16 × 1.5	G3/8" × 19	O113	28	35.8	28	16	22
AKGK–18–06–18OG	M18 × 1.5	G3/8" × 19	O113	30.8	37	30.8	19	22
AKGK–22–08–22OG	M22 × 1.5	G1/2" × 14	O115	35.5	43.2	35.5	22	27
AKGK–24–08–24OG	M24 × 1.5	G1/2" × 14	O115	37	46	37	24	27
AKGK–24–12–24OG	M24 × 1.5	G3/4" × 14	O119	40	49.3	40	27	32
AKGK–30–12–30OG	M30 × 1.5	G3/4" × 14	O119	47.5	53	47.5	30	32
AKGK–33–16–33OG	M33 × 1.5	G1" × 11	O217	50	53	50	33	41

Note: F end is connected with DIN 3852 port.

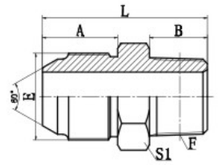


AKKG–OG

JIS METRIC MALE / BSP MALE O–RING ADJUSTABLE STUD END RUN TEE

PART NO.	THREAD		O–RING	DIMENSIONS				
	E、F	G	G	A	B	C	S1	S2
AKKG–14–14–04OG	M14 × 1.5	G1/4" × 19	O111	26.5	26.5	31.3	14	19
AKKG–14–14–06OG	M14 × 1.5	G3/8" × 19	O113	28.5	28.5	35.8	16	22
AKKG–16–16–06OG	M16 × 1.5	G3/8" × 19	O113	28	28	35.8	16	22
AKKG–18–18–06OG	M18 × 1.5	G3/8" × 19	O113	30.8	30.8	37	19	22
AKKG–22–22–08OG	M22 × 1.5	G1/2" × 14	O115	35.5	35.5	43.2	22	27
AKKG–24–24–08OG	M24 × 1.5	G1/2" × 14	O115	37	37	46	24	27
AKKG–24–24–12OG	M24 × 1.5	G3/4" × 14	O119	40	40	49.3	27	32
AKKG–30–30–12OG	M30 × 1.5	G3/4" × 14	O119	47.5	47.5	53	30	32
AKKG–33–33–16OG	M33 × 1.5	G1" × 11	O217	50	50	53	33	41

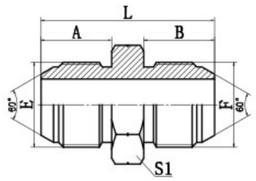
Note: F end is connected with DIN 3852 port.



1KT–SP

METRIC MALE 60° CONE / BSPT MALE

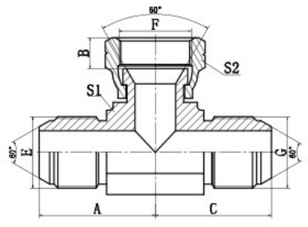
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1KT–14–04SP	M14 × 1.5	R1/4" × 19	17	14.5	37.5	17
1KT–14–06SP	M14 × 1.5	R3/8" × 19	17	15	38	19
1KT–16–06SP	M16 × 1.5	R3/8" × 19	18	15	39	19
1KT–18–06SP	M18 × 1.5	R3/8" × 19	18	15	39	19
1KT–20–06SP	M20 × 1.5	R3/8" × 19	20	15	43	22
1KT–22–06SP	M22 × 1.5	R3/8" × 19	20	15	43	24
1KT–22–08SP	M22 × 1.5	R1/2" × 14	20	20	48	24
1KT–24–08SP	M24 × 1.5	R1/2" × 14	21.5	20	51.5	27
1KT–24–12SP	M24 × 1.5	R3/4" × 14	21.5	20	51.5	30
1KT–30–12SP	M30 × 1.5	R3/4" × 14	26	20	57	32
1KT–33–16SP	M33 × 1.5	R1" × 11	30	25.5	66.5	36
1KT–36–20SP	M36 × 1.5	R1.1/4" × 11	33	26.5	72.5	46
1KT–42–24SP	M42 × 1.5	R1.1/2" × 11	36	26.5	77.5	50



1S

JIS GAS MALE 60° CONE

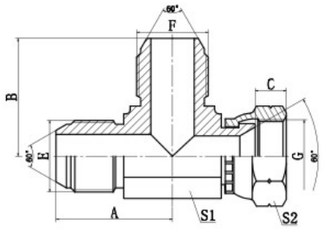
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1S–02	G1/8" × 28	G1/8" × 28	12	12	30	14
1S–04	G1/4" × 19	G1/4" × 19	16	16	38	17
1S–06	G3/8" × 19	G3/8" × 19	18	18	42	19
1S–08	G1/2" × 14	G1/2" × 14	20	20	48	22
1S–12	G3/4" × 14	G3/4" × 14	22	22	54	30
1S–16	G1" × 11	G1" × 11	24	24	59	36
1S–20	R1.1/4" × 11	R1.1/4" × 11	27	27	67	46
1S–24	R1.1/2" × 11	R1.1/2" × 11	27	27	69	50
1S–32	G2" × 11	G2" × 11	30	30	77	65



BS

JIS GAS MALE 60° CONE /
JIS GAS FEMALE 60° SEAT BRANCH TEE

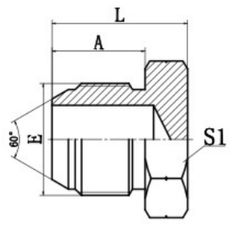
PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2
BS–04	G1/4" × 19	G1/4" × 19	G1/4" × 19	28	8	28	14	19
BS–06	G3/8" × 19	G3/8" × 19	G3/8" × 19	29	9	29	16	22
BS–08	G1/2" × 14	G1/2" × 14	G1/2" × 14	38	12	38	22	27
BS–12	G3/4" × 14	G3/4" × 14	G3/4" × 14	43	13.5	43	27	32
BS–16	G1" × 11	G1" × 11	G1" × 11	48.5	16	48.5	33	41



CS

JIS GAS MALE 60° CONE /
JIS GAS FEMALE 60° SEAT RUN TEE

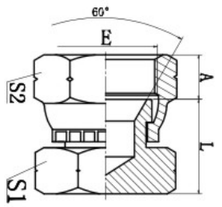
PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2
CS–04	G1/4" × 19	G1/4" × 19	G1/4" × 19	28	28	8	14	19
CS–06	G3/8" × 19	G3/8" × 19	G3/8" × 19	29	29	9	16	22
CS–08	G1/2" × 14	G1/2" × 14	G1/2" × 14	38	38	12	22	27
CS–12	G3/4" × 14	G3/4" × 14	G3/4" × 14	43	43	13.5	27	32
CS–16	G1" × 11	G1" × 11	G1" × 11	48.5	48.5	16	33	41



4S

JIS GAS MALE 60° CONE PLUG

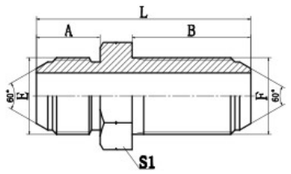
PART NO.	THREAD	DIMENSIONS		
	E	A	L	S1
4S–02	G1/8" × 28	12	18	14
4S–04	G1/4" × 19	16	24	17
4S–06	G3/8" × 19	18	24	19
4S–08	G1/2" × 14	20	28	22
4S–12	G3/4" × 14	22	32	30
4S–16	G1" × 11	24	35	36
4S–20	G1.1/4" × 11	27	40	46
4S–24	G1.1/2" × 11	27	42	50
4S–32	G2" × 11	30	47	65



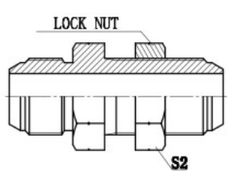
9S

JIS GAS FEMALE 60° SEAT PLUG

PART NO.	THREAD	DIMENSIONS			
	E	A	L	S1	S2
9S–04	G1/4" × 19	8	14.5	17	19
9S–06	G3/8" × 19	9	15.5	19	22
9S–08	G1/2" × 14	12	19	22	27
9S–12	G3/4" × 14	13.5	23.5	32	32
9S–16	G1" × 11	16	25	36	41
9S–20	G1.1/4" × 11	18.5	29.5	50	50
9S–24	G1.1/2" × 11	19	29.5	55	55
9S–32	G2" × 11	23	32	70	70



6S

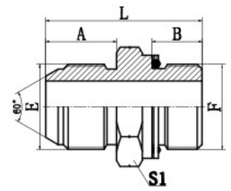


6S–LN

JIS GAS MALE 60° CONE BULKHEAD

PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
6S–04	G1/4" × 19	G1/4" × 19	16	32	56	19	19
6S–06	G3/8" × 19	G3/8" × 19	18	36	62	22	22
6S–08	G1/2" × 14	G1/2" × 14	20	40	70	27	27
6S–12	G3/4" × 14	G3/4" × 14	22	41	74	32	32
6S–16	G1" × 11	G1" × 11	24	45	88	41	41

Note: In case if you are interested to order the adapter in complete set with lock nut, it is necessary to suffix "LN" After our part NO., for example 6S–16LN,The lock nut NO. is 8B.

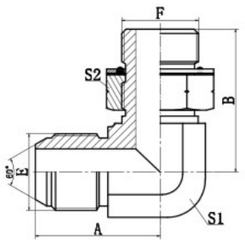


1SG

JIS GAS MALE 60° CONE / BSP MALE O–RING

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1SG–02	G1/8" × 28	G1/8" × 28	O011	12	9.5	29	14
1SG–04	G1/4" × 19	G1/4" × 19	O111	16	11	33.5	19
1SG–06	G3/8" × 19	G3/8" × 19	O113	18	11.5	37.5	22
1SG–08	G1/2" × 14	G1/2" × 14	O115	20	14	44	27
1SG–12	G3/4" × 14	G3/4" × 14	O119	22	15.5	48.5	32
1SG–16	G1" × 11	G1" × 11	O217	24	18	55	41
1SG–20	G1.1/4" × 11	G1.1/4" × 11	O222	27	20	59	50
1SG–24	G1.1/2" × 11	G1.1/2" × 11	O224	27	21.5	62.5	55

Note: F end is connected with DIN 3852 port.

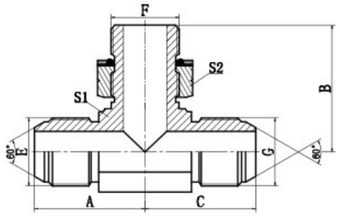


1SG9–OG

90° ELBOW JIS GAS MALE 60° CONE / BSP MALE O–RING ADJUSTABLE STUD END

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1SG9–02OG	G1/8" × 28	G1/8" × 28	O011	21.8	26.2	11	14
1SG9–04OG	G1/4" × 19	G1/4" × 19	O111	28	31.3	14	19
1SG9–06OG	G3/8" × 19	G3/8" × 19	O113	29	35.8	16	22
1SG9–08OG	G1/2" × 14	G1/2" × 14	O115	38	43.2	22	27
1SG9–12OG	G3/4" × 14	G3/4" × 14	O119	43	49.3	27	32
1SG9–16OG	G1" × 11	G1" × 11	O217	48.5	53	33	41
1SG9–20OG	G1.1/4" × 11	G1.1/4" × 11	O222	57	59	41	50
1SG9–24OG	G1.1/2" × 11	G1.1/2" × 11	O224	61	65	48	55

Note: F end is connected with DIN 3852 port.

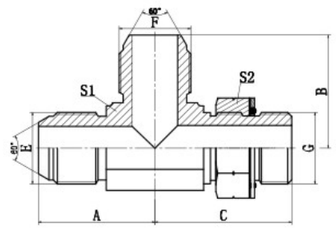


ASGS–OG

JIS GAS MALE / BSP MALE O–RING ADJUSTABLE STUD END BRANCH TEE

PART NO.	THREAD			O–RING	DIMENSIONS				
	E	F	G	F	A	B	C	S1	S2
ASGS–02OG	G1/8" × 28	G1/8" × 28	G1/8" × 28	O011	21.8	26.2	21.8	11	14
ASGS–04OG	G1/4" × 19	G1/4" × 19	G1/4" × 19	O111	28	31.3	28	14	19
ASGS–06OG	G3/8" × 19	G3/8" × 19	G3/8" × 19	O113	29	35.8	29	16	22
ASGS–08OG	G1/2" × 14	G1/2" × 14	G1/2" × 14	O115	38	43.2	38	22	27
ASGS–12OG	G3/4" × 14	G3/4" × 14	G3/4" × 14	O119	43	49.3	43	27	32
ASGS–16OG	G1" × 11	G1" × 11	G1" × 11	O217	48.5	54.5	48.5	33	41
ASGS–20OG	G1.1/4" × 11	G1.1/4" × 11	G1.1/4" × 11	O222	57	59	57	41	50
ASGS–24OG	G1.1/2" × 11	G1.1/2" × 11	G1.1/2" × 11	O224	61	65	61	48	55

Note: F end is connected with DIN 3852 port.

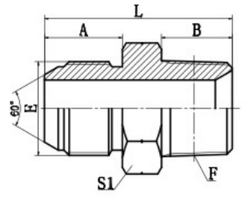


ASSG–OG

JIS GAS MALE / BSP MALE O–RING ADJUSTABLE STUD END RUN TEE

PART NO.	THREAD			O–RING	DIMENSIONS				
	E	F	G	G	A	B	C	S1	S2
ASSG–02OG	G1/8" × 28	G1/8" × 28	G1/8" × 28	O011	21.8	21.8	27	11	14
ASSG–04OG	G1/4" × 19	G1/4" × 19	G1/4" × 19	O111	28	28	31	14	19
ASSG–06OG	G3/8" × 19	G3/8" × 19	G3/8" × 19	O113	29	29	35.5	16	22
ASSG–08OG	G1/2" × 14	G1/2" × 14	G1/2" × 14	O115	38	38	43.5	22	27
ASSG–12OG	G3/4" × 14	G3/4" × 14	G3/4" × 14	O119	43	43	49.5	27	32
ASSG–16OG	G1" × 11	G1" × 11	G1" × 11	O217	48.5	48.5	54.5	33	41
ASSG–20OG	G1.1/4" × 11	G1.1/4" × 11	G1.1/4" × 11	O222	57	57	59	41	50
ASSG–24OG	G1.1/2" × 11	G1.1/2" × 11	G1.1/2" × 11	O224	61	61	65	48	55

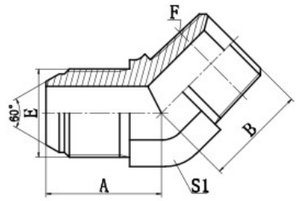
Note: F end is connected with DIN 3852 port.



1ST–SP

JIS GAS MALE 60° CONE / BSPT MALE

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1ST–02SP	G1/8" × 28	R1/8" × 28	12	10	28	14
1ST–02–04SP	G1/8" × 28	R1/4" × 19	12	14.5	32.5	17
1ST–04SP	G1/4" × 19	R1/4" × 19	16	14.5	36.5	17
1ST–04–02SP	G1/4" × 19	R1/8" × 28	16	10	32	17
1ST–04–06SP	G1/4" × 19	R3/8" × 19	16	15	37	19
1ST–04–08SP	G1/4" × 19	R1/2" × 14	16	20	44	22
1ST–06SP	G3/8" × 19	R3/8" × 19	18	15	39	19
1ST–06–04SP	G3/8" × 19	R1/4" × 19	18	14.5	40.5	22
1ST–06–08SP	G3/8" × 19	R1/2" × 14	18	20	46	22
1ST–08SP	G1/2" × 14	R1/2" × 14	20	20	48	22
1ST–08–04SP	G1/2" × 14	R1/4" × 19	20	14.5	42.5	22
1ST–08–06SP	G1/2" × 14	R3/8" × 19	20	15	45	27
1ST–08–12SP	G1/2" × 14	R3/4" × 14	20	20	50	27
1ST–12SP	G3/4" × 14	R3/4" × 14	22	20	53	30
1ST–12–08SP	G3/4" × 14	R1/2" × 14	22	20	52	30
1ST–12–16SP	G3/4" × 14	R1" × 11	22	25.5	58.5	36
1ST–16SP	G1" × 11	R1" × 11	24	25.5	62.5	41
1ST–16–12SP	G1" × 11	R3/4" × 14	24	20	57	41
1ST–20SP	G1.1/4" × 11	R1.1/4" × 11	27	26.5	66	46
1ST–24SP	G1.1/2" × 11	R1.1/2" × 11	27	26.5	67.5	50
1ST–32SP	G2" × 11	R2" × 11	30	30	77	65

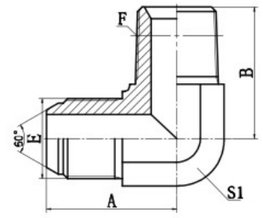


1ST4–SP

45° ELBOW JIS GAS MALE 60° CONE / BSPT MALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1ST4–02SP	G1/8" × 28	R1/8" × 28	19	17	11
1ST4–02–04SP	G1/8" × 28	R1/4" × 19	19.8	21	14
1ST4–04SP	G1/4" × 19	R1/4" × 19	24	21	14
1ST4–04–02SP	G1/4" × 19	R1/8" × 28	24.5	17.5	14
1ST4–04–06SP	G1/4" × 19	R3/8" × 19	24.5	23	16
1ST4–04–08SP	G1/4" × 19	R1/2" × 14	26.5	29.5	22
1ST4–06SP	G3/8" × 19	R3/8" × 19	26	23	16
1ST4–06–04SP	G3/8" × 19	R1/4" × 19	26	21	16
1ST4–06–08SP	G3/8" × 19	R1/2" × 14	28.5	29.5	22
1ST4–08SP	G1/2" × 14	R1/2" × 14	31	29.5	22
1ST4–08–06SP	G1/2" × 14	R3/8" × 19	30.5	25	22
1ST4–12SP	G3/4" × 14	R3/4" × 14	34.5	30.5	27
1ST4–12–08SP	G3/4" × 14	R1/2" × 14	34	30	27
1ST4–16SP	G1" × 11	R1" × 11	37.5	38	33
1ST4–16–12SP	G1" × 11	R3/4" × 14	37.5	32	33
1ST4–20SP	G1.1/4" × 11	R1.1/4" × 11	44.5	43	41
1ST4–24SP	G1.1/2" × 11	R1.1/2" × 11	47.5	47	48
1ST4–32SP	G2" × 11	R2" × 11	54	53	63

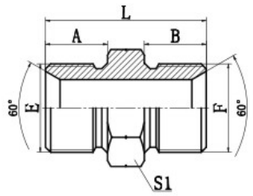
Japanese BSP Thread 60° Cone Fittings



1ST9–SP

90° ELBOW JIS GAS MALE 60° CONE / BSPT MALE

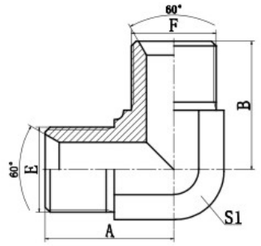
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1ST9–02SP	G1/8" × 28	R1/8" × 28	21.8	21	11
1ST9–02–04SP	G1/8" × 28	R1/4" × 19	24.3	25.5	14
1ST9–04SP	G1/4" × 19	R1/4" × 19	29	25.5	14
1ST9–04–02SP	G1/4" × 19	R1/8" × 28	29	23.5	14
1ST9–04–06SP	G1/4" × 19	R3/8" × 19	30	28.5	16
1ST9–04–08SP	G1/4" × 19	R1/2" × 14	31.5	28.5	16
1ST9–06SP	G3/8" × 19	R3/8" × 19	31.5	26.5	16
1ST9–06–04SP	G3/8" × 19	R1/4" × 19	36	36	22
1ST9–06–08SP	G3/8" × 19	R1/2" × 14	38	36	22
1ST9–08SP	G1/2" × 14	R1/2" × 14	38	32.5	22
1ST9–08–06SP	G1/2" × 14	R3/8" × 19	41	43.5	27
1ST9–12SP	G3/4" × 14	R3/4" × 14	43	43.5	27
1ST9–12–08SP	G3/4" × 14	R1/2" × 14	43	39.5	27
1ST9–16SP	G1" × 11	R1" × 11	47	50	33
1ST9–16–12SP	G1" × 11	R3/4" × 14	48.5	50	33
1ST9–20SP	G1.1/4" × 11	R1.1/4" × 11	57	56.5	41
1ST9–24SP	G1.1/2" × 11	R1.1/2" × 11	61	62.5	48
1ST9–32SP	G2" × 11	R2" × 11	73.2	74.2	63



1B

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL

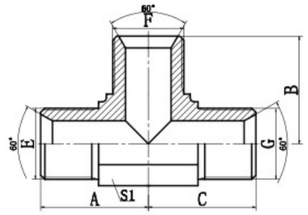
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1B–02	G1/8" × 28	G1/8" × 28	10	10	26	14
1B–02–04	G1/8" × 28	G1/4" × 19	10	12	28	19
1B–02–06	G1/8" × 28	G3/8" × 19	10	13.5	31.5	22
1B–02–08	G1/8" × 28	G1/2" × 14	10	16	36	27
1B–04	G1/4" × 19	G1/4" × 19	12	12	30	19
1B–04–06	G1/4" × 19	G3/8" × 19	12	13.5	33.5	22
1B–04–08	G1/4" × 19	G1/2" × 14	12	16	38	27
1B–04–10	G1/4" × 19	G5/8" × 14	12	17.5	39.5	30
1B–06	G3/8" × 19	G3/8" × 19	13.5	13.5	33	22
1B–06–08	G3/8" × 19	G1/2" × 14	13.5	16	39.5	27
1B–06–10	G3/8" × 19	G5/8" × 14	13.5	17.5	42	30
1B–06–12	G3/8" × 19	G3/4" × 14	13.5	18.5	43	32
1B–08	G1/2" × 14	G1/2" × 14	16	16	42	27
1B–08–10	G1/2" × 14	G5/8" × 14	16	17.5	43.5	30
1B–08–12	G1/2" × 14	G3/4" × 14	16	18.5	45.5	32
1B–10	G5/8" × 14	G5/8" × 14	17.5	17.5	45	30
1B–10–12	G5/8" × 14	G3/4" × 14	17.5	18.5	47	32
1B–10–16	G5/8" × 14	G1" × 11	17.5	20.5	51.5	41
1B–12	G3/4" × 14	G3/4" × 14	18.5	18.5	48	32
1B–12–16	G3/4" × 14	G1" × 11	18.5	20.5	52.5	41
1B–12–20	G3/4" × 14	G1.1/4" × 11	18.5	20.5	56	50
1B–16	G1" × 11	G1" × 11	20.5	20.5	54	41
1B–16–20	G1" × 11	G1.1/4" × 11	20.5	20.5	58	50
1B–16–24	G1" × 11	G1.1/2" × 11	20.5	23	60.5	55
1B–20	G1.1/4" × 11	G1.1/4" × 11	20.5	20.5	58	50
1B–20–24	G1.1/4" × 11	G1.1/2" × 11	20.5	23	60.5	55
1B–24	G1.1/2" × 11	G1.1/2" × 11	23	23	63	55
1B–24–32	G1.1/2" × 11	G2" × 11	23	25.5	66.5	70
1B–32	G2" × 11	G2" × 11	25.5	25.5	68	70
1B–40	G2.1/2" × 11	G2.1/2" × 11	32	32	81	90
1B–48	G3" × 11	G3" × 11	36	36	91	100



1B9

90° ELBOW BSP MALE 60° SEAT

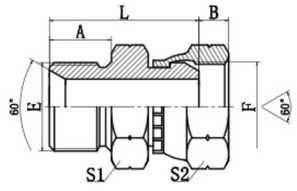
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1B9–02	G1/8" × 28	G1/8" × 28	19.8	19.8	11
1B9–02–04	G1/8" × 28	G1/4" × 19	23	25	14
1B9–04	G1/4" × 19	G1/4" × 19	24.5	24.5	14
1B9–04–06	G1/4" × 19	G3/8" × 19	26.5	27.5	16
1B9–06	G3/8" × 19	G3/8" × 19	27.5	27.5	16
1B9–06–08	G3/8" × 19	G1/2" × 14	31	34.5	22
1B9–08	G1/2" × 14	G1/2" × 14	34.5	34.5	22
1B9–08–12	G1/2" × 14	G3/4" × 14	37.5	40	27
1B9–10	G5/8" × 14	G5/8" × 14	35	35	22
1B9–10–12	G5/8" × 14	G3/4" × 14	37.5	39	30
1B9–12	G3/4" × 14	G3/4" × 14	40	40	27
1B9–12–16	G3/4" × 14	G1" × 11	43.5	46	33
1B9–16	G1" × 11	G1" × 11	46	46	33
1B9–16–20	G1" × 11	G1.1/4" × 11	50.5	50.5	41
1B9–20	G1.1/4" × 11	G1.1/4" × 11	50.5	50.5	41
1B9–20–24	G1.1/4" × 11	G1.1/2" × 11	54.5	57.5	48
1B9–24	G1.1/2" × 11	G1.1/2" × 11	57.5	57.5	48
1B9–32	G2" × 11	G2" × 11	68	68	63



AB

BSP –MALE 60° SEAT TEE

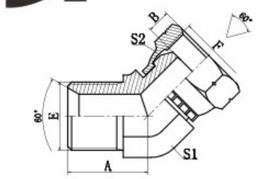
PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
AB–02	G1/8" × 28	G1/8" × 28	G1/8" × 28	19.8	19.8	19.8	11
AB–04	G1/4" × 19	G1/4" × 19	G1/4" × 19	24.5	24.5	24.5	14
AB–04–06–04	G1/4" × 19	G3/8" × 19	G1/4" × 19	26.5	27.5	26.5	16
AB–06–04–06	G3/8" × 19	G1/4" × 19	G3/8" × 19	27.5	26.5	27.5	16
AB–06	G3/8" × 19	G3/8" × 19	G3/8" × 19	27.5	27.5	27.5	16
AB–06–08–06	G3/8" × 19	G1/2" × 14	G3/8" × 19	31	34.5	31	22
AB–08–06–08	G1/2" × 14	G3/8" × 19	G1/2" × 14	34.5	31	34.5	22
AB–08	G1/2" × 14	G1/2" × 14	G1/2" × 14	34.5	34.5	34.5	22
AB–10	G5/8" × 14	G5/8" × 14	G5/8" × 14	35	35	35	22
AB–12	G3/4" × 14	G3/4" × 14	G3/4" × 14	40	40	40	27
AB–12–16–12	G3/4" × 14	G1" × 11	G3/4" × 14	43.5	46	43.5	33
AB–16–12–16	G1" × 11	G3/4" × 14	G1" × 11	46	43.5	46	33
AB–16	G1" × 11	G1" × 11	G1" × 11	46	46	46	33
AB–20	G1.1/4" × 11	G1.1/4" × 11	G1.1/4" × 11	50.5	50.5	50.5	41
AB–24	G1.1/2" × 11	G1.1/2" × 11	G1.1/2" × 11	57.5	57.5	57.5	48
AB–32	G2" × 11	G2" × 11	G2" × 11	72.5	72.5	72.5	63



2B

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / BSP FEMALE 60° CONE

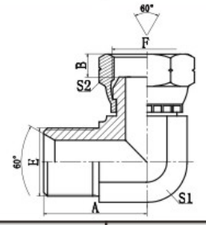
PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
2B–02	G1/8" × 28	G1/8" × 28	10	5.5	25	14	14
2B–02–04	G1/8" × 28	G1/4" × 19	10	5.5	27	14	19
2B–04	G1/4" × 19	G1/4" × 19	12	5.5	29	19	19
2B–04–06	G1/4" × 19	G3/8" × 19	12	6.3	30.5	19	22
2B–04–08	G1/4" × 19	G1/2" × 14	12	7.5	32	19	27
2B–06	G3/8" × 19	G3/8" × 19	13.5	6.3	34	22	22
2B–06–08	G3/8" × 19	G1/2" × 14	13.5	7.5	35.5	22	27
2B–06–10	G3/8" × 19	G5/8" × 14	13.5	9.5	36	22	30
2B–08	G1/2" × 14	G1/2" × 14	16	7.5	40	27	27
2B–08–06	G1/2" × 14	G3/8" × 19	16	6.3	38.5	27	22
2B–08–12	G1/2" × 14	G3/4" × 14	16	10.9	41	27	32
2B–10	G5/8" × 14	G5/8" × 14	17.5	9.5	42	30	30
2B–10–08	G5/8" × 14	G1/2" × 14	17.5	7.5	41.5	30	27
2B–10–12	G5/8" × 14	G3/4" × 14	17.5	10.9	42.5	30	32
2B–12	G3/4" × 14	G3/4" × 14	18.5	10.9	44.5	32	32
2B–12–10	G3/4" × 14	G5/8" × 14	18.5	9.5	44	32	30
2B–12–16	G3/4" × 14	G1" × 11	18.5	11.7	46	32	41
2B–16	G1" × 11	G1" × 11	20.5	11.7	50	41	41
2B–16–12	G1" × 11	G3/4" × 14	20.5	10.9	49	41	32
2B–16–20	G1" × 11	G1.1/4" × 11	20.5	11	53	41	50
2B–20	G1.1/4" × 11	G1.1/4" × 11	20.5	11	55	50	50
2B–20–16	G1.1/4" × 11	G1" × 11	20.5	11.7	52	50	41
2B–20–24	G1.1/4" × 11	G1.1/2" × 11	20.5	13	55.5	50	55
2B–24	G1.1/2" × 11	G1.1/2" × 11	23	13	58	55	55
2B–32	G2" × 11	G2" × 11	25.5	16	63.5	70	70



2B4

45° ELBOW BSP MALE 60° SEAT / BSP FEMALE 60° CONE

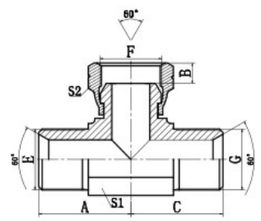
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
2B4–04	G1/4" × 19	G1/4" × 19	20.3	5.5	14	19
2B4–04–06	G1/4" × 19	G3/8" × 19	20.3	6.3	14	22
2B4–06	G3/8" × 19	G3/8" × 19	22	6.3	16	22
2B4–06–04	G3/8" × 19	G1/4" × 19	22	5.5	16	19
2B4–08	G1/2" × 14	G1/2" × 14	27	7.5	22	27
2B4–08–06	G1/2" × 14	G3/8" × 19	27	6.3	22	22
2B4–10	G5/8" × 14	G5/8" × 14	28.5	9.5	22	30
2B4–10–08	G5/8" × 14	G1/2" × 14	28.5	7.5	22	27
2B4–12	G3/4" × 14	G3/4" × 14	31	10.9	27	32
2B4–16	G1" × 11	G1" × 11	35	11.7	33	41
2B4–20	G1.1/4" × 11	G1.1/4" × 11	38.5	11	41	50
2B4–24	G1.1/2" × 11	G1.1/2" × 11	44	13	48	55
2B4–32	G2" × 11	G2" × 11	51	16	63	70



2B9

90° ELBOW BSP MALE 60° SEAT / BSP FEMALE 60° CONE

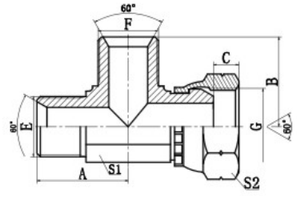
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
2B9–02	G1/8" × 28	G1/8" × 28	19.8	5.5	11	14
2B9–04	G1/4" × 19	G1/4" × 19	24.5	5.5	14	19
2B9–04–06	G1/4" × 19	G3/8" × 19	25	6.3	14	22
2B9–06	G3/8" × 19	G3/8" × 19	27.5	6.3	16	22
2B9–06–04	G3/8" × 19	G1/4" × 19	27.5	5.5	16	19
2B9–08	G1/2" × 14	G1/2" × 14	34.5	7.5	22	27
2B9–08–06	G1/2" × 14	G3/8" × 19	34.5	6.3	22	22
2B9–10	G5/8" × 14	G5/8" × 14	35	9.5	22	30
2B9–10–08	G5/8" × 14	G1/2" × 14	35	7.5	22	27
2B9–12	G3/4" × 14	G3/4" × 14	40	10.9	27	32
2B9–16	G1" × 11	G1" × 11	46	11.7	33	41
2B9–20	G1.1/4" × 11	G1.1/4" × 11	50.5	11	41	50
2B9–24	G1.1/2" × 11	G1.1/2" × 11	57.5	13	48	55
2B9–32	G2" × 11	G2" × 11	72.5	16	63	70



BB

BSP MALE 60° SEAT / BSP FEMALE 60° CONE BRANCH TEE

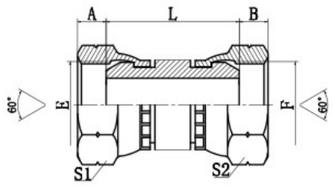
PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2
BB–02	G1/8" × 28	G1/8" × 28	G1/8" × 28	19.8	5.5	19.8	11	14
BB–04	G1/4" × 19	G1/4" × 19	G1/4" × 19	24.5	5.5	24.5	14	19
BB–06	G3/8" × 19	G3/8" × 19	G3/8" × 19	27.5	6.3	27.5	16	22
BB–08	G1/2" × 14	G1/2" × 14	G1/2" × 14	34.5	7.5	34.5	22	27
BB–12	G3/4" × 14	G3/4" × 14	G3/4" × 14	40	10.9	40	27	32
BB–16	G1" × 11	G1" × 11	G1" × 11	46	11.7	46	33	41
BB–20	G1.1/4" × 11	G1.1/4" × 11	G1.1/4" × 11	50.5	11	50.5	41	50
BB–24	G1.1/2" × 11	G1.1/2" × 11	G1.1/2" × 11	57.5	13	57.5	48	55
BB–32	G2" × 11	G2" × 11	G2" × 11	72.5	16	72.5	63	70



CB

BSP MALE 60° SEAT / BSP FEMALE 60° CONE RUN TEE

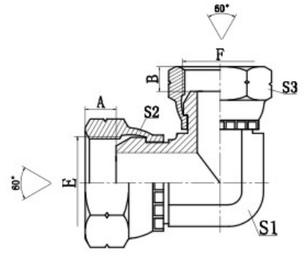
PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2
CB–02	G1/8" × 28	G1/8" × 28	G1/8" × 28	19.8	19.5	5.5	11	14
CB–04	G1/4" × 19	G1/4" × 19	G1/4" × 19	25	25	5.5	14	19
CB–06	G3/8" × 19	G3/8" × 19	G3/8" × 19	27.5	27.5	6.3	16	22
CB–08	G1/2" × 14	G1/2" × 14	G1/2" × 14	34.5	34.5	7.5	22	27
CB–10	G5/8" × 14	G5/8" × 14	G5/8" × 14	34.5	34.5	9.5	22	30
CB–12	G3/4" × 14	G3/4" × 14	G3/4" × 14	40	40	10.9	27	32
CB–16	G1" × 11	G1" × 11	G1" × 11	46	46	11.7	33	41
CB–20	G1.1/4" × 11	G1.1/4" × 11	G1.1/4" × 11	50.5	50.5	11	41	50
CB–24	G1.1/2" × 11	G1.1/2" × 11	G1.1/2" × 11	57.5	57.5	13	48	55
CB–32	G2" × 11	G2" × 11	G2" × 11	72.5	72.5	16	63	70



3B

BSP FEMALE 60° CONE

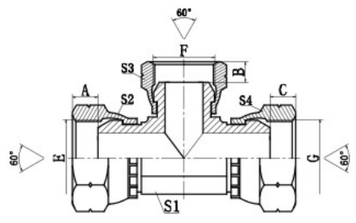
PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
3B–02	G1/8" × 28	G1/8" × 28	5.5	5.5	21	14	14
3B–02–04	G1/8" × 28	G1/4" × 19	5.5	5.5	23	14	19
3B–04	G1/4" × 19	G1/4" × 19	5.5	5.5	25	19	19
3B–04–06	G1/4" × 19	G3/8" × 19	5.5	6.3	26.5	19	22
3B–04–08	G1/4" × 19	G1/2" × 14	5.5	7.5	28.5	19	27
3B–06	G3/8" × 19	G3/8" × 19	6.3	6.3	27	22	22
3B–06–08	G3/8" × 19	G1/2" × 14	6.3	7.5	29.5	22	27
3B–08	G1/2" × 14	G1/2" × 14	7.5	7.5	31	27	27
3B–08–10	G1/2" × 14	G5/8" × 14	7.5	9.5	31.5	27	30
3B–08–12	G1/2" × 14	G3/4" × 14	7.5	10.9	32.5	27	32
3B–10	G5/8" × 14	G5/8" × 14	9.5	9.5	31.5	30	30
3B–10–12	G5/8" × 14	G3/4" × 14	9.5	10.9	33	30	32
3B–12	G3/4" × 14	G3/4" × 14	10.9	10.9	33.5	32	32
3B–12–16	G3/4" × 14	G1" × 11	10.9	11.7	35	32	41
3B–16	G1" × 11	G1" × 11	11.7	11.7	36.5	41	41
3B–16–20	G1" × 11	G1.1/4" × 11	11.7	11	37.5	41	50
3B–20	G1.1/4" × 11	G1.1/4" × 11	11	11	40	50	50
3B–24	G1.1/2" × 11	G1.1/2" × 11	13	13	42	55	55
3B–32	G2" × 11	G2" × 11	16	16	47	70	70



3B9

90° ELBOW BSP FEMALE 60° CONE

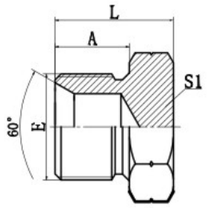
PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	S1	S2	S3
3B9–02	G1/8" × 28	G1/8" × 28	5.5	5.5	11	14	14
3B9–04	G1/4" × 19	G1/4" × 19	5.5	5.5	11	19	19
3B9–06	G3/8" × 19	G3/8" × 19	6.3	6.3	14	22	22
3B9–08	G1/2" × 14	G1/2" × 14	7.5	7.5	19	27	27
3B9–10	G5/8" × 14	G5/8" × 14	9.5	9.5	19	30	30
3B9–12	G3/4" × 14	G3/4" × 14	10.9	10.9	24	32	32
3B9–16	G1" × 11	G1" × 11	11.7	11.7	30	41	41
3B9–20	G1.1/4" × 11	G1.1/4" × 11	11	11	41	50	50
3B9–24	G1.1/2" × 11	G1.1/2" × 11	13	13	48	55	55
3B9–32	G2" × 11	G2" × 11	16	16	63	70	70



DB

BSP FEMALE 60° CONE TEE

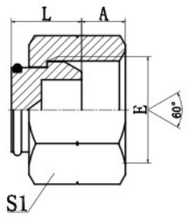
PART NO.	THREAD			DIMENSIONS		
	E	F	G	A、B、C	S1	S2、S3、S4
DB–02	G1/8" × 28	G1/8" × 28	G1/8" × 28	5.5	11	14
DB–04	G1/4" × 19	G1/4" × 19	G1/4" × 19	5.5	11	19
DB–06	G3/8" × 19	G3/8" × 19	G3/8" × 19	6.3	14	22
DB–08	G1/2" × 14	G1/2" × 14	G1/2" × 14	7.5	19	27
DB–10	G5/8" × 14	G5/8" × 14	G5/8" × 14	9.5	19	30
DB–12	G3/4" × 14	G3/4" × 14	G3/4" × 14	10.9	24	32
DB–16	G1" × 11	G1" × 11	G1" × 11	11.7	30	41
DB–20	G1.1/4" × 11	G1.1/4" × 11	G1.1/4" × 11	11	41	50
DB–24	G1.1/2" × 11	G1.1/2" × 11	G1.1/2" × 11	13	48	55
DB–32	G2" × 11	G2" × 11	G2" × 11	16	63	70



4B

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL PLUG

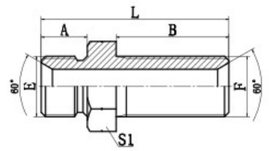
PART NO.	THREAD	DIMENSIONS		
	E	A	L	S1
4B–02	G1/8" × 28	10	16	14
4B–04	G1/4" × 19	12	18	19
4B–06	G3/8" × 19	13.5	21.5	22
4B–08	G1/2" × 14	16	26	27
4B–10	G5/8" × 14	17.5	27.5	30
4B–12	G3/4" × 14	18.5	29.5	32
4B–16	G1" × 11	20.5	34	41
4B–20	G1.1/4" × 11	20.5	37.5	50
4B–24	G1.1/2" × 11	23	40	55
4B–32	G2" × 11	25.5	43.5	70



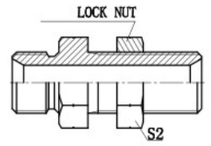
9B

BSP FEMALE 60° CONE PLUG

PART NO.	THREAD	DIMENSIONS		
	E	A	L	S1
9B–02	G1/8" × 28	5.5	11.5	14
9B–04	G1/4" × 19	5.5	13.5	19
9B–06	G3/8" × 19	6.3	14.5	22
9B–08	G1/2" × 14	7.5	16	27
9B–10	G5/8" × 14	9.5	16.5	30
9B–12	G3/4" × 14	10.9	17.5	32
9B–16	G1" × 11	11.7	19	41
9B–20	G1.1/4" × 11	11	21.5	50
9B–24	G1.1/2" × 11	13	22	55
9B–32	G2" × 11	16	26.5	70



6B

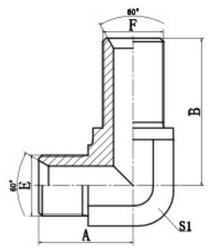


6B–LN

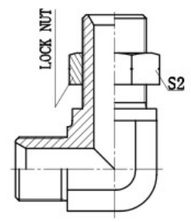
BSP MALE 60° SEAT BULKHEAD

PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
6B–02	G1/8" × 28	G1/8" × 28	10	33	49	14	14
6B–04	G1/4" × 19	G1/4" × 19	12	35	53	19	19
6B–06	G3/8" × 19	G3/8" × 19	13.5	35	56.5	22	22
6B–08	G1/2" × 14	G1/2" × 14	16	39	65	27	27
6B–10	G5/8" × 14	G5/8" × 14	17.5	40	67.5	30	30
6B–12	G3/4" × 14	G3/4" × 14	18.5	42	71.5	32	32
6B–16	G1" × 11	G1" × 11	20.5	50	84	41	41
6B–20	G1.1/4" × 11	G1.1/4" × 11	20.5	52	89.5	50	50
6B–24	G1.1/2" × 11	G1.1/2" × 11	23	55	93	55	55
6B–32	G2" × 11	G2" × 11	25.5	55	98.5	70	70

Note: In case if you are interested to order the adapter in complete set with lock nut, it is necessary to intsert suffix “LN” after our part NO.,for example 6B–16LN,The lock nut NO.is 8B.



6B9

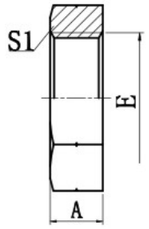


6B9–LN

90° ELBOW BSP MALE 60° SEATBULKHEAD

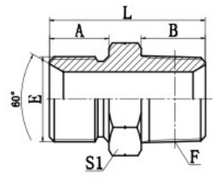
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
6B9–04	G1/4" × 19	G1/4" × 19	25	51	16	19
6B9–06	G3/8" × 19	G3/8" × 19	29	53.5	19	22
6B9–08	G1/2" × 14	G1/2" × 14	34.5	58.5	22	22
6B9–12	G3/4" × 14	G3/4" × 14	41	64	30	32
6B9–16	G1" × 11	G1" × 11	47.5	71	33	41

Note: In case if you are interested to order the adapter in complete set with lock nut, it is necessary to intsert suffix “LN” after our part NO.,for example 6B9–16LN,The lock nut NO.is 8B.



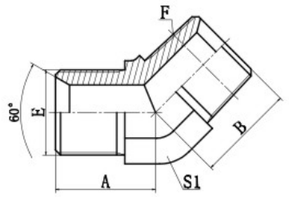
8B
BSP LOCK NUT

PART NO.	THREAD	DIMENSIONS	
	E	A	S1
8B–02	G1/8" × 28	5.5	14
8B–04	G1/4" × 19	6.5	19
8B–06	G3/8" × 19	7	22
8B–08	G1/2" × 14	9	27
8B–10	G5/8" × 14	9	30
8B–12	G3/4" × 14	10.5	32
8B–16	G1" × 11	10.5	41
8B–20	G1.1/4" × 11	10.5	50
8B–24	G1.1/2" × 11	10.5	55
8B–32	G2" × 11	10.5	70



1BT–SP
BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / BSPT MALE

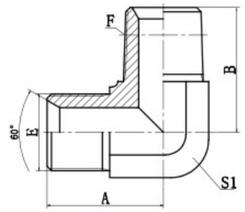
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1BT–02SP	G1/8" × 28	R1/8" × 28	10	10	26	14
1BT–02–04SP	G1/8" × 28	R1/4" × 19	10	14.5	30.5	14
1BT–04SP	G1/4" × 19	R1/4" × 19	12	14.5	32	19
1BT–04–02SP	G1/4" × 19	R1/8" × 28	12	10	28	19
1BT–04–06SP	G1/4" × 19	R3/8" × 19	12	15	32	19
1BT–04–08SP	G1/4" × 19	R1/2" × 14	12	20	40	24
1BT–06SP	G3/8" × 19	R3/8" × 19	13.5	15	35.5	22
1BT–06–04SP	G3/8" × 19	R1/4" × 19	13.5	14.5	35.5	22
1BT–06–08SP	G3/8" × 19	R1/2" × 14	13.5	20	40.5	24
1BT–08SP	G1/2" × 14	R1/2" × 14	16	20	45	27
1BT–08–04SP	G1/2" × 14	R1/4" × 19	16	14.5	40.5	27
1BT–08–06SP	G1/2" × 14	R3/8" × 19	16	15	40	27
1BT–08–12SP	G1/2" × 14	R3/4" × 14	16	20	45	30
1BT–10–06SP	G5/8" × 14	R3/8" × 19	17.5	15	41.5	30
1BT–10–08SP	G5/8" × 14	R1/2" × 14	17.5	20	46.5	30
1BT–10–12SP	G5/8" × 14	R3/4" × 14	17.5	20	46.5	30
1BT–10–16SP	G5/8" × 14	R1" × 11	17.5	25.5	57	36
1BT–12SP	G3/4" × 14	R3/4" × 14	18.5	20	48.5	32
1BT–12–08SP	G3/4" × 14	R1/2" × 14	18.5	20	49.5	32
1BT–12–16SP	G3/4" × 14	R1" × 11	18.5	25.5	53.5	36
1BT–12–20SP	G3/4" × 14	R1.1/4" × 11	18.5	26.5	58	46
1BT–16SP	G1" × 11	R1" × 11	20.5	25.5	58	41
1BT–16–12SP	G1" × 11	R3/4" × 14	20.5	20	53	41
1BT–16–20SP	G1" × 11	R1.1/4" × 11	20.5	26.5	60	46
1BT–20SP	G1.1/4" × 11	R1.1/4" × 11	20.5	26.5	62	50
1BT–20–12SP	G1.1/4" × 11	R3/4" × 14	20.5	20.5	56	50
1BT–20–16SP	G1.1/4" × 11	R1" × 11	20.5	25.5	61	50
1BT–20–24SP	G1.1/4" × 11	R1.1/2" × 11	20.5	26.5	62	50
1BT–24SP	G1.1/2" × 11	R1.1/2" × 11	23	26.5	64.5	55
1BT–24–16SP	G1.1/2" × 11	R1" × 11	23	25.5	63.5	55
1BT–24–20SP	G1.1/2" × 11	R1.1/4" × 11	23	26.5	64.5	55
1BT–24–32SP	G1.1/2" × 11	R2" × 11	23	30	70	65
1BT–32SP	G2" × 11	R2" × 11	25.5	30	72.5	70
1BT–32–20SP	G2" × 11	R1.1/4" × 11	25.5	27	68.5	70
1BT–32–24SP	G2" × 11	R1.1/2" × 11	25.5	26.5	68.5	70
1BT–40SP	G2.1/2" × 11	R2.1/2" × 11	32	34	83	90
1BT–48SP	G3" × 11	R3" × 11	36	38	94	100



1BT4–SP

45° ELBOW BSP MALE 60° SEAT / BSPT MALE

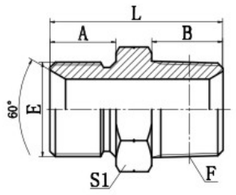
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1BT4–02SP	G1/8" × 28	R1/8" × 28	17	17	11
1BT4–04SP	G1/4" × 19	R1/4" × 19	20.3	21	14
1BT4–04–06SP	G1/4" × 19	R3/8" × 19	20.5	23	16
1BT4–06SP	G3/8" × 19	R3/8" × 19	22	23	16
1BT4–06–04SP	G3/8" × 19	R1/4" × 19	22	21	16
1BT4–06–08SP	G3/8" × 19	R1/2" × 14	24	29.5	22
1BT4–06–12SP	G3/8" × 19	R3/4" × 14	25.5	30.5	27
1BT4–08SP	G1/2" × 14	R1/2" × 14	27	29.5	22
1BT4–08–06SP	G1/2" × 14	R3/8" × 19	27	25	22
1BT4–08–12SP	G1/2" × 14	R3/4" × 14	28.5	30.5	27
1BT4–10–08SP	G5/8" × 14	R1/2" × 14	28.5	29.5	22
1BT4–10–12SP	G5/8" × 14	R3/4" × 14	29	35	27
1BT4–12SP	G3/4" × 14	R3/4" × 14	31	30.5	27
1BT4–12–08SP	G3/4" × 14	R1/2" × 14	31	30.5	27
1BT4–12–16SP	G3/4" × 14	R1" × 11	32.5	38	33
1BT4–16SP	G1" × 11	R1" × 11	35	38	33
1BT4–16–12SP	G1" × 11	R3/4" × 14	35	32.5	33
1BT4–16–20SP	G1" × 11	R1.1/4" × 11	38.5	43	41
1BT4–20SP	G1.1/4" × 11	R1.1/4" × 11	38.5	43	41
1BT4–20–16SP	G1.1/4" × 11	R1" × 11	38.5	42	41
1BT4–20–24SP	G1.1/4" × 11	R1.1/2" × 11	41.5	47.5	48
1BT4–24SP	G1.1/2" × 11	R1.1/2" × 11	44	47.5	48
1BT4–24–20SP	G1.1/2" × 11	R1.1/4" × 11	44	45.5	48
1BT4–24–32SP	G1.1/2" × 11	R2" × 11	51	60.5	63
1BT4–32SP	G2" × 11	R2" × 11	49.5	55.5	63
1BT4–32–24SP	G2" × 11	R1.1/2" × 11	51	52.5	63



1BT9–SP

90° ELBOW BSP MALE 60° SEAT / BSPT MALE

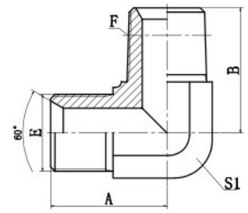
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1BT9–02SP	G1/8" × 28	R1/8" × 28	20	21	11
1BT9–02–04SP	R1/8" × 28	R1/4" × 19	22.3	25.5	14
1BT9–04SP	G1/4" × 19	R1/4" × 19	24.5	25.5	14
1BT9–04–02SP	G1/4" × 19	R1/8" × 28	25	23.5	14
1BT9–04–06SP	G1/4" × 19	R3/8" × 19	25	28.5	16
1BT9–04–08SP	G1/4" × 19	R1/2" × 14	30	36	22
1BT9–06SP	G3/8" × 19	R3/8" × 19	27.5	28.5	16
1BT9–06–04SP	G3/8" × 19	R1/4" × 19	27.5	26.5	16
1BT9–06–08SP	G3/8" × 19	R1/2" × 14	31	36	22
1BT9–08SP	G1/2" × 14	R1/2" × 14	34.5	36	22
1BT–08–04SP	G1/2" × 14	R1/4" × 19	34.5	30.5	22
1BT–08–06SP	G1/2" × 14	R3/8" × 19	34.5	32.5	22
1BT9–08–12SP	G1/2" × 14	R3/4" × 14	37.5	43.5	27
1BT9–08–16SP	G1/2" × 14	R1" × 11	41	50	33
1BT9–10–08SP	G5/8" × 14	R1/2" × 14	35	36	22
1BT8–10–12SP	G5/8" × 14	R3/4" × 14	39	43.5	27
1BT9–12SP	G3/4" × 14	R3/4" × 14	40	43	27
1BT9–12–06SP	G3/4" × 14	R3/8" × 19	40	36	27
1BT9–12–08SP	G3/4" × 14	R1/2" × 14	40	39.5	27
1BT9–12–16SP	G3/4" × 14	R1" × 11	43.5	50	33
1BT9–12–20SP	G3/4" × 14	R1.1/4" × 11	48	56.5	41
1BT9–16SP	G1" × 11	R1" × 11	46	50	33
1BT9–16–08SP	G1" × 11	R1/2" × 14	46	43	33
1BT9–16–12SP	G1" × 11	R3/4" × 14	46	47.5	33
1BT9–16–20SP	G1" × 11	R1.1/4" × 11	50.5	56.5	41
1BT9–20SP	G1.1/4" × 11	R1.1/4" × 11	52	59	41
1BT9–20–12SP	G1.1/4" × 11	R3/4" × 14	50.5	54	41
1BT9–20–16SP	G1.1/4" × 11	R1" × 11	52	56.5	41
1BT9–20–24SP	G1.1/4" × 11	R1.1/2" × 11	54.5	62.5	48
1BT9–24SP	G1.1/2" × 11	R1.1/2" × 11	57.5	62	48
1BT9–24–20SP	G1.1/2" × 11	R1.1/4" × 11	57.5	61	48
1BT9–24–32SP	G1.1/2" × 11	R2" × 11	66	75	63
1BT9–32SP	G2" × 11	R2" × 11	67	75	63
1BT9–32–24SP	G2" × 11	R1.1/2" × 11	68	72	63



1BN

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / NPT MALE

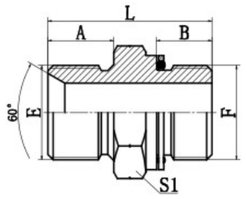
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1BN–02	G1/8" × 28	Z1/8" × 28	10	10.5	26	14
1BN–02–04	R1/8" × 28	Z1/4" × 18	10	15	31	17
1BN–04	G1/4" × 19	Z1/4" × 18	12	15	33	19
1BN–04–02	G1/4" × 19	Z1/8" × 28	12	10.5	28	19
1BN–04–06	G1/4" × 19	Z3/8" × 18	12	16	34	19
1BN–04–08	G1/4" × 19	Z1/2" × 14	12	19.5	39.5	22
1BN–06	G3/8" × 19	Z3/8" × 18	13.5	16	37.5	22
1BN–06–04	G3/8" × 19	Z1/4" × 18	13.5	15	36	22
1BN–06–08	G3/8" × 19	Z1/2" × 14	13.5	19.5	41	22
1BN–06–12	G3/8" × 19	Z3/4" × 14	13.5	19.5	43	30
1BN–08	G1/2" × 14	Z1/2" × 14	16	19.5	45.5	27
1BN–08–06	G1/2" × 14	Z3/8" × 18	16	16	42	27
1BN–08–12	G1/2" × 14	Z3/4" × 14	16	19.5	45.5	30
1BN–08–16	G1/2" × 14	Z1" × 11.5	16	25.5	52.5	36
1BN–10–08	G5/8" × 14	Z1/2" × 14	17.5	19.5	47	30
1BN–10–12	G5/8" × 14	Z3/4" × 14	17.5	19.5	47	30
1BN–12	G3/4" × 14	Z3/4" × 14	18.5	19.5	49	32
1BN–12–06	G3/4" × 14	Z3/8" × 18	18.5	16	45.5	32
1BN–12–08	G3/4" × 14	Z1/2" × 14	18.5	19.5	49	32
1BN–12–16	G3/4" × 14	Z1" × 11.5	18.5	25.5	55	36
1BN–16	G1" × 11	Z1" × 11.5	20.5	25.5	59	41
1BN–16–12	G1" × 11	Z3/4" × 14	20.5	19.5	53	41
1BN–16–20	G1" × 11	Z1.1/4" × 11.5	20.5	26.5	60	45
1BN–20	G1.1/4" × 11	Z1.1/4" × 11.5	20.5	26.5	62	50
1BN–20–16	G1.1/4" × 11	Z1" × 11.5	20.5	25.5	61	50
1BN–20–24	G1.1/4" × 11	Z1.1/2" × 11.5	20.5	27.5	63	50
1BN–24	G1.1/2" × 11	Z1.1/2" × 11.5	23	27.5	65.5	55
1BN–24–20	G1.1/2" × 11	Z1.1/4" × 11.5	23	26.5	64.5	55
1BN–24–32	G1.1/2" × 11	Z2" × 11.5	23	27.5	67.5	65
1BN–32	G2" × 11	Z2" × 11.5	25.5	27.5	70	70
1BN–32–20	G2" × 11	Z1.1/4" × 11.5	25.5	26.5	69	70
1BN–32–24	G2" × 11	Z1.1/2" × 11.5	25.5	27.5	70	70



1BN9

90° ELBOW BSP MALE 60° SEAT / NPT MALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1BN9–04	G1/4" × 19	Z1/4" × 18	24.5	25.5	14
1BN9–04–02	G1/4" × 19	Z1/8" × 27	24.5	23.5	14
1BN9–06	G3/8" × 19	Z3/8" × 18	28.5	31	19
1BN9–06–04	G3/8" × 19	Z1/4" × 18	27.5	26.5	16
1BN9–06–08	G3/8" × 19	Z1/2" × 14	31	36.5	22
1BN9–06–12	G3/8" × 19	Z3/4" × 14	34.5	44	27
1BN9–08	G1/2" × 14	Z1/2" × 14	34.5	37.5	22
1BN9–08–06	G1/2" × 14	Z3/8" × 18	34.5	33	22
1BN9–12	G3/4" × 14	Z3/4" × 14	38	43.5	27
1BN9–12–08	G3/4" × 14	Z1/2" × 14	39	40	27
1BN9–12–16	G3/4" × 14	Z1" × 11.5	43	50	33
1BN9–16	G1" × 11	Z1" × 11.5	46	50	33
1BN9–16–12	G1" × 11	Z3/4" × 14	46	46.5	33

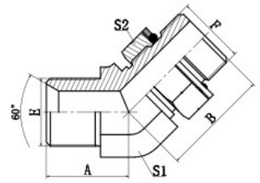


1BG

BSP MALE DOUBLE USE FOR 60° CONE SEAT OR BONDED SEAL / BSP MALE O-RING

PART NO.	THREAD		O-RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1BG-02	G1/8" × 28	G1/8" × 28	O011	10	9.5	27	14
1BG-04	G1/4" × 19	G1/4" × 19	O111	12	11	31	19
1BG-04-06	G1/4" × 19	G3/8" × 19	O113	12	11.5	32	22
1BG-06	G3/8" × 19	G3/8" × 19	O113	13.5	11.5	33	22
1BG-06-04	G3/8" × 19	G1/4" × 19	O111	13.5	11	32.5	22
1BG-06-08	G3/8" × 19	G1/2" × 14	O115	13.5	14	38.5	27
1BG-08	G1/2" × 14	G1/2" × 14	O115	16	14	41	27
1BG-08-06	G1/2" × 14	G3/8" × 19	O113	16	11.5	36	27
1BG-08-12	G1/2" × 14	G3/4" × 14	O119	16	15.5	45.5	32
1BG-10-08	G5/8" × 14	G1/2" × 14	O115	17.5	14	44.5	30
1BG-12	G3/4" × 14	G3/4" × 14	O119	18.5	15.5	46	32
1BG-12-08	G3/4" × 14	G1/2" × 14	O115	18.5	14	45.5	32
1BG-16-08	G1" × 11	G1/2" × 14	O115	20.5	14	50.5	41
1BG-16	G1" × 11	G1" × 11	O217	20.5	18	53	41
1BG-16-12	G1" × 11	G3/4" × 14	O119	20.5	15.5	52	41
1BG-20	G1.1/4" × 11	G1.1/4" × 11	O222	20.5	20	58.5	50
1BG-24	G1.1/2" × 11	G1.1/2" × 11	O224	23	21.5	62.5	55

Note: F end is connected with DIN 3852 port.

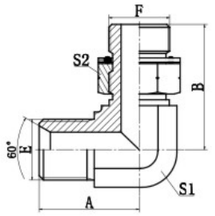


1BG4-OG

45° ELBOW BSP MALE 60° SEAT / BSP MALE O-RING ADJUSTABLE STUD END

PART NO.	THREAD		O-RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1BG4-04OG	G1/4" × 19	G1/4" × 19	O111	22	28	14	19
1BG4-04-06OG	G1/4" × 19	G3/8" × 19	O113	21	30	16	22
1BG4-04-08OG	G1/4" × 19	G1/2" × 14	O115	22.5	36	22	27
1BG4-06OG	G3/8" × 19	G3/8" × 19	O113	21	30	16	22
1BG4-06-08OG	G3/8" × 19	G1/2" × 14	O115	23.5	36	22	27
1BG4-08OG	G1/2" × 14	G1/2" × 14	O115	27	36	22	27
1BG4-12OG	G3/4" × 14	G3/4" × 14	O119	32	42	27	32
1BG4-12-16OG	G3/4" × 14	G1" × 11	O217	32.5	44	33	41
1BG4-16OG	G1" × 11	G1" × 11	O217	34	44	33	41
1BG4-20OG	G1.1/4" × 11	G1.1/4" × 11	O222	38.5	47.5	41	50
1BG4-24OG	G1.1/2" × 11	G1.1/2" × 11	O224	44	51.5	48	55

Note: F end is connected with DIN 3852 port.

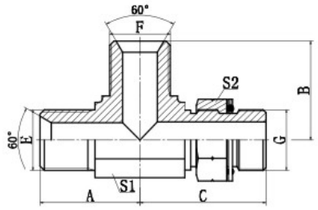


1BG9-OG

90° ELBOW BSP MALE 60° SEAT / BSP MALE O-RING ADJUSTABLE STUD END

PART NO.	THREAD		O-RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1BG9-04OG	G1/4" × 19	G1/4" × 19	O111	25	31.5	14	19
1BG9-04-06OG	G1/4" × 19	G3/8" × 19	O113	26.5	36.8	16	22
1BG9-06OG	G3/8" × 19	G3/8" × 19	O113	28	36.8	16	22
1BG9-06-08OG	G3/8" × 19	G1/2" × 14	O115	31	43.2	22	27
1BG9-08OG	G1/2" × 14	G1/2" × 14	O115	34.5	43.2	22	27
1BG9-08-12OG	G1/2" × 14	G3/4" × 14	O119	40	49.3	27	32
1BG9-12OG	G3/4" × 14	G3/4" × 14	O119	40	49.3	27	32
1BG9-12-16OG	G3/4" × 14	G1" × 11	O217	45	53	33	41
1BG9-16OG	G1" × 11	G1" × 11	O217	46	53	33	41
1BG9-20-16OG	G1.1/4" × 11	G1" × 11	O217	50.5	58	41	41
1BG9-20OG	G1.1/4" × 11	G1.1/4" × 11	O222	51.5	58	41	50
1BG9-24OG	G1.1/2" × 11	G1.1/2" × 11	O224	58.5	63	48	55

Note: F end is connected with DIN 3852 port.

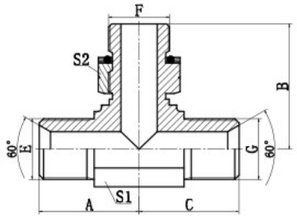


ABBG–OG

BSP MALE 60° SEAT / BSP MALE O–RING ADJUSTABLE STUD END RNU TEE

PART NO.	THREAD			O–RING	DIMENSIONS				
	E	F	G	G	A	B	C	S1	S2
ABBG–04OG	G1/4" × 19	G1/4" × 19	G1/4" × 19	O111	24.5	24.5	31.3	14	19
ABBG–04–04–06OG	G1/4" × 19	G1/4" × 19	G3/8" × 19	O113	26.5	26.5	35.5	16	19
ABBG–06OG	G3/8" × 19	G3/8" × 19	G3/8" × 19	O113	27.5	27.5	35.8	16	22
ABBG–06–06–08OG	G3/8" × 19	G3/8" × 19	G1/2" × 14	O115	31	31	43	16	22
ABBG–08OG	G1/2" × 14	G1/2" × 14	G1/2" × 14	O115	34.5	34.5	43.2	22	27
ABBG–12OG	G3/4" × 14	G3/4" × 14	G3/4" × 14	O119	40	40	49.3	27	32
ABBG–16OG	G1" × 11	G1" × 11	G1" × 11	O217	46	46	53	33	41

Note: G end is connected with DIN 3852 port.

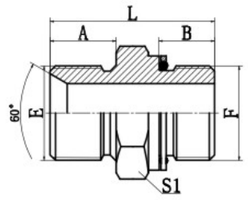


ABGB–OG

BSP MALE 60° SEAT / BSP MALE O–RING ADJUSTABLE STUD END BRANCH TEE

PART NO.	THREAD			O–RING	DIMENSIONS				
	E	F	G	G	A	B	C	S1	S2
ABGB–04OG	G1/4" × 19	G1/4" × 19	G1/4" × 19	O111	25	31.8	25	14	19
ABGB–06–04–06OG	G3/8" × 19	G1/4" × 19	G3/8" × 19	O111	27.5	33.5	27.5	16	19
ABGB–06OG	G3/8" × 19	G3/8" × 19	G3/8" × 19	O113	27.5	36.8	27.5	16	22
ABGB–08–06–08OG	G1/2" × 14	G3/8" × 19	G1/2" × 14	O113	34.5	39.5	34.5	22	22
ABGB–08OG	G1/2" × 14	G1/2" × 14	G1/2" × 14	O115	34.5	43.2	34.5	22	27
ABGB–12–08–12OG	G3/4" × 14	G1/2" × 14	G3/4" × 14	O115	40	46.5	40	27	27
ABGB–12OG	G3/4" × 14	G3/4" × 14	G3/4" × 14	O119	40	49.3	40	27	32
ABGB–16OG	G1" × 11	G1" × 11	G1" × 11	O217	46	53	46	33	41

Note: F end is connected with DIN 3852 port.

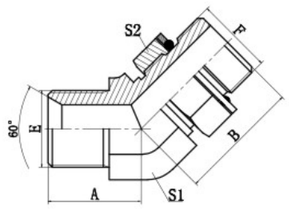


1BH

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / METRIC MALE L–SERIES ISO 6149–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	L
1BH–02–10	G1/8" × 28	M10 × 1	O08.1 × 1.6	10	8.5	14	25
1BH–02–12	G1/8" × 28	M12 × 1.5	O09.3 × 2.4	10	11	17	28
1BH–04–12	G1/4" × 19	M12 × 1.5	O09.3 × 2.4	12	11	19	30
1BH–04–14	G1/4" × 19	M14 × 1.5	O11.3 × 2.4	12	11	19	31.5
1BH–04–16	G1/4" × 19	M16 × 1.5	O13.3 × 2.4	12	11.5	22	31.5
1BH–06–14	G3/8" × 19	M14 × 1.5	O11.3 × 2.4	13.5	11	22	35
1BH–06–16	G3/8" × 19	M16 × 1.5	O13.3 × 2.4	13.5	11.5	22	33
1BH–06–18	G3/8" × 19	M18 × 1.5	O15.3 × 2.4	13.5	12.5	24	36.5
1BH–08–18	G1/2" × 14	M18 × 1.5	O15.3 × 2.4	16	12.5	27	41
1BH–08–22	G1/2" × 14	M22 × 1.5	O19.3 × 2.4	16	13	27	41.5
1BH–10–22	G5/8" × 14	M22 × 1.5	O19.3 × 2.4	17.5	13	30	43
1BH–12–16	G3/4" × 14	M16 × 1.5	O13.3 × 2.4	18.5	11.5	32	43.5
1BH–12–22	G3/4" × 14	M22 × 1.5	O19.3 × 2.4	18.5	13	32	45
1BH–12–27	G3/4" × 14	M27 × 2	O23.5 × 3.0	18.5	16	32	45.5
1BH–16–27	G1" × 11	M27 × 2	O23.5 × 3.0	20.5	16	41	49
1BH–16–33	G1" × 11	M33 × 2	O29.5 × 3.0	20.5	16	41	49.5
1BH–20–42	G1.1/4" × 11	M42 × 2	O38.5 × 3.0	20.5	16	50	51.5
1BH–24–48	G1.1/2" × 11	M48 × 2	O44.5 × 3.0	23	17.5	55	55.5

Note: fit for ISO 9974–1 port or ISO 6149–1 port when useless of retaining ring.

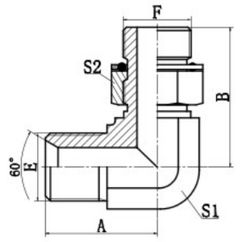


1BH4–OG

45° ELBOW BSP MALE 60° SEAT / METRIC MALE L–SERIES ISO 6149–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1BH4–02–10OG	G1/8" × 28	M10 × 1	O08.1 × 1.6	17	23.5	11	14
1BH4–02–12OG	G1/8" × 28	M12 × 1.5	O09.3 × 2.4	17	27.5	11	17
1BH4–04–12OG	G1/4" × 19	M12 × 1.5	O09.3 × 2.4	20.3	28.3	14	17
1BH4–04–14OG	G1/4" × 19	M14 × 1.5	O11.3 × 2.4	20.3	28.3	14	19
1BH4–04–16OG	G1/4" × 19	M16 × 1.5	O13.3 × 2.4	20.8	29.3	16	22
1BH4–06–14OG	G3/8" × 19	M14 × 1.5	O11.3 × 2.4	22.3	28.8	16	19
1BH4–06–16OG	G3/8" × 19	M16 × 1.5	O13.3 × 2.4	22.3	29.3	16	22
1BH4–06–18OG	G3/8" × 19	M18 × 1.5	O15.3 × 2.4	23	31	19	24
1BH4–08–18OG	G1/2" × 14	M18 × 1.5	O15.3 × 2.4	27.3	33.3	22	24
1BH4–08–22OG	G1/2" × 14	M22 × 1.5	O19.3 × 2.4	27.3	33.3	22	27
1BH4–10–22OG	G5/8" × 14	M22 × 1.5	O19.3 × 2.4	27.8	33.3	22	27
1BH4–12–22OG	G3/4" × 14	M22 × 1.5	O19.3 × 2.4	31	34.5	27	27
1BH4–12–27OG	G3/4" × 14	M27 × 2	O23.5 × 3.0	31	39.5	27	32
1BH4–16–27OG	G1" × 11	M27 × 2	O23.5 × 3.0	34.5	40.5	33	32
1BH4–16–33OG	G1" × 11	M33 × 2	O29.5 × 3.0	34.5	41	33	41
1BH4–20–42OG	G1.1/4" × 11	M42 × 2	O38.5 × 3.0	39	45.5	41	50
1BH4–24–48OG	G1.1/2" × 11	M48 × 2	O44.5 × 3.0	44	49.5	48	55

Note: fit for ISO 9974–1 port or ISO 6149–1 port when useless of retaining ring.

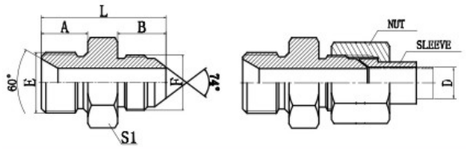


1BH9–OG

90° ELBOW BSP MALE 60° SEAT / METRIC MALE L–SERIES ISO 6149–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1BH9–02–10OG	G1/8" × 28	M10 × 1	O08.1 × 1.6	20	26.5	11	14
1BH9–02–12OG	G1/8" × 28	M12 × 1.5	O09.3 × 2.4	20	30.5	11	17
1BH9–04–12OG	G1/4" × 19	M12 × 1.5	O09.3 × 2.4	24.5	32	14	17
1BH9–04–14OG	G1/4" × 19	M14 × 1.5	O11.3 × 2.4	24.5	32.5	14	19
1BH9–04–16OG	G1/4" × 19	M16 × 1.5	O13.3 × 2.4	26.5	34.8	16	22
1BH9–06–14OG	G3/8" × 19	M14 × 1.5	O11.3 × 2.4	27.5	34	16	19
1BH9–06–16OG	G3/8" × 19	M16 × 1.5	O13.3 × 2.4	27.5	34.8	16	22
1BH9–06–18OG	G3/8" × 19	M18 × 1.5	O15.3 × 2.4	28.5	37	19	24
1BH9–08–18OG	G1/2" × 14	M18 × 1.5	O15.3 × 2.4	34.5	39.5	22	24
1BH9–08–22OG	G1/2" × 14	M22 × 1.5	O19.3 × 2.4	34.5	40.2	22	27
1BH9–10–22OG	G5/8" × 14	M22 × 1.5	O19.3 × 2.4	35	40.2	22	27
1BH9–12–22OG	G3/4" × 14	M22 × 1.5	O19.3 × 2.4	40	43.5	27	27
1BH9–12–27OG	G3/4" × 14	M27 × 2	O23.5 × 3.0	40	48.5	27	32
1BH9–16–27OG	G1" × 11	M27 × 2	O23.5 × 3.0	46	52	33	32
1BH9–16–33OG	G1" × 11	M33 × 2	O29.5 × 3.0	46	52.5	33	41
1BH9–20–42OG	G1.1/4" × 11	M42 × 2	O38.5 × 3.0	50.5	57.2	41	50
1BH9–24–48OG	G1.1/2" × 11	M48 × 2	O44.5 × 3.0	57.5	62.5	48	55

Note: fit for ISO 9974–1 port or ISO 6149–1 port when useless of retaining ring.



1BJ

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / JIC MALE 74° CONE

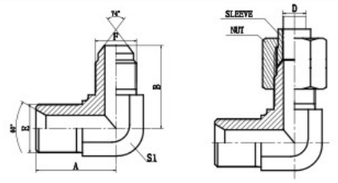
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1BJ–02–04	G1/8" × 28	7/16" × 20	10	14	30	14
1BJ–02–05	G1/8" × 28	1/2" × 20	10	14	30	14
1BJ–02–06	G1/8" × 28	9/16" × 18	10	14.1	30	17
1BJ–04	G1/4" × 19	7/16" × 20	12	14	32	19
1BJ–04–05	G1/4" × 19	1/2" × 20	12	14	32	19
1BJ–04–06	G1/4" × 19	9/16" × 18	12	14.1	32	19
1BJ–04–08	G1/4" × 19	3/4" × 16	12	16.7	36.5	22
1BJ–04–10	G1/4" × 19	7/8" × 14	12	19.3	39	24
1BJ–06	G3/8" × 19	9/16" × 18	13.5	14.1	35.5	22
1BJ–06–04	G3/8" × 19	7/16" × 20	13.5	14	35.5	22
1BJ–06–05	G3/8" × 19	1/2" × 20	13.5	14	35.5	22
1BJ–06–08	G3/8" × 19	3/4" × 16	13.5	16.7	38.5	22
1BJ–06–10	G3/8" × 19	7/8" × 14	13.5	19.3	41	24
1BJ–06–12	G3/8" × 19	1.1/16" × 12	13.5	21.9	45	30
1BJ–08	G1/2" × 14	3/4" × 16	16	16.7	43	27
1BJ–08–04	G1/2" × 14	7/16" × 20	16	14	40	27
1BJ–08–05	G1/2" × 14	1/2" × 20	16	14	40	27
1BJ–08–06	G1/2" × 14	9/16" × 18	16	14.1	40	27
1BJ–08–10	G1/2" × 14	7/8" × 14	16	19.3	45.5	27
1BJ–08–12	G1/2" × 14	1.1/16" × 12	16	21.9	48	30
1BJ–08–14	G1/2" × 14	1.3/16" × 12	16	22.6	49.5	32
1BJ–08–16	G1/2" × 14	1.5/16" × 12	16	23.1	50	36
1BJ–10	G5/8" × 14	7/8" × 14	17.5	19.3	47	30
1BJ–10–08	G5/8" × 14	3/4" × 16	17.5	16.7	44	30
1BJ–10–12	G5/8" × 14	1.1/16" × 12	17.5	21.9	49.5	30
1BJ–10–16	G5/8" × 14	1.5/16" × 12	17.5	23.1	51.5	36
1BJ–12	G3/4" × 14	1.1/16" × 12	18.5	21.9	51.5	32
1BJ–12–06	G3/4" × 14	9/16" × 18	18.5	14.1	43.5	32
1BJ–12–08	G3/4" × 14	3/4" × 16	18.5	16.7	46.5	32
1BJ–12–10	G3/4" × 14	7/8" × 14	18.5	19.3	49	32
1BJ–12–14	G3/4" × 14	1.3/16" × 12	18.5	22.6	52	32
1BJ–12–16	G3/4" × 14	1.5/16" × 12	18.5	23.1	52.5	34
1BJ–12–20	G3/4" × 14	1.5/8" × 12	18.5	24.3	55.5	46
1BJ–16	G1" × 11	1.5/16" × 12	20.5	23.1	57	41
1BJ–16–08	G1" × 11	3/4" × 16	20.5	16.7	50	41

c.o.

b.f.

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1BJ–16–10	G1" × 11	7/8" × 14	20.5	19.3	53	41
1BJ–16–12	G1" × 11	1.1/16" × 12	20.5	21.9	55.5	41
1BJ–16–14	G1" × 11	1.3/16" × 12	20.5	22.6	56	41
1BJ–16–20	G1" × 11	1.5/8" × 12	20.5	24.3	58	46
1BJ–20	G1.1/4" × 11	1.5/8" × 12	20.5	24.3	62	50
1BJ–20–12	G1.1/4" × 11	1.1/16" × 12	20.5	21.9	57.5	50
1BJ–20–16	G1.1/4" × 11	1.5/16" × 12	20.5	23.1	60.5	50
1BJ–20–24	G1.1/4" × 11	1.7/8" × 12	20.5	27.5	63	50
1BJ–24–16	G1.1/2" × 11	1.5/16" × 12	23	23.1	61	55
1BJ–24–20	G1.1/2" × 11	1.5/8" × 12	23	24.3	62.5	55
1BJ–24	G1.1/2" × 11	1.7/8" × 14	23	27.5	67.5	55
1BJ–24–32	G1.1/2" × 11	2.1/2" × 12	23	33.9	74	65
1BJ–32	G2" × 11	2.1/2" × 12	25.5	33.9	77.5	70
1BJ–32–24	G2" × 11	1.7/8" × 12	25.5	27.5	70	70

Note: Nut and sleeve shuld be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

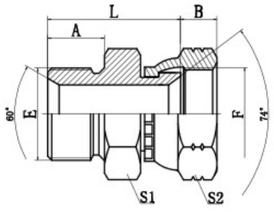


1BJ9

90° ELBOW BSP MALE 60° SEAT / JIC MALE 74° CONE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1BJ9–04	G1/4" × 19	7/16" × 20	24.5	26.5	14
1BJ9–04–05	G1/4" × 19	1/2" × 20	23.5	28	14
1BJ9–04–06	G1/4" × 19	9/16" × 18	24.5	26.9	14
1BJ9–06	G3/8" × 19	9/16" × 18	27.5	28.5	16
1BJ9–06–08	G3/8" × 19	3/4" × 16	28.5	32	19
1BJ9–08	G1/2" × 14	3/4" × 16	32.5	35	22
1BJ9–08–10	G1/2" × 14	7/8" × 14	34.5	37.8	22
1BJ9–10	G5/8" × 14	7/8" × 14	32.7	38.1	22
1BJ9–12	G3/4" × 14	1.1/16" × 12	37	44.2	27
1BJ9–16	G1" × 11	1.5/16" × 12	43	49	33
1BJ9–16–20	G1" × 11	1.5/8" × 12	50.5	55.5	41

Note: Nut and sleeve shuld be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

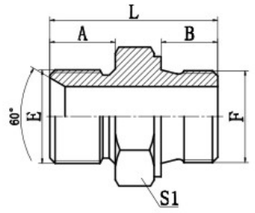


2BJ

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / JIC FEMALE 74° SEAT

PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
2BJ–02–04	G1/8" × 28	7/16" × 20	10	9	24	14	15
2BJ–02–06	G1/8" × 28	9/16" × 18	10	10.5	24.5	14	19
2BJ–04	G1/4" × 19	7/16" × 20	12	9	26	19	15
2BJ–04–05	G1/4" × 19	1/2" × 20	12	9.5	26.5	19	17
2BJ–04–06	G1/4" × 19	9/16" × 18	12	10.5	27	19	19
2BJ–04–08	G1/4" × 19	3/4" × 16	12	11	29	19	24
2BJ–06	G3/8" × 19	9/16" × 18	13.5	10.5	30.5	22	19
2BJ–06–08	G3/8" × 19	3/4" × 16	13.5	11	32.5	22	24
2BJ–06–10	G3/8" × 19	7/8" × 14	13.5	13	33	22	27
2BJ–08	G1/2" × 14	3/4" × 16	16	11	37	27	24
2BJ–08–06	G1/2" × 14	9/16" × 18	16	10.5	35	27	19
2BJ–08–10	G1/2" × 14	7/8" × 14	16	13	37.5	27	27
2BJ–10	G5/8" × 14	7/8" × 14	17.5	14	37.5	30	27
2BJ–12	G3/4" × 14	1.1/16" × 12	18.5	15	42	32	32
2BJ–12–08	G3/4" × 14	3/4" × 16	18.5	11	40	32	24
2BJ–12–10	G3/4" × 14	7/8" × 14	18.5	13	41	32	27
2BJ–12–16	G3/4" × 14	1.5/16" × 12	18.5	16	42	32	41
2BJ–16	G1" × 11	1.5/16" × 12	20.5	16	46	41	41
2BJ–16–20	G1" × 11	1.5/8" × 12	20.5	17	50	41	50
2BJ–20	G1.1/4" × 11	1.5/8" × 12	20.5	17	52	50	50
2BJ–20–24	G1.1/4" × 11	1.7/8" × 12	20.5	20	53.58	50	55
2BJ–24	G1.1/2" × 11	1.7/8" × 12	23	20	56.5	55	55
2BJ–32	G2" × 11	2.1/2" × 12	25.5	24.5	60	70	75

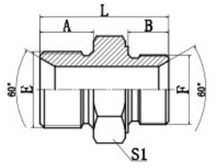
BSP Thread 60° Cone Fittings



1BL

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / METRIC MALE WITH BONDED SEAL

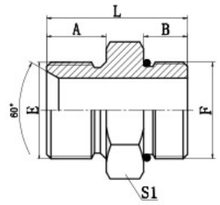
PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1BL–02–10	G1/8" × 28	M10 × 1	ZHD–10	10	8	25	17
1BL–04–10	G1/4" × 19	M10 × 1	ZHD–10	12	8	27	19
1BL–04–14	G1/4" × 19	M14 × 1.5	ZHD–14	12	12	31	19
1BL–06–14	G3/8" × 19	M14 × 1.5	ZHD–14	13.5	12	35	22
1BL–06–16	G3/8" × 19	M16 × 1.5	ZHD–16	13.5	12	34	22
1BL–06–18	G3/8" × 19	M18 × 1.5	ZHD–18	13.5	12	33.5	24
1BL–08–16	G1/2" × 14	M16 × 1.5	ZHD–16	16	12	38	27
1BL–08–18	G1/2" × 14	M18 × 1.5	ZHD–18	16	12	38	27
1BL–08–22	G1/2" × 14	M22 × 1.5	ZHD–22	16	14	41.5	30
1BL–10–33	G5/8" × 14	M33 × 2	ZHD–33	17.5	18	48.5	41
1BL–12–16	G3/4" × 14	M16 × 1.5	ZHD–16	18.5	12	41.5	32
1BL–12–22	G3/4" × 14	M22 × 1.5	ZHD–22	18.5	14	43.5	30
1BL–12–27	G3/4" × 14	M27 × 2	ZHD–27	18.5	16	45.5	36
1BL–12–33	G3/4" × 14	M33 × 2	ZHD–33	18.5	18	49.5	41
1BL–16–27	G1" × 11	M27 × 2	ZHD–27	20.5	16	51.5	41
1BL–16–33	G1" × 11	M33 × 2	ZHD–33	20.5	18	53.5	41
1BL–20–42	G1.1/4" × 11	M42 × 2	ZHD–42	20.5	20	56.5	50



1BM

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / METRIC MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL

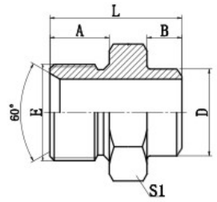
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1BM–02–10	G1/8" × 28	M10 × 1	10	8	25	14
1BM–02–12	G1/8" × 28	M12 × 1.5	10	10	27	17
1BM–04–12	G1/4" × 19	M12 × 1.5	12	10	29	19
1BM–04–14	G1/4" × 19	M14 × 1.5	12	11	30	19
1BM–04–16	G1/4" × 19	M16 × 1.5	12	12	33	22
1BM–04–18	G1/4" × 19	M18 × 1.5	12	12	33	24
1BM–06–10	G3/8" × 19	M10 × 1	13.5	8	29.5	22
1BM–06–12	G3/8" × 19	M12 × 1.5	13.5	10	31.5	22
1BM–06–14	G3/8" × 19	M14 × 1.5	13.5	11	32.5	22
1BM–06–16	G3/8" × 19	M16 × 1.5	13.5	12	33.5	22
1BM–06–18	G3/8" × 19	M18 × 1.5	13.5	12	34.5	24
1BM–06–20	G3/8" × 19	M20 × 1.5	13.5	14	38.5	27
1BM–06–22	G3/8" × 19	M22 × 1.5	13.5	14	38.5	27
1BM–08–14	G1/2" × 14	M14 × 1.5	16	11	38	27
1BM–08–16	G1/2" × 14	M16 × 1.5	16	12	39	27
1BM–08–18	G1/2" × 14	M18 × 1.5	16	12	39	27
1BM–08–20	G1/2" × 14	M20 × 1.5	16	14	41	27
1BM–08–22	G1/2" × 14	M22 × 1.5	16	14	41	27
1BM–08–24	G1/2" × 14	M24 × 1.5	16	14	41	30
1BM–08–26	G1/2" × 14	M26 × 1.5	16	16	44	32
1BM–08–27D	G1/2" × 14	M27 × 1.5	16	16	44	36
1BM–08–30	G1/2" × 14	M30 × 1.5	16	18	45	30
1BM–10–22	G5/8" × 14	M22 × 1.5	17.5	14	42.5	32
1BM–10–26	G5/8" × 14	M26 × 1.5	17.5	16	45.5	32
1BM–12–18	G3/4" × 14	M18 × 1.5	18.5	12	42.5	32
1BM–12–20	G3/4" × 14	M20 × 1.5	18.5	14	44.5	32
1BM–12–22	G3/4" × 14	M22 × 1.5	18.5	14	44.5	32
1BM–12–24	G3/4" × 14	M24 × 1.5	18.5	14	44.5	32
1BM–12–26	G3/4" × 14	M26 × 1.5	18.5	16	46.5	32
1BM–12–27	G3/4" × 14	M27 × 2	18.5	16	46.5	32
1BM–12–27D	G3/4" × 14	M27 × 1.5	18.5	16	46.5	32
1BM–12–30	G3/4" × 14	M30 × 2	18.5	18	47.5	36
1BM–12–30D	G3/4" × 14	M30 × 1.5	18.5	18	47.5	36
1BM–16–14	G1" × 11	M14 × 1.5	20.5	11	45.5	41
1BM–16–22	G1" × 11	M22 × 1.5	20.5	14	48.5	41



1BO

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / SAE O–RING BOSS L–SERIES ISO 11926–3

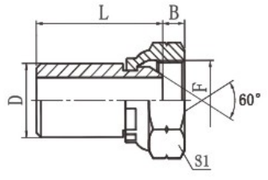
PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1BO–04	G1/4" × 19	7/16" × 20	O904	12	9.1	29.5	19
1BO–04–05	G1/4" × 19	1/2" × 20	O905	12	9.1	29.5	19
1BO–04–06	G1/4" × 19	9/16" × 18	O906	12	9.9	32	19
1BO–04–08	G1/4" × 19	3/4" × 16	O908	12	11.1	31	22
1BO–06	G3/8" × 19	9/16" × 18	O906	13.5	9.9	33.5	22
1BO–06–04	G3/8" × 19	7/16" × 20	O904	13.5	9.1	33	22
1BO–06–08	G3/8" × 19	3/4" × 16	O908	13.5	11.1	36	24
1BO–06–10	G3/8" × 19	7/8" × 14	O910	13.5	12.7	39.5	27
1BO–08	G1/2" × 14	3/4" × 16	O908	16	11.1	38	27
1BO–08–06	G1/2" × 14	9/16" × 18	O906	16	9.9	36	27
1BO–08–10	G1/2" × 14	7/8" × 14	O910	16	12.7	42	27
1BO–08–12	G1/2" × 14	1.1/16" × 12	O912	16	15.1	42.5	36
1BO–10	G5/8" × 14	7/8" × 14	O910	17.5	12.7	43.5	30
1BO–10–08	G5/8" × 14	3/4" × 16	O908	17.5	11.1	41.5	30
1BO–10–12	G5/8" × 14	1.1/16" × 12	O912	17.5	15.1	47	34
1BO–12	G3/4" × 14	1.1/16" × 12	O912	18.5	15.1	48	34
1BO–12–08	G3/4" × 14	3/4" × 16	O908	18.5	11.1	40.5	32
1BO–12–10	G3/4" × 14	7/8" × 14	O910	18.5	12.7	45.5	32
1BO–12–14	G3/4" × 14	1.3/16" × 12	O914	18.5	15.1	48	38
1BO–12–16	G3/4" × 14	1.5/16" × 12	O916	18.5	15.1	50.7	41
1BO–16	G1" × 11	1.5/16" × 12	O916	20.5	15.1	52.6	41
1BO–16–10	G1" × 11	7/8" × 14	O910	20.5	12.7	49.5	41
1BO–16–12	G1" × 11	1.1/16" × 12	O912	20.5	15.1	52	41
1BO–16–14	G1" × 11	1.3/16" × 12	O914	20.5	15.1	52	41
1BO–16–20	G1" × 11	1.5/8" × 12	O920	20.5	15.1	54.7	50
1BO–20	G1.1/4" × 11	1.5/8" × 12	O920	20.5	15.1	54.7	50
1BO–20–16	G1.1/4" × 11	1.5/16" × 12	O916	20.5	15.1	54.7	50
1BO–24	G1.1/2" × 11	1.7/8" × 12	O924	23	15.1	57	55



1BW

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / BUTT-WELD TUBE

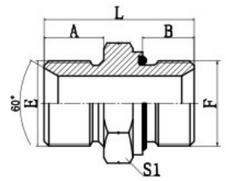
PART NO.	THREAD	TUBE O.D.	DIMENSIONS				
	E		A	B	D	L	S1
1BW-04-10	G1/4" × 19	10	12	7	10	25	19
1BW-06-14	G3/8" × 19	14	13.5	8	14	29.5	22
1BW-08-18	G1/2" × 14	18	16	10	18	36	27
1BW-12-22	G3/4" × 14	22	18.5	10	22	39.5	32
1BW-12-28	G3/4" × 14	28	18.5	12	28	41.5	32
1BW-16-28	G1" × 11	28	20.5	12	28	45.5	41
1BW-16-30	G1" × 11	30	20.5	12	30	45.5	41
1BW-20-34	G1.1/4" × 11	34	20.5	14	34	49.5	50
1BW-20-36	G1.1/4" × 11	36	20.5	14	36	49.5	50
1BW-20-42	G1.1/4" × 11	42	20.5	16	42	51.5	50
1BW-24-36	G1.1/2" × 11	36	23	14	36	52	55
1BW-24-42	G1.1/2" × 11	42	23	16	42	54	55
1BW-24-50	G1.1/2" × 11	50	23	16	50	54	55



2BW

BUTT-WELD TUBE / BSP FEMALE 60° CONE

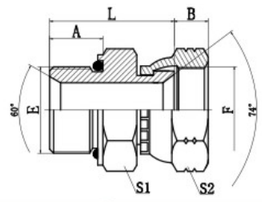
PART NO.	THREAD	TUBE O.D.	DIMENSIONS			
	F		B	D	L	S1
2BW-10-04	G1/4" × 19	10	5.5	10	35	19
2BW-14-06	G3/8" × 19	14	6.3	14	40	22
2BW-18-08	G1/2" × 14	18	7.5	18	50	27
2BW-22-08	G1/2" × 14	22	7.5	22	50	27
2BW-22-12	G3/4" × 14	22	10.9	22	62	32
2BW-28-16	G1" × 11	28	11.7	28	65	41
2BW-34-20	G1.1/4" × 11	34	11	34	68	50
2BW-42-20	G1.1/4" × 11	42	11	42	59.5	50
2BW-50-24	G1.1/2" × 11	50	13	50	57.5	55



1B-WD

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / BSP MALE CAPTIVE SEAL

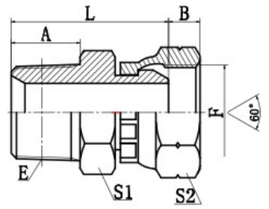
PART NO.	THREAD		O-RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1B-04WD	G1/4" × 19	G1/4" × 19	WD-B04	12	12	32	19
1B-04-06WD	G1/4" × 19	G3/8" × 19	WD-B06	12	12	34.5	22
1B-04-08WD	G1/4" × 19	G1/2" × 14	WD-B08	12	14	39	27
1B-06WD	G3/8" × 19	G3/8" × 19	WD-B06	13.5	12	34	22
1B-06-08WD	G3/8" × 19	G1/2" × 14	WD-B08	13.5	14	40.5	27
1B-08WD	G1/2" × 14	G1/2" × 14	WD-B08	16	14	43	27
1B-08-12WD	G1/2" × 14	G3/4" × 14	WD-B12	16	16	46	32
1B-12WD	G3/4" × 14	G3/4" × 14	WD-B12	18.5	16	46.5	32
1B-12-16WD	G3/4" × 14	G1" × 11	WD-B16	18.5	18	52.5	41
1B-16WD	G1" × 11	G1" × 11	WD-B16	20.5	18	54.5	41
1B-16-20WD	G1" × 11	G1.1/4" × 11	WD-B20	20.5	20	58.5	50
1B-20WD	G1.1/4" × 11	G1.1/4" × 11	WD-B20	20.5	20	58.5	50



2BJ-WD

BSP MALE CAPTIVE SEAL / JIC FEMALE 74° SEAT

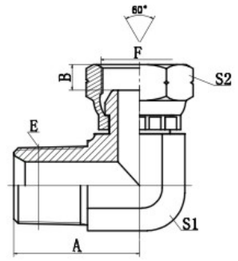
PART NO.	THREAD		CAPTIVE	DIMENSIONS				
	E	F	E	A	B	L	S1	S2
2BJ-02-04WD	G1/8" × 28	7/16" × 20	WD-B02	8	9	23.5	14	15
2BJ-04-05WD	G1/4" × 19	1/2" × 20	WD-B04	12	9.5	28.5	19	17
2BJ-04-06WD	G1/4" × 19	9/16" × 18	WD-B04	12	10.5	28.5	19	19
2BJ-04-08WD	G1/4" × 19	3/4" × 16	WD-B04	12	11	30.5	19	24
2BJ-04WD	G1/4" × 19	7/16" × 20	WD-B04	12	9	28	19	15
2BJ-06-08WD	G3/8" × 19	3/4" × 16	WD-B06	12	11	33	22	24
2BJ-06WD	G3/8" × 19	9/16" × 18	WD-B06	12	10.5	31	22	19
2BJ-08-06WD	G1/2" × 14	9/16" × 18	WD-B08	14	10.5	33.5	27	19
2BJ-08-10WD	G1/2" × 14	7/8" × 14	WD-B08	14	13	38	27	27
2BJ-08WD	G1/2" × 14	3/4" × 16	WD-B08	14	11	37.5	27	24
2BJ-12-16WD	G3/4" × 14	1.5/16" × 12	WD-B12	16	16	42.5	32	41
2BJ-12WD	G3/4" × 14	1.1/16" × 12	WD-B12	16	15	42.5	32	32
2BJ-16WD	G1" × 11	1.5/16" × 12	WD-B16	18	16	46.5	41	41
2BJ-20-16WD	G1.1/4" × 11	1.5/16" × 12	WD-B20	20	16	50.5	50	41
2BJ-20WD	G1.1/4" × 11	1.5/8" × 12	WD-B20	20	17	54.5	50	50
2BJ-24WD	G1.1/2" × 11	1.7/8" × 12	WD-B24	22	20	58.5	55	55



2NB

NPT MALE / BSP FEMALE 60° CONE

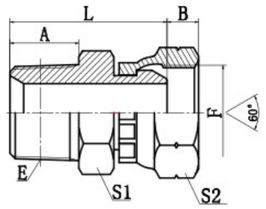
PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
2NB–02	Z1/8" × 27	G1/8" × 28	10.5	5.5	25.5	12	14
2NB–02–04	Z1/8" × 27	G1/4" × 19	10.5	5.5	27	14	19
2NB–04	Z1/4" × 18	G1/4" × 19	15	5.5	31	17	19
2NB–04–06	Z1/4" × 18	G3/8" × 19	15	6.3	32.5	17	22
2NB–04–08	Z1/4" × 18	G1/2" × 14	15	7.5	35	19	27
2NB–06	Z3/8" × 18	G3/8" × 19	16	6.3	33.5	19	22
2NB–06–08	Z3/8" × 18	G1/2" × 14	16	7.5	36	19	27
2NB–08	Z1/2" × 14	G1/2" × 14	19.5	7.5	41	22	27
2NB–08–06	Z1/2" × 14	G3/8" × 19	19.5	6.3	39.5	24	24
2NB–08–12	Z1/2" × 14	G3/4" × 14	19.5	10.9	44.5	27	32
2NB–12	Z3/4" × 14	G3/4" × 14	19.5	10.9	44.5	30	32
2NB–12–16	Z3/4" × 14	G1" × 11	19.5	11.7	46.5	32	41
2NB–16	Z1" × 11.5	G1" × 11	25.5	11.7	52.5	36	41
2NB–16–20	Z1" × 11.5	G1.1/4" × 11	25.5	11	59.5	41	50
2NB–20	Z1.1/4" × 11.5	G1.1/4" × 11	26.5	11	60.4	46	50
2NB–24	Z1.1/2" × 11.5	G1.1/2" × 11	27.5	13	62	50	55
2NB–32	Z2" × 11.5	G2" × 11	27.5	20	65.4	55	70



2NB9

90° ELBOW NPT MALE / BSP FEMALE 60° CONE

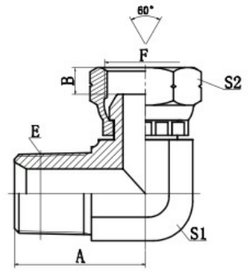
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
2NB9–02	Z1/8" × 27	G1/8" × 28	21	5.5	11	14
2NB9–04	Z1/4" × 18	G1/4" × 19	25.5	5.5	14	19
2NB9–04–06	Z1/4" × 18	G3/8" × 19	25.5	6.3	14	22
2NB9–06	Z3/8" × 18	G3/8" × 19	31	6.3	19	22
2NB9–06–04	Z3/8" × 18	G1/4" × 19	31	5.5	19	19
2NB9–06–08	Z3/8" × 18	G1/2" × 14	31	7.5	19	27
2NB9–08	Z1/2" × 14	G1/2" × 14	37.3	7.5	22	27
2NB9–08–06	Z1/2" × 14	G3/8" × 19	36.7	6.3	22	22
2NB9–12	Z3/4" × 14	G3/4" × 14	43.5	10.9	27	32
2NB9–12–08	Z3/4" × 14	G1/2" × 14	45	7.5	27	27
2NB9–12–16	Z3/4" × 14	G1" × 11	45	11.7	30	41
2NB9–16	Z1" × 11.5	G1" × 11	50	11.7	33	41
2NB9–16–12	Z1" × 11.5	G3/4" × 14	50	10.9	33	32
2NB9–20	Z1.1/4" × 11.5	G1.1/4" × 11	54.5	11	41	50
2NB9–24	Z1.1/2" × 11.5	G1.1/2" × 11	59	13	48	55
2NB9–32	Z2" × 11.5	G2" × 11	73.5	16	63	70



2TB–SP

BSPT MALE / BSP FEMALE 60° CONE

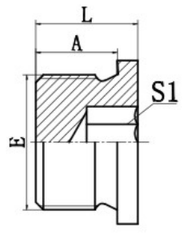
PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
2TB–02SP	R1/8" × 28	G1/8" × 28	10	5.5	25	12	14
2TB–04SP	R1/4" × 19	G1/4" × 19	14.5	5.5	31.5	17	19
2TB–06SP	R3/8" × 19	G3/8" × 19	15	6.3	33	19	22
2TB–06–04SP	R3/8" × 19	G1/4" × 19	15	5.5	32	19	19
2TB–06–08SP	R3/8" × 19	G1/2" × 14	15	7.5	35	19	27
2TB–08SP	R1/2" × 14	G1/2" × 14	20	7.5	42	22	27
2TB–08–06SP	R1/2" × 14	G3/8" × 19	20	6.3	40	22	22
2TB–08–12SP	R1/2" × 14	G3/4" × 14	20	10.9	45	27	32
2TB–12SP	R3/4" × 14	G3/4" × 14	20	10.9	45	30	32
2TB–12–08SP	R3/4" × 14	G1/2" × 14	20	7.5	44	30	27
2TB–12–16SP	R3/4" × 14	G1" × 11	20	11.7	47	32	41
2TB–16SP	R1" × 11	G1" × 11	25.5	11.7	52.5	36	41
2TB–16–12SP	R1" × 11	G3/4" × 14	25.5	10.9	51.5	36	32
2TB–20–16SP	R1.1/4" × 11	G1" × 11	26.5	11.7	55.5	46	41
2TB–20SP	R1.1/4" × 11	G1.1/4" × 11	26.5	11	59	46	50
2TB–24SP	R1.1/2" × 11	G1.1/2" × 11	26.5	13	61.5	50	55
2TB–32SP	R2" × 11	G2" × 11	30	16	68	65	70



2TB9–SP

90° ELBOW BSPT MALE / BSP FEMALE 60° CONE

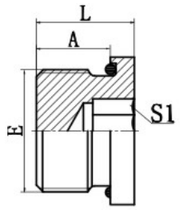
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
2TB9–02SP	R1/8" × 28	G1/8" × 28	21	5.5	11	14
2TB9–04SP	R1/4" × 19	G1/4" × 19	25.5	5.5	14	19
2TB9–06SP	R3/8" × 19	G3/8" × 19	28.5	6.3	16	22
2TB9–06–08SP	R3/8" × 19	G1/2" × 14	31	7.5	19	27
2TB9–08–06SP	R1/2" × 14	G3/8" × 19	36	6.3	22	22
2TB9–08SP	R1/2" × 14	G1/2" × 14	36	7.5	22	27
2TB9–08–12SP	R1/2" × 14	G3/4" × 14	37	10.9	24	32
2TB9–12–08SP	R3/4" × 14	G1/2" × 14	43.5	7.5	27	27
2TB9–12SP	R3/4" × 14	G3/4" × 14	43.5	10.9	27	32
2TB9–16SP	R1" × 11	G1" × 11	50	11.7	33	41
2TB9–20SP	R1.1/4" × 11	G1.1/4" × 11	58	11	41	50
2TB9–24SP	R1.1/2" × 11	G1.1/2" × 11	62.5	13	48	55



4BN

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL HOLLOW HEX PLUG

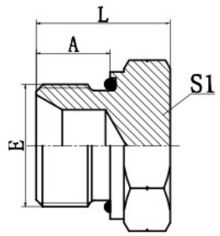
PART NO.	THREAD	DIMENSIONS		
	E	A	L	S1
4BN–02	G1/8" × 28	8	11	5
4BN–04	G1/4" × 19	12	15	6
4BN–06	G3/8" × 19	12	15	8
4BN–08	G1/2" × 14	14	18	10
4BN–12	G3/4" × 14	16	20	12
4BN–16	G1" × 11	16	21	17



4BN–WD

BSP MALE CAPTIVE SEAL HOLLOW HEX PLUG

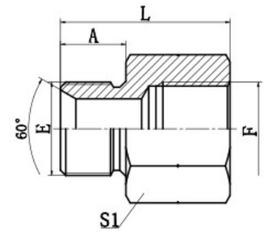
PART NO.	THREAD	CAPTIVE	DIMENSIONS		
	E	E	A	L	S1
4BN–02WD	G1/8" × 28	WD–B02	8	12.2	5
4BN–04WD	G1/4" × 19	WD–B04	12	17.2	6
4BN–06WD	G3/8" × 19	WD–B06	12	17.2	8
4BN–08WD	G1/2" × 14	WD–B08	14	19.2	10
4BN–12WD	G3/4" × 14	WD–B12	16	21.2	12
4BN–16WD	G1" × 11	WD–B16	16	22.8	17
4BN–20WD	G1.1/4" × 11	WD–B20	20	26.8	22
4BN–24WD	G1.1/2" × 11	WD–B24	22	28.8	24



4B–WD

BSP MALE CAPTIVE SEAL PLUG

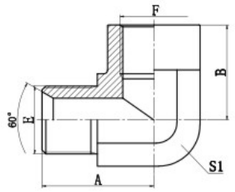
PART NO.	THREAD	CAPTIVE	DIMENSIONS		
	E	E	A	L	S1
4B–02WD	G1/8" × 28	WD–B02	8	15.5	14
4B–04WD	G1/4" × 19	WD–B04	12	19.6	19
4B–06WD	G3/8" × 19	WD–B06	12	22.5	22
4B–08WD	G1/2" × 14	WD–B08	14	25	27
4B–12WD	G3/4" × 14	WD–B12	16	29	32
4B–16WD	G1" × 11	WD–B16	16	35	41
4B–20WD	G1.1/4" × 11	WD–B20	20	37	50
4B–24WD	G1.1/2" × 11	WD–B24	22	40	55



5B

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / BSP FEMALE ISO 1179

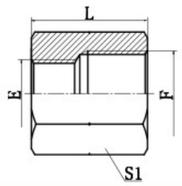
PART NO.	THREAD		DIMENSIONS		
	E	F	A	L	S1
5B–02–04	G1/8" × 28	G1/4" × 19	11	29	19
5B–04–02	G1/4" × 19	G1/8" × 28	12	28	19
5B–04	G1/4" × 19	G1/4" × 19	12	33	19
5B–04–06	G1/4" × 19	G3/8" × 19	12	36	22
5B–06–04	G3/8" × 19	G1/4" × 19	13.5	33.5	22
5B–06	G3/8" × 19	G3/8" × 19	13.5	37.5	22
5B–06–08	G3/8" × 19	G1/2" × 14	13.5	42.5	27
5B–08–06	G1/2" × 14	G3/8" × 19	16	38	27
5B–08	G1/2" × 14	G1/2" × 14	16	45	27
5B–08–10	G1/2" × 14	G5/8" × 14	16	46	30
5B–08–12	G1/2" × 14	G3/4" × 14	16	44.5	36
5B–10–08	G5/8" × 14	G1/2" × 14	16	41.5	30
5B–12–08	G3/4" × 14	G1/2" × 14	18.5	44.5	32
5B–12	G3/4" × 14	G3/4" × 14	18.5	48	36
5B–12–16	G3/4" × 14	G1" × 11	18.5	53.5	41
5B–16–12	G1" × 11	G3/4" × 14	20.5	47.5	41
5B–16	G1" × 11	G1" × 11	20.5	55.5	41
5B–16–20	G1" × 11	G1.1/4" × 11	20.5	56.5	50
5B–20–16	G1.1/4" × 11	G1" × 11	20.5	49	50
5B–20	G1.1/4" × 11	G1.1/4" × 11	20.5	52.5	50
5B–20–24	G1.1/4" × 11	G1.1/2" × 11	20.5	57.5	55
5B–24	G1.1/2" × 11	G1.1/2" × 11	23	58	55
5B–32–24	G2" × 11	G1.1/2" × 11	26	59.5	70
5B–32	G2" × 11	G2" × 11	26	63	70



5B9

90° ELBOW BSP MALE 60° SEAT / BSP FEMALE ISO 1179

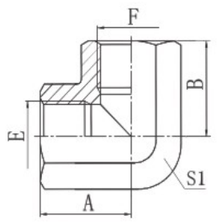
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
5B9–02	G1/8" × 28	G1/8" × 28	22.5	20	16
5B9–04	G1/4" × 19	G1/4" × 19	25.5	22	19
5B9–06	G3/8" × 19	G3/8" × 19	30.5	26	24
5B9–08	G1/2" × 14	G1/2" × 14	39	31	30
5B9–12	G3/4" × 14	G3/4" × 14	43.5	37	33
5B9–16	G1" × 11	G1" × 11	50.5	43	41
5B9–20	G1.1/4" × 11	G1.1/4" × 11	55	46	50



7B

BSP FEMALE ISO 1179

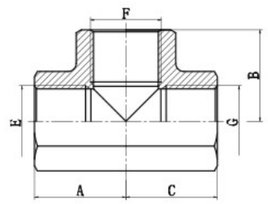
PART NO.	THREAD		DIMENSIONS	
	E	F	L	S1
7B–02	G1/8" × 28	G1/8" × 28	22	14
7B–02–04	G1/8" × 28	G1/4" × 19	24	19
7B–04	G1/4" × 19	G1/4" × 19	24	19
7B–04–06	G1/4" × 19	G3/8" × 19	29	22
7B–06	G3/8" × 19	G3/8" × 19	26	22
7B–06–08	G3/8" × 19	G1/2" × 14	33	27
7B–08	G1/2" × 14	G1/2" × 14	32	27
7B–08–10	G1/2" × 14	G5/8" × 14	36	30
7B–10	G5/8" × 14	G5/8" × 14	36	30
7B–12	G3/4" × 14	G3/4" × 14	36	32
7B–12–16	G3/4" × 14	G1" × 11	43	41
7B–16	G1" × 11	G1" × 11	40	41
7B–16–20	G1" × 11	G1.1/4" × 11	46	50
7B–20	G1.1/4" × 11	G1.1/4" × 11	44	50
7B–20–24	G1.1/4" × 11	G1.1/2" × 11	48	55
7B–24	G1.1/2" × 11	G1.1/2" × 11	45	55
7B–24–32	G1.1/2" × 11	G2" × 11	56	70
7B–32	G2" × 11	G2" × 11	54	70



7B9–PK

90° ELBOW BSP FEMALE ISO 1179

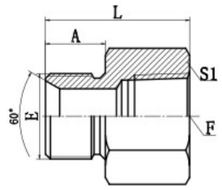
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
7B9–02PK	G1/8" × 28	G1/8" × 28	20	20	16
7B9–04PK	G1/4" × 19	G1/4" × 19	22.5	22.5	19
7B9–06PK	G3/8" × 19	G3/8" × 19	26	26	24
7B9–08PK	G1/2" × 14	G1/2" × 14	31	31	27
7B9–12PK	G3/4" × 14	G3/4" × 14	34	34	33
7B9–16PK	G1" × 11	G1" × 11	42	42	41
7B9–20PK	G1.1/4" × 11	G1.1/4" × 11	48	48	50
7B9–24PK	G1.1/2" × 11	G1.1/2" × 11	53	53	60
7B9–32PK	G2" × 11	G2" × 11	62	62	70



GB–PK

BSP FEMALE ISO 1179 TEE

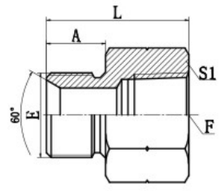
PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
GB–02PK	G1/8" × 28	G1/8" × 28	G1/8" × 28	20	20	20	16
GB–04PK	G1/4" × 19	G1/4" × 19	G1/4" × 19	22.5	22.5	22.5	19
GB–06PK	G3/8" × 19	G3/8" × 19	G3/8" × 19	26	26	26	24
GB–08PK	G1/2" × 14	G1/2" × 14	G1/2" × 14	31	31	31	27
GB–12PK	G3/4" × 14	G3/4" × 14	G3/4" × 14	34	34	34	33
GB–16PK	G1" × 11	G1" × 11	G1" × 11	42	42	42	41
GB–20PK	G1.1/4" × 11	G1.1/4" × 11	G1.1/4" × 11	48	48	48	50
GB–24PK	G1.1/2" × 11	G1.1/2" × 11	G1.1/2" × 11	53	53	53	60
GB–32PK	G2" × 11	G2" × 11	G2" × 11	62	62	62	70



5BN

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / NPT FEMALE

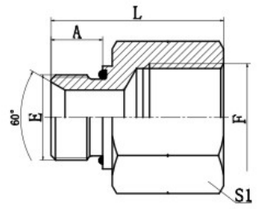
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
5BN–04	G1/4" × 19	Z1/4" × 18	12	31	19
5BN–06	G3/8" × 19	Z3/8" × 18	13.5	33	22
5BN–08	G1/2" × 14	Z1/2" × 14	16	42	30
5BN–12	G3/4" × 14	Z3/4" × 14	18.5	44.5	36
5BN–16	G1" × 11	Z1" × 11.5	20.5	52	41
5BN–20	G1.1/4" × 11	Z1.1/4" × 11.5	20.5	55	50
5BN–24	G1.1/2" × 11	Z1.1/2" × 11.5	23	60	60
5BN–32	G2" × 11	Z2" × 11.5	25.5	62	70



5BT

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / BSPT FEMALE

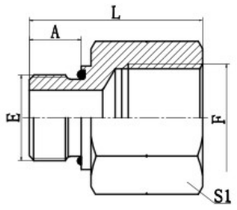
PART NO.	THREAD		DIMENSIONS		
	E	F	A	L	S1
5BT–04–02	G1/4" × 19	Rc1/8" × 28	12	28	19
5BT–04	G1/4" × 19	Rc1/4" × 19	12	33.5	19
5BT–04–06	G1/4" × 19	Rc3/8" × 19	12	34	22
5BT–04–08	G1/4" × 19	Rc1/2" × 14	12	41	27
5BT–06–04	G3/8" × 19	Rc1/4" × 19	13.5	35	22
5BT–06	G3/8" × 19	Rc3/8" × 19	13.5	34	22
5BT–08–06	G1/2" × 14	Rc3/8" × 19	16	39.5	27
5BT–08	G1/2" × 14	Rc1/2" × 14	16	45	27
5BT–10–08	G5/8" × 14	Rc1/2" × 14	17.5	43.5	30
5BT–12–08	G3/4" × 14	Rc1/2" × 14	18.5	47.5	32
5BT–12	G3/4" × 14	Rc3/4" × 14	18.5	49	36
5BT–16–12	G1" × 11	Rc3/4" × 14	20.5	47.5	41
5BT–16	G1" × 11	Rc1" × 11	20.5	57	41
5BT–20	G1.1/" × 11	Rc1.1/4" × 11	20.5	58.5	50
5BT–24	G1.1/2" × 11	Rc1.1/2" × 11	23	61	55



5B–WD

BSP MALE CAPTIVE SEAL / BSP FEMALE ISO 1179

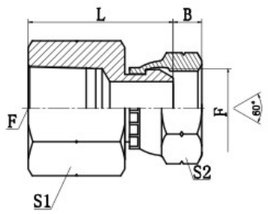
PART NO.	THREAD		CAPTIVE	DIMENSIONS		
	E	F	E	A	L	S1
5B–02–04WD	G1/8" × 28	G1/4" × 19	WD–B02	8	30.5	19
5B–02–06WD	G1/8" × 28	G3/8" × 19	WD–B02	8	33.5	22
5B–04–02WD	G1/4" × 19	G1/8" × 28	WD–B04	12	31.5	19
5B–04–06WD	G1/4" × 19	G3/8" × 19	WD–B04	12	37	22
5B–04–08WD	G1/4" × 19	G1/2" × 14	WD–B04	12	43	27
5B–06–02WD	G3/8" × 19	G1/8" × 28	WD–B06	12	35.5	22
5B–06–04WD	G3/8" × 19	G1/4" × 19	WD–B06	12	37.5	22
5B–06–08WD	G3/8" × 19	G1/2" × 14	WD–B06	12	43.5	27
5B–08–04WD	G1/2" × 14	G1/4" × 19	WD–B08	14	38	27
5B–08–06WD	G1/2" × 14	G3/8" × 19	WD–B08	14	41	27
5B–08–12WD	G1/2" × 14	G3/4" × 14	WD–B08	14	46	36
5B–12–08WD	G3/4" × 14	G1/2" × 14	WD–B12	16	47.5	32
5B–12–16WD	G3/4" × 14	G1" × 11	WD–B12	16	53.5	41
5B–12–20WD	G3/4" × 14	G1.1/4" × 11	WD–B12	16	54.5	50
5B–16–12WD	G1" × 11	G3/4" × 14	WD–B16	18	50.5	41
5B–16–20WD	G1" × 11	G1.1/4" × 11	WD–B16	18	56.5	50
5B–20–16WD	G1.1/4" × 11	G1" × 11	WD–B20	20	57.5	50
5B–20–24WD	G1.1/4" × 11	G1.1/2" × 11	WD–B20	20	59.5	55
5B–20–32WD	G1.1/4" × 11	G2" × 11	WD–B20	20	64	70
5B–24–16WD	G1.1/2" × 11	G1" × 11	WD–B24	22	59.5	55
5B–24–20WD	G1.1/2" × 11	G1.1/4" × 11	WD–B24	22	60	55
5B–24–32WD	G1.1/2" × 11	G2" × 11	WD–B24	22	66	70



5GB

BSP MALE O-RING / BSP FEMALE ISO 1179

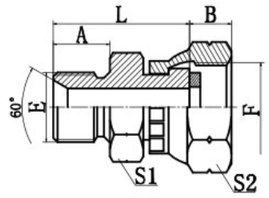
PART NO.	THREAD		CAPTIVE	DIMENSIONS		
	E	F	E	A	L	S1
5GB-04	G1/4" × 19	G1/4" × 19	O111	11	32	19
5GB-04-06	G1/4" × 19	G3/8" × 19	O111	11	35	22
5GB-06	G3/8" × 19	G3/8" × 19	O113	11.5	36	22
5GB-06-08	G3/8" × 19	G1/2" × 14	O113	11.5	41	27
5GB-08	G1/2" × 14	G1/2" × 14	O115	14	41	27
5GB-08-12	G1/2" × 14	G3/4" × 14	O115	14	46	36
5GB-12	G3/4" × 14	G3/4" × 14	O119	15.5	46	36
5GB-12-16	G3/4" × 14	G1" × 11	O119	15.5	50	41
5GB-16-12	G1" × 11	G3/4" × 14	O217	18	47	41
5GB-16	G1" × 11	G1" × 11	O217	18	52.5	41



7TB-S

BSPT FEMALE / BSP FEMALE 60° CONE

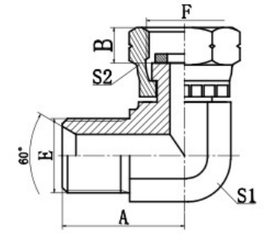
PART NO.	THREAD		DIMENSIONS			
	E	F	B	L	S1	S2
7TB-02-04S	Rc1/8" × 28	G1/4" × 19	5.5	26.5	17	19
7TB-04S	Rc1/4" × 19	G1/4" × 19	5.5	31	19	19
7TB-04-06S	Rc1/4" × 19	G3/8" × 19	6.3	31	19	22
7TB-06S	Rc3/8" × 19	G3/8" × 19	6.3	35.2	22	22
7TB-06-08S	Rc3/8" × 19	G1/2" × 14	7.5	37	22	27
7TB-08-06S	Rc1/2" × 14	G3/8" × 19	6.3	40.5	27	22
7TB-08S	Rc1/2" × 14	G1/2" × 14	7.5	42	27	27
7TB-12S	Rc3/4" × 14	G3/4" × 14	10.9	45.1	36	32
7TB-16S	Rc1" × 11	G1" × 11	11.7	51.3	41	41



2B-G

BSP MALE 60° SEAT /
BSP FEMALE PRESSURE GAUGE CONNECTORS

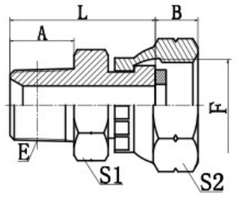
PART NO.	THREAD		COPPER WASHER	DIMENSIONS				
	E	F	F	A	B	L	S1	S2
2B-02-04G	G1/8" × 28	G1/4" × 19	DP-B04G	10	14.5	24.5	14	19
2B-04G	G1/4" × 19	G1/4" × 19	DP-B04G	12	14.5	26.5	19	19
2B-04-08G	G1/4" × 19	G1/2" × 14	DP-B08G	12	20	29	19	27
2B-06-04G	G3/8" × 19	G1/4" × 19	DP-B04G	13.5	14.5	30	22	19
2B-08-04G	G1/2" × 14	G1/4" × 19	DP-B04G	16	14.5	34.5	27	19
2B-08G	G1/2" × 14	G1/2" × 14	DP-B08G	16	20	37	27	27



2B9-G

90° ELBOW BSP MALE 60° SEAT / BSP FEMALE
PRESSURE GAUGE CONNECTORS

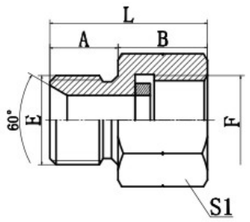
PART NO.	THREAD		COPPER WASHER	DIMENSIONS			
	E	F	F	A	B	S1	S2
2B9-04G	G1/4" × 19	G1/4" × 19	DP-B04G	24.5	14.5	14	19
2B9-08G	G1/2" × 14	G1/2" × 14	DP-B08G	24.5	20	22	27



2TB–G/SP

BSPT MALE / BSP FEMALE PRESSURE GAUGE CONNECTORS

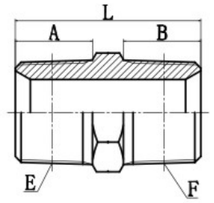
PART NO.	THREAD		COPPER WASHER	DIMENSIONS				
	E	F	F	A	B	L	S1	S2
2TB–02–04G/SP	R1/8" × 28	G1/4" × 19	DP–B04G	10	14.5	24.5	12	19
2TB–04G/SP	R1/4" × 19	G1/4" × 19	DP–B04G	14.5	14.5	29	17	19
2TB–04–08G/SP	R1/4" × 19	G1/2" × 14	DP–B08G	14.5	20	31.5	19	27
2TB–06–04G/SP	R3/8" × 19	G1/4" × 19	DP–B04G	15	14.5	29.5	19	19
2TB–08–04G/SP	R1/2" × 14	G1/4" × 19	DP–B04G	20	14.5	36.5	22	19
2TB–08G/SP	R1/2" × 14	G1/2" × 14	DP–B08G	20	20	39	22	27



5B–G

BSP MALE DOUBLE USE FOR 60° SEAT OR BONDED SEAL / BSP FEMALE PRESSURE GAUGE CONNECTORS

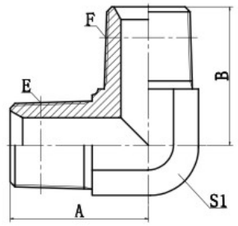
PART NO.	THREAD		COPPER WASHER	DIMENSIONS			
	E	F	F	A	B	L	S1
5B–04G	G1/4" × 19	G1/4" × 19	DP–B04G	12	11	26	19
5B–06–04G	G3/8" × 19	G1/4" × 19	DP–B04G	13.5	11	28.5	22
5B–06–08G	G3/8" × 19	G1/2" × 14	DP–B08G	13.5	17	35.5	27
5B–08G	G1/2" × 14	G1/2" × 14	DP–B08G	16	17	37	27



1T–SP

BSPT MALE

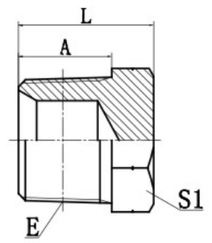
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1T–02SP	R1/8" × 28	R1/8" × 28	10	10	26	12
1T–02–04SP	R1/8" × 28	R1/4" × 19	10	14.5	30.5	14
1T–02–06SP	R1/8" × 28	R3/8" × 19	10	15	31	17
1T–04SP	R1/4" × 19	R1/4" × 19	14.5	14.5	34	14
1T–04–06SP	R1/4" × 19	R3/8" × 19	14.5	15	35	17
1T–04–08SP	R1/4" × 19	R1/2" × 14	15	20	43	22
1T–06SP	R3/8" × 19	R3/8" × 19	15	15	36	17
1T–06–08SP	R3/8" × 19	R1/2" × 14	15	20	43	22
1T–08SP	R1/2" × 14	R1/2" × 14	20	20	46	22
1T–08–12SP	R1/2" × 14	R3/4" × 14	20	20	48	27
1T–12SP	R3/4" × 14	R3/4" × 14	20	20	48	27
1T–12–16SP	R3/4" × 14	R1" × 11	20	25.5	55.5	36
1T–16SP	R1" × 11	R1" × 11	25.5	25.5	61	36
1T–16–20SP	R1" × 11	R1.1/4" × 11	25.5	26.5	64.5	46
1T–20SP	R1.1/4" × 11	R1.1/4" × 11	26.5	26.5	65.5	46
1T–20–24SP	R1.1/4" × 11	R1.1/2" × 11	26.5	26.5	67	50
1T–24SP	R1.1/2" × 11	R1.1/2" × 11	26.5	26.5	67	50
1T–24–32SP	R1.1/2" × 11	R2" × 11	26.5	30	71.5	65
1T–32SP	R2" × 11	R2" × 11	30	30	75	65



1T9–SP

90° ELBOW BSPT MALE

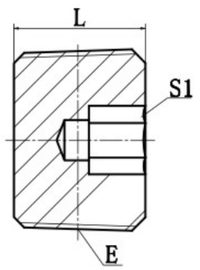
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1T9–02SP	R1/8" × 28	R1/8" × 28	21	21	11
1T9–02–04SP	R1/8" × 28	R1/4" × 19	23.5	25.5	14
1T9–04SP	R1/4" × 19	R1/4" × 19	25.5	25.5	14
1T9–04–06SP	R1/4" × 19	R3/8" × 19	26.5	28.5	16
1T9–04–08SP	R1/4" × 19	R1/2" × 14	30.5	36	22
1T9–06SP	R3/8" × 19	R3/8" × 19	28.5	28.5	16
1T9–06–08SP	R3/8" × 19	R1/2" × 14	32.5	36	22
1T9–08SP	R1/2" × 14	R1/2" × 14	36	36	22
1T9–08–12SP	R1/2" × 14	R3/4" × 14	39.5	43.5	27
1T9–12SP	R3/4" × 14	R3/4" × 14	43.5	43.5	27
1T9–12–16SP	R3/4" × 14	R1" × 11	48	50	33
1T9–16SP	R1" × 11	R1" × 11	50	50	33
1T9–16–20SP	R1" × 11	R1.1/4" × 11	56.5	57.5	41
1T9–20SP	R1.1/4" × 11	R1.1/4" × 11	57.5	57.5	41
1T9–24SP	R1.1/2" × 11	R1.1/2" × 11	62.5	62.5	48
1T9–32SP	R2" × 11	R2" × 11	68	75	63



4T–SP

BSPT MALE PLUG

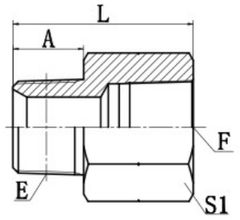
PART NO.	THREAD	DIMENSIONS		
	E	A	L	S1
4T–02SP	R1/8" × 28	10	16	12
4T–04SP	R1/4" × 19	14.5	20	14
4T–06SP	R3/8" × 19	15	21	17
4T–08SP	R1/2" × 14	20	27	22
4T–12SP	R3/4" × 14	20	29	27
4T–16SP	R1" × 11	25.5	36.5	26
4T–20SP	R1.1/4" × 11	26.5	38.5	46
4T–24SP	R1.1/2" × 11	26.5	42	50
4T–32SP	R2" × 11	30	47	65



4TN

BSPT MALE HOLLOW HEX PLUG

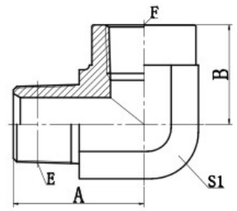
PART NO.	THREAD	DIMENSIONS	
	E	L	S1
4TN–02	R1/8" × 28	8	5
4TN–04	R1/4" × 19	10	6
4TN–06	R3/8" × 19	12	8
4TN–08	R1/2" × 14	15	10
4TN–12	R3/4" × 14	18	12
4TN–16	R1" × 11	20	17
4TN–20	R1.1/" × 11	22	22



5T–SP

BSPT MALE / BSPT FEMALE

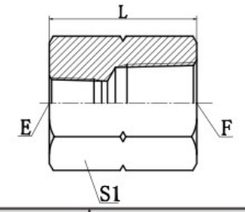
PART NO.	THREAD		DIMENSIONS		
	E	F	A	L	S1
5T–02–04SP	R1/8" × 28	Rc1/4" × 19	11	32.5	19
5T–04–02SP	R1/4" × 19	Rc1/8" × 28	14.5	20.5	14
5T–04SP	R1/4" × 19	Rc1/4" × 19	14.5	36	19
5T–04–06SP	R1/4" × 19	Rc3/8" × 19	14.5	38	22
5T–06–02SP	R3/8" × 19	Rc1/8" × 28	15	23	19
5T–06–04SP	R3/8" × 19	Rc1/4" × 19	15	23	19
5T–06SP	R3/8" × 19	Rc3/8" × 19	15	38.5	22
5T–06–08SP	R3/8" × 19	Rc1/2" × 14	15	44	27
5T–08–04SP	R1/2" × 14	Rc1/4" × 19	20	30	24
5T–08–06SP	R1/2" × 14	Rc3/8" × 19	20	30	24
5T–08SP	R1/2" × 14	Rc1/2" × 14	20	49	27
5T–08–12SP	R1/2" × 14	Rc3/4" × 14	20	51	36
5T–12–06SP	R3/4" × 14	Rc3/8" × 19	20	31	30
5T–12–08SP	R3/4" × 14	Rc1/2" × 14	20	31	30
5T–12SP	R3/4" × 14	Rc3/4" × 14	20	51	36
5T–12–16SP	R3/4" × 14	Rc1" × 11	20	56.5	41
5T–16–08SP	R1" × 11	Rc1/2" × 14	25.5	37	36
5T–16–12SP	R1" × 11	Rc3/4" × 14	25.5	37	36
5T–16SP	R1" × 11	Rc1" × 11	25.5	60	41
5T–16–20SP	R1" × 11	Rc1.1/4" × 11	25.5	64	50
5T–20–12SP	R1.1/4" × 11	Rc3/4" × 14	26.5	38	46
5T–20–16SP	R1.1/4" × 11	Rc1" × 11	26.5	38	46
5T–20SP	R1.1/4" × 11	Rc1.1/4" × 11	26.5	46.5	50
5T–24–16SP	R1.1/2" × 11	Rc1" × 11	26.5	41	50
5T–24–20SP	R1.1/2" × 11	Rc1.1/4" × 11	25.5	41	50
5T–32–20SP	R2" × 11	Rc1.1/4" × 11	30	45	65
5T–32–24SP	R2" × 11	Rc1.1/2" × 11	30	45	65



5T9–SP

90° ELBOW BSPT MALE / BSPT FEMALE

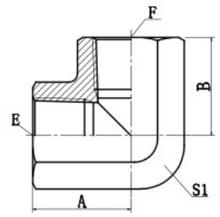
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
5T9–02SP	R1/8" × 28	Rc1/8" × 28	24.5	23	16
5T9–04SP	R1/4" × 19	Rc1/4" × 19	28.5	25	19
5T9–06SP	R3/8" × 19	Rc3/8" × 19	33.5	25	24
5T9–08SP	R1/2" × 14	Rc1/2" × 14	40.8	31.5	30
5T9–12SP	R3/4" × 14	Rc3/4" × 14	47.5	37	33
5T9–16SP	R1" × 11	Rc1" × 11	56.5	43	41
5T9–20SP	R1.1/4" × 11	Rc1.1/4" × 11	61	50	48
5T9–24SP	R1.1/2" × 11	Rc1.1/2" × 11	75	55	63



7T

BSPT FEMALE

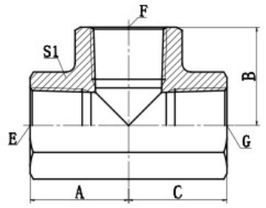
PART NO.	THREAD		DIMENSIONS	
	E	F	L	S1
7T–02	Rc1/8" × 28	Rc1/8" × 28	20	14
7T–02–04	Rc1/8" × 28	Rc1/4" × 19	30	19
7T–04	Rc1/4" × 19	Rc1/4" × 19	30	19
7T–04–06	Rc1/4" × 19	Rc3/8" × 19	30	22
7T–04–08	Rc1/4" × 19	Rc1/2" × 14	40	27
7T–06	Rc3/8" × 19	Rc3/8" × 19	30	22
7T–06–08	Rc3/8" × 19	Rc1/2" × 14	40	27
7T–06–12	Rc3/8" × 19	Rc3/4" × 14	37	36
7T–08	Rc1/2" × 14	Rc1/2" × 14	40	27
7T–08–12	Rc1/2" × 14	Rc3/4" × 14	42	36
7T–12	Rc3/4" × 14	Rc3/4" × 14	42	36
7T–12–16	Rc3/4" × 14	Rc1" × 11	50	41
7T–16	Rc1" × 11	Rc1" × 11	50	41
7T–16–20	Rc1" × 11	Rc1.1/4" × 11	52	50
7T–20	Rc1.1/4" × 11	Rc1.1/4" × 11	55	50
7T–24	Rc1.1/2" × 11	Rc1.1/2" × 11	55	55
7T–32	Rc2" × 11	Rc2" × 11	65	70



7T9–PK

90° ELBOW BSPT FEMALE

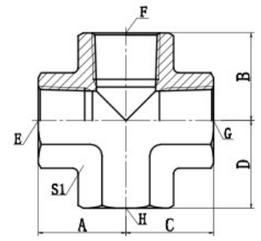
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
7T9–02PK	Rc1/8" × 28	Rc1/8" × 28	20	20	16
7T9–02–04PK	Rc1/8" × 28	Rc1/4" × 19	20	22.5	19
7T9–04PK	Rc1/4" × 19	Rc1/4" × 19	22.5	22.5	19
7T9–06PK	Rc3/8" × 19	Rc3/8" × 19	26	26	24
7T9–08PK	Rc1/2" × 14	Rc1/2" × 14	31	31	27
7T9–12PK	Rc3/4" × 14	Rc3/4" × 14	34	34	33
7T9–16PK	Rc1" × 11	Rc1" × 11	42	42	41
7T9–20PK	Rc1.1/4" × 11	Rc1.1/4" × 11	48	48	50
7T9–24PK	Rc1.1/2" × 11	Rc1.1/2" × 11	53	53	60
7T9–32PK	Rc2" × 11	Rc2" × 11	62	62	70



GT–PK

BSPT FEMALE TEE

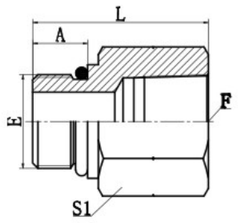
PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
GT–02PK	Rc1/8" × 28	Rc1/8" × 28	Rc1/8" × 28	20	20	20	16
GT–04PK	Rc1/4" × 19	Rc1/4" × 19	Rc1/4" × 19	22.5	22.5	22.5	19
GT–06PK	Rc3/8" × 19	Rc3/8" × 19	Rc3/8" × 19	26	26	26	24
GT–08PK	Rc1/2" × 14	Rc1/2" × 14	Rc1/2" × 14	31	31	31	27
GT–12PK	Rc3/4" × 14	Rc3/4" × 14	Rc3/4" × 14	34	34	34	33
GT–16PK	Rc1" × 11	Rc1" × 11	Rc1" × 11	42	42	42	41
GT–20PK	Rc1.1/4" × 11	Rc1.1/4" × 11	Rc1.1/4" × 11	48	48	48	50
GT–24PK	Rc1.1/2" × 11	Rc1.1/2" × 11	Rc1.1/2" × 11	53	53	53	60
GT–32PK	Rc2" × 11	Rc2" × 11	Rc2" × 11	62	62	62	70



ZT

BSPT FEMALE CROSS

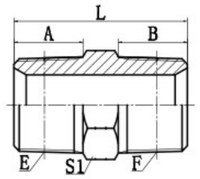
PART NO.	THREAD	DIMENSIONS	
	E,F,G,H	A,B,C,D	S1
ZT–02	Rc1/8" × 28	20	16
ZT–04	Rc1/4" × 19	22.5	19
ZT–06	Rc3/8" × 19	26	24
ZT–08	Rc1/2" × 14	31	27
ZT–12	Rc3/4" × 14	34	33
ZT–16	Rc1" × 11	42	41
ZT–20	Rc1.1/4" × 11	48	50



5GT

BSP MALE O–RING / BSPT FEMALE

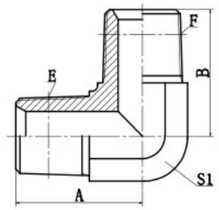
PART NO.	THREAD		CAPTIVE	DIMENSIONS		
	E	F	E	A	L	S1
5GT–02	G1/8" × 28	Rc1/8" × 28	O011	9.5	26	14
5GT–04	G1/4" × 19	Rc1/4" × 19	O111	10	32	19
5GT–06	G3/8" × 19	Rc3/8" × 19	O113	11.5	37	22
5GT–08–06	G1/2" × 14	Rc3/8" × 19	O115	14	38	27
5GT–08	G1/2" × 14	Rc1/2" × 14	O115	14	46	27
5GT–12	G3/4" × 14	Rc3/4" × 14	O119	15.5	49.5	36
5GT–16	G1" × 11	Rc1" × 11	O217	18	52	41



1N

NPT MALE

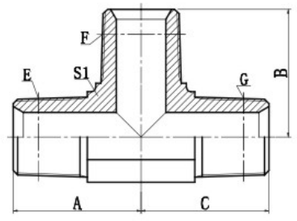
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1N–02	Z1/8" × 27	Z1/8" × 27	10.5	10.5	27	12
1N–02–04	Z1/8" × 27	Z1/4" × 18	10.5	15	31	17
1N–02–06	Z1/8" × 27	Z3/8" × 18	10.5	16	32	19
1N–04	Z1/4" × 18	Z1/4" × 18	15	15	35	17
1N–04–06	Z1/4" × 18	Z3/8" × 18	15	16	37	19
1N–04–08	Z1/4" × 18	Z1/2" × 14	15	19.5	41.5	22
1N–06	Z3/8" × 18	Z3/8" × 18	16	16	38	19
1N–06–08	Z3/8" × 18	Z1/2" × 14	16	19.5	43.5	22
1N–06–12	Z3/8" × 18	Z3/4" × 14	16	19.5	45.5	27
1N–08	Z1/2" × 14	Z1/2" × 14	19.5	19.5	47	22
1N–08–12	Z1/2" × 14	Z3/4" × 14	19.5	19.5	49	27
1N–08–16	Z1/2" × 14	Z1" × 11.5	19.5	25.5	56	36
1N–12	Z3/4" × 14	Z3/4" × 14	19.5	19.5	49	27
1N–12–16	Z3/4" × 14	Z1" × 11.5	19.5	25.5	55	36
1N–12–20	Z3/4" × 14	Z1.1/4" × 11.5	19.5	26.5	59	46
1N–16	Z1" × 11.5	Z1" × 11.5	25.5	25.5	61	36
1N–16–20	Z1" × 11.5	Z1.1/4" × 11.5	25.5	26.5	64	46
1N–16–24	Z1" × 11.5	Z1.1/2" × 11.5	25.5	27.5	68	50
1N–20	Z1.1/4" × 11.5	Z1.1/4" × 11.5	26.5	26.5	65	46
1N–20–24	Z1.1/4" × 11.5	Z1.1/2" × 11.5	26.5	27.5	69	50
1N–24	Z1.1/2" × 11.5	Z1.1/2" × 11.5	27.5	27.5	69	50
1N–24–32	Z1.1/2" × 11.5	Z2" × 11.5	27.5	27.5	72	65
1N–32	Z2" × 11.5	Z2" × 11.5	27.5	27.5	71	65



1N9

90° ELBOW NPT MALE

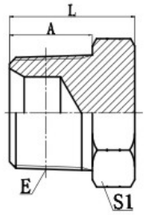
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1N9–02	Z1/8" × 27	Z1/8" × 27	21	21	11
1N9–02–04	Z1/8" × 27	Z1/4" × 18	23.5	25.5	14
1N9–04	Z1/4" × 18	Z1/4" × 18	25.5	25.5	14
1N9–04–06	Z1/4" × 18	Z3/8" × 18	28	31	19
1N9–04–08	Z1/4" × 18	Z1/2" × 14	30.5	36.5	22
1N9–06	Z3/8" × 18	Z3/8" × 18	31	31	19
1N9–06–08	Z3/8" × 18	Z1/2" × 14	33.8	37.3	22
1N9–08	Z1/2" × 14	Z1/2" × 14	37.3	37.3	22
1N9–08–12	Z1/2" × 14	Z3/4" × 14	40	44	27
1N9–12	Z3/4" × 14	Z3/4" × 14	44	44	27
1N9–12–16	Z3/4" × 14	Z1" × 11.5	46.5	50	33
1N9–16	Z1" × 11.5	Z1" × 11.5	50	50	33
1N9–20	Z1.1/4" × 11.5	Z1.1/4" × 11.5	54	54	41
1N9–24	Z1.1/2" × 11.5	Z1.1/2" × 11.5	63	63	48
1N9–32	Z2" × 11.5	Z2" × 11.5	68	68	63



AN

NPT MALE TEE

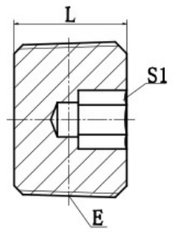
PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
AN–02	Z1/8" × 27	Z1/8" × 27	Z1/8" × 27	21	21	21	11
AN–04	Z1/4" × 18	Z1/4" × 18	Z1/4" × 18	25.5	25.5	25.5	14
AN–06	Z3/8" × 18	Z3/8" × 18	Z3/8" × 18	31	31	31	19
AN–08	Z1/2" × 14	Z1/2" × 14	Z1/2" × 14	36.7	36.7	36.7	22
AN–12	Z3/4" × 14	Z3/4" × 14	Z3/4" × 14	44	44	44	27
AN–16	Z1" × 11.5	Z1" × 11.5	Z1" × 11.5	50	50	50	33
AN–20	Z1.1/4" × 11.5	Z1.1/4" × 11.5	Z1.1/4" × 11.5	54.5	54.5	54.5	41
AN–24	Z1.1/2" × 11.5	Z1.1/2" × 11.5	Z1.1/2" × 11.5	59.5	59.5	59.5	48



4N

NPT MALE PLUG

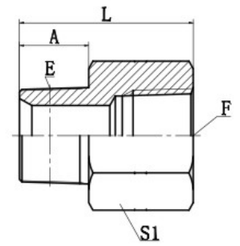
PART NO.	THREAD	DIMENSIONS		
	E	A	L	S1
4N–02	Z1/8" × 27	10.5	16	12
4N–04	Z1/4" × 18	15	20	17
4N–06	Z3/8" × 18	16	21	19
4N–08	Z1/2" × 14	19.5	27	22
4N–12	Z3/4" × 14	19.5	29.5	27
4N–16	Z1" × 11.5	25.5	36.5	36
4N–20	Z1.1/4" × 11.5	26.5	38.5	46
4N–24	Z1.1/2" × 11.5	27.5	43	50
4N–32	Z2" × 11.5	27.5	43.5	65



4NN

NPT MALE HOLLOW HEX PLUG

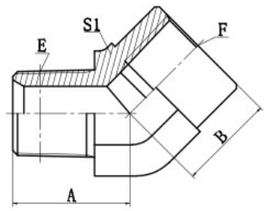
PART NO.	THREAD	DIMENSIONS	
	E	L	S1
4NN–02	Z1/8" × 27	8	5
4NN–04	Z1/4" × 18	10	6
4NN–06	Z3/8" × 18	12	8
4NN–08	Z1/2" × 14	15	10
4NN–12	Z3/4" × 14	16	12
4NN–16	Z1" × 11.5	18	17



5N

NPT MALE / NPT FEMALE

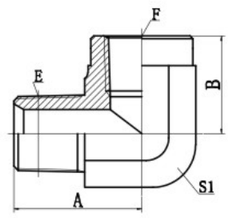
PART NO.	THREAD		DIMENSIONS		
	E	F	A	L	S1
5N–02	Z1/8" × 27	Z1/8" × 27	10.5	25.5	17
5N–02–04	Z1/8" × 27	Z1/4" × 18	10.5	31	19
5N–02–06	Z1/8" × 27	Z3/8" × 18	11	31	24
5N–04–02	Z1/4" × 18	Z1/8" × 27	15	22	17
5N–04	Z1/4" × 18	Z1/4" × 18	15	35.3	19
5N–04–06	Z1/4" × 18	Z3/8" × 18	15	36.6	24
5N–04–08	Z1/4" × 18	Z1/2" × 14	15	43	30
5N–06–02	Z3/8" × 18	Z1/8" × 27	16	22	19
5N–06–04	Z3/8" × 18	Z1/4" × 18	16	22	19
5N–06	Z3/8" × 18	Z3/8" × 18	16	37.6	24
5N–06–08	Z3/8" × 18	Z1/2" × 14	17	43.7	30
5N–06–12	Z3/8" × 18	Z3/4" × 14	17	47	36
5N–08–04	Z1/2" × 14	Z1/4" × 18	19.5	28	24
5N–08–06	Z1/2" × 14	Z3/8" × 18	19.5	28.5	24
5N–08	Z1/2" × 14	Z1/2" × 14	19.5	47.5	30
5N–08–12	Z1/2" × 14	Z3/4" × 14	19.5	49	36
5N–12–06	Z3/4" × 14	Z3/8" × 18	19.5	30.5	27
5N–12–08	Z3/4" × 14	Z1/2" × 14	19.5	30.5	27
5N–12	Z3/4" × 14	Z3/4" × 14	19.5	49	36
5N–12–16	Z3/4" × 14	Z1" × 11.5	19.5	55.4	41
5N–16–08	Z1" × 11.5	Z1/2" × 14	25.5	35.5	36
5N–16–12	Z1" × 11.5	Z3/4" × 14	25.5	36.5	36
5N–16	Z1" × 11.5	Z1" × 11.5	25.5	60.7	41
5N–16–20	Z1" × 11.5	Z1.1/4" × 11.5	25.5	63.5	50
5N–20–12	Z1.1/4" × 11.5	Z3/4" × 14	26.5	38.5	46
5N–20–16	Z1.1/4" × 11.5	Z1" × 11.5	26.5	41	46
5N–20	Z1.1/4" × 11.5	Z1.1/4" × 11.5	26.5	61.5	50
5N–20–24	Z1.1/4" × 11.5	Z1.1/2" × 11.5	26.5	62.5	60
5N–24–16	Z1.1/2" × 11.5	Z1" × 11.5	27.5	41.5	50
5N–24–20	Z1.1/2" × 11.5	Z1.1/4" × 11.5	27.5	41	50
5N–24	Z1.1/2" × 11.5	Z1.1/2" × 11.5	27.5	62.5	65
5N–24–32	Z1.1/2" × 11.5	Z2" × 11.5	27.5	66.5	70
5N–32–20	Z2" × 11.5	Z1.1/4" × 11.5	27.5	44.5	65
5N–32–24	Z2" × 11.5	Z1.1/2" × 11.5	27.5	45	65
5N–32	Z2" × 11.5	Z2" × 11.5	27.5	62.5	70



5N4

45° ELBOW NPT MALE / NPT FEMALE

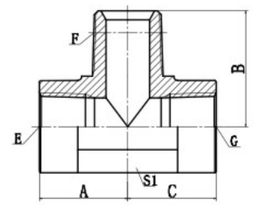
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
5N4–02	Z1/8" × 27	Z1/8" × 27	19	17	16
5N4–04	Z1/4" × 18	Z1/4" × 18	22	20	19
5N4–06	Z3/8" × 18	Z3/8" × 18	27	19	24
5N4–08	Z1/2" × 14	Z1/2" × 14	31.7	28	30
5N4–12	Z3/4" × 14	Z3/4" × 14	36.5	30	33
5N4–16	Z1" × 11.5	Z1" × 11.5	42.5	37.5	41
5N4–20	Z1.1/4" × 11.5	Z1.1/4" × 11.5	44	30	48
5N4–24	Z1.1/2" × 11.5	Z1.1/2" × 11.5	51	36	63



5N9

90° ELBOW NPT MALE / NPT FEMALE

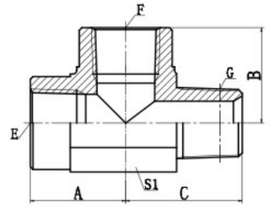
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
5N9–02	Z1/8" × 27	Z1/8" × 27	24.5	17.8	16
5N9–04–02	Z1/4" × 18	Z1/8" × 27	26.5	16.8	16
5N9–04	Z1/4" × 18	Z1/4" × 18	28	22.4	19
5N9–04–06	Z1/4" × 18	Z3/8" × 18	31	25	24
5N9–06–04	Z3/8" × 18	Z1/4" × 18	31	22.4	19
5N9–06	Z3/8" × 18	Z3/8" × 18	33.5	25	24
5N9–08	Z1/2" × 14	Z1/2" × 14	41.2	31.2	30
5N9–12–08	Z3/4" × 14	Z1/2" × 14	45	31.2	30
5N9–12	Z3/4" × 14	Z3/4" × 14	45.2	34.5	33
5N9–16	Z1" × 11.5	Z1" × 11.5	54.5	41.1	41
5N9–20	Z1.1/4" × 11.5	Z1.1/4" × 11.5	63	43.2	48
5N9–24	Z1.1/2" × 11.5	Z1.1/2" × 11.5	71.5	52.8	63
5N9–32	Z2" × 11.5	Z2" × 11.5	73.5	62	65



JN

NPT FEMALE / NPT MALE BRANCH TEE

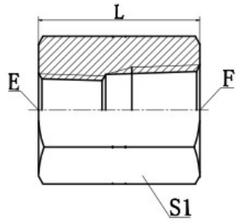
PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
JN–02	Z1/8" × 27	Z1/8" × 27	Z1/8" × 27	17.8	24.5	17.8	14
JN–04	Z1/4" × 18	Z1/4" × 18	Z1/4" × 18	22.4	28	22.4	19
JN–06	Z3/8" × 18	Z3/8" × 18	Z3/8" × 18	25	33.5	25	24
JN–08	Z1/2" × 14	Z1/2" × 14	Z1/2" × 14	31.2	41.2	31.2	30
JN–12	Z3/4" × 14	Z3/4" × 14	Z3/4" × 14	34.5	45.2	34.5	33
JN–16	Z1" × 11.5	Z1" × 11.5	Z1" × 11.5	41.1	54.5	41.1	41



HN

NPT FEMALE / NPT MALE RUN TEE

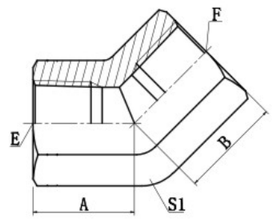
PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
HN–02	Z1/8" × 27	Z1/8" × 27	Z1/8" × 27	20	20	24.5	16
HN–04	Z1/4" × 18	Z1/4" × 18	Z1/4" × 18	25	25	28.5	19
HN–06	Z3/8" × 18	Z3/8" × 18	Z3/8" × 18	27	27	33.5	24
HN–08	Z1/2" × 14	Z1/2" × 14	Z1/2" × 14	35	35	42.5	30
HN–12	Z3/4" × 14	Z3/4" × 14	Z3/4" × 14	37	37	45.2	33
HN–16	Z1" × 11.5	Z1" × 11.5	Z1" × 11.5	44	44	54.7	41
HN–20	Z1.1/4" × 11.5	Z1.1/4" × 11.5	Z1.1/4" × 11.5	48	48	58.5	48



7N

NPT FEMALE

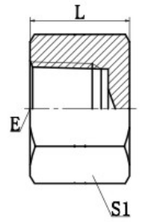
PART NO.	THREAD		DIMENSIONS	
	E	F	L	S1
7N–02	Z1/8" × 27	Z1/8" × 27	24	17
7N–02–04	Z1/8" × 27	Z1/4" × 18	27	19
7N–02–06	Z1/8" × 27	Z3/8" × 18	30	22
7N–04	Z1/4" × 18	Z1/4" × 18	29	19
7N–04–06	Z1/4" × 18	Z3/8" × 18	31	22
7N–04–08	Z1/4" × 18	Z1/2" × 14	35	30
7N–06	Z3/8" × 18	Z3/8" × 18	29	22
7N–06–08	Z3/8" × 18	Z1/2" × 14	38	30
7N–06–12	Z3/8" × 18	Z3/4" × 14	40	36
7N–08	Z1/2" × 14	Z1/2" × 14	38	30
7N–08–12	Z1/2" × 14	Z3/4" × 14	43	36
7N–12	Z3/4" × 14	Z3/4" × 14	39	36
7N–12–16	Z3/4" × 14	Z1" × 11.5	45.5	41
7N–16	Z1" × 11.5	Z1" × 11.5	48	41
7N–20	Z1.1/4" × 11.5	Z1.1/4" × 11.5	49	50
7N–24	Z1.1/2" × 11.5	Z1.1/2" × 11.5	49	60
7N–32	Z2" × 11.5	Z2" × 11.5	50	70



7N4–PK

45° ELBOW NPT FEMALE

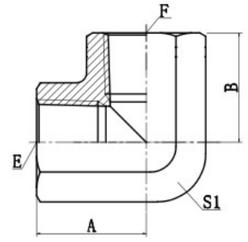
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
7N–02PK	Z1/8" × 27	Z1/8" × 27	18.5	18.5	16
7N–04PK	Z1/4" × 18	Z1/4" × 18	20	20	19
7N–06PK	Z3/8" × 18	Z3/8" × 18	25	25	24
7N–08PK	Z1/2" × 14	Z1/2" × 14	27.5	27.5	27
7N–12PK	Z3/4" × 14	Z3/4" × 14	31.5	31.5	33
7N–16PK	Z1" × 11.5	Z1" × 11.5	37.5	37.5	41



9N–CAP

NPT FEMALE PLUG

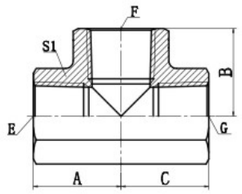
PART NO.	THREAD	DIMENSIONS	
	E	L	S1
9N–02CAP	Z1/8" × 27	17.5	17
9N–04CAP	Z1/4" × 18	23	19
9N–06CAP	Z3/8" × 18	24	24
9N–08CAP	Z1/2" × 14	28	30
9N–12CAP	Z3/4" × 14	28	36
9N–16CAP	Z1" × 11.5	34	46
9N–20CAP	Z1.1/4" × 11.5	37	55
9N–24CAP	Z1.1/2" × 11.5	37	65
9N–32CAP	Z2" × 11.5	40.5	75



7N9–PK

90° ELBOW NPT FEMALE

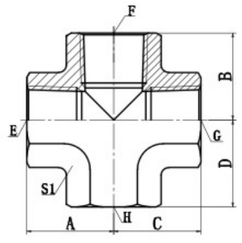
PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
7N9–02PK	Z1/8" × 27	Z1/8" × 27	20	20	16
7N9–02–04PK	Z1/8" × 27	Z1/4" × 18	20	22.5	19
7N9–04PK	Z1/4" × 18	Z1/4" × 18	22.5	22.5	19
7N9–04–06PK	Z1/4" × 18	Z3/8" × 18	25	26	24
7N9–06PK	Z3/8" × 18	Z3/8" × 18	26	26	24
7N9–06–08PK	Z3/8" × 18	Z1/2" × 14	26	31	27
7N9–08PK	Z1/2" × 14	Z1/2" × 14	31	31	27
7N9–08–12PK	Z1/2" × 14	Z3/4" × 14	34	34	33
7N9–12PK	Z3/4" × 14	Z3/4" × 14	34	34	33
7N9–12–16PK	Z3/4" × 14	Z1" × 11.5	42	42	41
7N9–16PK	Z1" × 11.5	Z1" × 11.5	42	42	41
7N9–20PK	Z1.1/4" × 11.5	Z1.1/4" × 11.5	48	48	50
7N9–24PK	Z1.1/2" × 11.5	Z1.1/2" × 11.5	53	53	60
7N9–32PK	Z2" × 11.5	Z2" × 11.5	62	62	70



GN–PK

NPT FEMALE TEE

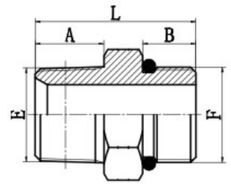
PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
GN–02PK	Z1/8" × 27	Z1/8" × 27	Z1/8" × 27	20	20	20	16
GN–04PK	Z1/4" × 18	Z1/4" × 18	Z1/4" × 18	22.5	22.5	22.5	19
GN–06PK	Z3/8" × 18	Z3/8" × 18	Z3/8" × 18	26	26	26	24
GN–08PK	Z1/2" × 14	Z1/2" × 14	Z1/2" × 14	31	31	31	27
GN–12PK	Z3/4" × 14	Z3/4" × 14	Z3/4" × 14	34	34	34	33
GN–16PK	Z1" × 11.5	Z1" × 11.5	Z1" × 11.5	42	42	42	41
GN–20PK	Z1.1/4" × 11.5	Z1.1/4" × 11.5	Z1.1/4" × 11.5	48	48	48	50
GN–24PK	Z1.1/2" × 11.5	Z1.1/2" × 11.5	Z1.1/2" × 11.5	53	53	53	60
GN–32PK	Z2" × 11.5	Z2" × 11.5	Z2" × 11.5	62	62	62	70



ZN

NPT FEMALE CROSS

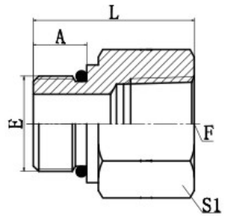
PART NO.	THREAD				DIMENSIONS				
	E	F	G	H	A	B	C	D	S1
ZN–04	Z1/4" × 18	Z1/4" × 18	Z1/4" × 18	Z1/4" × 18	22.5	22.5	22.5	22.5	19
ZN–06	Z3/8" × 18	Z3/8" × 18	Z3/8" × 18	Z3/8" × 18	26	26	26	26	24
ZN–08	Z1/2" × 14	Z1/2" × 14	Z1/2" × 14	Z1/2" × 14	31	31	31	31	27
ZN–12	Z3/4" × 14	Z3/4" × 14	Z3/4" × 14	Z3/4" × 14	34	34	34	34	33
ZN–16	Z1" × 11.5	Z1" × 11.5	Z1" × 11.5	Z1" × 11.5	42	42	42	42	41
ZN–20	Z1.1/4" × 11.5	Z1.1/4" × 11.5	Z1.1/4" × 11.5	Z1.1/4" × 11.5	48	48	48	48	50



1NO

NPT MALE / SAE O–RING
BOSS L–SERIES ISO 11926–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1NO–04	Z1/4" × 18	7/16" × 20	O904	15	9.1	30	14
1NO–04–06	Z1/4" × 18	9/16" × 18	O906	15	9.9	31	17
1NO–06–04	Z3/8" × 18	7/16" × 20	O904	16	9.1	31	19
1NO–06	Z3/8" × 18	9/16" × 18	O906	16	9.9	32	19
1NO–06–08	Z3/8" × 18	3/4" × 16	O908	16	11.1	35.5	22
1NO–08	Z1/2" × 14	3/4" × 16	O908	19.5	11.1	38.5	22
1NO–08–10	Z1/2" × 14	7/8" × 14	O910	19.5	12.7	42	27
1NO–08–12	Z1/2" × 14	1.1/16" × 12	O912	19.5	15.1	45.5	32
1NO–12–10	Z3/4" × 14	7/8" × 14	O910	19.5	12.7	43	30
1NO–12	Z3/4" × 14	1.1/16" × 12	O912	19.5	15.1	45.5	32
1NO–16	Z1" × 11.5	1.5/16" × 12	O916	25.5	15.1	51.5	38
1NO–20–16	Z1.1/4" × 11.5	1.5/16" × 12	O916	26.5	15.1	54.5	46
1NO–20	Z1.1/4" × 11.5	1.5/8" × 12	O920	26.5	15.1	56.5	50
1NO–24	Z1.1/2" × 11.5	1.7/8" × 12	O924	27.5	15.1	57.5	55

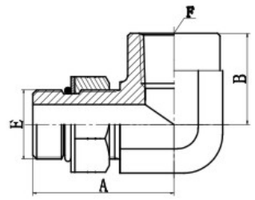


5ON

SAE O–RING BOSS L–SERIES

ISO 11926–3 / NPT FEMALE

PART NO.	THREAD		O–RING	DIMENSIONS		
	E	F	E	A	L	S1
5ON–02	5/16" × 24	Z1/8" × 27	O902	7.54	24.5	17
5ON–02–04	5/16" × 24	Z1/4" × 18	O902	7.54	29	19
5ON–03–02	3/8" × 24	Z1/8" × 27	O903	7.54	24.5	17
5ON–03–04	3/8" × 24	Z1/4" × 18	O903	7.54	29	19
5ON–04–02	7/16" × 20	Z1/8" × 27	O904	9.1	24.5	17
5ON–04	7/16" × 20	Z1/4" × 18	O904	9.1	30.5	19
5ON–04–06	7/16" × 20	Z3/8" × 18	O904	9.1	30.7	24
5ON–05–02	1/2" × 20	Z1/8" × 27	O905	9.1	26	17
5ON–06–04	9/16" × 18	Z1/4" × 18	O906	9.9	31.5	19
5ON–08–04	3/4" × 16	Z1/4" × 18	O908	11.1	32.5	22
5ON–08–06	3/4" × 16	Z3/8" × 18	O908	11.1	34	22
5ON–08	3/4" × 16	Z1/2" × 14	O908	11.1	40	30
5ON–08–12	3/4" × 16	Z3/4" × 14	O908	11.1	40.1	36
5ON–10–08	7/8" × 14	Z1/2" × 14	O910	12.7	41.5	30
5ON–10–06	7/8" × 14	Z3/8" × 18	O910	12.7	35.5	27
5ON–10–12	7/8" × 14	Z3/4" × 14	O910	12.7	41	36
5ON–12–08	1.1/16" × 12	Z1/2" × 14	O912	15.1	42	32
5ON–12	1.1/16" × 12	Z3/4" × 14	O912	15.1	45.5	36
5ON–12–16	1.1/16" × 12	Z1" × 11.5	O912	15.1	50.5	41
5ON–16–12	1.5/16" × 12	Z3/4" × 14	O916	15.1	43	38
5ON–16	1.5/16" × 12	Z1" × 11.5	O916	15.1	51.5	41
5ON–20–16	1.5/8" × 12	Z1" × 11.5	O920	15.1	40	50
5ON–20	1.5/8" × 12	Z1.1/4" × 11.5	O920	15.1	53.5	50
5ON–24–16	1.7/8" × 12	Z1" × 11.5	O924	15.1	34	55
5ON–24–20	1.7/8" × 12	Z1.1/4" × 11.5	O924	15.1	48	55
5ON–24	1.7/8" × 12	Z1.1/2" × 11.5	O924	15.1	53.5	60
5ON–32	2.1/8" × 12	2" × 11.5	O932	15.1	50	70



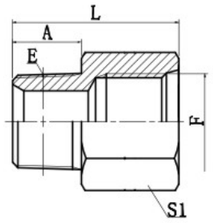
5ON9–OG

90° ELBOW SAE O–RING BOSS L–SERIES

ISO 11926–3 / NPT FEMALE

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	E	A	B	S1	S2
5ON9–04OG	7/16" × 20	Z1/4" × 18	O904	31.5	22.4	16	17
5ON9–05–04OG	1/2" × 20	Z1/4" × 18	O905	31.5	22.4	16	17
5ON9–06OG	9/16" × 18	Z3/8" × 18	O906	36.5	26.5	22	19
5ON9–06–04OG	9/16" × 18	Z1/4" × 18	O906	33.3	22.4	16	17
5ON9–06–08OG	9/16" × 18	Z1/2" × 14	O906	40	31.2	27	19
5ON9–08OG	3/4" × 16	Z1/2" × 14	O908	43	31.2	27	24
5ON9–08–06OG	3/4" × 16	Z3/8" × 18	O908	40	26.5	22	24
5ON9–08–12OG	3/4" × 16	Z3/4" × 14	O908	46.5	34.5	33	24
5ON9–10–08OG	7/8" × 14	Z1/2" × 14	O910	48	31.2	27	27
5ON9–12OG	1.1/16" × 12	Z3/4" × 14	O912	55	34.5	33	32
5ON9–12–16OG	1.1/16" × 12	Z1" × 11.5	O912	59.5	41.1	41	32
5ON9–16OG	1.5/16" × 12	Z1" × 11.5	O916	59.5	41.1	41	41
5ON9–16–12OG	1.5/16" × 12	Z3/4" × 14	O916	56	34.5	33	41
5ON9–20OG	1.5/8" × 12	Z1.1/4" × 11.5	O920	65	43.2	48	50

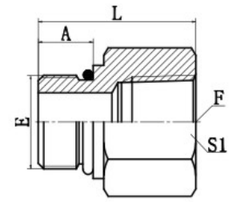
Note: E end is connected with ISO 11926–1 port.



5NO

NPT MALE / SAE FEMALE ISO 11926–1

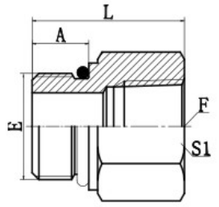
PART NO.	THREAD		DIMENSIONS		
	E	F	A	L	S1
5NO–02–04	Z1/8" × 27	7/16" × 20	10.5	29.5	17
5NO–02–05	Z1/8" × 27	1/2" × 20	10.5	30.5	17
5NO–04	Z1/4" × 18	7/16" × 20	15	34	17
5NO–04–06	Z1/4" × 18	9/16" × 18	15	36	19
5NO–04–08	Z1/4" × 18	3/4" × 16	15	41	27
5NO–06–04	Z3/8" × 18	7/16" × 20	16	22	19
5NO–06	Z3/8" × 18	9/16" × 18	16	34.5	19
5NO–06–08	Z3/8" × 18	3/4" × 16	16	40	24
5NO–08–06	Z1/2" × 14	9/16" × 18	19.5	27.5	24
5NO–08	Z1/2" × 14	3/4" × 16	19.5	41.5	27
5NO–08–10	Z1/2" × 14	7/8" × 14	19.5	46.5	30
5NO–12–08	Z3/4" × 14	3/4" × 16	19.5	29.5	30
5NO–12–10	Z3/4" × 14	7/8" × 14	19.5	42.5	30
5NO–12	Z3/4" × 14	1.1/16" × 12	19.5	47	36
5NO–16–12	Z1" × 11.5	1.1/16" × 12	25.5	36.5	36
5NO–16	Z1" × 11.5	1.5/16" × 12	25.5	53	41
5NO–20	Z1.1/4" × 11.5	1.5/8" × 12	26.5	55.5	50



5GN

BSP MALE O–RING / NPT FEMALE

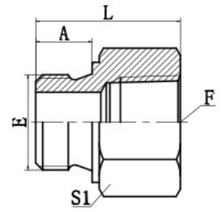
PART NO.	THREAD		O–RING	DIMENSIONS		
	E	F	E	A	L	S1
5GN–02	G1/8" × 28	Z1/8" × 27	O011	9.5	24.5	17
5GN–02–04	G1/8" × 28	Z1/4" × 18	O011	9.5	29.5	19
5GN–04–02	G1/4" × 19	Z1/8" × 27	O111	11	26	19
5GN–04	G1/4" × 19	Z1/4" × 18	O111	11	31	19
5GN–04–06	G1/4" × 19	Z3/8" × 18	O111	11	33	22
5GN–06–04	G3/8" × 19	Z1/4" × 18	O113	11.5	30	22
5GN–06	G3/8" × 19	Z3/8" × 18	O113	11.5	35	22
5GN–08–04	G1/2" × 14	Z1/4" × 18	O115	14	27	27
5GN–08–06	G1/2" × 14	Z3/8" × 18	O115	14	34	27
5GN–08	G1/2" × 14	Z1/2" × 14	O115	14	43	30
5GN–12	G3/4" × 14	Z3/4" × 14	O119	15.5	44.5	36
5GN–16	G1" × 11	Z1" × 11.5	O217	18	54.5	41
5GN–20	G1.1/4" × 11	Z1.1/4" × 11.5	O222	20	55.5	50
5GN–24	G1.1/2" × 11	Z1.1/2" × 11.5	O224	21.5	57	60



5HN

METRIC MALE L–SERIES ISO 6149–3 / NPT FEMALE

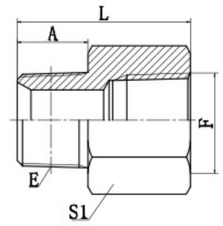
PART NO.	THREAD		O–RING	DIMENSIONS		
	E	F	E	A	L	S1
5HN–10–02	M10 × 1	Z1/8" × 27	O08.1 × 1.6	9.5	24	14
5HN–12–02	M12 × 1.5	Z1/8" × 27	O09.3 × 2.4	11	26	17
5HN–12–04	M12 × 1.5	Z1/4" × 18	O09.3 × 2.4	11	31.5	19
5HN–14–04	M14 × 1.5	Z1/4" × 18	O11.3 × 2.4	11	31.5	19
5HN–16–06	M16 × 1.5	Z3/8" × 18	O13.3 × 2.4	12.5	34.5	22
5HN–16–08	M16 × 1.5	Z1/2" × 14	O13.3 × 2.4	12.5	40	30
5HN–18–06	M18 × 1.5	Z3/8" × 18	O15.3 × 2.4	12.5	36.5	24
5HN–18–08	M18 × 1.5	Z1/2" × 14	O15.3 × 2.4	12.5	41.5	30
5HN–22–08	M22 × 1.5	Z1/2" × 14	O19.3 × 2.4	13	42.5	30
5HN–27–12	M27 × 2	Z3/4" × 14	O23.5 × 3.0	18.5	47.5	36
5HN–33–16	M33 × 2	Z1" × 11.5	O29.5 × 3.0	18.5	53.5	41
5HN–42–20	M42 × 2	Z1.1/4" × 11.5	O38.5 × 3.0	19	52	50
5HN–48–24	M48 × 2	Z1.1/2" × 11.5	O44.5 × 3.0	21.5	53	60



5LN

METRIC MALE WITH BONDED SEAL / NPT FEMALE

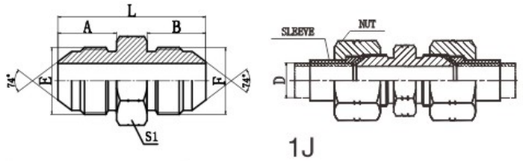
PART NO.	THREAD		SEAL	DIMENSIONS		
	E	F	E	A	L	S1
5LN–10–02	M10 × 1	Z1/8" × 27	ZHD–10	8	23	17
5LN–12–02	M12 × 1.5	Z1/8" × 27	ZHD–12	12	34.8	19
5LN–14–04	M14 × 1.5	Z1/4" × 18	ZHD–14	12	34.8	19
5LN–16–06	M16 × 1.5	Z3/8" × 18	ZHD–16	12	36.5	22
5LN–18–06	M18 × 1.5	Z3/8" × 18	ZHD–18	12	36.5	24
5LN–22–06	M22 × 1.5	Z3/8" × 18	ZHD–22	14	28	27
5LN–22–08	M22 × 1.5	Z1/2" × 14	ZHD–22	14	39	30
5LN–27–08	M27 × 2	Z1/2" × 14	ZHD–27	16	40	34
5LN–27–12	M27 × 2	Z3/4" × 14	ZHD–27	16	41	36
5LN–33–16	M33 × 2	Z1" × 11.5	ZHD–33	18	56.6	41



5TN–SP

BSPT MALE / NPT FEMALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	L	S1
5TN–02SP	R1/8" × 28	Z1/8" × 27	10	25	17
5TN–04–02SP	R1/4" × 19	Z1/8" × 27	14.5	21.5	14
5TN–04SP	R1/4" × 19	Z1/4" × 18	14.5	34.5	19
5TN–06–04SP	R3/8" × 19	Z1/4" × 18	15	23	19
5TN–06SP	R3/8" × 19	Z3/8" × 18	15	36.5	24
5TN–08–06SP	R1/2" × 14	Z3/8" × 18	20	28.5	24
5TN–08SP	R1/2" × 14	Z1/2" × 14	20	47	30
5TN–12–08SP	R3/4" × 14	Z1/2" × 14	20	30.5	32
5TN–12SP	R3/4" × 14	Z3/4" × 14	20	49	36
5TN–16–12SP	R1" × 11	Z3/4" × 14	25.5	36.5	36
5TN–16SP	R1" × 11	Z1" × 11.5	25.5	60	41

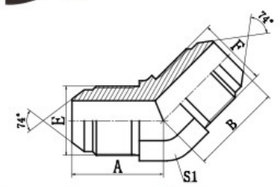


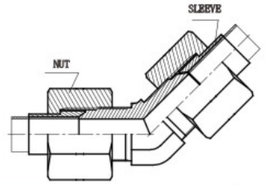
1J

JIC MALE 74° CONE

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1J–02	5/16" × 24	5/16" × 24	11.4	11.4	29	12
1J–02–03	5/16" × 24	3/8" × 24	11.4	12.2	29.5	12
1J–03	3/8" × 24	3/8" × 24	12.2	12.2	30.5	12
1J–04	7/16" × 20	7/16" × 20	14	14	34	12
1J–04–05	7/16" × 20	1/2" × 20	14	14	34	14
1J–04–06	7/16" × 20	9/16" × 18	14	14.1	34.1	17
1J–04–08	7/16" × 20	3/4" × 16	14	16.7	38.5	22
1J–05	1/2" × 20	1/2" × 20	14	14	34	14
1J–05–06	1/2" × 20	9/16" × 18	14	14.1	34	17
1J–05–08	1/2" × 20	3/4" × 16	14	16.7	38.5	22
1J–05–10	1/2" × 20	7/8" × 14	14	19.3	41	24
1J–06	9/16" × 18	9/16" × 18	14.4	14.1	34.2	17
1J–06–08	9/16" × 18	3/4" × 16	14.1	16.7	38.5	22
1J–06–10	9/16" × 18	7/8" × 14	14.1	19.3	41.5	24
1J–06–12	9/16" × 18	1.1/16" × 12	14.1	21.9	46	30
1J–08	3/4" × 16	3/4" × 16	16.7	16.7	42	22
1J–08–10	3/4" × 16	7/8" × 14	16.7	19.3	44	24
1J–08–12	3/4" × 16	1.1/16" × 12	16.7	21.9	48.5	30
1J–08–16	3/4" × 16	1.5/16" × 12	16.7	23.1	51	36
1J–10	7/8" × 14	7/8" × 14	19.3	19.3	46.5	24
1J–10–12	7/8" × 14	1.1/16" × 12	19.3	21.9	51	30
1J–10–16	7/8" × 14	1.5/16" × 12	19.3	23.1	53.5	36
1J–12	1.1/16" × 12	1.1/16" × 12	21.9	21.9	54	30
1J–12–14	1.1/16" × 12	1.3/16" × 12	21.9	22.6	55.5	32
1J–12–16	1.1/16" × 12	1.5/16" × 12	21.9	23.1	56	36
1J–14	1.3/16" × 12	1.3/16" × 12	22.6	22.6	56	32
1J–14–16	1.3/16" × 12	1.5/16" × 12	22.6	23.1	56.5	36
1J–16	1.5/16" × 12	1.5/16" × 12	23.1	22.6	57	36
1J–16–20	1.5/16" × 12	1.5/8" × 12	23.1	23.1	60.5	46
1J–16–24	1.5/16" × 12	1.7/8" × 12	23.1	23.1	65.5	50
1J–20	1.5/8" × 12	1.5/8" × 12	24.3	24.3	62	46
1J–20–24	1.5/8" × 12	1.7/8" × 12	24.3	27.5	67	50
1J–20–32	1.5/8" × 12	2.1/2" × 12	24.3	24.3	75	65
1J–24	1.7/8" × 12	1.7/8" × 12	27.5	27.5	70	50
1J–24–32	1.7/8" × 12	2.1/2" × 12	27.5	33.9	78.5	65
1J–32	2.1/2" × 12	2.1/2" × 12	33.9	33.9	85	65

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.





1J4

45° ELBOW JIC MALE 74° CONE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1J4–04	7/16" × 20	7/16" × 20	21.5	21.5	11
1J4–05	1/2" × 20	1/2" × 20	23	23	14
1J4–06	9/16" × 18	9/16" × 18	22.8	22.8	14
1J4–08	3/4" × 16	3/4" × 16	26.8	26.8	19
1J4–10	7/8" × 14	7/8" × 14	31	31	22
1J4–12	1.1/16" × 12	1.1/16" × 12	35.5	35.5	27
1J9–16	1.5/16" × 12	1.5/16" × 12	38.5	38.5	33

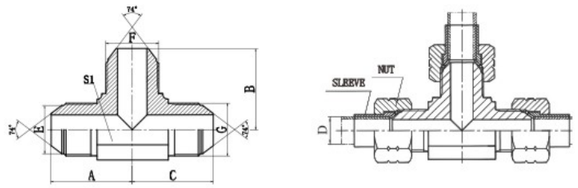
Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

1J9

90° ELBOW JIC MALE 74° CONE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1J9–02	5/16" × 24	5/16" × 24	20.5	20.5	11
1J9–03	3/8" × 24	3/8" × 24	22	22	11
1J9–04	7/16" × 20	7/16" × 20	24.5	24.5	11
1J9–05	1/2" × 20	1/2" × 20	26.6	26.6	14
1J9–05–06	1/2" × 20	9/16" × 18	26.6	26.9	14
1J9–06	9/16" × 18	9/16" × 18	26.9	26.9	14
1J9–06–08	9/16" × 18	3/4" × 16	30	32	19
1J9–06–10	9/16" × 18	7/8" × 14	32	37.8	22
1J9–08	3/4" × 16	3/4" × 16	32	32	19
1J9–08–10	3/4" × 16	7/8" × 14	34.8	37.8	22
1J9–10	7/8" × 14	7/8" × 14	37.8	37.8	22
1J9–10–12	7/8" × 14	1.1/16" × 12	41	44.2	27
1J9–12	1.1/16" × 12	1.1/16" × 12	44.2	44.2	27
1J9–14	1.3/16" × 12	1.3/16" × 12	47.5	47.5	30
1J9–16	1.5/16" × 12	1.5/16" × 12	49	49	33
1J9–20	1.5/8" × 12	1.5/8" × 12	55.5	55.5	41
1J9–24	1.7/8" × 12	1.7/8" × 12	62.5	62.5	48
1J9–32	2.1/2" × 12	2.1/2" × 12	78	78	63

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

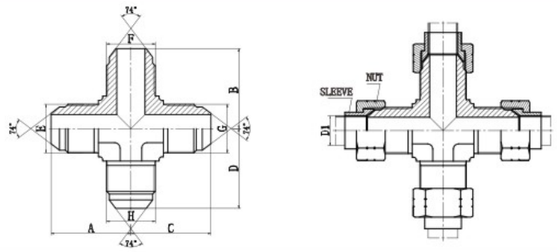


AJ

JIC MALE 74° CONE TEE

PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
AJ–04	7/16" × 20	7/16" × 20	7/16" × 20	24.5	24.5	24.5	11
AJ–04–06–04	7/16" × 20	9/16" × 18	7/16" × 20	26.6	26.9	26.6	14
AJ–05	1/2" × 20	1/2" × 20	1/2" × 20	26	26	26	14
AJ–06–04–06	9/16" × 18	7/16" × 20	9/16" × 18	26.9	26.6	26.9	14
AJ–06	9/16" × 18	9/16" × 18	9/16" × 18	26.9	26.9	26.9	14
AJ–08	3/4" × 16	3/4" × 16	3/4" × 16	32	32	32	19
AJ–08–06–08	3/4" × 16	9/16" × 18	3/4" × 16	32	30	32	19
AJ–10	7/8" × 14	7/8" × 14	7/8" × 14	37.8	37.8	37.8	22
AJ–12	1.1/16" × 12	1.1/16" × 12	1.1/16" × 12	44.2	44.2	44.2	27
AJ–16	1.5/16" × 12	1.5/16" × 12	1.5/16" × 12	49	49	49	33
AJ–16–12–16	1.5/16" × 12	1.1/16" × 12	1.5/16" × 12	49	48	49	33
AJ–20	1.5/8" × 12	1.5/8" × 12	1.5/8" × 12	56.5	56.5	56.5	41
AJ–24	1.7/8" × 12	1.7/8" × 12	1.7/8" × 12	63	63	63	48
AJ–32	2.1/2" × 12	2.1/2" × 12	2.1/2" × 12	78	78	78	63

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

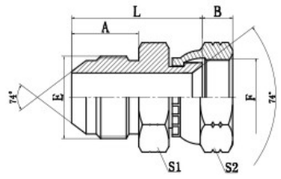


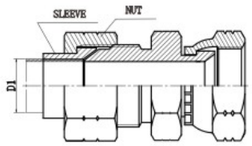
XJ

JIC MALE 74° CONE CROSS

PART NO.	THREAD				DIMENSIONS				
	E	F	G	H	A	B	C	D	S1
XJ–04	7/16" × 20	7/16" × 20	7/16" × 20	7/16" × 20	24.5	24.5	24.5	24.5	11
XJ–05	1/2" × 20	1/2" × 20	1/2" × 20	1/2" × 20	26.5	26.5	26.5	26.5	14
XJ–06	9/16" × 18	9/16" × 18	9/16" × 18	9/16" × 18	26.9	26.9	26.9	26.9	14
XJ–08	3/4" × 16	3/4" × 16	3/4" × 16	3/4" × 16	32	32	32	32	19
XJ–10	7/8" × 14	7/8" × 14	7/8" × 14	7/8" × 14	37.8	37.8	37.8	37.8	22
XJ–12	1.1/16" × 12	1.1/16" × 12	1.1/16" × 12	1.1/16" × 12	44.2	44.2	44.2	44.2	27
XJ–16	1.5/16" × 12	1.5/16" × 12	1.5/16" × 12	1.5/16" × 12	49	49	49	49	33

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



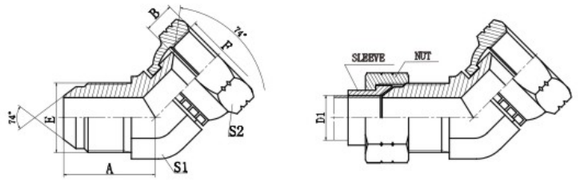


2J

JIC MALE 74° CONE / JIC FEMALE 74° SEAT

PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
2J–04	7/16" × 20	7/16" × 20	14	9	28	12	15
2J–04–05	7/16" × 20	1/2" × 20	14	9.5	28.5	12	17
2J–04–06	7/16" × 20	9/16" × 18	14	10.5	28.5	14	19
2J–04–08	7/16" × 20	3/4" × 16	14	11	30.5	19	24
2J–05	1/2" × 20	1/2" × 20	14	9.5	29	14	17
2J–05–06	1/2" × 20	9/16" × 18	14	10.5	28.5	14	19
2J–05–08	1/2" × 20	3/4" × 16	14	11	30.5	19	24
2J–06	9/16" × 18	9/16" × 18	14.1	10.5	29	17	19
2J–06–08	9/16" × 18	3/4" × 16	14.1	11	31	19	24
2J–06–10	9/16" × 18	7/8" × 14	14.1	13	33.5	22	27
2J–08	3/4" × 16	3/4" × 16	16.7	11	36	22	24
2J–08–06	3/4" × 16	9/16" × 18	16.7	10.5	34	22	19
2J–08–10	3/4" × 16	7/8" × 14	16.7	13	36.5	22	27
2J–08–12	3/4" × 16	1.1/16" × 12	16.7	15	39.5	27	32
2J–10	7/8" × 14	7/8" × 14	19.3	13	39	24	27
2J–10–08	7/8" × 14	3/4" × 16	19.3	11	38	24	24
2J–10–12	7/8" × 14	1.1/16" × 12	19.3	15	42	27	32
2J–12	1.1/16" × 12	1.1/16" × 12	21.9	15	44.5	30	32
2J–12–10	1.1/16" × 12	7/8" × 14	21.9	13	43.5	30	27
2J–12–16	1.1/16" × 12	1.5/16" × 12	21.9	16	45.5	36	41
2J–16	1.5/16" × 12	1.5/16" × 12	23.1	16	46.5	36	41
2J–16–20	1.5/16" × 12	1.5/8" × 12	23.1	17	53	41	50
2J–20	1.5/8" × 12	1.5/8" × 12	24.3	17	54.5	46	50
2J–20–24	1.5/8" × 12	1.7/8" × 12	24.3	20	55.5	46	55
2J–24	1.7/8" × 12	1.7/8" × 12	27.5	20	61	50	55
2J–24–32	1.7/8" × 12	2.1/2" × 12	27.5	24.5	63	65	75
2J–32	2.1/2" × 12	2.1/2" × 12	33.9	24.5	69.5	65	75

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

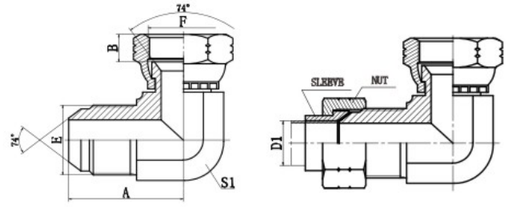


2J4

45° ELBOW JIC MALE 74° CONE / JIC FEMALE 74° SEAT

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
2J4–04	7/16" × 20	7/16" × 20	21.5	9	11	15
2J4–05	1/2" × 20	1/2" × 20	22	9.5	14	17
2J4–06	9/16" × 18	9/16" × 18	22.8	10.5	14	19
2J4–08	3/4" × 16	3/4" × 16	26.8	11	19	24
2J4–10	7/8" × 14	7/8" × 14	31	13	22	27
2J4–12	1.1/16" × 12	1.1/16" × 12	35.5	15	27	32
2J4–14	1.3/16" × 12	1.3/16" × 12	37	15	30	36
2J4–16	1.5/16" × 12	1.5/16" × 12	38.5	16	33	41
2J4–20	1.5/8" × 12	1.5/8" × 12	43	17	41	50
2J4–24	1.7/8" × 12	1.7/8" × 12	49	20	48	55
2J4–32	2.1/2" × 12	2.1/2" × 12	58	24.5	63	75

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

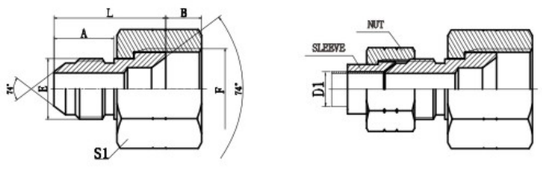


2J9

90° ELBOW JIC MALE 74° CONE / JIC FEMALE 74° SEAT

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
2J9–02	5/16" × 24	5/16" × 24	21	5.6	11	12
2J9–03	3/8" × 24	3/8" × 24	22	5	11	14
2J9–04	7/16" × 20	7/16" × 20	24.5	9	11	15
2J9–05	1/2" × 20	1/2" × 20	26.5	9.5	14	17
2J9–06	9/16" × 18	9/16" × 18	26.9	10.5	14	19
2J9–06–08	9/16" × 18	3/4" × 16	28.5	11	16	24
2J9–08–06	3/4" × 16	9/16" × 18	32	10.5	19	19
2J9–08	3/4" × 16	3/4" × 16	32	11	19	24
2J9–08–10	3/4" × 16	7/8" × 14	32	13	19	27
2J9–10	7/8" × 14	7/8" × 14	37.8	13	22	27
2J9–10–08	7/8" × 14	3/4" × 16	37.8	11	22	24
2J9–10–12	7/8" × 14	1.1/16" × 12	39.5	15	24	32
2J9–12	1.1/16" × 12	1.1/16" × 12	44.2	15	27	32
2J9–12–10	1.1/16" × 12	7/8" × 14	44.2	13	27	27
2J9–12–16	1.1/16" × 12	1.5/16" × 12	46	16	30	41
2J9–14	1.3/16" × 12	1.3/16" × 12	47.5	15	30	36
2J9–16	1.5/16" × 12	1.5/16" × 12	48.8	16	33	41
2J9–16–20	1.5/16" × 12	1.5/8" × 12	54	17	41	50
2J9–20–16	1.5/8" × 12	1.5/16" × 12	55.5	16	41	41
2J9–20	1.5/8" × 12	1.5/8" × 12	55.5	17	41	50
2J9–20–24	1.5/8" × 12	1.7/8" × 12	59.5	20	48	55
2J9–24–20	1.7/8" × 12	1.5/8" × 12	62.5	17	48	50
2J9–24	1.7/8" × 12	1.7/8" × 12	62.5	20	48	55
2J9–32	2.1/2" × 12	2.1/2" × 12	75.5	24.5	63	75

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

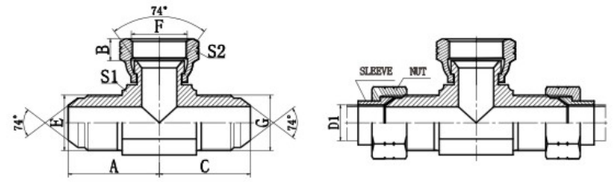


5J–S

JIC MALE / JIC FEMALE

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
5J–04–06S	7/16" × 20	9/16" × 18	14	9.8	26.2	19
5J–04–08S	7/16" × 20	3/4" × 16	14	10.9	26.2	24
5J–04–10S	7/16" × 20	7/8" × 14	14	12.8	28	27
5J–04–12S	7/16" × 20	1.1/16" × 12	14	15	29.8	32
5J–04–14S	7/16" × 20	1.3/16" × 12	14	15.2	32.5	36
5J–05–08S	1/2" × 20	3/4" × 16	14	10.9	26.2	24
5J–05–10S	1/2" × 20	7/8" × 14	14	12.8	28	27
5J–05–12S	1/2" × 20	1.1/16" × 12	14	15	29.8	32
5J–06–08S	9/16" × 18	3/4" × 16	14.1	10.9	26.3	24
5J–06–10S	9/16" × 18	7/8" × 14	14.1	12.8	28.2	27
5J–06–12S	9/16" × 18	1.1/16" × 12	14.1	15	30.1	32
5J–06–14S	9/16" × 18	1.3/16" × 12	14.1	15.2	32.5	36
5J–06–16S	9/16" × 18	1.5/16" × 12	14.1	15.9	33	38
5J–08–12S	3/4" × 16	1.1/16" × 12	16.7	15	33.3	32
5J–08–14S	3/4" × 16	1.3/16" × 12	16.7	15.2	35	36
5J–08–16S	3/4" × 16	1.5/16" × 12	16.7	15.9	35.6	38
5J–08–20S	3/4" × 16	1.5/8" × 12	16.7	16.8	35.5	50
5J–10–16S	7/8" × 14	1.5/16" × 12	19.3	15.9	37.5	38
5J–10–20S	7/8" × 14	1.5/8" × 12	19.3	16.8	37.9	50
5J–10–24S	7/8" × 14	1.7/8" × 12	19.3	19.7	42	60
5J–12–16S	1.1/16" × 12	1.5/16" × 12	22	15.9	40.2	38
5J–12–20S	1.1/16" × 12	1.5/8" × 12	22	16.8	40.6	50
5J–12–24S	1.1/16" × 12	1.7/8" × 12	22	19.7	42	60
5J–16–20S	1.5/16" × 12	1.5/8" × 12	23	16.8	41.8	50
5J–16–24S	1.5/16" × 12	1.7/8" × 12	23	19.7	43.2	60
5J–16–32S	1.5/16" × 12	2.1/2" × 12	23	29.1	49	75
5J–20–24S	1.5/8" × 12	1.7/8" × 12	24.3	19.7	44.3	60
5J–20–32S	1.5/8" × 12	2.1/2" × 12	24.3	29.1	50	75

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

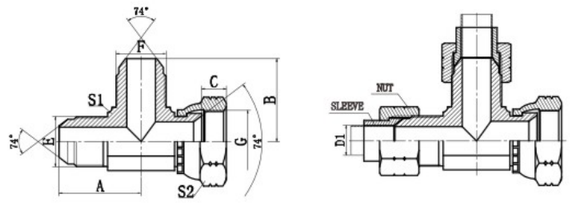


BJ

JIC MALE 74° CONE / JIC FEMALE BRANCH TEE

PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2
BJ–04	7/16" × 20	7/16" × 20	7/16" × 20	24.5	9	24.5	11	15
BJ–05	1/2" × 20	1/2" × 20	1/2" × 20	26.5	9.5	26.5	14	17
BJ–06	9/16" × 18	9/16" × 18	9/16" × 18	26.9	10.5	26.9	14	19
BJ–08	3/4" × 16	3/4" × 16	3/4" × 16	32	11	32	19	24
BJ–10	7/8" × 14	7/8" × 14	7/8" × 14	37.8	14	37.8	22	27
BJ–12	1.1/16" × 12	1.1/16" × 12	1.1/16" × 12	44.2	15	44.2	27	32
BJ–14	1.3/16" × 12	1.3/16" × 12	1.3/16" × 12	47.5	15	47.5	30	36
BJ–16	1.5/16" × 12	1.5/16" × 12	1.5/16" × 12	49	16	49	33	41
BJ–20	1.5/8" × 12	1.5/8" × 12	1.5/8" × 12	56	17	56	41	50
BJ–24	1.7/8" × 12	1.7/8" × 12	1.7/8" × 12	62.5	20	62.5	48	55
BJ–32	2.1/2" × 12	2.1/2" × 12	2.1/2" × 12	78	24.5	78	63	75

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

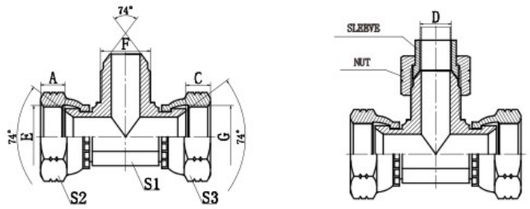


CJ

JIC MALE 74° CONE / JIC FEMALE 74° SEAT RUN TEE

PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2
CJ–04	7/16" × 20	7/16" × 20	7/16" × 20	24.5	24.5	9	11	15
CJ–05	1/2" × 20	1/2" × 20	1/2" × 20	26.5	26.5	9.5	14	17
CJ–06	9/16" × 18	9/16" × 18	9/16" × 18	26.9	26.9	10.5	14	19
CJ–08	3/4" × 16	3/4" × 16	3/4" × 16	32	32	9.5	19	24
CJ–10	7/8" × 14	7/8" × 14	7/8" × 14	37.8	37.8	13	22	27
CJ–12	1.1/16" × 12	1.1/16" × 12	1.1/16" × 12	44.2	44.2	15	27	32
CJ–14	1.3/16" × 12	1.3/16" × 12	1.3/16" × 12	47.5	47.5	15	30	36
CJ–16	1.5/16" × 12	1.5/16" × 12	1.5/16" × 12	49	49	16	33	41
CJ–20	1.5/8" × 12	1.5/8" × 12	1.5/8" × 12	56	56	17	41	50
CJ–24	1.7/8" × 12	1.7/8" × 12	1.7/8" × 12	62.5	62.5	20	48	55
CJ–32	2.1/2" × 12	2.1/2" × 12	2.1/2" × 12	78	78	24.5	63	75

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

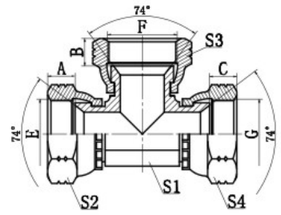


EJ

JIC FEMALE 74° SEAT / JIC MALE 74° CONE BRANCH TEE

PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2,S4
EJ–04	7/16" × 20	7/16" × 20	7/16" × 20	9	24.5	9	11	15
EJ–06	9/16" × 18	9/16" × 18	9/16" × 18	10.5	26.9	10.5	14	19
EJ–08	3/4" × 16	3/4" × 16	3/4" × 16	11	32	11	19	24
EJ–10	7/8" × 14	7/8" × 14	7/8" × 14	14	37.8	14	22	27
EJ–12	1.1/16" × 12	1.1/16" × 12	1.1/16" × 12	15	44.2	15	24	32
EJ–16	1.5/16" × 12	1.5/16" × 12	1.5/16" × 12	16	49	16	33	41
EJ–20	1.5/8" × 12	1.5/8" × 12	1.5/8" × 12	17	56	17	41	50
EJ–24	1.7/8" × 12	1.7/8" × 12	1.7/8" × 12	20	62.5	20	48	55

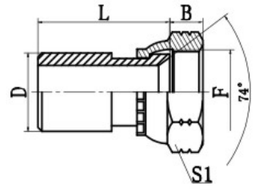
Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



DJ

JIC FEMALE 74° SEAT TEE

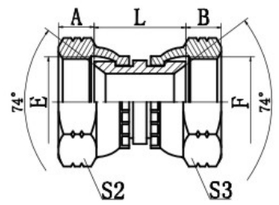
PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2,S3,S4
DJ–04	7/16" × 20	7/16" × 20	7/16" × 20	9	9	9	11	15
DJ–05	1/2" × 20	1/2" × 20	1/2" × 20	9.5	9.5	9.5	11	17
DJ–06	9/16" × 18	9/16" × 18	9/16" × 18	10.5	10.5	10.5	14	19
DJ–08	3/4" × 16	3/4" × 16	3/4" × 16	11	11	11	16	24
DJ–10	7/8" × 14	7/8" × 14	7/8" × 14	14	14	14	22	27
DJ–12	1.1/16" × 12	1.1/16" × 12	1.1/16" × 12	15	15	15	24	32
DJ–16	1.5/16" × 12	1.5/16" × 12	1.5/16" × 12	16	16	16	33	41



2WJ

BUTT–WELD TUBE / JIC FEMALE 74° SEAT

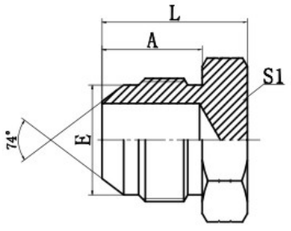
PART NO.	THREAD	TUBE O.D.	尺寸 DIMENSIONS			
	F		B	D	L	S1
2WJ–10–04	7/16" × 20	10	9	10	25.5	15
2WJ–12–05	1/2" × 20	12	9.5	12	27	17
2WJ–14–04	7/16" × 20	14	9	14	27	15
2WJ–14–06	9/16" × 18	14	10.5	14	55	19
2WJ–18–08	3/4" × 16	18	11	18	60	24
2WJ–20–10	7/8" × 14	20	13	20	33	27
2WJ–22–12	1.1/16" × 12	22	15	22	68	32
2WJ–28–16	1.5/16" × 12	28	16	28	68	41
2WJ–34–20	1.5/8" × 12	34	17	34	75	50

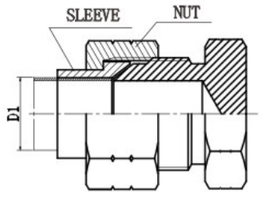


3J

JIC FEMALE 74° SEAT

PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S2	S3
3J-04	7/16" × 20	7/16" × 20	9	9	19	15	15
3J-05	1/2" × 20	1/2" × 20	9.5	9.5	21	17	17
3J-06	9/16" × 18	9/16" × 18	10.5	10.5	21	19	19
3J-06-08	9/16" × 18	3/4" × 16	10.5	11	23	19	24
3J-08	3/4" × 16	3/4" × 16	11	11	26	24	24
3J-10	7/8" × 14	7/8" × 14	13	13	27	27	27
3J-12	1.1/16" × 12	1.1/16" × 12	15	15	29	32	32
3J-16	1.5/16" × 12	1.5/16" × 12	16	16	29	41	41
3J-20	1.5/8" × 12	1.5/8" × 12	17	17	35	50	50
3J-24	1.7/8" × 12	1.7/8" × 12	20	20	37	55	55



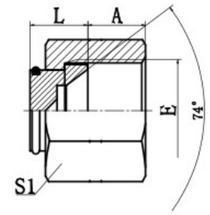


4J

JIC MALE 74° CONE PLUG

PART NO.	THREAD	DIMENSIONS		
	E	A	L	S1
4J-04	7/16" × 20	14	20	12
4J-05	1/2" × 20	14	20	14
4J-06	9/16" × 18	14.1	20	17
4J-08	3/4" × 16	16.7	25	22
4J-10	7/8" × 14	19.3	27.5	24
4J-12	1.1/16" × 12	21.9	32	30
4J-14	1.3/16" × 12	22.6	33.5	32
4J-16	1.5/16" × 12	23.1	34	36
4J-20	1.5/8" × 12	24.3	38	46
4J-24	1.7/8" × 12	27.5	44.5	50
4J-32	2.1/2" × 12	33.9	51	65

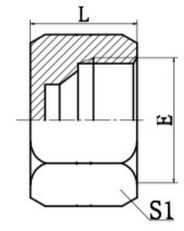
Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



9J

JIC FEMALE 74° SEAT PLUG

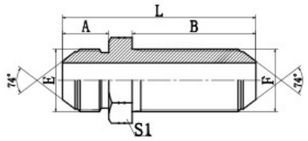
PART NO.	THREAD	DIMENSIONS		
	E	A	L	S2
9J-04	7/16" × 20	9	10.5	15
9J-05	1/2" × 20	9.5	11	17
9J-06	9/16" × 18	10.5	11	19
9J-08	3/4" × 16	11	13	24
9J-10	7/8" × 14	13	13.5	27
9J-12	1.1/16" × 12	15	15	32
9J-14	1.3/16" × 12	15	15	36
9J-16	1.5/16" × 12	16	15.5	41
9J-20	1.5/8" × 12	17	18.5	50
9J-24	1.7/8" × 12	20	19	55
9J-32	2.1/2" × 12	23.5	20.5	75



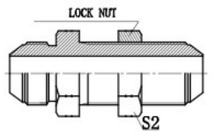
9J-CAP

JIC 74° FEMALE PLUG

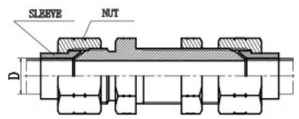
PART NO.	THREAD	DIMENSIONS	
	E	L	S1
9J-04CAP	7/16" × 20	15.1	15
9J-05CAP	1/2" × 20	15.5	17
9J-06CAP	9/16" × 18	15.9	19
9J-08CAP	3/4" × 16	19	24
9J-10CAP	7/8" × 14	21.4	27
9J-12CAP	1.1/16" × 12	23	32
9J-16CAP	1.5/16" × 12	25.8	41
9J-20CAP	1.5/8" × 12	27	50
9J-24CAP	1.7/8" × 12	30.2	60
9J-32CAP	2.1/2" × 12	36.5	75



6J



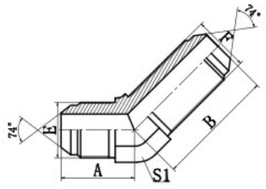
6J–LN



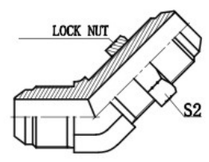
JIC MALE 74° CONE BULKHEAD

PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
6J–04	7/16" × 20	7/16" × 20	14	32.5	52.5	17	17
6J–05	1/2" × 20	1/2" × 20	14	32.5	52.5	19	19
6J–06	9/16" × 18	9/16" × 18	14.1	32.5	54.5	22	22
6J–08	3/4" × 16	3/4" × 16	16.7	36.5	61.5	24	24
6J–10	7/8" × 14	7/8" × 14	19.3	40	69.5	30	30
6J–12	1.1/16" × 12	1.1/16" × 12	21.9	44.5	78.5	36	36
6J–14	1.3/16" × 12	1.3/16" × 12	22.6	44.5	79.2	38	38
6J–16	1.5/16" × 12	1.5/16" × 12	23.1	44.5	79.8	41	41
6J–20	1.5/8" × 12	1.5/8" × 12	24.3	45.7	84	50	50
6J–24	1.7/8" × 12	1.7/8" × 12	27.5	46	89.5	55	55
6J–32	2.1/2" × 12	2.1/2" × 12	33.9	53.1	106.5	70	70

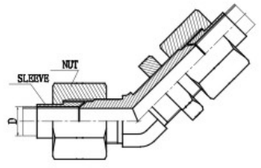
Note: In case if you are interested to order the adapter with lock nut, please insert suffix "LN" after our part NO., for example 6J–12LN. Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



6J4



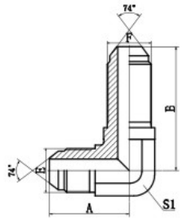
6J4–LN

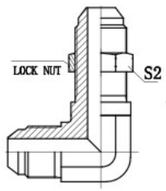


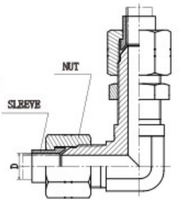
45° ELBOW JIC MALE 74° CONE BULKHEAD

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
6J4–04	7/16" × 20	7/16" × 20	21	38.9	11	17
6J4–05	1/2" × 20	1/2" × 20	23	42.2	14	19
6J4–06	9/16" × 18	9/16" × 18	23	42.4	14	22
6J4–08	3/4" × 16	3/4" × 16	27	49.3	19	24
6J4–10	7/8" × 14	7/8" × 14	31	55.1	22	30
6J4–12	1.1/16" × 12	1.1/16" × 12	35	62	27	36
6J4–16	1.5/16" × 12	1.5/16" × 12	37.8	65	33	41
6J4–20	1.5/8" × 12	1.5/8" × 12	43	67.3	41	50

Note: In case if you are interested to order the adapter with lock nut, please insert suffix "LN" after our part NO., for example 6J4–12LN. Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.





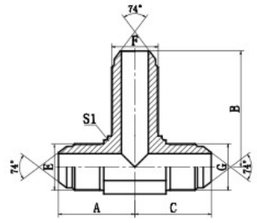


6J9 6J9–LN

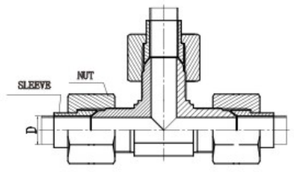
90° ELBOW JIC MALE 74° CONE BULKHEAD

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
6J9–04	7/16" × 20	7/16" × 20	24.5	40.4	11	17
6J9–05	1/2" × 20	1/2" × 20	26.6	43.7	14	19
6J9–06	9/16" × 18	9/16" × 18	27.7	46	14	22
6J9–08	3/4" × 16	3/4" × 16	34.5	53.5	19	24
6J9–10	7/8" × 14	7/8" × 14	39.6	60.7	22	30
6J9–12	1.1/16" × 12	1.1/16" × 12	45.2	67.8	27	36
6J9–14	1.3/16" × 12	1.3/16" × 12	48.2	69.5	30	38
6J9–16	1.5/16" × 12	1.5/16" × 12	50	71	33	41
6J9–20	1.5/8" × 12	1.5/8" × 12	57.5	79.2	41	50

Note: In case if you are interested to order the adapter with lock nut, please insert suffix "LN" after our part NO., for example 6J9–12LN. Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



AJ6JJ

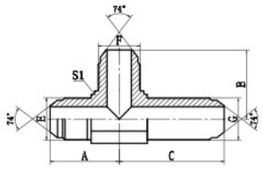


AJ6JJ–LN

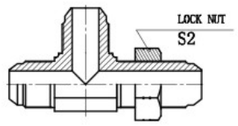
JIC MALE 74° CONE BULKHEAD BRANCH TEE

PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2
AJ6JJ–04	7/16" × 20	7/16" × 20	7/16" × 20	24.5	40.4	24.5	11	17
AJ6JJ–05	1/2" × 20	1/2" × 20	1/2" × 20	26.6	43.7	26.6	14	19
AJ6JJ–06	9/16" × 18	9/16" × 18	9/16" × 18	26.9	46	26.9	14	22
AJ6JJ–08	3/4" × 16	3/4" × 16	3/4" × 16	32	53.5	32	19	24
AJ6JJ–10	7/8" × 14	7/8" × 14	7/8" × 14	37.8	60.7	37.8	22	30
AJ6JJ–12	1.1/16" × 12	1.1/16" × 12	1.1/16" × 12	44.2	67.8	44.2	27	36
AJ6JJ–14	1.3/16" × 12	1.3/16" × 12	1.3/16" × 12	46.2	69.5	46.2	30	38
AJ6JJ–16	1.5/16" × 12	1.5/16" × 12	1.5/16" × 12	49	71	49	33	41

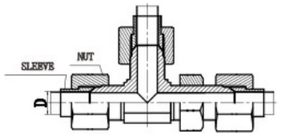
Note: In case if you are interested to order the adapter with lock nut, please insert suffix "LN" after our part NO., for example AJ6JJ–12LN. Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



AJJ6J



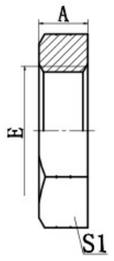
AJJ6J–LN



JIC MALE 74° CONE BULKHEAD RUN TEE

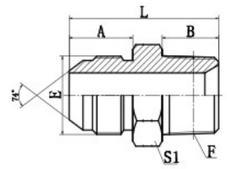
PART NO.	THREAD			DIMENSIONS				
	E	F	G	A	B	C	S1	S2
AJJ6J–04	7/16" × 20	7/16" × 20	7/16" × 20	24.5	24.5	40.4	11	17
AJJ6J–05	1/2" × 20	1/2" × 20	1/2" × 20	26.6	26.6	43.7	14	19
AJJ6J–06	9/16" × 18	9/16" × 18	9/16" × 18	26.9	26.9	46	14	22
AJJ6J–08	3/4" × 16	3/4" × 16	3/4" × 16	32	32	53.5	19	24
AJJ6J–10	7/8" × 14	7/8" × 14	7/8" × 14	37.8	37.8	60.7	22	30
AJJ6J–12	1.1/16" × 12	1.1/16" × 12	1.1/16" × 12	44.2	44.2	67.8	27	36
AJJ6J–16	1.5/16" × 12	1.5/16" × 12	1.5/16" × 12	49	49	71	33	41
AJJ6J–20	1.5/8" × 12	1.5/8" × 12	1.5/8" × 12	55.3	55.3	79.2	41	50
AJJ6J–24	1.7/8" × 12	1.7/8" × 12	1.7/8" × 12	63.5	63.5	86.9	48	55

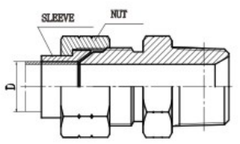
Note: In case if you are interested to order the adapter with lock nut, please insert suffix "LN" after our part NO., for example AJJ6J–12LN. Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



8J
JIC LOCK NUT

PART NO.	THREAD	DIMENSIONS	
	E	A	S1
8J–04	7/16" × 20	7	17
8J–05	1/2" × 20	7	19
8J–06	9/16" × 18	7	22
8J–08	3/4" × 16	8	24
8J–10	7/8" × 14	9	30
8J–12	1.1/16" × 12	10.5	36
8J–14	1.3/16" × 12	10.5	38
8J–16	1.5/16" × 12	10.5	41
8J–20	1.5/8" × 12	10.5	50
8J–24	1.7/8" × 12	10.5	55
8J–32	2.1/2" × 12	10.5	70

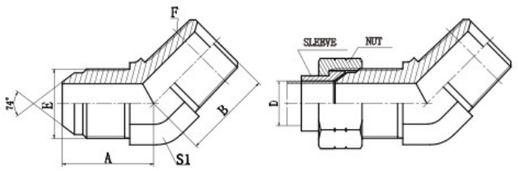




1JN
JIC MALE 74° CONE / NPT MALE

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1JN–02	5/16" × 24	Z1/8" × 27	11.4	10.5	28	12
1JN–04–02	7/16" × 20	Z1/8" × 27	14	10.5	30.5	12
1JN–04	7/16" × 20	Z1/4" × 18	14	15	35	17
1JN–04–06	7/16" × 20	Z3/8" × 18	14	16	36	19
1JN–04–08	7/16" × 20	Z1/2" × 14	14	19.5	41.5	24
1JN–05–04	1/2" × 20	Z1/4" × 18	14	15	35	17
1JN–05–06	1/2" × 20	Z3/8" × 18	14	16	36	19
1JN–05–08	1/2" × 20	Z1/2" × 14	14	19.5	41.5	24
1JN–06–04	9/16" × 18	Z1/4" × 18	14.1	15	34.5	17
1JN–06	9/16" × 18	Z3/8" × 18	14.1	16	36	19
1JN–06–08	9/16" × 18	Z1/2" × 14	14.1	19.5	41.5	24
1JN–08–04	3/4" × 16	Z1/4" × 18	16.7	15	39	22
1JN–08–06	3/4" × 16	Z3/8" × 18	16.7	16	40	22
1JN–08	3/4" × 16	Z1/2" × 14	16.7	19.5	44	24
1JN–08–12	3/4" × 16	Z3/4" × 14	16.7	19.5	46.5	30
1JN–10–06	7/8" × 14	Z3/8" × 18	19.3	16	43.5	24
1JN–10–08	7/8" × 14	Z1/2" × 14	19.3	19.5	47	24
1JN–10–12	7/8" × 14	Z3/4" × 14	19.3	19.5	49	30
1JN–12–08	1.1/16" × 12	Z1/2" × 14	21.9	19.5	51	30
1JN–12	1.1/16" × 12	Z3/4" × 14	21.9	19.5	51.5	30
1JN–12–16	1.1/16" × 12	Z1" × 11.5	21.9	25.5	58.5	36
1JN–12–20	1.1/16" × 12	Z1.1/4" × 11.5	21.9	26.5	61.5	46
1JN–14–12	1.3/16" × 12	Z3/4" × 14	22.6	19.5	53	32
1JN–16–12	1.5/16" × 12	Z3/4" × 14	23.1	19.5	53.5	36
1JN–16	1.5/16" × 12	Z1" × 11.5	23.1	25.5	58.5	36
1JN–16–20	1.5/16" × 12	Z1.1/4" × 11.5	23.1	26.5	62.5	46
1JN–16–24	1.5/16" × 12	Z1.1/2" × 11.5	23.1	27.5	65.5	50
1JN–20–16	1.5/8" × 12	Z1" × 11.5	24.3	25.5	63	46
1JN–20	1.5/8" × 12	Z1.1/4" × 11.5	24.3	26.5	63.5	46
1JN–20–24	1.5/8" × 12	Z1.1/2" × 11.5	24.3	27.5	67	50
1JN–24–20	1.7/8" × 12	Z1.1/4" × 11.5	27.5	26.5	69	50
1JN–24	1.7/8" × 12	Z1.1/2" × 11.5	27.5	27.5	70	50
1JN–24–32	1.7/8" × 12	Z2" × 11.5	27.5	27.5	72	65
1JN–32	2.1/2" × 12	Z2" × 11.5	33.9	27.5	78.5	65
1JN–32–24	2.1/2" × 12	Z1.1/2" × 11.5	33.9	27.5	78.5	65

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

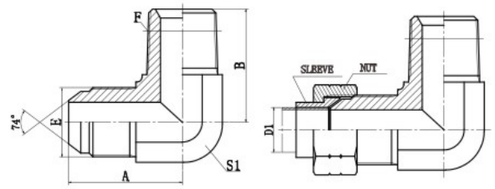


1JN4

45° ELBOW JIC MALE 74° CONE / NPT MALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1JN4–02	5/16" × 24	Z1/8" × 27	18	17	11
1JN4–03–02	3/8" × 24	Z1/8" × 27	19	17	11
1JN4–04–02	7/16" × 20	Z1/8" × 27	21.5	17	11
1JN4–04	7/16" × 20	Z1/4" × 18	22.3	21	14
1JN4–04–06	7/16" × 20	Z3/8" × 18	23	24	19
1JN4–04–08	7/16" × 20	Z1/2" × 14	24.5	29.5	22
1JN4–05–02	1/2" × 20	Z1/8" × 27	22.3	18	14
1JN4–05–04	1/2" × 20	Z1/4" × 18	22.3	21	14
1JN4–06–02	9/16" × 18	Z1/8" × 27	22.8	17.3	14
1JN4–06–04	9/16" × 18	Z1/4" × 18	22.8	21	14
1JN4–06	9/16" × 18	Z3/8" × 18	24	24	19
1JN4–06–08	9/16" × 18	Z1/2" × 14	25	29.5	22
1JN4–08–04	3/4" × 16	Z1/4" × 18	26.8	22	19
1JN4–08–06	3/4" × 16	Z3/8" × 18	26.8	24	19
1JN4–08	3/4" × 16	Z1/2" × 14	28	29.5	22
1JN4–08–12	3/4" × 16	Z3/4" × 14	29	35	27
1JN4–10–08	7/8" × 14	Z1/2" × 14	31	29.5	22
1JN4–10–12	7/8" × 14	Z3/4" × 14	32	35	27
1JN4–12–08	1.1/16" × 12	Z1/2" × 14	35.5	31	27
1JN4–12	1.1/16" × 12	Z3/4" × 14	35.5	35	27
1JN4–12–16	1.1/16" × 12	Z1" × 11.5	37.5	39	33
1JN4–14–12	1.3/16" × 12	Z3/4" × 14	37	35.5	30
1JN4–16–12	1.5/16" × 12	Z3/4" × 14	38.5	36.5	33
1JN4–16	1.5/16" × 12	Z1" × 11.5	38.5	39	33
1JN4–16–20	1.5/16" × 12	Z1.1/4" × 11.5	42	42.5	41
1JN4–20–16	1.5/8" × 12	Z1" × 11.5	43	42.5	41
1JN4–20	1.5/8" × 12	Z1.1/4" × 11.5	43	42	41
1JN4–20–24	1.5/8" × 12	Z1.1/2" × 11.5	46	45	48
1JN4–24	1.7/8" × 12	Z1.1/2" × 11.5	49	45	48
1JN4–32	2.1/2" × 12	Z2" × 11.5	58	50	63

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

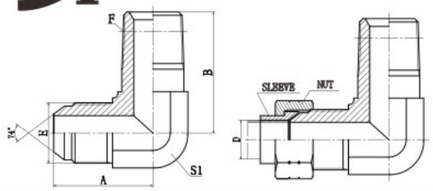


1JN9

90° ELBOW JIC MALE 74° CONE / NPT MALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1JN9–02	5/16" × 24	Z1/8" × 27	21	21	11
1JN9–03–02	3/8" × 24	Z1/8" × 27	22	21	11
1JN9–04	7/16" × 20	Z1/4" × 18	26.6	25.5	14
1JN9–04–02	7/16" × 20	Z1/8" × 27	24.5	21	11
1JN9–04–06	7/16" × 20	Z3/8" × 18	29.5	31	19
1JN9–05–02	1/2" × 20	Z1/8" × 27	26.6	23.5	14
1JN9–05–04	1/2" × 20	Z1/4" × 18	26.6	25.5	14
1JN9–05–06	1/2" × 20	Z3/8" × 18	29.5	31	19
1JN9–06	9/16" × 18	Z3/8" × 18	30	31	19
1JN9–06–04	9/16" × 18	Z1/4" × 18	26.9	25.5	14
1JN9–06–08	9/16" × 18	Z1/2" × 14	32	36.7	22
1JN9–08	3/4" × 16	Z1/2" × 14	34.8	37.3	22
1JN9–08–04	3/4" × 16	Z1/4" × 18	32	28.5	19
1JN9–08–06	3/4" × 16	Z3/8" × 18	32	31	19
1JN9–08–12	3/4" × 16	Z3/4" × 14	37.9	44	27
1JN9–10–06	7/8" × 14	Z3/8" × 18	37.8	32.5	22
1JN9–10–08	7/8" × 14	Z1/2" × 14	37.8	37.3	22
1JN9–10–12	7/8" × 14	Z3/4" × 14	41	44	27
1JN9–10–16	7/8" × 14	Z1" × 11.5	44.5	50	33
1JN9–12	1.1/16" × 12	Z3/4" × 14	44.2	44	27
1JN9–12–08	1.1/16" × 12	Z1/2" × 14	44.2	40	27
1JN9–12–16	1.1/16" × 12	Z1" × 11.5	49	50	33
1JN9–12–20	1.1/16" × 12	Z1.1/4" × 11.5	52.5	54.5	41
1JN9–14–12	1.3/16" × 12	Z3/4" × 14	47.5	45	30
1JN9–14–16	1.3/16" × 12	Z1" × 11.5	48.7	50	33
1JN9–16	1.5/16" × 12	Z1" × 11.5	49	50	33
1JN9–16–12	1.5/16" × 12	Z3/4" × 14	49	45.2	33
1JN9–16–20	1.5/16" × 12	Z1.1/4" × 11.5	54	60.5	41
1JN9–16–24	1.5/16" × 12	Z1.1/2" × 11.5	59.4	59.5	48
1JN9–20	1.5/8" × 12	Z1.1/4" × 11.5	55.5	54.5	41
1JN9–20–16	1.5/8" × 12	Z1" × 11.5	55.5	54.5	41
1JN9–20–24	1.5/8" × 12	Z1.1/2" × 11.5	59.4	63	48
1JN9–24	1.7/8" × 12	Z1.1/2" × 11.5	62.5	63	48
1JN9–24–20	1.7/8" × 12	Z1.1/4" × 11.5	62.5	63	48
1JN–32–24	2.1/2" × 12	Z1.1/2" × 11.5	75.4	70	63
1JN–32	2.1/2" × 12	Z2" × 11.5	75.4	67.5	63

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

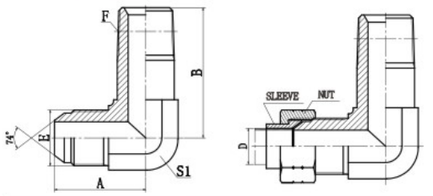


1JN9–L

90° ELBOW JIC MALE 74° CONE / LONG NPT MALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1JN9–04–02L	7/16" × 20	Z1/8" × 27	24.5	30	11
1JN9–04L	7/16" × 20	Z1/4" × 18	26.6	40.1	14
1JN9–05–02L	1/2" × 20	Z1/8" × 27	26.6	31	14
1JN9–05–04L	1/2" × 20	Z1/4" × 18	26.6	40.1	14
1JN9–06–04L	9/16" × 18	Z1/4" × 18	26.9	40.1	14
1JN9–06–08L	9/16" × 18	Z1/2" × 14	32	55.1	22
1JN9–08–06L	3/4" × 16	Z3/8" × 18	32	46.2	19
1JN9–08L	3/4" × 16	Z1/2" × 14	34.8	55.1	22
1JN9–10–08L	7/8" × 14	Z1/2" × 14	37.8	55.1	22
1JN9–12–08L	1.1/16" × 12	Z1/2" × 14	44.2	56.9	27
1JN9–12L	1.1/16" × 12	Z3/4" × 14	44.2	62	27
1JN9–16–12L	1.5/16" × 12	Z3/4" × 14	49	69.9	33
1JN9–16L	1.5/16" × 12	Z1" × 11.5	49	76.5	33
1JN9–20L	1.5/8" × 12	Z1.1/4" × 11.5	55.5	93.7	41
1JN9–24L	1.7/8" × 12	Z1.1/2" × 11.5	62.5	104.1	48
1JN–32L	2.1/2" × 12	Z2" × 11.5	78	122.2	63

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

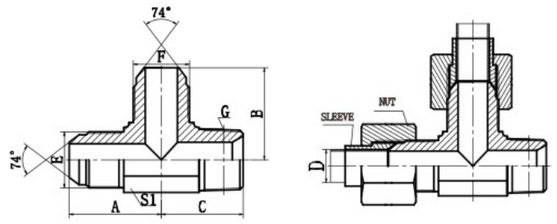


1JN9–LL

90° ELBOW JIC MALE 74° CONE / LONGER NPT MALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1JN9–04–02LL	7/16" × 20	Z1/8" × 27	24.5	39.6	11
1JN9–04LL	7/16" × 20	Z1/4" × 18	26.6	52.6	14
1JN9–05–04LL	1/2" × 20	Z1/4" × 18	26.6	52.6	14
1JN9–06–04LL	9/16" × 18	Z1/4" × 18	26.9	52.6	14
1JN9–06LL	9/16" × 18	Z3/8" × 18	30	61.5	19
1JN9–08–06LL	3/4" × 16	Z3/8" × 18	32	61.5	19
1JN9–10–08LL	7/8" × 14	Z1/2" × 14	37.8	72.9	22
1JN9–12LL	1.1/16" × 12	Z3/4" × 14	44.2	83.3	27
1JN9–16LL	1.5/16" × 12	Z1" × 11.5	49	102.9	33
1JN9–20LL	1.5/8" × 12	Z1.1/4" × 11.5	55.5	127	41
1JN9–24LL	1.7/8" × 12	Z1.1/2" × 11.5	62.5	141	48
1JN–32LL	2.1/2" × 12	Z2" × 11.5	78	168.4	63

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

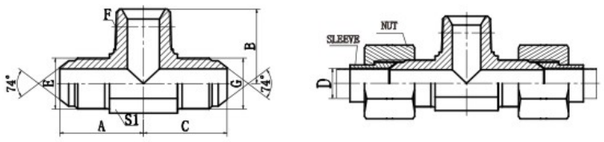


AJJN

JIC MALE 74° CONE / NPT MALE RUN TEE

PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
AJJN–04	7/16" × 20	7/16" × 20	Z1/4" × 18	26.6	26.6	25.5	14
AJJN–04–04–02	7/16" × 20	7/16" × 20	Z1/8" × 27	24.5	24.5	21	11
AJJN–05–05–02	1/2" × 20	1/2" × 20	Z1/8" × 27	26.5	26.5	23.5	14
AJJN–05–05–04	1/2" × 20	1/2" × 20	Z1/4" × 18	26.5	26.5	25.5	14
AJJN–06	9/16" × 18	9/16" × 18	Z3/8" × 18	30	30	32	19
AJJN–06–06–04	9/16" × 18	9/16" × 18	Z1/4" × 18	26.9	26.9	25.5	14
AJJN–08	3/4" × 16	3/4" × 16	Z1/2" × 14	34.8	34.8	36.7	22
AJJN–08–08–06	3/4" × 16	3/4" × 16	Z3/8" × 18	32	32	31	19
AJJN–10–10–08	7/8" × 14	7/8" × 14	Z1/2" × 14	37.8	37.8	36.7	22
AJJN–10–10–12	7/8" × 14	7/8" × 14	Z3/4" × 14	41	41	44	27
AJJN–12	1.1/16" × 12	1.1/16" × 12	Z3/4" × 14	44.2	44.2	44	27
AJJN–16	1.5/16" × 12	1.5/16" × 12	Z1" × 11.5	49	49	50	33
AJJN–20	1.5/8" × 12	1.5/8" × 12	Z1.1/4" × 11.5	55.5	55.5	54.5	41
AJJN–24	1.7/8" × 12	1.7/8" × 12	Z1.1/2" × 11.5	62.5	62.5	60	48

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

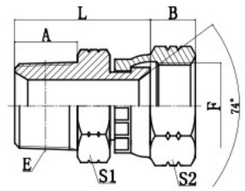


AJNJ

JIC MALE 74° CONE / NPT MALE BRANCH TEE

PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
AJNJ–04	7/16" × 20	Z1/4" × 18	7/16" × 20	26.6	25.5	26.6	14
AJNJ–04–02–04	7/16" × 20	Z1/8" × 27	7/16" × 20	24.5	21	24.5	11
AJNJ–05–02–05	1/2" × 20	Z1/8" × 27	1/2" × 20	26.6	23.5	26.6	14
AJNJ–05–04–05	1/2" × 20	Z1/4" × 18	1/2" × 20	26.6	25.5	26.6	14
AJNJ–06	9/16" × 18	Z3/8" × 18	9/16" × 18	30	31	30	19
AJNJ–06–04–06	9/16" × 18	Z1/4" × 18	9/16" × 18	26.9	25.5	26.9	14
AJNJ–06–08–06	9/16" × 18	Z1/2" × 14	9/16" × 18	32	36.7	32	22
AJNJ–08	3/4" × 16	Z1/2" × 14	3/4" × 16	34.8	37.3	34.8	22
AJNJ–08–06–08	3/4" × 16	Z3/8" × 18	3/4" × 16	32	31	32	19
AJNJ–10–08–10	7/8" × 14	Z1/2" × 14	7/8" × 14	37.8	36.7	37.8	22
AJNJ–12	1.1/16" × 12	Z3/4" × 14	1.1/16" × 12	44.2	44	44.2	27
AJNJ–16	1.5/16" × 12	Z1" × 11.5	1.5/16" × 12	49	50	49	33
AJNJ–20	1.5/8" × 12	Z1.1/4" × 11.5	1.5/8" × 12	55.5	54.5	55.5	41
AJNJ–24	1.7/8" × 12	Z1.1/2" × 11.5	1.7/8" × 12	62.5	63	62.5	48

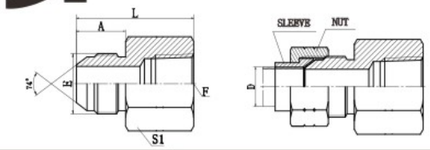
Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



2NJ

NPT MALE / JIC FEMALE 74° SEAT

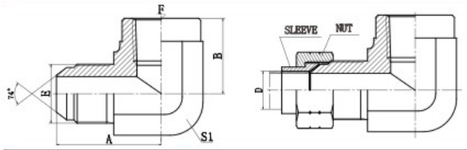
PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
2NJ–02–04	Z1/8" × 27	7/16" × 20	10.5	9	24.5	12	17
2NJ–02–05	Z1/8" × 27	1/2" × 20	10.5	9	25	12	17
2NJ–04	Z1/4" × 18	7/16" × 20	15	9	29	17	17
2NJ–04–05	Z1/4" × 18	1/2" × 20	15	9	29.5	17	17
2NJ–04–06	Z1/4" × 18	9/16" × 18	15	10.5	29.5	17	19
2NJ–04–08	Z1/4" × 18	3/4" × 16	15	10.5	31.5	19	24
2NJ–06	Z3/8" × 18	9/16" × 18	16	10.5	30.5	19	19
2NJ–06–08	Z3/8" × 18	3/4" × 16	16	10.5	32.5	19	24
2NJ–06–10	Z3/8" × 18	7/8" × 14	16	12	35	22	27
2NJ–08	Z1/2" × 14	3/4" × 16	19.5	10.5	37.5	22	24
2NJ–08–06	Z1/2" × 14	9/16" × 18	19.5	10.5	36	22	19
2NJ–08–10	Z1/2" × 14	7/8" × 14	19.5	12	38	22	27
2NJ–08–12	Z1/2" × 14	1.1/16" × 12	19.5	15	42	27	32
2NJ–12	Z3/4" × 14	1.1/16" × 12	19.5	15	42	30	32
2NJ–12–08	Z3/4" × 14	3/4" × 16	19.5	10.5	40	30	24
2NJ–12–10	Z3/4" × 14	7/8" × 14	19.5	12	40.5	30	27
2NJ–12–16	Z3/4" × 14	1.5/16" × 12	19.5	16	42.5	32	41
2NJ–16	Z1" × 11.5	1.5/16" × 12	25.5	16	48	36	41
2NJ–16–12	Z1" × 11.5	1.1/16" × 12	25.5	15	49	36	32
2NJ–16–20	Z1" × 11.5	1.5/8" × 12	25.5	17	55	41	50
2NJ–20	Z1.1/4" × 11.5	1.5/8" × 12	26.5	17	56	46	50
2NJ–20–24	Z1.1/4" × 11.5	1.7/8" × 12	26.5	20	57.5	46	60
2NJ–24–20	Z1.1/4" × 11.5	1.5/8" × 12	27.5	17	58.5	50	50
2NJ–24	Z1.1/2" × 11.5	1.7/8" × 12	27.5	23.5	60.5	50	60



5JN
JIC MALE 74° CONE / NPT FEMALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	L	S1
5JN–04–02	7/16" × 20	Z1/8" × 27	14	30	17
5JN–04	7/16" × 20	Z1/4" × 18	14	35.5	19
5JN–05–04	1/2" × 20	Z1/4" × 18	14	35.3	19
5JN–06–04	9/16" × 18	Z1/4" × 18	14.1	35.6	19
5JN–06	9/16" × 18	Z3/8" × 18	14.1	37.1	22
5JN–06–08	9/16" × 18	Z1/2" × 14	14.1	42.5	30
5JN–08–06	3/4" × 16	Z3/8" × 18	16.7	39.6	22
5JN–08	3/4" × 16	Z1/2" × 14	16.7	45.6	30
5JN–08–12	3/4" × 16	Z3/4" × 14	16.7	45	36
5JN–10–08	7/8" × 14	Z1/2" × 14	19.3	48	30
5JN–10–12	7/8" × 14	Z3/4" × 14	19.3	49.7	36
5JN–12–08	1.1/16" × 12	Z1/2" × 14	21.9	52.1	30
5JN–12	1.1/16" × 12	Z3/4" × 14	21.9	52.3	36
5JN–16–12	1.5/16" × 12	Z3/4" × 14	23.1	50	36
5JN–16	1.5/16" × 12	Z1" × 11.5	23.1	59.7	41
5JN–20	1.5/8" × 12	Z1.1/4" × 11.5	24.3	61.5	50
5JN–24	1.7/8" × 12	Z1.1/2" × 11.5	27.5	62.5	60
5JN–32	2.1/2" × 12	Z2" × 11.5	33.9	70	70

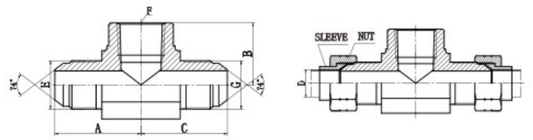
Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



5JN9
90° ELBOW JIC MALE 74° CONE / NPT FEMALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
5JN9–04–02	7/16" × 20	Z1/8" × 27	27.5	16.8	16
5JN9–04	7/16" × 20	Z1/4" × 18	30.9	22.4	19
5JN9–06–04	9/16" × 18	Z1/4" × 18	31.2	22.4	19
5JN9–06	9/16" × 18	Z3/8" × 18	33.5	25.9	24
5JN9–08–04	3/4" × 16	Z1/4" × 18	31.6	22.4	19
5JN9–08	3/4" × 16	Z1/2" × 14	39.5	31.2	30
5JN9–12–08	1.1/16" × 12	Z1/2" × 14	46	31.2	30
5JN9–12	1.1/16" × 12	Z3/4" × 14	48	34.5	33
5JN9–12–16	1.1/16" × 12	Z1" × 11.5	52.5	41.1	41
5JN9–16–12	1.5/16" × 12	Z3/4" × 14	49	34.5	33
5JN9–16	1.5/16" × 12	Z1" × 11.5	55.1	41.1	41
5JN9–20	1.5/8" × 12	Z1.1/4" × 11.5	59.2	43.2	48
5JN9–24	1.7/8" × 12	Z1.1/2" × 11.5	73.4	52.8	63

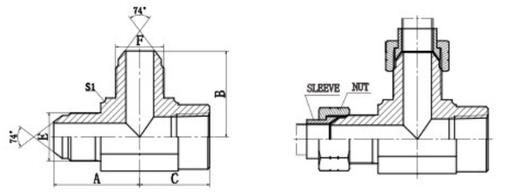
Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



KJNJ
JIC MALE 74° CONE / NPT FEMALE BRANCH TEE

PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
KJNJ–04	7/16" × 20	Z1/4" × 18	7/16" × 20	29.5	22.4	29.5	19
KJNJ–04–02–04	7/16" × 20	Z1/8" × 27	7/16" × 20	26.5	16.8	26.5	16
KJNJ–05–02–05	1/2" × 20	Z1/8" × 27	1/2" × 20	27.5	16.8	27.5	16
KJNJ–05–04–05	1/2" × 20	Z1/4" × 18	1/2" × 20	29.5	22.4	29.5	19
KJNJ–06	9/16" × 18	Z3/8" × 18	9/16" × 18	33.5	25.9	33.5	24
KJNJ–06–04–06	9/16" × 18	Z1/4" × 18	9/16" × 18	30	22.4	30	19
KJNJ–08	3/4" × 16	Z1/2" × 14	3/4" × 16	39.5	31.2	39.5	30
KJNJ–08–06–08	3/4" × 16	Z3/8" × 18	3/4" × 16	36	25.9	36	24
KJNJ–10–08–10	7/8" × 14	Z1/2" × 14	7/8" × 14	42.5	31.2	42.5	30
KJNJ–12	1.1/16" × 12	Z3/4" × 14	1.1/16" × 12	48	34.5	48	33
KJNJ–16	1.5/16" × 12	Z1" × 11.5	1.5/16" × 12	54	41.1	54	41
KJNJ–20	1.5/8" × 12	Z1.1/4" × 11.5	1.5/8" × 12	59.4	43.2	59.4	48

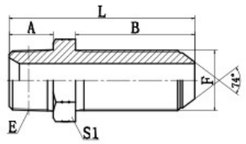
Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



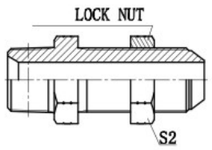
LJJN
JIC MALE 74° CONE / NPT FEMALE RUN TEE

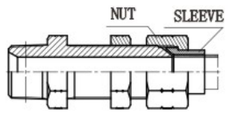
PART NO.	THREAD			DIMENSIONS			
	E	F	G	A	B	C	S1
LJJN–04	7/16" × 20	7/16" × 20	Z1/4" × 18	30.9	30.9	25.1	19
LJJN–04–04–02	7/16" × 20	7/16" × 20	Z1/8" × 27	27.5	27.5	16.8	16
LJJN–06	9/16" × 18	9/16" × 18	Z3/8" × 18	33.5	33.5	26.8	24
LJJN–06–06–04	9/16" × 18	9/16" × 18	Z1/4" × 18	30	30	22.5	19
LJJN–08	3/4" × 16	3/4" × 16	Z1/2" × 14	39.5	39.5	33	30
LJJN–08–08–06	3/4" × 16	3/4" × 16	Z3/8" × 18	36	36	25.9	24
LJJN–10–10–08	7/8" × 14	7/8" × 14	Z1/2" × 14	42.5	42.5	31.2	30
LJJN–12	1.1/16" × 12	1.1/16" × 12	Z3/4" × 14	48	48	39	33
LJJN–16	1.5/16" × 12	1.5/16" × 12	Z1" × 11.5	55.1	55.1	43.9	41
LJJN–20	1.5/8" × 12	1.5/8" × 12	Z1.1/4" × 11.5	59.2	59.2	43.3	48

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



6NJ



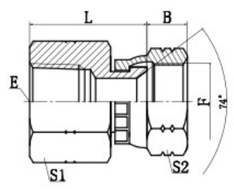


6NJ–LN

NPT MALE / JIC MALE 74° CONE BULKHEAD

PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
6NJ–02–04	Z1/8" × 27	7/16" × 20	10.5	32.5	49	17	17
6NJ–04	Z1/4" × 18	7/16" × 20	15	32.5	53.5	17	17
6NJ–04–06	Z1/4" × 18	9/16" × 18	15	32.5	53.5	22	22
6NJ–06	Z3/8" × 18	9/16" × 18	16	32.5	56.5	22	22
6NJ–08	Z1/2" × 14	3/4" × 16	19.5	36.5	64	24	24
6NJ–08–10	Z1/2" × 14	7/8" × 14	19.5	40	69.5	30	30
6NJ–12	Z3/4" × 14	1.1/16" × 12	19.5	44.5	75	36	36
6NJ–16	Z1" × 11.5	1.5/16" × 12	25.5	44.5	83	41	41
6NJ–20	Z1.1/4" × 11.5	1.5/8" × 12	26.5	45.7	87	50	50
6NJ–24	Z1.1/2" × 11.5	1.7/8" × 12	27.5	46	88.5	55	55

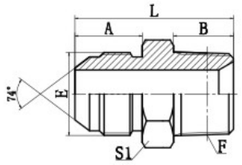
Note: In case if you are interested to order the adapter with lock nut, please insert suffix "LN" after our part NO., for example 6J–12LN. Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

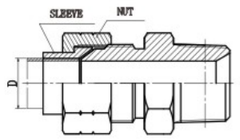


7NJ–S

NPT FEMALE / JIC FEMALE 74° SEAT

PART NO.	THREAD		DIMENSIONS			
	E	F	B	L	S1	S2
7NJ–04S	Z1/4" × 18	7/16" × 20	9	29	19	15
7NJ–04–06S	Z1/4" × 18	9/16" × 18	10.5	28	19	19
7NJ–06S	Z3/8" × 18	9/16" × 18	10.5	30	24	19
7NJ–06–08S	Z3/8" × 18	3/4" × 16	11	32	24	24
7NJ–08S	Z1/2" × 14	3/4" × 16	11	37.5	30	24
7NJ–08–10S	Z1/2" × 14	7/8" × 14	14	38	30	27
7NJ–08–12S	Z1/2" × 14	1.1/16" × 12	15	37.5	30	32
7NJ–12S	Z3/4" × 14	1.1/16" × 12	15	40.5	36	32
7NJ–16S	Z1" × 11.5	1.5/16" × 12	16	47.5	41	41
7NJ–20S	Z1.1/4" × 11.5	1.5/8" × 12	16.1	52	50	50
7NJ–24S	Z1.1/2" × 11.5	1.7/8" × 12	20	53.5	60	55



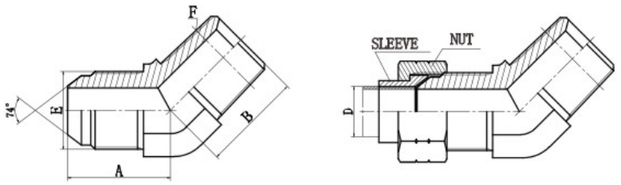


1JT–SP

JIC MALE 74° CONE / BSPT MALE

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1JT–04–02SP	7/16" × 20	R1/8" × 28	14	10	30	12
1JT–04SP	7/16" × 20	R1/4" × 19	14	14.5	34.5	14
1JT–04–06SP	7/16" × 20	R3/8" × 19	14	15	35	17
1JT–05–02SP	1/2" × 20	R1/8" × 28	14	10.5	30.5	14
1JT–05–04SP	1/2" × 20	R1/4" × 19	14	14.5	34	14
1JT–05–06SP	1/2" × 20	R3/8" × 19	14	15	35	19
1JT–06–02SP	9/16" × 18	R1/8" × 28	14.1	10.5	30.5	17
1JT–06–04SP	9/16" × 18	R1/4" × 19	14.1	14.5	34	17
1JT–06SP	9/16" × 18	R3/8" × 19	14.1	15	34	17
1JT–06–08SP	9/16" × 18	R1/2" × 14	14.1	20	41	22
1JT–08–06SP	3/4" × 16	R3/8" × 19	16.7	15	39	22
1JT–08SP	3/4" × 16	R1/2" × 14	16.7	20	44.5	22
1JT–08–12SP	3/4" × 16	R3/4" × 14	16.7	20	46	30
1JT–10–06SP	7/8" × 14	R3/8" × 19	19.3	15	42.5	24
1JT–10–08SP	7/8" × 14	R1/2" × 14	19.3	20	46.5	24
1JT–10–12SP	7/8" × 14	R3/4" × 14	19.3	20	48.5	30
1JT–12–08SP	1.1/16" × 12	R1/2" × 14	21.9	20	51	30
1JT–12SP	1.1/16" × 12	R3/4" × 14	21.9	20	51	30
1JT–12–16SP	1.1/16" × 12	R1" × 11	21.9	25.5	57.5	36
1JT–14–12SP	1.3/16" × 12	R3/4" × 14	22.6	20	52.5	32
1JT–14–16SP	1.3/16" × 12	R1" × 11	22.6	25.5	57.5	36
1JT–16–12SP	1.5/16" × 12	R3/4" × 14	23.1	20	53	36
1JT–16SP	1.5/16" × 12	R1" × 11	23.1	25.5	59	36
1JT–16–20SP	1.5/16" × 12	R1.1/4" × 11	23.1	26.5	61.5	46
1JT–20–16SP	1.5/8" × 12	R1" × 11	24.3	25.5	62.5	46
1JT–20SP	1.5/8" × 12	R1.1/4" × 11	24.3	26.5	63	46
1JT–20–24SP	1.5/8" × 12	R1.1/2" × 11	24.3	26.5	66.5	50
1JT–24–20SP	1.7/8" × 12	R1.1/4" × 11	27.5	26.5	67.5	50
1JT–24SP	1.7/8" × 12	R1.1/2" × 11	27.5	26.5	69.5	50
1JT–24–32SP	1.7/8" × 12	R2" × 11	27.5	30	74.5	65
1JT–32–24SP	2.1/2" × 12	R1.1/2" × 11	33.9	26.5	77.5	65
1JT–32SP	2.1/2" × 12	R2" × 11	33.9	30	80	65

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

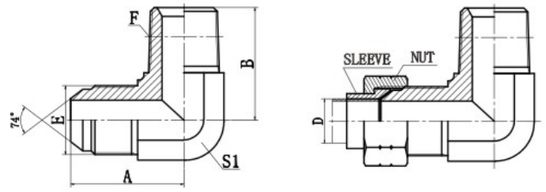


1JT4–SP

45° ELBOW JIC MALE 74° CONE / BSPT MALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1JT4–04–02SP	7/16" × 20	R1/8" × 28	21.5	17	11
1JT4–04SP	7/16" × 20	R1/4" × 19	22.3	21	14
1JT4–04–06SP	7/16" × 20	R3/8" × 19	22.5	23	16
1JT4–04–08SP	7/16" × 20	R1/2" × 14	24.5	29.5	22
1JT4–05–02SP	1/2" × 20	R1/8" × 28	21.5	17.5	14
1JT4–05–04SP	1/2" × 20	R1/4" × 19	22.3	21	14
1JT4–05–06SP	1/2" × 20	R3/8" × 19	22.8	23	16
1JT4–06–02SP	9/16" × 18	R1/8" × 28	22.8	18	14
1JT4–06–04SP	9/16" × 18	R1/4" × 19	22.8	21	14
1JT4–06SP	9/16" × 18	R3/8" × 19	23	23	16
1JT4–06–08SP	9/16" × 18	R1/2" × 14	25	29.5	22
1JT4–08–04SP	3/4" × 16	R1/4" × 19	26.8	22	19
1JT4–08–06SP	3/4" × 16	R3/8" × 19	26.8	24	19
1JT4–08SP	3/4" × 16	R1/2" × 14	28	29.5	22
1JT4–08–12SP	3/4" × 16	R3/4" × 14	29	30.5	27
1JT4–10–06SP	7/8" × 14	R3/8" × 19	31	25	22
1JT4–10–08SP	7/8" × 14	R1/2" × 14	31	29.5	22
1JT4–10–12SP	7/8" × 14	R3/4" × 14	33	31.5	27
1JT4–12–08SP	1.1/16" × 12	R1/2" × 14	35.5	30	27
1JT4–12SP	1.1/16" × 12	R3/4" × 14	35.5	30.5	27
1JT4–12–16SP	1.1/16" × 12	R1" × 11	37.5	38	33
1JT4–16–12SP	1.5/16" × 12	R3/4" × 14	38.5	32.5	33
1JT4–16SP	1.5/16" × 12	R1" × 11	38.5	38	33
1JT4–16–20SP	1.5/16" × 12	R1.1/4" × 11	42	43	41
1JT4–20–16SP	1.5/8" × 12	R1" × 11	43	42	41
1JT4–20SP	1.5/8" × 12	R1.1/4" × 11	43	43	41
1JT4–20–24SP	1.5/8" × 12	R1.1/2" × 11	46	47.5	48
1JT4–24–20SP	1.7/8" × 12	R1.1/4" × 11	49	45.5	48
1JT4–24SP	1.7/8" × 12	R1.1/2" × 11	49	47.5	48
1JT4–32SP	2.1/2" × 12	R2" × 11	58	50	63

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

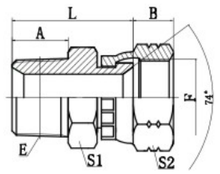


1JT9–SP

90° ELBOW JIC MALE 74° CONE / BSPT MALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	B	S1
1JT9–02SP	5/16" × 24	R1/8" × 28	20.5	21	11
1JT9–04–02SP	7/16" × 20	R1/8" × 28	24.5	21	11
1JT9–04SP	7/16" × 20	R1/4" × 19	26.6	25.5	14
1JT9–04–06SP	7/16" × 20	R3/8" × 19	27.5	28	16
1JT9–05–02SP	1/2" × 20	R1/8" × 28	26.6	23.5	14
1JT9–05–04SP	1/2" × 20	R1/4" × 19	26.6	25.5	14
1JT9–05–06SP	1/2" × 20	R3/8" × 19	27.5	28	16
1JT9–06–02SP	9/16" × 18	R1/8" × 28	26.9	23.5	14
1JT9–06–04SP	9/16" × 18	R1/4" × 19	26.9	25.5	14
1JT9–06SP	9/16" × 18	R3/8" × 19	28.5	28.5	16
1JT9–06–08SP	9/16" × 18	R1/2" × 14	32	36	22
1JT9–08–04SP	3/4" × 16	R1/4" × 19	32	28	19
1JT9–08–06SP	3/4" × 16	R3/8" × 19	32	30.5	19
1JT9–08SP	3/4" × 16	R1/2" × 14	34.8	36	22
1JT9–08–12SP	3/4" × 16	R3/4" × 14	37.9	43.5	27
1JT9–10–06SP	7/8" × 14	R3/8" × 19	38	32	22
1JT9–10–08SP	7/8" × 14	R1/2" × 14	37.8	36	22
1JT9–10–12SP	7/8" × 14	R3/4" × 14	41	43.5	27
1JT9–12–08SP	1.1/16" × 12	R1/2" × 14	44.2	40	27
1JT9–12SP	1.1/16" × 12	R3/4" × 14	44.2	43.5	27
1JT9–12–16SP	1.1/16" × 12	R1" × 11	47.8	50	33
1JT9–16–12SP	1.5/16" × 12	R3/4" × 14	49	47.5	33
1JT9–16SP	1.5/16" × 12	R1" × 11	49	50	33
1JT9–16–20SP	1.5/16" × 12	R1.1/4" × 11	54	56.5	41
1JT9–20–16SP	1.5/8" × 12	R1" × 11	55.5	56.5	41
1JT9–20SP	1.5/8" × 12	R1.1/4" × 11	55.5	56.5	41
1JT9–24–20SP	1.7/8" × 12	R1.1/4" × 11	62.5	61	48
1JT9–24SP	1.7/8" × 12	R1.1/2" × 11	62.5	62.5	48
1JT9–24–32SP	1.7/8" × 12	R2" × 11	74.5	67	63
1JT9–32SP	2.1/2" × 12	R2" × 11	75.4	67	63

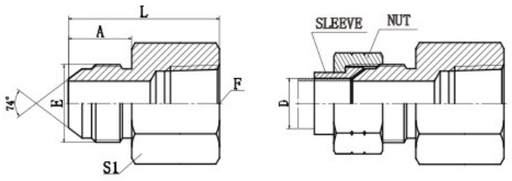
Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



2TJ–SP
BSPT MALE / JIC FEMALE 74° SEAT

PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
2JT–02–04SP	R1/8" × 28	7/16" × 20	10	9	24	12	17
2JT–04SP	R1/4" × 19	7/16" × 20	14	9	28	14	17
2JT–04–05SP	R1/4" × 19	1/2" × 20	14	9	28.5	14	17
2JT–04–06SP	R1/4" × 19	9/16" × 18	14	10.5	28.5	14	19
2JT–06–05SP	R3/8" × 19	1/2" × 20	15	9	29.5	17	17
2JT–06SP	R3/8" × 19	9/16" × 18	15	10.5	29.5	17	19
2JT–06–08SP	R3/8" × 19	3/4" × 16	15	10.5	31.5	19	24
2JT–08SP	R1/2" × 14	3/4" × 16	19	10.5	37.5	24	24
2JT–08–10SP	R1/2" × 14	7/8" × 14	19	12	38	24	27
2JT–08–12SP	R1/2" × 14	1.1/16" × 12	20	15	41.5	27	32
2JT–12SP	R3/4" × 14	1.1/16" × 12	19	15	41.5	30	32
2JT–12–16SP	R3/4" × 14	1.5/16" × 12	20	16	43.5	32	41
2JT–16SP	R1" × 11	1.5/16" × 12	24	16	47.5	36	41
2JT–20SP	R1.1/4" × 11	1.5/8" × 12	25	17	55	46	50
2JT–24SP	R1.1/2" × 11	1.7/8" × 12	26.5	20	59.5	50	55

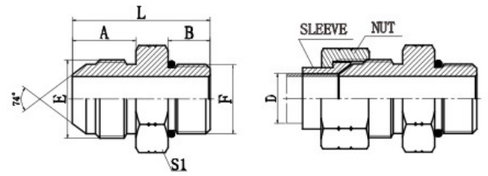
Note: In case if you are interested to order the adapter with lock nut, please insert suffix "LN" after our part NO., for example 6J–12LN. Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



5JT
JIC MALE 74° CONE / BSPT FEMALE

PART NO.	THREAD		DIMENSIONS		
	E	F	A	L	S1
5JT–04–02	7/16" × 20	Rc1/8" × 28	14	30	14
5JT–04	7/16" × 20	Rc1/4" × 19	14	35.5	19
5JT–06–04	9/16" × 18	Rc1/4" × 19	14	35.5	19
5JT–06	9/16" × 18	RC3/8" × 19	14	36.5	22
5JT–08–06	3/4" × 16	RC3/8" × 19	16.7	39.5	22
5JT–08	3/4" × 16	Rc1/2" × 14	16.7	45.5	27
5JT–10–08	7/8" × 14	Rc1/2" × 14	19.3	48	27
5JT–12	1.1/16" × 12	Rc3/4" × 14	22	52.5	36
5JT–16	1.5/16" × 12	Rc1" × 11	23	59.5	41

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

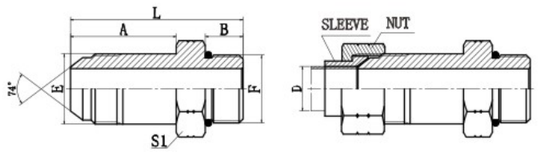


1JO
JIC MALE 74° CONE / SAE O–RING BOSS L–SERIES ISO 11926–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1JO–04–02	7/16" × 20	5/16" × 24	O902	14	7.54	27.5	14
1JO–04–03	7/16" × 20	3/8" × 24	O903	14	7.54	27.5	14
1JO–04	7/16" × 20	7/16" × 20	O904	14	9.14	29	14
1JO–04–05	7/16" × 20	1/2" × 20	O905	14	9.14	29	17
1JO–04–06	7/16" × 20	9/16" × 18	O906	14	9.93	30	17
1JO–04–08	7/16" × 20	3/4" × 16	O908	14	11.13	33	22
1JO–05	1/2" × 20	1/2" × 20	O905	14	9.14	29	17
1JO–05–04	1/2" × 20	7/16" × 20	O904	14	9.14	29	14
1JO–05–06	1/2" × 20	9/16" × 18	O906	14	9.93	30	17
1JO–05–08	1/2" × 20	3/4" × 16	O908	14	11.13	33	22
1JO–06	9/16" × 18	9/16" × 18	O906	14.1	9.93	30	17
1JO–06–04	9/16" × 18	7/16" × 20	O904	14.1	9.14	29	17
1JO–06–05	9/16" × 18	1/2" × 20	O905	14.1	9.14	29.5	17
1JO–06–08	9/16" × 18	3/4" × 16	O908	14.1	11.13	33	22
1JO–06–10	9/16" × 18	7/8" × 14	O910	14.1	12.7	37	27
1JO–06–12	9/16" × 18	1.1/16" × 12	O912	14.1	15.09	40	32
1JO–08	3/4" × 16	3/4" × 16	O908	16.7	11.13	36	22
1JO–08–04	3/4" × 16	7/16" × 20	O904	16.7	9.14	34	22
1JO–08–06	3/4" × 16	9/16" × 18	O906	16.7	9.93	35	22
1JO–08–10	3/4" × 16	7/8" × 14	O910	16.7	12.7	40	27
1JO–08–12	3/4" × 16	1.1/16" × 12	O912	16.7	15.09	43	32
1JO–08–14	3/4" × 16	1.3/16" × 12	O914	16.7	15.09	43	36
1JO–10	7/8" × 14	7/8" × 14	O910	19.3	12.7	42.5	27
1JO–10–08	7/8" × 14	3/4" × 16	O908	19.3	11.13	39	24
1JO–10–12	7/8" × 14	1.1/16" × 12	O912	19.3	15.09	45.5	32
1JO–10–14	7/8" × 14	1.3/16" × 12	O914	19.3	15.09	45.5	36
1JO–12	1.1/16" × 12	1.1/16" × 12	O912	21.9	15.09	48	32
1JO–12–08	1.1/16" × 12	3/4" × 16	O908	21.9	11.13	43	30
1JO–12–10	1.1/16" × 12	7/8" × 14	O910	21.9	12.7	45	30
1JO–12–14	1.1/16" × 12	1.3/16" × 12	O914	21.9	15.09	48	36
1JO–12–16	1.1/16" × 12	1.5/16" × 12	O916	21.9	15.09	48	38
1JO–14	1.3/16" × 12	1.3/16" × 12	O914	22.6	15.09	48.5	36

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1JO–14–12	1.3/16" × 12	1.1/16" × 12	O912	22.6	15.09	48.5	32
1JO–14–16	1.3/16" × 12	1.5/16" × 12	O916	22.6	15.09	50.5	38
1JO–16	1.5/16" × 12	1.5/16" × 12	O916	23.1	15.09	49	38
1JO–16–12	1.5/16" × 12	1.1/16" × 12	O912	23.1	15.09	49	36
1JO–16–14	1.5/16" × 12	1.3/16" × 12	O914	23.1	15.09	49	36
1JO–16–20	1.5/16" × 12	1.5/8" × 12	O920	23.1	15.09	53	50
1JO–20	1.5/8" × 12	1.5/8" × 12	O920	24.3	15.09	54.5	50
1JO–20–16	1.5/8" × 12	1.5/16" × 12	O916	24.3	15.09	52.5	46
1JO–20–24	1.5/8" × 12	1.7/8" × 12	O924	24.3	15.09	54.5	55
1JO–24	1.7/8" × 12	1.7/8" × 12	O924	27.5	15.09	57.5	55
1JO–24–20	1.7/8" × 12	1.5/8" × 12	O920	27.5	15.09	57.5	50
1JO–24–32	1.7/8" × 12	2.1/2" × 12	O932	27.5	15.09	59.5	70
1JO–32	2.1/2" × 12	2.1/2" × 12	O932	33.9	15.09	66	70

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

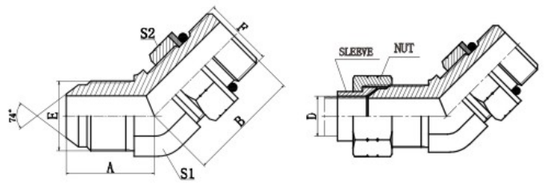


1JO–L

LONG JIC MALE 74° CONE /
SAE O–RING BOSS L–SERIES ISO 11926–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1JO–04L	7/16" × 20	7/16" × 20	O904	35	9.1	50.5	14
1JO–05L	1/2" × 20	1/2" × 20	O905	37	9.1	52.5	17
1JO–06L	9/16" × 18	9/16" × 18	O906	39	9.9	55.5	17
1JO–08L	3/4" × 16	3/4" × 16	O908	48	11.1	67.5	22
1JO–10L	7/8" × 14	7/8" × 14	O910	53	12.7	75	27
1JO–12L	1.1/16" × 12	1.1/16" × 12	O912	63	15.1	89	32
1JO–16L	1.5/16" × 12	1.5/16" × 12	O916	72	15.1	100	38
1JO–20L	1.5/8" × 12	1.5/8" × 12	O920	88.1	15.1	118	50

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

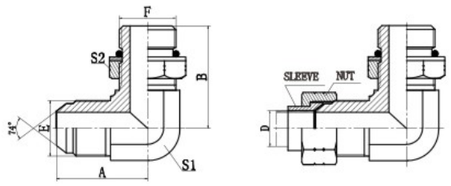


1JO4–OG

45° ELBOW JIC MALE 74° CONE /
SAE O–RING BOSS L–SERIES ISO 11926–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1JO4–04OG	7/16" × 20	7/16" × 20	O904	21	24	11	17
1JO4–04–06OG	7/16" × 20	9/16" × 18	O906	22.3	27.5	14	19
1JO4–04–08OG	7/16" × 20	3/4" × 16	O908	24.5	32.5	19	24
1JO4–05OG	1/2" × 20	1/2" × 20	O905	22	26.7	14	17
1JO4–05–04OG	1/2" × 20	7/16" × 20	O904	22	26.7	14	17
1JO4–06OG	9/16" × 18	9/16" × 18	O906	23.5	28	14	19
1JO4–06–04OG	9/16" × 18	7/16" × 20	O904	22.8	26	14	17
1JO4–06–05OG	9/16" × 18	1/2" × 20	O905	22.8	26	14	17
1JO4–06–08OG	9/16" × 18	3/4" × 16	O908	25	32.5	19	24
1JO4–06–10OG	9/16" × 18	7/8" × 14	O910	25.5	38.5	22	27
1JO4–08OG	3/4" × 16	3/4" × 16	O908	25.8	32.5	19	24
1JO4–08–06OG	3/4" × 16	9/16" × 18	O906	25.5	28	19	19
1JO4–08–10OG	3/4" × 16	7/8" × 14	O910	28	38.7	22	27
1JO4–08–12OG	3/4" × 16	1.1/16" × 12	O912	30	43.9	27	32
1JO4–10OG	7/8" × 14	7/8" × 14	O910	29.5	38.7	22	27
1JO4–10–08OG	7/8" × 14	3/4" × 16	O908	29.5	33	22	27
1JO4–10–12OG	7/8" × 14	1.1/16" × 12	O912	33	43.9	27	32
1JO4–12OG	1.1/16" × 12	1.1/16" × 12	O912	34	43.5	27	32
1JO4–12–10OG	1.1/16" × 12	7/8" × 14	O910	34	42	27	27
1JO4–12–16OG	1.1/16" × 12	1.5/16" × 12	O916	37	45.5	33	41
1JO4–14OG	1.3/16" × 12	1.3/16" × 12	O914	37	44	30	36
1JO4–16OG	1.5/16" × 12	1.5/16" × 12	O916	38	45.5	33	41
1JO4–16–12OG	1.5/16" × 12	1.1/16" × 12	O912	38	45	33	32
1JO4–16–20OG	1.5/16" × 12	1.5/8" × 12	O920	40.5	47	41	50
1JO4–20OG	1.5/8" × 12	1.5/8" × 12	O920	42	48.5	41	50
1JO4–20–24OG	1.5/8" × 12	1.7/8" × 12	O924	46	50	48	55
1JO4–24OG	1.7/8" × 12	1.7/8" × 12	O924	48	50	48	55
1JO4–32OG	2.1/2" × 12	2.1/2" × 12	O932	58	54	63	70

Note: 1 Nut and sleeve should be ordered separately.The nut NB200 and sleeve NB500 is suitable for metric tube,the nut NB200 and sleeve NB300 is suitable for inch tube. 2 F end is connected with ISO 11926–1 port.

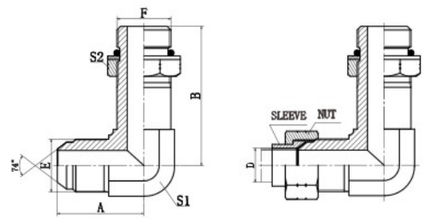


1JO9–OG

90° ELBOW JIC MALE 74° CONE / SAE O–RING BOSS L–SERIES ISO 11926–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1JO9–04–03OG	7/16" × 20	3/8" × 24	O903	24.5	28	11	14
1JO9–04OG	7/16" × 20	7/16" × 20	O904	24.5	27.2	11	17
1JO9–04–05OG	7/16" × 20	1/2" × 20	O905	26.6	29.9	14	17
1JO9–04–06OG	7/16" × 20	9/16" × 18	O906	26.6	31.8	14	19
1JO9–05–04OG	1/2" × 20	7/16" × 20	O904	26.6	30	14	17
1JO9–05OG	1/2" × 20	1/2" × 20	O905	26.6	29	14	17
1JO9–05–06OG	1/2" × 20	9/16" × 18	O906	26.6	31.8	14	19
1JO9–06–04OG	9/16" × 18	7/16" × 20	O904	26.9	30	14	17
1JO9–06–05OG	9/16" × 18	1/2" × 20	O905	26.9	29.9	14	17
1JO9–06OG	9/16" × 18	9/16" × 18	O906	26.9	31.8	14	19
1JO9–06–08OG	9/16" × 18	3/4" × 16	O908	30	36.8	19	24
1JO9–08–04OG	3/4" × 16	7/16" × 20	O904	32	33	19	17
1JO9–08–06OG	3/4" × 16	9/16" × 18	O906	33	33.5	19	19
1JO9–08OG	3/4" × 16	3/4" × 16	O908	33	36.8	19	24
1JO9–08–10OG	3/4" × 16	7/8" × 14	O910	34.8	44	22	27
1JO9–08–12OG	3/4" × 16	1.1/16" × 12	O912	37.9	51	27	32
1JO9–10–08OG	7/8" × 14	3/4" × 16	O908	38	40	22	27
1JO9–10OG	7/8" × 14	7/8" × 14	O910	37.8	44	22	27
1JO9–10–12OG	7/8" × 14	1.1/16" × 12	O912	41	51	27	32
1JO9–12–08OG	1.1/16" × 12	3/4" × 16	O908	45	44	27	24
1JO9–12–10OG	1.1/16" × 12	7/8" × 14	O910	44.2	47	27	27
1JO9–12OG	1.1/16" × 12	1.1/16" × 12	O912	44.2	51	27	32
1JO9–12–16OG	1.1/16" × 12	1.5/16" × 12	O916	47.8	54.5	33	41
1JO9–14OG	1.3/16" × 12	1.3/16" × 12	O914	47.5	53	30	36
1JO9–14–16OG	1.3/16" × 12	1.5/16" × 12	O916	48.5	54.5	33	41
1JO9–16–12OG	1.5/16" × 12	1.1/16" × 12	O912	48.8	54.5	33	32
1JO9–16–14OG	1.5/16" × 12	1.3/16" × 12	O914	49	56	33	36
1JO9–16OG	1.5/16" × 12	1.5/16" × 12	O916	48.8	54.5	33	41
1JO9–16–20OG	1.5/16" × 12	1.5/8" × 12	O920	53.8	59	41	50
1JO9–20–16OG	1.5/8" × 12	1.5/16" × 12	O916	55.5	59.5	41	41
1JO9–20OG	1.5/8" × 12	1.5/8" × 12	O920	55.3	59	41	50
1JO9–20–24OG	1.5/8" × 12	1.7/8" × 12	O924	59.4	63	48	55
1JO9–24OG	1.7/8" × 12	1.7/8" × 12	O924	62.5	63	48	55
1JO9–32OG	2.1/2" × 12	2.1/2" × 12	O932	80	76	63	70

Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 F end is connected with ISO 11926–1 port.

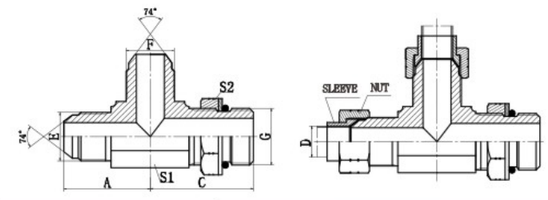


1JO9–OGL

90° ELBOW JIC MALE 74° CONE / LONG SAE O–RING BOSS L–SERIES ISO 11926–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1JO9–04OG/L	7/16" × 20	7/16" × 20	O904	24.5	44	11	17
1JO9–06OG/L	9/16" × 18	9/16" × 18	O906	26.9	52.8	14	19
1JO9–08OG/L	3/4" × 16	3/4" × 16	O908	32.5	63.5	19	24
1JO9–10OG/L	7/8" × 14	7/8" × 14	O910	37.8	73.4	22	27
1JO9–12OG/L	1.1/16" × 12	1.1/16" × 12	O912	44.2	84.8	27	32
1JO9–16OG/L	1.5/16" × 12	1.5/16" × 12	O916	49	94.5	33	41

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

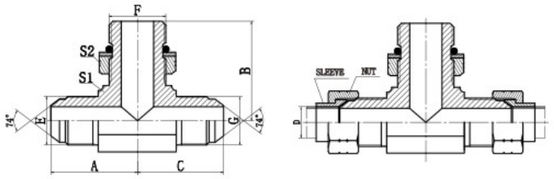


AJJO–OG

JIC MALE 74° CONE / SAE O–RING BOSS L–SERIES ISO 11926–3 RUN TEE

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	G	A	B	C	S1
AJJO–04OG	7/16" × 20	7/16" × 20	O904	24.5	24.5	27.2	11
AJJO–05OG	1/2" × 20	1/2" × 20	O905	26.6	26.6	29	14
AJJO–05–05–04OG	1/2" × 20	1/2" × 20	O904	26.6	26.6	30	14
AJJO–06OG	9/16" × 18	9/16" × 18	O906	26.9	26.9	31.8	14
AJJO–06–06–04OG	9/16" × 18	9/16" × 18	O904	26.9	26.9	30.1	14
AJJO–06–06–05OG	9/16" × 18	9/16" × 18	O905	26.9	26.9	30	14
AJJO–06–06–08OG	9/16" × 18	9/16" × 18	O908	30	30	37.5	19
AJJO–08OG	3/4" × 16	3/4" × 16	O908	33	33	36.8	19
AJJO–08–08–06OG	3/4" × 16	3/4" × 16	O906	32	32	33.5	19
AJJO–08–08–10OG	3/4" × 16	3/4" × 16	O910	34.8	34.8	44	22
AJJO–10OG	7/8" × 14	7/8" × 14	O910	37.8	37.8	44	22
AJJO–10–10–08OG	7/8" × 14	7/8" × 14	O908	37.8	37.8	39.5	22
AJJO–12OG	1.1/16" × 12	1.1/16" × 12	O912	44.2	44.2	51	27
AJJO–12–12–08OG	1.1/16" × 12	1.1/16" × 12	O908	44.2	44.2	43	27
AJJO–12–12–10OG	1.1/16" × 12	1.1/16" × 12	O910	44.2	44.2	49	27
AJJO–16OG	1.5/16" × 12	1.5/16" × 12	O916	48.8	48.8	54.5	33
AJJO–20OG	1.5/8" × 12	1.5/8" × 12	O920	55.3	55.3	59	41
AJJO–24OG	1.7/8" × 12	1.7/8" × 12	O924	62.5	62.5	63	48

Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 G end is connected with ISO 11926–1 port.

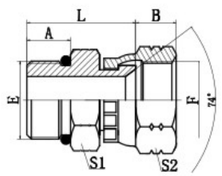


AJOJ–OG

JIC MALE 74° CONE / SAE O–RING BOSS L–SERIES ISO 11926–3 BRANCH TEE

PART NO.	THREAD			O–RING	DIMENSIONS				
	E	F	G	F	A	B	C	S1	S2
AJOJ–04OG	7/16" × 20	7/16" × 20	7/16" × 20	O904	24.5	27.2	24.5	11	17
AJOJ–05–04–05OG	1/2" × 20	7/16" × 20	1/2" × 20	O904	26.6	30	26.6	14	17
AJOJ–05OG	1/2" × 20	1/2" × 20	1/2" × 20	O905	26.6	29	26.6	14	17
AJOJ–06–04–06OG	9/16" × 18	7/16" × 20	9/16" × 18	O904	26.9	30	26.9	14	17
AJOJ–06–05–06OG	9/16" × 18	1/2" × 20	9/16" × 18	O905	26.9	30	26.9	14	17
AJJO–06OG	9/16" × 18	9/16" × 18	9/16" × 18	O906	26.9	31.8	26.9	14	19
AJOJ–08–06–08OG	3/4" × 16	9/16" × 18	3/4" × 16	O906	32	33.5	32	19	19
AJOJ–08OG	3/4" × 16	3/4" × 16	3/4" × 16	O908	33	36.8	33	19	24
AJOJ–10–08–10OG	7/8" × 14	3/4" × 16	7/8" × 14	O908	38	40	38	22	24
AJOJ–10OG	7/8" × 14	7/8" × 14	7/8" × 14	O910	37.8	44	37.8	22	27
AJOJ–12–08–12OG	1.1/16" × 12	3/4" × 16	1.1/16" × 12	O908	45	44	45	27	24
AJOJ–12–10–12OG	1.1/16" × 12	7/8" × 14	1.1/16" × 12	O910	44.2	49	44.2	27	27
AJOJ–12OG	1.1/16" × 12	1.1/16" × 12	1.1/16" × 12	O912	44.2	51	44.2	27	32
AJOJ–16OG	1.5/16" × 12	1.5/16" × 12	1.5/16" × 12	O916	48.8	54.5	48.8	33	41
AJOJ–20–16–20OG	1.5/8" × 12	1.5/16" × 12	1.5/8" × 12	O916	55.5	59.5	55.5	41	41
AJOJ–20OG	1.5/8" × 12	1.5/8" × 12	1.5/8" × 12	O920	55.3	59	55.3	41	50
AJOJ–24OG	1.7/8" × 12	1.7/8" × 12	1.7/8" × 12	O924	62.5	63	62.5	48	55

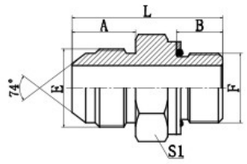
Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 F end is connected with ISO 11926–1 port.



2OJ

SAE O–RING BOSS L–SERIES ISO 11926–3 / JIC FEMALE 74° SEAT

PART NO.	THREAD		O–RING	DIMENSIONS				
	E	F	E	A	B	L	S1	S2
2OJ–04	7/16" × 20	7/16" × 20	O904	9.1	9	23	14	15
2OJ–05	1/2" × 20	1/2" × 20	O905	9.1	9	23.5	17	17
2JO–06	9/16" × 18	9/16" × 18	O906	9.9	10.5	24.5	17	19
2OJ–08	3/4" × 16	3/4" × 16	O908	11.1	10.5	29.5	22	24
2OJ–10	7/8" × 14	7/8" × 14	O910	12.7	12	34	27	27
2OJ–12	1.1/16" × 12	1.1/16" × 12	O912	15.1	15	38.5	32	32
2OJ–14	1.3/16" × 12	1.3/16" × 12	O914	15.1	15	38.5	36	36
2OJ–16	1.5/16" × 12	1.5/16" × 12	O916	15.1	16	38.5	38	41
2OJ–20	1.5/8" × 12	1.5/8" × 12	O920	15.1	17	44	50	50

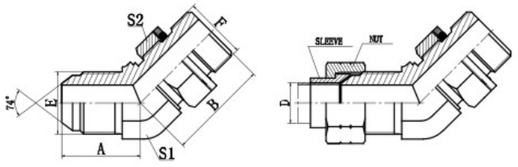


1JH

JIC MALE 74° CONE / METRIC MALE END L–SERIES ISO 6149–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1JH–04–10	7/16" × 20	M10 × 1	O08.1 × 1.6	14	8.5	28.5	14
1JH–04–12	7/16" × 20	M12 × 1.5	O09.3 × 2.4	14	11	31	17
1JH–04–14	7/16" × 20	M14 × 1.5	O11.3 × 2.4	14	11	31	19
1JH–05–10	1/2" × 20	M10 × 1	O08.1 × 1.6	14	8.5	29	14
1JH–05–12	1/2" × 20	M12 × 1.5	O09.3 × 2.4	14	11	31	17
1JH–05–14	1/2" × 20	M14 × 1.5	O11.3 × 2.4	14	11	33	19
1JH–06–14	9/16" × 18	M14 × 1.5	O11.3 × 2.4	14.1	11	31	19
1JH–06–16	9/16" × 18	M16 × 1.5	O13.3 × 2.4	14.1	11.5	33.5	22
1JH–06–18	9/16" × 18	M18 × 1.5	O15.3 × 2.4	14.1	12.5	34.5	24
1JH–08–14	3/4" × 16	M14 × 1.5	O15.3 × 2.4	16.7	11	38	22
1JH–08–16	3/4" × 16	M16 × 1.5	O13.3 × 2.4	16.7	11.5	36	22
1JH–08–18	3/4" × 16	M18 × 1.5	O15.3 × 2.4	16.7	12.5	37	24
1JH–08–22	3/4" × 16	M22 × 1.5	O19.3 × 2.4	16.7	13	39.5	27
1JH–10–16	7/8" × 14	M16 × 1.5	O13.3 × 2.4	19.3	11.5	41	24
1JH–10–18	7/8" × 14	M18 × 1.5	O15.3 × 2.4	19.3	12.5	40	24
1JH–10–22	7/8" × 14	M22 × 1.5	O19.3 × 2.4	19.3	13	42	27
1JH–12–22	1.1/16" × 12	M22 × 1.5	O19.3 × 2.4	21.9	13	47.5	30
1JH–12–27	1.1/16" × 12	M27 × 2	O23.5 × 3.0	21.9	16	49	32
1JH–16–27	1.5/16" × 12	M27 × 2	O23.5 × 3.0	23.1	16	52. 5	36
1JH–16–33	1.5/16" × 12	M33 × 2	O29.5 × 3.0	23.1	16	52	41
1JH–20–42	1.5/8" × 12	M42 × 2	O38.5 × 3.0	24.3	16	58	50
1JH–24–48	1.7/8" × 12	M48 × 2	O44.5 × 3.0	27.5	17.5	63	55

Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 F end is fit for ISO 9974–1 port or ISO 6149–1 port when useless of retaining ring.



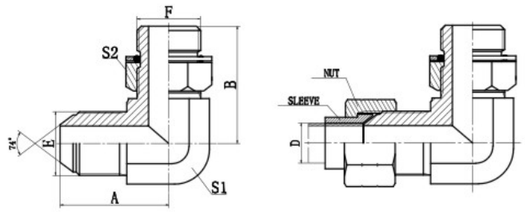
1JH4–OG

45° ELBOW JIC MALE 74° CONE / METRIC MALE ADJUSTABLE STUD END L–SERIES ISO 6149–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1JH4–04–10OG	7/16" × 20	M10 × 1	O08.1 × 1.6	21.5	23.5	11	14
1JH4–04–12OG	7/16" × 20	M12 × 1.5	O09.3 × 2.4	21.5	27.5	11	17
1JH4–04–14OG	7/16" × 20	M14 × 1.5	O11.3 × 2.4	22.3	28.3	14	19
1JH4–05–12OG	1/2" × 20	M12 × 1.5	O09.3 × 2.4	22.3	28.3	14	17
1JH4–05–14OG	1/2" × 20	M14 × 1.5	O11.3 × 2.4	22.3	28.3	14	19
1JH4–06–14OG	9/16" × 18	M14 × 1.5	O11.3 × 2.4	22.8	28.3	14	19
1JH4–06–16OG	9/16" × 18	M16 × 1.5	O13.3 × 2.4	22	29	16	22
1JH4–08–16OG	3/4" × 16	M16 × 1.5	O13.3 × 2.4	26.8	30	19	22
1JH4–08–18OG	3/4" × 16	M18 × 1.5	O15.3 × 2.4	26.8	31	19	24
1JH4–10–16OG	7/8" × 14	M16 × 1.5	O13.3 × 2.4	31	31	22	22
1JH4–10–18OG	7/8" × 14	M18 × 1.5	O15.3 × 2.4	31	32	22	24
1JH4–10–22OG	7/8" × 14	M22 × 1.5	O19.3 × 2.4	31	33	22	27
1JH4–12–22OG	1.1/16" × 12	M22 × 1.5	O19.3 × 2.4	35.5	34.5	27	27
1JH4–12–27OG	1.1/16" × 12	M27 × 2	O23.5 × 3.0	35.5	39.5	27	32
1JH4–16–27OG	1.5/16" × 12	M27 × 2	O23.5 × 3.0	38.5	41	33	32
1JH4–16–33OG	1.5/16" × 12	M33 × 2	O29.5 × 3.0	38.5	41.5	33	41
1JH4–20–42OG	1.5/8" × 12	M42 × 2	O38.5 × 3.0	43	45	41	50
1JH4–24–48OG	1.7/8" × 12	M48 × 2	O44.5 × 3.0	49	49.5	48	55

Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 F end is fit for ISO 9974–1 port or ISO 6149–1 port when useless of retaining ring.

JIC 74° Cone Flared Tube Fittings

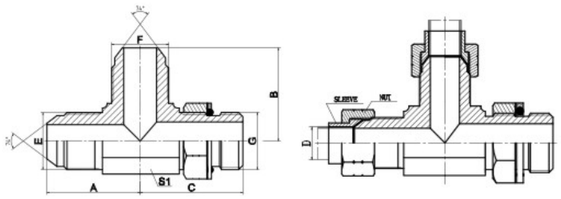


1JH9–OG

90° ELBOW JIC MALE 74° CONE / METRIC MALE ADJUSTABLE STUD END L–SERIES ISO 6149–3

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1JH9–04–10OG	7/16" × 20	M10 × 1	O08.1 × 1.6	24.5	27.5	11	14
1JH9–04–12OG	7/16" × 20	M12 × 1.5	O09.3 × 2.4	24.5	30.3	11	17
1JH9–04–14OG	7/16" × 20	M14 × 1.5	O11.3 × 2.4	26.6	32	14	19
1JH9–05–10OG	1/2" × 20	M10 × 1	O08.1 × 1.6	26.5	28.5	14	14
1JH9–05–12OG	1/2" × 20	M12 × 1.5	O09.3 × 2.4	26.5	32	14	17
1JH9–05–14OG	1/2" × 20	M14 × 1.5	O11.3 × 2.4	26.5	32	14	19
1JH9–06–14OG	9/16" × 18	M14 × 1.5	O11.3 × 2.4	26.9	32	14	19
1JH9–06–16OG	9/16" × 18	M16 × 1.5	O13.3 × 2.4	28	34.8	16	22
1JH9–06–18OG	9/16" × 18	M18 × 1.5	O15.3 × 2.4	30	37	19	24
1JH9–08–16OG	3/4" × 16	M16 × 1.5	O13.3 × 2.4	32	38	19	22
1JH9–08–18OG	3/4" × 16	M18 × 1.5	O15.3 × 2.4	33	38	19	24
1JH9–08–22OG	3/4" × 16	M22 × 1.5	O19.3 × 2.4	34.8	40.2	22	27
1JH9–10–16OG	7/8" × 14	M16 × 1.5	O13.3 × 2.4	38	38	22	22
1JH9–10–18OG	7/8" × 14	M18 × 1.5	O15.3 × 2.4	38	39.5	22	24
1JH9–10–22OG	7/8" × 14	M22 × 1.5	O19.3 × 2.4	38	42.5	22	27
1JH9–12–22OG	1.1/16" × 12	M22 × 1.5	O19.3 × 2.4	45	44	27	27
1JH9–12–27OG	1.1/16" × 12	M27 × 2	O23.5 × 3.0	44.2	48.5	27	32
1JH9–16–27OG	1.5/16" × 12	M27 × 2	O23.5 × 3.0	49	52	33	32
1JH9–16–33OG	1.5/16" × 12	M33 × 2	O29.5 × 3.0	49	52.5	33	41
1JH9–20–42OG	1.5/8" × 12	M42 × 2	O38.5 × 3.0	55.5	57.2	41	50
1JH9–24–48OG	1.7/8" × 12	M48 × 2	O44.5 × 3.0	62.5	62.5	48	55

Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 F end is fit for ISO 9974–1 port or ISO 6149–1 port when useless of retaining ring.

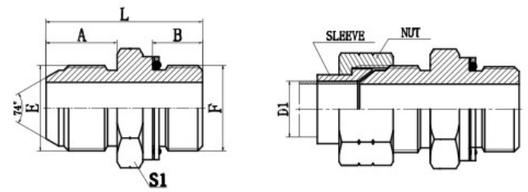


AJJH–OG

JIC MALE 74° CONE / METRIC MALE ADJUSTABLE STUD END L–SERIES ISO 6149–3 RUN TEE

PART NO.	THREAD			O–RING	DIMENSIONS				
	E	F	G	G	A	B	C	S1	S2
AJJH–04–04–10OG	7/16" × 20	7/16" × 20	M10 × 1	O08.1 × 1.6	24.5	24.5	26.5	11	14
AJJH–04–04–12OG	7/16" × 20	7/16" × 20	M12 × 1.5	O09.3 × 2.4	26.5	26.5	32.5	14	17
AJJH–05–05–12OG	1/2" × 20	1/2" × 20	M12 × 1.5	O09.3 × 2.4	26.5	26.5	32	14	17
AJJH–05–05–14OG	1/2" × 20	1/2" × 20	M14 × 1.5	O11.3 × 2.4	26.5	26.5	32	14	19
AJJH–06–06–14OG	9/16" × 18	9/16" × 18	M14 × 1.5	O11.3 × 2.4	27	27	32	14	19
AJJH–06–06–16OG	9/16" × 18	9/16" × 18	M16 × 1.5	O13.3 × 2.4	28	28	34.8	16	22
AJJH–08–08–16OG	3/4" × 16	3/4" × 16	M16 × 1.5	O13.3 × 2.4	32	32	36	19	22
AJJH–08–08–18OG	3/4" × 16	3/4" × 16	M18 × 1.5	O15.3 × 2.4	32	32	37	19	24
AJJH–10–10–18OG	7/8" × 14	7/8" × 14	M18 × 1.5	O15.3 × 2.4	38	38	39.5	22	24
AJJH–10–10–22OG	7/8" × 14	7/8" × 14	M22 × 1.5	O19.3 × 2.4	37.8	37.8	40.2	22	27
AJJH–12–12–22OG	1.1/16" × 12	1.1/16" × 12	M22 × 1.5	O19.3 × 2.4	44	44	44	27	27
AJJH–12–12–27OG	1.1/16" × 12	1.1/16" × 12	M27 × 2	O23.5 × 3.0	44	44	48.5	27	32
AJJH–16–16–27OG	1.5/16" × 12	1.5/16" × 12	M27 × 2	O23.5 × 3.0	49	49	52	33	32
AJJH–16–16–33OG	1.5/16" × 12	1.5/16" × 12	M33 × 2	O29.5 × 3.0	49	49	52.5	33	41
AJJH–20–20–42OG	1.5/8" × 12	1.5/8" × 12	M42 × 2	O38.5 × 3.0	55.5	55.5	57.2	41	50
AJJH–24–24–48OG	1.7/8" × 12	1.7/8" × 12	M48 × 2	O44.5 × 3.0	62.5	62.5	62.5	48	55

Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 G end is fit for ISO 9974–1 port or ISO 6149–1 port when useless of retaining ring.

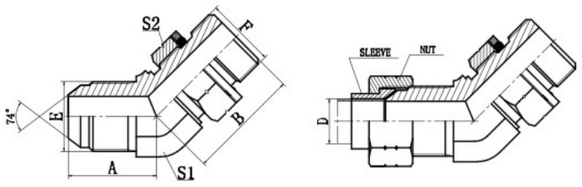


1JG

JIC MALE 74° CONE / BSP MALE O–RING

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1JG–04–02	7/16" × 20	G1/8" × 28	O011	14	9.5	31	14
1JG–04	7/16" × 20	G1/4" × 19	O111	14	10	32.5	19
1JG–04–06	7/16" × 20	G3/8" × 19	O113	14	11.5	34	22
1JG–04–08	7/16" × 20	G1/2" × 14	O115	14	14	39	27
1JG–05–04	1/2" × 20	G1/4" × 19	O111	14	10	33	19
1JG–05–06	1/2" × 20	G3/8" × 19	O113	14	11.5	36	22
1JG–05–08	1/2" × 20	G1/2" × 14	O115	14	14	39	27
1JG–06–04	9/16" × 18	G1/4" × 19	O111	14.1	11	31.5	19
1JG–06	9/16" × 18	G3/8" × 19	O113	14.1	11.5	34	22
1JG–06–08	9/16" × 18	G1/2" × 14	O115	14.1	14	39	27
1JG–08–04	3/4" × 16	G1/4" × 19	O111	16.7	10	36	22
1JG–08–06	3/4" × 16	G3/8" × 19	O113	16.7	11.5	37	22
1JG–08	3/4" × 16	G1/2" × 14	O115	16.7	14	42	27
1JG–08–12	3/4" × 16	G3/4" × 14	O119	16.7	15.5	44	32
1JG–10–06	7/8" × 14	G3/8" × 19	O113	19.3	11.5	39.5	24
1JG–10–08	7/8" × 14	G1/2" × 14	O115	19.3	14	44.5	27
1JG–10–12	7/8" × 14	G3/4" × 14	O119	19.3	15.5	48.5	32
1JG–12–08	1.1/16" × 12	G1/2" × 14	O115	22	14	49	30
1JG–12	1.1/16" × 12	G3/4" × 14	O119	22	15.5	49.5	32
1JG–12–16	1.1/16" × 12	G1" × 11	O217	22	18	54	41
1JG–12–20	1.1/16" × 12	G1.1/4" × 11	O222	22	20	57	50
1JG–16–12	1.5/16" × 12	G3/4" × 14	O119	23	15.5	52.5	36
1JG–16	1.5/16" × 12	G1" × 11	O217	23	18	55	41
1JG–16–20	1.5/16" × 12	G1.1/4" × 11	O222	23	20	58	50
1JG–20–16	1.5/8" × 12	G1" × 11	O217	24.3	18	58	46
1JG–20	1.5/8" × 12	G1.1/4" × 11	O222	24.3	20	59.5	50
1JG–24–16	1.7/8" × 12	G1" × 11	O217	27.5	18	63.5	50
1JG–24–20	1.7/8" × 12	G1.1/4" × 11	O222	27.5	20	65.5	50
1JG–24	1.7/8" × 12	G1.1/2" × 11	O224	27.5	21.5	64	55

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

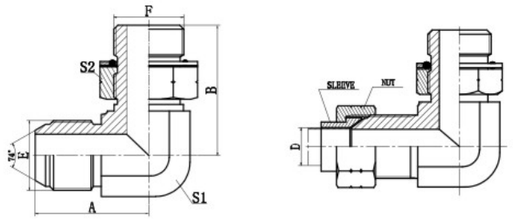


1JG4–OG

45° ELBOW JIC MALE 74° CONE / BSP MALE O–RING

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1JG4–04OG	7/16" × 20	G1/4" × 19	O111	21	28	14	19
1JG4–05–04OG	1/2" × 20	G1/4" × 19	O111	21	28	14	19
1JG4–06–04OG	9/16" × 18	G1/4" × 19	O111	22	28	14	19
1JG4–06OG	9/16" × 18	G3/8" × 19	O113	23	32	19	22
1JG4–08–06OG	3/4" × 16	G3/8" × 19	O113	25.8	32	19	22
1JG4–08OG	3/4" × 16	G1/2" × 14	O115	27.5	36	22	27
1JG4–10–08OG	7/8" × 14	G1/2" × 14	O115	29.5	38	22	27
1JG4–10OG	7/8" × 14	G5/8" × 14	O910	29.5	38	22	30
1JG4–12–10OG	1.1/16" × 12	G5/8" × 14	O910	34	38.5	27	30
1JG4–12–16OG	1.1/16" × 12	G1" × 11	O217	37.5	44	33	41
1JG4–12OG	1.1/16" × 12	G3/4" × 14	O119	34	42	27	32
1JG4–16–12OG	1.5/16" × 12	G3/4" × 14	O119	38	44	33	32
1JG4–16OG	1.5/16" × 12	G1" × 11	O217	38	44	33	41
1JG4–20OG	1.5/8" × 12	G1.1/4" × 11	O222	43	47.5	41	50
1JG4–24OG	1.7/8" × 12	G1.1/2" × 11	O224	49	51.5	48	55

Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 F end is connected with DIN 3852 port.

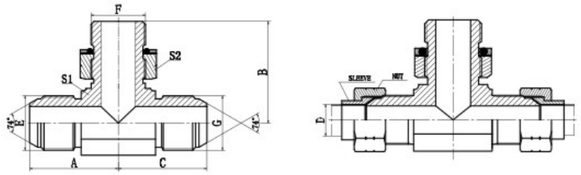


1JG9–OG

90° ELBOW JIC MALE 74° CONE / BSP MALE O–RING

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	S1	S2
1JG9–04–02OG	7/16" × 20	G1/8" × 28	O011	24.5	26.2	11	14
1JG9–04–06OG	7/16" × 20	G3/8" × 19	O113	27.5	36.8	16	22
1JG9–04OG	7/16" × 20	G1/4" × 19	O111	26.6	31.3	14	19
1JG9–05–04OG	1/2" × 20	G1/4" × 19	O111	26.5	31.8	14	19
1JG9–05–06OG	1/2" × 20	G3/8" × 19	O113	27.5	35.8	16	22
1JG9–05–08OG	1/2" × 20	G1/2" × 14	O115	31.5	43.2	22	27
1JG9–06–04OG	9/16" × 18	G1/4" × 19	O111	26.9	31.3	14	19
1JG9–06–08OG	9/16" × 18	G1/2" × 14	O115	32.5	43.2	22	27
1JG9–06OG	9/16" × 18	G3/8" × 19	O113	28.5	35.8	16	22
1JG9–08–04OG	3/4" × 16	G1/4" × 19	O111	32	33.5	19	19
1JG9–08OG	3/4" × 16	G1/2" × 14	O115	34.8	43.2	22	27
1JG9–08–06OG	3/4" × 16	G3/8" × 19	O113	32	36.8	19	22
1JG9–08–12OG	3/4" × 16	G3/4" × 14	O119	37.9	49.3	27	32
1JG9–10–06OG	7/8" × 14	G3/8" × 19	O113	37.8	39.2	22	22
1JG9–10–08OG	7/8" × 14	G1/2" × 14	O115	37.8	43.2	22	27
1JG9–10–12OG	7/8" × 14	G3/4" × 14	O119	41	49.3	27	32
1JG9–12OG	1.1/16" × 12	G3/4" × 14	O119	44.2	49.3	27	32
1JG9–12–08OG	1.1/16" × 12	G1/2" × 14	O115	44.2	46.5	27	27
1JG9–12–16OG	1.1/16" × 12	G1" × 11	O217	48	53	33	41
1JG9–16OG	1.5/16" × 12	G1" × 11	O217	49	53	33	41
1JG9–16–12OG	1.5/16" × 12	G3/4" × 14	O119	49	53	33	32
1JG9–16–20OG	1.5/16" × 12	G1.1/4" × 11	O222	53.8	58	41	50
1JG9–20OG	1.5/8" × 12	G1.1/4" × 11	O222	55.5	58	41	50
1JG9–20–16OG	1.5/8" × 12	G1" × 11	O217	55.5	58	41	41
1JG9–24–16OG	1.7/8" × 12	G1" × 11	O217	62.5	63	48	41
1JG9–24–20OG	1.7/8" × 12	G1.1/4" × 11	O222	62.5	63	48	50
1JG9–24OG	1.7/8" × 12	G1.1/2" × 11	O224	62.5	63	48	55

Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 F end is connected with DIN 3852 port.

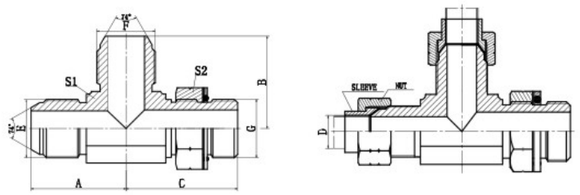


AJGJ–OG

90° ELBOW JIC MALE 74° CONE / BSP MALE O–RING BRANCH TEE

PART NO.	THREAD			O–RING	DIMENSIONS				
	E	F	G	F	A	B	C	S1	S2
AJGJ–04–02–04OG	7/16" × 20	G1/8" × 28	7/16" × 20	O011	24.5	26.2	24.5	11	19
AJGJ–04OG	7/16" × 20	G1/4" × 19	7/16" × 20	O111	26.6	31.8	26.6	14	19
AJGJ–05–02–05OG	1/2" × 20	G1/8" × 28	1/2" × 20	O011	26.6	29	26.6	14	19
AJGJ–05–04–05OG	1/2" × 20	G1/4" × 19	1/2" × 20	O111	26.6	31.8	26.6	14	19
AJGJ–06–04–06OG	9/16" × 18	G1/4" × 19	9/16" × 18	O111	37	31	27	14	19
AJGJ–06OG	9/16" × 18	G3/8" × 19	9/16" × 18	O113	28.5	36.8	28.5	16	22
AJGJ–08–06–08OG	3/4" × 16	G3/8" × 19	3/4" × 16	O113	33	37	33	19	22
AJGJ–08OG	3/4" × 16	G1/2" × 14	3/4" × 16	O115	35	43.2	35	22	27
AJGJ–10–08–10OG	7/8" × 14	G1/2" × 14	7/8" × 14	O115	37.8	43.5	37.8	22	27
AJGJ–12OG	1.1/16" × 12	G3/4" × 14	1.1/16" × 12	O119	44.2	51	44.2	27	32
AJGJ–16OG	1.5/16" × 12	G1" × 11	1.5/16" × 12	O217	48.8	53	48.8	33	41

Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 F end is connected with DIN 3852 port.

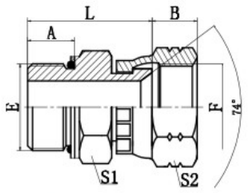


AJJG–OG

90° ELBOW JIC MALE 74° CONE / BSP MALE O–RING RUN TEE

PART NO.	THREAD			O–RING	DIMENSIONS				
	E	F	G	G	A	B	C	S1	S2
AJJG–04OG	7/16" × 20	7/16" × 20	G1/4" × 19	O111	26.6	26.5	31.9	14	19
AJJG–05–05–04OG	1/2" × 20	1/2" × 20	G1/4" × 19	O111	26.6	26.6	31.3	14	19
AJJG–05–06–04OG	1/2" × 20	9/16" × 18	G1/4" × 19	O111	26.6	26.9	31.3	14	19
AJJG–06OG	9/16" × 18	9/16" × 18	G3/8" × 19	O113	28.5	28.5	36.8	16	22
AJJG–06–06–04OG	9/16" × 18	9/16" × 18	G1/4" × 19	O111	26.9	26.9	31.3	14	19
AJJG–08–08–06OG	3/4" × 16	3/4" × 16	G3/8" × 19	O113	32	32	36.8	19	22
AJJG–08OG	3/4" × 16	3/4" × 16	G1/2" × 14	O115	35	35	43.2	22	27
AJJG–10–10–08OG	7/8" × 14	7/8" × 14	G1/2" × 14	O115	37.8	37.8	44	22	27
AJJG–12OG	1.1/16" × 12	1.1/16" × 12	G3/4" × 14	O119	44	44	49.5	27	32
AJJG–16OG	1.5/16" × 12	1.5/16" × 12	G1" × 11	O217	48.8	48.8	53	33	41

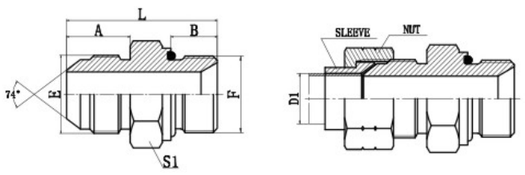
Note: 1 Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube. 2 G end is connected with DIN 3852 port.



2GJ

BSP MALE O–RING / JIC FEMALE 74° SEAT

PART NO.	THREAD		O–RING	DIMENSIONS				
	E	F	E	A	B	L	S1	S2
2GJ–04	G1/4" × 19	7/16" × 20	10.77 × 2.62	10	9	26.5	19	15
2GJ–04–05	G1/4" × 19	1/2" × 20	10.77 × 2.62	10	9	27.5	19	17
2GJ–04–06	G1/4" × 19	9/16" × 18	10.77 × 2.62	10	10.5	27	19	19
2GJ–06	G3/8" × 19	9/16" × 18	13.94 × 2.62	11.5	10.5	30.5	22	19
2GJ–06–08	G3/8" × 19	3/4" × 16	13.94 × 2.62	11.5	10.5	32.5	22	24
2GJ–08	G1/2" × 14	3/4" × 16	17.12 × 2.62	14	10.5	37.5	27	24
2GJ–08–06	G1/2" × 14	9/16" × 18	17.12 × 2.62	14	10.5	35.5	27	19
2GJ–08–10	G1/2" × 14	7/8" × 14	17.12 × 2.62	14	12	38	27	27
2GJ–12	G3/4" × 14	1.1/16" × 12	23.47 × 2.62	15.5	15	39	32	32
2GJ–12–08	G3/4" × 14	3/4" × 16	23.47 × 2.62	15.5	10.5	40	32	24
2GJ–12–10	G3/4" × 14	7/8" × 14	23.47 × 2.62	15.5	11	40.5	32	27
2GJ–12–16	G3/4" × 14	1.5/16" × 12	23.47 × 2.62	15.5	16	39	32	41
2GJ–16	G1" × 11	1.5/16" × 12	29.74 × 3.53	18	16	46.5	41	41
2GJ–20	G1.1/4" × 11	1.5/8" × 12	37.69 × 3.53	20	17	54.5	50	50
2GJ–24	G1.1/2" × 11	1.7/8" × 12	44.04 × 3.53	21.5	20	57.5	55	55

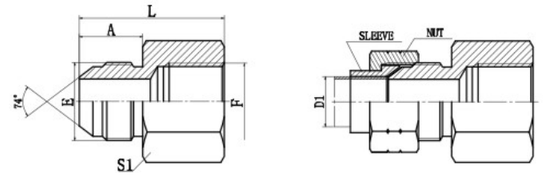


1JB–WD

JIC MALE 74° CONE / BSP MALE CAPTIVE SEAL

PART NO.	THREAD		CAPTIVE	DIMENSIONS			
	E	F	F	A	B	L	S1
1JB–04–02WD	7/16" × 20	G1/8" × 28	WD–B02	14	8	29.5	14
1JB–04WD	7/16" × 20	G1/4" × 19	WD–B04	14	12	34	19
1JB–04–06WD	7/16" × 20	G3/8" × 19	WD–B06	14	12	34.5	22
1JB–04–08WD	7/16" × 20	G1/2" × 14	WD–B08	14	14	41	27
1JB–05–04WD	1/2" × 20	G1/4" × 19	WD–B04	14	12	34	19
1JB–05–06W	1/2" × 20	G3/8" × 19	WD–B06	14	12	34.5	22
1JB–06–02WD	9/16" × 18	G1/8" × 28	WD–B02	14.1	8	29.5	17
1JB–06–04WD	9/16" × 18	G1/4" × 19	WD–B04	14.1	12	34	19
1JB–06WD	9/16" × 18	G3/8" × 19	WD–B06	14.1	12	34.5	22
1JB–06–08WD	9/16" × 18	G1/2" × 14	WD–B08	14.1	14	41	27
1JB–08–04WD	3/4" × 16	G1/4" × 19	WD–B04	16.7	12	37	22
1JB–08–06WD	3/4" × 16	G3/8" × 19	WD–B06	16.7	12	37.5	22
1JB–08WD	3/4" × 16	G1/2" × 14	WD–B08	16.7	14	43.5	27
1JB–10–08WD	7/8" × 14	G1/2" × 14	WD–B08	19.3	14	46.5	27
1JB–10–12WD	7/8" × 14	G3/4" × 14	WD–B12	19.3	16	47.5	32
1JB–12–08WD	1.1/16" × 12	G1/2" × 14	WD–B08	21.9	14	48.5	30
1JB–12WD	1.1/16" × 12	G3/4" × 14	WD–B12	21.9	16	50	32
1JB–12–16WD	1.1/16" × 12	G1" × 11	WD–B16	21.9	18	56	41
1JB–16–12WD	1.5/16" × 12	G3/4" × 14	WD–B12	23.1	16	53	36
1JB–16WD	1.5/16" × 12	G1" × 11	WD–B16	23.1	18	57	41
1JB–16–20WD	1.5/16" × 12	G1.1/4" × 11	WD–B20	23.1	20	61	50
1JB–20–16WD	1.5/8" × 12	G1" × 11	WD–B16	24.3	18	58	46
1JB–20WD	1.5/8" × 12	G1.1/4" × 11	WD–B20	24.3	20	62	50
1JB–20–24WD	1.5/8" × 12	G1.1/2" × 11	WD–B24	24.3	22	64	55
1JB–24–20WD	1.7/8" × 12	G1.1/4" × 11	WD–B20	27.5	20	65.5	50
1JB–24WD	1.7/8" × 12	G1.1/2" × 11	WD–B24	27.5	22	67.5	55

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

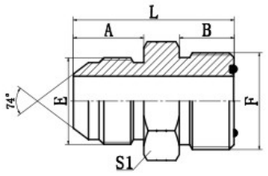


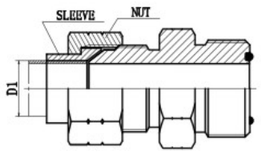
5JB

JIC MALE 74° CONE / BSP FEMALE ISO 1179

PART NO.	THREAD		DIMENSIONS		
	E	F	A	L	S1
5JB–04	7/16" × 20	G1/4" × 19	14	33	19
5JB–04–02	7/16" × 20	G1/8" × 28	14	31	14
5JB–04–06	7/16" × 20	G3/8" × 19	14	35.5	22
5JB–06	9/16" × 18	G3/8" × 19	14.1	35	22
5JB–06–08	9/16" × 18	G1/2" × 14	14.4	39.5	27
5JB–08	3/4" × 16	G1/2" × 14	16.7	44	27
5JB–08–10	3/4" × 16	G5/8" × 14	16.7	46	30
5JB–10–12	7/8" × 14	G3/4" × 14	19.3	48	32
5JB–12	1.1/16" × 12	G3/4" × 14	21.9	50	36
5JB–12–16	1.1/16" × 12	G1" × 11	21.9	53	41
5JB–16	1.5/16" × 12	G1" × 11	23.1	52.5	41
5JB–16–20	1.5/16" × 12	G1.1/4" × 11	23.1	57	50
5JB–20	1.5/8" × 12	G1.1/4" × 11	24.3	57	50
5JB–24	1.7/8" × 12	G1.1/2" × 11	27.5	62	55
5JB–32	2.1/2" × 12	G2" × 11	33.9	67	70

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



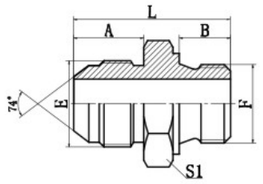


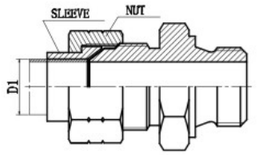
1JF

JIC MALE 74° CONE / ORFS MALE

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	F	A	B	L	S1
1JF–04	7/16" × 20	9/16" × 18	O011	14	9.8	29.5	17
1JF–05–04	1/2" × 20	9/16" × 18	O011	14	9.8	29.5	17
1JF–05–06	1/2" × 20	11/16" × 16	O012	14	11.2	31.5	19
1JF–06–04	9/16" × 18	9/16" × 18	O011	14.1	9.8	30	17
1JF–06	9/16" × 18	11/16" × 16	O012	14.1	11.2	31	19
1JF–08–06	3/4" × 16	11/16" × 16	O012	16.7	11.2	36	22
1JF–08	3/4" × 16	13/16" × 16	O014	16.7	12.8	37.5	22
1JF–10–08	7/8" × 14	13/16" × 16	O014	19.3	12.8	40	24
1JF–10	7/8" × 14	1" × 14	O016	19.3	15.5	44.5	27
1JF–12–10	1.1/16" × 12	1" × 14	O016	21.9	15.8	47.5	30
1JF–12	1.1/16" × 12	1.3/16" × 12	O018	21.9	17	50	32
1JF–16–12	1.5/16" × 12	1.3/16" × 12	O018	23.1	17	51	36
1JF–16	1.5/16" × 12	1.7/16" × 12	O021	23.1	17.5	51.5	38
1JF–20–16	1.5/8" × 12	1.7/16" × 12	O021	24.3	17.5	54.5	46
1JF–20	1.5/8" × 12	1.11/16" × 12	O025	24.3	17.5	54.5	46
1JF–24–20	1.7/8" × 12	1.11/16" × 12	O025	27.5	17.5	60	50
1JF–24	1.7/8" × 12	2 × 12	O029	27.5	17.5	60	55

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



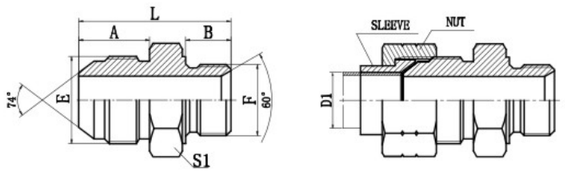


1JL

JIC MALE 74° CONE /
METRIC MALE WITH BONDED SEAL

PART NO.	THREAD		SEAL	DIMENSIONS			
	E	F	F	A	B	L	S1
1JL–04–10	7/16" × 20	M10 × 1	ZHD–10	14	8	29	17
1JL–04–12	7/16" × 20	M12 × 1.5	ZHD–12	14	12	32.5	17
1JL–06–12	9/16" × 18	M12 × 1.5	ZHD–12	14.1	12	33.5	17
1JL–06–14	9/16" × 18	M14 × 1.5	ZHD–14	14.1	12	32	19
1JL–06–18	9/16" × 18	M18 × 1.5	ZHD–18	14.1	12	35.5	24
1JL–06–22	9/16" × 18	M22 × 1.5	ZHD–22	14.1	14	38	27
1JL–08–16	3/4" × 16	M16 × 1.5	ZHD–16	16.7	12	37	22
1JL–08–18	3/4" × 16	M18 × 1.5	ZHD–18	16.7	12	37.5	24
1JL–08–22	3/4" × 16	M22 × 1.5	ZHD–22	16.7	14	40.5	27
1JL–10–18	7/8" × 14	M18 × 1.5	ZHD–18	19.3	12	40.5	24
1JL–10–22	7/8" × 14	M22 × 1.5	ZHD–22	19.3	14	43	27
1JL–12–22	1.1/16" × 12	M22 × 1.5	ZHD–22	21.9	14	48.5	30
1JL–12–27	1.1/16" × 12	M27 × 2	ZHD–27	21.9	16	49	36
1JL–16–33	1.5/16" × 12	M33 × 2	ZHD–33	23.1	18	56	41

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

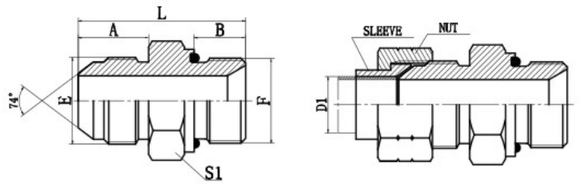


1JM

JIC MALE 74° CONE / METRIC MALE 60° SEAT

PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1JM–04–10	7/16" × 20	M10 × 1	14	8	29	14
1JM–04–12	7/16" × 20	M12 × 1.5	14	10	31	17
1JM–04–14	7/16" × 20	M14 × 1.5	14	11	32	19
1JM–05–10	1/2" × 20	M10 × 1	14	8	28	14
1JM–05–12	1/2" × 20	M12 × 1.5	14	10	30	17
1JM–05–14	1/2" × 20	M14 × 1.5	14	11	32	19
1JM–06–12	9/16" × 18	M12 × 1.5	14.1	10	31	17
1JM–06–14	9/16" × 18	M14 × 1.5	14.1	11	33	19
1JM–06–16	9/16" × 18	M16 × 1.5	14.1	12	35	22
1JM–06–18	9/16" × 18	M18 × 1.5	14.1	12	34	24
1JM–08–16	3/4" × 16	M16 × 1.5	16.7	12	37.5	22
1JM–08–18	3/4" × 16	M18 × 1.5	16.7	12	36.5	24
1JM–08–20	3/4" × 16	M20 × 1.5	16.7	14	41	27
1JM–08–22	3/4" × 16	M22 × 1.5	16.7	14	41	27
1JM–10–20	7/8" × 14	M20 × 1.5	19.3	14	44	27
1JM–10–22	7/8" × 14	M22 × 1.5	19.3	14	43.5	27
1JM–10–26	7/8" × 14	M26 × 1.5	19.3	16	47.5	32
1JM–12–20	1.1/16" × 12	M20 × 1.5	21.9	14	47	30
1JM–12–22	1.1/16" × 12	M22 × 1.5	21.9	14	47	30
1JM–12–26	1.1/16" × 12	M26 × 1.5	21.9	16	50	32

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.

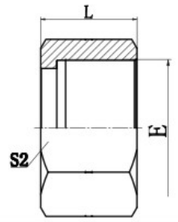


1JM–WD

JIC MALE 74° CONE / METRIC MALE CAPTIVE SEAL

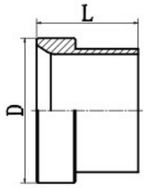
PART NO.	THREAD		CAPTIVE	DIMENSIONS			
	E	F	F	A	B	L	S1
1JM–04–10WD	7/16" × 20	M10 × 1	WD–B02	14	8	29.5	17
1JM–04–12WD	7/16" × 20	M12 × 1.5	WD–M12	14	12	34	17
1JM–05–14WD	1/2" × 20	M14 × 1.5	WD–B04	14	12	34	19
1JM–06–14WD	9/16" × 18	M14 × 1.5	WD–B04	14.1	12	34	19
1JM–06–18WD	9/16" × 18	M18 × 1.5	WD–M18	14.1	12	36.5	24
1JM–06–20WD	9/16" × 18	M20 × 1.5	WD–M20	14.1	14	40.5	27
1JM–08–18WD	3/4" × 16	M18 × 1.5	WD–M18	16.7	12	39	24
1JM–08–20WD	3/4" × 16	M20 × 1.5	WD–M20	16.7	14	43	27
1JM–08–22WD	3/4" × 16	M22 × 1.5	WD–M22	16.7	14	43.5	27
1JM–10–18WD	7/8" × 14	M18 × 1.5	WD–M18	19.3	12	41.5	24
1JM–10–20WD	7/8" × 14	M20 × 1.5	WD–M20	19.3	14	45.5	27
1JM–10–22WD	7/8" × 14	M22 × 1.5	WD–M22	19.3	14	46	27
1JM–12–20WD	1.1/16" × 12	M20 × 1.5	WD–M20	21.9	14	48.5	30
1JM–12–22WD	1.1/16" × 12	M22 × 1.5	WD–M22	21.9	14	49	30
1JM–12–26WD	1.1/16" × 12	M26 × 1.5	WD–B12	21.9	16	52	32
1JM–12–27WD	1.1/16" × 12	M27 × 2	WD–B12	21.9	16	52	32
1JM–16–26WD	1.5/16" × 12	M26 × 1.5	WD–B12	23.1	16	53	36
1JM–16–33WD	1.5/16" × 12	M33 × 2	WD–B16	23.1	18	57	41
1JM–20–42WD	1.5/8" × 12	M42 × 2	WD–B20	24.3	20	62	50
1JM–20–48WD	1.5/8" × 12	M48 × 2	WD–B24	24.3	22	64	55
1JM–24–48WD	1.7/8" × 12	M48 × 2	WD–B24	27.5	22	67.5	55

Note: Nut and sleeve should be ordered separately. The nut NB200 and sleeve NB500 is suitable for metric tube, the nut NB200 and sleeve NB300 is suitable for inch tube.



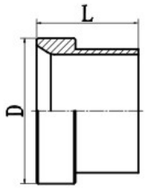
NB200
JIC FLARE TUBE END NUT

PART NO.	THREAD	INCH SLEEVE		METRIC SLEEVE		DIMENSIONS	
	E	TUBE O.D.	SLEEVE NO.	TUBE O.D.	SLEEVE NO.	L	S2
NB200–04	7/16" × 20	1/4"	NB300–04	6	NB500–06	15.8	14
NB200–05	1/2" × 20	5/16"	NB300–05	8	NB500–08	17.3	17
NB200–06	9/16" × 18	3/8"	NB300–06	10	NB500–10	18.5	19
NB200–08	3/4" × 16	1/2"	NB300–08	12	NB500–12	21.6	24
NB200–10	7/8" × 14			14	NB500–14	24.9	27
NB200–10	7/8" × 14			15	NB500–15	24.9	27
NB200–10	7/8" × 14	5/8"	NB300–10	16	NB500–16	24.9	27
NB200–12	1.1/16" × 12	3/4"	NB300–12	18	NB500–18	26.2	32
NB200–12A	1.1/16" × 12			20	NB500–20A	26.2	32
NB200–14	1.3/16" × 12			20	NB500–20	27.7	36
NB200–14	1.3/16" × 12	7/8"	NB300–14	22	NB500–22	27.7	36
NB200–16	1.5/16" × 12	1	NB300–16	25	NB500–25	28.7	38
NB200–20	1.5/8" × 12			28	NB500–28	31.2	50
NB200–20	1.5/8" × 12			30	NB500–30	31.2	50
NB200–20	1.5/8" × 12	1.1/4"	NB300–20	32	NB500–32	31.2	50
NB200–24	1.7/8" × 12			35	NB500–35	36.1	60
NB200–24	1.7/8" × 12	1.1/2"	NB300–24	38	NB500–38	36.1	60
NB200–32	2.1/2" × 12	2"	NB300–32	50	NB500–50	44.5	75



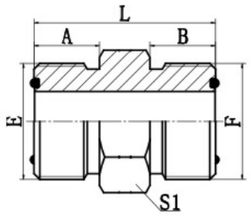
NB300
JIC INCH SLEEVE

PART NO.	THREAD	TUBE O.D.	DIMENSIONS	
		in	D	L
NB300–04	7/16" × 20	1/4"	9.73	10.4
NB300–05	1/2" × 20	5/16"	11.3	11.2
NB300–06	9/16" × 18	3/8"	12.75	12.7
NB300–08	3/4" × 16	1/2"	17.32	14.2
NB300–10	7/8" × 14	5/8"	20.24	16.8
NB300–12	1.1/16" × 12	3/4"	24.69	17.3
NB300–14	1.3/16" × 12	7/8"	27.86	19.3
NB300–16	1.5/16" × 12	1	31.04	19.8
NB300–20	1.5/8" × 12	1.1/4"	38.96	23.1
NB300–24	1.7/8" × 12	1.1/2"	45.31	28.4
NB300–32	2.1/2" × 12	2"	61.19	30.2



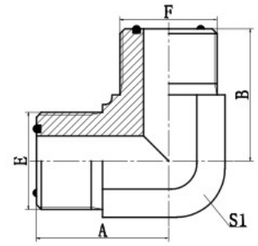
NB500
JIC METRIC SLEEVE

PART NO.	THREAD	TUBE O.D.	DIMENSIONS	
		mm	D	L
NB500–06	7/16" × 20	6	9.7	10.4
NB500–08	1/2" × 20	8	11.3	11.2
NB500–10	9/16" × 18	10	12.7	12.7
NB500–12	3/4" × 16	12	17.3	14.2
NB500–14	7/8" × 14	14	20.2	16.8
NB500–15	7/8" × 14	15	20.2	16.8
NB500–16	7/8" × 14	16	20.2	16.8
NB500–18	1.1/16" × 12	18	24.7	17.3
NB500–20A	1.1/16" × 12	20	24.7	17.3
NB500–20	1.3/16" × 12	20	27.8	19.3
NB500–22	1.3/16" × 12	22	27.8	19.3
NB300–25	1.5/16" × 12	25	31	19.8
NB500–28	1.5/8" × 12	28	38.9	23.1
NB500–30	1.5/8" × 12	30	38.9	23.1
NB500–32	1.5/8" × 12	32	38.9	23.1
NB500–35	1.7/8" × 12	35	45.3	28.4
NB500–38	1.7/8" × 12	38	45.3	28.4
NB500–50	2.1/2" × 12	50	61.2	30.2



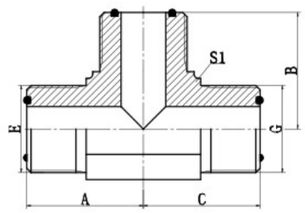
1F
ORFS MALE O-RING

PART NO.	THREAD		O-RING		DIMENSIONS			
	E	F	E	F	A	B	L	S1
1F-04	9/16" × 18	9/16" × 18	O011	O011	9.8	9.8	27.5	17
1F-04-06	9/16" × 18	11/16" × 16	O011	O012	9.8	11.2	29.7	19
1F-04-08	9/16" × 18	13/16" × 16	O011	O014	9.8	12.8	32.5	22
1F-06	11/16" × 16	11/16" × 16	O012	O012	11.2	11.2	31.1	19
1F-06-08	11/16" × 16	13/16" × 16	O012	O014	11.2	12.8	33.8	22
1F-06-10	11/16" × 16	1" × 14	O012	O016	11.2	15.5	38	27
1F-08	13/16" × 16	13/16" × 16	O014	O014	12.8	12.8	35.4	22
1F-08-10	13/16" × 16	1" × 14	O014	O016	12.8	15.5	40	27
1F-08-12	13/16" × 16	1.3/16" × 12	O014	O018	12.8	17	43	32
1F-10	1" × 14	1" × 14	O016	O016	15.5	15.5	42.5	27
1F-10-12	1" × 14	1.3/16" × 12	O016	O018	15.5	17	45.5	32
1F-12	1.3/16" × 12	1.3/16" × 12	O018	O018	17	17	47.1	32
1F-12-16	1.3/16" × 12	1.7/16" × 12	O018	O021	17	17.5	45.5	38
1F-12-20	1.3/16" × 12	1.11/16" × 12	O018	O025	17	17.5	50.5	46
1F-16	1.7/16" × 12	1.7/16" × 12	O021	O021	17.5	17.5	49.3	38
1F-16-20	1.7/16" × 12	1.11/16" × 12	O021	O025	17.5	17.5	51.3	46
1F-16-24	1.7/16" × 12	2" × 12	O021	O029	17.5	17.5	53	55
1F-20	1.11/16" × 12	1.11/16" × 12	O025	O025	17.5	17.5	51.3	46
1F-20-24	1.11/16" × 12	2" × 12	O025	O029	17.5	17.5	53	55
1F-24	2" × 12	2" × 12	O029	O029	17.5	17.5	53	55



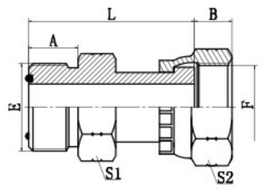
1F9
90° ELBOW ORFS MALE O-RING

PART NO.	THREAD		O-RING		DIMENSIONS		
	E	F	E	F	A	B	S1
1F9-04	9/16" × 18	9/16" × 18	O011	O011	23	23	14
1F9-04-06	9/16" × 18	11/16" × 16	O011	O012	25.5	27	19
1F9-06	11/16" × 16	11/16" × 16	O012	O012	27.5	27.5	19
1F9-06-08	11/16" × 16	13/16" × 16	O012	O014	29	31	22
1F9-08	13/16" × 16	13/16" × 16	O014	O014	31	31	22
1F9-08-12	13/16" × 16	1.3/16" × 12	O014	O018	35.5	40.3	30
1F9-10	1" × 14	1" × 14	O016	O016	36.5	36.5	27
1F9-12	1.3/16" × 12	1.3/16" × 12	O018	O018	41	41	30
1F9-16	1.7/16" × 12	1.7/16" × 12	O021	O021	44.5	44.5	36
1F9-20	1.11/16" × 12	1.11/16" × 12	O025	O025	47.5	47.5	41
1F9-24	2" × 12	2" × 12	O029	O029	53.5	53.5	50



AF
ORFS MALE O-RING TEE

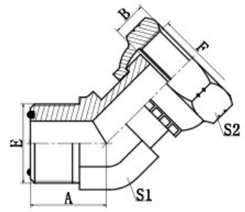
PART NO.	THREAD			O-RING			DIMENSIONS			
	E	F	G	E	F	G	A	B	C	S1
AF-04	9/16" × 18	9/16" × 18	9/16" × 18	O011	O011	O011	23	23	23	14
AF-06	11/16" × 16	11/16" × 16	11/16" × 16	O012	O012	O012	27	27	27	19
AF-08	13/16" × 16	13/16" × 16	13/16" × 16	O014	O014	O014	31	31	31	22
AF-10	1" × 14	1" × 14	1" × 14	O016	O016	O016	36.5	36.5	36.5	27
AF-12	1.3/16" × 12	1.3/16" × 12	1.3/16" × 12	O018	O018	O018	40.3	40.3	40.3	30
AF-16	1.7/16" × 12	1.7/16" × 12	1.7/16" × 12	O021	O021	O021	44.5	44.5	44.5	36
AF-20	1.11/16" × 12	1.11/16" × 12	1.11/16" × 12	O025	O025	O025	47.5	47.5	47.5	41
AF-24	2" × 12	2" × 12	2" × 12	O029	O029	O029	53.5	53.5	53.5	50



2F

ORFS MALE O–RING / ORFS FEMALE

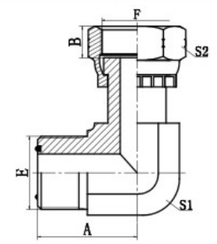
PART NO.	THREAD		O–RING	DIMENSIONS				
	E	F	E	A	B	L	S1	S2
2F–04	9/16" × 18	9/16" × 18	O011	9.8	8.5	33	17	19
2F–04–06	9/16" × 18	11/16" × 16	O011	9.8	10	34.5	17	22
2F–04–08	9/16" × 18	13/16" × 16	O011	9.8	11	36.5	19	27
2F–06–04	11/16" × 16	9/16" × 18	O012	11.2	8.5	35.5	19	19
2F–06	11/16" × 16	11/16" × 16	O012	11.2	10	38.5	19	22
2F–06–08	11/16" × 16	13/16" × 16	O012	11.2	11	37.7	19	27
2F–06–10	11/16" × 16	1" × 14	O012	11.2	13.5	43.7	24	30
2F–08–06	13/16" × 16	11/16" × 16	O014	13	10	41	22	22
2F–08	13/16" × 16	13/16" × 16	O014	13	11	43	22	27
2F–08–10	13/16" × 16	1" × 14	O014	13	13.5	45.5	24	30
2F–08–12	13/16" × 16	1.3/16" × 12	O014	13	15	49	30	36
2F–10–08	1" × 14	13/16" × 16	O016	15.5	11	47.5	27	27
2F–10	1" × 14	1" × 14	O016	15.5	13.5	51.5	27	30
2F–10–12	1" × 14	1.3/16" × 12	O016	15.5	15	51.5	30	36
2F–10–16	1" × 14	1.7/16" × 12	O016	15.5	15	56	36	41
2F–12–08	1.3/16" × 12	13/16" × 16	O018	17	11	50.5	32	27
2F–12–10	1.3/16" × 12	1" × 14	O018	17	13.5	54.5	32	30
2F–12	1.3/16" × 12	1.3/16" × 12	O018	17	15	56	32	36
2F–12–16	1.3/16" × 12	1.7/16" × 12	O018	17	15	58	36	41
2F–16–12	1.7/16" × 12	1.3/16" × 12	O021	17.5	15	58	38	36
2F–16	1.7/16" × 12	1.7/16" × 12	O021	17.5	15	60	38	41
2F–16–20	1.7/16" × 12	1.11/16" × 12	O021	17.5	15	62	41	50
2F–20–16	1.11/16" × 12	1.7/16" × 12	O025	17.5	15	58.5	46	41
2F–20	1.11/16" × 12	1.11/16" × 12	O025	17.5	15	62	46	50
2F–20–24	1.11/16" × 12	2" × 12	O025	17.5	16	65.5	50	60
2F–24–20	2" × 12	1.11/16" × 12	O029	17.5	15	64	55	50
2F–24	2" × 12	2" × 12	O029	17.5	16	64	55	60



2F4

45° ELBOW ORFS MALE O–RING / ORFS FEMALE

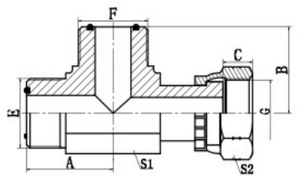
PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	E	A	B	S1	S2
2F4–04	9/16" × 18	9/16" × 18	O011	18.3	8.5	14	19
2F4–06	11/16" × 16	11/16" × 16	O012	20.5	10	19	22
2F4–08	13/16" × 16	13/16" × 16	O014	24	11	22	27
2F4–10	1" × 14	1" × 14	O016	28	15	27	30
2F4–12	1.3/16" × 12	1.3/16" × 12	O018	30.7	15	30	36
2F4–16	1.7/16" × 12	1.7/16" × 12	O021	33	15	36	41
2F4–20	1.11/16" × 12	1.11/16" × 12	O025	35.5	15	41	50



2F9

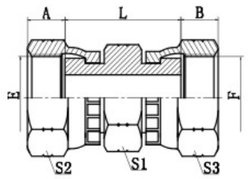
90° ELBOW ORFS MALE O–RING / ORFS FEMALE

PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	E	A	B	S1	S2
2F9–04	9/16" × 18	9/16" × 18	O011	23	8.5	14	19
2F9–04–06	9/16" × 18	11/16" × 16	O011	23	10	14	22
2F9–06–04	11/16" × 16	9/16" × 18	O012	27.5	8.5	19	19
2F9–06	11/16" × 16	11/16" × 16	O012	27.5	10	19	22
2F9–06–08	11/16" × 16	13/16" × 16	O012	27	11	19	27
2F9–08–06	13/16" × 16	11/16" × 16	O014	31	10	22	22
2F9–08	13/16" × 16	13/16" × 16	O014	31	11	22	27
2F9–10–08	1" × 14	13/16" × 16	O016	36.5	11	27	27
2F9–10	1" × 14	1" × 14	O016	36.5	15	27	30
2F9–10–12	1" × 14	1.3/16" × 16	O016	36.5	15	27	36
2F9–12	1.3/16" × 12	1.3/16" × 12	O018	41	15	30	36
2F9–12–16	1.3/16" × 12	1.7/16" × 12	O018	42.5	15	33	41
2F9–16–12	1.7/16" × 12	1.3/16" × 16	O021	44.5	15	36	36
2F9–16	1.7/16" × 12	1.7/16" × 12	O021	44.5	15	36	41
2F9–20	1.11/16" × 12	1.11/16" × 12	O025	44.5	15	41	50
2F9–24	2" × 12	2" × 12	O029	53.5	15	50	60



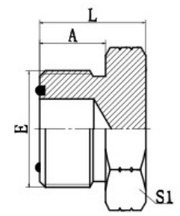
CF
ORFS MALE O-RING / ORFS FEMALE RUN TEE

PART NO.	THREAD			O-RING		DIMENSIONS				
	E	F	G	E	F	A	B	C	S1	S2
CF-04	9/16" × 18	9/16" × 18	9/16" × 18	O011	O011	23	23	8.5	14	19
CF-06	11/16" × 16	11/16" × 16	11/16" × 16	O012	O012	27.5	27.5	10	19	22
CF-08	13/16" × 16	13/16" × 16	13/16" × 16	O014	O014	31	31	11	22	27
CF-10	1" × 14	1" × 14	1" × 14	O016	O016	36.5	36.5	13.5	27	30
CF-12	1.3/16" × 12	1.3/16" × 12	1.3/16" × 12	O018	O018	40.3	40.3	15	30	36
CF-16	1.7/16" × 12	1.7/16" × 12	1.7/16" × 12	O021	O021	44.5	44.5	15	36	41
CF-20	1.11/16" × 12	1.11/16" × 12	1.11/16" × 12	O025	O025	47.5	47.5	15	41	50
CF-24	2" × 12	2" × 12	2" × 12	O029	O029	53.5	53.5	15	50	60



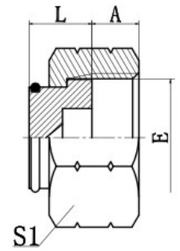
3F
ORFS FEMALE

PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2, S3
3F-04	9/16" × 18	9/16" × 18	8.5	8.5	33.5	19	19
3F-06	11/16" × 16	11/16" × 16	10	10	40.5	22	22
3F-08	13/16" × 16	13/16" × 16	11	11	44.5	27	27
3F-10	1" × 14	1" × 14	13.5	13.5	52.5	30	30
3F-12	1.3/16" × 12	1.3/16" × 12	15	15	56	36	36
3F-16	1.7/16" × 12	1.7/16" × 12	15	15	60	41	41
3F-20	1.11/16" × 12	1.11/16" × 12	15	15	59.5	50	50
3F-24	2" × 12	2" × 12	16	16	64	60	60



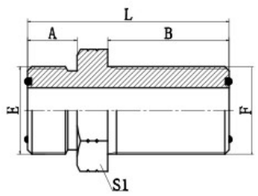
4F
ORFS MALE O-RING PLUG

PART NO.	THREAD	O-RING	DIMENSIONS		
	E	E	A	L	S1
4F-04	9/16" × 18	O011	9.8	16.8	17
4F-06	11/16" × 16	O012	11.2	19.2	19
4F-08	13/16" × 16	O014	12.8	21.8	22
4F-10	1" × 14	O016	15.5	25.9	27
4F-12	1.3/16" × 12	O018	17	27.4	32
4F-16	1.7/16" × 12	O021	17.5	27.9	38
4F-20	1.11/16" × 12	O025	17.5	27.9	46
4F-24	2" × 12	O029	17.5	27.9	55

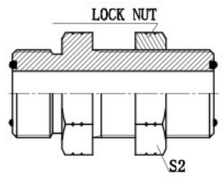


9F
ORFS FEMALE PLUG

PART NO.	THREAD	DIMENSIONS		
	E	A	L	S2
9F-04	9/16" × 18	8.5	10.5	19
9F-06	11/16" × 16	10	13	22
9F-08	13/16" × 16	11	14	27
9F-10	1" × 14	13.5	16	30
9F-12	1.3/16" × 12	15	15	36
9F-16	1.7/16" × 12	15	18	41
9F-20	1.11/16" × 12	15	19	50
9F-24	2" × 12	16	21	60



6F

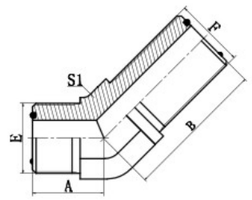


6F-LN

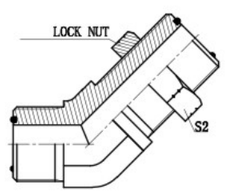
ORFS MALE O-RING BULKHEAD

PART NO.	THREAD		O-RING		DIMENSIONS				
	E	F	E	F	A	B	L	S1	S2
6F-04	9/16" × 18	9/16" × 18	O011	O011	9.8	31.5	48.2	22	22
6F-06	11/16" × 16	11/16" × 16	O012	O012	11.2	34	53.2	27	27
6F-08	13/16" × 16	13/16" × 16	O014	O014	12.8	36.5	58.3	30	30
6F-10	1" × 14	1" × 14	O016	O016	15.5	40.6	66.6	36	36
6F-12	1.3/16" × 12	1.3/16" × 12	O018	O018	17	41.7	69.2	38	38
6F-16	1.7/16" × 12	1.7/16" × 12	O021	O021	17.5	42.2	70.2	46	46
6F-20	1.11/16" × 12	1.11/16" × 12	O025	O025	17.5	42.2	70.2	50	50
6F-24	2" × 12	2" × 12	O029	O029	17.5	42.2	70.2	60	63

Note: In case if you are interested to order the adapter with lock nut,please insert suffix "LN"after our part NO.,for example 6F-16LN,The lock nut NO. is 8F.



6F4

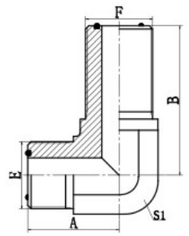


6F4-LN

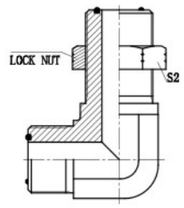
45° ELBOW ORFS MALE O-RING BULKHEAD

PART NO.	THREAD		O-RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
6F4-04	9/16" × 18	9/16" × 18	O011	O011	18.5	42.4	14	22
6F4-06	11/16" × 16	11/16" × 16	O012	O012	20.5	48.5	19	27
6F4-08	13/16" × 16	13/16" × 16	O014	O014	24	51	22	30
6F4-10	1" × 14	1" × 14	O016	O016	28	56.6	27	36
6F4-12	1.3/16" × 12	1.3/16" × 12	O018	O018	30.7	60.7	30	38
6F4-16	1.7/16" × 12	1.7/16" × 12	O021	O021	33	65.2	36	46

Note: In case if you are interested to order the adapter with lock nut,please insert suffix "LN"after our part NO.,for example 6F4-16LN,The lock nut NO. is 8F.



6F9

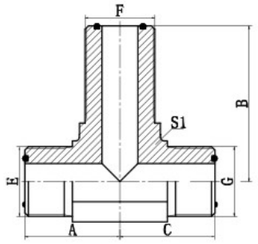


6F9-LN

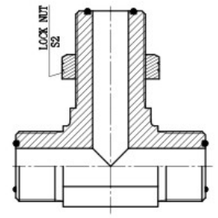
90° ELBOW ORFS MALE O-RING BULKHEAD

PART NO.	THREAD		O-RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
6F9-04	9/16" × 18	9/16" × 18	O011	O011	23	47	14	22
6F9-06	11/16" × 16	11/16" × 16	O012	O012	27.5	52	19	27
6F9-08	13/16" × 16	13/16" × 16	O014	O014	31	55.5	22	30
6F9-10	1" × 14	1" × 14	O016	O016	36.5	63	27	36
6F9-12	1.3/16" × 12	1.3/16" × 12	O018	O018	38.5	67.2	30	38
6F9-16	1.7/16" × 12	1.7/16" × 12	O021	O021	44.5	71.2	36	46
6F9-20	1.11/16" × 12	1.11/16" × 12	O025	O025	47.5	75.5	41	50
6F9-24	2" × 12	2" × 12	O029	O029	53.5	79.5	50	60

Note: In case if you are interested to order the adapter with lock nut,please insert suffix "LN"after our part NO.,for example 6F9-16LN,The lock nut NO. is 8F.



AF6FF

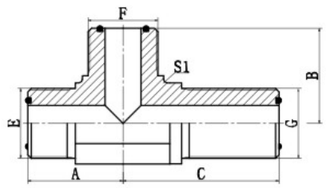


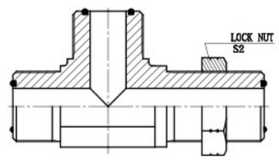
AF6FF-LN

ORFS MALE O-RING BULKHEAD BRANCH TEE

PART NO.	THREAD			O-RING			DIMENSIONS				
	E	F	G	E	F	G	A	B	C	S1	S2
AF6FF-04	9/16" × 18	9/16" × 18	9/16" × 18	O011	O011	O011	23	47	23	14	22
AF6FF-06	11/16" × 16	11/16" × 16	11/16" × 16	O012	O012	O012	27	52	27	19	27
AF6FF-08	13/16" × 16	13/16" × 16	13/16" × 16	O014	O014	O014	31	55.5	31	22	30
AF6FF-10	1" × 14	1" × 14	1" × 14	O016	O016	O016	36.5	63	36.5	27	36
AF6FF-12	1.3/16" × 12	1.3/16" × 12	1.3/16" × 12	O018	O018	O018	41	67.2	41	30	41
AF6FF-16	1.7/16" × 12	1.7/16" × 12	1.7/16" × 12	O021	O021	O021	44.5	71.2	44.5	36	46
AF6FF-20	1.11/16" × 12	1.11/16" × 12	1.11/16" × 12	O025	O025	O025	47.5	75.5	47.5	41	50
AF6FF-24	2" × 12	2" × 12	2" × 12	O029	O029	O029	53.5	79.5	53.5	50	60

Note: In case if you are interested to order the adapter with lock nut,please insert suffix "LN"after our part NO.,for example AF6FF-16LN,The lock nut NO. is 8F.



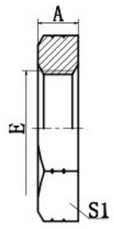


AFF6F **AFF6F–LN**

ORFS MALE O–RING
BULKHEAD RUN TEE

PART NO.	THREAD			O–RING			DIMENSIONS				
	E	F	G	E	F	G	A	B	C	S1	S2
AFF6F–04	9/16" × 18	9/16" × 18	9/16" × 18	O011	O011	O011	23	23	47	14	22
AFF6F–06	11/16" × 16	11/16" × 16	11/16" × 16	O012	O012	O012	27	27	52	19	27
AFF6F–08	13/16" × 16	13/16" × 16	13/16" × 16	O014	O014	O014	31	31	55.5	22	30
AFF6F–10	1" × 14	1" × 14	1" × 14	O016	O016	O016	36.5	36.5	63	27	36
AFF6F–12	1.3/16" × 12	1.3/16" × 12	1.3/16" × 12	O018	O018	O018	41	41	67.2	30	41
AFF6F–16	1.7/16" × 12	1.7/16" × 12	1.7/16" × 12	O021	O021	O021	44.5	44.5	71.2	36	46
AFF6F–20	1.11/16" × 12	1.11/16" × 12	1.11/16" × 12	O025	O025	O025	47.5	47.5	75.5	41	50
AFF6F–24	2" × 12	2" × 12	2" × 12	O029	O029	O029	53.5	53.5	79.5	50	60

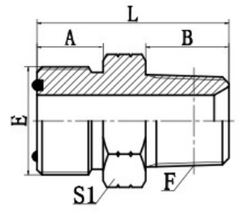
Note: In case if you are interested to order the adapter with lock nut,please insert suffix "LN"after our part NO.,for example AFF6F–16LN,The lock nut NO. is 8F.



8F
ORFS LOCK NUT

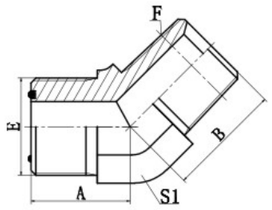
PART NO.	THREAD	DIMENSIONS	
	E	A	S1
8F–04	9/16" × 18	7	22
8F–06	11/16" × 16	8	27
8F–08	13/16" × 16	9	30
8F–10	1" × 14	10.4	36
8F–12	1.3/16" × 12	10.4	38
8F–16	1.7/16" × 12	10.4	46
8F–20	1.11/16" × 12	10.4	50
8F–24	2" × 12	10.4	60

Note: 8F–04 is the same as 8J–06.



1FN
ORFS MALE O–RING / NPT MALE

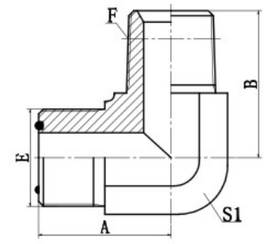
PART NO.	THREAD		O–RING	DIMENSIONS			
	E	F	E	A	B	L	S1
1FN–04–02	9/16" × 18	Z1/8" × 27	O011	9.8	10.5	26.5	17
1FN–04	9/16" × 18	Z1/4" × 18	O011	9.8	15	30.5	17
1FN–04–06	9/16" × 18	Z3/8" × 18	O011	9.8	16	30.5	19
1FN–06–04	11/16" × 16	Z1/4" × 18	O012	11.2	15	32	19
1FN–06	11/16" × 16	Z3/8" × 18	O012	11.2	16	33.5	19
1FN–06–08	11/16" × 16	Z1/2" × 14	O012	11.2	19.5	39	24
1FN–08–04	13/16" × 16	Z1/4" × 18	O014	12.8	15	36	22
1FN–08–06	13/16" × 16	Z3/8" × 18	O014	12.8	16	36.5	22
1FN–08	13/16" × 16	Z1/2" × 14	O014	12.8	19.5	40	24
1FN–08–12	13/16" × 16	Z3/4" × 14	O014	12.8	19.5	42.5	30
1FN–10–08	1" × 14	Z1/2" × 14	O016	15.5	19.5	45	27
1FN–10–12	1" × 14	Z3/4" × 14	O016	15.5	19.5	45	30
1FN–12–08	1.3/16" × 12	Z1/2" × 14	O018	17	19.5	46.5	32
1FN–12	1.3/16" × 12	Z3/4" × 14	O018	17	19.5	47	32
1FN–12–16	1.3/16" × 12	Z1" × 11.5	O018	17	25.5	53.5	36
1FN–16–12	1.7/16" × 12	Z3/4" × 14	O021	17.5	19.5	48	38
1FN–16	1.7/16" × 12	Z1" × 11.5	O021	17.5	25.5	53.5	38
1FN–16–20	1.7/16" × 12	Z1.1/4" × 11.5	O021	17.5	26.5	57	46
1FN–20–16	1.11/16" × 12	Z1" × 11.5	O025	17.5	25.5	56	46
1FN–20	1.11/16" × 12	Z1.1/4" × 11.5	O025	17.5	26.5	56.5	46
1FN–20–24	1.11/16" × 12	Z1.1/2" × 11.5	O025	17.5	27.5	60	50
1FN–24	2" × 12	Z1.1/2" × 11.5	O029	17.5	27.5	59.5	55



1FN4

45° ELBOW ORFS MALE O-RING / NPT MALE

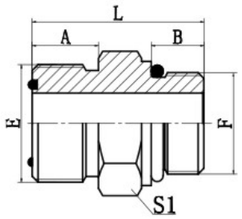
PART NO.	THREAD		O-RING	DIMENSIONS		
	E	F	E	A	B	S1
1FN4-04-02	9/16" × 18	Z1/8" × 27	O011	18.3	18	14
1FN4-04	9/16" × 18	Z1/4" × 18	O011	18.3	21	14
1FN4-04-06	9/16" × 18	Z3/8" × 18	O011	19.5	25	19
1FN4-06-04	11/16" × 16	Z1/4" × 18	O012	20.5	22	19
1FN4-06	11/16" × 16	Z3/8" × 18	O012	20.5	25	19
1FN4-06-08	11/16" × 16	Z1/2" × 14	O012	22	29.5	22
1FN4-08-06	13/16" × 16	Z3/8" × 18	O014	24	26	22
1FN4-08	13/16" × 16	Z1/2" × 14	O014	24	29.5	22
1FN4-10-08	1" × 14	Z1/2" × 14	O016	28	31	27
1FN4-12	1.3/16" × 12	Z3/4" × 14	O018	30.7	35.5	30
1FN4-16	1.7/16" × 12	Z1" × 11.5	O021	33	40	36
1FN4-20	1.11/16" × 12	Z1.1/4" × 11.5	O025	35.5	42.5	41
1FN4-24	2" × 12	Z1.1/2" × 11.5	O029	39	46.5	50



1FN9

90° ELBOW ORFS MALE O-RING / NPT MALE

PART NO.	THREAD		O-RING	DIMENSIONS		
	E	F	E	A	B	S1
1FN9-04-02	9/16" × 18	Z1/8" × 27	O011	23	24	14
1FN9-04	9/16" × 18	Z1/4" × 18	O011	23	25.5	14
1FN9-06-04	11/16" × 16	Z1/4" × 18	O012	27	28.5	19
1FN9-06	11/16" × 16	Z3/8" × 18	O012	27.5	31	19
1FN9-06-08	11/16" × 16	Z1/2" × 14	O012	29	36.7	22
1FN9-08-06	13/16" × 16	Z3/8" × 18	O014	31	33.5	22
1FN9-08	13/16" × 16	Z1/2" × 14	O014	31	37.3	22
1FN9-08-12	13/16" × 16	Z3/4" × 14	O014	34.5	44	27
1FN9-10-08	1" × 14	Z1/2" × 14	O016	36.5	40	27
1FN9-10-12	1" × 14	Z3/4" × 14	O016	36.5	44	27
1FN9-12-08	1.3/16" × 12	Z1/2" × 14	O018	40.3	41.5	30
1FN9-12	1.3/16" × 12	Z3/4" × 14	O018	41	45.5	30
1FN9-12-16	1.3/16" × 12	Z1" × 11.5	O018	43	50	33
1FN9-16-12	1.7/16" × 12	Z3/4" × 14	O021	44.5	49	36
1FN9-16	1.7/16" × 12	Z1" × 11.5	O021	44.5	51.5	36
1FN9-20-16	1.11/16" × 12	Z1" × 11.5	O025	47.5	54.5	41
1FN9-20	1.11/16" × 12	Z1.1/4" × 11.5	O025	47.5	54.5	41
1FN9-24	2" × 12	Z1.1/2" × 11.5	O029	53.5	61	50

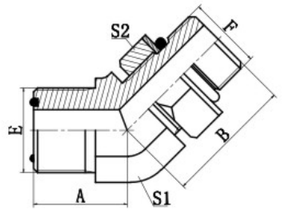


1FH

ORFS MALE O–RING /
METIRC MALE S–SERIES ISO6149–2

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	L	S1
1FH–04–10	9/16" × 18	M10 × 1	O011	O08.1 × 1.6	9.8	9.5	28	17
1FH–04–12	9/16" × 18	M12 × 1.5	O011	O09.3 × 2.4	9.8	11	29.5	17
1FH–06–12	11/16" × 16	M12 × 1.5	O012	O09.3 × 2.4	11.2	11	31	19
1FH–06–14	11/16" × 16	M14 × 1.5	O012	O11.3 × 2.4	11.2	11	31	19
1FH–06–16	11/16" × 16	M16 × 1.5	O012	O13.3 × 2.4	11.2	12.5	33.5	22
1FH–08–16	13/16" × 16	M16 × 1.5	O014	O13.3 × 2.4	12.8	12.5	36	22
1FH–08–18	13/16" × 16	M18 × 1.5	O014	O15.3 × 2.4	12.8	14	36.5	24
1FH–08–22	13/16" × 16	M22 × 1.5	O014	O19.3 × 2.4	12.8	15	37.5	27
1FH–10–22	1" × 14	M22 × 1.5	O016	O19.3 × 2.4	15.5	15	40.5	27
1FH–12–22	1.3/16" × 12	M22 × 1.5	O018	O19.3 × 2.4	17	15	45.5	32
1FH–12–27	1.3/16" × 12	M27 × 2	O018	O23.5 × 3.0	17	18.5	44	32
1FH–16–33	1.7/16" × 12	M33 × 2	O021	O29.5 × 3.0	17.5	18.5	51	41
1FH–20–42	1.11/16" × 12	M42 × 2	O025	O38.5 × 3.0	17.5	19	54.5	50
1FH–24–48	2" × 12	M48 × 2	O029	O44.5 × 3.0	17.5	21.5	57	55

Note: F end is fit for ISO 6149–1 port.

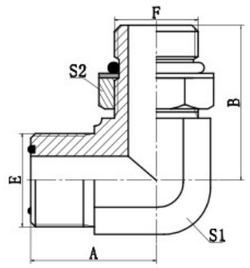


1FH4–OG

45° ELBOW ORFS MALE O–RING /
METIRC MALE ADJUSTABLE STUD
END S–SERIES ISO6149–2

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
1FH4–04–14OG	9/16" × 18	M14 × 1.5	O011	O11.3 × 2.4	18.3	29.5	14	19
1FH4–06–14OG	11/16" × 16	M14 × 1.5	O012	O11.3 × 2.4	20.5	33	19	19
1FH4–06–16OG	11/16" × 16	M16 × 1.5	O012	O13.3 × 2.4	20.5	33.5	19	22
1FH4–08–16OG	13/16" × 16	M16 × 1.5	O014	O13.3 × 2.4	24	33.5	22	22
1FH4–08–18OG	13/16" × 16	M18 × 1.5	O014	O15.3 × 2.4	24	36	22	24
1FH4–10–22OG	1" × 14	M22 × 1.5	O016	O19.3 × 2.4	28	38.5	27	27
1FH4–12–22OG	1.3/16" × 12	M22 × 1.5	O018	O19.3 × 2.4	30.7	39.5	30	27
1FH4–12–27OG	1.3/16" × 12	M27 × 2	O018	O23.5 × 3.0	30.7	40	30	32
1FH4–16–33OG	1.7/16" × 12	M33 × 2	O021	O29.5 × 3.0	33	48.5	36	41

Note: F end is fit for ISO 6149–1 port.

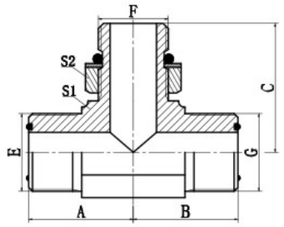


1FH9–OG

90° ELBOW ORFS MALE O–RING /
METIRC MALE ADJUSTABLE STUD
END S–SERIES ISO6149–2

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
1FH9–04–12OG	9/16" × 18	M12 × 1.5	O011	O09.3 × 2.4	23	32	14	17
1FH9–06–14OG	11/16" × 16	M14 × 1.5	O012	O11.3 × 2.4	27	35.5	19	19
1FH9–06–16OG	11/16" × 16	M16 × 1.5	O012	O13.3 × 2.4	27	38	19	22
1FH9–08–16OG	13/16" × 16	M16 × 1.5	O014	O13.3 × 2.4	31	40.5	22	22
1FH9–08–18OG	13/16" × 16	M18 × 1.5	O014	O15.3 × 2.4	31	43	22	24
1FH9–08–22OG	13/16" × 16	M22 × 1.5	O014	O19.3 × 2.4	31	44.5	22	27
1FH9–10–22OG	1" × 14	M22 × 1.5	O016	O19.3 × 2.4	36.5	48	27	27
1FH9–12–27OG	1.3/16" × 12	M27 × 2	O018	O23.5 × 3.0	40.5	50	30	32
1FH9–12–33OG	1.3/16" × 12	M33 × 2	O018	O29.5 × 3.0	42.5	56	33	41
1FH9–16–33OG	1.7/16" × 12	M33 × 2	O021	O29.5 × 3.0	44.5	58.5	36	41

Note: F end is fit for ISO 6149–1 port.

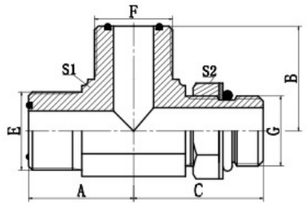


AFFH–OG

ORFS MALE O–RING / METIRC MALE
ADJUSTABLE STUD END S–SERIES ISO6149–2 RUN TEE

PART NO.	THREAD			O–RING			DIMENSIONS				
	E	F	G	E	F	G	A	B	C	S1	S2
AFFH–04–04–14OG	9/16" × 18	9/16" × 18	M14 × 1.5	O011	O011	O11.3 × 2.4	23	23	33.5	14	19
AFFH–06–06–16OG	11/16" × 16	11/16" × 16	M16 × 1.5	O012	O012	O13.3 × 2.4	27	27	38	19	22
AFFH–08–08–22OG	13/16" × 16	13/16" × 16	M22 × 1.5	O014	O014	O19.3 × 2.4	31	31	44.5	22	27
AFFH–10–10–22OG	1" × 14	1" × 14	M22 × 1.5	O016	O016	O19.3 × 2.4	36.5	36.5	48	27	27
AFFH–12–12–27OG	1.3/16" × 12	1.3/16" × 12	M27 × 2	O018	O018	O23.5 × 3.0	40.5	40.5	50	30	32
AFFH–16–16–33OG	1.7/16" × 12	1.7/16" × 12	M33 × 2	O021	O021	O29.5 × 3.0	44.5	44.5	58.5	36	41

Note: F end is fit for ISO 6149–1 port.

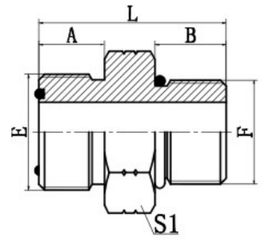


AFHF–OG

ORFS MALE O–RING / METIRC MALE
ADJUSTABLE STUD END S–SERIES ISO6149–2 BRANCH TEE

PART NO.	THREAD			O–RING			DIMENSIONS				
	E	F	G	E	F	G	A	B	C	S1	S2
AFHF–04–14–04OG	9/16" × 18	M14 × 1.5	9/16" × 18	O011	O11.3 × 2.4	O011	23	33.5	23	14	19
AFHF–06–16–06OG	11/16" × 16	M16 × 1.5	11/16" × 16	O012	O13.3 × 2.4	O012	27	38	27	19	22
AFHF–08–22–08OG	13/16" × 16	M22 × 1.5	13/16" × 16	O014	O19.3 × 2.4	O014	31	44.5	31	22	27
AFHF–10–22–10OG	1" × 14	M22 × 1.5	1" × 14	O016	O19.3 × 2.4	O016	36.5	48	36.5	27	27
AFHF–12–27–12OG	1.3/16" × 12	M27 × 2	1.3/16" × 12	O018	O23.5 × 3.0	O018	40.5	50	40.5	30	32
AFHF–16–33–16OG	1.7/16" × 12	M33 × 2	1.7/16" × 12	O021	O29.5 × 3.0	O021	44.5	58.5	44.5	36	41

Note: F end is fit for ISO 6149–1 port.

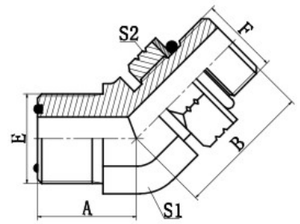


1FO

ORFS MALE O–RING /
SAE O–RING BOSS S–SERIES ISO 11926–2

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	L	S1
1FO–04	9/16" × 18	7/16" × 20	O011	O904	9.8	11	28.7	17
1FO–04–05	9/16" × 18	1/2" × 20	O011	O905	9.8	11	28.7	17
1FO–04–06	9/16" × 18	9/16" × 18	O011	O906	9.8	12	29.5	17
1FO–04–08	9/16" × 18	3/4" × 16	O011	O908	9.8	14	33.5	22
1FO–06–04	11/16" × 16	7/16" × 20	O012	O904	11.2	11	31	19
1FO–06–05	11/16" × 16	1/2" × 20	O012	O905	11.2	11	30.9	19
1FO–06	11/16" × 16	9/16" × 18	O012	O906	11.2	12	31.9	19
1FO–06–08	11/16" × 16	3/4" × 16	O012	O908	11.2	14	35	22
1FO–06–10	11/16" × 16	7/8" × 14	O012	O910	11.2	16	38.5	27
1FO–08–06	13/16" × 16	9/16" × 18	O014	O906	12.8	12	34.5	22
1FO–08	13/16" × 16	3/4" × 16	O014	O908	12.8	14	36.6	22
1FO–08–10	13/16" × 16	7/8" × 14	O014	O910	12.8	16	40.5	27
1FO–08–12	13/16" × 16	1.1/16" × 12	O014	O912	12.8	18.5	44.5	32
1FO–10	1" × 14	7/8" × 14	O016	O910	15.5	16	43.1	27
1FO–10–08	1" × 14	3/4" × 16	O016	O908	15.5	14	41	27
1FO–10–12	1" × 14	1.1/16" × 12	O016	O912	15.5	18.5	47	32
1FO–12–10	1.3/16" × 12	7/8" × 14	O018	O910	17	16	46	32
1FO–12	1.3/16" × 12	1.1/16" × 12	O018	O912	17	18.5	48.6	32
1FO–12–16	1.3/16" × 12	1.5/16" × 12	O018	O916	17	18.5	49.8	38
1FO–16–12	1.7/16" × 12	1.1/16" × 12	O021	O912	17.5	18.5	50	38
1FO–16	1.7/16" × 12	1.5/16" × 12	O021	O916	17.5	18.5	50.3	38
1FO–16–20	1.7/16" × 12	1.5/8" × 12	O021	O920	17.5	18.5	52	50
1FO–20–16	1.11/16" × 12	1.5/16" × 12	O025	O916	17.5	18.5	52	46
1FO–20	1.11/16" × 12	1.5/8" × 12	O025	O920	17.5	18.5	52.3	50
1FO–24–20	2" × 12	1.5/8" × 12	O029	O920	17.5	18.5	54	55
1FO–24	2" × 12	1.7/8" × 12	O029	O924	17.5	18.5	54.1	55

Note: F end is connected with ISO 11926–1 port.

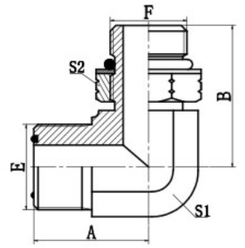


1FO4–OG

45° ELBOW ORFS MALE O–RING / SAE O–RING BOSS S–SERIES ISO 11926–2

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
1FO4–04OG	9/16" × 18	7/16" × 20	O011	O904	18.3	26	14	17
1FO4–04–06OG	9/16" × 18	9/16" × 18	O011	O906	18.3	28	14	19
1FO4–06–04OG	11/16" × 16	7/16" × 20	O012	O904	20.5	27.3	19	17
1FO4–06OG	11/16" × 16	9/16" × 18	O012	O906	20.5	29.5	19	19
1FO4–06–08OG	11/16" × 16	3/4" × 16	O012	O908	20.5	32.5	19	24
1FO4–08–06OG	13/16" × 16	9/16" × 18	O014	O906	24	30.8	22	19
1FO4–08OG	13/16" × 16	3/4" × 16	O014	O908	24	34	22	24
1FO4–08–10OG	13/16" × 16	7/8" × 14	O014	O910	24	39.5	22	27
1FO4–08–12OG	13/16" × 16	1.1/16" × 12	O014	O912	25.5	44	27	32
1FO4–10–08OG	1" × 14	3/4" × 16	O016	O908	28	34	27	24
1FO4–10OG	1" × 14	7/8" × 14	O016	O910	28	41.5	27	27
1FO4–10–12OG	1" × 14	1.1/16" × 12	O016	O912	28	44	27	32
1FO4–12–10OG	1.3/16" × 12	7/8" × 14	O018	O910	30.7	42	30	27
1FO4–12OG	1.3/16" × 12	1.1/16" × 12	O018	O912	30.7	45.5	30	32
1FO4–12–16OG	1.3/16" × 12	1.5/16" × 12	O018	O916	32.5	47.9	36	41
1FO4–16–12OG	1.7/16" × 12	1.1/16" × 12	O021	O912	33	47.9	36	32
1FO4–16OG	1.7/16" × 12	1.5/16" × 12	O021	O916	33	47.9	36	41
1FO4–16–20OG	1.7/16" × 12	1.5/8" × 12	O021	O920	35.5	48.5	41	50
1FO4–20OG	1.11/16" × 12	1.5/8" × 12	O025	O920	35.5	48.8	41	50
1FO4–20–24OG	1.11/16" × 12	1.7/8" × 12	O025	O924	38	51	48	55
1FO4–24OG	2" × 12	1.7/8" × 12	O029	O924	39	52	50	55

Note: F end is connected with ISO 11926–1 port.

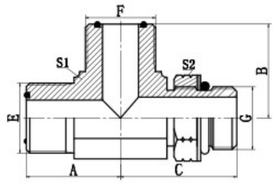


1FO9–OG

90° ELBOW ORFS MALE O–RING / SAE O–RING BOSS S–SERIES ISO 11926–2

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
1FO9–04OG	9/16" × 18	7/16" × 20	O011	O904	23	30.3	14	17
1FO9–04–06OG	9/16" × 18	9/16" × 18	O011	O906	23	32	14	19
1FO9–06–04OG	11/16" × 16	7/16" × 20	O012	O904	27.5	33.5	19	17
1FO9–06OG	11/16" × 16	9/16" × 18	O012	O906	27.5	34.5	19	19
1FO9–06–08OG	11/16" × 16	3/4" × 16	O012	O908	27.5	38	19	24
1FO9–06–10OG	11/16" × 16	7/8" × 14	O012	O910	29	47	22	27
1FO9–08–06OG	13/16" × 16	9/16" × 18	O014	O906	31	37	22	19
1FO9–08OG	13/16" × 16	3/4" × 16	O014	O908	31	40.5	22	24
1FO9–08–10OG	13/16" × 16	7/8" × 14	O014	O910	31	45.3	22	27
1FO9–08–12OG	13/16" × 16	1.1/16" × 12	O014	O912	34.5	52	27	32
1FO9–10–08OG	1" × 14	3/4" × 16	O016	O908	36.5	45	27	24
1FO9–10OG	1" × 14	7/8" × 14	O016	O910	36.5	50.8	27	27
1FO9–10–12OG	1" × 14	1.1/16" × 12	O016	O912	36.5	52	27	32
1FO9–12–10OG	1.3/16" × 12	7/8" × 14	O018	O910	41	52.8	30	27
1FO9–12OG	1.3/16" × 12	1.1/16" × 12	O018	O912	41	54	30	32
1FO9–12–16OG	1.3/16" × 12	1.5/16" × 12	O018	O916	43	55.5	33	41
1FO9–16–12OG	1.7/16" × 12	1.1/16" × 12	O021	O912	44.5	59	36	32
1FO9–16OG	1.7/16" × 12	1.5/16" × 12	O021	O916	44.5	59	36	41
1FO9–20OG	1.11/16" × 12	1.5/8" × 12	O025	O920	47.5	60.5	41	50
1FO9–20–24OG	1.11/16" × 12	1.7/8" × 12	O025	O924	51.5	66.5	48	55
1FO9–24–20OG	2" × 12	1.5/8" × 12	O029	O920	53.5	67.5	50	50
1FO9–24OG	2" × 12	1.7/8" × 12	O029	O924	53.5	67.5	50	55

Note: F end is connected with ISO 11926–1 port.

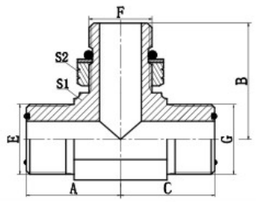


AFFO–OG

ORFS MALE O–RING / SAE O–RING BOSS S–SERIES ISO 11926–2 RUN TEE

PART NO.	THREAD			O–RING			DIMENSIONS				
	E	F	G	E	F	G	A	B	C	S1	S2
AFFO–04OG	9/16" × 18	9/16" × 18	7/16" × 20	O011	O011	O904	23	23	30	14	17
AFFO–04–04–06OG	9/16" × 18	9/16" × 18	9/16" × 18	O011	O011	O906	23	23	32	14	19
AFFO–06OG	11/16" × 16	11/16" × 16	9/16" × 18	O012	O012	O906	27.5	27.5	35.5	19	19
AFFO–06–06–08OG	11/16" × 16	11/16" × 16	3/4" × 16	O012	O012	O908	27.5	27.5	38	19	24
AFFO–08–08–06OG	13/16" × 16	13/16" × 16	9/16" × 18	O014	O014	O906	31	31	37.5	22	19
AFFO–08OG	13/16" × 16	13/16" × 16	3/4" × 16	O014	O014	O908	31	31	40.5	22	24
AFFO–08–08–10OG	13/16" × 16	13/16" × 16	7/8" × 14	O014	O014	O910	31	31	45.3	22	27
AFFO–08–08–12OG	13/16" × 16	13/16" × 16	1.1/16" × 12	O014	O014	O912	34.5	34.5	54	27	32
AFFO–10OG	1" × 14	1" × 14	7/8" × 14	O016	O016	O910	36.5	36.5	50.8	27	27
AFFO–10–10–12OG	1" × 14	1" × 14	1.1/16" × 12	O016	O016	O912	36.5	36.5	52	27	32
AFFO–12OG	1.3/16" × 12	1.3/16" × 12	1.1/16" × 12	O018	O018	O912	40.3	40.3	55.3	30	32
AFFO–16–16–12OG	1.7/16" × 12	1.7/16" × 12	1.1/16" × 12	O021	O021	O912	44.5	44.5	59.5	36	32
AFFO–16OG	1.7/16" × 12	1.7/16" × 12	1.5/16" × 12	O021	O021	O916	44.5	44.5	59.3	36	41
AFFO–20OG	1.11/16" × 12	1.11/16" × 12	1.5/8" × 12	O025	O025	O920	47.5	47.5	60.5	41	50
AFFO–24OG	2" × 12	2" × 12	1.7/8" × 12	O029	O029	O924	53.5	53.5	68.5	50	55

Note: F end is connected with ISO 11926–1 port.

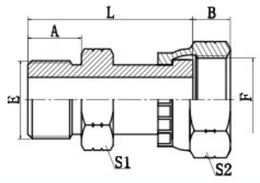


AFOF–OG

ORFS MALE O–RING / SAE O–RING BOSS S–SERIES ISO 11926–2 BRANCH TEE

PART NO.	THREAD			O–RING			DIMENSIONS				
	E	F	G	E	F	G	A	B	C	S1	S2
AFOF–04OG	9/16" × 18	7/16" × 20	9/16" × 18	O011	O904	O011	23	30.3	23	14	17
AFOF–04–06–04OG	9/16" × 18	9/16" × 18	9/16" × 18	O011	O906	O011	23	32	23	14	19
AFOF–06OG	11/16" × 16	9/16" × 18	11/16" × 16	O012	O906	O012	27.5	35.5	27.5	19	19
AFOF–06–08–06OG	11/16" × 16	3/4" × 16	11/16" × 16	O012	O908	O012	27	38	27	19	24
AFOF–08OG	13/16" × 16	3/4" × 16	13/16" × 16	O014	O908	O014	31	40.5	31	22	24
AFOF–08–10–08OG	13/16" × 16	7/8" × 14	13/16" × 16	O014	O910	O014	31	45.3	31	22	27
AFOF–08–12–08OG	13/16" × 16	1.1/16" × 12	13/16" × 16	O014	O912	O014	34.5	54	34.5	27	32
AFOF–10OG	1" × 14	7/8" × 14	1" × 14	O016	O910	O016	36.5	50.8	36.5	27	27
AFOF–10–12–10OG	1" × 14	1.1/16" × 12	1" × 14	O016	O912	O016	36.5	52	36.5	27	32
AFOF–12OG	1.3/16" × 12	1.1/16" × 12	1.3/16" × 12	O018	O912	O018	40.3	55.3	40.3	30	32
AFOF–16OG	1.7/16" × 12	1.5/16" × 12	1.7/16" × 12	O021	O916	O021	41.5	59.3	41.5	36	41
AFOF–20OG	1.11/16" × 12	1.5/8" × 12	1.11/16" × 12	O025	O920	O025	47.5	60.5	47.5	41	50
AFOF–24OG	2" × 12	1.7/8" × 12	2" × 12	O029	O924	O029	53.5	68	53.5	50	55

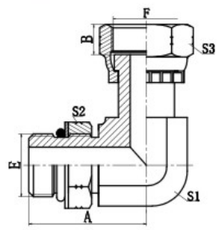
Note: F end is connected with ISO 11926–1 port.



2OF

SAE O–RING BOSS S–SERIES ISO 11926–2 / ORFS FEMALE

PART NO.	THREAD		O–RING	DIMENSIONS				
	E	F	E	A	B	L	S1	S2
2OF–04	7/16" × 20	9/16" × 18	O904	11	8.5	32.5	17	19
2OF–04–06	7/16" × 20	11/16" × 16	O904	11	10	35.5	17	22
2OF–06–04	9/16" × 18	9/16" × 18	O906	12	8.5	33.5	17	19
2OF–06	9/16" × 18	11/16" × 16	O906	12	10	36.5	19	22
2OF–06–08	9/16" × 18	13/16" × 16	O906	12	11	38.5	19	27
2OF–08–06	3/4" × 16	11/16" × 16	O908	14	10	40.5	22	22
2OF–08	3/4" × 16	13/16" × 16	O908	14	11	42.5	22	27
2OF–10–08	7/8" × 14	13/16" × 16	O910	16	11	46.5	27	27
2OF–10	7/8" × 14	1" × 14	O910	16	13.5	50.5	27	30
2OF–12–10	1.1/16" × 12	1" × 14	O912	18.5	13.5	54	32	30
2OF–12	1.1/16" × 12	1.3/16" × 12	O912	18.5	15	56	32	36
2OF–16–12	1.5/16" × 12	1.3/16" × 12	O916	18.5	15	55.5	38	36
2OF–16	1.5/16" × 12	1.7/16" × 12	O916	18.5	15	57.5	38	41
2OF–20–16	1.5/8" × 12	1.7/16" × 12	O920	18.5	15	61.5	50	41
2OF–20	1.5/8" × 12	1.11/16" × 12	O920	18.5	15	65	50	50
2OF–24	2" × 12	1.7/8" × 12	O924	18.5	16	65	55	60

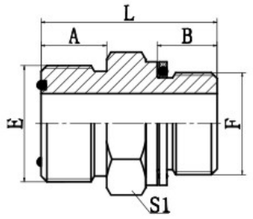


2OF9–OG

90° ELBOW SAE O–RING BOSS S–SERIES ISO 11926–2 / ORFS FEMALE

PART NO.	THREAD		O–RING	DIMENSIONS				
	E	F	E	A	B	S1	S2	S3
2OF9–04OG	7/16" × 20	9/16" × 18	O904	30.5	8.5	14	19	19
2OF9–06OG	9/16" × 18	11/16" × 16	O906	34.5	10	16	22	22
2OF9–08OG	3/4" × 16	13/16" × 16	O908	37.5	11	19	27	27
2OF9–10OG	7/8" × 14	1" × 14	O910	45.2	13.5	22	30	30
2OF9–12OG	1.1/16" × 12	1.3/16" × 12	O912	52	15	27	36	36
2OF9–16OG	1.5/16" × 12	1.7/16" × 12	O916	56	15	33	41	41
2OF9–20OG	1.5/8" × 12	1.11/16" × 12	O920	59	15	41	50	50
2OF9–24OG	1.7/8" × 12	2" × 12	O924	63	16	48	55	60

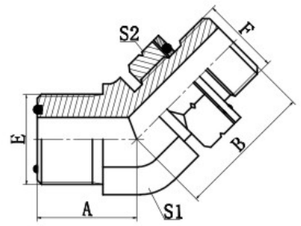
Note: E end is connected with ISO 11926–1 port.



1FG

ORFS MALE O–RING / BSP MALE O–RING

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	L	S1
1FG–04–02	9/16" × 18	G1/8" × 28	O011	O011	10	9.5	27.5	17
1FG–04	9/16" × 18	G1/4" × 19	O011	O111	10	10	29	19
1FG–04–06	9/16" × 18	G3/8" × 19	O011	O113	10	11.5	31	22
1FG–06	11/16" × 16	G3/8" × 19	O012	O113	11.2	11.5	32.5	22
1FG–06–04	11/16" × 16	G1/4" × 19	O012	O111	11.2	10	31	19
1FG–06–08	11/16" × 16	G1/2" × 14	O012	O115	11.2	14	36.5	27
1FG–08	13/16" × 16	G1/2" × 14	O014	O115	13	14	38.5	27
1FG–08–06	13/16" × 16	G3/8" × 19	O014	O113	13	11.5	34.3	22
1FG–08–12	13/16" × 16	G3/4" × 14	O014	O119	13	15.5	42	32
1FG–10–08	1" × 14	G1/2" × 14	O016	O115	15.5	14	41	27
1FG–10–12	1" × 14	G3/4" × 14	O016	O119	15.5	15.5	44	32
1FG–12–08	1.3/16" × 12	G1/2" × 14	O018	O115	17	14	44	32
1FG–12	1.3/16" × 12	G3/4" × 14	O018	O119	17	15.5	45.6	32
1FG–12–16	1.3/16" × 12	G1" × 11	O018	O217	17	18	48	41
1FG–16–12	1.7/16" × 12	G3/4" × 14	O021	O119	17.5	15.5	48	38
1FG–16	1.7/16" × 12	G1" × 11	O021	O217	17.5	18	49.5	41
1FG–20	1.11/16" × 12	G1.1/4" × 11	O025	O222	17.5	20	55.5	50
1FG–20–16	1.11/16" × 12	G1" × 11	O025	O217	17.5	18	51.5	46
1FG–24	2" × 12	G1.1/2" × 11	O029	O224	17.5	21.5	57	55

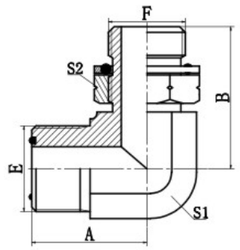


1FG4–OG

45° ELBOW ORFS MALE O–RING / BSP MALE O–RING

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
1FG4–04OG	9/16" × 18	G1/4" × 19	O011	O111	18.3	27	14	19
1FG4–04–02OG	9/16" × 18	G1/8" × 28	O011	O011	18.3	24.8	14	14
1FG4–04–06OG	9/16" × 18	G3/8" × 19	O011	O113	18	30	16	22
1FG4–06OG	11/16" × 16	G3/8" × 19	O012	O113	20.5	31	19	22
1FG4–06–04OG	11/16" × 16	G1/4" × 19	O012	O111	20.5	28	19	19
1FG4–06–08OG	11/16" × 16	G1/2" × 14	O012	O115	22	36	22	27
1FG4–08OG	13/16" × 16	G1/2" × 14	O014	O115	24	36	22	27
1FG4–08–06OG	13/16" × 16	G3/8" × 19	O014	O113	24	32	22	22
1FG4–10–08OG	1" × 14	G1/2" × 14	O016	O115	28	37.5	27	27
1FG4–10–12OG	1" × 14	G3/4" × 14	O016	O119	28	42	27	32
1FG4–12OG	1.3/16" × 12	G3/4" × 14	O018	O119	30.7	42.5	30	32
1FG4–12–08OG	1.3/16" × 12	G1/2" × 14	O018	O115	30.7	38.5	30	27
1FG4–12–16OG	1.3/16" × 12	G1" × 11	O018	O217	31.5	44	33	41
1FG4–16OG	1.7/16" × 12	G1" × 11	O021	O217	33	44.5	36	41
1FG4–16–12OG	1.7/16" × 12	G3/4" × 14	O021	O119	33	44.5	36	32
1FG4–20OG	1.11/16" × 12	G1.1/4" × 11	O025	O222	35.5	47.5	41	50

Note: F end is connected with DIN 3852 port.

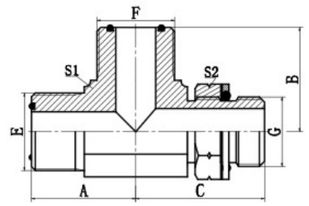


1FG9–OG

90° ELBOW ORFS MALE O–RING / BSP MALE O–RING

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	S1	S2
1FG9–04–02OG	9/16" × 18	G1/8" × 28	O011	O011	23	29	14	14
1FG9–04OG	9/16" × 18	G1/4" × 19	O011	O111	23	31.3	14	19
1FG9–04–06OG	9/16" × 18	G3/8" × 19	O011	O113	24	35.8	16	22
1FG9–06–04OG	11/16" × 16	G1/4" × 19	O012	O111	27	33.5	19	19
1FG9–06OG	11/16" × 16	G3/8" × 19	O012	O113	27	36.8	19	22
1FG9–06–08OG	11/16" × 16	G1/2" × 14	O012	O115	29	43.2	22	27
1FG9–08–06OG	13/16" × 16	G3/8" × 19	O014	O113	31	39.5	22	22
1FG9–08OG	13/16" × 16	G1/2" × 14	O014	O115	31	43.2	22	27
1FG9–10–08OG	1" × 14	G1/2" × 14	O016	O115	36.5	46.5	27	27
1FG9–10–12OG	1" × 14	G3/4" × 14	O016	O119	36.5	49.3	27	32
1FG9–12–08OG	1.3/16" × 12	G1/2" × 14	O018	O115	40.3	47.5	30	27
1FG9–12OG	1.3/16" × 12	G3/4" × 14	O018	O119	40.3	52	30	32
1FG9–12–16OG	1.3/16" × 12	G1" × 11	O018	O217	42.5	53	33	41
1FG9–16–12OG	1.7/16" × 12	G3/4" × 14	O021	O119	44.5	56	36	32
1FG9–16OG	1.7/16" × 12	G1" × 11	O021	O217	44.5	56	36	41
1FG9–20–16OG	1.11/16" × 12	G1" × 11	O025	O217	47.5	60	41	41
1FG9–20OG	1.11/16" × 12	G1.1/4" × 11	O025	O222	47.5	60	41	50
1FG9–24OG	2" × 12	G1.1/2" × 11	O029	O224	51.5	65.5	50	55

Note: F end is connected with DIN 3852 port.

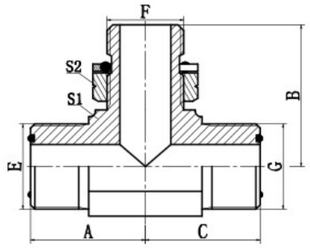


AFFG–OG

ORFS MALE O–RING / BSP MALE O–RING RUN TEE

PART NO.	THREAD			O–RING			DIMENSIONS				
	E	F	G	E	F	G	A	B	C	S1	S2
AFFG–04OG	9/16" × 18	9/16" × 18	G1/4" × 19	O011	O011	O111	23	23	31.3	14	19
AFFG–04–04–06OG	9/16" × 18	9/16" × 18	G3/8" × 19	O011	O011	O113	23.5	23.5	35.5	16	22
AFFG–06–06–04OG	11/16" × 16	11/16" × 16	G1/4" × 19	O012	O012	O111	27	27	33.5	19	19
AFFG–06OG	11/16" × 16	11/16" × 16	G3/8" × 19	O012	O012	O113	27.5	27.5	36.8	19	22
AFFG–08–08–06OG	13/16" × 16	13/16" × 16	G3/8" × 19	O014	O014	O113	31	31	39.5	22	22
AFFG–08OG	13/16" × 16	13/16" × 16	G1/2" × 14	O014	O014	O115	31	31	43.2	22	27
AFFG–10–10–12OG	1" × 14	1" × 14	G3/4" × 14	O016	O016	O119	36.5	36.5	49.3	27	32
AFFG–12OG	1.3/16" × 12	1.3/16" × 12	G3/4" × 14	O018	O018	O119	41.5	41.5	53.5	30	32
AFFG–16OG	1.7/16" × 12	1.7/16" × 12	G1" × 11	O021	O021	O217	44.5	44.5	56	36	41

Note: G end is connected with DIN 3852 port.

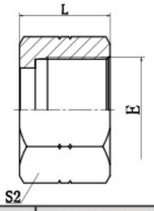


AFGF–OG

ORFS MALE O–RING / BSP MALE O–RING BRANCH TEE

PART NO.	THREAD			O–RING			DIMENSIONS				
	E	F	G	E	F	G	A	B	C	S1	S2
AFGF–04OG	9/16" × 18	G1/4" × 19	9/16" × 18	O011	O111	O011	23	31.3	23	14	19
AFGF–04–06–04OG	9/16" × 18	G3/8" × 19	9/16" × 18	O011	O113	O011	23.5	35.5	23.5	16	22
AFGF–06OG	11/16" × 16	G3/8" × 19	11/16" × 16	O012	O113	O012	27.5	36.8	27.5	19	22
AFGF–08–06–08OG	13/16" × 16	G3/8" × 19	13/16" × 16	O014	O113	O014	31	39.5	31	22	27
AFGF–08OG	13/16" × 16	G1/2" × 14	13/16" × 16	O014	O115	O014	31	43.2	31	22	27
AFGF–10–12–10OG	1" × 14	G3/4" × 14	1" × 14	O016	O119	O016	36.5	49.3	36.5	27	32
AFGF–12OG	1.3/16" × 12	G3/4" × 14	1.3/16" × 12	O018	O119	O018	41.5	53.5	41.5	30	32
AFGF–16OG	1.7/16" × 12	G1" × 11	1.7/16" × 12	O021	O217	O021	44.5	56	44.5	36	41

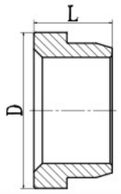
Note: F end is connected with DIN 3852 port.



NB200–F

ORFS NUT

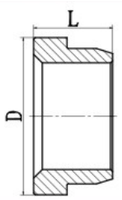
PART NO.	THREAD	INCH SLEEVE		METRIC SLEEVE		DIMENSIONS	
	E	TUBE O.D.	SLEEVE NO.	TUBE O.D.	SLEEVE NO.	L	S2
NB200–04F	9/16" × 18	1/4"	NB300–04F	6	NB500–06F	14.7	19
NB200–06F	11/16" × 16	3/8"	NB300–06F	10	NB500–10F	17	22
NB200–08F	13/16" × 16	1/2"	NB300–08F	12	NB500–12F	21	27
NB200–10F	1" × 14	5/8"	NB300–10F	16	NB500–16F	23.5	30
NB200–12F	1.3/16" × 12	3/4"	NB300–12F	20	NB500–20F	26	36
NB200–16F	1.7/16" × 12	1	NB300–16F	25	NB500–25F	27.8	41
NB200–20F	1.11/16" × 12	1.1/4"	NB300–20F	30	NB500–30F	27.8	50
NB200–24F	2" × 12	1.1/2"	NB300–24F	38	NB500–38F	27.8	60



NB300–F

ORFS INCH SLEEVE

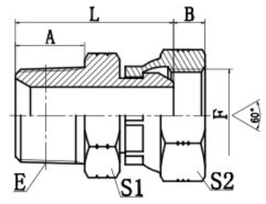
PART NO.	THREAD	TUBE O.D.	DIMENSIONS	
		in	D	L
NB300–04F	9/16" × 18	1/4"	12.8	8.5
NB300–06F	11/16" × 16	3/8"	15.8	8.5
NB300–08F	13/16" × 16	1/2"	18.9	8.5
NB300–10F	1" × 14	5/8"	23.4	9
NB300–12F	1.3/16" × 12	3/4"	27.9	12.5
NB300–16F	1.7/16" × 12	1	34.2	14
NB300–20F	1.11/16" × 12	1.1/4"	40.6	14
NB300–24F	2" × 12	1.1/2"	48.5	14



NB500–F

ORFS METRIC SLEEVE

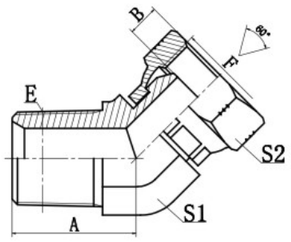
PART NO.	THREAD	TUBE O.D.	DIMENSIONS	
		MM	D	L
NB500–06F	9/16" × 18	6	12.8	8.5
NB500–10F	11/16" × 16	10	15.8	8.5
NB500–12F	13/16" × 16	12	18.9	8.5
NB500–16F	1" × 14	16	23.4	9
NB500–20F	1.3/16" × 12	20	27.9	12.5
NB500–25F	1.7/16" × 12	25	34.2	14
NB500–30F	1.11/16" × 12	30	40.6	14
NB500–38F	2" × 12	38	48.5	14



2NU

NPT MALE / NPSM FEMALE 60° CONE

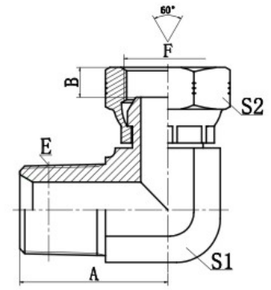
PART NO.	THREAD		DIMENSIONS				
	E	F	A	B	L	S1	S2
2NU–02	Z1/8" × 27	1/8" × 27	10.5	3.5	25.5	12	15
2NU–02–04	Z1/8" × 27	1/4" × 18	10.5	4.6	27.5	12	19
2NU–04–02	Z1/4" × 18	1/8" × 27	15	3.5	30	14	15
2NU–04	Z1/4" × 18	1/4" × 18	15	4.6	32	17	19
2NU–04–06	Z1/4" × 18	3/8" × 18	15	6	33	17	22
2NU–04–08	Z1/4" × 18	1/2" × 14	15	7.5	35	19	27
2NU–06	Z3/8" × 18	3/8" × 18	16	6	34.5	19	22
2NU–06–04	Z3/8" × 18	1/4" × 18	16	4.6	33	19	19
2NU–06–08	Z3/8" × 18	1/2" × 14	16	7.5	36	19	27
2NU–08	Z1/2" × 14	1/2" × 14	19.5	7.5	41.5	22	27
2NU–08–04	Z1/2" × 14	1/4" × 18	19.5	4.6	38.5	22	19
2NU–08–06	Z1/2" × 14	3/8" × 18	19.5	6	39.5	22	22
2NU–12	Z3/4" × 14	3/4" × 14	19.5	8.9	44.5	30	32
2NU–12–06	Z3/4" × 14	3/8" × 18	19.5	6	41.5	30	22
2NU–12–08	Z3/4" × 14	1/2" × 14	19.5	7.5	43.5	30	27
2NU–12–16	Z3/4" × 14	1" × 11.5	19.5	10.5	46.5	32	41
2NU–16–12	Z1" × 11.5	3/4" × 14	21.5	8.9	51.5	36	32
2NU–16	Z1" × 11.5	1" × 11.5	25.5	10.5	52.5	36	41
2NU–16–20	Z1" × 11.5	1.1/4" × 11.5	25.5	11.2	58.5	41	50
2NU–20–16	Z1.1/4" × 11.5	1" × 11.5	26.5	10.5	55.5	36	41
2NU–20	Z1.1/4" × 11.5	1.1/4" × 11.5	26.5	11.2	59.5	46	50
2NU–20–24	Z1.1/4" × 11.5	1.1/2" × 11.5	26.5	11.2	59.5	46	55
2NU–24–20	Z1.1/2" × 11.5	1.1/4" × 11.5	27.5	11.2	62.5	50	50
2NU–24	Z1.1/2" × 11.5	1.1/2" × 11.5	27.5	11.2	62.5	50	55
2NU–32	Z2" × 11.5	2" × 11.5	27.5	11.2	64.5	65	70



2NU4

45° ELBOW NPT MALE / NPSM FEMALE 60° CONE

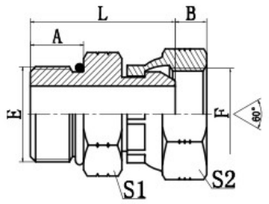
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
2NU4–02	Z1/8" × 27	1/8" × 27	17	3.5	11	15
2NU4–04	Z1/4" × 18	1/4" × 18	21	4.6	14	19
2NU4–04–06	Z1/4" × 18	3/8" × 18	21	6	14	22
2NU4–06	Z3/8" × 18	3/8" × 18	24	6	19	22
2NU4–06–04	Z3/8" × 18	1/4" × 18	24	4.6	19	19
2NU4–06–08	Z3/8" × 18	1/2" × 14	24	7.5	19	27
2NU4–08	Z1/2" × 14	1/2" × 14	29.5	7.5	22	27
2NU4–08–06	Z1/2" × 14	3/8" × 18	29.5	6	22	22
2NU4–08–12	Z1/2" × 14	3/4" × 14	31	8.9	27	32
2NU4–12	Z3/4" × 14	3/4" × 14	35	8.9	27	32
2NU4–12–08	Z3/4" × 14	1/2" × 14	35	7.5	27	27
2NU4–12–16	Z3/4" × 14	1" × 11.5	35.5	10.5	30	41
2NU4–16	Z1" × 11.5	1" × 11.5	39	10.5	33	41
2NU4–16–12	Z1" × 11.5	3/4" × 14	39	8.9	33	32
2NU4–20	Z1.1/4" × 11.5	1.1/4" × 11.5	42.5	11.2	41	50
2NU4–24	Z1.1/2" × 11.5	1.1/2" × 11.5	45	11.2	48	55
2NU4–32	Z2" × 11	2" × 11.5	50	11.2	63	70



2NU9

90° ELBOW NPT MALE / NPSM FEMALE 60° CONE

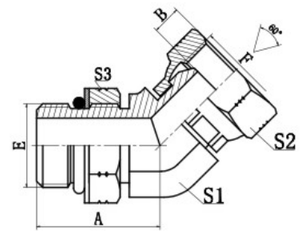
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
2NU9–02	Z1/8" × 27	1/8" × 27	21	3.5	11	15
2NU9–02–04	Z1/8" × 27	1/4" × 18	21	4.6	11	19
2NU9–04–02	Z1/4" × 18	1/8" × 27	25.5	3.5	14	15
2NU9–04	Z1/4" × 18	1/4" × 18	25.5	4.6	14	19
2NU9–04–06	Z1/4" × 18	3/8" × 18	25.5	6	14	22
2NU9–06	Z3/8" × 18	3/8" × 18	31	6	19	22
2NU9–06–04	Z3/8" × 18	1/4" × 18	31	4.6	19	19
2NU9–06–08	Z3/8" × 18	1/2" × 14	31	7.5	19	27
2NU9–08	Z1/2" × 14	1/2" × 14	37.3	7.5	22	27
2NU9–08–06	Z1/2" × 14	3/8" × 18	36.7	6	22	22
2NU9–08–12	Z1/2" × 14	3/4" × 14	37.5	8.9	24	32
2NU9–12	Z3/4" × 14	3/4" × 14	44	8.9	27	32
2NU9–12–08	Z3/4" × 14	1/2" × 14	44	7.5	27	27
2NU9–12–16	Z3/4" × 14	1" × 11.5	45	10.5	30	41
2NU9–16	Z1" × 11.5	1" × 11.5	50	10.5	33	41
2NU9–16–12	Z1" × 11.5	3/4" × 14	50	8.9	33	32
2NU9–20–16	Z1.1/4" × 11.5	1" × 11.5	54.5	10.5	41	41
2NU9–20	Z1.1/4" × 11.5	1.1/4" × 11.5	54.5	11.2	41	50
2NU9–24	Z1.1/2" × 11.5	1.1/2" × 11.5	59.5	11.2	48	55
2NU9–32	Z2" × 11.5	2" × 11.5	73.5	11.2	63	70



2OU

SAE O–RING BOSS L–SERIES
ISO 11926–3 / NPSM FEMALE 60° CONE

PART NO.	THREAD		O–RING	DIMENSIONS				
	E	F	E	A	B	L	S1	S2
2OU–04	7/16" × 20	1/4" × 18	O904	9.1	4.6	26	14	19
2OU–04–06	7/16" × 20	3/8" × 18	O904	9.1	6	27.5	17	22
2OU–06	9/16" × 18	3/8" × 18	O906	9.9	6	28.5	17	22
2OU–06–08	9/16" × 18	1/2" × 14	O906	9.9	7.5	30	19	27
2OU–08	3/4" × 16	1/2" × 14	O908	11.1	7.5	33	22	27
2OU–08–06	3/4" × 16	3/8" × 18	O908	11.1	6	31	22	22
2OU–10–08	7/8" × 14	1/2" × 14	O910	12.7	7.5	36.5	27	27
2OU–12–08	1.1/16" × 12	1/2" × 14	O912	15.1	7.5	40	32	27
2OU–12	1.1/16" × 12	3/4" × 14	O912	15.1	8.9	41	32	32
2OU–12–16	1.1/16" × 12	1" × 11.5	O912	15.1	10.5	42.5	32	41
2OU–16	1.5/16" × 12	1" × 11.5	O916	15.1	10.5	42.5	38	41
2OU–20	1.5/8" × 12	1.1/4" × 11.5	O920	15.1	11.2	50	50	50
2OU–24	1.7/8" × 12	1.1/2" × 11.5	O924	15.1	11.2	50	55	55

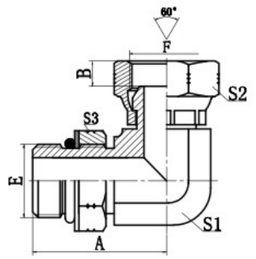


2OU4–OG

45° ELBOW SAE O–RING BOSS L–SERIES
ISO 11926–3 / NPSM FEMALE 60° CONE

PART NO.	THREAD		O–RING	DIMENSIONS				
	E	F	E	A	B	S1	S2	S3
2OU4–04–02OG	7/16" × 20	1/8" × 27	O904	24	3.5	11	15	17
2OU4–04OG	7/16" × 20	1/4" × 18	O904	24	4.6	11	19	19
2OU4–04–06OG	7/16" × 20	3/8" × 18	O904	23.5	6	14	22	22
2OU4–06–04OG	9/16" × 18	1/4" × 18	O906	27.5	4.6	14	19	19
2OU4–06OG	9/16" × 18	3/8" × 18	O906	27.5	6	14	22	22
2OU4–06–08OG	9/16" × 18	1/2" × 14	O906	30	7.5	19	27	19
2OU4–08–06OG	3/4" × 16	3/8" × 18	O908	31.5	6	19	22	22
2OU4–08OG	3/4" × 16	1/2" × 14	O908	31.5	7.5	19	27	27
2OU4–08–12OG	3/4" × 16	3/4" × 14	O908	33.5	8.9	24	32	32
2OU4–10–08OG	7/8" × 14	1/2" × 14	O910	38.5	7.5	22	27	27
2OU4–10–12OG	7/8" × 14	3/4" × 14	O910	39	8.9	24	32	27
2OU4–12–08OG	1.1/16" × 12	1/2" × 14	O912	43.5	7.5	27	27	32
2OU4–12OG	1.1/16" × 12	3/4" × 14	O912	43.5	8.9	27	32	32
2OU4–12–16OG	1.1/16" × 12	1" × 11.5	O912	44.5	10.5	30	41	32
2OU4–16–12OG	1.5/16" × 12	3/4" × 14	O916	45.5	8.9	33	32	41
2OU4–16OG	1.5/16" × 12	1" × 11.5	O916	45.5	10.5	33	41	41
2OU4–16–20OG	1.5/16" × 12	1.1/4" × 11.5	O916	48	11.2	41	50	41
2OU4–20–16OG	1.5/8" × 12	1" × 11.5	O920	48	10.5	41	41	50
2OU4–20OG	1.5/8" × 12	1.1/4" × 11.5	O920	48	11.2	41	50	50

Note: E end is connected with ISO 11926–1 port.

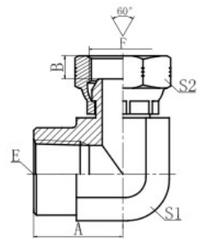


2OU9–OG

SERIES ISO 11926–3 / NPSM FEMALE 60° CONE

PART NO.	THREAD		O–RING	DIMENSIONS				
	E	F	E	A	B	S1	S2	S3
2OU9–04–02OG	7/16" × 20	1/8" × 27	O904	27.2	3.5	11	15	17
2OU9–04OG	7/16" × 20	1/4" × 18	O904	27.2	4.6	11	19	17
2OU9–04–06OG	7/16" × 20	3/8" × 18	O904	30	6	14	22	17
2OU9–06–04OG	9/16" × 18	1/4" × 18	O906	32	4.6	14	19	19
2OU9–06OG	9/16" × 18	3/8" × 18	O906	33	6	16	22	19
2OU9–06–08OG	9/16" × 18	1/2" × 14	O906	34.5	7.5	19	27	19
2OU9–08–06OG	3/4" × 16	3/8" × 18	O908	37.5	6	19	22	24
2OU9–08OG	3/4" × 16	1/2" × 14	O908	37.5	7.5	19	27	24
2OU9–10–08OG	7/8" × 14	1/2" × 14	O910	44	7.5	22	27	27
2OU9–12OG	1.1/16" × 12	3/4" × 14	O912	51	8.9	27	32	32
2OU9–16OG	1.5/16" × 12	1" × 11.5	O916	54.5	10.5	33	41	41
2OU9–20OG	1.5/8" × 12	1.1/4" × 11.5	O920	59.5	11.2	41	50	50
2OU9–24OG	1.7/8" × 12	1.1/2" × 11.5	O924	65	11.2	48	55	55

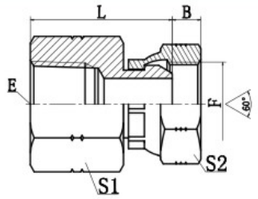
Note: E end is connected with ISO 11926–1 port.



7NU9–S

90° ELBOW NPT FEMALE / NPSM FEMALE 60° CONE

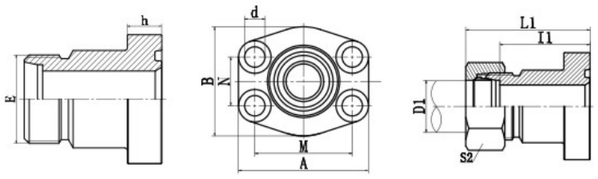
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	S1	S2
7NU9–02S	Z1/8" × 27	1/8" × 27	17.8	3.5	16	15
7NU9–04–02S	Z1/4" × 18	1/8" × 27	22.5	3.5	19	15
7NU9–04S	Z1/4" × 18	1/4" × 18	22.5	4.6	19	19
7NU9–04–06S	Z1/4" × 18	3/8" × 18	22.5	6	19	22
7NU9–06S	Z3/8" × 18	3/8" × 18	25	6	24	22
7NU9–06–08S	Z3/8" × 18	1/2" × 14	25	7.5	24	27
7NU9–08–06S	Z1/2" × 14	3/8" × 18	31.2	6	30	22
7NU9–08S	Z1/2" × 14	1/2" × 14	31.2	7.5	30	27
7NU9–08–12S	Z1/2" × 14	3/4" × 14	31.2	8.9	30	32
7NU9–12–08S	Z3/4" × 14	1/2" × 14	34.5	7.5	33	27
7NU9–12S	Z3/4" × 14	3/4" × 14	34.5	8.9	33	32
7NU9–12–16S	Z3/4" × 14	1" × 11.5	34.5	10.5	33	41
7NU9–16S	Z1" × 11.5	1" × 11.5	41	10.5	41	41
7NU9–20S	Z1.1/4" × 11.5	1.1/4" × 11.5	43.2	11.2	50	50
7NU9–24S	Z1.1/2" × 11.5	1.1/2" × 11.5	52.8	11.2	63	55



7NU–S

NPT FEMALE / NPSM FEMALE 60° CONE

PART NO.	THREAD		DIMENSIONS			
	E	F	B	L	S1	S2
7NU–02S	Z1/8" × 27	1/8" × 27	3.5	24	17	15
7NU–04–02S	Z1/4" × 18	1/8" × 27	3.5	29	19	15
7NU–04S	Z1/4" × 18	1/4" × 18	4.6	31.5	19	19
7NU–04–06S	Z1/4" × 18	3/8" × 18	6	33	19	22
7NU–06S	Z3/8" × 18	3/8" × 18	6	34	22	22
7NU–06–08S	Z3/8" × 18	1/2" × 14	7.5	34	22	27
7NU–08–06S	Z1/2" × 14	3/8" × 18	6	39	30	22
7NU–08S	Z1/2" × 14	1/2" × 14	7.5	41	30	27
7NU–12S	Z3/4" × 14	3/4" × 14	8.9	44	36	32
7NU–16S	Z1" × 11.5	1" × 11.5	10.5	51.5	41	41
7NU–20S	Z1.1/4" × 11.5	1.1/4" × 11.5	11.2	55	50	50
7NU–24S	Z1.1/2" × 11.5	1.1/2" × 11.5	11.2	55.5	60	55
7NU–32S	Z2" × 11.5	2" × 11.5	11.5	57	70	70

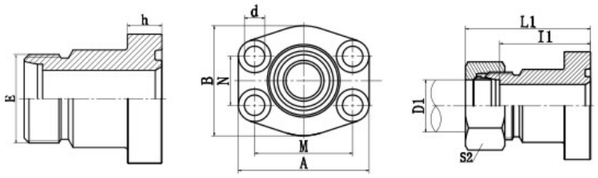


1CFL–W 1CFL–W/RN
1DFL–W 1DFL–W/RN

SAE FLANGE WITH STANDARD SERIES

PART NO.	THREAD E	FLANGE SIZE	TUBE O.D.	DIMENSIONS									PN BAR MPa
			D1	A	B	d	h	I1	L1	M	N	S2	
1CFL–22–08W	M22 × 1.5	1/2"	15	53.8	46.1	9	16	40	55	38.1	17.5	27	31.5 L–series
1CFL–30–12W	M30 × 2	3/4"	22	65	52.4	11	18	44.5	60.5	47.6	22.2	36	16 L–series
1CFL–36–16W	M36 × 2	1"	28	69.9	58.7	11	18	52.5	69	52.4	26.2	41	
1CFL–45–20W	M45 × 2	1.1/4"	35	79.2	73	11	21	49.5	71	58.7	30.2	50	
1CFL–52–24W	M52 × 2	1.1/2"	42	93.7	82.6	13.5	25	59	81.5	69.9	35.7	60	
1DFL–24–08W	M24 × 1.5	1/2"	16	53.8	46.1	9	16	38.5	56.5	38.1	17.5	30	35 S–series
1DFL–30–12W	M30 × 2	3/4"	20	65	52.4	11	18	41.5	63	47.6	22.2	36	
1DFL–36–16W	M36 × 2	1"	25	69.9	58.7	11	18	48	72	52.4	26.2	46	
1DFL–42–20W	M42 × 2	1.1/4"	30	79.2	73	11	21	49.5	76	58.7	30.2	50	28 S–series
1DFL–52–24W	M52 × 2	1.1/2"	38	93.7	82.6	13.5	25	54	84.5	69.9	35.7	60	21 S–series

Note:In case if you are interested to order the adapter in cmplete set with cutting ring and nut, it is necessary to insert suffix "RN"after our part no., for example 1DFL–52–24W/RN.

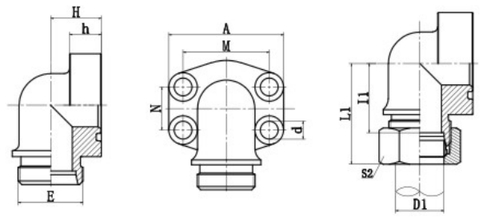


1DFS–W 1DFS–W/RN

SAE FLANGE WITH HIGH PRESSURE SERIES

PART NO.	THREAD E	FLANGE SIZE	TUBE O.D.	DIMENSIONS									PN BAR MPa
			D1	A	B	d	h	I1	L1	M	N	S2	
1DFS–24–08W	M24 × 1.5	1/2"	16	56.4	49.2	9	61	38.5	56.5	40.5	18.2	30	40 S–series
1DFS–30–12W	M30 × 2	3/4"	20	71.4	61.8	11	19	41.5	63	50.8	23.8	36	
1DFS–36–16W	M36 × 2	1"	25	81	71.4	13	21	48	72	57.2	27.8	46	
1DFS–42–20W	M42 × 2	1.1/4"	30	95.3	79.2	15	24	54.5	81	66.7	31.8	50	
1DFS–52–24W	M52 × 2	1.1/2"	38	113	96.8	17	27	56	86.5	79.4	36.6	60	31.5 S–series

Note:In case if you are interested to order the adapter in complete set with cutting ring and nut, it is necessary to insert suffix "RN"after our part no., for example 1DFS–52–24W/RN.

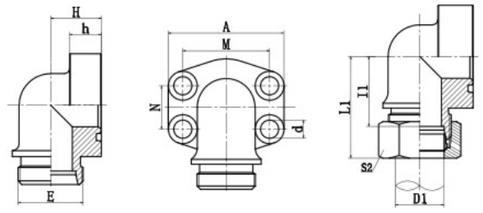


1CFL9–W 1CFL9–W/RN
1DFL9–W 1DFL9–W/RN

90° ELBOW SAE FLANGE WITH STANDARD SERIES

PART NO.	THREAD E	FLANGE SIZE	TUBE O.D.	DIMENSIONS									PN BAR MPa
			D1	A	d	h	H	I1	L1	M	N	S2	
1CFL9–22–08W	M22 × 1.5	1/2"	15	53.8	9	16	18	28	43	38.1	17.5	27	31.5 L–series
1CFL9–30–12W	M30 × 2	3/4"	22	65	11	18	22	30.5	47	47.6	22.2	36	16 L–series
1CFL9–36–16W	M36 × 2	1"	28	69.9	11	19	26	34.5	51	52.4	26.2	41	
1CFL9–45–20W	M45 × 2	1.1/4"	35	79.2	11	22	32	37.5	59	58.7	30.2	50	
1CFL9–52–24W	M52 × 2	1.1/2"	42	93.7	13.5	26	36	43	66	69.9	35.7	60	
1DFL9–24–08W	M24 × 1.5	1/2"	16	53.8	9	16	20	28.5	47	38.1	17.5	30	35 S–series
1DFL9–30–12W	M30 × 2	3/4"	20	65	11	18	24	29.5	51	47.6	22.2	36	
1DFL9–36–16W	M36 × 2	1"	25	69.9	11	19	30	34	58	52.4	26.2	46	
1DFL9–42–20W	M42 × 2	1.1/4"	30	79.2	11	22	32	38.5	65	58.7	30.2	50	28 S–series
1DFL9–52–24W	M52 × 2	1.1/2"	38	93.7	13.5	26	36	44	75	69.9	35.7	60	21 S–series

Note:In case if you are interested to order the adapter in cmplete set with cutting ring and nut, it is necessary to insert suffix "RN"after our part no., for example 1DFL9–52–24W/RN.

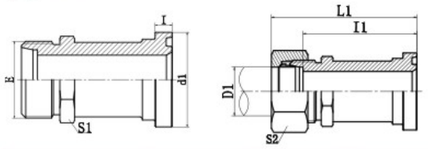


1DFS9–W 1DFS9–W/RN

90° ELBOW SAE FLANGE WITH HIGH PRESSURE SERIES

PART NO.	THREAD E	FLANGE SIZE	TUBE O.D.	DIMENSIONS									PN BAR MPa
			D1	A	d	h	H	I1	L1	M	N	S2	
1DFS9–24–08W	M24 × 1.5	1/2"	16	56.3	9	16	20	28.5	47	40.5	18.2	30	40 S–series
1DFS9–30–12W	M30 × 2	3/4"	20	71.4	11	19	26	30.5	52	50.8	23.8	36	
1DFS9–36–16W	M36 × 2	1"	25	81	13	24	32	36	60	57.2	27.8	46	
1DFS9–42–20W	M42 × 2	1.1/4"	30	95.3	15	25	38	41.5	68	66.7	31.8	50	
1DFS9–52–24W	M52 × 2	1.1/2"	38	113	17	26	40	45	76	79.4	36.6	60	31.5 S–series

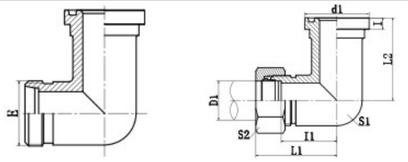
Note:In case if you are interested to order the adapter in cmplete set with cutting ring and nut, it is necessary to insert suffix "RN"after our part no., for example 1DFS9–52–24W/RN.



1CFL 1CFL–RN
1DFL 1DFL–RN
METRIC MALE BITE TYPE / L–SERIES FLANGE ISO 6162–1

PART NO.	THREAD E	FLANGE SIZE	TUBE O.D.	DIMENSIONS						PN BAR MPa
			D1	d1	I	I1	L1	S1	S2	
1CFL–22–08	M22 × 1.5	1/2"	15	30.2	6.7	41	56	24	27	31.5 L–series
1CFL–26–12	M26 × 1.5	3/4"	18	38.1	6.73	45.5	62	30	32	
1CFL–30–12	M30 × 2	3/4"	22	38.1	6.7	45.5	62	32	36	16 L–series
1CFL–36–16	M36 × 2	1"	28	44.4	8	46.5	63	38	41	
1CFL–45–20	M45 × 2	1.1/4"	35	50.8	8	47.5	69	41	50	
1CFL–52–24	M52 × 2	1.1/2"	42	60.3	8	53	76	46	60	
1DFL–24–08	M24 × 1.5	1/2"	16	30.2	6.7	41.5	60	24	30	35 S–series
1DFL–30–12	M30 × 2	3/4"	20	38.1	6.7	46.5	68	30	36	
1DFL–36–12	M36 × 2	3/4"	25	38.1	6.73	45	69	30	46	
1DFL–42–16	M42 × 2	1"	30	44.4	8	49.5	76	36	50	
1DFL–36–20	M36 × 2	1.1/4"	25	50.8	8	48	72	41	46	28 S–series
1DFL–42–20	M42 × 2	1.1/4"	30	50.8	8	48.5	75	41	50	
1DFL–52–20	M52 × 2	1.1/4"	38	50.8	8	50	81	46	60	
1DFL–52–24	M52 × 2	1.1/2"	38	60.3	8	54	85	46	60	21 S–series

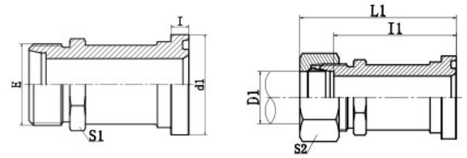
Note:In case if you are interested to order the adapter in cmplete set with cutting ring and nut, it is necessary to insert suffix "RN"after our part NO., for example 1DFL–52–24RN.



1CFL9 1CFL9–RN
1DFL9 1DFL9–RN
90° ELBOW METRIC MALE BITE TYPE / L–SERIES FLANGE ISO 6162–1

PART NO.	THREAD E	FLANGE SIZE	TUBE O.D.	DIMENSIONS							PN BAR MPa
			D1	d1	I	I1	L1	L2	S1	S2	
1CFL9–22–08	M22 × 1.5	1/2"	15	30.2	6.7	29	44	36	24	27	31.5 L–series
1CFL9–26–12	M26 × 1.5	3/4"	18	38.1	6.7	31.5	48	42	30	32	
1CFL9–30–12	M30 × 2	3/4"	22	38.1	6.7	33.5	50	42	30	36	16 L–series
1CFL9–36–16	M36 × 2	1"	28	44.4	8	36.5	53	45	36	41	
1CFL9–45–20	M45 × 2	1.1/4"	35	50.8	8	46.5	68	50	41	50	
1CFL9–52–24	M52 × 2	1.1/2"	42	60.3	8	47	70	55	50	60	
1DFL9–24–08	M24 × 1.5	1/2"	16	30.2	6.7	29.5	48	36	24	30	35 S–series
1DFL9–30–12	M30 × 2	3/4"	20	38.1	6.7	32.5	54	42	30	36	
1DFL9–36–12	M36 × 2	3/4"	25	38.1	6.7	33	57	42	30	46	
1DFL9–42–16	M42 × 2	1"	30	44.4	8	36.5	63	45	36	50	
1DFL9–36–20	M36 × 2	1.1/4"	25	50.8	8	43	67	50	41	46	28 S–series
1DFL9–42–20	M42 × 2	1.1/4"	30	50.8	8	43.5	70	50	41	50	
1DFL9–52–20	M52 × 2	1.1/4"	38	50.8	8	43	74	50	41	60	
1DFL9–52–24	M52 × 2	1.1/2"	38	60.3	8	48	79	55	50	60	21 S–series

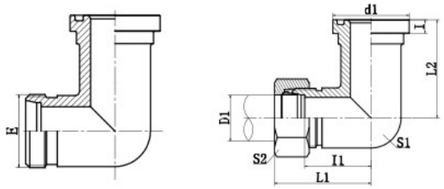
Note:In case if you are interested to order the adapter in cmplete set with cutting ring and nut, it is necessary to insert suffix "RN"after our part NO., for example 1DFL9–52–24RN.



1DFS 1DFS–RN
METRIC MALE BITE TYPE / S–SERIES FLANGE ISO 6162–2

PART NO.	THREAD E	FLANGE SIZE	TUBE O.D.	DIMENSIONS						PN BAR MPa
			D1	d1	I	I1	L1	S1	S2	
1DFS–24–08	M24 × 1.5	1/2"	16	31.7	7.8	44.5	63	24	30	40 S–series
1DFS–24–12	M24 × 1.5	3/4"	16	41.3	8.8	50.5	69	30	30	
1DFS–30–12	M30 × 2	3/4"	20	41.3	8.8	50.5	72	30	36	
1DFS–36–12	M36 × 2	3/4"	25	41.3	8.8	51	75	30	46	
1DFS–36–16	M36 × 2	1"	25	47.6	9.5	60	81	36	46	
1DFS–42–16	M42 × 2	1"	30	47.6	9.5	60.5	87	36	50	
1DFS–42–20	M42 × 2	1.1/4"	30	54	10.3	65.5	92	41	50	
1DFS–52–20	M52 × 2	1.1/4"	38	54	10.3	67	98	46	60	31.5 S–series
1DFL–52–24	M52 × 2	1.1/2"	38	63.5	12.6	73	104	46	60	

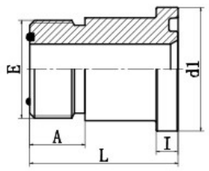
Note:In case if you are interested to order the adapter in cmplete set with cutting ring and nut, it is necessary to insert suffix "RN"after our part NO., for example 1DFS–52–24RN.



1DFS9 1DFS9–RN
90° ELBOW METRIC MALE BITE TYPE / S–SERIES FLANGE ISO 6162–2

PART NO.	THREAD E	FLANGE SIZE	TUBE O.D.	DIMENSIONS							PN BAR MPa
			D1	d1	I	I1	L1	L2	S1	S2	
1DFS9–24–08	M24 × 1.5	1/2"	16	31.7	7.8	29.5	48	39	24	30	40 S–series
1DFS9–24–12	M24 × 1.5	3/4"	16	41.3	8.8	36.5	55	48	32	30	
1DFS9–30–12	M30 × 2	3/4"	20	41.3	8.8	35.5	57	48	32	36	
1DFS9–36–12	M36 × 2	3/4"	25	41.3	8.8	36	60	48	32	46	
1DFS9–36–16	M36 × 2	1"	25	47.6	9.5	41	65	60	41	46	
1DFS9–42–16	M42 × 2	1"	30	47.6	9.5	41.5	68	60	41	50	
1DFS9–42–20	M42 × 2	1.1/4"	30	54	10.3	44.5	71	68	46	50	
1DFS9–52–20	M52 × 2	1.1/4"	38	54	10.3	45	76	68	46	60	31.5 S–series
1DFL9–52–24	M52 × 2	1.1/2"	38	63.5	12.6	56	87	76	50	60	

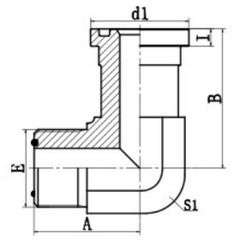
Note:In case if you are interested to order the adapter in cmplete set with cutting ring and nut, it is necessary to insert suffix "RN"after our part NO., for example 1DFS9–52–24RN.



1FFL

ORFS MALE O–RING /
L–SERIES FLANGE ISO 6162–1

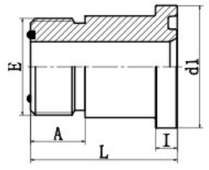
PART NO.	THREAD	FLANGE SIZE	O–RING		DIMENSIONS			
	E		E	FLANGE	A	I	d1	L
1FFL–12	1.3/16 × 12	3/4"	O018	O214	17	6.73	38.1	45.7
1FFL–16	1.7/16" × 12	1"	O021	O219	17.5	8	44.4	47.8
1FFL–20	1.11/16" × 12	1.1/4"	O025	O222	17.5	8	50.8	47
1FFL–24	2" × 12	1.1/2"	O029	O225	17.5	8	60.3	49.5



1FFL9

90° ELBOW ORFS MALE O–RING /
L–SERIES FLANGE ISO 6162–1

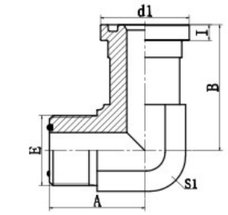
PART NO.	THREAD	FLANGE SIZE	O–RING		DIMENSIONS				
	E		E	FLANGE	A	B	d1	I	S1
1FFL9–12	1.3/16 × 12	3/4"	O018	O214	41	54.1	38.1	6.73	30
1FFL9–16	1.7/16" × 12	1"	O021	O219	44.5	60.2	44.4	8	36
1FFL9–20	1.11/16" × 12	1.1/4"	O025	O222	47.5	66.5	50.8	8	41
1FFL9–24	2" × 12	1.1/2"	O029	O225	52	79.5	60.3	8	48



1FFS

ORFS MALE O–RING /
S–SERIES FLANGE ISO 6162–2

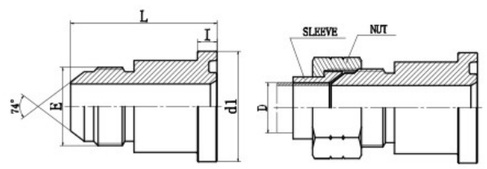
PART NO.	THREAD	FLANGE SIZE	O–RING		DIMENSIONS			
	E		E	FLANGE	A	I	d1	L
1FFS–12	1.3/16 × 12	3/4"	O018	O214	17	8.76	41.3	51.8
1FFS–16	1.7/16" × 12	1"	O021	O219	17.5	9.53	47.6	57.2
1FFS–20	1.11/16" × 12	1.1/4"	O025	O222	17.5	10.29	54	62
1FFS–24	2" × 12	1.1/2"	O029	O225	17.5	12.57	63.5	66.8



1FFS9

90° ELBOW ORFS MALE O–RING /
S–SERIES FLANGE ISO 6162–2

PART NO.	THREAD	FLANGE SIZE	O–RING		DIMENSIONS				
	E		E	FLANGE	A	B	d1	I	S1
1FFS9–12	1.3/16 × 12	3/4"	O018	O214	40.3	54.1	41.3	8.76	30
1FFS9–16	1.7/16" × 12	1"	O021	O219	44.5	60.2	47.6	9.53	36
1FFS9–20	1.11/16" × 12	1.1/4"	O025	O222	47.5	66.5	54	10.29	41
1FFS9–24	2" × 12	1.1/2"	O029	O225	52	79.3	63.5	12.57	48

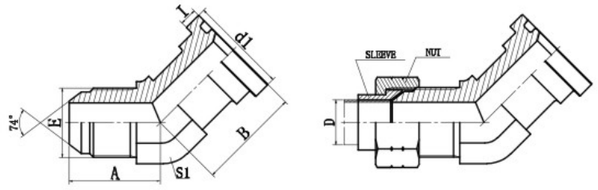


1JFL

JIC MALE 74° CONE /
L–SERIES FLANGE ISO 6162–1

PART NO.	THREAD	FLANGE SIZE	O–RING	DIMENSIONS		
	E			I	d1	L
1JFL–08	3/4" × 16	1/2"	O210	6.73	30.2	43.5
1JFL–08–12	3/4" × 16	3/4"	O214	6.73	38.1	45.4
1JFL–10–08	7/8" × 14	1/2"	O210	6.73	30.2	48
1JFL–10–12	7/8" × 14	3/4"	O214	6.73	38.1	48
1JFL–12–08	1.1/16 × 12	1/2"	O210	6.73	30.2	49
1JFL–12	1.1/16 × 12	3/4"	O214	6.73	38.1	50.5
1JFL–12–16	1.1/16 × 12	1"	O219	8	44.4	52.2
1JFL–16–12	1.5/16" × 12	3/4"	O214	6.73	38.1	52
1JFL–16	1.5/16" × 12	1"	O219	8	44.4	53.4
1JFL–16–20	1.5/16" × 12	1.1/4"	O222	8	50.8	52.2
1JFL–20–16	1.5/8" × 12	1"	O219	8	44.4	54.5
1JFL–20	1.5/8" × 12	1.1/4"	O222	8	50.8	53.1
1JFL–20–24	1.5/8" × 12	1.1/2"	O225	8	60.3	56
1JFL–24–20	1.7/8" × 12	1.1/4"	O222	8	50.8	56.5
1JFL–24	1.7/8" × 12	1.1/2"	O225	8	60.3	59.2
1JFL–24–32	1.7/8" × 12	2"	O228	9.53	71.4	60
1JFL–32	2.1/2" × 12	2"	O228	9.53	71.4	66.3

Note: Nut and Sleeve should be ordered separately. The nut NB200 and NB500 is suitable for metric tube, the nut NB200 and NB300 is suitable for inch tube.

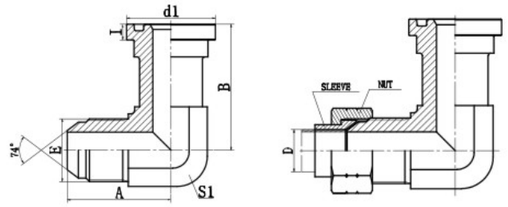


1JFL4

45° ELBOW JIC MALE 74° CONE / L–SERIES FLANGE ISO 6162–1

PART NO.	THREAD	FLANGE SIZE	O–RING	DIMENSIONS				
	E			A	B	I	d1	S1
1JFL4–08	3/4" × 16	1/2"	O210	27	37	6.73	30.2	19
1JFL4–10–08	7/8" × 14	1/2"	O210	31	37	6.73	30.2	22
1JFL4–10–12	7/8" × 14	3/4"	O214	32	40.1	6.73	38.1	27
1JFL4–12	1.1/16" × 12	3/4"	O214	35.5	40.1	6.73	38.1	27
1JFL4–12–16	1.1/16" × 12	1"	O219	37.5	47	8	44.4	33
1JFL4–16	1.5/16" × 12	1"	O219	38.5	47	8	44.4	33
1JFL4–16–12	1.5/16" × 12	3/4"	O214	38.5	42	6.73	38.1	33
1JFL4–16–20	1.5/16" × 12	1.1/4"	O222	42	51.8	8	50.8	41
1JFL4–20	1.5/8" × 12	1.1/4"	O222	43.5	51.8	8	50.8	41
1JFL4–20–16	1.5/8" × 12	1"	O219	43	51	8	44.4	41
1JFL4–20–24	1.5/8" × 12	1.1/2"	O225	46	60.5	8	60.3	48
1JFL4–24–20	1.7/8" × 12	1.1/4"	O222	49	54	8	50.8	48
1JFL4–24	1.7/8" × 12	1.1/2"	O225	49	60.5	8	60.3	48
1JFL4–32	2.1/2" × 12	2"	O228	58	76.2	9.53	71.4	63

Note: Nut and Sleeve should be ordered separately. The nut NB200 and NB500 is suitable for metric tube, the nut NB200 and NB300 is suitable for inch tube.

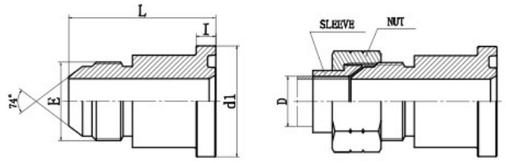


1JFL9

90° ELBOW JIC MALE 74° CONE / L–SERIES FLANGE ISO 6162–1

PART NO.	THREAD	FLANGE SIZE	O–RING	DIMENSIONS				
	E			A	B	i	d1	S1
1JFL9–08	3/4" × 16	1/2"	O210	32.5	44	6.73	30.2	19
1JFL9–08–12	3/4" × 16	3/4"	O214	38	54.1	6.73	38.1	27
1JFL9–10–08	7/8" × 14	1/2"	O210	37.5	44	6.73	30.2	22
1JFL9–10–12	7/8" × 14	3/4"	O214	41	54.1	6.73	38.1	27
1JFL9–12	1.1/16" × 12	3/4"	O214	44.5	54.1	6.73	38.1	27
1JFL9–12–16	1.1/16" × 12	1"	O219	48	60.2	8	44.4	33
1JFL9–16	1.5/16" × 12	1"	O219	49	60.2	8	44.4	33
1JFL9–16–12	1.5/16" × 12	3/4"	O214	49	58	6.73	38.1	33
1JFL9–16–20	1.5/16" × 12	1.1/4"	O222	54	66.5	8	50.8	41
1JFL9–20	1.5/8" × 12	1.1/4"	O222	55.5	66.5	8	50.8	41
1JFL9–20–16	1.5/8" × 12	1"	O219	55.5	65	8	44.4	41
1JFL9–20–24	1.5/8" × 12	1.1/2"	O225	60	79.3	8	60.3	48
1JFL9–24	1.7/8" × 12	1.1/2"	O225	62.5	79.3	8	60.3	48
1JFL9–24–20	1.7/8" × 12	1.1/4"	O222	62.5	75.5	8	50.8	48
1JFL9–24–32	1.7/8" × 12	2"	O228	74.5	108	9.53	71.4	63
1JFL9–32	2.1/2" × 12	2"	O228	80	108	9.53	71.4	63

Note: Nut and Sleeve should be ordered separately. The nut NB200 and NB500 is suitable for metric tube, the nut NB200 and NB300 is suitable for inch tube.

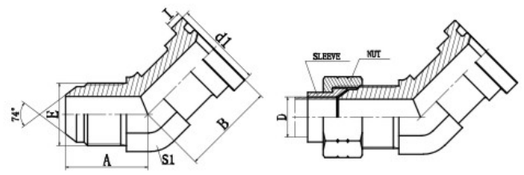


1JFS

JIC MALE 74° CONE / S –SERIES FLANGE ISO 6162–2

PART NO.	THREAD E	FLANGE SIZE	O–RING	DIMENSIONS I	d1	L
1JFS–08	3/4" × 16	1/2"	O210	7.75	31.7	47.5
1JFS–10–08	7/8" × 14	1/2"	O210	7.75	31.7	50
1JFS–10–12	7/8" × 14	3/4"	O214	8.76	41.3	55
1JFS–12	1.1/16" × 12	3/4"	O214	8.76	41.3	56.7
1JFS–12–16	1.1/16" × 12	1"	O219	9.53	47.6	61.5
1JFS–16–12	1.5/16" × 12	3/4"	O214	8.76	41.3	57.8
1JFS–16	1.5/16" × 12	1"	O219	9.53	47.6	62.8
1JFS–16–20	1.5/16" × 12	1.1/4"	O222	10.29	54	67.7
1JFS–20–16	1.5/8" × 12	1"	O219	9.53	47.6	64
1JFS–20	1.5/8" × 12	1.1/4"	O222	10.29	54	68.9
1JFS–20–24	1.5/8" × 12	1.1/2"	O225	12.57	63.5	73.5
1JFS–24–20	1.7/8" × 12	1.1/4"	O222	10.29	54	72
1JFS–24	1.7/8" × 12	1.1/2"	O225	12.57	63.5	76.7

Note: Nut and Sleeve should be ordered separately. The nut NB200 and NB500 is suitable for metric tube, the nut NB200 and NB300 is suitable for inch tube.

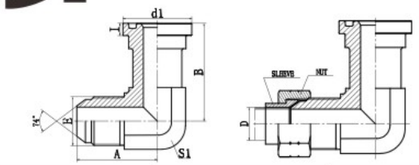


1JFS4

45° ELBOW JIC MALE 74° CONE / S–SERIES FLANGE ISO 6162–2

PART NO.	THREAD E	FLANGE SIZE	O–RING	DIMENSIONS A	B	I	d1	S1
1JFS4–08	3/4" × 16	1/2"	O210	27	38	7.75	31.7	19
1JFS4–10–08	7/8" × 14	1/2"	O210	31	39	7.75	31.7	22
1JFS4–10–12	7/8" × 14	3/4"	O214	32.5	40.1	8.76	41.3	27
1JFS4–12	1.1/16" × 12	3/4"	O214	35.5	40.1	8.76	41.3	27
1JFS4–12–16	1.1/16" × 12	1"	O219	37.5	47	9.53	47.6	33
1JFS4–16	1.5/16" × 12	1"	O219	38.5	47	9.53	47.6	33
1JFS4–16–12	1.5/16" × 12	3/4"	O214	38.5	45	8.76	41.3	33
1JFS4–16–20	1.5/16" × 12	1.1/4"	O222	42	52	10.29	54	41
1JFS4–20	1.5/8" × 12	1.1/4"	O222	43	52	10.29	54	41
1JFS4–20–16	1.5/8" × 12	1"	O219	43	52	9.53	47.6	41
1JFS4–20–24	1.5/8" × 12	1.1/2"	O225	46	60.5	12.57	63.5	48
1JFS4–24	1.7/8" × 12	1.1/2"	O225	49	60.5	12.57	63.5	48

Note: Nut and Sleeve should be ordered separately. The nut NB200 and NB500 is suitable for metric tube, the nut NB200 and NB300 is suitable for inch tube.

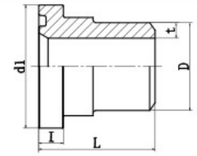


1JFS9

90° ELBOW JIC MALE 74° CONE / S–SERIES FLANGE ISO 6162–2

PART NO.	THREAD E	FLANGE SIZE	O–RING	DIMENSIONS A	B	I	d1	S1
1JFS9–08	3/4" × 16	1/2"	O210	32.5	44	7.75	31.7	19
1JFS9–10–08	7/8" × 14	1/2"	O210	37.5	46	7.75	31.7	22
1JFS9–10–12	7/8" × 14	3/4"	O214	41	54.1	8.76	41.3	27
1JFS9–12	1.1/16" × 12	3/4"	O214	44.2	54.1	8.76	41.3	27
1JFS9–12–16	1.1/16" × 12	1"	O219	48	60.2	9.6	47.6	33
1JFS9–16	1.5/16" × 12	1"	O219	49	60.2	9.53	47.6	33
1JFS9–16–12	1.5/16" × 12	3/4"	O214	49	57	8.76	41.3	33
1JFS9–16–20	1.5/16" × 12	1.1/4"	O222	54	66.5	10.29	54	41
1JFS9–20	1.5/8" × 12	1.1/4"	O222	55.5	66.5	10.29	54	41
1JFS9–20–16	1.5/8" × 12	1"	O219	55.5	65	9.53	47.6	41
1JFS9–20–24	1.5/8" × 12	1.1/2"	O225	59.5	79.3	12.57	63.5	48
1JFS9–24	1.7/8" × 12	1.1/2"	O225	62.5	79.3	12.57	63.5	48
1JFS9–24–20	1.7/8" × 12	1.1/4"	O222	62.5	70	10.29	54	48

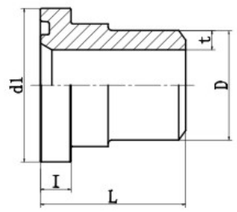
Note: Nut and Sleeve should be ordered separately. The nut NB200 and NB500 is suitable for metric tube, the nut NB200 and NB300 is suitable for inch tube.



1FSW

S–SERIES FLANGE ISO 6162–2 / BUTT–WELD TUBE

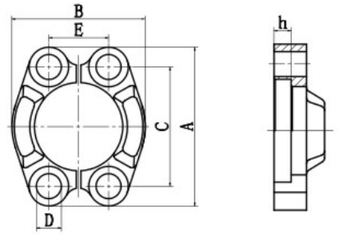
PART NO.	FLANGE SIZE	DXt	DIMENSIONS d1	D	I	L	PN BAR MPa
1FSW–08–16 × 2	1/2"	16 × 2	31.7	16	7.8	34	40
1FSW–08–20 × 2.5	1/2"	20 × 2.5		20			
1FSW–12–16 × 2	3/4"	16 × 2	41.3	16	8.8	38	
1FSW–12–20 × 2.5	3/4"	20 × 2.5		20			
1FSW–12–25 × 4	3/4"	25 × 4		25			
1FSW–16–25 × 3	1"	25 × 3	47.6	25	9.5	40	
1FSW–16–30 × 4	1"	30 × 4		30			
1FSW–16–38 × 5	1"	38 × 5		38			
1FSW–20–25 × 3	1.1/4"	25 × 3	54	25	10.3	45	
1FSW–20–30 × 4	1.1/4"	30 × 4		30			
1FSW–20–38 × 5	1.1/4"	38 × 5		38			
1FSW–20–42 × 6	1.1/4"	42 × 6		42			
1FSW–24–38 × 5	1.1/2"	38 × 5	63.5	38	12.6	50	
1FSW–24–45 × 6.5	1.1/2"	45 × 6.5		45			
1FSW–24–48 × 8	1.1/2"	48 × 8		48			
1FSW–24–50 × 8	1.1/2"	50 × 8		50			
1FSW–32–60 × 8	2"	60 × 8	79.4	60	12.6	58	
1FSW–32–60 × 10	2"	60 × 10		60			



1FLW

L–SERIES FLANGE ISO 6162–1 / BUTT–WELD TUBE

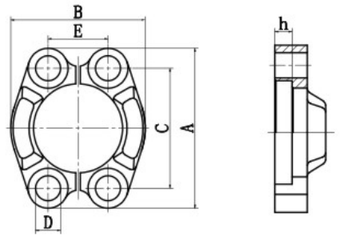
PART NO.	FLANGE SIZE	DXt	DIMENSIONS				PN BAR MPa
			d1	D	I	L	
1FLW–08–16 × 2	1/2"	16 × 2	30.2	16	6.8	41	34.5
1FLW–08–20 × 2.5	1/2"	20 × 2.5		20			
1FLW–12–25 × 3	3/4"	25 × 3	38.1	25	6.8	50	
1FLW–16–25 × 3	1"	25 × 3	44.4	25	8	50	
1FLW–16–28 × 3	1"	28 × 3		28			
1FLW–16–30 × 4	1"	30 × 4		30			
1FLW–16–38 × 5	1"	38 × 5		38			
1FLW–20–25 × 3	1.1/4"	25 × 3	50.8	25	8	55	27.6
1FLW–20–30 × 4	1.1/4"	30 × 4		30			
1FLW–20–38 × 5	1.1/4"	38 × 5		38			
1FLW–20–42 × 6	1.1/4"	42 × 6		42		46	
1FLW–24–38 × 4	1.1/2"	38 × 4	60.3	38	8	57	20.7
1FLW–24–42 × 5	1.1/2"	42 × 5		42			
1FLW–24–45 × 5	1.1/2"	45 × 5		45			
1FLW–24–50 × 6	1.1/2"	50 × 6		50			
1FLW–32–55 × 5	2"	55 × 5	71.4	55	9.6	57	
1FLW–32–60 × 8	2"	60 × 8		60			
1FLW–40–65 × 6	2.1/2"	65 × 6	84.1	65	9.6	58	17.2
1FLW–40–70 × 7.5	2.1/2"	70 × 7.5		70			
1FLW–48–80 × 6	3"	80 × 6	101.6	80	9.6	58	13.8
1FLW–48–90 × 8	3"	90 × 8		90			



FL

ISO 6162–1—SAE J518 L–SERIES SPLIT FLANGE CLAMPS

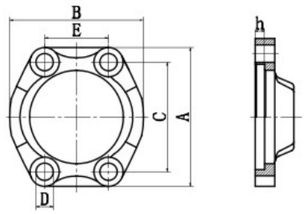
PART NO.	FLANGE SIZE	DIMENSIONS					BOLT	O–RING	PN BAR MPa
		A	B	C	D	E			
FL–08	1/2"	53.8	46.1	38.1	9	17.5	M8 × 25	O210	34.5
FL–12	3/4"	65	52.4	47.6	11	22.2	M10 × 30	O214	
FL–16	1"	69.9	58.7	52.4	11	26.2	M10 × 30	O219	
FL–20	1.1/4"	79.2	73	58.7	11	30.2	M10 × 30	O222	27.6
FL–24	1.1/2"	93.7	82.6	69.9	13.5	35.7	M12 × 35	O225	20.7
FL–32	2"	101.6	96.8	77.8	13.5	42.9	M12 × 35	O228	
FL–40	2.1/2"	114	109	88.9	13.5	50.8	M12 × 40	O232	17.2
FL–48	3	135	130.6	106.4	17.5	61.9	M16 × 50	O237	13.8



FS

ISO 6162–2—SAE J518 S–SERIES SPLIT FLANGE CLAMPS

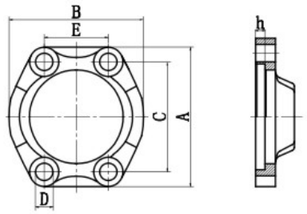
PART NO.	FLANGE SIZE	DIMENSIONS					BOLT	O–RING	PN BAR MPa
		A	B	C	D	E			
FS–08	1/2"	56.3	49.2	40.5	9	18.2	M8 × 30	O210	42
FS–12	3/4"	71.4	61.8	50.8	11	23.8	M10 × 35	O214	
FS–16	1"	81	71.4	57.2	13	27.8	M12 × 45	O219	
FS–20	1.1/4"	95.3	79.2	66.7	15	31.8	M14 × 50	O222	
FS–24	1.1/2"	112.8	96.8	79.4	17	36.6	M16 × 55	O225	
FS–32	2"	133.4	115.6	96.8	21	44.4	M20 × 70	O228	



FL–W

ISO 6162–1—SAE J518 L–SERIES WHOLE FLANGE CLAMPS

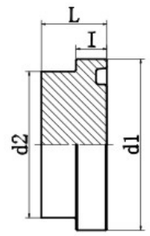
PART NO.	FLANGE SIZE	DIMENSIONS						BOLT	O–RING	PN BAR MPa
		A	B	C	D	E	h			
FL–08W	1/2"	53.8	46.1	38.1	9	17.5	6.2	M8 × 25	O210	34.5
FL–12W	3/4"	65	52.4	47.6	11	22.2	6.2	M10 × 30	O214	
FL–16W	1"	69.9	58.7	52.4	11	26.2	7.5	M10 × 30	O219	
FL–20W	1.1/4"	79.2	73	58.7	11	30.2	7.5	M10 × 30	O222	27.6
FL–24W	1.1/2"	93.7	82.6	69.9	13.5	35.7	7.5	M12 × 35	O225	20.7
FL–32W	2"	101.6	96.8	77.8	13.5	42.9	9	M12 × 35	O228	
FL–40W	2.1/2"	114	109	88.9	13.5	50.8	9	M12 × 40	O232	17.2
FL–48W	3"	135	130.6	106.4	17.5	61.9	9	M16 × 50	O237	13.8



FS–W

ISO 6162–2—SAE J518 S–SERIES WHOLE FLANGE CLAMPS

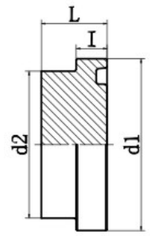
PART NO.	FLANGE SIZE	DIMENSIONS						BOLT	O–RING	PN BAR MPa
		A	B	C	D	E	h			
FS–08W	1/2"	56.3	49.2	40.5	9	18.2	7.2	M8 × 30	O210	42
FS–12W	3/4"	71.4	61.8	50.8	11	23.8	8.2	M10 × 35	O214	
FS–16W	1"	81	71.4	57.2	13	27.8	9	M12 × 45	O219	
FS–20W	1.1/4"	95.3	79.2	66.7	15	31.8	9.8	M14 × 50	O222	
FS–24W	1.1/2"	112.8	96.8	79.4	17	36.6	12	M16 × 55	O225	
FS–32W	2"	133.4	115.6	96.8	21	44.4	12	M20 × 70	O228	



4FL

ISO 6162–1 L–SERIES FLANGE PLUG

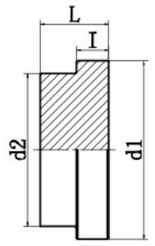
PART NO.	FLANGE SIZE	O–RING	DIMENSIONS				PN BAR MPa
			d1	d2	L	I	
4FL–08	1/2"	O210	30.2	24	16	6.8	34.5
4FL–12	3/4"	O214	38.1	31.5	17	6.8	
4FL–16	1"	O219	44.4	38	17	8	
4FL–20	1.1/4"	O222	50.8	43	17	8	27.6
4FL–24	1.1/2"	O225	60.3	50	19	8	20.7
4FL–32	2"	O228	71.4	62	19	9.6	
4FL–40	2.1/2"	O232	84.1	74	40	9.6	17.2
4FL–48	3"	O237	101.6	90	45	9.6	13.8



4FS

ISO 6162–2 S–SERIES FLANGE PLUG

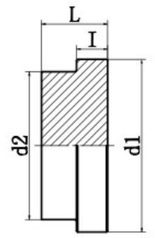
PART NO.	FLANGE SIZE	O–RING	DIMENSIONS				PN BAR MPa
			d1	d2	L	I	
4FS–08	1/2"	O210	31.8	24	18	7.8	42
4FS–12	3/4"	O214	41.3	32	18	8.8	
4FS–16	1"	O219	47.6	38	18	9.5	
4FS–20	1.1/4"	O222	54	44	18	10.3	
4FS–24	1.1/2"	O225	63.5	51	20	12.6	
4FS–32	2"	O228	79.4	67	30	12.6	



4FL–M

ISO 6162–1 L–SERIES FLANGE PLUG

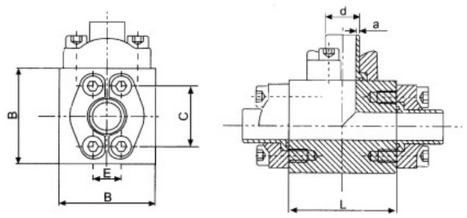
PART NO.	FLANGE SIZE	DIMENSIONS				PN BAR MPa
		d1	d2	L	I	
4FL–08M	1/2"	30.2	24	16	6.8	34.5
4FL–12M	3/4"	38.1	31.5	17	6.8	
4FL–16M	1"	44.4	38	17	8	
4FL–20M	1.1/4"	50.8	43	17	8	27.6
4FL–24M	1.1/2"	60.3	50	19	8	20.7
4FL–32M	2"	71.4	62	19	9.6	
4FL–40M	2.1/2"	84.1	74	40	9.6	17.2
4FL–48M	3"	101.6	90	45	9.6	13.8



4FS–M

ISO 6162–2 S–SERIES FLANGE PLUG

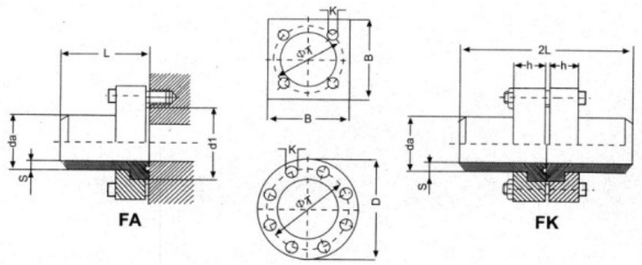
PART NO.	FLANGE SIZE	DIMENSIONS				PN BAR MPa
		d1	d2	L	I	
4FS–08M	1/2"	31.8	24	18	7.8	42
4FS–12M	3/4"	41.3	32	15	8.8	
4FS–16M	1"	47.6	38	16	9.5	
4FS–20M	1.1/4"	54	44	16	10.3	
4FS–24M	1.1/2"	63.5	51	19	12.6	
4FS–32M	2"	79.4	67	30	12.6	



AW–SFV

SAE TEE FLANGE

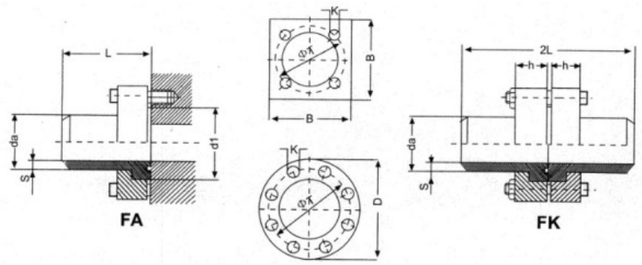
PART NO.	FLANGE SIZE	TUBE O.D.	DIMENSIONS				PN BAR MPa
			B	C	E	L	
AW–08SFVFL	1/2"	16x3 20x3	60	38.1	17.5	70	34.5
AW–12SFVFL	3/4"	20x3 22x3	70	47.63	22.26	80	
AW–16SFVFL	1"	25x3 28x3	80	52.37	26.16	90	
AW–20SFVFL	11/4"	30x4 34x5	90	58.72	30.18	100	27.6
AW–24SFVFL	11/2"	38x4 42.4x4	100	69.85	35.72	110	20.7
AW–32SFVFL	2"	42.4x4 48.3x5	110	77.77	42.88	120	
AW–08SFVFS	1/2"	22x3 22x4.5	60	40.49	18.24	70	42
AW–12SFVFS	3/4"	26.9x3.6 30x5	80	50.8	23.8	90	
AW–16SFVFS	1"	35x5 38x5	90	57.17	27.78	100	
AW–20SFVFS	11/4"	42.4x4 43x6	100	66.68	31.76	110	
AW–24SFVFS	11/2"	48.3x36 48.3x5	120	79.38	36.52	120	
AW–32SFVFS	2"	60.3x4 60.3x5.6	140	96.82	44.46	140	



1FLW–FA/FK

PN10–64/SERIES 2

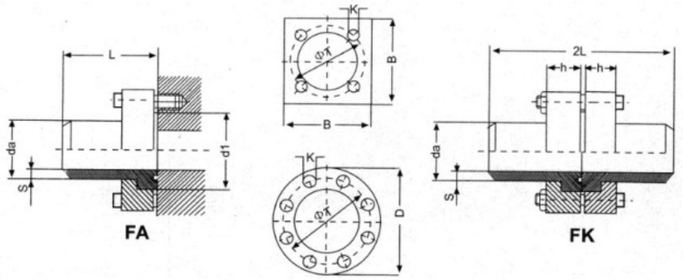
PART NO.	TUBE O.D.	PARTS		DIMENSIONS						
		BOLT	O–RING	B	D	h	T	d1	K	L
1FLW–12–2FA	16X2	M10X35	16.00X2.65	50	–	19	44	28	11	43
1FLW–16–2FA	20X2.5	M10X35	25.00X2.65	60	–	19	54	38	11	50
1FLW–20–2FA	25X3	M10X35	25.00X2.65	60	–	19	54	38	11	50
1FLW–25–2FA	30X4	M12X35	30.00X2.65	70	–	19	64	46	13	56
1FLW–32–2FA	38X5	M12X40	37.70X3.53	80	–	24	72	55	13	64
1FLW–40–2FA	48.3X4	M16X55	42.50X3.53	90	–	29	80	60	17	68
1FLW–50–2FA	60.3X5	M16X60	53.30X5.33	100	–	38	98	76	17	80
1FLW–65–2FA	76.1X6.3	M20X75	61.5X5.33	120	–	48	118	92	21	98
1FLW–80–2FA	101.6X8.8	M30X90	88.6X5.7	180	–	58	175	135	32	109
1FLW–100–2FA	114.3X10	M30X90	103.6X5.7	180	–	58	175	135	32	135
1FLW–125–2FA	152.4X12.5	M24X100	128.6X5.7	–	245	68	200	168	25	150
1FLW–150–2FA	177.8X17.5	M30X110	160.00X7	–	300	79	245	205	32	190
1FLW–12–2FK	16X2	M10X55	16.00X2.65	50	–	19	44	28	11	43
1FLW–16–2FK	20X2.5	M10X55	25.00X2.65	60	–	19	54	38	11	50
1FLW–20–2FK	25X3	M10X55	25.00X2.65	60	–	19	54	38	11	50
1FLW–25–2FK	30X4	M12X55	30.00X2.65	70	–	19	64	46	13	56
1FLW–32–2FK	38X5	M12X65	37.70X3.53	80	–	24	72	55	13	64
1FLW–40–2FK	48.3X6	M16X80	42.50X3.53	90	–	29	80	60	17	68
1FLW–50–2FK	60.3X6.3	M16X100	53.30X5.33	100	–	38	98	76	17	80
1FLW–65–2FK	76.1X7.1	M20X120	61.5X5.33	120	–	48	118	92	21	98
1FLW–80–2FK	101.6X10	M30X150	88.6X5.7	180	–	58	175	135	32	109
1FLW–100–2FK	114.3X12.5	M30X150	103.6X5.7	180	–	58	175	135	32	135
1FLW–125–2FK	152.4X16	M24X170	128.6X5.7	–	245	68	200	168	25	150
1FLW–150–2FK	177.8X17.5	M30X200	160.00X7	–	300	79	245	205	32	190



1FLW–FA/FK

PN10–64/SERIES 3

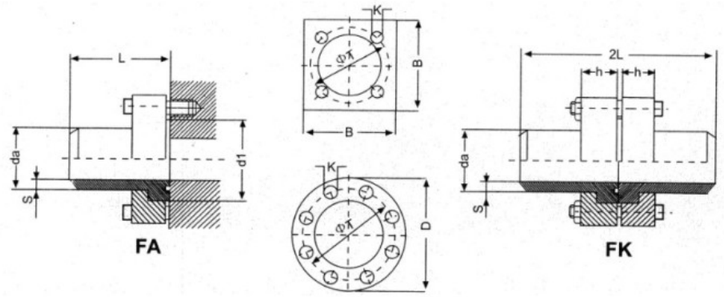
PART NO.	TUBE O.D.	PARTS		DIMENSIONS						
		BOLT	O–RING	B	D	h	T	d1	K	L
1FLW–10–3FA	16X3	M10X35	16.00X2.65	50	–	19	44	28	11	43
1FLW–12–3FA	20X3	M10X35	25.00X2.65	60	–	19	54	38	11	50
1FLW–16–3FA	21.3X2.6	M10X35	25.00X2.65	60	–	19	54	38	11	50
1FLW–20–3FA	26.9X3.6	M12X35	30.00X2.65	70	–	19	64	46	13	56
1FLW–25–3FA	33.7X4.5	M12X40	37.70X3.53	80	–	24	72	55	13	64
1FLW–32–3FA	42.4X5.5	M16X55	42.50X3.53	90	–	29	80	60	17	68
1FLW–40–3FA	60.3X8	M16X60	53.30X5.33	100	–	38	98	76	17	80
1FLW–50–3FA	76.1X10	M20X75	61.5X5.33	120	–	48	118	92	21	98
1FLW–65–3FA	88.9X11	M24X80	78.6X5.7	150	–	48	145	110	25	109
1FLW–80–3FA	101.6X12.5	M30X90	88.6X5.7	180	–	59	175	135	32	135
1FLW–100–3FA	139.7X17.5	M24X100	113.6X5.7	–	245	69	200	168	25	150
1FLW–125–3FA	168.3X20	M30X110	145.00X7	–	300	79	245	205	32	190
1FLW–150–3FA	193.7X25	M36X130	145.00X7	–	355	88	290	245	38	200
1FLW–10–3FK	16X3	M10X55	16.00X2.65	50	–	19	44	28	11	43
1FLW–12–3FK	20X3	M10X55	25.00X2.65	60	–	19	54	38	11	50
1FLW–16–3FK	21.3X3.6	M10X55	25.00X2.65	60	–	19	54	38	11	50
1FLW–20–3FK	26.9X3.6	M12X55	30.00X2.65	70	–	19	64	46	13	56
1FLW–25–3FK	33.7X4.5	M12X65	37.70X3.53	80	–	24	72	55	13	64
1FLW–32–3FK	42.4X5.5	M16X80	42.50X3.53	90	–	29	80	60	17	68
1FLW–40–3FK	60.3X8	M16X100	53.30X5.33	100	–	38	98	76	17	80
1FLW–50–3FK	76.1X10	M20X120	61.5X5.33	120	–	48	118	92	21	98
1FLW–65–3FK	88.9X111	M24X130	78.6X5.7	150	–	48	145	110	25	109
1FLW–80–3FK	101.6X14.2	M30X150	88.6X5.7	180	–	59	175	135	32	135
1FLW–100–3FK	139.7X20	M24X170	113.6X5.7	–	245	69	200	168	25	150
1FLW–125–3FK	168.3X22	M30X200	145.00X7	–	300	79	245	205	32	190
1FLW–150–3FK	193.7X25	M36X220	145.00X7	–	355	88	290	245	38	200



1FLW–FA/FK

PN10–64/SERIES 4

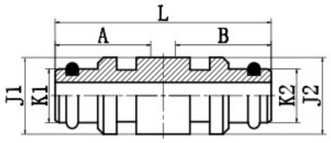
PART NO.	TUBE O.D.	PARTS		DIMENSIONS						
		BOLT	O–RING	B	D	h	T	d1	K	L
1FLW–10–4FA	17.2X3.6	M10X35	16.00X2.65	50	–	19	44	28	11	43
1FLW–12–4FA	20X4	M10X35	25.00X2.65	60	–	19	54	38	11	50
1FLW–16–4FA	26.9X4.5	M10X35	25.00X2.65	60	–	19	54	38	11	50
1FLW–20–4FA	33.7X5.6	M12X35	30.00X2.65	70	–	19	64	46	13	56
1FLW–25–4FA	42.4X7.1	M12X40	37.70X3.53	80	–	24	72	55	13	64
1FLW–32–4FA	48.3X8	M16X55	42.50X3.53	90	–	29	80	60	17	68
1FLW–40–4FA	60.3X10	M16X60	53.30X5.33	100	–	38	98	76	17	80
1FLW–50–4FA	76.1X12.5	M20X75	61.5X5.33	120	–	48	118	92	21	98
1FLW–65–4FA	88.9X14.2	M24X80	78.6X5.7	150	–	48	145	110	25	109
1FLW–70–4FA	101.6X16	M30X90	88.6X5.7	180	–	59	175	135	32	135
1FLW–80–4FA	114.3X17.5	M30X90	88.6X5.7	180	–	59	175	135	32	135
1FLW–100–4FA	139.7X22.2	M24X100	113.6X5.7	–	245	69	200	168	25	150
1FLW–125–4FA	177.8X30	M30X110	145.00X7	–	300	79	245	205	32	190
1FLW–150–4FA	193.7X30	M36X130	145.00X7	–	355	88	290	245	38	200
1FLW–10–4FK	17.2X3.6	M10X55	16.00X2.65	50	–	19	44	28	11	43
1FLW–12–4FK	21.3X3.6	M10X55	25.00X2.65	60	–	19	54	38	11	50
1FLW–16–4FK	26.9X4.5	M10X55	25.00X2.65	60	–	19	54	38	11	50
1FLW–20–4FK	33.7X5.6	M12X55	30.00X2.65	70	–	19	64	46	13	56
1FLW–25–4FK	42.4X7.1	M12X65	37.70X3.53	80	–	24	72	55	13	64
1FLW–32–4FK	48.3X8	M16X80	42.50X3.53	90	–	29	80	60	17	68
1FLW–40–4FK	60.3X10	M16X100	53.30X5.33	100	–	38	98	76	17	80
1FLW–50–4FK	76.1X12.5	M20X120	61.5X5.33	120	–	48	118	92	21	98
1FLW–65–4FK	88.9X14.2	M24X130	78.6X5.7	150	–	48	145	110	25	109
1FLW–70–4FK	101.6X16	M30X150	88.6X5.7	180	–	59	175	135	32	135
1FLW–80–4FK	114.3X20	M30X150	88.6X5.7	180	–	59	175	135	32	135
1FLW–100–4FK	152.4X28	M24X170	113.6X5.7	–	245	69	200	168	25	150
1FLW–125–4FK	177.8X30	M30X200	145.00X7	–	300	79	245	205	32	190
1FLW–150–4FK	219.1X38	M36X220	145.00X7	–	355	88	290	245	38	200



1FLW–FA/FK

PN10–64/SERIES 5

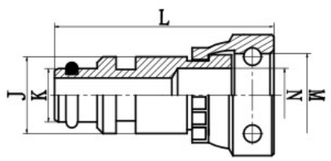
PART NO.	TUBE O.D.	PARTS		DIMENSIONS						
		BOLT	O–RING	B	D	h	T	d1	K	L
1FLW–32–5FA	48.3X8.8	M160X60	53.30X5.33	100	–	38	98	76	17	80
1FLW–40–5FA	60.3X11	M20X75	61.5X5.33	120	–	48	118	92	21	98
1FLW–50–5FA	76.1X14.2	M24X80	78.60X5.7	150	–	48	145	110	25	109
1FLW–65–5FA	101.6X20	M30X90	88.60X5.7	180	–	59	175	135	32	135
1FLW–80–5FA	133X25	M24X100	113.60X5.7	–	245	69	200	168	25	150
1FLW–100–5FA	152.4X30	M30X110	145.00X7	–	300	79	245	205	32	190
1FLW–125–5FA	219.1X45	M36X130	145.00X7	–	390	88	315	273	38	200
1FLW–32–5FK	48.3X8.8	M160X100	53.30X5.33	100	–	38	98	76	17	80
1FLW–40–5FK	60.3X11	M20X120	61.5X5.33	120	–	48	118	92	21	98
1FLW–50–5FK	76.1X14.2	M24X130	78.60X5.7	150	–	48	145	110	25	109
1FLW–65–5FK	101.6X20	M30X150	88.60X5.7	180	–	59	175	135	32	135
1FLW–80–5FK	133X25	M24X170	113.60X5.7	–	245	69	200	168	25	150
1FLW–100–5FK	152.4X30	M30X200	145.00X7	–	300	79	245	205	32	190
1FLW–125–5FK	219.1X45	M36X220	145.00X7	–	390	88	315	273	38	200



1Y

CLIP FASTENER MALE SAE J1467

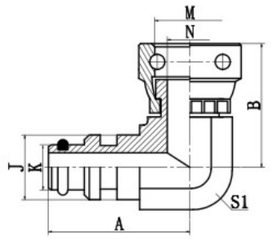
PART NO.	SIZE		O–RING		DIMENSIONS						
	LEFT	RIGHT	LEFT	RIGHT	A	B	J1	K1	J2	K2	L
1Y–04	1/4"	1/4"	O06.0×2.0	O06.0×2.0	28	28	14.9	9.9	14.9	9.9	57
1Y–04–06	1/4"	3/8"	O06.0×2.0	O10.0×2.0	28	28	14.9	9.9	19.9	13.9	57
1Y–06	3/8"	3/8"	O10.0×2.0	O10.0×2.0	28	28	19.9	13.9	19.9	13.9	57
1Y–08	1/2"	1/2"	O13.0×2.5	O13.0×2.5	28	28	23.9	17.9	23.9	17.9	57
1Y–12	3/4"	3/4"	O19.0×2.5	O19.0×2.5	28	28	28.9	23.9	28.9	23.9	57
1Y–16	1"	1"	O25.0×2.5	O25.0×2.5	33.5	33.5	38.8	30.9	38.8	30.9	68
1Y–20	1.1/4"	1.1/4"	O33.0×2.5	O33.0×2.5	33.5	33.5	45.9	37.9	45.9	37.9	68
1Y–24	1.1/2"	1.1/2"	O40.0×3.0	O40.0×3.0	37	37	54.9	46.9	54.9	46.9	76
1Y–32	2	2"	O50.0×3.0	O50.0×3.0	37	37	63.9	55.9	63.9	55.9	76



2Y

CLIP FASTENER MALE /
CLIP FASTENER FEMALE SAE J1467

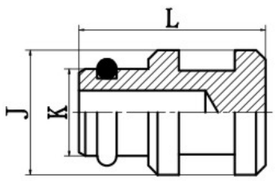
PART NO.	SIZE		O–RING	DIMENSIONS				
	LEFT	RIGHT		J	K	L	M	N
2Y–04	1/4"	1/4"	O06.0×2.0	14.9	9.9	58	15.16	10.03
2Y–06	3/8"	3/8"	O10.0×2.0	19.9	13.9	59.5	20.17	14.02
2Y–08	1/2"	1/2"	O13.0×2.5	23.9	17.9	58.5	24.16	18.03
2Y–12	3/4"	3/4"	O19.0×2.5	28.9	23.9	59.5	29.16	24.03
2Y–16	1"	1"	O25.0×2.5	38.8	30.9	72	39.12	31.01



2Y9

90° ELBOW CLIP FASTENER MALE /
CLIP FASTENER FEMALE SAE J1467

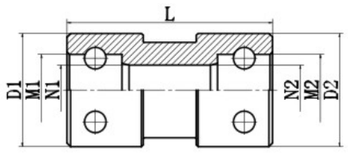
PART NO.	SIZE		O–RING	DIMENSIONS						
	LEFT	RIGHT		A	B	J	K	M	N	S1
2Y9–04	1/4"	1/4"	O06.0×2.0	40.5	38	14.9	9.9	15.16	10.03	16
2Y9–06	3/8"	3/8"	O10.0×2.0	44	42.5	19.9	13.9	20.17	14.02	22
2Y9–08	1/2"	1/2"	O13.0×2.5	46.5	46	23.9	17.9	24.16	18.03	27
2Y9–12	3/4"	3/4"	O19.0×2.5	52	51.5	28.9	23.9	29.16	24.03	36
2Y9–16	1"	1"	O25.0×2.5	64	63.5	38.9	30.9	39.12	31.01	48
2Y9–20	1.1/4"	1.1/4"	O33.0×2.5	64	63.5	45.9	37.9	46.15	38.02	48



4Y

CLIP FASTENER MALE PLUG SAE J1467

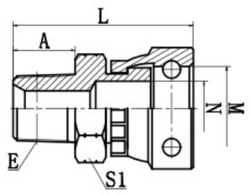
PART NO.	SIZE	O–RING	DIMENSIONS		
	LEFT		J	K	L
4Y–04	1/4"	O06.0×2.0	14.9	9.9	34
4Y–06	3/8"	O10.0×2.0	19.9	13.9	34
4Y–08	1/2"	O13.0×2.5	23.9	17.9	34
4Y–12	3/4"	O19.0×2.5	28.9	23.9	34
4Y–16	1"	O25.0×2.5	38.8	30.9	41
4Y–20	1.1/4"	O33.0×2.5	45.9	37.9	41



7Y

CLIP FASTENER FEMALE SAE J1467

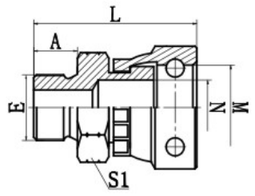
PART NO.	SIZE		DIMENSIONS			
	LEFT	RIGHT	D1,D2	L	M1,M2	N1,N2
7Y–04	1/4"	1/4"	25	59	15.16	10.03
7Y–06	3/8"	3/8"	32	59	20.17	14.02
7Y–08	1/2"	1/2"	35	59	24.16	18.03
7Y–12	3/4"	3/4"	45	59	29.16	24.03
7Y–16	1"	1"	55	68	39.12	31.01
7Y–20	1.1/4"	1.1/4"	60	68	46.15	38.02
7Y–24	1.1/2"	1.1/2"	70	80	55.22	47.02
7Y–32	2"	2"	80	80	64.21	56.00



2NY

NPT MALE / CLIP FASTENER FEMALE SAE J1467

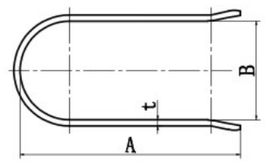
PART NO.	THREAD E	RIGHT SIZE	DIMENSIONS				
			A	L	M	N	S1
2NY–04	Z1/4" × 18	1/4"	15	51.5	15.16	10.03	19
2NY–06	Z3/8" × 18	3/8"	16	52.5	20.17	14.02	22
2NY–08	Z1/2" × 14	1/2"	19.5	59	24.16	18.03	27
2NY–12	Z3/4" × 14	3/4"	19.5	61	29.16	24.03	36
2NY–16	Z1" × 11.5	1"	25.5	72.5	39.12	31.01	46
2NY–20	Z1.1/4" × 11.5	1.1/4"	26.5	73.5	46.15	38.02	50



2ZY

BSP BONDED SEAL DIN 3852–2 A TYPE / CLIP FASTENER FEMALE SAE J1467

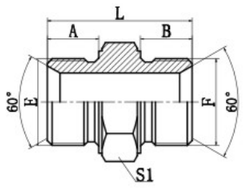
PART NO.	THREAD E	RIGHT SIZE	SEAL E END	DIMENSIONS				
				A	L	M	N	S1
2ZY–04	G1/4" × 19	1/4"	ZHD–14	12	48.5	15.16	10.03	19
2ZY–06	G3/8" × 19	3/8"	ZHD–18	13.5	50.5	20.17	14.02	22
2ZY–06–08	G3/8" × 19	1/2"	ZHD–18	13.5	54	24.16	18.03	27
2ZY–08–06	G1/2" × 14	3/8"	ZHD–22	16	56	20.17	14.02	27
2ZY–08	G1/2" × 14	1/2"	ZHD–22	16	56.5	24.16	18.03	27
2ZY–12	G3/4" × 14	3/4"	ZHD–27	18.5	61	29.16	24.03	36
2ZY–16	G1" × 11	1"	ZHD–33	20.5	73	39.12	31.01	46
2ZY–16–20	G1" × 11	1.1/4"	ZHD–33	20.5	77	46.15	38.02	50
2ZY–20–16	G1.1/4" × 11	1"	ZHD–42	20.5	77	39.12	31.01	50
2ZY–20	G1.1/4" × 11	1.1/4"	ZHD–42	20.5	77	46.15	38.02	50



U–Y

STAPLE

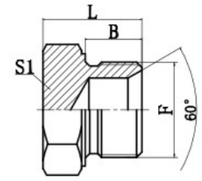
PART NO.	STECKO SIZE	DIMENSIONS		
		A	B	t
U–Y04	1/4"	28.5	7.8	4
U–Y06	3/8"	37	12.5	4
U–Y08	1/2"	44	16.2	4
U–Y12	3/4"	56	20.6	4
U–Y16	1"	75	27.7	6
U–Y20	1.1/4"	77.5	34.8	6
U–Y24	1.1/2"	78.8	46.1	6
U–Y32	2"	100	58	6



1M

METRIC MALE DOUBLE USE FOR 60° CONE SEAT OR BONDED SEAL

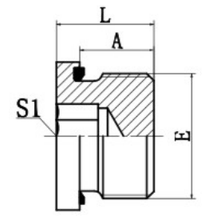
PART NO.	THREAD		DIMENSIONS			
	E	F	A	B	L	S1
1M–10	M10 × 1	M10 × 1	8	8	24	14
1M–10–12	M10 × 1	M12 × 1.5	8	10	26	17
1M–12	M12 × 1.5	M12 × 1.5	10	10	28	17
1M–12–14	M12 × 1.5	M14 × 1.5	10	11	29	19
1M–14	M14 × 1.5	M14 × 1.5	11	11	30	19
1M–14–16	M14 × 1.5	M16 × 1.5	11	12	31	22
1M–16	M16 × 1.5	M16 × 1.5	12	12	32	22
1M–16–18	M16 × 1.5	M18 × 1.5	12	12	34	24
1M–18	M18 × 1.5	M18 × 1.5	12	12	34	24
1M–18–22	M18 × 1.5	M22 × 1.5	12	14	38	27
1M–20–22	M20 × 1.5	M22 × 1.5	14	14	38	27
1M–22	M22 × 1.5	M22 × 1.5	14	14	38	27
1M–22–26	M22 × 1.5	M26 × 1.5	14	16	43	32
1M–22–27	M22 × 1.5	M27 × 2	14	16	43	32
1M–22–27D	M22 × 1.5	M27 × 1.5	14	16	43	32
1M–26	M26 × 1.5	M26 × 1.5	16	16	45	32
1M–26–30	M26 × 1.5	M30 × 2	16	18	47	36
1M–26–30D	M26 × 1.5	M30 × 1.5	16	18	47	36
1M–27	M27 × 2	M27 × 2	16	16	45	32
1M–27D	M27 × 1.5	M27 × 1.5	16	16	45	32
1M–30	M30 × 2	M30 × 2	18	18	49	36
1M–30D	M30 × 1.5	M30 × 1.5	18	18	49	36



4M

METRIC MALE DOUBLE USE FOR 60° CONE SEAT OR BONDED SEAL PLUG

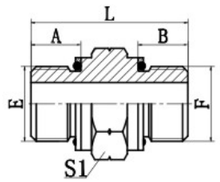
PART NO.	THREAD	DIMENSIONS		
	F	B	L	S1
4M–10	M10 × 1	8	15	14
4M–12	M12 × 1.5	10	17	17
4M–14	M14 × 1.5	11	19	19
4M–16	M16 × 1.5	12	20	22
4M–18	M18 × 1.5	12	20	24
4M–20	M20 × 1.5	14	23	27
4M–22	M22 × 1.5	14	23	27
4M–24	M24 × 1.5	14	25	30
4M–26	M26 × 1.5	16	28	32
4M–27D	M27 × 1.5	16	28	32
4M–30	M30 × 2	18	30	36
4M–30D	M30 × 1.5	18	30	36



4MN–WD

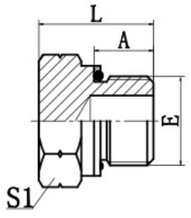
METRIC MALE CAPTIVE SEAL HOLLOW HEX PLUG

PART NO.	THREAD	CAPTIVE	DIMENSIONS		
	E	E	A	L	S1
4MN–10WD	M10 × 1	WD–B02	8	12	5
4MN–12WD	M12 × 1.5	WD–M12	12	17	6
4MN–14WD	M14 × 1.5	WD–B04	12	17	6
4MN–16WD	M16 × 1.5	WD–M16	12	17	8
4MN–18WD	M18 × 1.5	WD–M18	12	17	8
4MN–20WD	M20 × 1.5	WD–M20	14	19	10
4MN–22WD	M22 × 1.5	WD–M22	14	19	10
4MN–26WD	M26 × 1.5	WD–B12	16	21	12
4MN–27WD	M27 × 2	WD–B12	16	21	12
4MN–33WD	M33 × 2	WD–B16	18	24.5	17
4MN–42WD	M42 × 2	WD–B20	20	26.5	22
4MN–48WD	M48 × 2	WD–B24	22	28.5	24



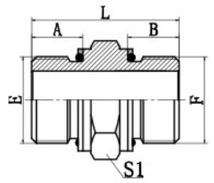
1G
BSP MALE O–RING

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	L	S1
1G–02	G1/8" × 28	G1/8" × 28	O011	O011	9.5	9.5	28	14
1G–04	G1/4" × 19	G1/4" × 19	O111	O111	11	11	32	19
1G–06	G3/8" × 19	G3/8" × 19	O113	O113	11.5	11.5	36	22
1G–08	G1/2" × 14	G1/2" × 14	O115	O115	14	14	44	27
1G–12	G3/4" × 14	G3/4" × 14	O119	O119	15.5	15.5	48	32
1G–16	G1" × 11	G1" × 11	O217	O217	18	18	55	41
1G–20	G1.1/4" × 11	G1.1/4" × 11	O222	O222	20	20	61	50
1G–24	G1.1/2" × 11	G1.1/2" × 11	O224	O224	21.5	21.5	64	55



4G
BSP MALE O–RING PLUG

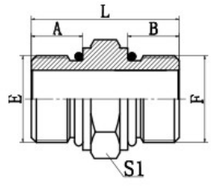
PART NO.	THREAD	O–RING	DIMENSIONS		
	E	E	A	L	S1
4G–04	G1/4" × 19	O111	11	19	19
4G–06	G3/8" × 19	O113	11.5	22	22
4G–08	G1/2" × 14	O115	14	27	27
4G–12	G3/4" × 14	O119	15.5	29.5	32
4G–16	G1" × 11	O217	18	34	41



1H
METRIC MALE L–SERIES ISO 6149–3

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	L	S1
1H–10	M10 × 1	M10 × 1	O08.1 × 1.6	O08.1 × 1.6	8.5	8.5	28	14
1H–12	M12 × 1.5	M12 × 1.5	O09.3 × 2.4	O09.3 × 2.4	11.0	11.0	33	17
1H–14	M14 × 1.5	M14 × 1.5	O11.3 × 2.4	O11.3 × 2.4	11.0	11.0	33	19
1H–16	M16 × 1.5	M16 × 1.5	O13.3 × 2.4	O13.3 × 2.4	11.5	11.5	34	22
1H–18	M18 × 1.5	M18 × 1.5	O15.3 × 2.4	O15.3 × 2.4	12.5	12.5	36	24
1H–22	M22 × 1.5	M22 × 1.5	O19.3 × 2.4	O19.3 × 2.4	13.0	13.0	39	27
1H–27	M27 × 2	M27 × 2	O23.5 × 3.0	O23.5 × 3.0	16.0	16.0	45	32
1H–33	M33 × 2	M33 × 2	O29.5 × 3.0	O29.5 × 3.0	16.0	16.0	48	41
1H–42	M42 × 2	M42 × 2	O38.5 × 3.0	O38.5 × 3.0	16.0	16.0	50	50
1H–48	M48 × 2	M48 × 2	O44.5 × 3.0	O44.5 × 3.0	17.5	17.5	53	55

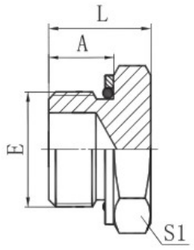
Note: fit for ISO 9974–1 port or ISO 6149–1 port when useless of retaining ring.



1H–H
METRIC MALE S–SERIES ISO 6149–2

PART NO.	THREAD		O–RING		DIMENSIONS			
	E	F	E	F	A	B	L	S1
1H–10H	M10 × 1	M10 × 1	O08.1 × 1.6	O08.1 × 1.6	9.5	9.5	31.0	14
1H–12H	M12 × 1.5	M12 × 1.5	O09.3 × 2.4	O09.3 × 2.4	11.0	11.0	35.5	17
1H–14H	M14 × 1.5	M14 × 1.5	O11.3 × 2.4	O11.3 × 2.4	11.0	11.0	35.5	19
1H–16H	M16 × 1.5	M16 × 1.5	O13.3 × 2.4	O13.3 × 2.4	12.5	12.5	39.0	22
1H–18H	M18 × 1.5	M18 × 1.5	O15.3 × 2.4	O15.3 × 2.4	14.0	14.0	42.0	24
1H–20H	M20 × 1.5	M20 × 1.5	O17.3 × 2.4	O17.3 × 2.4	14.0	14.0	42.0	27
1H–22H	M22 × 1.5	M22 × 1.5	O19.3 × 2.4	O19.3 × 2.4	15.0	15.0	46.0	27
1H–27H	M27 × 2	M27 × 2	O23.5 × 3.0	O23.5 × 3.0	18.5	18.5	55.5	32
1H–33H	M33 × 2	M33 × 2	O29.5 × 3.0	O29.5 × 3.0	18.5	18.5	56.5	41
1H–42H	M42 × 2	M42 × 2	O38.5 × 3.0	O38.5 × 3.0	19.0	19.0	58.0	50
1H–48H	M48 × 2	M48 × 2	O44.5 × 3.0	O44.5 × 3.0	21.5	21.5	63.0	55

Note: fit for ISO 6149–1 port.

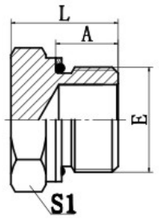


4H

METRIC MALE L–SERIES PLUG ISO 6149–3

PART NO.	THREAD	O–RING	DIMENSIONS		
	E	E	A	L	S1
4H–12	M12 × 1.5	O09.3 × 2.4	11	19.5	17
4H–14	M14 × 1.5	O11.3 × 2.4	11	19.5	19
4H–16	M16 × 1.5	O13.3 × 2.4	12.5	23	22
4H–18	M18 × 1.5	O15.3 × 2.4	14	24.5	24
4H–22	M22 × 1.5	O19.3 × 2.4	15	27.5	27
4H–27	M27 × 2	O23.5 × 3.0	18.5	32	32
4H–33	M33 × 2	O29.5 × 3.0	18.5	34.5	41
4H–42	M42 × 2	O38.5 × 3.0	19	37	50

Note: fit for ISO 9974–1 port or ISO 6149–1 port when useless of retaining ring.

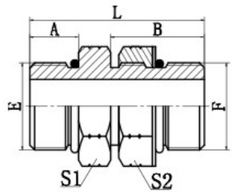


4HN

METRIC MALE L–SERIES HOLLOW HEX PLUG ISO 6149–3

PART NO.	THREAD	O–RING	DIMENSIONS		
	E	E	A	L	S1
4HN–10	M10 × 1	O08.1 × 1.6	8.5	11.5	5
4HN–12	M12 × 1.5	O09.3 × 2.4	11	14	6
4HN–14	M14 × 1.5	O11.3 × 2.4	11	14	6
4HN–16	M16 × 1.5	O13.3 × 2.4	11.5	14	8
4HN–18	M18 × 1.5	O15.3 × 2.4	12.5	15.5	8
4HN–22	M22 × 1.5	O19.3 × 2.4	13	16	10
4NH–27	M27 × 2	O23.5 × 3.0	16	19	12
4HN–33	M33 × 2	O29.5 × 3.0	16	20	17
4HN–42	M42 × 2	O38.5 × 3.0	16	22	22
4NH–48	M48 × 2	O44.5 × 3.0	17.5	21.5	24

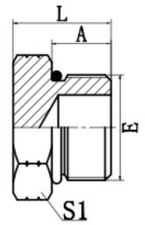
Note: fit for ISO 9974–1 port or ISO 6149–1 port when useless of retaining ring.



1O–OG

SAE O–RING BOSS PLUG L–SERIES ISO 11926–3

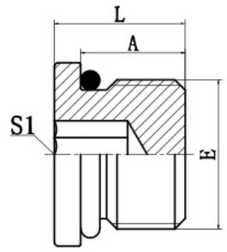
PART NO.	THREAD		O–RING		DIMENSIONS				
	E	F	E	F	A	B	L	S1	S2
1O–04OG	7/16" × 20	7/16" × 20	O904	O904	9.14	18	33	14	17
1O–04–06OG	7/16" × 20	9/16" × 18	O904	O906	9.14	20	35.1	17	19
1O–06OG	9/16" × 18	9/16" × 18	O906	O906	9.93	20	36	17	19
1O–06–08OG	9/16" × 18	3/4" × 16	O906	O908	9.93	22	40	22	24
1O–08OG	3/4" × 16	3/4" × 16	O908	O908	11.13	22	40	22	24
1O–08–12OG	3/4" × 16	1.1/16" × 12	O908	O912	11.13	29	51	32	32
1O–10OG	7/8" × 14	7/8" × 14	O910	O910	12.7	26	46	27	27
1O–12OG	1.1/16" × 12	1.1/16" × 12	O912	O912	15.1	29	54	32	32
1O–16OG	1.5/16" × 12	1.5/16" × 12	O916	O916	15.1	29	54	38	41
1O–20OG	1.5/8" × 12	1.5/8" × 12	O920	O920	15.1	29	54	50	50
1O–24OG	1.7/8" × 12	1.7/8" × 12	O924	O924	15.1	29	54	55	55



4O

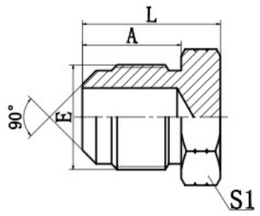
SAE O–RING BOSS PLUG L–SERIES ISO 11926–3

PART NO.	THREAD	O–RING	DIMENSIONS		
	E	E	A	L	S1
4O–02	5/16" × 24	O902	7.54	14.6	12
4O–03	3/8" × 24	O903	7.54	14.6	14
4O–04	7/16" × 20	O904	9.1	16	14
4O–05	1/2" × 20	O905	9.1	16	17
4O–06	9/16" × 18	O906	9.9	17.5	17
4O–08	3/4" × 16	O908	11.1	19.5	22
4O–10	7/8" × 14	O910	12.7	23	27
4O–12	1.1/16" × 12	O912	15.1	26.5	32
4O–14	1.3/16" × 12	O914	15.1	27	36
4O–16	1.5/16" × 12	O916	15.1	27.5	38
4O–20	1.5/8" × 12	O920	15.1	30	50
4O–24	1.7/8" × 12	O924	15.1	30	55
4O–32	2.1/2" × 12	O932	15.1	32	70



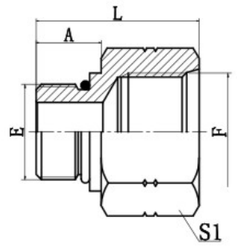
4ON
SAE O–RING BOSS HOLLOW HEX PLUG L–SERIES ISO 11926–3

PART NO.	THREAD	O–RING	DIMENSIONS		
	E	E	A	L	S1
4ON–04	7/16" × 20	O904	9.1	11.5	5
4ON–05	1/2" × 20	O905	9.1	11.5	5
4ON–06	9/16" × 18	O906	9.9	12.2	6
4ON–08	3/4" × 16	O908	11.1	14.3	8
4ON–10	7/8" × 14	O910	12.7	16	10
4ON–12	1.1/16" × 12	O912	15.1	19	14
4ON–16	1.5/16" × 12	O916	15.1	19	16
4ON–20	1.5/8" × 12	O920	15.1	19	19



4P
SAE MALE 90° CONE PLUG SAE J513

PART NO.	THREAD	DIMENSIONS		
	E	A	L	S1
4P–04	7/16" × 20	12.7	18.5	14
4P–05	1/2" × 20	14.2	20	14
4P–06	5/8" × 18	15.7	22	17
4P–08	3/4" × 16	19	27	22
4P–10	7/8" × 14	22.4	30.5	24
4P–12	1.1/16" × 14	25.4	35.5	30



5O
SAE O–RING BOSS L–SERIES ISO 11926–3/ SAE FEMALE ISO 11926–1

PART NO.	THREAD		O–RING	DIMENSIONS		
	E	F	E	A	L	S1
5O–04–06	7/16" × 20	9/16" × 18	O904	9.14	31	22
5O–06–04	9/16" × 18	7/16" × 20	O906	9.93	28	17
5O–06–08	9/16" × 18	3/4" × 16	O906	9.93	36	27
5O–08–06	3/4" × 16	9/16" × 18	O908	11.13	31.5	22
5O–08–10	3/4" × 16	7/8" × 14	O908	11.13	38	30
5O–08–12	3/4" × 16	1.1/16" × 12	O908	11.13	36	32
5O–10	7/8" × 14	7/8" × 14	O910	12.7	38	30
5O–10–06	7/8" × 14	9/16" × 18	O910	12.7	20.6	27
5O–10–08	7/8" × 14	3/4" × 16	O910	12.7	35	27
5O–10–12	7/8" × 14	1.1/16" × 12	O910	12.7	43	36
5O–12–08	1.1/16" × 12	3/4" × 16	O912	15.09	26	32
5O–12–10	1.1/16" × 12	7/8" × 14	O912	15.1	40.5	32
5O–12–16	1.1/16" × 12	1.5/16" × 12	O912	15.1	45	41
5O–14–12	1.3/16" × 12	1.1/16" × 12	O914	15.1	43	36
5O–16–06	1.5/16" × 12	9/16" × 18	O916	15.1	26	38
5O–16–10	1.5/16" × 12	7/8" × 14	O916	15.1	26	38
5O–16–12	1.5/16" × 12	1.1/16" × 12	O916	15.1	43.5	38
5O–16–14	1.5/16" × 12	1.3/16" × 12	O916	15.1	43	38
5O–16–20	1.5/16" × 12	1.5/8" × 12	O916	15.1	46.5	50
5O–20–12	1.5/8" × 12	1.1/16" × 12	O920	15.1	35	50
5O–20–16	1.5/8" × 12	1.5/16" × 12	O920	15.1	42	50
5O–20–24	1.5/8" × 12	1.7/8" × 12	O920	15.1	48	55
5O–24–16	1.7/8" × 12	1.5/16" × 12	O924	15.1	35	55
5O–24–20	1.7/8" × 12	1.5/8" × 12	O924	15.1	45	55
5O–32–20	2.1/2" × 12	1.5/8" × 12	O932	15.1	32	70
5O–32–24	2.1/2" × 12	1.7/8" × 12	O932	15.1	32	70

Working Pressure

Pressure unit:MPa

Thread	Metric Male O-Ring S-Series	Metric Male O-Ring Adjustable Stud End S-Series	Metric Male O-Ring L-Series	Metric Male O-Ring Adjustable Stud End L-Series	Metric Male Captive Seal L-Series	Metric Male Captive Seal S-Series
M8 × 1	63	40	40	31.5	–	–
M10 × 1	63	40	40	31.5	25	–
M12 × 1.5	63	40	40	31.5	25	63
M14 × 1.5	63	40	40	31.5	25	63
M16 × 1.5	63	40	31.5	25	25	63
M18 × 1.5	63	40	31.5	25	25	63
M20 × 1.5	–	–	–	–	–	63
M22 × 1.5	–	–	–	–	16	40
M22 × 1.5	63	40	31.5	25	–	–
M26 × 1.5	–	–	–	–	16	–
M27 × 2	40	40	20	16	–	40
M30 × 2	40	40	20	16	–	–
M33 × 2	–	–	–	–	10	40
M33 × 2	40	31.5	20	16	–	–
M42 × 2	25	25	20	16	–	–
M42 × 2	–	–	–	–	10	25
M48 × 2	25	20	20	16	10	25
M60 × 2	25	16	16	10	–	–

Thread	Metric Male 74° Cone	Metric Male O-Ring	Metric Male 60° Cone Seat
M10 × 1	35	–	–
M10 × 1	35	–	–
M12 × 1.25	–	63	–
M12 × 1.5	35	–	–
M14 × 1.5	35	63	34.5
M16 × 1.5	25	63	–
M18 × 1.5	25	63	34.5
M22 × 1.5	20	63	34.5
M24 × 1.5	20	–	–
M27 × 1.5	20	40	–
M27 × 2	–	–	27.5
M30 × 2	20	–	–
M30 × 1.5	–	40	–
M33 × 2	16	–	20.5
M36 × 2	16	–	–
M36 × 2	–	40	–
M39 × 2	12.5	–	–
M39 × 2	–	25	–
M42 × 2	12.5	–	17
M42 × 2	–	25	–
M45 × 2	10	–	–
M45 × 2	–	25	–
M52 × 2	–	25	–
M60 × 2	–	25	–
M64 × 2	–	25	–

Thread	JIS Metric Male 60° Cone
M12 × 1.5	34.5
M14 × 1.5	34.5
M16 × 1.5	34.5
M18 × 1.5	34.5
M20 × 1.5	34.5
M22 × 1.5	34.5
M24 × 1.5	27.5
M27 × 1.5	27.5
M30 × 1.5	20.5
M33 × 1.5	20.5
M36 × 1.5	17
M42 × 1.5	17

Working Pressure

Pressure unit:MPa

Thread	BSP Male 60° Cone Seat	JIS GAS Male 60° Cone	BSP Male O-Ring	BSP Male O-Ring Adjustable Stud End
G1/8" × 28	34.5	34.5	40	31.5
G1/4" × 19	34.5	34.5	40	31.5
G3/8" × 19	34.5	34.5	31.5	25
G1/2" × 14	34.5	34.5	31.5	25
G3/4" × 14	27.5	27.5	20	16
G1" × 11	20.5	20.5	20	16
G1.1/4" × 11	17	17	20	16
G1.1/2" × 11	10.5	10.5	20	16
G2" × 11	10.5	10.5	16	10

Thread	BSP Male 60° Cone Seat
R1/8" × 28	34.5
R1/4" × 19	34.5
R3/8" × 19	34.5
R1/2" × 14	34.5
R3/4" × 14	27.5
R1" × 11	20.5
R1.1/4" × 11	17
R1.1/2" × 11	10.5
R2" × 11	10.5

Thread	JIC 74° Cone	SAE Male O-Ring S-Series	SAE Male O-Ring Adjustable Stud End S-Series	SAE Male O-Ring L-Series	Metric Male O-Ring Adjustable Stud End L-Series
5/16" × 24	34.5	–	–	31.5	31.5
3/8" × 24	34.5	63	40	31.5	31.5
7/16" × 20	34.5	63	40	31.5	31.5
1/2" × 20	34.5	63	40	31.5	31.5
9/16" × 18	34.5	63	40	31.5	25
3/4" × 16	31	63	40	31.5	25
7/8" × 14	24	63	40	25	20
1.1/16" × 12	24	40	40	25	20
1.3/16" × 12	21	40	40	20	16
1.5/16" × 12	21	40	31.5	20	16
1.5/8" × 12	17	25	25	16	12.5
1.7/8" × 12	14	25	20	16	12.5
2.1/2" × 12	10.5	–	–	12.5	10

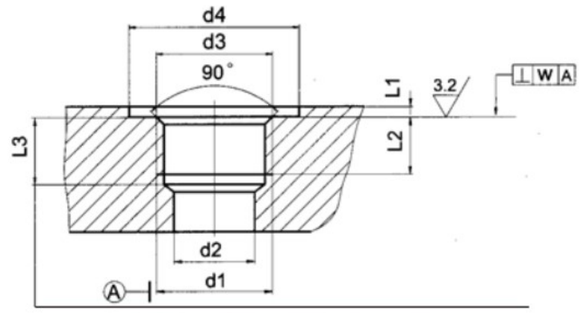
Thread	NPT Male	Thread	ORFS Male O-Ring
Z1/8" × 27	34.5	9/16" × 18	63
Z1/4" × 18	27.5	11/16" × 16	63
Z3/8" × 18	21	13/16" × 18	63
Z1/2" × 14	21	1" × 14	40
Z3/4" × 14	17	1.3/16" × 12	40
Z1" × 11.5	14	1.7/16" × 12	40
Z1.1/4" × 11.5	8	1.11/16" × 12	25
Z1.1/2" × 11.5	7	2" × 12	25

ISO 6162 Flange Size	Mid-Strength Bolt L-Series	High-Strength Bolt L-Series	Mid-Strength Bolt S-Series	High-Strength Bolt S-Series
1/2"	35	35	35	40
3/4"	35	35	35	40
1"	25	31.5	35	40
1.1/4"	20	25	35	40
1.1/2"	20	20	35	40
2"	16	16	35	40

Port

◎ 1 ISO 9974–1 metric thread port and mating stud end



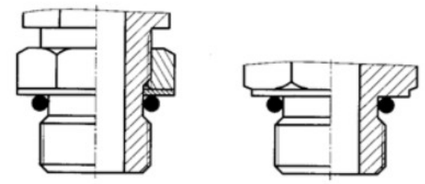


ISO 9974–1 Port

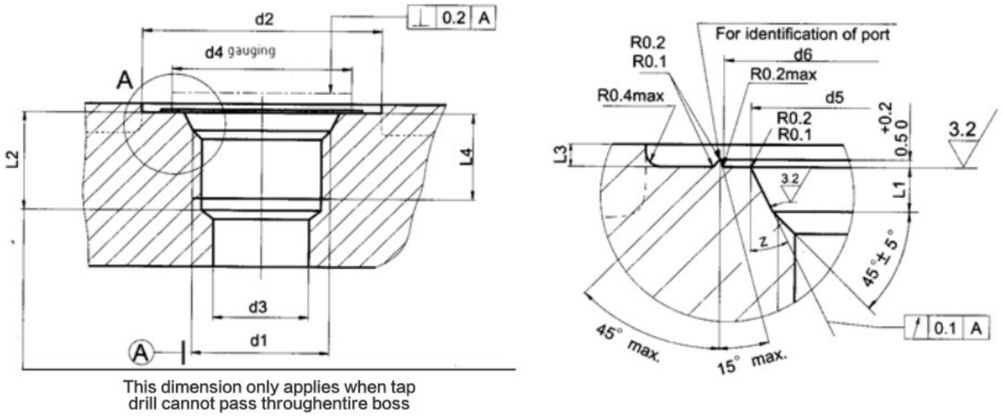
Port Dimensions mm

Thread d1	d2 ref.	d3		d4 min.	L1 max.	L2 min.	L3 min.	w
		nom.	tol.					
M8 × 1	3	8	0,+0.2	13	1	8	10	0.1
M10 × 1	4.5	10	0,+0.2	15	1	8	10	0.1
M12 × 1.5	6	12	0,+0.2	18	1.5	12	15	0.1
M14 × 1.5	7	14	0,+0.2	20	1.5	12	15	0.1
M16 × 1.5	9	16	0,+0.2	23	1.5	12	15	0.1
M18 × 1.5	11	18	0,+0.2	25	2	12	15	0.1
M20 × 1.5	10	20	0,+0.2	27	2	14	17	0.1
M22 × 1.5	14	22	0,+0.2	28	2.5	14	17	0.1
M26 × 1.5	18	26	0,+0.2	33	2.5	16	19	0.2
M27 × 2	16	27	0,+0.2	33	2.5	16	20	0.2
M33 × 2	23	33	0,+0.3	41	2.5	18	22	0.2
M42 × 2	30	42	0,+0.3	51	2.5	20	24	0.2
M48 × 2	36	48	0,+0.3	56	2.5	22	36	0.2

◎2 ISO 6149–1 metric thread port and mating stud end



ISO 6149–3 stud eng

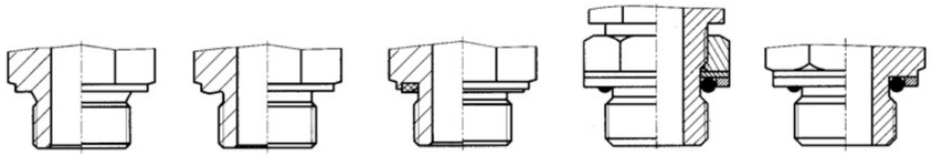


ISO 6149–1 Port

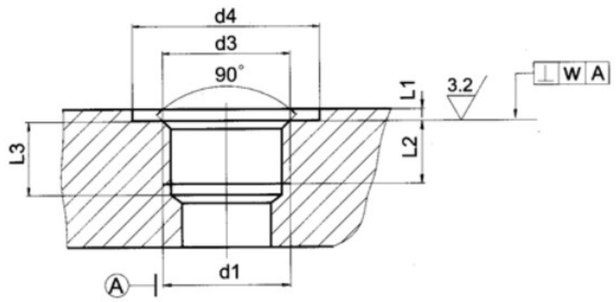
Port Dimensions mm

Thread d1	d2		d3 ref.	d4	d5 +0.1 0	d6 +0.5 0	L1 +0.4 0	L2 min.	L3 max.	L4 min.	Z° ±1°	O–RING
	min.[1]	min.[2]										
M8 × 1	17	14	3	12.5	9.1	14	1.6	11.5	1	10	12	6.1 × 1.6
M10 × 1	20	16	4.5	14.5	11.1	16	1.6	11.5	1	10	12	8.1 × 1.6
M12 × 1.5	23	19	6	17.5	13.8	19	2.4	14	1.5	11.5	15	9.3 × 2.2
M14 × 1.5	25	21	7.5	19.5	15.8	21	2.4	14	1.5	11.5	15	11.3 × 2.2
M16 × 1.5	28	24	9	22.5	17.8	24	2.4	15.5	1.5	13	15	13.3 × 2.2
M18 × 1.5	30	26	11	24.5	19.8	26	2.4	17	2	14.5	15	15.3 × 2.2
M20 × 1.5	32	27	--	25.5	21.8	27	2.4	--	2	14.5	15	17.3 × 2.2
M22 × 1.5	34	29	14	27.5	23.8	29	2.4	18	2	15.5	15	19.3 × 2.2
M27 × 2	40	34	18	32.5	29.4	34	3.1	22	2	19	15	23.6 × 2.9
M33 × 2	49	43	23	41.5	35.4	43	3.1	22	2.5	19	15	29.6 × 2.9
M42 × 2	60	52	30	50.5	44.4	52	3.1	22.5	2.5	19.5	15	38.6 × 2.9
M48 × 2	66	57	36	55.5	50.4	57	3.1	25	2.5	22	15	44.6 × 2.9
M60 × 2	76	67	44	65.5	62.4	67	3.1	27.5	2.5	24.5	15	56.6 × 2.9

◎ 3 DIN 3852 BSP thread port and mating stud end



DIN 3852 Type A | DIN 3852 Type B | DIN 3852 Type E | O-Ring Seal | O-Ring Seal

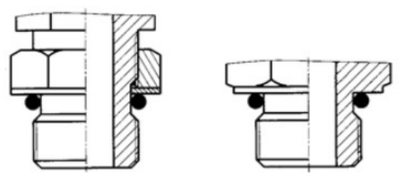


DIN 3852 Port

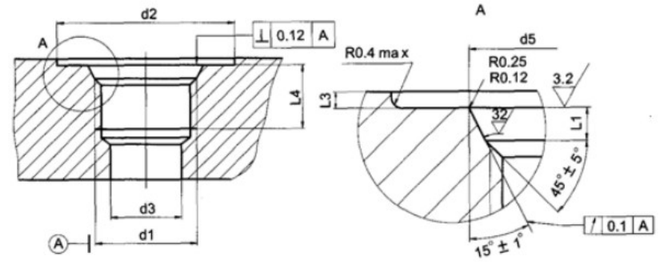
Port Dimensions mm

Thread d1	d3		d4+0.4 0		L1 max.	L2 min.	L3 min.	w
			Type B,E	Others				
G1/8 × 28	9.8	0,+0.2	15	19	1	8	13	0.1
G1/4 × 19	13.2	0,+0.2	19	25	1.5	12	18.5	0.1
G3/8 × 19	16.7	0,+0.2	23	28	2	12	18.5	0.1
G1/2 × 14	21	0,+0.2	27	34	2.5	14	22	0.1
G3/4 × 14	26.5	0,+0.2	33	42	2.5	16	24	0.2
G1 × 11	33.3	0,+0.3	40	47	2.5	18	27	0.2
G1.1/4 × 11	42	0,+0.3	50	58	2.5	20	29	0.2
G1.1/2 × 11	47.9	0,+0.3	56	65	2.5	22	31	0.2
G2 × 11	59.7	0,+0.3	69	76	3	24	33	0.2

◎ 4 BS5380 BSP thread port and mating stud end



BS 5380 stud end

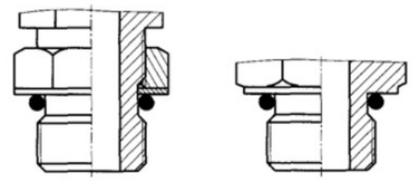


BS 5380 Port

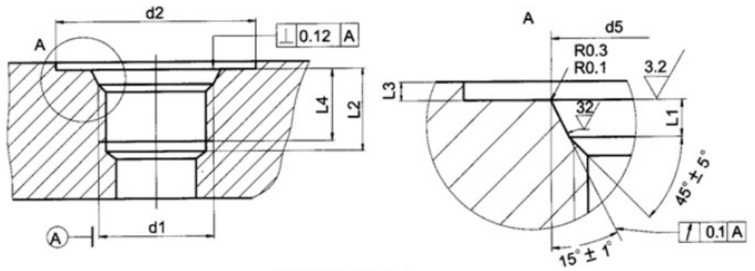
Port Dimensions mm

Thread d1	d2 min.	d3 max.	d5 +0.12 O	L1 +0.4 O	L3 max	L4 min.	O-RING
G1/8 × 28	15	14	11.24	1.3	0.6	10.5	8.1 × 1.6
G1/4 × 19	19	18	14.16	1.2	0.6	11.0	10.1 × 1.6
G3/8 × 19	23	22	18.86	1.9	0.6	12.5	13.6 × 2.4
G1/2 × 14	27	26	22.40	1.9	0.8	15.0	17.6 × 2.4
G5/8 × 14	31	30	26.00	2.4	0.8	16.3	19.5 × 3.0
G3/4 × 14	33	32	28.92	2.4	1.1	16.3	22.5 × 3.0
G1 × 11	40	39	35.50	2.4	1.1	19.1	29.5 × 3.0
G1.1/4 × 11	50	49	43.56	2.4	1.1	21.4	36.5 × 3.0
G1.1/2 × 11	56	55	49.42	2.4	1.1	22.5	42.5 × 3.0
G2 × 11	69	68	61.42	2.4	1.1	25.7	54.5 × 3.0

◎ 5 JIS B 2351 BSP thread port and mating stud end



JIS B 2351 stud end

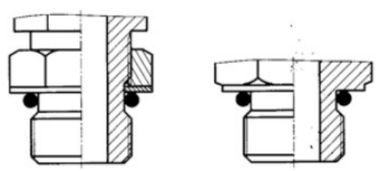


JIS B 2351 Port

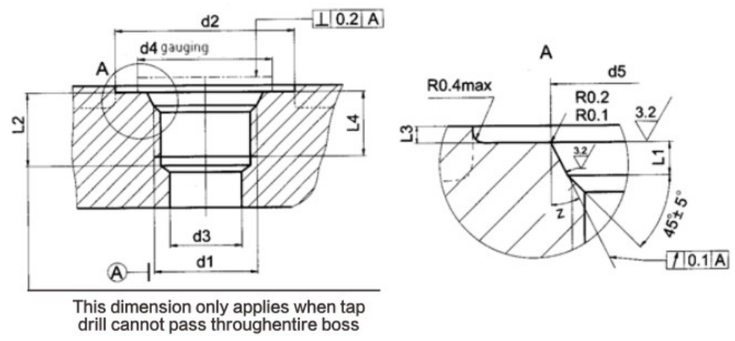
Port Dimensions mm

Thread d1	d2 ±0.3	d5 +0.1 O	L1 +0.4 O	L2 min.	L3 max.	L4 min.	O-RING
G1/8×28	18	11.6	2	15	1	10	7.8×1.9
G1/4×19	24	15.6	2.5	18	1.5	12	10.8×2.4
G3/8×19	28	18.6	2.5	18	2	12	13.8×2.4
G1/2×14	34	22.6	2.5	24	2.5	16	17.8×2.4
G3/4×14	45	29.8	3.5	25	2.5	17	22.1×3.5
G1×11	51	35.8	3.5	30	2.5	21	28.7×3.5
G1.1/4×11	62	44.8	3.5	30	2.5	21.4	37.7×3.5
G1.1/2×11	68	50.8	3.5	30	2.5	21.4	43.7×3.5

◎ 6 ISO 11926-1 SAE thread port and mating stud end



ISO 11926-2、ISO 11926-3 SAE thread stud end



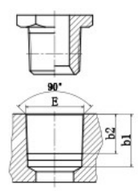
This dimension only applies when tap drill cannot pass throughentire boss

ISO 11926-1 SAE thread port

Port Dimensions mm

Thread d1	d2 min.	d3 ref	d4 min.	d5 ±0.05	L1 +0.4 O	L2 min.	L3 max.	L4 min.	Z° ±1°	O-RING
5/16"×24	17	2.5	11	9.15	1.9	12	1.6	10	12	6.07×1.63
3/8"×24	19	3.5	13	10.75	2.4	12	1.6	10	12	7.65×1.63
7/16"×20	21	4.5	15	12.45	2.4	14	1.6	11.5	12	8.92×1.83
1/2"×20	23	6	16	14.05	2.5	14	1.6	11.5	12	10.52×1.83
9/16"×18	25	7.5	18	15.70	2.5	15.5	2.4	12.7	15	11.98×1.98
3/4"×16	30	10	22	20.65	2.5	17.5	2.4	14.3	15	16.36×2.21
7/8"×14	34	12.5	26	24	3.3	20	2.4	16.7	15	19.18×2.46
1.1/16"×12	41	16	32	29.2	3.3	23	2.4	19	15	23.47×2.95
1.3/16"×12	45	18	35	32.4	3.3	23	2.4	19	15	26.62×2.95
1.5/16"×12	49	21	38	35.55	3.3	23	3.2	19	15	29.74×2.95
1.5/8"×12	58	27	48	43.55	3.3	23	3.2	19	15	37.46×3.00
1.7/8"×12	65	33	54	49.9	3.3	23	3.2	19	15	43.69×3.00
2.1/2"×12	88	45	70	65.75	3.3	23	3.2	19	15	59.36×3.00

◎ 7 Taper Thread Port

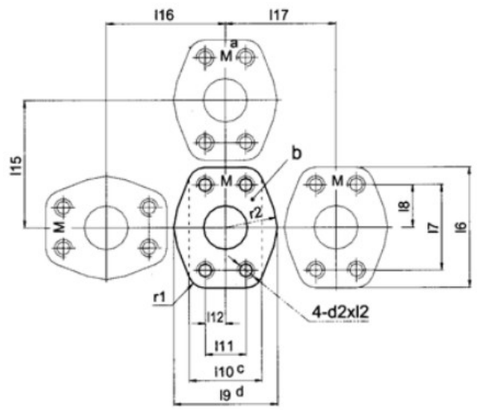


Taper Thread Port

Port Dimensions mm

Thread E		b1 min.	b2 min.
BSPT Thread	R1/8×28	9.5	7.5
	R1/4×19	13.5	11
	R3/8×19	14	11.5
	R1/2×14	17.5	15
	R3/4×14	19	16.5
	R1×11	22.5	19.5
	R1.1/4×11	24.8	21.5
	R1.1/2×11	24.8	21.5
	R2×11	29.5	26
NPT Thread	Z1/8×27	10	7.8
	Z1/4×18	14	11.8
	Z3/8×18	14	11.8
	Z1/2×14	18	15.5
	Z3/4×14	18.5	16
	Z1×11.5	22.5	19.5
	Z1.1/4×11.5	24	20.5
	Z1.1/2×11.5	24	20.5
	Z2×11.5	25	21.5

◎ 8 ISO 6162 Flange Port



a Metric Thread Port Mark.
b Port Roughness Ra3.2.
c Flange Washer Min. Width.
d Recommended Flange Washer Width.

ISO 6162–1 、ISO 6162–2 Flange Port

ISO 6162–1 Flange Port Dimensions (3.5Mpa – 35MPa)

Flange Size		d2	l2 min.	l6		l7 ± 0.25	l8 ± 0.25	l9 ± 0.8	l10 min.	l11 ± 0.25	l12 ± 0.25	l15 min.	l16 min.	l17 min.	r1 ± 0.4	r2 ± 0.8
				max.	min.											
–08	1/2"	M8	14	54.9	53.1	38.1	19.05	46	33	17.5	8.75	56	52	49	8	23
–12	3/4"	M10	18	65.8	64.3	47.6	23.8	52	41	22.3	11.15	68	61	55	9	26
–16	1"	M10	18	70.6	69.1	52.4	26.2	59	48	26.2	13.1	72	67	61	9	29
–20	1.1/4"	M10	22	80.3	78.5	58.7	29.35	73	54	30.2	15.1	82	78	75	10	37
–24	1.1/2"	M12	22	94.5	93.0	69.9	34.95	83	64	35.7	17.85	96	90	85	12	41
–32	2"	M12	22	103.1	100.1	77.8	38.9	97	76	42.9	21.45	104	102	99	12	49

ISO 6162–2 Flange Port Dimensions (35Mpa – 40MPa)

Flange Size		d2	l2 min.	l6		l7 ± 0.25	l8 ± 0.25	l9 ± 0.8	l10 min.	l11 ± 0.25	l12 ± 0.25	l15 min.	l16 min.	l17 min.	r1 ± 0.4	r2 ± 0.8
				max.	min.											
–08	1/2"	M8	16	57.2	55.6	40.5	20.25	48	38	18.2	9.1	59	56	53	8	24
–12	3/4"	M10	18	72.1	70.6	50.8	25.4	60	48	23.8	11.9	75	70	66	10	30
–16	1"	M12	23	81.8	80.3	57.2	28.6	70	54	27.8	13.9	84	80	75	12	35
–20	1.1/4"	M12	20	96.0	94.5	66.6	33.3	78	60	31.8	15.9	99	90	83	14	39
–24	1.1/2"	M16	27	114.3	111.3	79.3	39.65	95	70	36.5	18.25	116	108	101	17	48
–32	2"	M20	35	134.9	131.8	96.8	48.4	114	86	44.5	22.25	137	128	120	18	57

Fittings And Fittings Assembly Instructions

O–ring Face Seal Fittings

◎ O–ring Face Seal Fitting Instructions

◆The fitting has two types. The first type consists of a body, an O–ring, a nut and the weld tube. The weld tube isbrazed with the system steel tube, see Fig.1. The second type consists of a body, an O–ring, a nut and a sleeve. As shown in Fig.2, the tube is flanged to 90° . When used as Fig.1, the quality of weld is very imporant.

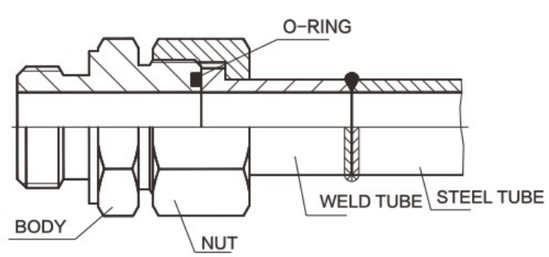


Fig.1

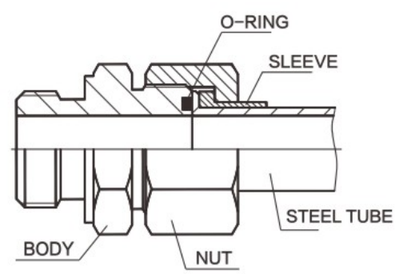


Fig.2

◆O–ring face seal fittings are suit for high pressure system. If the hardness of O–ring is N90, the sealing will better, and be good for preveting leakage.
◆The O–ring face seal fitting has two connected thread(see P6–22) and ORFS thread (see P254–281).
◆As shown in Fig.3, Fig.4 and Fig. 5, the O–ring seal groove has three types. The advantage of type Gig.3. It is very convenience for installation, when put the groove adown O–ring could be held in the groove and not drop; The O–ring could not enter the hydraulic system when the pressure is negative. The type Fig.4 has onlt the later adavantage of the type Fig.3. The type Fig.5 has no above adavantage.

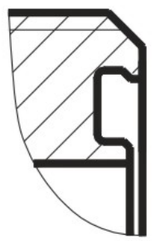


Fig.3

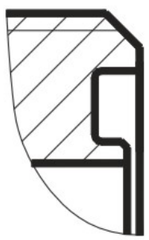


Fig.4

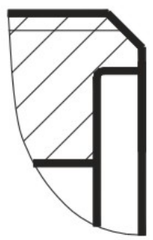


Fig.5

◆For metric thread O–ring groove JB standard is type Fig.5, but we suggest that the type Fig. 3 should be chosen and make a annotation when order. If no annotation we produce as type Fig. 5 general. For ORFS O–ring groove, we produce as type Fig. 3 only.

O-ring Face Seal Fittings Assembly Instructions

◎ **Assembly**

◆1 As shown in Fig.l,the tube end is cut squarely(within +/-1°)before assemblied,deburr the O.D.and I.D. of the tube,remove all oil and oxide,weld after put the nut .As shown in Fig. 2,the tube is flanged t0 90° with special equipment after cut,diameter D should fall between diameter Dl and D2,see Fig. 6.

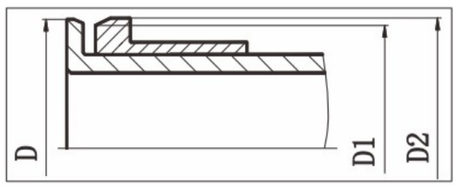


Fig.6

◆2 The fitting body should be installed O-ring firstly.

◆3 As shown in Fig.1 or Fig.2,place tube assembly against the fitting body so that the flat face of the weld tube (or flanged steel tube) comes in full contact with the O-ring. Tighten the nut onto the fitting body by hand, then tighten it to the recommended torque with a torque wrench.If torque wrenches are not available, tighten il/4 to 1/2 turn with general wrench.

◎ **Reassembly**

◆Because the sealing surf aces are flat and perpendicular to the installtion force,the O-ring may be distorted during assembly .The O-ring should be in spected at each disassembly and replaced when necessary.

◎ **Leakage reason**

◆ 1 The O-ring is installed in the face seal groove improperly.
◆ 2 The O-ring is damaged.
◆ 3 The sealing surface,the weld tube or the flange are not flat, or have another fault affecting sealing.
◆ 4 The flange is too large or too small that the O-ring can't be compressed.
◆ 5 The O-ring material is not suit for working temperature.
◆ 6 The O-ring hardness is not enough.
◆ 7 The connected nut is loosen.

Bite Type Tube Fittings

◎ **Type Tube Fittings Instructions**

Bite type fitting consists of three parts: body, cutting ring and nut. When tightening nut, cutting ring is driven forward on the tube then bites the tube with the edge of cutting ring, this is how sealing is achieved and results in internal ridge inside the tube. See Fig-7.
The tube connection side of fitting is manufactured in accordance with standard: DIN 3861.
In general, body and nuts' surface is plated zinc. Bite type fitting can be used in system with Max 63MPa. The connection tube O.D. is Max. 42mm.

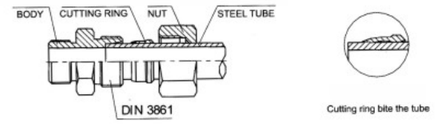


Fig.7

◎ **Bite Type Tube Fittings Assembly Instructions**

◆ Assembly

1 Cut the tube at right angle and de-burr inside and outside of tube end. Minimum straight length of tube from the starting point of tube bend to the tube end may be 3 times height of the nut.

2 Set a nut and cutting ring on the tube. Make sure the cutting ring and the nut are facing the fitting.

3 Lubricate the pre-assembly fitting body threads and cutting ring. Insert tube end into fitting body until it is firmly seated on bottom (fitting shoulder) and hand-tighten the nut.

4 Tighten nut until ferrule grips tube which is felt by a noticeable increase in torque (in crease in force).

5 Tighten nut l/2 0f a turn after increase in force.

6 Disassembly the pre-assembly fitting body .Check penetration of cutting edge.A visible ring of material should fill the space in front of the profile ring end face. Profile ring may turn on tube,but should not be capable of axial displacement.

7 Lubricate the fitting body to be subsequently installed.Tighten nut until a noticeable increase in force is required.Tighten nut by l/2 0f a turn beyond this point for final assembly.

◆ Reassembly

Fitting can be used many times. To ensure this, parts must be clean and free of defects.

1 Insert the tube into fitting body until cutting ring seats firmly in the fitting and hand-tighten the nut.

2 Tighten the nut with a wrench by holding the fitting body with a backup wrench until a sharp rise in torque is felt. Further tighten the nut l/4 t0 1/2 turn.

◆ Checking up the bite condition

All bite type fitting must be disassembled prior to service to check up if small ridge inside the tube is completely formed around front edge of cutting ring. Otherwise tighten slightly more to have it. Cutting ring may rotate on the tube that doesn't mean wrong installation. The cutting ring shall be refitted once the nut is retightened.

◆ Leakage reason

1 When the tube is not fully bottomed
2 When the nut is not tightened enough
3 When the tube is of scratches or oval
4 When the tube is extremely hard

Flared Tube Fittings

◎ Flared Tube Fittings Instructions

As shown in Fig. 8,the fitting consists of three pieces:the body,sleeve and nut.The tube end is flared at a 37° angle and held between the fitting nose and the sleeve with the nut,providing a metal to metal seal between the fitting nose and the tube flare. The advantage of sleeve is reducing vibration and fatigue of tube, the steel tube will not turn when tighten the nut.

The flared tube fitting has two connected thread:metric thread (see PCI−C20) and JIC thread (see PJI−J62)

It is easy to assemble without weld.It is especially suited for low and medium pressure systems

As metal to metal seal,it allows wide operting temperature range .

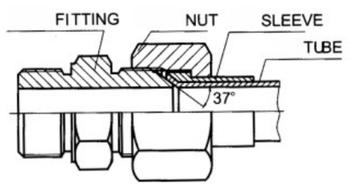


Fig.8

◎ Flared Tube Fittings Assembly Instructions

◆ Assembly

1 Cut tube reasonably square (within ± 1°), deburr the I.D. and O.D. of the tube ,remove the dirt.Set a nut and sleeve on the tube, the tube is flared with special equipment, diameter D should fall between diameter Dl and D2, see Fig.9.

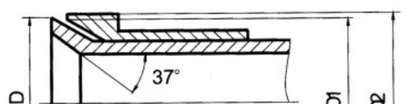


Fig. 9

2 Over half of the leakage with flared fittings is caused by impoper flaring or installation.When assembled ,the axis of the tube,the tube flare and the fitting nose should be concentric.

3 Screw the nut onto the fitting body by hand and tighten it to the recommended torque with a torque wrench.If torque wrenches are not available, tighten l to 2 turns with general wrench.In general ,the small fitting is tighten about l turn and the large fitting is tighten about 2 turns.

◆ Reassembly

Fitting can be used many times. To ensure this, parts must be clean and free of defects. no tube cracked.

◆ Leakage reason

1 When assembled, the axis of the tube,the tube flare and the fitting nose are not concentric, force the tube to the station.

2 The tighten force is too large or too small.

3 The tube flare is cracked.

4 The fitting body or the tube flare is collapsed.

5 The connected nut is loosen.

6 The sealing suface is damaged for longer torque or reassembly time after time.

7 The tube flare is too large or too small,so the seal between the fitting nose and the tube flare is not effective.

Taper Thread Fittings

◎ Taper Thread Fittings Intructions

◆ The connected thread has three types:NPT, NPTF and BSPT.

◆ NPT、BSPT threads should be assembled with sealant.NPTF is metal to metal seal, but use sealant also. Sealants are available in various forms such as teflon tape ,paste and anaerobic glue etc..

◆ Teflon tape,paste etc.,if applied improperly,they will pollute the oil of the hydraulic system, even jam the system.

◆ The seal of the small thread is better than the large.In general the seal of less than 3/4" are good.

◆ The connect will compact when the taper thread for straight fitting, if for eblow or tee or cross fittings,the assemble angle is difficult to contron, so suggest that the adjustable stud end fittings should be used,for example IS0 6149, IS0 11926 etc..

◎ Taper Thread Fittings Assembly Instructions

◆ Assembly

1 Inspect port and connectors to ensure that threads on both are free of dirt,burrs and excessive nicks.

2 Apply sealant to male pipe threads.With any sealant,the first and second threads should be uncovered to avoid system contamination.If Teflon tape is used it should be wrapped 1.1/2 to 2 turns in clockwise direction when viewed from the pipe thread end.

3 First tighten the fitting with hand,then tighten with a wrench 1.1/2 to 3 turns ..In general ,the small fiiting is tighten about 2.5 turns and the large fitting is tighten about 2 turns.

◆ Reassembly

The taper thread fitting can be reassembled.When reassembled,check if sealant has worn thin.

◆ Leakage reason

1 There is no sealant used or sealant has worn thin.

2 Threads are galled.

3 Fitting screws In too far into the port

4 Threads are severely nicked.

5 Threads are loosen.

Routing of Tube Lines

◎ **Routing of tube lines should pay attention to the following**

◆ The length of tube should be short and tube O.D.should be suitable, the energy will loss if the velocity is too large.

◆ The tube connection should avoid strain, it is good that have a bending part. See Fig.l.

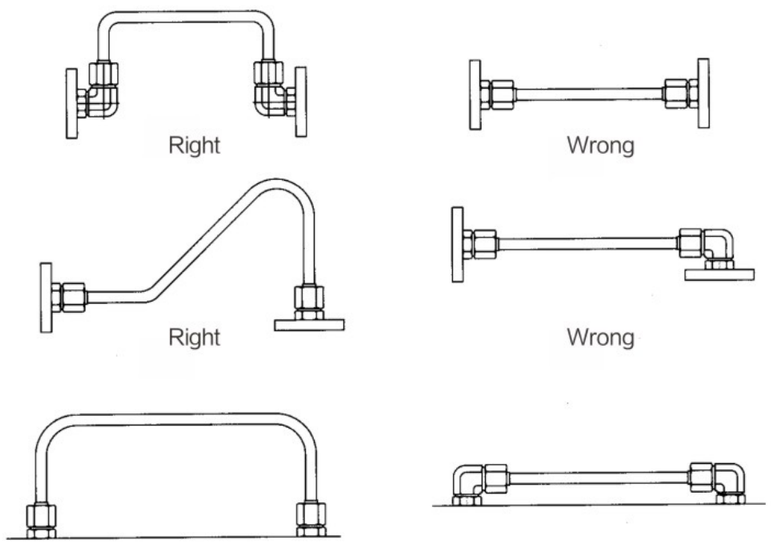


Fig. 1

◆ The tube bending radius is large as possible. The min. bending radius is about 2.5 times of the O.D.. The tube end should be straight and the spacing is above 2 times of the tube nut. See Fig.2:

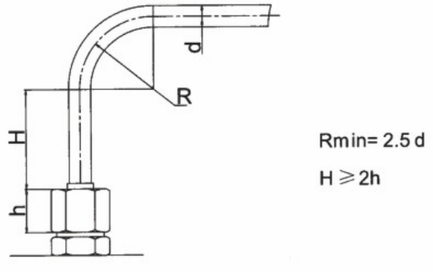


Fig. 2

◆ Fatigue failure due to mechanical vibration accounts for the majority of tube line failures. When the tube line is longer, we can use tube clamps to support the system. Proper clamping of the tube can reduce system noise. Recommended tube clamp spacing as shown in Fig. 3 and table I:

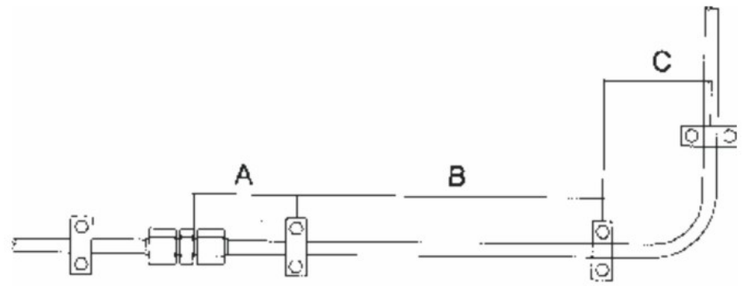


Fig. 3

TUBE O.D. (mm)	CLAMP SPACING A (mm)	CLAMP SPACING A (mm)	CLAMP SPACING A (mm)
6–12.7	50	900	100
15.9–22.2	100	1200	200
25.4	100	1500	200
31.8–38.1	150	2100	300
48.3	150	2700	300

Table 1

◆ Get around obstructions without using excessive amount of 90° bends. Pressure drop due to one 90° bend is greater than that due to two 45° bends. See Fig.4:

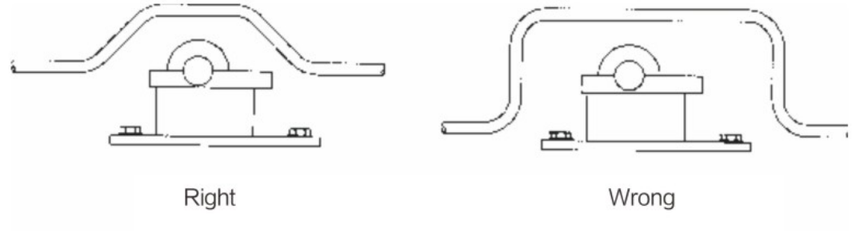


Fig. 4

◆ Keep tube lines away from components that require regular maintenance

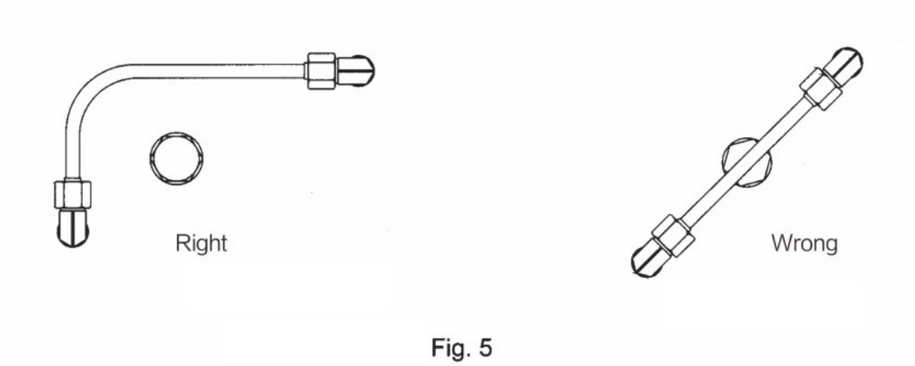


Fig. 5

◆ Have a neat appearance and allow for easy trouble-shooting,maintenance and repair.See Fig.6

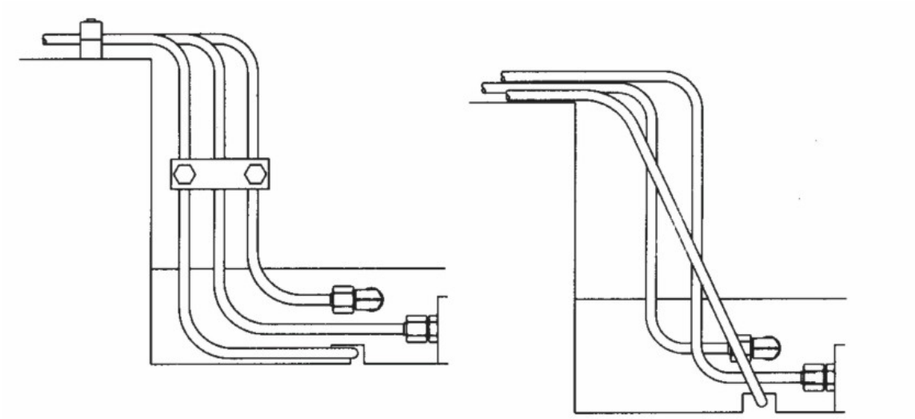


Fig. 6

Recommended Thread Torque

Metric Thread

Thread	NUT TORQUE N.M
M12 × 1.5	10–20
M14 × 1.5	20–35
M16 × 1.5	25–40
M18 × 1.5	30–45
M20 × 1.5	35–50
M22 × 1.5	40–70
M24 × 1.5	40–70
M26 × 1.5	60–100
M30 × 2.0	80–120
M36 × 2.0	100–150
M42 × 2.0	150–220
M45 × 2.0	180–250
M52 × 2.0	200–300

BSP Thread

Thread	NUT TORQUE N.M
G1/8" × 28	11–12
G1/4" × 19	25–28
G3/8" × 19	41–48
G1/2" × 14	72–82
G5/8" × 14	96–110
G3/4" × 14	124–137
G1" × 11	151–165
G1.1/4" × 11	192–206
G1.1/2" × 11	261–275
G2" × 11	343–357

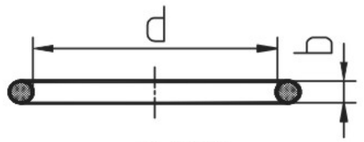
JIC Thread

Thread	NUT TORQUE N.M
7/16" × 20	15–16
1/2" × 20	19–21
9/16" × 18	24–28
3/4" × 16	49–53
7/8" × 14	77–85
1.1/16" × 12	107–119
1.3/16" × 12	127–140
1.5/16" × 12	147–154
1.5/8" × 12	172–181
1.7/8" × 12	215–226
2.1/2" × 12	332–350

ORFS Thread

Thread	NUT TORQUE N.M
9/16" × 18	14–16
11/16" × 16	24–27
13/16" × 16	43–47
1" × 14	60–68
1.3/16" × 12	90–95
1.7/16" × 12	125–135
1.11/16" × 12	170–190
2" × 12	200–225

Seal



O-RING

For DIN 24° Cone O-ring L.T.

PART NO.	Thread	d	b	TUBE O.D.
O04.5 × 1.5	M12 × 1.5	4.5	1.5	6
O06.5 × 1.5	M14 × 1.5	6.5	1.5	8
O08.0 × 1.5	M16 × 1.5	8.0	1.5	10
O10.0 × 1.5	M18 × 1.5	10.0	1.5	12
O12.0 × 2.0	M22 × 1.5	12.0	2.0	15
O15.0 × 2.0	M26 × 1.5	15.0	2.0	18
O15.0 × 2.0	M27 × 1.5	15.0	2.0	18
O20.0 × 2.0	M30 × 2	20.0	2.0	22
O26.0 × 2.0	M36 × 2	26.0	2.0	28
O32.0 × 2.5	M45 × 2	32.0	2.5	35
O38.0 × 2.5	M52 × 2	38.0	2.5	42

For ISO 6162 Flange O-ring

PART NO.	FLANGE SIZE	d	b
O210	1/2"	18.64	3.53
O214	3/4"	24.99	3.53
O219	1"	32.92	3.53
O222	1.1/4"	37.69	3.53
O225	1.1/2"	47.22	3.53
O228	2"	56.74	3.53
O232	2.1/4	69.44	3.53

For DIN 24° Cone O-ring H.T.

PART NO.	Thread	d	b	TUBE O.D.
O04.5 × 1.5	M14 × 1.5	4.5	1.5	6
O06.5 × 1.5	M16 × 1.5	6.5	1.5	8
O08.0 × 1.5	M18 × 1.5	8.0	1.5	10
O10.0 × 1.5	M20 × 1.5	10.0	1.5	12
O11.0 × 2.0	M22 × 1.5	11.0	2.0	14
O13.0 × 2.0	M24 × 1.5	13.0	2.0	16
O16.3 × 2.4	M30 × 2	16.3	2.4	20
O20.3 × 2.4	M36 × 2	20.3	2.4	25
O25.3 × 2.4	M42 × 2	25.3	2.4	30
O33.3 × 2.4	M52 × 2	33.3	2.4	38

For BSP Male O-ring

PART NO.	Thread	d	b
O111	G1/4" × 19	10.77	2.62
O113	G3/8" × 19	13.94	2.62
O115	G1/2" × 14	17.12	2.62
O910	G5/8" × 14	19.18	2.46
O119	G3/4" × 14	23.47	2.62
O217	G1" × 11	29.74	3.53
O222	G1.1/4" × 11	37.69	3.53
O224	G1.1/2" × 11	44.04	3.53
O139	G2" × 11	54	3

For ORFS Male O-ring

PART NO.	Thread	d	b
O011	9/16" × 18UNF	7.65	1.78
O012	11/16" × 16UN	9.25	1.78
O014	13/16" × 16UN	12.42	1.78
O016	1" × 14UNSf	15.6	1.78
O018	1.3/16" × 12UN	18.77	1.78
O021	1.7/16" × 12UN	23.52	1.78
O025	1.11/16" × 12UN	29.87	1.78
O029	2" × 12UN	37.82	1.78

For SAE Staplelok O-ring

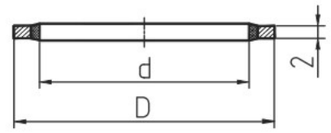
PART NO.	FITTING SIZE	d	b
O06.0 × 2.0	-04	6.0	2.0
O10.0 × 2.0	-06	10.0	2.0
O13.0 × 2.5	-08	13.0	2.5
O19.0 × 2.5	-12	19.0	2.5
O25.0 × 2.5	-16	25.0	2.5
O33.0 × 2.5	-20	33.0	2.5
O40.0 × 3.0	-24	40.0	3.0
O50.0 × 3.0	-32	50.0	3.0

For DIN 24° Cone O-ring H.T.

PART NO.	Thread	d	b
O06.1 × 1.6	M8 × 1	6.1	1.6
O08.1 × 1.6	M10 × 1	10.0	2.0
O09.3 × 2.4	M12 × 1.5	9.3	2.4
O11.3 × 2.4	M14 × 1.5	11.3	2.4
O13.3 × 2.4	M16 × 1.5	13.3	2.4
O15.3 × 2.4	M18 × 1.5	15.3	2.4
O17.3 × 2.4	M20 × 1.5	17.3	2.4
O19.3 × 2.4	M22 × 1.5	19.3	2.4
O21.3 × 3.0	M24 × 1.5	21.3	3.0
O23.5 × 3.0	M26 × 1.5	23.5	3.0
O23.5 × 3.0	M27 × 2	23.5	3.0
O26.5 × 3.0	M30 × 2	26.5	3.0
O29.5 × 3.0	M33 × 2	29.5	3.0
O38.5 × 3.0	M42 × 2	38.5	3.0
O44.5 × 3.0	M48 × 2	44.5	3.0
O56.2 × 3.0	M60 × 2	56.2	3.0

For SAE Male O-ring

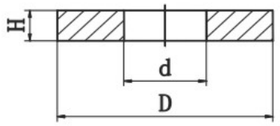
PART NO.	Thread	d	b
O904	7/16" × 20UNF	8.92	1.83
O905	1/2" × 20UNF	10.52	1.83
O906	9/16" × 18UNF	11.89	1.98
O908	3/4" × 16UNF	16.36	2.21
O910	7/8" × 14UNF	19.18	2.46
O912	1.1/16" × 12UN	23.47	2.95
O914	1.3/16" × 12UN	26.62	2.95
O916	1.5/16" × 12UN	29.74	2.95
O920	1.5/8" × 12UN	37.46	3.00
O924	1.7/8" × 12UN	43.69	3.00
O932	2.1/2" × 12UN	59.36	3.00



Bonded Seal

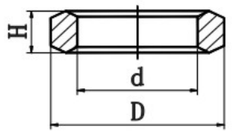
Bonded Seal

PART NO.	Thread	d	b
ZHD-10	M10、G1/8"	10.4	16
ZHD-14	M14、G1/4"	14.4	20
ZHD-16	M16	16.4	22
ZHD-18	M18、G3/8"	18.4	25
ZHD-22	M22、G1/2"	22.5	30
ZHD-24	M24	24.5	32
ZHD-27	M27、G3/4"	27.5	35
ZHD-30	M30	30.5	38
ZHD-33	M33、G1"	33.5	42
ZHD-36	M36	36.6	46
ZHD-42	M42、G1.1/4"	42.6	53
ZHD-45	M45	45.6	56
ZHD-48	M48、G1.1/2"	48.7	60
ZHD-52	M52	52.7	66
ZHD-60	M60、G2"	60.7	75



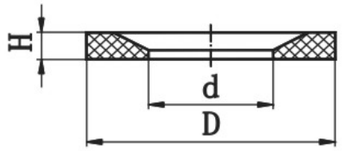
Copper Seal For Pressure Gauge

PART NO.	d	D	H
DP–B04G	6	11	2
DP–B08G	6	18	2



DKI For Pressure Gauge

PART NO.	d	D	H
DP–B04DK	6	11.3	4.5
DP–B08DK	12	18.5	5



Captive

PART NO.	Thread	d	D	H
WD–B02	G1/8" × 28	8.4	11.9	1.0
WD–B04	G1/4" × 19	11.6	16.5	1.5
WD–B06	G3/8" × 19	14.7	18.9	1.5
WD–B08	G1/2" × 14	18.5	23.9	1.5
WD–B12	G3/4" × 14	23.9	29.2	1.5
WD–B16	G1" × 11	29.7	35.7	2.0
WD–B20	G1.1/4" × 11	38.8	45.8	2.0
WD–B24	G1.1/2" × 11	44.7	50.7	2.0
WD–B02	M10 × 1	8.4	11.9	1.0
WD–M12	M12 × 1.5	9.8	14.4	1.5
WD–B04	M14 × 1.5	11.6	16.5	1.5
WD–M16	M16 × 1.5	13.8	18.9	1.5
WD–M18	M18 × 1.5	15.7	20.9	1.5
WD–M20	M20 × 1.5	17.8	22.9	1.5
WD–M22	M22 × 1.5	19.6	24.3	1.5
WD–B12	M26 × 1.5	23.9	29.2	1.5
WD–B12	M27 × 2	23.9	29.2	1.5
WD–B16	M33 × 2	29.7	35.7	1.5
WD–B20	M42 × 2	38.8	45.8	2.0
WD–B24	M48 × 2	44.7	50.7	2.0

Conversion Factor

DENOMINATION	UNIT	CONVERSION UNIT	FACTOR
LENGTH	in	mm	25.4
	mm	in	0.03937
	ft	m	0.3048
	m	ft	3.28084
AREA	in^2	cm^2	6.4516
	cm^2	in^2	0.1550
VOLUME	gal	l	4.54609
	L	gal	0.219969
	gal	l	3.78541
	l	gal	0.264172
	l	dm^3	1
MASS	lb	kg	0.453592
	kg	lb	2.204622
TORQUE	lbf.in	N.m	0.112985
	N.m	lbf.in	8.85075
PRESSURE	psi	bar	0.06895
	bar	psi	14.5038
	psi	MPa	0.006895
	MPa	psi	145.038
	MPa	bar	10
	bar	MPa	0.1
	Pa	bar	10^{-5}
	bar	Pa	10^{5}
VELOCITY	ft/s	m/s	0.3048
	m/s	ft/s	3.28084
FLOW RATE	gal/min	l/min	4.54609
	l/min	gal/min	0.219969
	gal/min	l/min	3.78541
	l/min	gal/min	0.264172
TEMPERATURE	° F	° C	5/9* (° F–32)
	° C	° F	° C*9/5+32