

HYDRAULIC CRIMPING FITTINGS HYDRAULIC CRIMPING FERRULES



 **統屋機械股份有限公司**
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CRIMP FERRULES:FR1A

For SAE 100 R1A , 1 WIRE SKIVE HOSE

Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash		mm	mm	mm	mm
1/4	6.4	04	FR1A-04	30.0	2.1	11.0	20.5
5/16	7.9	05	FR1A-05	30.0	2.1	12.5	20.8
3/8	9.5	06	FR1A-06	32.0	2.1	14.3	23.3
1/2	12.7	08	FR1A-08	35.0	2.5	18.5	27.0
5/8	15.8	10	FR1A-10	38.0	2.5	21.3	30.0
3/4	19.0	12	FR1A-12	44.0	3.0	24.5	34.0
1	25.4	16	FR1A-16	52.0	3.7	30.8	42.6
1-1/4	31.8	20	FR1A-20	57.0	3.7	37.8	50.8
1-1/2	38.1	24	FR1A-24	70.0	3.7	44.0	58.0
2	50.8	32	FR1A-32	75.0	3.7	57.3	72.0

CRIMP FERRULES:FR2A

For SAE 100 R2A , 2 WIRE SKIVE HOSE

Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash		mm	mm	mm	mm
1/4	6.4	04	FR2A-04	30.0	2.1	11.0	22.2
5/16	7.9	05	FR2A-05	30.0	2.1	12.5	23.0
3/8	9.5	06	FR2A-06	32.0	2.1	14.3	25.0
1/2	12.7	08	FR2A-08	35.0	2.5	18.5	28.5
5/8	15.8	10	FR2A-10	38.0	2.5	21.3	32.0
3/4	19.0	12	FR2A-12	44.0	3.0	24.5	35.5
1	25.4	16	FR2A-16	52.0	3.7	30.8	45.0
1-1/4	31.8	20	FR2A-20	57.0	3.7	37.8	55.0
1-1/2	38.1	24	FR2A-24	70.0	3.7	44.0	62.5
2	50.8	32	FR2A-32	75.0	3.7	57.3	75.0

CRIMP FERRULES:FR1AT

For SAE 100 R1AT , 1 WIRE NO-SKIVE HOSE

Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash		mm	mm	mm	mm
1/4	6.4	04	FR1AT-04	30.0	2.1	11.0	20.5
5/16	7.9	05	FR1AT-05	30.0	2.1	12.5	20.8
3/8	9.5	06	FR1AT-06	32.0	2.1	14.3	23.3
1/2	12.7	08	FR1AT-08	35.0	2.5	18.5	27.0
5/8	15.8	10	FR1AT-10	38.0	2.5	21.3	30.0
3/4	19.0	12	FR1AT-12	44.0	3.0	24.5	34.0
1	25.4	16	FR1AT-16	52.0	3.7	30.8	42.6
1-1/4	31.8	20	FR1AT-20	57.0	3.7	37.8	50.8
1-1/2	38.1	24	FR1AT-24	70.0	3.7	44.0	58.0
2	50.8	32	FR1AT-32	75.0	3.7	57.3	72.0

CRIMP FERRULES:FR2AT

For SAE 100 R2AT , 2 WIRE NO-SKIVE HOSE

Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash		mm	mm	mm	mm
1/4	6.4	04	FR2AT-04	30.0	2.1	11.0	22.2
5/16	7.9	05	FR2AT-05	30.0	2.1	12.5	23.0
3/8	9.5	06	FR2AT-06	32.0	2.1	14.3	25.0
1/2	12.7	08	FR2AT-08	35.0	2.5	18.5	28.5
5/8	15.8	10	FR2AT-10	38.0	2.5	21.3	32.0
3/4	19.0	12	FR2AT-12	44.0	3.0	24.5	35.5
1	25.4	16	FR2AT-16	52.0	3.7	30.8	45.0
1-1/4	31.8	20	FR2AT-20	57.0	3.7	37.8	55.0
1-1/2	38.1	24	FR2AT-24	70.0	3.7	44.0	62.5
2	50.8	32	FR2AT-32	75.0	3.7	57.3	75.0

CRIMP FERRULES:FR2AS

For SAE 100 R1AT & R2AT , 1 & 2 WIRE NO-SKIVE HOSE

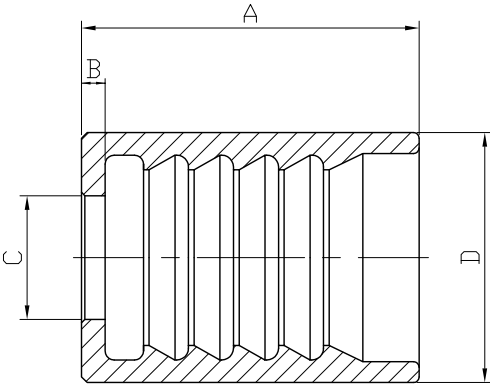
Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash		mm	mm	mm	mm
1/4	6.4	04	FR2AS-04	30.0	2.5	10.8	23.0
5/16	7.9	05	FR2AS-05	30.5	2.5	12.8	24.0
3/8	9.5	06	FR2AS-06	31.5	2.5	14.7	26.0
1/2	12.7	08	FR2AS-08	33.5	2.5	18.5	29.0
5/8	15.8	10	FR2AS-10	36.0	2.5	21.5	33.0
3/4	19.0	12	FR2AS-12	40.0	3.0	24.6	37.0
1	25.4	16	FR2AS-16	50.0	3.6	31.0	46.0
1-1/4	31.8	20	FR2AS-20	57.0	3.6	39.5	59.0
1-1/2	38.1	24	FR2AS-24	66.0	3.6	44.9	67.0
2	50.8	32	FR2AS-32	71.0	3.6	57.8	80.0

CRIMP FERRULES:FR2AE

For SAE 100 R1AT & R2AT , 1 & 2 WIRE NO-SKIVE HOSE

Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash		mm	mm	mm	mm
1/4	6.4	04	FR2AE-04	30.0	2.5	10.8	23.0
5/16	7.9	05	FR2AE-05	30.5	2.5	12.8	24.0
3/8	9.5	06	FR2AE-06	31.5	2.5	14.7	26.0
1/2	12.7	08	FR2AE-08	33.5	2.5	18.5	29.0
5/8	15.8	10	FR2AE-10	36.0	2.5	21.5	33.0
3/4	19.0	12	FR2AE-12	40.0	3.0	24.6	37.0
1	25.4	16	FR2AE-16	50.0	3.6	31.0	46.0
1-1/4	31.8	20	FR2AE-20	57.0	3.6	39.5	59.0
1-1/2	38.1	24	FR2AE-24	66.0	3.6	44.9	67.0
2	50.8	32	FR2AE-32	71.0	3.6	57.8	80.0

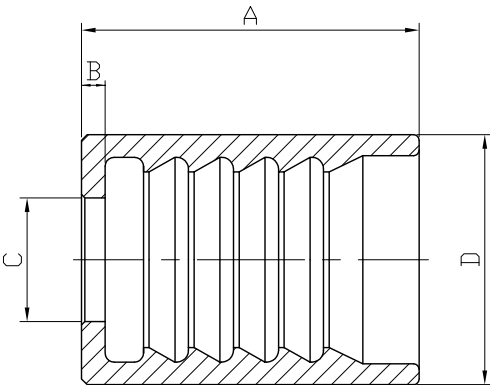




CRIMP FERRULES:FR4SP

For SAE 100 R9A / R9R, SAE 100 R12 / 06~16

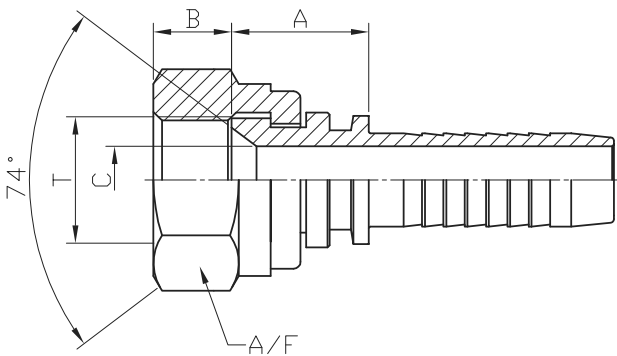
Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash		mm	mm	mm	mm
3/8	9.5	06	FR4SP-06	39.0	2.1	14.3	25.5
1/2	12.7	08	FR4SP-08	41.0	2.5	18.5	29.0
5/8	15.8	10	FR4SP-10	43.0	2.5	21.3	32.6
3/4	19.0	12	FR4SP-12	51.0	3.0	24.5	37.0
1	25.4	16	FR4SP-16	61.5	3.7	30.8	46.5
1-1/4	31.8	20	FR4SP-20	67.5	3.7	37.8	56.5
1-1/2	38.1	24	FR4SP-24	75.0	3.7	44.0	65.0
2	50.8	32	FR4SP-32	79.0	3.7	57.3	79.0



CRIMP FERRULES:FR4SH

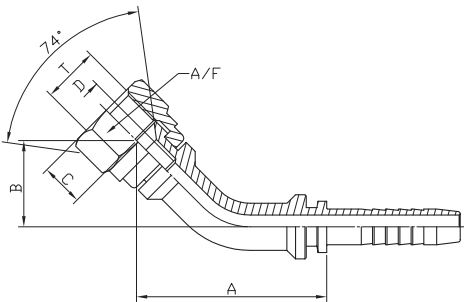
For SAE R12 / 20~32 Hose

Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash		mm	mm	mm	mm
1-1/4	31.8	20	FR4SH-20	67.5	3.7	37.8	53.0
1-1/2	38.1	24	FR4SH-24	75.0	3.7	44.0	61.0
2	50.8	32	FR4SH-32	79.0	3.7	57.3	77.0



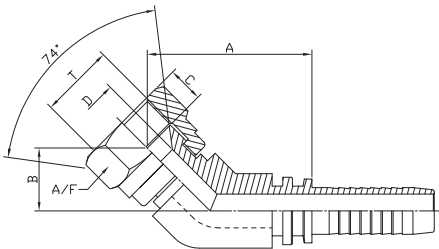
JIC SWIVEL FEMALE 74° CONE SEAT:NJ

Thread T	Dash No.	Hose Bore			Part No.	A/F	Dim A	Dim B	Dim C
		in	mm	dash		mm	mm	mm	mm
7/16—20	07	1/4	6.4	04	NJ-07-04	15.0	15.0	9.0	4.0
1/2—20	08	1/4	6.4	04	NJ-08-04	17.0	16.0	9.5	4.0
9/16—18	09	1/4	6.4	04	NJ-09-04	19.0	16.0	10.0	4.0
1/2—20	08	3/8	9.5	06	NJ-08-06	17.0	16.0	9.5	7.0
9/16—18	09	3/8	9.5	06	NJ-09-06	19.0	17.0	10.0	7.0
3/4—16	12	3/8	9.5	06	NJ-12-06	24.0	20.0	10.5	7.0
7/8—14	14	3/8	9.5	06	NJ-14-06	27.0	20.0	13.0	7.0
9/16—18	09	1/2	12.7	08	NJ-09-08	19.0	18.0	10.0	9.5
3/4—16	12	1/2	12.7	08	NJ-12-08	24.0	20.0	10.5	9.5
7/8—14	14	1/2	12.7	08	NJ-14-08	27.0	21.0	13.0	9.5
1-1/16—12	17	1/2	12.7	08	NJ-17-08	32.0	21.0	15.0	9.5
3/4—16	12	5/8	15.9	10	NJ-12-10	24.0	20.0	10.5	12.5
7/8—14	14	5/8	15.9	10	NJ-14-10	27.0	22.0	13.0	12.5
1-1/16—12	17	5/8	15.9	10	NJ-17-10	32.0	22.0	15.0	12.5
1-3/16—12	19	5/8	15.9	10	NJ-19-10	36.0	23.0	14.8	12.5
7/8—14	14	3/4	19.1	12	NJ-14-12	27.0	22.0	13.0	15.0
1-1/16—12	17	3/4	19.1	12	NJ-17-12	32.0	23.0	15.0	15.0
1-3/16—12	19	3/4	19.1	12	NJ-19-12	36.0	24.0	14.8	15.0
1-5/16—12	21	3/4	19.1	12	NJ-21-12	41.0	24.0	15.5	15.0
1-1/16—12	17	1	25.4	16	NJ-17-16	32.0	23.0	15.0	19.8
1-3/16—12	19	1	25.4	16	NJ-19-16	36.0	24.0	14.8	19.8
1-5/16—12	21	1	25.4	16	NJ-21-16	41.0	24.0	15.5	19.8
1-5/8—12	26	1	25.4	16	NJ-26-16	50.0	26.0	16.2	19.8
1-5/8—12	26	1-1/4	31.8	20	NJ-26-20	50.0	27.0	16.2	26.0
1-7/8—12	30	1-1/2	38.1	24	NJ-30-24	55.0	27.0	18.8	32.0
2-1/2—12	40	2	50.8	32	NJ-40-32	75.0	32.0	24.0	42.0



JIC SWIVEL FEMALE 74° CONE SEAT 45° SWEPT ELBOW: NJ4

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
7/16—20	07	1/4	6.4	04	NJ4-07-04	15.0	27.0	33.0	9.0	4.0
1/2—20	08	1/4	6.4	04	NJ4-08-04	17.0	27.0	33.0	9.0	4.0
9/16—18	09	1/4	6.4	04	NJ4-09-04	19.0	28.0	33.0	9.0	4.0
1/2—20	08	3/8	9.5	06	NJ4-08-06	17.0	30.0	34.0	10.0	7.0
9/16—18	09	3/8	9.5	06	NJ4-09-06	19.0	31.5	35.0	10.0	7.0
3/4—16	12	3/8	9.5	06	NJ4-12-06	24.0	31.5	37.0	10.0	7.0
7/8—14	14	3/8	9.5	06	NJ4-14-06	27.0	34.0	40.0	10.0	7.0
3/4—16	12	1/2	12.7	08	NJ4-12-08	24.0	36.0	43.0	10.5	9.5
7/8—14	14	1/2	12.7	08	NJ4-14-08	27.0	36.0	43.0	10.5	9.5
1-1/16—12	17	1/2	12.7	08	NJ4-17-08	32.0	39.0	43.0	10.5	9.5
7/8—14	14	5/8	15.9	10	NJ4-14-10	27.0	44.0	46.0	13.0	12.5
1-1/16—12	17	5/8	15.9	10	NJ4-17-10	32.0	44.0	50.0	13.0	12.5
1-3/16—12	19	5/8	15.9	10	NJ4-19-10	36.0	44.0	50.0	13.0	12.5
1-1/16—12	17	3/4	19.1	12	NJ4-17-12	32.0	48.0	51.0	15.0	15.0
1-3/16—12	19	3/4	19.1	12	NJ4-19-12	36.0	48.0	52.0	15.0	15.0
1-5/16—12	21	3/4	19.1	12	NJ4-21-12	41.0	52.0	58.0	15.0	15.0
1-3/16—12	19	1	25.4	16	NJ4-19-16	36.0	55.0	55.0	15.5	19.8
1-5/16—12	21	1	25.4	16	NJ4-21-16	41.0	60.0	58.0	15.5	19.8
1-5/8—12	26	1	25.4	16	NJ4-26-16	50.0	65.0	70.0	15.5	19.8
1-5/8—12	26	1-1/4	31.8	20	NJ4-26-20	50.0	65.0	72.0	16.2	26.0
1-7/8—12	30	1-1/2	38.1	24	NJ4-30-24	55.0	80.0	80.0	18.8	32.0
2-1/2—12	40	2	50.8	32	NJ4-40-32	75.0	100.0	100.0	24.0	42.0



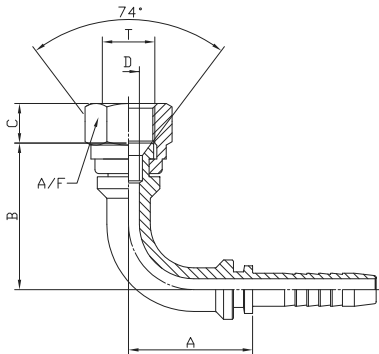
JIC SWIVEL FEMALE 74° CONE SEAT 45° COMPACT ELBOW: NJC4

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
7/8—14	14	1/2	12.7	08	NJC4-14-08	27.0	30.0	20.0	10.5	9.5



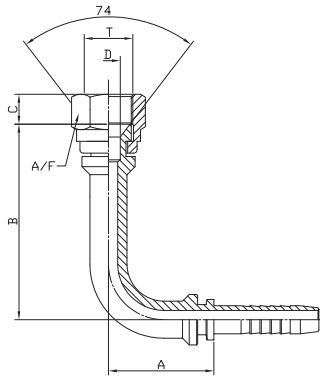
JIC SWIVEL FEMALE 74° CONE SEAT 90° SWEPT ELBOW: NJ9

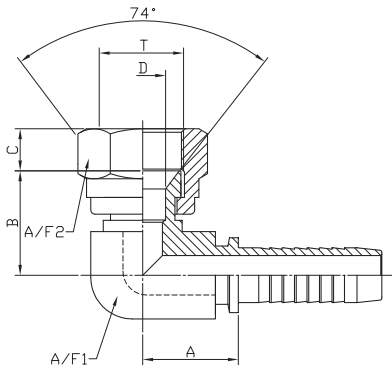
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
7/16—20	07	1/4	6.4	04	NJ9-07-04	15.0	27.0	33.0	9.0	4.0
1/2—20	08	1/4	6.4	04	NJ9-08-04	17.0	27.0	33.0	9.0	4.0
9/16—18	09	1/4	6.4	04	NJ9-09-04	19.0	28.0	33.0	9.0	4.0
1/2—20	08	3/8	9.5	06	NJ9-08-06	17.0	30.0	34.0	10.0	7.0
9/16—18	09	3/8	9.5	06	NJ9-09-06	19.0	31.5	35.0	10.0	7.0
3/4—16	12	3/8	9.5	06	NJ9-12-06	24.0	31.5	37.0	10.0	7.0
7/8—14	14	3/8	9.5	06	NJ9-14-06	27.0	34.0	40.0	10.0	7.0
3/4—16	12	1/2	12.7	08	NJ9-12-08	24.0	36.0	43.0	10.5	9.5
7/8—14	14	1/2	12.7	08	NJ9-14-08	27.0	36.0	43.0	10.5	9.5
1-1/16—12	17	1/2	12.7	08	NJ9-17-08	32.0	39.0	43.0	10.5	9.5
7/8—14	14	5/8	15.9	10	NJ9-14-10	27.0	44.0	46.0	13.0	12.5
1-1/16—12	17	5/8	15.9	10	NJ9-17-10	32.0	44.0	50.0	13.0	12.5
1-3/16—12	19	5/8	15.9	10	NJ9-19-10	36.0	44.0	50.0	13.0	12.5
1-1/16—12	17	3/4	19.1	12	NJ9-17-12	32.0	48.0	51.0	15.0	15.0
1-3/16—12	19	3/4	19.1	12	NJ9-19-12	36.0	48.0	52.0	15.0	15.0
1-5/16—12	21	3/4	19.1	12	NJ9-21-12	41.0	52.0	58.0	15.0	15.0
1-3/16—12	19	1	25.4	16	NJ9-19-16	36.0	55.0	55.0	15.5	19.8
1-5/16—12	21	1	25.4	16	NJ9-21-16	41.0	60.0	58.0	15.5	19.8
1-5/8—12	26	1	25.4	16	NJ9-26-16	50.0	65.0	70.0	15.5	19.8
1-5/8—12	26	1-1/4	31.8	20	NJ9-26-20	50.0	65.0	72.0	16.2	26.0
1-7/8—12	30	1-1/2	38.1	24	NJ9-30-24	55.0	80.0	80.0	18.8	32.0
2-1/2—12	40	2	50.8	32	NJ9-40-32	75.0	100.0	100.0	24.0	42.0



JIC SWIVEL FEMALE 74° CONE SEAT 90° LONG DROP SWEPT ELBOW: NJ9-L

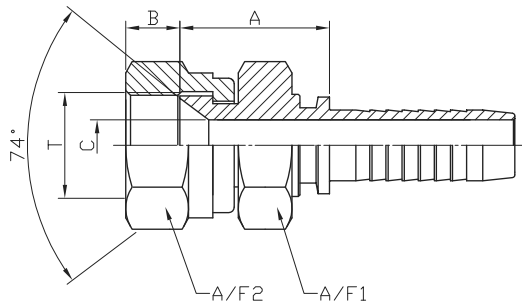
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
7/16—20	07	1/4	6.4	04	NJ9-07-04-L	17.0	28.5	45.0	8.7	4.0
1/2—20	08	1/4	6.4	04	NJ9-08-04-L	17.0	28.5	45.0	9.5	4.0
9/16—18	09	1/4	6.4	04	NJ9-09-04-L	19.0	29.5	55.5	9.8	4.0
9/16—18	09	3/8	9.5	06	NJ9-09-06-L	19.0	35.5	55.0	9.7	7.0
3/4—16	12	3/8	9.5	06	NJ9-12-06-L	22.0	36.5	61.5	11.0	7.0
3/4—16	12	1/2	12.7	08	NJ9-12-08-L	22.0	40.6	61.5	10.7	9.5
7/8—14	14	1/2	12.7	08	NJ9-14-08-L	27.0	45.0	65.0	12.8	9.5
7/8—14	14	5/8	15.9	10	NJ9-14-10-L	27.0	53.5	65.5	12.6	12.5
1-1/16—12	17	3/4	19.1	12	NJ9-17-12-L	32.0	62.0	94.5	14.4	15.0
1-5/16—12	21	1	25.4	16	NJ9-21-16-L	38.0	77.0	110.0	15.2	19.8





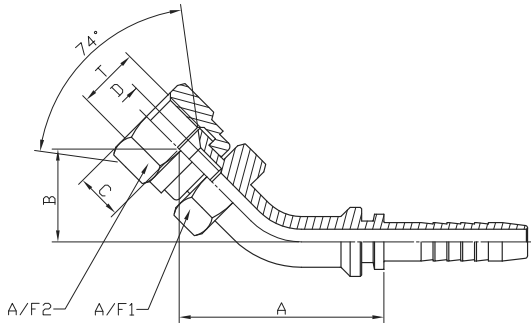
JIC SWIVEL FEMALE 74° CONE SEAT 90° COMPACT ELBOW:NJC9

Thread T	Dash No.	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash							
7/16—20	07	1/4	6.4	04	NJC9-07-04	14.0	17.0	20.0	20.5	8.2	4.0
9/16—18	09	1/4	6.4	04	NJC9-09-04	14.0	19.0	20.0	21.5	9.7	7.0
9/16—18	09	3/8	9.5	06	NJC9-09-06	19.0	19.0	23.1	24.0	9.7	7.0
3/4—16	12	3/8	9.5	06	NJC9-12-06	22.0	22.0	26.6	28.0	10.6	9.5
3/4—16	12	1/2	12.7	08	NJC9-12-08	22.0	22.0	24.9	28.0	10.6	9.5
7/8—14	14	1/2	12.7	08	NJC9-14-08	27.0	27.0	24.9	29.0	12.6	12.5
1-1/16—12	17	3/4	19.1	12	NJC9-17-12	27.0	32.0	37.5	33.0	14.4	15.0
1-5/16—12	21	1	25.4	16	NJC9-21-16	36.0	38.0	51.8	40.0	15.2	20.0



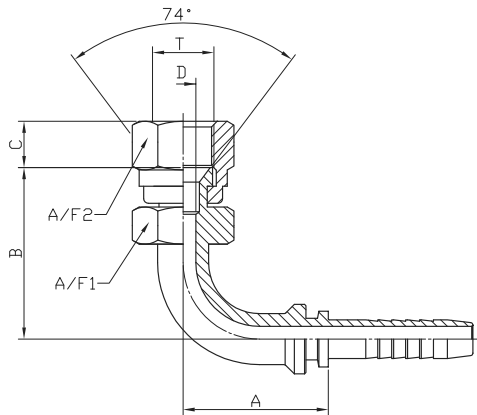
JIC SWIVEL FEMALE 74° CONE SEAT DOUBLE HEX:NJH

Thread T	Dash No.	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash						
7/16—20	07	1/4	6.4	04	NJH-07-04	12.0	17.0	21.0	8.7	4.0
9/16—18	09	3/8	9.5	06	NJH-09-06	17.0	19.0	24.6	9.7	7.0
3/4—16	12	1/2	12.7	08	NJH-12-08	19.0	24.0	27.4	10.6	9.5
7/8—14	14	5/8	15.9	10	NJH-14-10	22.0	27.0	29.0	12.6	12.5
1-1/16—12	17	3/4	19.1	12	NJH-17-12	27.0	32.0	31.5	14.4	15.0
1-5/16—12	21	1	25.4	16	NJH-21-16	32.0	41.0	34.3	15.2	19.8
1-5/8—12	26	1-1/4	31.8	20	NJH-26-20	41.0	50.0	43.5	16.2	26.0
1-7/8—12	30	1-1/2	38.1	24	NJH-30-24	50.0	55.0	51.0	18.8	32.0
2-1/2—12	40	2	50.8	32	NJH-40-32	65.0	75.0	55.5	24.0	42.0



JIC SWIVEL FEMALE 74° CONE SEAT DOUBLE HEX 45° SWEPT ELBOW:NJH4

Thread T	Dash No.	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash							
7/16—20	07	1/4	6.4	04	NJH4-07-04	12.0	17.0	27.0	33.0	9.0	4.0
9/16—18	09	3/8	9.5	06	NJH4-09-06	17.0	19.0	31.5	35.0	10.0	7.0
7/8—14	14	5/8	15.9	10	NJH4-14-10	22.0	27.0	44.0	46.0	13.0	12.5
1-1/16—12	17	3/4	19.1	12	NJH4-17-12	27.0	32.0	48.0	51.0	15.0	15.0
1-5/16—12	21	1	25.4	16	NJH4-21-16	32.0	41.0	60.0	58.0	15.5	19.8
1-5/8—12	26	1-1/4	31.8	20	NJH4-26-20	41.0	50.0	65.0	72.0	16.2	26.0
1-7/8—12	30	1-1/2	38.1	24	NJH4-30-24	50.0	55.0	80.0	80.0	18.8	32.0
2-1/2—12	40	2	50.8	32	NJH4-40-32	65.0	75.0	100.0	100.0	24.0	42.0



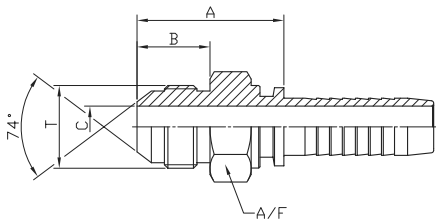
JIC SWIVEL FEMALE 74° CONE SEAT DOUBLE HEX 90° SWEPT ELBOW:NJH9

Thread T	Dash No.	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash							
7/16—20	07	1/4	6.4	04	NJH9-07-04	12.0	17.0	27.0	33.0	9.0	4.0
9/16—18	09	3/8	9.5	06	NJH9-09-06	17.0	19.0	31.5	35.0	10.0	7.0
3/4—16	12	1/2	12.7	08	NJH9-12-08	19.0	24.0	36.0	43.0	10.5	9.5
7/8—14	14	5/8	15.9	10	NJH9-14-10	22.0	27.0	44.0	46.0	13.0	12.5
1-1/16—12	17	3/4	19.1	12	NJH9-17-12	27.0	32.0	48.0	51.0	15.0	15.0
1-5/16—12	21	1	25.4	16	NJH9-21-16	32.0	41.0	60.0	58.0	15.5	19.8
1-5/8—12	26	1-1/4	31.8	20	NJH9-26-20	41.0	50.0	65.0	72.0	16.2	26.0
1-7/8—12	30	1-1/2	38.1	24	NJH9-30-24	50.0	55.0	80.0	80.0	18.8	32.0
2-1/2—12	40	2	50.8	32	NJH9-40-32	65.0	75.0	100.0	100.0	24.0	42.0



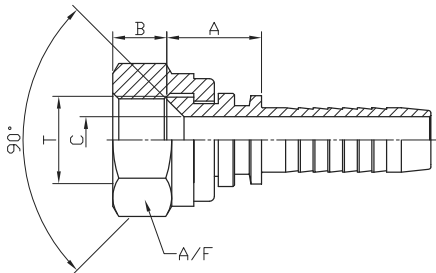
JIC MALE 74° CONE:MJ

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
7/16—20	07	1/4	6.4	04	MJ-07-04	12.0	27.5	14.0	4.0
1/2—20	08	1/4	6.4	04	MJ-08-04	14.0	27.5	14.0	4.0
9/16—18	09	1/4	6.4	04	MJ-09-04	17.0	29.0	15.0	4.0
1/2—20	08	3/8	9.5	06	MJ-08-06	14.0	29.0	14.0	7.0
9/16—18	09	3/8	9.5	06	MJ-09-06	17.0	29.0	15.0	7.0
3/4—16	12	3/8	9.5	06	MJ-12-06	22.0	32.0	17.0	7.0
7/8—14	14	3/8	9.5	06	MJ-14-06	24.0	32.0	17.0	7.0
3/4—16	12	1/2	12.7	08	MJ-12-08	22.0	32.0	17.0	9.5
7/8—14	14	1/2	12.7	08	MJ-14-08	24.0	34.0	19.0	9.5
1-1/16—12	17	1/2	12.7	08	MJ-17-08	27.0	41.0	23.0	9.5
7/8—14	14	5/8	15.9	10	MJ-14-10	24.0	34.0	19.0	12.5
1-1/16—12	17	5/8	15.9	10	MJ-17-10	27.0	41.0	23.0	12.5
1-3/16—12	19	5/8	15.9	10	MJ-19-10	32.0	43.0	23.0	12.5
1-5/16—12	21	5/8	15.9	10	MJ-21-10	36.0	43.0	23.0	12.5
1-1/16—12	17	3/4	19.1	12	MJ-17-12	27.0	42.0	23.0	15.0
1-3/16—12	19	3/4	19.1	12	MJ-19-12	32.0	44.0	24.0	15.0
1-5/16—12	21	3/4	19.1	12	MJ-21-12	36.0	43.0	24.0	15.0
1-3/16—12	19	1	25.4	16	MJ-19-16	32.0	44.0	24.0	19.8
1-5/16—12	21	1	25.4	16	MJ-21-16	36.0	44.0	24.0	19.8
1-5/8—12	26	1-1/4	31.8	20	MJ-26-20	46.0	48.0	25.0	26.0
1-7/8—12	30	1-1/2	38.1	24	MJ-30-24	50.0	50.0	26.0	32.0
2-1/2—12	40	2	50.8	32	MJ-40-32	65.0	56.0	32.0	42.0



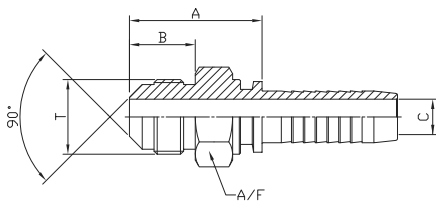
SAE SWIVEL FEMALE 90° CONE SEAT:NJE

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
7/16—20	07	1/4	6.4	04	NJE-07-04	15.0	16.0	9.0	4.0
1/2—20	08	1/4	6.4	04	NJE-08-04	17.0	16.0	9.5	4.0
5/8—18	10	3/8	9.5	06	NJE-10-06	22.0	16.0	10.0	7.0
7/8—14	14	1/2	12.7	08	NJE-14-08	27.0	20.0	13.0	9.5
1-1/16—14	17	3/4	19.1	12	NJE-17-12	32.0	23.0	15.0	15.0



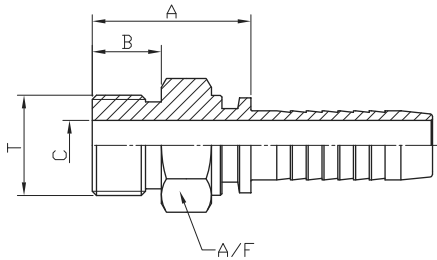
SAE MALE 90° CONE:MJE

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
7/16—20	07	1/4	6.4	04	MJE-07-04	12.0	28.0	14.0	4.0
1/2—20	08	1/4	6.4	04	MJE-08-04	14.0	28.0	14.0	4.0
5/8—18	10	3/8	9.5	06	MJE-10-06	19.0	29.0	15.0	7.0
3/4—16	12	1/2	12.7	08	MJE-12-08	22.0	32.0	17.0	9.5
1-1/16—14	17	3/4	19.1	12	MJE-17-12	27.0	42.0	23.0	15.0



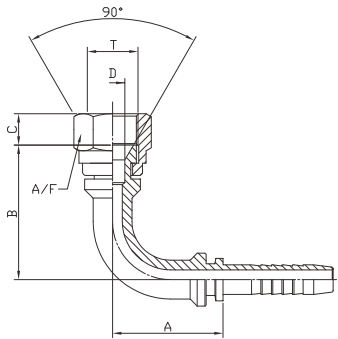
SAE MALE O-RING BOSS:MSE

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
7/16—20	07	1/4	6.4	04	MSE-07-04	12.0	21.0	12.5	4.0
1/2—20	08	1/4	6.4	04	MSE-08-04	14.0	22.0	12.5	4.0
9/16—18	09	3/8	9.5	06	MSE-09-06	17.0	23.0	13.5	7.0
3/4—16	12	3/8	9.5	06	MSE-12-06	22.0	26.0	15.0	7.0
3/4—16	12	1/2	12.7	08	MSE-12-08	22.0	26.0	15.0	9.5
7/8—14	14	1/2	12.7	08	MSE-14-08	24.0	28.0	15.0	9.5
1-1/16—12	17	1/2	12.7	08	MSE-17-08	27.0	31.0	16.0	9.5
7/8—14	14	5/8	15.9	10	MSE-14-10	24.0	30.0	15.0	12.5
1-1/16—12	17	5/8	15.9	10	MSE-17-10	27.0	30.0	16.0	12.5
1-1/16—12	17	3/4	19.1	12	MSE-17-12	27.0	32.0	16.0	15.0
1-3/16—12	19	3/4	19.1	12	MSE-19-12	32.0	32.0	17.0	15.0
1-5/16—12	21	3/4	19.1	12	MSE-21-12	36.0	33.0	18.0	15.0
1-5/16—12	21	1	25.4	16	MSE-21-16	36.0	33.0	18.0	19.8
1-5/8—12	26	1-1/4	31.8	20	MSE-26-20	46.0	36.0	18.0	26.0
1-7/8—12	30	1-1/2	38.1	24	MSE-30-24	50.0	38.0	18.0	32.0
2-1/2—12	40	2	50.8	32	MSE-40-32	65.0	40.0	18.0	42.0



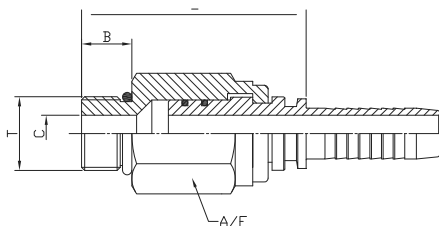
SAE SWIVEL FEMALE 90° CONE SEAT 90° SWEEP ELBOW:NJE9

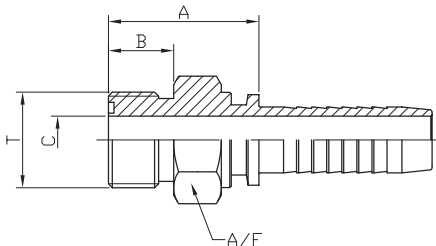
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
7/16—20	07	1/4	6.4	04	NJE9-07-04	15.0	26.5	30.5	9.0	4.0
1/2—20	08	1/4	6.4	04	NJE9-08-04	17.0	26.5	30.5	9.5	4.0
5/8—18	10	3/8	9.5	06	NJE9-10-06	22.0	35.5	33.0	10.8	7.0
7/8—14	14	1/2	12.7	08	NJE9-14-08	27.0	41.0	47.0	13.0	9.5
1-1/16—14	17	3/4	19.1	12	NJE9-17-12	32.0	62.0	58.0	14.4	15.0



SAE SWIVEL MALE O-RING BOSS:MSET

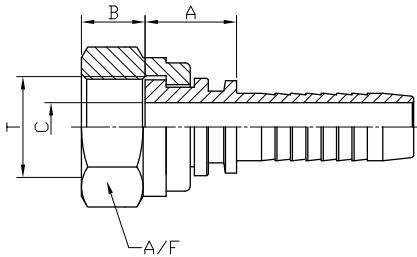
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
7/16—20	07	1/4	6.4	04	MSET-07-04	17.0	41.0	9.1	4.0
9/16—18	09	3/8	9.5	06	MSET-09-06	22.0	45.9	9.9	7.0
3/4—16	12	1/2	12.7	08	MSET-12-08	27.0	50.9	11.1	9.5
7/8—14	14	1/2	12.7	08	MSET-14-08	27.0	42.2	13.0	9.5
7/8—14	14	5/8	15.9	10	MSET-14-10	27.0	41.4	13.0	12.5
1-1/16—12	17	3/4	19.1	12	MSET-17-12	32.0	47.8	15.0	15.0





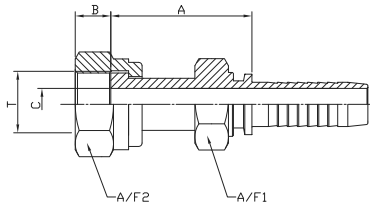
ORFS MALE O-RING:MRS

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
9/16—18	04	1/4	6.4	04	MRS-04-04	16.0	24.0	9.8	4.0
11/16—16	06	3/8	9.5	06	MRS-06-06	19.0	27.6	11.2	7.0
13/16—16	08	3/8	9.5	06	MRS-08-06	22.0	30.0	12.8	9.5
13/16—16	08	1/2	12.7	08	MRS-08-08	22.0	30.6	12.8	9.5
1—14	10	1/2	12.7	08	MRS-10-08	27.0	35.0	15.5	12.5
1—14	10	5/8	15.9	10	MRS-10-10	27.0	34.7	15.5	12.5
1-3/16—12	12	3/4	19.1	12	MRS-12-12	32.0	39.0	17.0	15.0
1-7/16—12	16	3/4	19.1	12	MRS-16-12	38.0	40.5	17.5	15.0
1-7/16—12	16	1	25.4	16	MRS-16-16	38.0	41.8	17.5	19.8
1-11/16—12	20	1-1/4	31.8	20	MRS-20-20	46.0	46.3	17.5	26.0
2—12	24	1-1/2	38.1	24	MRS-24-24	55.0	48.6	17.5	32.0



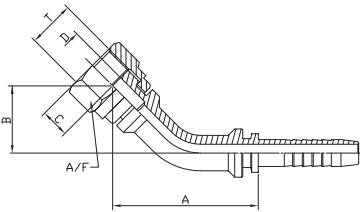
ORFS SWIVEL FEMALE:NOR

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
9/16—18	04	1/4	6.4	04	NOR-04-04	19.0	20.5	8.0	4.0
11/16—16	06	1/4	6.4	04	NOR-06-04	22.0	22.0	9.5	4.0
11/16—16	06	5/16	8.0	05	NOR-06-05	22.0	22.0	9.5	5.5
11/16—16	06	3/8	9.5	06	NOR-06-06	22.0	22.0	9.5	7.0
13/16—16	08	3/8	9.5	06	NOR-08-06	24.0	26.0	11.0	7.0
11/16—16	06	1/2	12.7	08	NOR-06-08	22.0	26.0	9.5	9.5
13/16—16	08	1/2	12.7	08	NOR-08-08	24.0	26.0	11.0	9.5
1—14	10	1/2	12.7	08	NOR-10-08	30.0	30.0	13.5	9.5
1-3/16—12	12	1/2	12.7	08	NOR-12-08	36.0	30.5	15.0	9.5
1—14	10	5/8	15.9	10	NOR-10-10	30.0	30.0	13.5	12.5
1-3/16—12	12	5/8	15.9	10	NOR-12-10	36.0	32.0	14.5	12.5
1—14	10	3/4	19.1	12	NOR-10-12	30.0	33.5	13.5	15.0
1-3/16—12	12	3/4	19.1	12	NOR-12-12	36.0	32.0	14.5	15.0
1-7/16—12	16	3/4	19.1	12	NOR-16-12	41.0	35.4	15.0	15.0
1-3/16—12	12	1	25.4	16	NOR-12-16	36.0	32.0	15.0	19.8
1-7/16—12	16	1	25.4	16	NOR-16-16	41.0	35.4	15.0	19.8
1-11/16—12	20	1	25.4	16	NOR-20-16	50.0	35.0	15.0	19.8
1-11/16—12	20	1-1/4	31.8	20	NOR-20-20	50.0	35.5	15.0	26.0
2—12	24	1-1/2	38.1	24	NOR-24-24	60.0	35.5	15.0	32.0



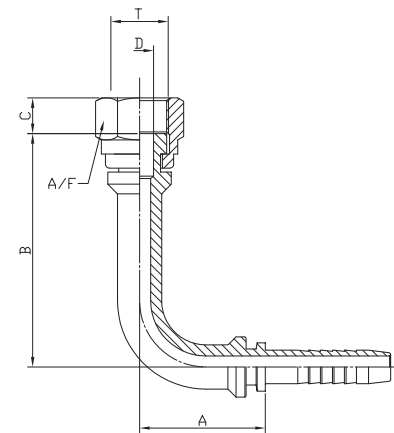
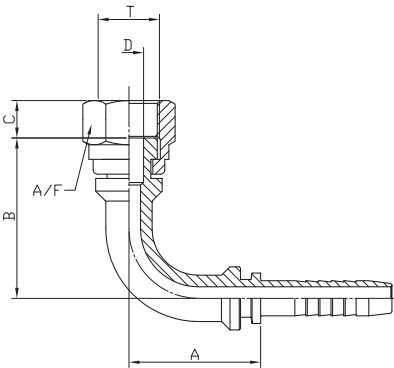
ORFS SWIVEL FEMALE DOUBLE HEX:NORH

Thread T	Dash No.	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash						
9/16—18	04	1/4	6.4	04	NORH-04-04	13.0	19.0	27.5	8.0	4.0
11/16—16	06	1/4	6.4	04	NORH-06-04	16.0	22.0	30.0	9.5	4.0
11/16—16	06	5/16	8.0	05	NORH-06-05	16.0	22.0	30.5	9.5	5.5
11/16—16	06	3/8	9.5	06	NORH-06-06	16.0	22.0	31.1	9.5	7.0
13/16—16	08	3/8	9.5	06	NORH-08-06	19.0	24.0	35.6	11.0	7.0
11/16—16	06	1/2	12.7	08	NORH-06-08	19.0	22.0	31.9	9.5	9.5
13/16—16	08	1/2	12.7	08	NORH-08-08	19.0	24.0	35.9	11.0	9.5
1—14	10	1/2	12.7	08	NORH-10-08	24.0	30.0	38.4	13.5	9.5
1-3/16—12	12	1/2	12.7	08	NORH-12-08	28.0	36.0	41.9	14.5	9.5
1—14	10	5/8	15.9	10	NORH-10-10	24.0	30.0	38.7	13.5	12.5
1-3/16—12	12	5/8	15.9	10	NORH-12-10	28.0	36.0	42.0	14.5	12.5
1—14	10	3/4	19.1	12	NORH-10-12	28.0	30.0	41.0	13.5	15.0
1-3/16—12	12	3/4	19.1	12	NORH-12-12	28.0	36.0	43.5	14.5	15.0
1-7/16—12	16	3/4	19.1	12	NORH-16-12	36.0	41.0	45.5	15.0	15.0
1-3/16—12	12	1	25.4	16	NORH-12-16	36.0	36.0	45.8	14.5	19.8
1-7/16—12	16	1	25.4	16	NORH-16-16	36.0	41.0	46.3	15.0	19.8
1-11/16—12	20	1	25.4	16	NORH-20-16	41.0	50.0	49.5	14.8	19.8
1-11/16—12	20	1-1/4	31.8	20	NORH-20-20	41.0	50.0	49.0	14.8	26.0
2—12	24	1-1/2	38.1	24	NORH-24-24	50.0	60.0	54.0	15.8	32.0



ORFS SWIVEL FEMALE 45° SWEPT ELBOW:NOR4

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
9/16—18	04	1/4	6.4	04	NOR4-04-04	17.0	32.5	12.0	8.2	4.0
11/16—16	06	1/4	6.4	04	NOR4-06-04	22.0	31.0	10.5	9.5	4.0
11/16—16	06	5/16	8.0	05	NOR4-06-05	22.0	34.0	10.5	9.5	5.5
11/16—16	06	3/8	9.5	06	NOR4-06-06	22.0	32.5	11.0	9.5	7.0
13/16—16	08	3/8	9.5	06	NOR4-08-06	24.0	34.0	12.5	11.0	7.0
11/16—16	06	1/2	12.7	08	NOR4-06-08	22.0	33.0	11.0	9.5	9.5
13/16—16	08	1/2	12.7	08	NOR4-08-08	24.0	42.0	13.0	11.0	9.5
1—14	10	1/2	12.7	08	NOR4-10-08	30.0	42.0	13.5	13.5	9.5
1-3/16—12	12	1/2	12.7	08	NOR4-12-08	36.0	46.5	18.5	14.5	9.5
1—14	10	5/8	15.9	10	NOR4-10-10	30.0	49.0	16.0	13.5	12.5
1-3/16—12	12	5/8	15.9	10	NOR4-12-10	36.0	51.5	18.5	14.5	12.5
1—14	10	3/4	19.1	12	NOR4-10-12	30.0	50.5	16.5	13.5	15.0
1-3/16—12	12	3/4	19.1	12	NOR4-12-12	36.0	60.5	21.5	14.5	15.0
1-7/16—12	16	3/4	19.1	12	NOR4-16-12	41.0	61.0	21.0	14.8	15.0
1-7/16—12	16	1	25.4	16	NOR4-16-16	41.0	72.0	23.5	14.8	19.8
1-11/16—12	20	1	25.4	16	NOR4-20-16	50.0	74.0	25.2	14.8	19.8
1-11/16—12	20	1-1/4	31.8	20	NOR4-20-20	50.0	82.0	27.0	14.8	26.0
2—12	24	1-1/2	38.1	24	NOR4-24-24	60.0	98.0	31.5	14.8	32.0

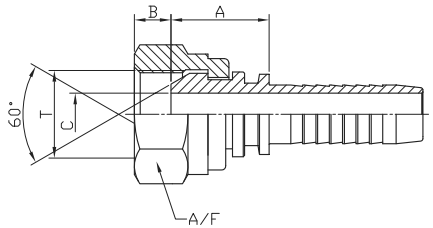
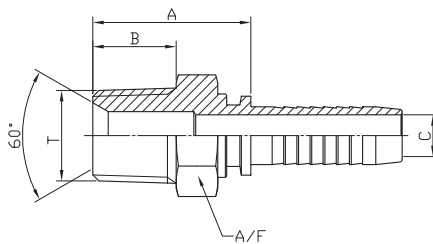


ORFS SWIVEL FEMALE 90° SWEPT ELBOW:NOR9

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
9/16—18	04	1/4	6.4	04	NOR9-04-04	17.0	27.5	24.0	8.2	4.0
11/16—16	06	1/4	6.4	04	NOR9-06-04	22.0	27.5	22.0	9.5	4.0
11/16—16	06	5/16	8.0	05	NOR9-06-05	22.0	32.0	23.0	9.5	5.5
11/16—16	06	3/8	9.5	06	NOR9-06-06	22.0	30.0	24.0	9.5	7.0
13/16—16	08	3/8	9.5	06	NOR9-08-06	24.0	30.0	26.5	11.0	7.0
11/16—16	06	1/2	12.7	08	NOR9-06-08	22.0	30.9	24.5	9.5	9.5
13/16—16	08	1/2	12.7	08	NOR9-08-08	24.0	40.5	30.0	11.0	9.5
1—14	10	1/2	12.7	08	NOR9-10-08	30.0	40.5	30.0	13.5	9.5
1-3/16—12	12	1/2	12.7	08	NOR9-12-08	36.0	39.5	37.5	14.5	9.5
1—14	10	5/8	15.9	10	NOR9-10-10	30.0	48.0	37.5	13.5	12.5
1-3/16—12	12	5/8	15.9	10	NOR9-12-10	36.0	48.0	41.0	14.5	12.5
1—14	10	3/4	19.1	12	NOR9-10-12	30.0	49.0	38.0	13.5	15.0
1-3/16—12	12	3/4	19.1	12	NOR9-12-12	36.0	56.5	41.0	14.5	15.0
1-7/16—12	16	3/4	19.1	12	NOR9-16-12	41.0	56.5	47.5	14.8	15.0
1-3/16—12	12	1	25.4	16	NOR9-12-16	36.0	57.6	48.0	14.5	19.8
1-7/16—12	16	1	25.4	16	NOR9-16-16	41.0	71.5	56.0	14.8	19.8
1-11/16—12	20	1	25.4	16	NOR9-20-16	50.0	71.5	58.5	14.8	19.8
1-11/16—12	20	1-1/4	31.8	20	NOR9-20-20	50.0	83.0	66.0	14.8	26.0
2—12	24	1-1/2	38.1	24	NOR9-24-24	60.0	102.0	79.5	14.8	32.0

ORFS SWIVEL FEMALE 90° LONG DROP SWEPT ELBOW:NOR9-L

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
9/16—18	04	1/4	6.4	04	NOR9-04-04-L	17.0	24.5	45.5	8.2	4.0
11/16—16	06	3/8	9.5	06	NOR9-06-06-L	22.0	31.5	53.5	9.5	7.0
13/16—16	08	3/8	9.5	06	NOR9-08-06-L	24.0	32.0	53.5	11.0	7.0
13/16—16	08	1/2	12.7	08	NOR9-08-08-L	24.0	37.0	63.5	11.0	9.5
1—14	10	1/2	12.7	08	NOR9-10-08-L	30.0	37.0	64.0	13.5	9.5
1—14	10	1/2	12.7	10	NOR9-10-10-L	30.0	41.0	69.0	13.5	12.5
1-3/16—12	12	5/8	15.9	10	NOR9-12-10-L	36.0	41.0	73.0	14.5	12.5
1-3/16—12	12	3/4	19.1	12	NOR9-12-12-L	36.0	45.5	96.0	14.5	15.0
1-7/16—12	16	1	25.4	16	NOR9-16-16-L	41.0	58.5	113.5	14.8	19.8



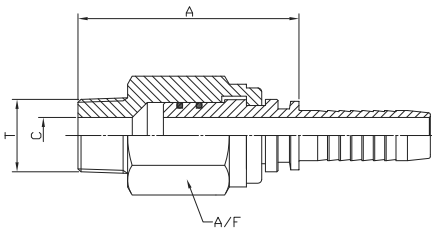
NPT MALE:MNT

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
1/8—27	02	1/4	6.4	04	MNT-02-04	17.0	24.0	12.0	4.0
1/4—18	04	1/4	6.4	04	MNT-04-04	17.0	25.0	12.0	4.0
3/8—18	06	1/4	6.4	04	MNT-06-04	17.0	28.0	14.0	4.0
1/4—18	04	3/8	9.5	06	MNT-04-06	19.0	26.0	12.0	7.0
3/8—18	06	3/8	9.5	06	MNT-06-06	19.0	28.0	14.0	7.0
1/2—14	08	3/8	9.5	06	MNT-08-06	19.0	34.0	15.0	7.0
3/8—18	06	1/2	12.7	08	MNT-06-08	22.0	28.0	14.0	9.5
1/2—14	08	1/2	12.7	08	MNT-08-08	22.0	34.0	15.0	9.5
3/4—14	12	1/2	12.7	08	MNT-12-08	22.0	36.0	17.0	9.5
1/2—14	08	3/4	19.0	12	MNT-08-12	27.0	36.0	15.0	15.0
3/4—14	12	3/4	19.0	12	MNT-12-12	27.0	37.0	17.0	15.0
1—11.5	16	3/4	19.0	12	MNT-16-12	27.0	41.0	19.0	15.0
3/4—14	12	1	25.4	16	MNT-12-16	36.0	40.0	17.0	19.8
1—11.5	16	1	25.4	16	MNT-16-16	36.0	44.0	19.0	19.8
1-1/4—11.5	20	1	25.4	16	MNT-20-16	36.0	44.0	22.0	19.8
1-1/4—11.5	20	1-1/4	31.8	20	MNT-20-20	46.0	46.0	22.0	26.0
1-1/2—11.5	24	1-1/2	38.1	24	MNT-24-24	50.0	50.0	24.0	32.0
2—11.5	32	2	50.8	32	MNT-32-32	65.0	50.0	26.0	42.0

NPSM SWIVEL FEMALE 60° CONE:NSM

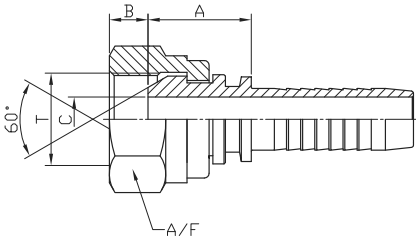
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
1/4—18	04	1/4	6.4	04	NSM-04-04	19.0	18.0	5.2	4.0
3/8—18	06	1/4	6.4	04	NSM-06-04	22.0	18.5	6.0	4.0
1/2—14	08	1/4	6.4	04	NSM-08-04	27.0	21.5	6.7	4.0
1/4—18	04	3/8	9.5	06	NSM-04-06	19.0	18.0	5.2	7.0
3/8—18	06	3/8	9.5	06	NSM-06-06	22.0	19.0	6.0	7.0
1/2—14	08	3/8	9.5	06	NSM-08-06	27.0	20.5	6.7	7.0
3/8—18	06	1/2	12.7	08	NSM-06-08	22.0	19.5	6.0	9.5
1/2—14	08	1/2	12.7	08	NSM-08-08	27.0	21.2	6.7	9.5
5/8—14	10	1/2	12.7	08	NSM-10-08	30.0	24.0	9.2	9.5
3/4—14	12	1/2	12.7	08	NSM-12-08	32.0	22.0	9.2	9.5
1/2—14	08	5/8	15.8	10	NSM-08-10	27.0	22.0	6.7	12.5
5/8—14	10	5/8	15.8	10	NSM-10-10	30.0	24.0	9.2	12.5
3/4—14	12	5/8	15.8	10	NSM-12-10	32.0	25.0	9.2	12.5
1/2—14	08	3/4	19.0	12	NSM-08-12	27.0	22.5	6.7	15.0
3/4—14	12	3/4	19.0	12	NSM-12-12	32.0	25.0	9.2	15.0
1—11.5	16	3/4	19.0	12	NSM-16-12	41.0	30.0	10.5	15.0
3/4—14	12	1	25.4	16	NSM-12-16	32.0	29.0	9.2	19.8
1—11.5	16	1	25.4	16	NSM-16-16	41.0	31.0	10.5	19.8
1-1/4—11.5	20	1-1/4	31.8	20	NSM-20-20	50.0	35.5	10.5	26.0
1-1/2—11.5	24	1-1/2	38.1	24	NSM-24-24	55.0	35.5	12.0	32.0
2—11.5	32	2	50.8	32	NSM-32-32	70.0	35.5	16.0	42.0





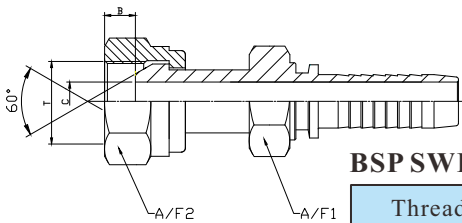
NPT MALE SWIVEL:MSNT

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim C mm
		in	mm	dash				
1/4—18	04	1/4	6.4	04	MSNT-04-04	19.0	56.0	4.0
3/8—18	06	3/8	9.5	06	MSNT-06-06	22.0	60.0	7.0
1/2—14	08	1/2	12.7	08	MSNT-08-08	27.0	66.0	9.5
3/4—14	12	3/4	19.1	12	MSNT-12-12	32.0	68.4	15.0



BSP SWIVEL FEMALE 60° CONE:NU

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
1/4—19	04	1/4	6.4	04	NU-04-04	19.0	18.0	5.2	4.0
3/8—19	06	1/4	6.4	04	NU-06-04	22.0	18.5	6.0	4.0
1/2—14	08	1/4	6.4	04	NU-08-04	27.0	21.5	6.7	4.0
1/4—19	04	3/8	9.5	06	NU-04-06	19.0	18.0	5.2	7.0
3/8—19	06	3/8	9.5	06	NU-06-06	22.0	19.0	6.0	7.0
1/2—14	08	3/8	9.5	06	NU-08-06	27.0	20.5	6.7	7.0
3/8—19	06	1/2	12.7	08	NU-06-08	22.0	19.5	6.0	9.5
1/2—14	08	1/2	12.7	08	NU-08-08	27.0	21.2	6.7	9.5
5/8—14	10	1/2	12.7	08	NU-10-08	30.0	24.0	9.2	9.5
3/4—14	12	1/2	12.7	08	NU-12-08	32.0	22.0	9.2	9.5
1/2—14	08	5/8	15.8	10	NU-08-10	27.0	22.0	6.7	12.5
5/8—14	10	5/8	15.8	10	NU-10-10	30.0	24.0	9.2	12.5
3/4—14	12	5/8	15.8	10	NU-12-10	32.0	25.0	9.2	12.5
1/2—14	08	3/4	19.0	12	NU-08-12	27.0	22.5	6.7	15.0
3/4—14	12	3/4	19.0	12	NU-12-12	32.0	25.0	9.2	15.0
1—11	16	3/4	19.0	12	NU-16-12	41.0	30.0	10.5	15.0
3/4—14	12	1	25.4	16	NU-12-16	32.0	29.0	9.2	19.8
1—11	16	1	25.4	16	NU-16-16	41.0	31.0	10.5	19.8
1-1/4—11	20	1-1/4	31.8	20	NU-20-20	50.0	35.5	10.5	26.0
1-1/2—11	24	1-1/2	38.1	24	NU-24-24	55.0	35.5	12.0	32.0
2—11	32	2	50.8	32	NU-32-32	70.0	35.5	16.0	42.0

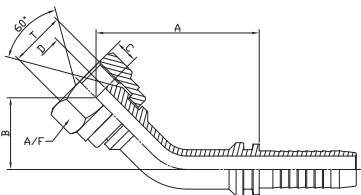


BSP SWIVEL FEMALE 60° CONE DOUBLE HEX:NUH

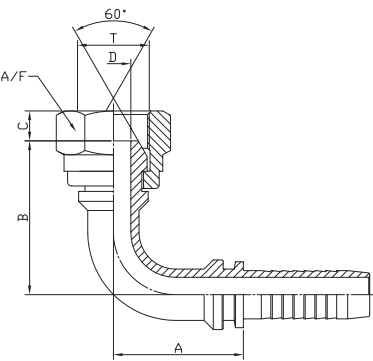
Thread T	Dash No.	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash						
1/4—19	04	1/4	6.4	04	NUH-04-04	19.0	19.0	23.5	5.5	4.0
3/8—19	06	3/8	9.5	06	NUH-06-06	22.0	22.0	26.5	6.3	7.0
1/2—14	08	1/2	12.7	08	NUH-08-08	27.0	27.0	31.0	7.5	9.5
5/8—14	10	1/2	12.7	08	NUH-10-08	30.0	30.0	32.0	9.5	9.5
3/4—14	12	1/2	12.7	08	NUH-12-08	32.0	32.0	33.0	10.9	9.5
3/4—14	12	3/4	19.0	12	NUH-12-12	32.0	32.0	34.0	10.9	15.0
1—11	16	1	25.4	16	NUH-16-16	41.0	41.0	35.5	11.7	19.8
1-1/4—11	20	1-1/4	31.8	20	NUH-20-20	50.0	50.0	43.5	11.0	26.0



BSP SWIVEL FEMALE 60° CONE 45° SWEEP ELBOW:NU4



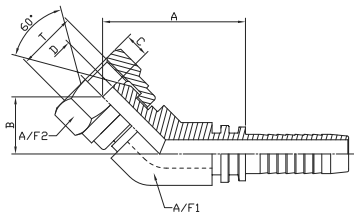
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
1/4—19	04	1/4	6.4	04	NU4-04-04	19.0	41.0	17.0	5.2	4.0
3/8—19	06	1/4	6.4	04	NU4-06-04	22.0	40.0	17.0	6.0	4.0
3/8—19	06	3/8	9.5	06	NU4-06-06	22.0	41.0	19.0	6.0	7.0
1/2—14	08	3/8	9.5	06	NU4-08-06	27.0	48.0	22.0	6.7	7.0
3/8—19	06	1/2	12.7	08	NU4-06-08	22.0	42.0	21.0	6.0	9.5
1/2—14	08	1/2	12.7	08	NU4-08-08	27.0	50.0	24.0	6.7	9.5
5/8—14	10	1/2	12.7	08	NU4-10-08	30.0	50.0	23.0	9.2	9.5
5/8—14	10	5/8	15.8	10	NU4-10-10	30.0	53.0	25.0	9.2	12.5
3/4—14	12	5/8	15.8	10	NU4-12-10	32.0	55.0	30.0	9.2	12.5
3/4—14	12	3/4	19.0	12	NU4-12-12	32.0	58.0	32.0	9.2	15.0
1—11	16	3/4	19.0	12	NU4-16-12	41.0	61.0	35.0	10.5	15.0
1—11	16	1	25.4	16	NU4-16-16	41.0	65.0	38.0	10.5	19.8
1-1/4—11	20	1-1/4	31.8	20	NU4-20-20	50.0	75.0	60.0	10.5	26.0
1-1/2—11	24	1-1/2	38.1	24	NU4-24-24	55.0	80.0	62.0	12.0	32.0
2—11	32	2	50.8	32	NU4-32-32	70.0	85.0	80.0	16.0	42.0



BSP SWIVEL FEMALE 60° CONE 90° SWEEP ELBOW:NU9

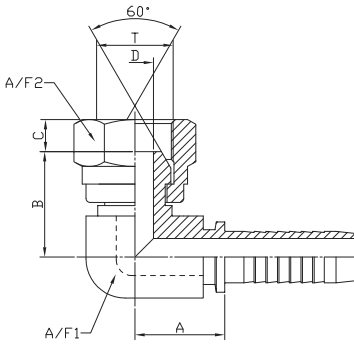
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
1/4—19	04	1/4	6.4	04	NU9-04-04	19.0	27.5	33.5	5.2	4.0
3/8—19	06	1/4	6.4	04	NU9-06-04	22.0	30.0	36.0	6.0	4.0
1/4—19	04	3/8	9.5	06	NU9-04-06	19.0	28.5	34.0	5.2	7.0
3/8—19	06	3/8	9.5	06	NU9-06-06	22.0	32.0	38.0	6.0	7.0
1/2—14	08	3/8	9.5	06	NU9-08-06	27.0	32.0	38.0	6.7	7.0
3/8—19	06	1/2	12.7	08	NU9-06-08	22.0	33.0	40.0	6.0	9.5
1/2—14	08	1/2	12.7	08	NU9-08-08	27.0	39.0	46.0	6.7	9.5
5/8—14	10	1/2	12.7	08	NU9-10-08	30.0	40.0	48.0	9.2	9.5
3/4—14	12	1/2	12.7	08	NU9-12-08	32.0	44.0	52.0	9.2	9.5
5/8—14	10	5/8	15.8	10	NU9-10-10	30.0	44.0	51.0	9.2	12.5
3/4—14	12	5/8	15.8	10	NU9-12-10	32.0	46.0	54.0	9.2	12.5
3/4—14	12	3/4	19.0	12	NU9-12-12	32.0	50.0	55.0	9.2	15.0
1—11	16	3/4	19.0	12	NU9-16-12	41.0	58.0	60.0	10.5	15.0
1—11	16	1	25.4	16	NU9-16-16	41.0	63.0	66.0	10.5	19.8
1-1/4—11	20	1-1/4	31.8	20	NU9-20-20	50.0	69.0	78.0	10.5	26.0
1-1/2—11	24	1-1/2	38.1	24	NU9-24-24	55.0	82.0	83.0	12.0	32.0
2—11	32	2	50.8	32	NU9-32-32	70.0	100.0	86.0	16.0	42.0

BSP SWIVEL FEMALE 60° CONE 45° COMPACT ELBOW:NUC4



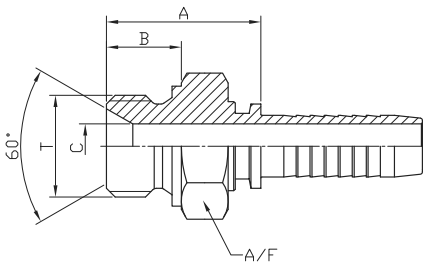
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
1/4—19	04	1/4	6.4	04	NUC4-04-04	19.0	32.0	15.0	5.2	4.0
3/8—19	06	1/4	6.4	04	NUC4-06-04	22.0	35.0	16.5	6.0	4.0
3/8—19	06	3/8	9.5	06	NUC4-06-06	22.0	35.0	16.5	6.0	7.0
1/2—14	08	1/2	12.7	08	NUC4-08-08	27.0	41.0	20.0	6.7	9.5
3/4—14	12	1/2	12.7	08	NUC4-12-08	32.0	48.0	22.0	9.2	9.5
5/8—14	10	5/8	15.8	10	NUC4-10-10	30.0	47.0	20.0	9.2	12.5
3/4—14	12	3/4	19.0	12	NUC4-12-12	32.0	49.0	22.0	9.2	15.0
1—11	16	1	25.4	16	NUC4-16-16	41.0	58.0	26.0	10.5	19.8
1-1/4—11	20	1-1/4	31.8	20	NUC4-20-20	50.0	68.0	32.0	10.5	26.0

BSP SWIVEL FEMALE 60° CONE 90° COMPACT ELBOW:NUC9



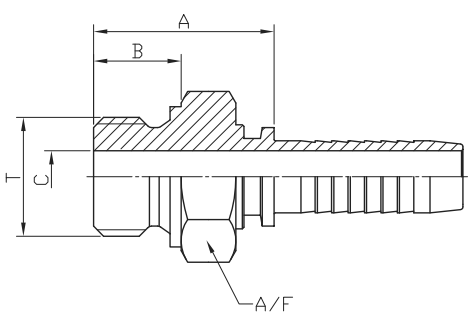
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
1/4—19	04	1/4	6.4	04	NUC9-04-04	19.0	20.0	20.0	5.2	4.0
3/8—19	06	1/4	6.4	04	NUC9-06-04	22.0	21.0	26.0	6.0	4.0
3/8—19	06	3/8	9.5	06	NUC9-06-06	22.0	23.0	27.0	6.0	7.0
1/2—14	08	3/8	9.5	06	NUC9-08-06	27.0	26.0	28.0	6.7	7.0
3/8—19	06	1/2	12.7	08	NUC9-06-08	22.0	26.0	28.0	6.0	9.5
1/2—14	08	1/2	12.7	08	NUC9-08-08	27.0	28.0	29.0	6.7	9.5
5/8—14	10	5/8	15.8	10	NUC9-10-10	30.0	30.0	33.0	9.2	12.5
3/4—14	12	3/4	19.0	12	NUC9-12-12	32.0	34.0	38.0	9.2	15.0
1—11	16	1	25.4	16	NUC9-16-16	41.0	38.0	45.0	10.5	19.8
1-1/4—11	20	1-1/4	31.8	20	NUC9-20-20	50.0	42.0	50.0	10.5	26.0
1-1/2—11	24	1-1/2	38.1	24	NUC9-24-24	55.0	48.0	54.0	12.0	32.0

BSP MALE BONDED SEAL TYPE:MU



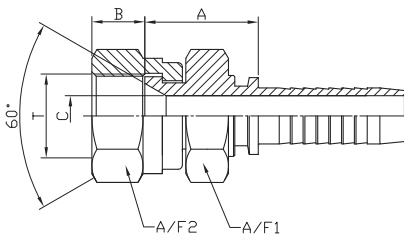
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
1/4—19	04	1/4	6.4	04	MU-04-04	19.0	25.0	11.0	4.0
3/8—19	06	1/4	6.4	04	MU-06-04	22.0	29.0	12.0	4.0
1/4—19	04	3/8	9.5	06	MU-04-06	19.0	25.0	11.0	7.0
3/8—19	06	3/8	9.5	06	MU-06-06	22.0	29.0	12.0	7.0
1/2—14	08	3/8	9.5	06	MU-08-06	27.0	30.0	14.0	7.0
3/8—19	06	1/2	12.7	08	MU-06-08	22.0	30.0	12.0	9.5
1/2—14	08	1/2	12.7	08	MU-08-08	27.0	31.0	14.0	9.5
1/2—14	08	5/8	15.8	10	MU-08-10	27.0	32.0	14.0	12.5
5/8—14	10	5/8	15.8	10	MU-10-10	30.0	35.0	16.0	12.5
3/4—14	12	5/8	15.8	10	MU-12-10	32.0	37.0	16.0	12.5
3/4—14	12	3/4	19.0	12	MU-12-12	32.0	38.0	16.0	15.0
1—11	16	3/4	19.0	12	MU-16-12	41.0	41.0	19.0	15.0
1—11	16	1	25.4	16	MU-16-16	41.0	43.0	19.0	19.8
1-1/4—11	20	1-1/4	31.8	20	MU-20-20	50.0	48.0	20.0	26.0
1-1/2—11	24	1-1/2	38.1	24	MU-24-24	55.0	50.0	22.0	32.0
2—11	32	2	50.8	32	MU-32-32	70.0	53.0	25.0	45.0

BSP MALE FLAT FACED:MUF



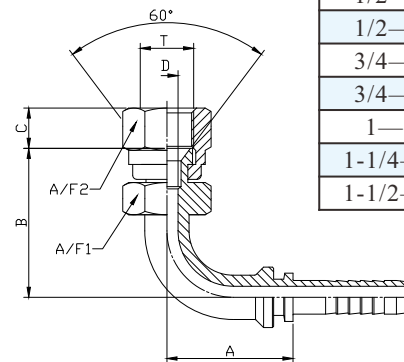
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
1/4—19	04	1/4	6.4	04	MUF-04-04	19.0	25.5	11.0	4.0
3/8—19	06	1/4	6.4	04	MUF-06-04	22.0	26.0	12.0	4.0
1/4—19	04	3/8	9.5	06	MUF-04-06	19.0	27.1	11.0	7.0
3/8—19	06	3/8	9.5	06	MUF-06-06	22.0	28.1	12.0	7.0
1/2—14	08	3/8	9.5	06	MUF-08-06	27.0	30.6	14.0	7.0
3/8—19	06	1/2	12.7	08	MUF-06-08	22.0	32.1	12.0	9.5
1/2—14	08	1/2	12.7	08	MUF-08-08	27.0	32.3	14.0	9.5
1/2—14	08	5/8	15.8	10	MUF-08-10	27.0	33.0	14.0	12.5
5/8—14	10	5/8	15.8	10	MUF-10-10	30.0	35.0	16.0	12.5
3/4—14	12	5/8	15.8	10	MUF-12-10	32.0	36.0	16.0	12.5
3/4—14	12	3/4	19.1	12	MUF-12-12	32.0	37.5	16.0	15.0

BSP SWIVEL FEMALE 60° CONE SEAT DOUBLE HEX(KOMATSU):NUJK

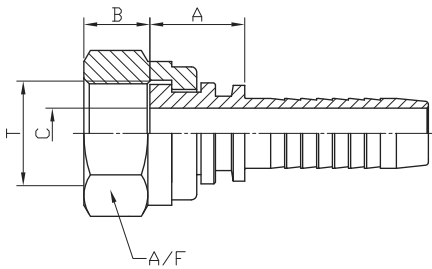


Thread T	Dash No.	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash						
1/4—19	04	1/4	6.4	04	NUJK-04-04	19.0	19.0	14.0	5.2	4.0
3/8—19	06	1/4	6.4	04	NUJK-06-04	22.0	22.0	14.0	6.0	4.0
1/4—19	04	3/8	9.5	06	NUJK-04-06	19.0	19.0	15.0	5.2	7.0
3/8—19	06	3/8	9.5	06	NUJK-06-06	22.0	22.0	15.0	6.0	7.0
1/2—14	08	3/8	9.5	06	NUJK-08-06	27.0	27.0	15.0	6.7	7.0
1/2—14	08	1/2	12.7	08	NUJK-08-08	27.0	27.0	17.0	6.7	9.5
3/4—14	12	1/2	12.7	08	NUJK-12-08	32.0	32.0	17.0	9.2	9.5
3/4—14	12	3/4	19.0	12	NUJK-12-12	32.0	32.0	18.0	9.2	15.0
1—11	16	1	25.4	16	NUJK-16-16	36.0	41.0	23.0	10.5	19.8
1-1/4—11	20	1-1/4	31.8	20	NUJK-20-20	46.0	50.0	28.0	10.5	26.0
1-1/2—11	24	1-1/2	38.1	24	NUJK-24-24	50.0	55.0	28.0	12.0	32.0

BSP SWIVEL FEMALE 60° CONE SEAT DOUBLE HEX 90° SWEEP ELBOW:NUJK9

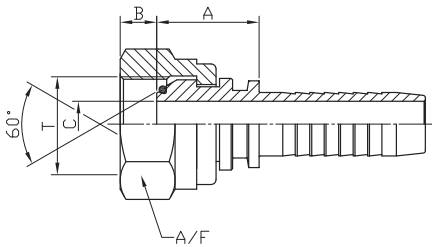


Thread T	Dash No.	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash							
1/4—19	04	1/4	6.4	04	NUJK9-04-04	19.0	19.0	30.0	38.0	8.0	4.0
3/8—19	06	1/4	6.4	04	NUJK9-06-04	22.0	22.0	30.0	45.8	9.0	7.0
1/4—19	04	3/8	9.5	06	NUJK9-04-06	19.0	19.0	35.3	38.0	8.0	4.0
3/8—19	06	3/8	9.5	06	NUJK9-06-06	22.0	22.0	35.3	45.8	9.0	7.0
1/2—14	08	3/8	9.5	06	NUJK9-08-06	27.0	27.0	35.3	53.0	12.0	9.5
1/2—14	08	1/2	12.7	08	NUJK9-08-08	27.0	27.0	41.0	53.0	12.0	9.5
3/4—14	12	1/2	12.7	08	NUJK9-12-08	32.0	32.0	41.0	69.0	13.5	15.0
3/4—14	12	3/4	19.0	12	NUJK9-12-12	32.0	32.0	65.5	69.0	13.5	15.0
1—11	16	1	25.4	16	NUJK9-16-16	36.0	41.0	76.7	76.5	16.0	19.8
1-1/4—11	20	1-1/4	31.8	20	NUJK9-20-20	46.0	50.0	91.5	92.5	18.5	26.0
1-1/2—11	24	1-1/2	38.1	24	NUJK9-24-24	50.0	55.0	109.4	110.5	19.0	32.0



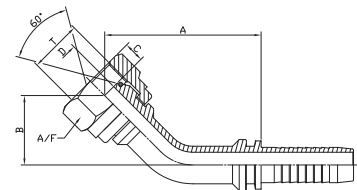
BSP SWIVEL FEMALE FLAT FACE:NUF

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
1/4—19	04	1/4	6.4	04	NUF-04-04	19.0	15.0	5.2	4.0
3/8—19	06	1/4	6.4	04	NUF-06-04	22.0	16.0	6.0	4.0
3/8—19	06	3/8	9.5	06	NUF-06-06	22.0	16.0	6.0	7.0
1/2—14	08	3/8	9.5	06	NUF-08-06	27.0	18.0	6.7	7.0
3/8—19	06	1/2	12.7	08	NUF-06-08	22.0	16.0	6.0	9.5
1/2—14	08	1/2	12.7	08	NUF-08-08	27.0	18.0	6.7	9.5
5/8—14	10	1/2	12.7	08	NUF-10-08	30.0	18.0	9.2	9.5
3/4—14	12	1/2	12.7	08	NUF-12-08	32.0	18.0	9.2	9.5
3/4—14	12	5/8	15.8	10	NUF-12-10	32.0	18.0	9.2	12.5
3/4—14	12	3/4	19.0	12	NUF-12-12	32.0	22.5	9.2	15.0
1—11	16	3/4	19.0	12	NUF-16-12	41.0	22.5	10.5	15.0
1—11	16	1	25.4	16	NUF-16-16	41.0	24.5	10.5	19.8
1-1/4—11	20	1-1/4	31.8	20	NUF-20-20	50.0	25.0	10.5	26.0



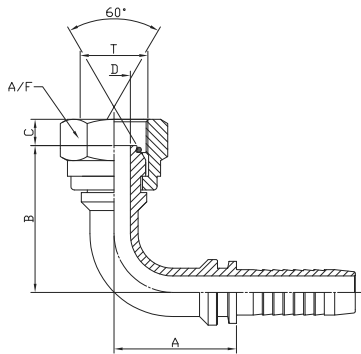
BSP SWIVEL FEMALE 60° CONE WITH O-RING:NUR

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
1/4—19	04	1/4	6.4	04	NUR-04-04	19.0	17.5	4.9	4.0
1/4—19	04	3/8	9.5	06	NUR-04-06	19.0	18.1	4.9	7.0
3/8—19	06	3/8	9.5	06	NUR-06-06	22.0	20.4	6.1	7.0
1/2—14	08	1/2	12.7	08	NUR-08-08	27.0	23.1	6.5	9.5
5/8—14	10	5/8	15.9	10	NUR-10-10	30.0	22.1	9.7	12.5
3/4—14	12	3/4	19.1	12	NUR-12-12	32.0	25.0	8.5	15.0
1—11	16	1	25.4	16	NUR-16-16	38.0	27.3	10.6	19.8
1-1/4—11	20	1	25.4	16	NUR-20-16	50.0	30.8	10.5	19.8
1-1/4—11	20	1-1/4	31.8	20	NUR-20-20	50.0	31.5	10.5	26.0
1-1/2—11	24	1-1/4	31.8	20	NUR-24-20	60.0	29.5	12.5	26.0
1-1/2—11	24	1-1/2	38.1	24	NUR-24-24	60.0	30.5	12.5	32.0
2—11	32	2	50.8	32	NUR-32-32	70.0	31.9	16.1	42.0



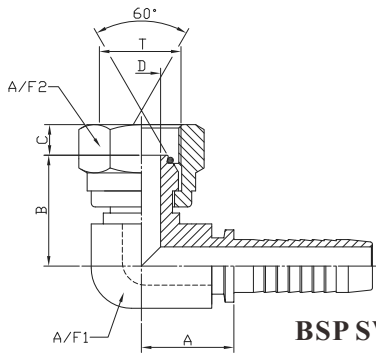
BSP SWIVEL FEMALE 60° CONE WITH O-RING 45° SWEEP ELBOW:NUR4

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
1/4—19	04	1/4	6.4	04	NUR4-04-04	19.0	36.0	15.0	4.9	4.0
3/8—19	06	3/8	9.5	06	NUR4-06-06	22.0	44.5	18.5	6.1	7.0
1/2—14	08	1/2	12.7	08	NUR4-08-08	27.0	52.0	20.5	6.5	9.5
5/8—14	10	5/8	15.9	10	NUR4-10-10	30.0	63.5	27.5	9.7	12.5
3/4—14	12	3/4	19.1	12	NUR4-12-12	32.0	71.0	29.0	8.5	15.0
1—11	16	1	25.4	16	NUR4-16-16	38.0	90.5	35.6	10.6	19.8
1-1/4—11	20	1-1/4	31.8	20	NUR4-20-20	50.0	101.5	39.0	10.5	26.0
1-1/2—11	24	1-1/2	38.1	24	NUR4-24-24	60.0	118.0	45.0	12.5	32.0
2—11	32	2	50.8	32	NUR4-32-32	70.0	134.0	47.0	16.1	42.0



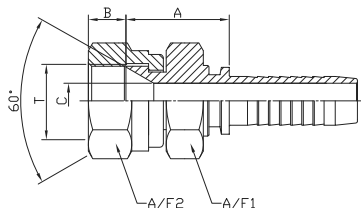
BSP SWIVEL FEMALE 60° CONE WITH O-RING 90° SWEEP ELBOW:NUR9

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
1/4—19	04	1/4	6.4	04	NUR9-04-04	19.0	28.5	28.5	4.9	4.0
1/4—19	04	3/8	9.5	06	NUR9-04-06	19.0	35.5	33.0	4.9	7.0
3/8—19	06	3/8	9.5	06	NUR9-06-06	22.0	35.5	36.0	6.1	7.0
1/2—14	08	1/2	12.7	08	NUR9-08-08	27.0	44.5	42.0	6.5	9.5
5/8—14	10	5/8	15.9	10	NUR9-10-10	30.0	53.0	55.0	9.7	12.5
3/4—14	12	3/4	19.1	12	NUR9-12-12	32.0	61.5	60.0	8.5	15.0
1—11	16	1	25.4	16	NUR9-16-16	38.0	79.5	76.0	10.6	19.8
1-1/4—11	20	1	25.4	16	NUR9-20-16	50.0	79.5	78.5	10.5	19.8
1-1/4—11	20	1-1/4	31.8	20	NUR9-20-20	50.0	90.5	83.5	10.5	26.0
1-1/2—11	24	1-1/4	31.8	20	NUR9-24-20	60.0	90.5	84.5	12.5	26.0
1-1/2—11	24	1-1/2	38.1	24	NUR9-24-24	60.0	108.0	98.5	12.5	32.0
2—11	32	2	50.8	32	NUR9-32-32	70.0	131.0	110.5	16.1	42.0



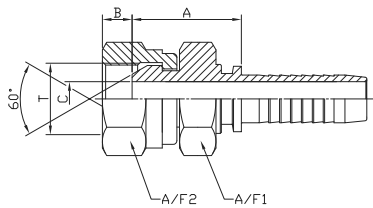
BSP SWIVEL FEMALE 60° CONE WITH O-RING 90° COMPACT ELBOW:NURC9

Thread T	Dash No.	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash							
1/4—19	04	1/4	6.4	04	NURC9-04-04	14.0	19.0	20.0	22.0	4.9	4.0
3/8—19	06	3/8	9.5	06	NURC9-06-06	19.0	22.0	23.1	27.5	6.1	7.0
1/2—14	08	1/2	12.7	08	NURC9-08-08	22.0	27.0	24.9	31.1	6.5	9.5
5/8—14	10	5/8	15.9	10	NURC9-10-10	24.0	28.0	24.6	32.5	9.7	12.5
3/4—14	12	3/4	19.1	12	NURC9-12-12	27.0	32.0	37.5	36.0	8.5	15.0
1—11	16	1	25.4	16	NURC9-16-16	36.0	38.0	51.8	44.0	10.6	19.8



BSP SWIVEL FEMALE 60° CONE SEAT DOUBLE HEX (TOYOTA):NUJT

Thread T	Dash No.	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash						
1/4—19	04	1/4	6.4	04	NUJT-04-04	19.0	19.0	18.5	8.3	4.0
3/8—19	06	3/8	9.5	06	NUJT-06-06	22.0	22.0	23.1	10.0	7.0
1/2—14	08	1/2	12.7	08	NUJT-08-08	27.0	27.0	23.0	11.5	9.5
3/4—14	12	3/4	19.1	12	NUJT-12-12	32.0	32.0	26.0	13.5	15.0
1—11	16	1	25.4	16	NUJT-16-16	38.0	38.0	30.3	14.5	19.8

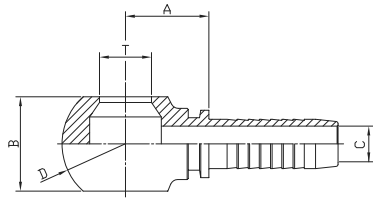


BSP SWIVEL FEMALE 60° CONE DOUBLE HEX (NISSAN):NUJN

Thread T	Dash No.	Hose Bore			Part No.	A/F1	A/F2	Dim A	Dim B	Dim C
		in	mm	dash		mm	mm	mm	mm	mm
1/4—19	04	1/4	6.4	04	NUJN-04-04	19.0	19.0	22.5	4.5	4.0
3/8—19	06	3/8	9.5	06	NUJN-06-06	22.0	22.0	24.6	6.4	7.0
1/2—14	08	1/2	12.7	08	NUJN-08-08	27.0	27.0	26.4	6.7	9.5
3/4—14	12	5/8	15.9	10	NUJN-12-10	32.0	32.0	30.7	9.0	12.5
3/4—14	12	3/4	19.1	12	NUJN-12-12	32.0	32.0	30.0	8.9	15.0

BSP BANJO: BAN

Thread	Dash No.	Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D	Dim T
		in	mm	dash		mm	mm	mm	mm	mm
1/4—19	04	1/4	6.4	04	BAN-04-04	22.0	14.0	4.0	24.0	13.3
3/8—19	06	3/8	9.5	06	BAN-06-06	24.1	18.0	7.0	28.0	16.7
1/2—14	08	3/8	9.5	06	BAN-08-06	27.1	22.0	7.0	35.0	21.0
1/2—14	08	1/2	12.7	08	BAN-08-08	27.5	22.0	9.5	35.0	21.0
5/8—14	10	5/8	15.8	10	BAN-10-10	28.2	23.5	12.5	38.0	23.0
3/4—14	12	3/4	19.0	12	BAN-12-12	36.5	29.0	15.0	45.0	26.5
1—11	16	1	25.4	16	BAN-16-16	44.5	36.0	19.8	54.0	33.3

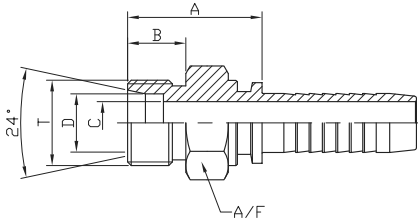
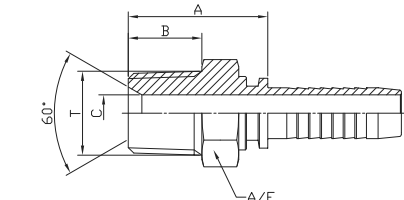


BSP BANJO BOLT: BJB

Thread T	Dash No.	Part No.	A/F	Dim A	Dim B	Dim C
			mm	mm	mm	mm
1/4—19	04	BJB-04	17.0	32.0	7.0	7.0
3/8—19	06	BJB-06	22.0	38.0	7.0	9.0
1/2—14	08	BJB-08	27.0	46.0	8.0	13.0
5/8—14	10	BJB-10	30.0	49.0	8.0	13.5
3/4—14	12	BJB-12	32.0	56.0	10.0	17.0
1—11	16	BJB-16	41.0	69.0	11.0	22.0

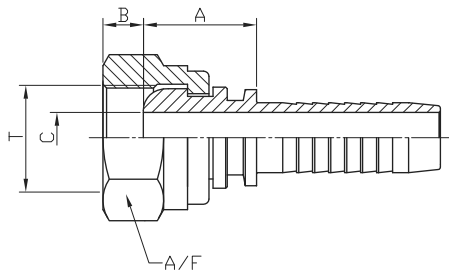
BSPT MALE: MBT

Thread T	Dash No.	Hose Bore			Part No.	A/F	Dim A	Dim B	Dim C
		in	mm	dash		mm	mm	mm	mm
1/4—19	04	1/4	6.4	04	MBT-04-04	19.0	25.5	12.5	4.0
3/8—19	06	1/4	6.4	04	MBT-06-04	22.0	28.5	14.0	4.0
1/4—19	04	3/8	9.5	06	MBT-04-06	19.0	26.0	12.5	7.0
3/8—19	06	3/8	9.5	06	MBT-06-06	22.0	28.5	14.0	7.0
1/2—14	08	3/8	9.5	06	MBT-08-06	27.0	32.0	15.0	7.0
3/8—19	06	1/2	12.7	08	MBT-06-08	22.0	28.5	14.0	9.5
1/2—14	08	1/2	12.7	08	MBT-08-08	27.0	34.0	15.0	9.5
5/8—14	10	5/8	15.8	10	MBT-10-10	30.0	34.0	15.0	12.5
3/4—14	12	5/8	15.8	10	MBT-12-10	32.0	35.0	17.0	12.5
3/4—14	12	3/4	19.0	12	MBT-12-12	32.0	36.0	17.0	15.0
1—11	16	1	25.4	16	MBT-16-16	41.0	43.5	19.5	19.8
1-1/4—11	20	1-1/4	31.8	20	MBT-20-20	50.0	46.5	21.5	26.0
1-1/2—11	24	1-1/2	38.1	24	MBT-24-24	55.0	47.5	21.5	32.0
2—11	32	2	50.8	32	MBT-32-32	70.0	47.5	21.5	45.0



METRIC MALE 24° LIGHT DUTY: MMTL

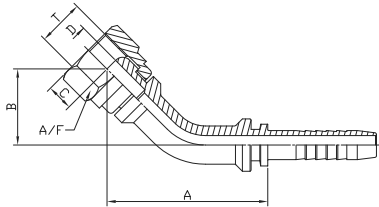
Thread T	Tube D	Hose Bore			Part No.	A/F	Dim A	Dim B	Dim C
		in	mm	dash		mm	mm	mm	mm
M12X1.5	6	1/4	6.4	04	MMTL-12-04	12.0	22.0	10.0	4.0
M14X1.5	8	1/4	6.4	04	MMTL-14-04	14.0	22.0	10.0	4.0
M16X1.5	10	1/4	6.4	04	MMTL-16-04	17.0	24.0	11.0	4.0
M16X1.5	10	5/16	7.9	05	MMTL-16-05	17.0	24.0	11.0	5.5
M18X1.5	12	5/16	7.9	05	MMTL-18-05	19.0	24.0	11.0	5.5
M16X1.5	10	3/8	9.5	06	MMTL-16-06	17.0	25.0	11.0	7.0
M18X1.5	12	3/8	9.5	06	MMTL-18-06	19.0	25.0	11.0	7.0
M22X1.5	15	3/8	9.5	06	MMTL-22-06	24.0	26.0	12.0	7.0
M22X1.5	15	1/2	12.7	08	MMTL-22-08	24.0	28.0	12.0	9.5
M26X1.5	18	1/2	12.7	08	MMTL-26-08	27.0	28.0	12.0	9.5
M26X1.5	18	5/8	15.8	10	MMTL-26-10	27.0	28.0	12.0	12.5
M30X2	22	3/4	19.0	12	MMTL-30-12	32.0	30.0	14.0	15.0
M36X2	28	1	25.4	16	MMTL-36-16	41.0	36.0	14.0	19.8
M45X2	35	1-1/4	31.8	20	MMTL-45-20	46.0	40.0	15.0	26.0
M52X2	42	1-1/2	38.1	24	MMTL-52-24	55.0	40.0	15.0	32.0



METRIC MULTISEAL SWIVEL FEMALE LIGHT DUTY:NMML

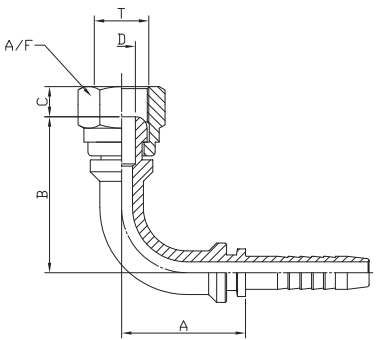
Thread T	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
	in	mm	dash					
M12X1.5	1/4	6.4	04	NMML-12-04	17.0	19.0	2.2	4.0
M14X1.5	1/4	6.4	04	NMML-14-04	19.0	19.0	1.7	4.0
M16X1.5	3/8	9.5	06	NMML-16-06	22.0	21.0	2.1	7.0
M18X1.5	3/8	9.5	06	NMML-18-06	24.0	22.0	2.3	7.0
M22X1.5	1/2	12.7	08	NMML-22-08	27.0	25.0	2.3	9.5
M26X1.5	1/2	12.7	08	NMML-26-08	32.0	26.0	2.5	9.5
M26X1.5	5/8	15.8	10	NMML-26-10	32.0	26.0	2.5	12.5
M30X2	3/4	19.0	12	NMML-30-12	36.0	27.0	3.6	15.0
M36X2	1	25.4	16	NMML-36-16	41.0	31.0	3.8	19.8
M45X2	1-1/4	31.8	20	NMML-45-20	55.0	35.0	5.1	26.0
M52X2	1-1/2	38.1	24	NMML-52-24	60.0	35.0	5.1	32.0

METRIC MULTISEAL SWIVEL FEMALE LIGHT DUTY 45°
ELBOW:NMML4

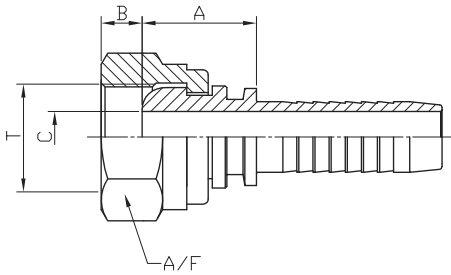


Thread T	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
	in	mm	dash						
M14X1.5	1/4	6.4	04	NMML4-14-04	19.0	37.0	18.0	1.7	4.0
M18X1.5	3/8	9.5	06	NMML4-18-06	24.0	42.0	22.0	2.3	7.0
M22X1.5	1/2	12.7	08	NMML4-22-08	27.0	47.0	25.0	2.3	9.5
M26X1.5	5/8	15.8	10	NMML4-26-10	32.0	53.0	27.0	2.5	12.5
M30X2	3/4	19.0	12	NMML4-30-12	36.0	57.0	29.0	3.6	15.0
M36X2	1	25.4	16	NMML4-36-16	41.0	69.0	31.0	3.8	19.8

METRIC MULTISEAL SWIVEL FEMALE LIGHT DUTY 90°
ELBOW:NMML9



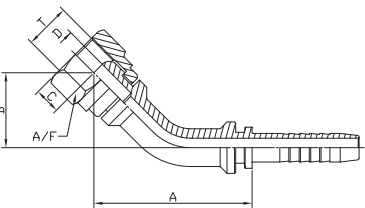
Thread T	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
	in	mm	dash						
M14X1.5	1/4	6.4	04	NMML9-14-04	19.0	19.0	35.0	1.7	4.0
M18X1.5	3/8	9.5	06	NMML9-18-06	24.0	22.0	40.0	2.3	7.0
M22X1.5	1/2	12.7	08	NMML9-22-08	27.0	26.0	45.0	2.3	9.5
M26X1.5	5/8	15.8	10	NMML9-26-10	32.0	32.0	55.0	2.5	12.5
M30X2	3/4	19.0	12	NMML9-30-12	36.0	35.0	62.0	3.6	15.0
M36X2	1	25.4	16	NMML9-36-16	41.0	44.0	64.0	3.8	19.8
M45X2	1-1/4	31.8	20	NMML9-45-20	55.0	57.0	65.0	5.1	26.0
M52X2	1-1/2	38.1	24	NMML9-52-24	60.0	60.0	70.0	5.1	32.0



METRIC MULTISEAL SWIVEL FEMALE HEAVY DUTY:NMMH

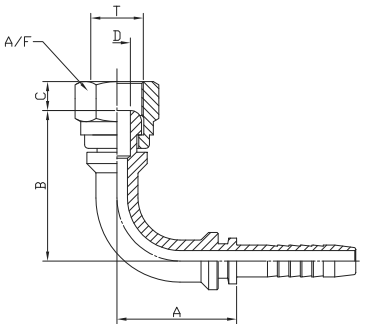
Thread T	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
	in	mm	dash					
M16X1.5	1/4	6.4	04	NMMH-16-04	22.0	22.0	3.4	4.0
M18X1.5	1/4	6.4	04	NMMH-18-04	24.0	22.0	3.0	4.0
M20X1.5	3/8	9.5	06	NMMH-20-06	27.0	24.0	2.5	7.0
M22X1.5	3/8	9.5	06	NMMH-22-06	27.0	24.0	3.0	7.0
M24X1.5	1/2	12.7	08	NMMH-24-08	30.0	24.0	3.0	9.5
M30X2	5/8	15.8	10	NMMH-30-10	36.0	24.0	3.5	12.5
M36X2	3/4	19.0	12	NMMH-36-12	46.0	27.0	4.5	15.0
M42X2	1	25.4	16	NMMH-42-16	50.0	30.0	6.3	19.8
M52X2	1-1/4	31.8	20	NMMH-52-20	60.0	32.0	8.0	26.0

METRIC MULTISEAL SWIVEL FEMALE HEAVY DUTY 45°
ELBOW:NMMH4



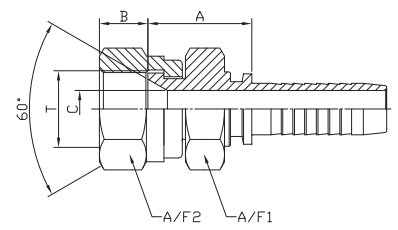
Thread T	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
	in	mm	dash						
M18X1.5	1/4	6.4	04	NMMH4-18-04	24.0	38.0	20.0	3.0	4.0
M22X1.5	3/8	9.5	06	NMMH4-22-06	27.0	43.0	23.0	3.0	7.0
M24X1.5	1/2	12.7	08	NMMH4-24-08	30.0	48.0	26.0	3.0	9.5
M30X2	5/8	15.8	10	NMMH4-30-10	36.0	53.0	28.0	3.5	12.5
M36X2	3/4	19.0	12	NMMH4-36-12	46.0	60.0	30.0	4.5	15.0
M42X2	1	25.4	16	NMMH4-42-16	50.0	68.0	31.0	6.3	19.8
M52X2	1-1/4	31.8	20	NMMH4-52-20	60.0	80.0	31.0	8.0	26.0

METRIC MULTISEAL SWIVEL FEMALE HEAVY DUTY 90°
ELBOW:NMMH9



Thread T	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
	in	mm	dash						
M18X1.5	1/4	6.4	04	NMMH9-18-04	24.0	28.0	36.0	3.0	4.0
M22X1.5	3/8	9.5	06	NMMH9-22-06	27.0	32.0	41.0	3.0	7.0
M24X1.5	1/2	12.7	08	NMMH9-24-08	30.0	39.0	46.0	3.0	9.5
M30X2	5/8	15.8	10	NMMH9-30-10	36.0	44.0	50.0	3.5	12.5
M36X2	3/4	19.0	12	NMMH9-36-12	46.0	50.0	58.0	4.5	15.0
M42X2	1	25.4	16	NMMH9-42-16	50.0	63.0	64.0	6.3	19.8
M52X2	1-1/4	31.8	20	NMMH9-52-20	60.0	69.0	69.0	8.0	26.0

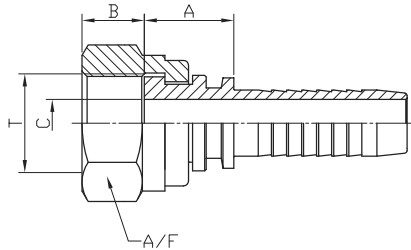
METRIC SWIVEL FEMALE 60° CONE SEAT DOUBLE HEX
(KOMATSU):NMJK



Thread T	Hose Bore			Part No.	A/F1 mm	A/F2 mm	Dim A mm	Dim B mm	Dim C mm
	in	mm	dash						
M14X1.5	1/4	6.4	04	NMJK-14-04	19.0	19.0	23.0	10.5	4.0
M14X1.5	3/8	9.5	06	NMJK-14-06	19.0	19.0	23.6	10.5	7.0
M18X1.5	3/8	9.5	06	NMJK-18-06	24.0	24.0	23.6	11.5	7.0
M22X1.5	1/2	12.7	08	NMJK-22-08	27.0	27.0	24.9	14.0	9.5
M24X1.5	5/8	15.8	10	NMJK-24-10	32.0	32.0	26.7	15.1	12.5
M30X1.5	3/4	19.0	12	NMJK-30-12	36.0	36.0	31.5	18.3	15.0
M33X1.5	1	25.4	16	NMJK-33-16	41.0	41.0	33.3	21.3	19.8
M36X1.5	1-1/4	31.8	20	NMJK-36-20	46.0	46.0	41.0	20.0	26.0
M42X1.5	1-1/2	38.1	24	NMJK-42-24	55.0	55.0	44.0	18.8	32.0

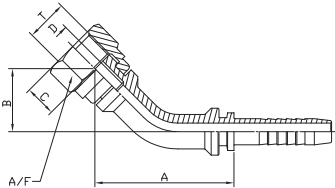


METRIC SWIVEL FEMALE FLAT FACED:NMF



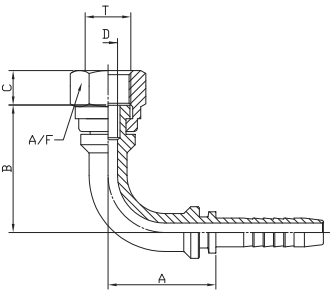
Thread T	Tube D	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
M10X1	10	1/4	6.4	04	NMF-10-04	14.0	14.5	6.0	4.0
M12X1.25	12	1/4	6.4	04	NMF-12-04	17.0	15.5	8.0	4.0
M14X1.5	14	1/4	6.4	04	NMF-14-04	19.0	15.5	8.5	4.0
M16X1.5	16	5/16	8.0	05	NMF-16-05	22.0	17.5	8.0	5.5
M18X1.5	18	3/8	9.5	06	NMF-18-06	24.0	17.5	8.0	7.0
M22X1.5	22	1/2	12.7	08	NMF-22-08	27.0	18.5	10.0	9.5
M27X1.5	27	5/8	15.8	10	NMF-27-10	32.0	20.0	10.0	12.5
M30X1.5	30	3/4	19.0	12	NMF-30-12	35.0	20.0	11.0	15.0
M36X2	36	7/8	22.3	14	NMF-36-14	41.0	20.0	13.0	17.6
M39X2	39	1	25.4	16	NMF-39-16	46.0	23.0	13.0	19.8
M42X2	42	1-1/4	31.8	20	NMF-42-20	50.0	25.0	15.0	26.0
M45X2	45	1-1/4	31.8	20	NMF-45-20	55.0	25.0	15.0	26.0
M52X2	52	1-1/2	38.1	24	NMF-52-24	60.0	25.0	17.0	32.0
M64X2	64	2	50.8	32	NMF-64-32	75.0	26.0	23.0	42.0

METRIC SWIVEL FEMALE FLAT FACED 45° ELBOW:NMF4



Thread T	Tube D	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M16X1.5	16	1/4	6.4	04	NMF4-16-04	22.0	42.3	19.2	8.0	4.0
M18X1.5	18	3/8	9.5	06	NMF4-18-06	24.0	47.2	21.4	8.0	7.0
M22X1.5	22	1/2	12.7	08	NMF4-22-08	27.0	59.9	24.0	10.0	9.5
M27X1.5	27	5/8	15.8	10	NMF4-27-10	32.0	71.7	26.4	10.0	12.5
M30X1.5	30	3/4	19.0	12	NMF4-30-12	35.0	79.4	30.0	11.0	15.0
M36X2	36	7/8	22.3	14	NMF4-36-14	41.0	79.4	30.0	13.0	17.6
M39X2	39	1	25.4	16	NMF4-39-16	46.0	86.3	30.0	13.0	19.8
M45X2	45	1-1/4	31.8	20	NMF4-45-20	55.0	96.5	33.8	15.0	26.0
M52X2	52	1-1/2	38.1	24	NMF4-52-24	60.0	108.8	37.7	17.0	32.0
M64X2	64	2	50.8	32	NMF4-64-32	75.0	128.8	45.6	23.0	42.0

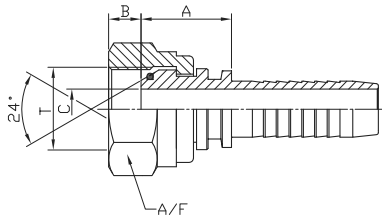
METRIC SWIVEL FEMALE FLAT FACED 90° ELBOW:NMF9



Thread T	Tube D	Hose Bore			PartNo.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M12X1.25	12	1/8	3.0	02	NMF9-12-02	17.0	26.5	30.5	8.0	2.0
M14X1.5	14	1/4	6.4	04	NMF9-14-04	19.0	30.0	34.0	8.5	4.0
M16X1.5	16	5/16	8.0	05	NMF9-16-05	22.0	34.0	38.0	8.0	5.5
M18X1.5	18	3/8	9.5	06	NMF9-18-06	24.0	35.8	41.3	8.0	7.0
M22X1.5	22	1/2	12.7	08	NMF9-22-08	27.0	41.0	48.0	10.0	9.5
M27X1.5	27	5/8	15.8	10	NMF9-27-10	32.0	56.5	54.0	10.0	12.5
M30X1.5	30	3/4	19.0	12	NMF9-30-12	36.0	66.2	63.5	11.0	15.0
M36X2	36	7/8	22.3	14	NMF9-36-14	41.0	71.2	61.0	13.0	17.6
M39X2	39	1	25.4	16	NMF9-39-16	46.0	76.7	67.5	13.0	19.8
M45X2	45	1-1/4	31.8	20	NMF9-45-20	55.0	91.5	78.5	15.0	26.0
M52X2	52	1-1/2	38.1	24	NMF9-52-24	60.0	109.4	92.0	17.0	32.0
M64X2	64	2	50.8	32	NMF9-64-32	75.0	131.0	113.3	23.0	42.0

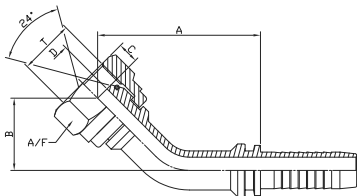


METRIC SWIVEL FEMALE WITH O-RING 24° CONE LIGHT DUTY:NMRL



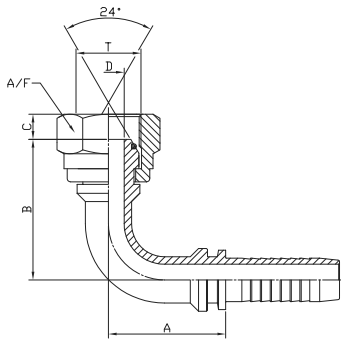
Thread T	Tube D	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
M12X1.5	12	1/4	6.4	04	NMRL-12-04	17.0	21.1	2.2	4.0
M14X1.5	14	1/4	6.4	04	NMRL-14-04	17.0	25.0	1.7	4.0
M16X1.5	16	1/4	6.4	04	NMRL-16-04	19.0	26.0	2.1	4.0
M18X1.5	18	1/4	6.4	04	NMRL-18-04	22.0	26.1	2.3	4.0
M16X1.5	16	3/8	9.5	06	NMRL-16-06	19.0	23.1	3.0	7.0
M18X1.5	18	3/8	9.5	06	NMRL-18-06	22.0	26.6	2.3	7.0
M22X1.5	22	3/8	9.5	06	NMRL-22-06	27.0	29.3	2.3	7.0
M22X1.5	22	1/2	12.7	08	NMRL-22-08	27.0	29.7	2.3	9.5
M26X1.5	26	1/2	12.7	08	NMRL-26-08	32.0	30.3	2.5	9.5
M26X1.5	26	5/8	15.9	10	NMRL-26-10	32.0	30.2	2.5	12.5
M30X2	30	3/4	19.1	12	NMRL-30-12	36.0	33.5	3.6	15.0
M36X2	36	3/4	19.1	12	NMRL-36-12	41.0	34.2	3.8	15.0
M36X2	36	1	25.4	16	NMRL-36-16	41.0	35.3	3.8	19.8
M45X2	45	1-1/4	31.8	20	NMRL-45-20	50.0	39.5	5.1	26.0
M52X2	52	1-1/2	38.1	24	NMRL-52-24	60.0	40.0	5.1	32.0

METRIC SWIVEL FEMALE WITH O-RING 24° CONE 45° SWEPT ELBOW LIGHT DUTY:NMRL4



Thread T	Tube D	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M14X1.5	14	1/4	6.4	04	NMRL4-14-04	17.0	38.0	16.5	1.7	4.0
M16X1.5	16	1/4	6.4	04	NMRL4-16-04	19.0	38.0	17.0	2.1	4.0
M16X1.5	16	3/8	9.5	06	NMRL4-16-06	19.0	47.5	21.5	3.0	7.0
M18X1.5	18	3/8	9.5	06	NMRL4-18-06	22.0	43.5	16.5	2.3	7.0
M22X1.5	22	3/8	9.5	06	NMRL4-22-06	27.0	45.0	18.0	2.3	7.0
M22X1.5	22	1/2	12.7	08	NMRL4-22-08	27.0	52.0	19.0	2.3	9.5
M26X1.5	26	5/8	15.9	10	NMRL4-26-10	32.0	62.0	26.5	2.5	12.5
M30X2	30	3/4	19.1	12	NMRL4-30-12	36.0	71.0	28.5	3.6	15.0
M36X2	36	1	25.4	16	NMRL4-36-16	41.0	85.0	32.0	3.8	19.8
M45X2	45	1-1/4	31.8	20	NMRL4-45-20	50.0	99.5	36.0	5.1	26.0
M52X2	52	1-1/2	38.1	24	NMRL4-52-24	60.0	117.0	44.5	5.1	32.0

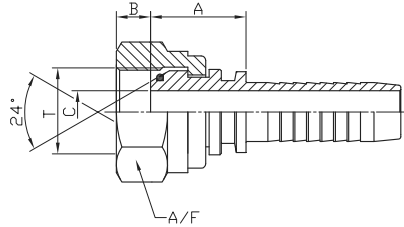
METRIC SWIVEL FEMALE WITH O-RING 24° CONE 90° SWEPT ELBOW LIGHT DUTY:NMRL9



Thread T	Tube D	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M12X1.5	12	1/4	6.4	04	NMRL9-12-04	17	28.5	32.5	2.2	4.0
M14X1.5	14	1/4	6.4	04	NMRL9-14-04	17	29.5	31.5	1.7	4.0
M16X1.5	16	1/4	6.4	04	NMRL9-16-04	19	29.5	32.0	2.1	4.0
M18X1.5	18	1/4	6.4	04	NMRL9-18-04	22	29.5	33.0	2.3	4.0
M16X1.5	16	3/8	9.5	06	NMRL9-16-06	19	35.5	40.0	3.0	7.0
M18X1.5	18	3/8	9.5	06	NMRL9-18-06	22	36.5	33.5	2.3	7.0
M22X1.5	22	3/8	9.5	06	NMRL9-22-06	27	36.5	35.0	2.3	7.0
M22X1.5	22	1/2	12.7	08	NMRL9-22-08	27	45.0	39.5	2.3	9.5
M26X1.5	26	5/8	15.9	10	NMRL9-26-10	32	51.5	53.0	2.5	12.5
M30X2	30	3/4	19.1	12	NMRL9-30-12	36	61.5	59.0	3.6	15.0
M36X2	36	1	25.4	16	NMRL9-36-16	41	76.5	69.5	3.8	19.8
M45X2	45	1-1/4	31.8	20	NMRL9-45-20	50	93.5	81.0	5.1	26.0
M52X2	52	1-1/2	38.1	24	NMRL9-52-24	60	107.5	98.0	5.1	32.0

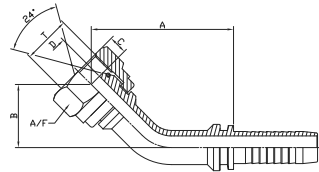


METRIC SWIVEL FEMALE WITH O-RING 24° CONE HEAVY DUTY:NMRH



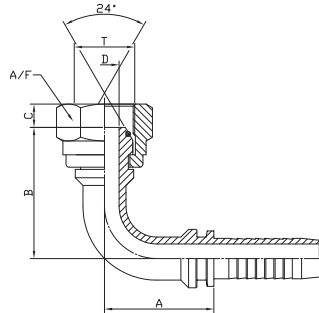
Thread T	Tube D	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
M14X1.5	14	1/4	6.4	04	NMRH-14-04	17.0	23.5	3.5	4.0
M16X1.5	16	1/4	6.4	04	NMRH-16-04	19.0	26.6	3.4	4.0
M18X1.5	18	1/4	6.4	04	NMRH-18-04	22.0	28.0	3.0	4.0
M20X1.5	20	1/4	6.4	04	NMRH-20-04	24.0	28.0	2.5	4.0
M20X1.5	20	3/8	9.5	06	NMRH-20-06	24.0	28.6	2.5	7.0
M22X1.5	22	3/8	9.5	06	NMRH-22-06	27.0	32.6	3.0	7.0
M24X1.5	24	1/2	12.7	08	NMRH-24-08	30.0	32.6	3.0	9.5
M30X2	30	5/8	15.9	10	NMRH-30-10	36.0	37.1	3.5	12.5
M30X2	30	3/4	19.1	12	NMRH-30-12	36.0	33.5	2.2	15.0
M36X2	36	3/4	19.1	12	NMRH-36-12	41.0	41.0	4.5	15.0
M42X2	42	1	25.4	16	NMRH-42-16	50.0	44.3	6.3	19.8
M52X2	52	1-1/4	31.8	20	NMRH-52-20	60.0	49.5	8.0	26.0
M52X2	52	1-1/2	38.1	24	NMRH-52-24	60.0	49.6	8.0	32.0

METRIC SWIVEL FEMALE WITH O-RING 24° CONE 45° SWEEP ELBOW HEAVY DUTY:NMRH4



Thread T	Tube D	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M16X1.5	16	1/4	6.4	04	NMRH4-16-04	19.0	36.0	15.0	3.4	4.0
M18X1.5	18	1/4	6.4	04	NMRH4-18-04	22.0	37.5	16.5	3.0	4.0
M20X1.5	20	3/8	9.5	06	NMRH4-20-06	24.0	45.0	18.0	2.5	7.0
M22X1.5	22	3/8	9.5	06	NMRH4-22-06	27.0	46.5	19.5	3.0	7.0
M24X1.5	24	1/2	12.7	08	NMRH4-24-08	30.0	52.5	20.0	3.0	9.5
M30X2	30	5/8	15.9	10	NMRH4-30-10	36.0	65.5	29.5	3.5	12.5
M36X2	36	3/4	19.1	12	NMRH4-36-12	41.0	75.0	32.5	4.5	15.0
M42X2	42	1	25.4	16	NMRH4-42-16	50.0	90.0	35.5	6.3	19.8
M52X2	52	1-1/4	31.8	20	NMRH4-52-20	60.0	103.0	39.5	8.0	26.0

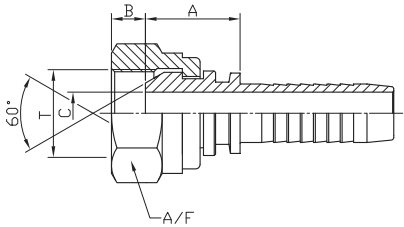
METRIC SWIVEL FEMALE WITH O-RING 24° CONE 90° SWEEP ELBOW HEAVY DUTY:NMRH9



Thread T	Tube D	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M16X1.5	16	1/4	6.4	04	NMRH9-16-04	19.0	29.5	29.5	3.4	4.0
M18X1.5	18	1/4	6.4	04	NMRH9-18-04	22.0	29.5	31.0	3.0	4.0
M20X1.5	20	3/8	9.5	06	NMRH9-20-06	24.0	36.5	35.0	2.5	7.0
M22X1.5	22	3/8	9.5	06	NMRH9-22-06	27.0	36.5	37.0	3.0	7.0
M24X1.5	24	1/2	12.7	08	NMRH9-24-08	30.0	45.0	40.5	3.0	9.5
M30X2	30	5/8	15.9	10	NMRH9-30-10	36.0	51.5	57.5	3.5	12.5
M36X2	36	3/4	19.1	12	NMRH9-36-12	41.0	61.5	64.5	4.5	15.0
M42X2	42	1	25.4	16	NMRH9-42-16	50.0	79.0	74.5	6.3	19.8
M52X2	52	1-1/4	31.8	20	NMRH9-52-20	60.0	93.5	85.5	8.0	26.0

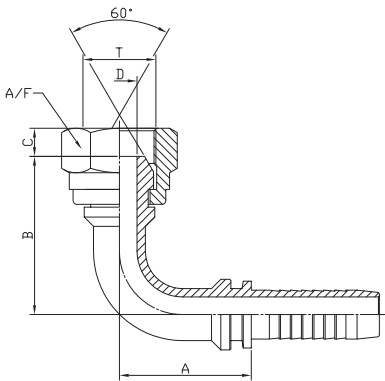


METRIC SWIVEL FEMALE 60° CONE:NMV



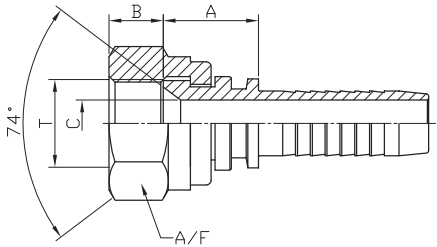
Thread T	Tube D	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash				
M14X1.5	14	1/4	6.4	04	NMV-14-04	18.0	5.5	4.0
M16X1.5	16	5/16	7.9	05	NMV-16-05	19.1	5.5	5.5
M18X1.5	18	3/8	9.5	06	NMV-18-06	19.5	5.5	7.0
M22X1.5	22	1/2	12.7	08	NMV-22-08	20.8	6.0	9.5
M27X1.5	27	5/8	15.9	10	NMV-27-10	25.5	6.0	12.5
M30X2	30	3/4	19.1	12	NMV-30-12	26.0	6.0	15.0
M39X2	39	1	25.4	16	NMV-39-16	30.0	6.5	19.8
M45X2	45	1-1/4	31.8	20	NMV-45-20	31.0	8.5	26.0
M52X2	52	1-1/2	38.1	24	NMV-52-24	32.0	10.0	32.0

METRIC SWIVEL FEMALE 60° CONE 90° SWEEP ELBOW:NMV9



Thread T	Tube D	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash					
M14X1.5	14	1/4	6.4	04	NMV9-14-04	28.0	29.0	5.5	4.0
M16X1.5	16	5/16	7.9	05	NMV9-16-05	31.0	31.5	5.5	5.5
M18X1.5	18	3/8	9.5	06	NMV9-18-06	34.0	34.0	5.5	7.0
M22X1.5	22	1/2	12.7	08	NMV9-22-08	40.0	40.5	6.0	9.5
M27X1.5	27	5/8	15.9	10	NMV9-27-10	48.0	42.0	6.0	12.5
M30X2	30	3/4	19.1	12	NMV9-30-12	55.0	55.0	6.0	15.0
M39X2	39	1	25.4	16	NMV9-39-16	73.0	72.0	6.5	19.8
M45X2	45	1-1/4	31.8	20	NMV9-45-20	89.9	84.0	8.5	26.0
M52X2	52	1-1/2	38.1	24	NMV9-52-24	103.0	93.0	10.0	32.0

METRIC SWIVEL FEMALE 74° CONE SEAT:NMJ

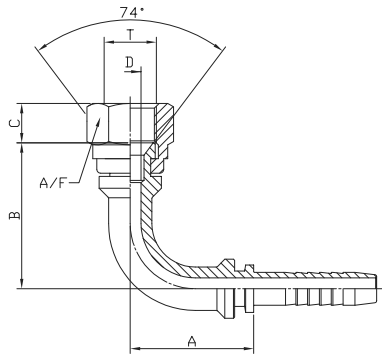


Thread T	Tube D	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash				
M14X1.5	14	1/4	6.4	04	NMJ-14-04	14.0	8.5	4.0
M16X1.5	16	5/16	7.9	05	NMJ-16-05	15.0	8.0	5.5
M18X1.5	18	3/8	9.5	06	NMJ-18-06	16.5	8.0	7.0
M22X1.5	22	1/2	12.7	08	NMJ-22-08	15.5	10.0	9.5
M27X1.5	27	5/8	15.9	10	NMJ-27-10	18.5	11.0	12.5
M30X2	30	3/4	19.1	12	NMJ-30-12	20.0	11.0	15.0
M39X2	39	1	25.4	16	NMJ-39-16	23.5	14.0	19.8
M45X2	45	1-1/4	31.8	20	NMJ-45-20	25.0	15.0	26.0
M52X2	52	1-1/2	38.1	24	NMJ-52-24	25.0	17.0	32.0



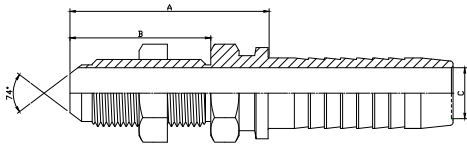
METRIC SWIVEL FEMALE 74° CONE SEAT 90° SWEPT ELBOW:NMJ9

Thread T	Tube D	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash					
M14X1.5	14	1/4	6.4	04	NMJ9-14-04	28.0	26.0	8.5	4.0
M16X1.5	16	5/16	7.9	05	NMJ9-16-05	31.0	27.5	8.0	5.5
M18X1.5	18	3/8	9.5	06	NMJ9-18-06	34.0	31.0	8.0	7.0
M22X1.5	22	1/2	12.7	08	NMJ9-22-08	40.0	39.0	10.0	9.5
M27X1.5	27	5/8	15.9	10	NMJ9-27-10	48.0	50.0	11.0	12.5
M30X2	30	3/4	19.1	12	NMJ9-30-12	55.0	56.0	11.0	15.0
M39X2	39	1	25.4	16	NMJ9-39-16	73.0	65.0	14.0	19.8
M45X2	45	1-1/4	31.8	20	NMJ9-45-20	89.8	80.0	15.0	26.0
M52X2	52	1-1/2	38.1	24	NMJ9-52-24	103.0	95.0	17.0	32.0



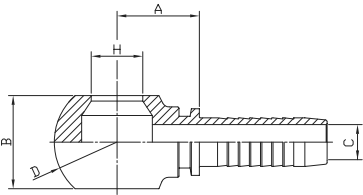
METRIC MALE 90° CONE BULKHEAD:MMBK

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
M12X1.5	12	1/4	6.4	04	MMBK-12-04	17	46.0	34.0	4.0
M14X1.5	14	1/4	6.4	04	MMBK-14-04	19	46.0	34.0	4.0
M14X1.5	14	3/8	9.5	06	MMBK-14-06	19	46.5	34.0	7.0
M16X1.5	16	1/4	6.4	04	MMBK-16-04	22	46.5	34.0	4.0
M16X1.5	16	3/8	9.5	06	MMBK-16-06	22	46.5	34.0	7.0
M20X1.5	20	3/8	9.5	06	MMBK-20-06	27	57.0	40.0	7.0
M20X1.5	20	1/2	12.7	08	MMBK-20-08	27	57.5	40.0	9.5
M20X1.5	20	1/2	12.7	08	MMBK-20-08	27	62.5	45.0	9.5



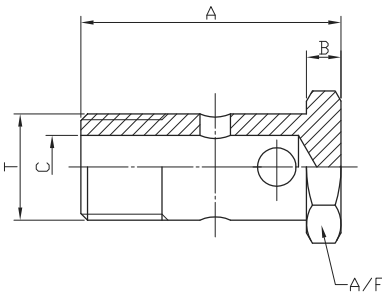
METRIC BANJO:BNM

Metric Bolt	Dash No.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm	Dim D mm	Dim H mm
		in	mm	dash						
M12X1.5	12	1/4	6.4	04	BNM-12-04	21.0	12.0	4.0	20.0	12.1
M14X1.5	14	1/4	6.4	04	BNM-14-04	21.5	14.0	4.0	24.0	14.1
M14X1.5	14	3/8	9.5	06	BNM-14-06	24.1	14.0	7.0	24.0	14.1
M16X1.5	16	3/8	9.5	06	BNM-16-06	24.1	16.0	7.0	28.0	16.1
M18X1.5	18	3/8	9.5	06	BNM-18-06	27.1	18.0	7.0	32.0	18.1
M18X1.5	18	1/2	12.7	08	BNM-18-08	27.5	18.0	9.5	32.0	18.1
M22X1.5	22	1/2	12.7	08	BNM-22-08	27.5	22.0	9.5	35.0	22.1
M22X1.5	22	5/8	15.9	10	BNM-22-10	28.2	22.0	12.5	38.0	22.1
M26X1.5	26	3/4	19.1	12	BNM-26-12	36.5	26.0	15.0	45.0	26.2



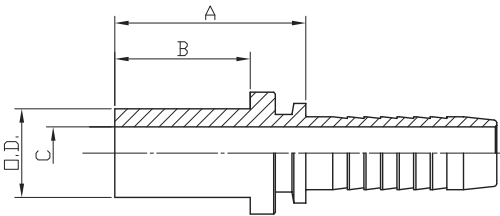
METRIC BOLT:BMB

Thread T	Dash No.	Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
M12X1.5	12	BMB-12	17.0	28.0	5.0	6.0
M14X1.5	14	BMB-14	19.0	32.0	7.0	8.0
M16X1.5	16	BMB-16	22.0	38.0	7.0	9.0
M18X1.5	18	BMB-18	24.0	44.0	8.0	11.0
M22X1.5	22	BMB-22	27.0	46.0	8.0	13.0
M26X1.5	26	BMB-26	32.0	56.0	10.0	17.0



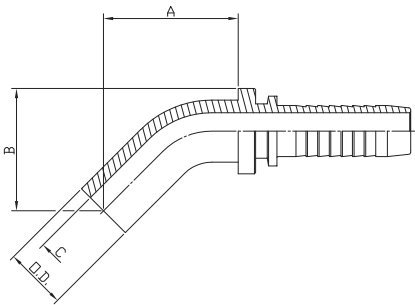
METRIC STANDPIPE STRAIGHT LIGHT DUTY:SPML

Pipe O/D	Dash No.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash				
6	06	1/4	6.4	04	SPML-06-04	29.5	22.0	4.0
10	10	3/8	9.5	06	SPML-10-10	30.6	23.0	7.0
12	12	3/8	9.5	06	SPML-12-06	30.6	23.0	7.0
15	15	3/8	9.5	06	SPML-15-06	32.6	25.0	7.0
12	12	1/2	12.7	08	SPML-12-08	30.9	23.0	9.5
15	15	1/2	12.7	08	SPML-15-08	32.9	25.0	9.5
18	18	1/2	12.7	08	SPML-18-08	33.9	26.0	9.5
18	18	5/8	15.9	10	SPML-18-10	34.2	26.0	12.5
22	22	5/8	15.9	10	SPML-22-10	36.2	28.0	12.5
22	22	3/4	19.1	12	SPML-22-12	38.0	28.0	15.0
28	28	1	25.4	16	SPML-28-16	41.3	30.0	19.8
35	35	1-1/4	31.8	20	SPML-35-20	48.5	36.0	26.0
42	42	1-1/2	38.1	24	SPML-42-24	52.6	40.0	32.0



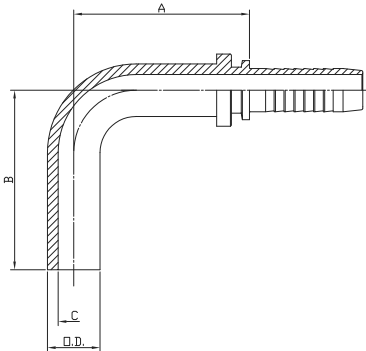
METRIC 45° STANDPIPE LIGHT DUTY:SPML4

Pipe O/D	Dash No.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash				
6	06	1/4	6.4	04	SPML4-06-04	41.0	22.0	4.0
10	10	3/8	9.5	06	SPML4-10-06	46.5	23.5	7.0
12	12	3/8	9.5	06	SPML4-12-06	48.0	24.5	7.0
15	15	1/2	12.7	08	SPML4-15-08	55.0	28.5	9.5
18	18	5/8	15.9	10	SPML4-18-10	60.5	30.0	12.5
22	18	3/4	19.1	12	SPML4-18-12	65.5	33.5	15.0
28	28	1	25.4	16	SPML4-28-16	77.0	38.5	19.8



METRIC 90° STANDPIPE LIGHT DUTY:SPML9

Pipe O/D	Dash No.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash				
6	06	1/4	6.4	04	SPML9-06-04	25.5	36.0	4.0
10	10	3/8	9.5	06	SPML9-10-10	31.5	42.0	7.0
12	12	3/8	9.5	06	SPML9-12-06	34.0	45.0	7.0
15	15	1/2	12.7	08	SPML9-15-08	38.5	52.5	9.5
18	18	1/2	12.7	08	SPML9-18-08	44.0	58.0	9.5
18	18	5/8	15.9	10	SPML9-18-10	44.0	58.0	12.5
22	22	3/4	19.1	12	SPML9-22-12	47.5	65.0	15.0
28	28	1	25.4	16	SPML9-28-16	59.5	77.0	19.8
35	35	1-1/4	31.8	20	SPML9-35-20	73.0	95.0	26.0



METRIC STANDPIPE STRAIGHT HEAVY DUTY:SPMH

Pipe O/D	Dash No.	Hose Bore			Part No.	Dim A	Dim B	Dim C
		in	mm	dash		mm	mm	mm
8	08	1/4	6.4	04	SPMH-08-04	31.5	24.0	4.0
10	10	1/4	6.4	04	SPMH-10-04	33.5	26.0	4.0
12	12	1/4	6.4	04	SPMH-12-04	33.5	26.0	4.0
14	14	3/8	9.5	06	SPMH-14-06	36.6	29.0	7.0
14	14	1/2	12.7	08	SPMH-14-08	36.9	29.0	9.5
16	16	1/2	12.7	08	SPMH-16-08	37.9	30.0	9.5
20	20	5/8	15.9	10	SPMH-20-10	44.2	36.0	12.5
20	20	3/4	19.1	12	SPMH-20-12	46.0	36.0	15.0
25	25	3/4	19.1	12	SPMH-25-12	50.0	40.0	15.0
25	25	1	25.4	16	SPMH-25-16	51.3	40.0	19.8
30	30	1	25.4	16	SPMH-30-16	55.3	44.0	19.8
38	38	1	25.4	16	SPMH-38-16	61.3	50.0	19.8
30	30	1-1/4	31.8	20	SPMH-30-20	56.5	44.0	26.0
38	38	1-1/4	31.8	20	SPMH-38-20	62.5	50.0	26.0
38	38	1-1/2	38.1	24	SPMH-38-24	62.6	50.0	32.0

METRIC 45° STANDPIPE HEAVY DUTY:SPMH4

Pipe O/D	Dash No.	Hose Bore			Part No.	Dim A	Dim B	Dim C
		in	mm	dash		mm	mm	mm
8	08	1/4	6.4	04	SPMH4-08-04	44.0	23.0	4.0
10	10	1/4	6.4	04	SPMH4-10-04	46.5	23.5	4.0
14	14	3/8	9.5	06	SPMH4-14-06	53.0	28.5	7.0
16	16	1/2	12.7	08	SPMH4-16-08	58.0	29.5	9.5
20	20	5/8	15.9	10	SPMH4-20-10	65.0	33.5	12.5
25	25	3/4	19.1	12	SPMH4-25-12	75.0	38.0	15.0
25	25	1	25.4	16	SPMH4-25-16	76.0	38.0	19.8

METRIC 90° STANDPIPE HEAVY DUTY:SPMH9

Pipe O/D	Dash No.	Hose Bore			Part No.	Dim A	Dim B	Dim C
		in	mm	dash		mm	mm	mm
8	08	1/4	6.4	04	SPMH9-08-04	28.5	39.0	4.0
10	10	1/4	6.4	04	SPMH9-10-04	31.5	42.0	4.0
12	12	1/4	6.4	04	SPMH9-12-04	34.5	45.0	4.0
14	14	3/8	9.5	06	SPMH9-14-06	37.0	52.0	7.0
14	14	1/2	12.7	08	SPMH9-14-08	38.0	52.0	9.5
16	16	1/2	12.7	08	SPMH9-16-08	41.0	55.0	9.5
20	20	5/8	15.9	10	SPMH9-20-10	47.0	65.0	12.5
20	20	3/4	19.1	12	SPMH9-20-12	47.5	65.0	15.0
25	25	3/4	19.1	12	SPMH9-25-12	57.0	75.5	15.0
25	25	1	25.4	16	SPMH9-25-16	58.0	75.5	19.8
30	30	1	25.4	16	SPMH9-30-16	67.5	87.0	19.8

SAE FLANGE STRAIGHT SERIES CODE 61:PA

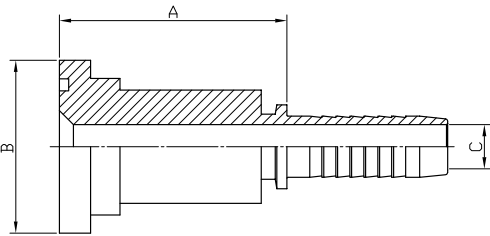
Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C
in	mm	dash	in	mm	dash		mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PA-08-08	50.0	30.1	9.5
3/4	19.0	12	1/2	12.7	08	PA-12-08	50.0	38.1	9.5
3/4	19.0	12	5/8	15.9	10	PA-12-10	50.0	38.1	12.5
3/4	19.0	12	3/4	19.0	12	PA-12-12	50.0	38.1	15.0
1	25.4	16	3/4	19.0	12	PA-16-12	50.0	44.5	15.0
1	25.4	16	1	25.4	16	PA-16-16	55.0	44.5	19.8
1-1/4	31.8	20	1	25.4	16	PA-20-16	57.0	50.8	19.8
1-1/4	31.8	20	1-1/4	31.8	20	PA-20-20	64.0	50.8	26.0
1-1/2	38.1	24	1-1/2	38.1	24	PA-24-24	66.0	60.3	32.0
2	50.8	32	1-1/2	38.1	24	PA-32-24	70.0	71.4	32.0
2	50.8	32	2	50.8	32	PA-32-32	70.0	71.4	42.0

SAE FLANGE 45° SWEPT ELBOW SERIES CODE 61:PA4

Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash	in	mm	dash		mm	mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PA4-08-08	40.0	13.0	9.5	30.1
3/4	19.0	12	1/2	12.7	08	PA4-12-08	43.0	15.0	9.5	38.1
3/4	19.0	12	3/4	19.0	12	PA4-12-12	52.0	19.0	15.0	38.1
1	25.4	16	3/4	19.0	12	PA4-16-12	52.0	19.0	15.0	44.5
1	25.4	16	1	25.4	16	PA4-16-16	60.0	24.0	19.8	44.5
1-1/4	31.8	20	1	25.4	16	PA4-20-16	65.0	24.0	19.8	50.8
1-1/4	31.8	20	1-1/4	31.8	20	PA4-20-20	70.0	30.0	26.0	50.8
1-1/2	38.1	24	1-1/4	31.8	20	PA4-24-20	80.0	30.0	26.0	60.3
1-1/2	38.1	24	1-1/2	38.1	24	PA4-24-24	80.0	32.0	32.0	60.3
2	50.8	32	2	50.8	32	PA4-32-32	95.0	40.0	42.0	71.4

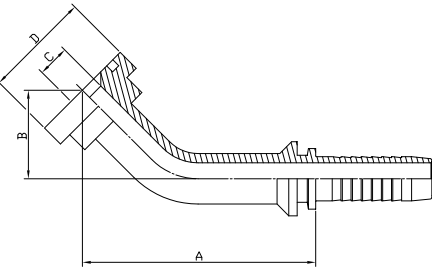
SAE FLANGE 90° SWEPT ELBOW SERIES CODE 61:PA9

Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash	in	mm	dash		mm	mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PA9-08-08	35.0	32.0	9.5	30.1
3/4	19.0	12	1/2	12.7	08	PA9-12-08	39.0	36.0	9.5	38.1
3/4	19.0	12	5/8	15.9	10	PA9-12-10	43.0	40.0	12.5	38.1
3/4	19.0	12	3/4	19.0	12	PA9-12-12	50.0	43.0	15.0	38.1
1	25.4	16	3/4	19.0	12	PA9-16-12	50.0	50.0	15.0	44.5
1	25.4	16	1	25.4	16	PA9-16-16	60.0	56.0	19.8	44.5
1-1/4	31.8	20	1	25.4	16	PA9-20-16	65.0	57.0	19.8	50.8
1	25.4	16	1-1/4	31.8	20	PA9-16-20	60.0	57.0	26.0	44.5
1-1/4	31.8	20	1-1/4	31.8	20	PA9-20-20	65.0	60.0	26.0	50.8
1-1/2	38.1	24	1-1/4	31.8	20	PA9-24-20	65.0	68.0	26.0	60.3
1-1/2	38.1	24	1-1/2	38.1	24	PA9-24-24	80.0	80.0	32.0	60.3
2	50.8	32	1-1/2	38.1	24	PA9-32-24	80.0	80.0	32.0	71.4
2	50.8	32	2	50.8	32	PA9-32-32	105.0	90.0	42.0	71.4



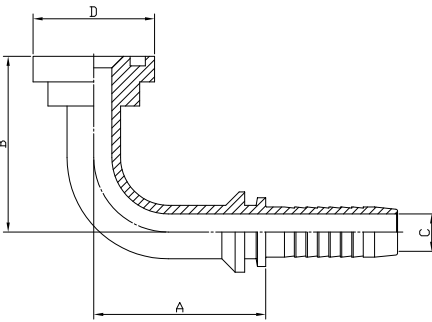
SAE FLANGE STRAIGHT SERIES CODE 62 (SOLID):PH

Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C
in	mm	dash	in	mm	dash		mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PH-08-08	48.8	31.8	9.5
3/4	19.0	12	3/4	19.0	12	PH-12-12	51.8	41.4	15.0
1	25.4	16	3/4	19.0	12	PH-16-12	71.1	47.8	15.0
1	25.4	16	1	25.4	16	PH-16-16	72.5	47.8	19.8
1-1/4	31.8	20	1	25.4	16	PH-20-16	81.2	54.1	19.8
1-1/4	31.8	20	1-1/4	31.8	20	PH-20-20	81.5	54.1	26.0
1-1/2	38.1	24	1-1/4	31.8	20	PH-24-20	92.2	63.5	26.0
1-1/2	38.1	24	1-1/2	38.1	24	PH-24-24	92.5	63.5	32.0
2	50.8	32	2	50.8	32	PH-32-32	96.5	79.5	42.0



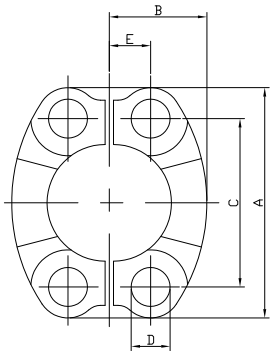
SAE FLANGE 45° SWEPT ELBOW SERIES CODE 62:PH4

Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash	in	mm	dash		mm	mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PH4-08-08	47.8	18.3	9.5	31.8
3/4	19.0	12	3/4	19.0	12	PH4-12-12	54.6	22.1	15.0	41.4
1	25.4	16	3/4	19.0	12	PH4-16-12	61.5	26.4	15.0	47.8
1	25.4	16	1	25.4	16	PH4-16-16	62.7	26.4	19.8	47.8
1-1/4	31.8	20	1	25.4	16	PH4-20-16	72.9	32.5	19.8	54.1
1-1/4	31.8	20	1-1/4	31.8	20	PH4-20-20	73.2	32.5	26.0	54.1
1-1/2	38.1	24	1-1/4	31.8	20	PH4-24-20	83.4	38.6	26.0	63.5
1-1/2	38.1	24	1-1/2	38.1	24	PH4-24-24	83.8	38.6	32.0	63.5
2	50.8	32	2	50.8	32	PH4-32-32	105.4	49.8	42.0	79.5



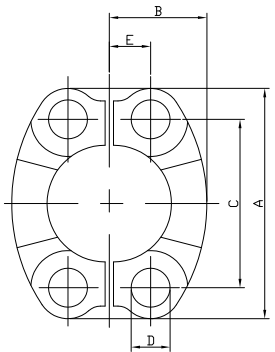
SAE FLANGE 90° SWEPT ELBOW SERIES CODE 62:PH9

Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D
in	mm	dash	in	mm	dash		mm	mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PH9-08-08	43.6	39.9	9.5	31.8
3/4	19.0	12	3/4	19.0	12	PH9-12-12	49.9	49.0	15.0	41.4
1	25.4	16	3/4	19.0	12	PH9-16-12	57.4	59.7	15.0	47.8
1	25.4	16	1	25.4	16	PH9-16-16	58.8	59.7	19.8	47.8
1-1/4	31.8	20	1	25.4	16	PH9-20-16	68.3	74.0	19.8	54.1
1-1/4	31.8	20	1-1/4	31.8	20	PH9-20-20	68.5	74.0	26.0	54.1
1-1/2	38.1	24	1-1/4	31.8	20	PH9-24-20	78.1	88.4	26.0	63.5
1-1/2	38.1	24	1-1/2	38.1	24	PH9-24-24	78.5	88.4	32.0	63.5
2	50.8	32	2	50.8	32	PH9-32-32	100.3	115.1	42.0	79.5



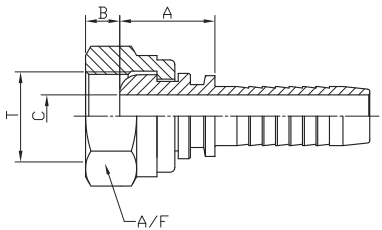
SPLIT FLANGE CLAMPS SERIES CODE 61:PAC

Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D	Dim E
in	mm	dash		mm	mm	mm	mm	mm
1/2	12.7	08	PAC-08	54.0	23.0	38.1	9.0	8.7
3/4	19.0	12	PAC-12	65.1	26.1	47.6	11.0	11.1
1	25.4	16	PAC-16	69.8	29.4	52.4	11.0	13.1
1-1/4	31.8	20	PAC-20	79.4	36.5	58.7	12.0	15.1
1-1/2	38.1	24	PAC-24	93.7	41.3	69.8	13.5	17.8
2	50.8	32	PAC-32	101.6	48.4	77.8	13.5	21.4



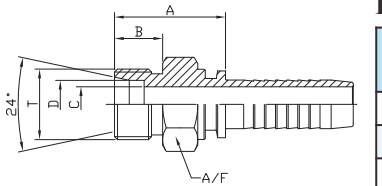
SPLIT FLANGE CLAMPS SERIES CODE 62:PHC

Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D	Dim E
in	mm	dash		mm	mm	mm	mm	mm
1/2	12.7	08	PHC-08	56.3	23.8	40.5	9.0	9.1
3/4	19.0	12	PHC-12	71.4	30.2	50.8	11.0	11.9
1	25.4	16	PHC-16	80.9	34.9	57.1	13.0	13.9
1-1/4	31.8	20	PHC-20	95.2	38.9	66.7	15.0	15.8
1-1/2	38.1	24	PHC-24	112.7	47.6	79.4	17.0	18.2
2	50.8	32	PHC-32	133.3	57.1	96.8	21.0	22.2



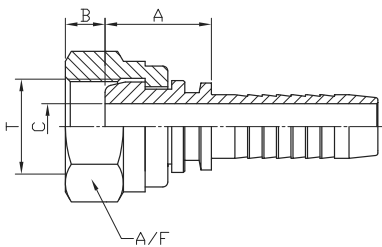
FRENCH METRIC SWIVEL FEMALE MILLIMETRIC TYPE:NMI

Thread T	Dash No.	Hose Bore			Part No.	A/F	Dim A	Dim B	Dim C
		in	mm	dash		mm	mm	mm	mm
M27X1.5	27	5/8	15.9	10	NMI-27-10	32	22.2	5.1	12.5
M27X1.5	27	5/8	15.9	10	NMI-27-10	32	22.2	5.1	12.5
M30X1.5	30	3/4	19.1	12	NMI-30-12	36	25.5	4.1	15.0
M33X1.5	33	3/4	19.1	12	NMI-33-12	38	25.5	4.1	15.0
M36X1.5	36	1	25.4	16	NMI-36-16	41	27.8	4.8	19.8
M39X1.5	39	1	25.4	16	NMI-39-16	46	28.3	4.3	19.8



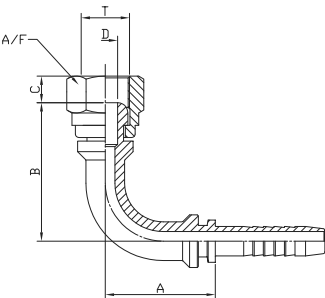
FRENCH METRIC MALE 24° CONE SEAT MILLIMETRIC TYPE:MMI

Thread T	Dash No.	Hose Bore			Part No.	A/F	Dim A	Dim B	Dim C	Dim D
		in	mm	dash		mm	mm	mm	mm	mm
M27X1.5	27	5/8	15.9	10	MMI-27-10	28	28.7	14.0	12.5	18.0
M27X1.5	27	5/8	15.9	10	MMI-27-10	28	28.7	14.0	12.5	20.0
M30X1.5	30	3/4	19.1	12	MMI-30-12	30	30.0	14.0	15.0	22.0
M33X1.5	33	3/4	19.1	12	MMI-33-12	34	31.0	14.0	15.0	25.0



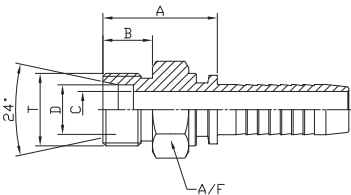
METRIC SWIVEL FEMALE GAZ TYPE:NMG

Thread T	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
	in	mm	dash					
M20X1.5	3/8	9.5	06	NMG-20-06	27.0	20.0	4.3	7.0
M24X1.5	1/2	12.7	08	NMG-24-08	30.0	22.0	4.0	9.5
M30X1.5	5/8	15.8	10	NMG-30-10	36.0	24.0	5.1	12.5
M36X1.5	3/4	19.0	12	NMG-36-12	46.0	32.0	4.8	15.0
M45X1.5	1	25.4	16	NMG-45-16	55.0	33.0	4.8	19.8



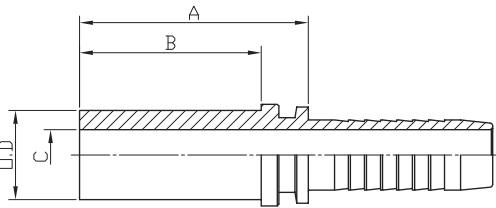
FRENCH METRIC SWIVEL FEMALE 90° ELBOW GAZ TYPE:NMG9

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M20X1.5	20	3/8	9.5	06	NMG9-20-06	24	36.5	33.5	4.3	7.0
M24X1.5	24	1/2	12.7	08	NMG9-24-08	30	45.0	41.0	4.0	9.5
M30X2	30	5/8	15.9	10	NMG9-30-10	36	51.5	53.5	5.1	12.5
M36X2	36	3/4	19.1	12	NMG9-36-12	41	61.5	60.0	4.8	15.0



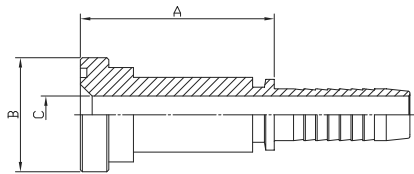
MATRIC MALE 24° CONE SEAT GAZ TYPE:MMG

Thread T	Tube Size		Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
	in	mm	in	mm	dash					
M20X1.5	0.52	13.2	3/8	9.5	06	MMG-20-06	22.0	26.0	12.0	7.0
M24X1.5	0.66	16.7	1/2	12.7	08	MMG-24-08	27.0	28.0	12.0	9.5
M30X1.5	0.84	21.2	5/8	15.8	10	MMG-30-10	32.0	30.0	14.0	12.5
M36X1.5	1.05	26.7	3/4	19.0	12	MMG-36-12	41.0	31.0	14.0	15.0
M45X1.5	1.32	33.5	1	25.4	16	MMG-45-16	46.0	36.0	15.5	19.8



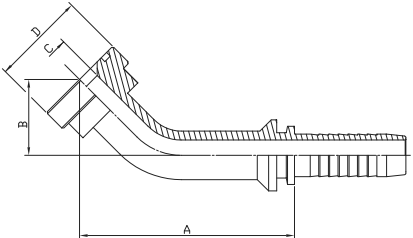
GAZ STANDPIPE STRAIGHT (SOLID):SGZ

Pipe O.D.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm
	in	mm	dash				
13.2	3/8	9.5	06	SGZ-06	35.0	30.0	7.0
16.7	1/2	12.7	08	SGZ-08	39.0	34.0	9.5
21.2	5/8	15.8	10	SGZ-10	42.0	36.0	12.5
26.7	3/4	19.0	12	SGZ-12	44.0	38.0	15.0



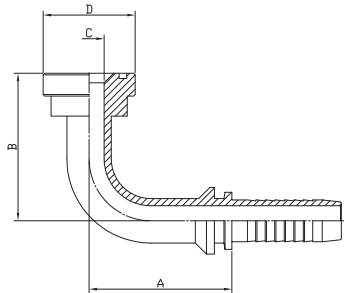
FLANGE STRAIGHT KOMATSU:PAJK

FLANGE	Dash No.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash				
5/8	10	5/8	15.9	10	PAJK-10-10	65.7	34.0	12.5



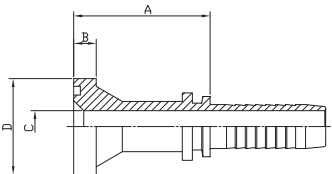
FLANGE 45° ELBOW KOMATSU:PAJK4

FLANGE	Dash No.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash					
5/8	10	5/8	15.9	10	PAJK4-10-10	61.0	22.0	12.5	34.0



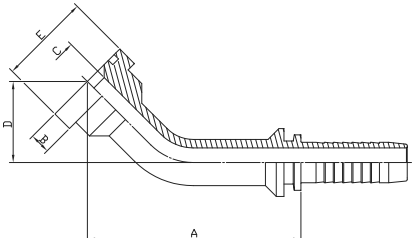
FLANGE 90° ELBOW KOMATSU:PAJK9

FLANGE	Dash No.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash					
5/8	10	5/8	15.9	10	PAJK9-10-10	56.0	47.5	12.5	34.0



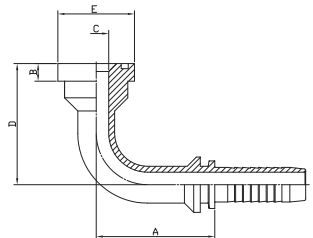
FLANGE SUPERCAT STRAIGHT:PASC

FLANGE	Dash No.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash					
3/4	12	3/4	19.1	12	PASC-12-12	74.5	14.3	15.0	41.5
1	16	1	25.4	16	PASC-16-16	86.8	14.3	19.8	47.7
1-1/4	20	1	25.4	16	PASC-20-16	92.3	14.3	19.8	54.0
1-1/4	20	1-1/4	31.8	20	PASC-20-20	86.0	14.3	26.0	54.0
1-1/2	24	1-1/2	38.1	24	PASC-24-24	94.0	14.3	32.0	63.6



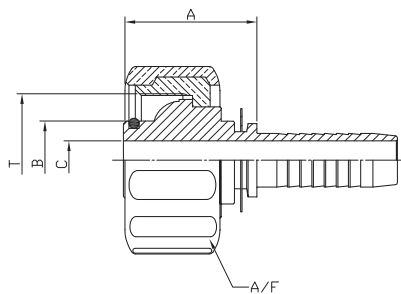
FLANGE SUPERCAT 45° ELBOW:PASC4

FLANGE	Dash No.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm	Dim D mm	Dim E mm
		in	mm	dash						
3/4	12	3/4	19.1	12	PASC4-12-12	77.0	14.3	15.0	32.0	41.5
1	16	1	25.4	16	PASC4-16-16	89.5	14.3	19.8	36.5	47.7
1-1/4	20	1	25.4	16	PASC4-20-16	92.5	14.3	19.8	40.5	54.0
1-1/4	20	1-1/4	31.8	20	PASC4-20-20	99.0	14.3	26.0	41.5	54.0



FLANGE SUPERCAT 90° ELBOW:PASC9

FLANGE	Dash No.	Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm	Dim D mm	Dim E mm
		in	mm	dash						
3/4	12	3/4	19.1	12	PASC9-12-12	64.5	14.3	15.0	64.5	41.5
1	16	1	25.4	16	PASC9-16-16	77.5	14.3	19.8	76.5	47.7
1-1/4	20	1	25.4	16	PASC9-20-16	75.5	14.3	19.8	80.5	54.0
1-1/4	20	1-1/4	31.8	20	PASC9-20-20	85.5	14.3	26.0	87.0	54.0

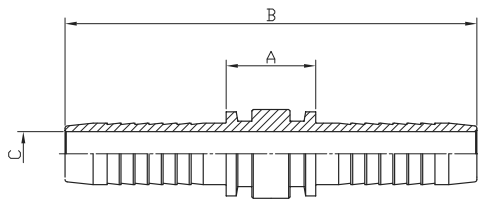
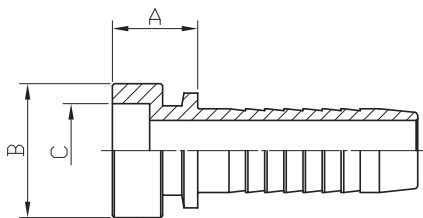


METRIC SWIVEL FEMALE - WASH CLEANER:NWA

Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
M22X1.5	22	1/4	6.4	04	NWA-22-04	27.0	34.0	13.9	4.0
M22X1.5	22	5/16	8.0	05	NWA-22-05	27.0	34.0	13.9	5.5
M22X1.5	22	3/8	9.5	06	NWA-22-06	27.0	34.0	13.9	7.0

BRAZING TAIL:BZT

Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm
in	mm	dash				
3/16	5.0	03	BZT-06	11.5	10.0	6.0
1/4	6.0	04	BZT-08	13.0	12.0	8.0
3/8	10.0	06	BZT-12	13.5	16.0	12.0
3/8	10.0	06	BZT-14	13.5	18.0	14.0
1/2	12.0	08	BZT-15	14.0	20.0	15.0
1/2	12.0	08	BZT-16	14.0	20.0	16.0
5/8	16.0	10	BZT-18	15.0	23.0	18.0
3/4	19.0	12	BZT-22	16.0	26.0	22.0
1	25.0	16	BZT-28	18.5	34.0	28.0
1-1/4	31.0	20	BZT-35	21.5	40.0	35.0
1-1/2	38.0	24	BZT-40	21.5	50.0	40.0
2	51.0	32	BZT-50	23.0	60.0	50.0
2-1/2	63.0	40	BZT-60	22.0	73.0	60.0
3	76.0	48	BZT-70	38.0	89.0	70.0

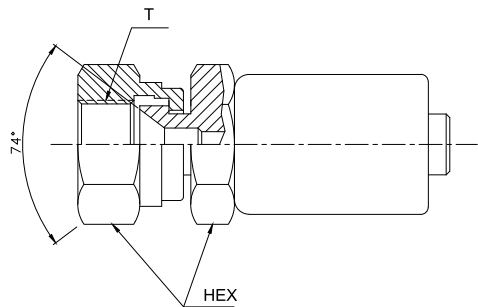
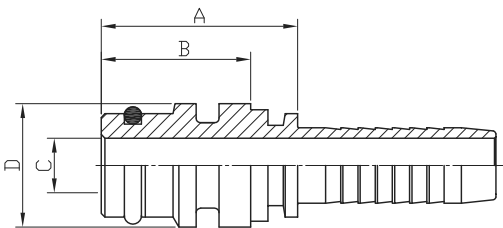


DOUBLE CONNECTOR:HHM

Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm
in	mm	dash				
1/4	6.4	04	HHM-04	14.0	69.0	4.0
3/8	9.5	06	HHM-06	14.7	73.5	7.0
1/2	12.7	08	HHM-08	15.8	78.0	9.5
5/8	15.9	10	HHM-10	15.8	84.0	12.5
3/4	19.1	12	HHM-12	18.5	91.5	15.0
1	25.4	16	HHM-16	22.6	119.0	19.8

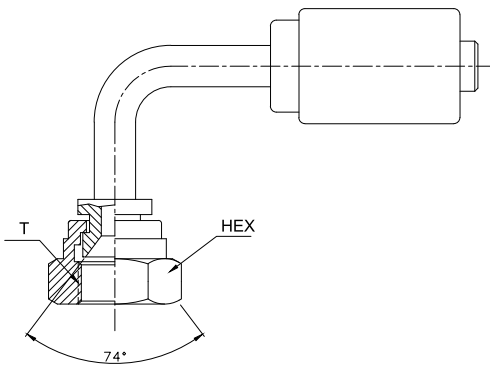
SAE STAPLE-LOCK MALE:SLOK

Hose Bore			Part No.	Dim A mm	Dim B mm	Dim C mm	Dim D mm
in	mm	dash					
1/4	6.4	04	SLOK-04	33.0	28.7	4.0	15.0
3/8	9.5	06	SLOK-06	33.6	28.8	7.0	20.0
1/2	12.7	08	SLOK-08	33.9	28.7	9.5	24.0
3/4	19.1	12	SLOK-12	35.0	28.9	15.0	29.0
1	25.4	16	SLOK-16	42.3	35.1	19.8	39.0
1-1/4	31.8	20	SLOK-20	42.5	35.0	26.0	46.0
1-1/2	38.1	24	SLOK-24	51.5	40.0	32.0	55.0
2	50.8	32	SLOK-32	48.9	40.0	42.0	64.0



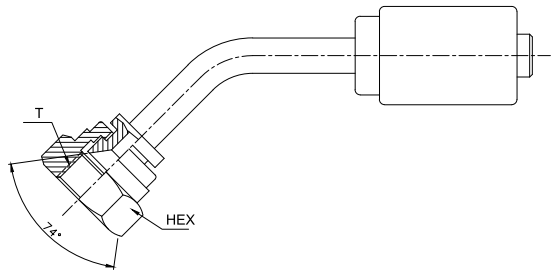
JIC SWIVEL FEMALE 74° CONE SEAT:RNJ

REF. NO.	T	HOSE I.D.	HEX mm
RNJ-07-04	7/16—20	1/4"	15.0
RNJ-09-06	9/16—18	3/8"	19.0
RNJ-12-08	3/4—16	1/2"	24.0
RNJ-14-10	7/8—14	5/8"	27.0
RNJ-17-12	1-1/16—12	3/4"	32.0
RNJ-21-16	1-5/16—12	1"	41.0
RNJ-26-20	1-5/8—12	1-1/4"	50.0
RNJ-30-24	1-7/8—12	1-1/2"	55.0
RNJ-40-32	2-1/2—12	2"	75.0



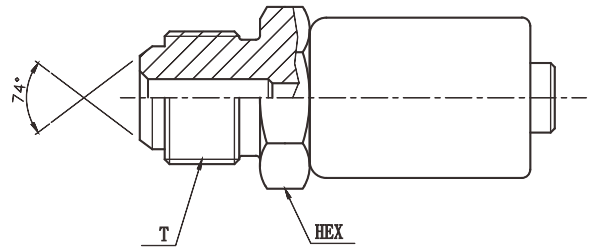
JIC SWIVEL FEMALE 74° CONE SEAT 90° SWEPT ELBOW:RNJ9

REF. NO.	T	HOSE I.D.	HEX mm
RNJ9-07-04	7/16—20	1/4"	15.0
RNJ9-09-06	9/16—18	3/8"	19.0
RNJ9-12-08	3/4—16	1/2"	24.0
RNJ9-14-10	7/8—14	5/8"	27.0
RNJ9-17-12	1-1/16—12	3/4"	32.0
RNJ9-21-16	1-5/16—12	1"	41.0
RNJ9-26-20	1-5/8—12	1-1/4"	50.0
RNJ9-30-24	1-7/8—12	1-1/2"	55.0
RNJ9-40-32	2-1/2—12	2"	75.0



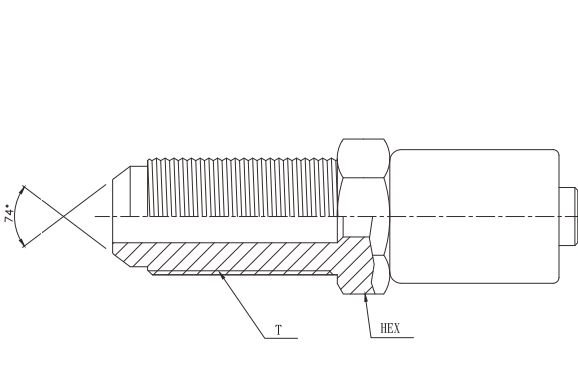
JIC SWIVEL FEMALE 74° CONE SEAT 45° SWEPT ELBOW:RNJ4

REF. NO.	T	HOSE I.D.	HEX mm
RNJ4-07-04	7/16—20	1/4"	15.0
RNJ4-09-06	9/16—18	3/8"	19.0
RNJ4-12-08	3/4—16	1/2"	24.0
RNJ4-14-10	7/8—14	5/8"	27.0
RNJ4-17-12	1-1/16—12	3/4"	32.0
RNJ4-21-16	1-5/16—12	1"	41.0
RNJ4-26-20	1-5/8—12	1-1/4"	50.0
RNJ4-30-24	1-7/8—12	1-1/2"	55.0
RNJ4-40-32	2-1/2—12	2"	75.0



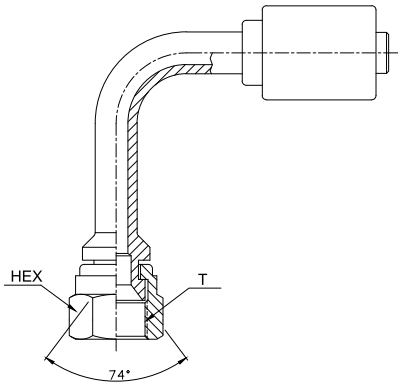
JIC MALE 74° CONE:RMJ

REF. NO.	T	HOSE I.D.	HEX mm
RMJ-07-04	7/16—20	1/4"	14.0
RMJ-09-06	9/16—18	3/8"	17.0
RMJ-12-08	3/4—16	1/2"	22.0
RMJ-14-10	7/8—14	5/8"	27.0
RMJ-17-12	1-1/16—12	3/4"	30.0
RMJ-21-16	1-5/16—12	1"	36.0
RMJ-26-20	1-5/8—12	1-1/4"	46.0
RMJ-30-24	1-7/8—12	1-1/2"	50.0
RMJ-40-32	2-1/2—12	2"	65.0



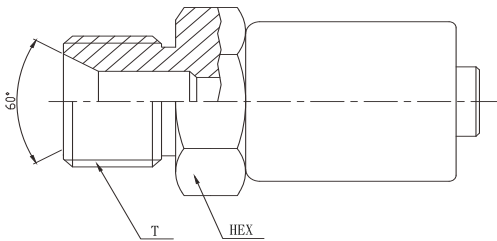
JIC MALE 74° CONE BULKHEAD:RMJB

REF. NO.	T	HOSE I.D.	HEX mm
RMJB-07-04	7/16—20	1/4"	17.0
RMJB-09-04	9/16—18	1/4"	17.0
RMJB-09-06	9/16—18	3/8"	21.0
RMJB-12-06	3/4—16	3/8"	23.0
RMJB-12-08	3/4—16	1/2"	26.0
RMJB-17-08	1-1/16—12	1/2"	32.0
RMJB-17-12	1-1/16—12	3/4"	32.0
RMJB-21-12	1-5/16—12	3/4"	38.0



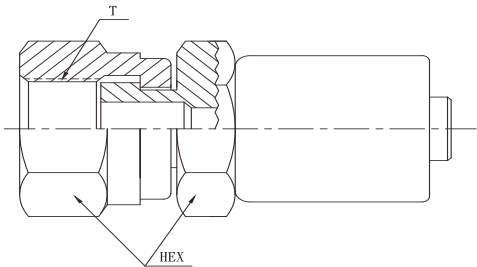
JIC SWIVEL FEMALE 74° CONE SEAT LONG
DROP 90° SWEPT ELBOW:RNJ9-L

REF. NO.	T	HOSE I.D.	HEX mm
RNJ9-07-04-L	7/16—20	1/4"	15.0
RNJ9-09-06-L	9/16—18	3/8"	19.0
RNJ9-12-08-L	3/4—16	1/2"	24.0
RNJ9-14-10-L	7/8—14	5/8"	27.0
RNJ9-17-12-L	1-1/16—12	3/4"	32.0
RNJ9-21-16-L	1-5/16—12	1"	41.0
RNJ9-26-20-L	1-5/8—12	1-1/4"	50.0
RNJ9-30-24-L	1-7/8—12	1-1/2"	55.0
RNJ9-40-32-L	2-1/2—12	2"	75.0



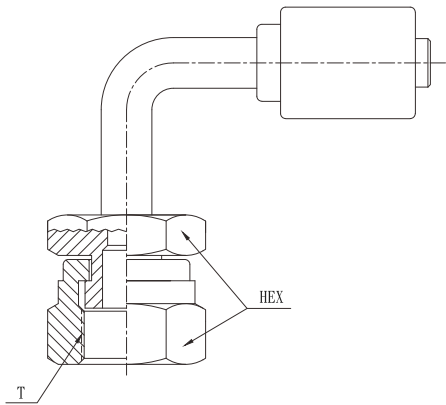
SAE MALE WITH O-RING BOSS 60° CONE
SEAT:RMSE

REF. NO.	T	HOSE I.D.	HEX mm
RMSE-07-04	7/16—20	1/4"	14.0
RMSE-09-06	9/16—18	3/8"	17.0
RMSE-12-08	3/4—16	1/2"	22.0
RMSE-14-10	7/8—14	5/8"	27.0
RMSE-17-12	1-1/16—12	3/4"	30.0
RMSE-21-16	1-5/16—12	1"	36.0
RMSE-26-20	1-5/8—12	1-1/4"	46.0
RMSE-30-24	1-7/8—12	1-1/2"	50.0
RMSE-40-32	2-1/2—12	2"	65.0



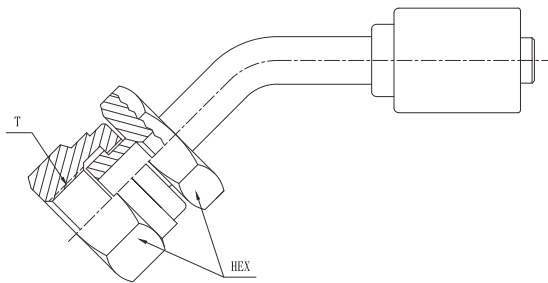
ORFS SWIVEL FEMALE FLAT FACED:RNOR

REF. NO.	T	HOSE I.D.	HEX mm
RNOR-04-04	9/16—18	1/4"	16.0
RNOR-06-06	1-1/16—16	3/8"	19.0
RNOR-08-08	13/16—16	1/2"	22.0
RNOR-10-10	1—14	5/8"	27.0
RNOR-12-12	1-3/16—12	3/4"	32.0
RNOR-16-16	1-7/16—12	1"	38.0
RNOR-20-20	1-11/16—12	1-1/4"	46.0
RNOR-24-24	2—12	1-1/2"	55.0



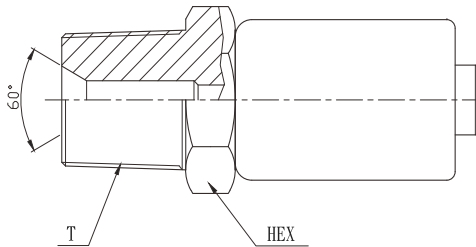
ORFS SWIVEL FEMALE FLAT FACED 90°
ELBOW:RNOR9

REF. NO.	T	HOSE I.D.	HEX mm
RNOR9-04-04	9/16—18	1/4"	16.0
RNOR9-06-06	1-1/16—16	3/8"	19.0
RNOR9-08-08	13/16—16	1/2"	22.0
RNOR9-10-10	1—14	5/8"	27.0
RNOR9-12-12	1-3/16—12	3/4"	32.0
RNOR9-16-16	1-7/16—12	1"	38.0
RNOR9-20-20	1-11/16—12	1-1/4"	46.0
RNOR9-24-24	2—12	1-1/2"	55.0



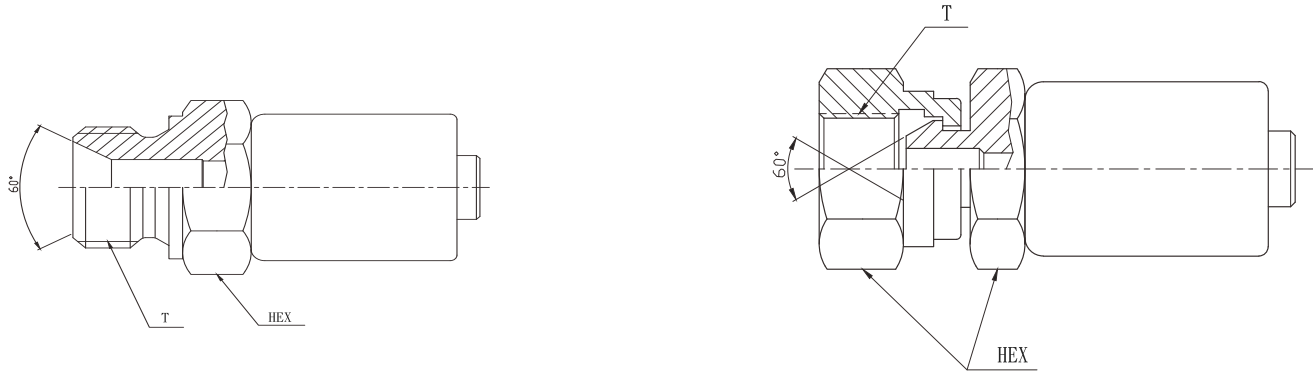
ORFS SWIVEL FEMALE FLAT FACED 45°
ELBOW:RNOR4

REF. NO.	T	HOSE I.D.	HEX mm
RNOR4-04-04	9/16—18	1/4"	16.0
RNOR4-06-06	1-1/16—16	3/8"	19.0
RNOR4-08-08	13/16—16	1/2"	22.0
RNOR4-10-10	1—14	5/8"	27.0
RNOR4-12-12	1-3/16—12	3/4"	32.0
RNOR4-16-16	1-7/16—12	1"	38.0
RNOR4-20-20	1-11/16—12	1-1/4"	46.0
RNOR4-24-24	2—12	1-1/2"	55.0



NPT MALE:RMNT

REF. NO.	T	HOSE I.D.	HEX mm
RMNT-04-04	1/4—18	1/4"	17.0
RMNT-06-06	3/8—18	3/8"	19.0
RMNT-08-08	1/2—14	1/2"	22.0
RMNT-12-12	3/4—14	3/4"	27.0
RMNT-16-16	1—11-1/2	1"	36.0
RMNT-20-20	1-1/4—11-1/2	1-1/4"	46.0
RMNT-24-24	1-1/2—11-1/2	1-1/2"	50.0
RMNT-32-32	2—11-1/2	2"	65.0

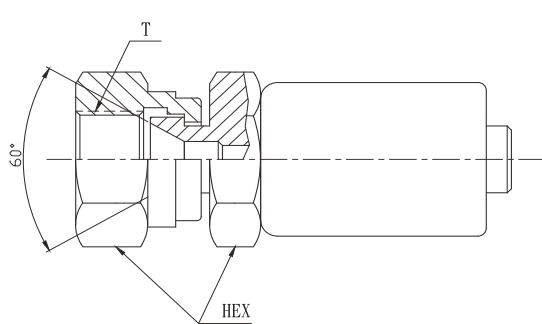


BSP MALE :RMU

REF. NO.	T	HOSE I.D.	HEX mm
RMU-04-04	1/4—19	1/4"	19.0
RMU-06-06	3/8—19	3/8"	22.0
RMU-08-08	1/2—14	1/2"	27.0
RMU-12-12	3/4—14	3/4"	32.0
RMU-16-16	1—11	1"	41.0
RMU-20-20	1-1/4—11	1-1/4"	50.0
RMU-24-24	1-1/2—11	1-1/2"	55.0
RMU-32-32	2—11	2"	70.0

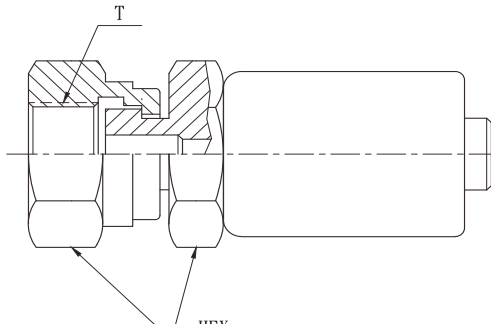
BSP SWIVEL FEMALE 60° CONE:RNU

REF. NO.	T	HOSE I.D.	HEX mm
RNU-04-04	1/4—19	1/4"	19.0
RNU-06-06	3/8—19	3/8"	22.0
RNU-08-08	1/2—14	1/2"	27.0
RNU-12-12	3/4—14	3/4"	32.0
RNU-16-16	1—11	1"	41.0
RNU-20-20	1-1/4—11	1-1/4"	50.0
RNU-24-24	1-1/2—11	1-1/2"	55.0
RNU-32-32	2—11	2"	70.0



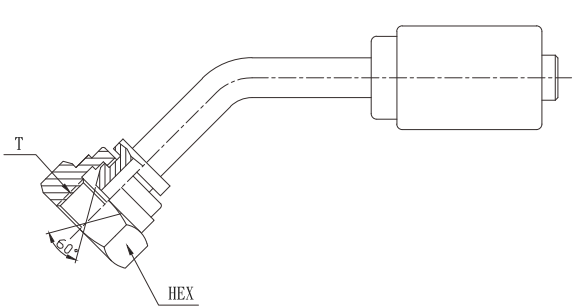
BSP SWIVEL FEMALE 60° CONE SEAT:RNUK

REF. NO.	T	HOSE I.D.	HEX mm
RNUK-04-04	1/4—19	1/4"	19.0
RNUK-06-06	3/8—19	3/8"	22.0
RNUK-08-08	1/2—14	1/2"	27.0
RNUK-12-12	3/4—14	3/4"	32.0
RNUK-16-16	1—11	1"	41.0
RNUK-20-20	1-1/4—11	1-1/4"	50.0
RNUK-24-24	1-1/2—11	1-1/2"	55.0
RNUK-32-32	2—11	2"	70.0



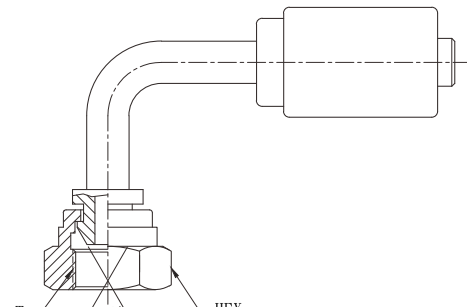
BSP SWIVEL FEMALE FLAT FACED:RNUF

REF. NO.	T	HOSE I.D.	HEX mm
RNUF-04-04	1/4—19	1/4"	19.0
RNUF-06-06	3/8—19	3/8"	22.0
RNUF-08-08	1/2—14	1/2"	27.0
RNUF-12-12	3/4—14	3/4"	32.0
RNUF-16-16	1—11	1"	41.0
RNUF-20-20	1-1/4—11	1-1/4"	50.0
RNUF-24-24	1-1/2—11	1-1/2"	55.0
RNUF-32-32	2—11	2"	70.0



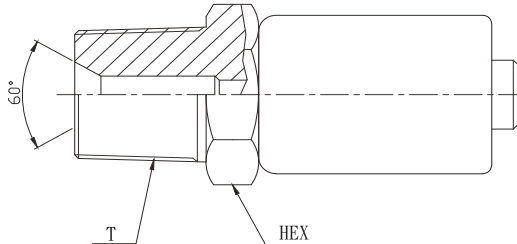
BSP SWIVEL FEMALE 60° CONE 45° SWEPT ELBOW:RNU4

REF. NO.	T	HOSE I.D.	HEX mm
RNU4-04-04	1/4—19	1/4"	19.0
RNU4-06-06	3/8—19	3/8"	22.0
RNU4-08-08	1/2—14	1/2"	27.0
RNU4-12-12	3/4—14	3/4"	32.0
RNU4-16-16	1—11	1"	41.0
RNU4-20-20	1-1/4—11	1-1/4"	50.0
RNU4-24-24	1-1/2—11	1-1/2"	55.0
RNU4-32-32	2—11	2"	70.0



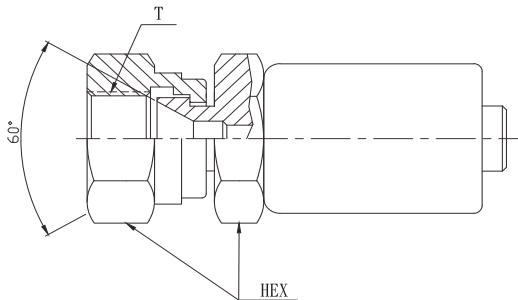
BSP SWIVEL FEMALE 60° CONE 90° SWEPT ELBOW:RNU9

REF. NO.	T	HOSE I.D.	HEX mm
RNU9-04-04	1/4—19	1/4"	19.0
RNU9-06-06	3/8—19	3/8"	22.0
RNU9-08-08	1/2—14	1/2"	27.0
RNU9-12-12	3/4—14	3/4"	32.0
RNU9-16-16	1—11	1"	41.0
RNU9-20-20	1-1/4—11	1-1/4"	50.0
RNU9-24-24	1-1/2—11	1-1/2"	55.0
RNU9-32-32	2—11	2"	70.0



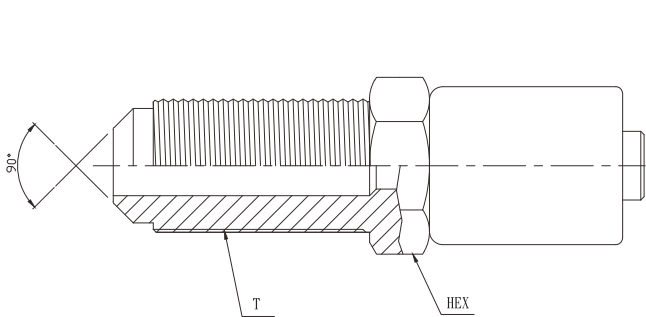
BSPT MALE:RMBT

REF. NO.	T	HOSE I.D.	HEX mm
RMBT-04-04	1/4—19	1/4"	14.0
RMBT-06-06	3/8—19	3/8"	17.0
RMBT-08-08	1/2—14	1/2"	22.0
RMBT-12-12	3/4—14	3/4"	30.0
RMBT-16-16	1—11	1"	36.0
RMBT-20-20	1-1/4—11	1-1/4"	46.0
RMBT-24-24	1-1/2—11	1-1/2"	50.0
RMBT-32-32	2—11	2"	65.0



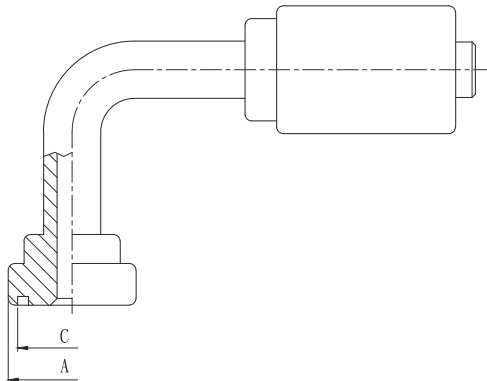
METRIC SWIVEL FEMALE 60° CONE SEAT:RNMK

REF. NO.	T	HOSE I.D.	HEX mm
RNMK-14-04	M14X1.5	1/4"	17.0
RNMK-18-06	M18X1.5	3/8"	21.0
RNMK-22-08	M22X1.5	1/2"	26.0
RNMK-24-10	M24X1.5	5/8"	26.0
RNMK-30-12	M30X1.5	3/4"	32.0
RNMK-33-16	M33X1.5	1"	38.0
RNMK-36-20	M36X1.5	1-1/4"	50.0
RNMK-36-24	M36X1.5	1-1/2"	60.0
RNMK-42-32	M42X1.5	2"	70.0



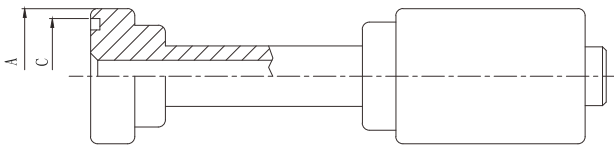
METRIC MALE 90° CONE BULKHEAD: RMMB

REF. NO.	T	HOSE I.D.	HEX mm
RMMB-12-04	M12X1.5	1/4"	17.0
RMMB-14-04	M14X1.5	1/4"	17.0
RMMB-16-06	M16X1.5	3/8"	21.0
RMMB-18-06	M18X1.5	3/8"	23.0
RMMB-20-06	M20X1.5	3/8"	26.0
RMMB-22-06	M22X1.5	3/8"	26.0
RMMB-20-08	M20X1.5	1/2"	26.0
RMMB-22-08	M22X1.5	1/2"	26.0
RMMB-24-08	M24X1.5	1/2"	29.0
RMMB-20-10	M20X1.5	5/8"	26.0
RMMB-22-10	M22X1.5	5/8"	26.0
RMMB-24-10	M24X1.5	5/8"	29.0



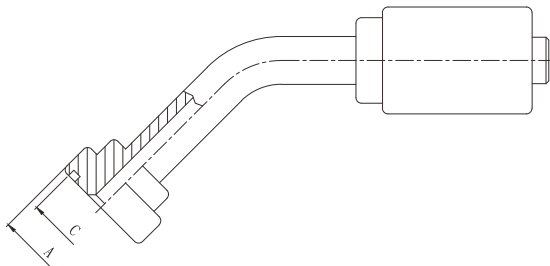
SAE FLANGE 90° SWEPT ELBOWCODE
61: RPA9

REF. NO.	HOSE I.D.	A mm	C mm
RPA9-06-06	3/8"	19.0	16.2
RPA9-08-08	1/2"	30.2	25.5
RPA9-10-10	5/8"	35.0	27.1
RPA9-12-12	3/4"	38.1	31.8
RPA9-16-16	1"	44.5	39.7
RPA9-20-20	1-1/4"	50.8	44.5
RPA9-24-24	1-1/2"	60.3	53.9
RPA9-32-32	2"	71.4	63.4



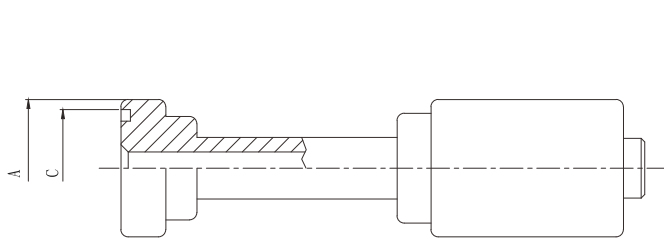
SAE FLANGE STRAIGHT CODE 61:RPA

REF. NO.	HOSE I.D.	A mm	C mm
RPA-06-06	3/8"	19.0	16.2
RPA-08-08	1/2"	30.2	25.5
RPA-10-10	5/8"	35.0	27.1
RPA-12-12	3/4"	38.1	31.8
RPA-16-16	1"	44.5	39.7
RPA-20-20	1-1/4"	50.8	44.5
RPA-24-24	1-1/2"	60.3	53.9
RPA-32-32	2"	71.4	63.4



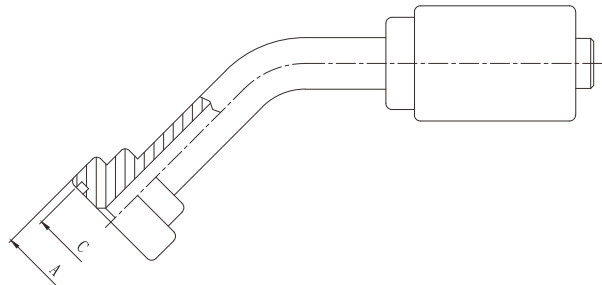
SAE FLANGE 45° SWEPT ELBOWCODE
61: RPA4

REF. NO.	HOSE I.D.	A mm	C mm
RPA4-06-06	3/8"	19.0	16.2
RPA4-08-08	1/2"	30.2	25.5
RPA4-10-10	5/8"	35.0	27.1
RPA4-12-12	3/4"	38.1	31.8
RPA4-16-16	1"	44.5	39.7
RPA4-20-20	1-1/4"	50.8	44.5
RPA4-24-24	1-1/2"	60.3	53.9
RPA4-32-32	2"	71.4	63.4



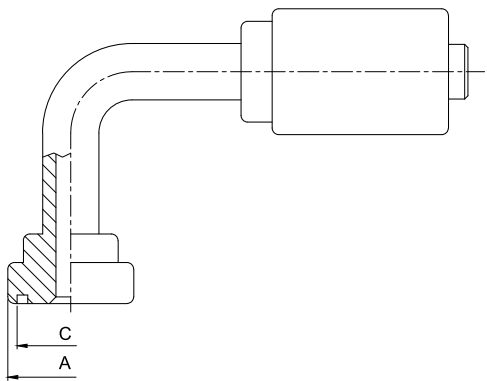
SAE FLANGE STRAIGHT CODE 62:RPH

REF. NO.	HOSE I.D.	A mm	C mm
RPH-08-08	1/2"	31.8	27.0
RPH-12-12	3/4"	41.4	35.2
RPH-16-16	1"	47.8	43.0
RPH-20-20	1-1/4"	54.1	47.8
RPH-24-24	1-1/2"	63.5	57.0
RPH-32-32	2"	79.4	71.2



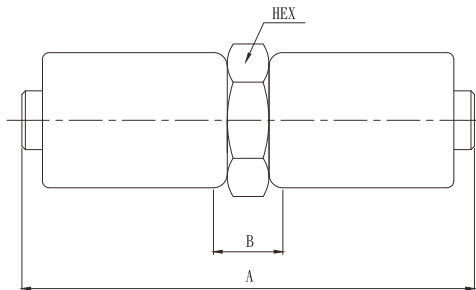
SAE FLANGE 45° SWEPT ELBOWCODE
62: RPH4

REF. NO.	HOSE I.D.	A mm	C mm
RPH4-08-08	1/2"	31.8	27.0
RPH4-12-12	3/4"	41.4	35.2
RPH4-16-16	1"	47.8	43.0
RPH4-20-20	1-1/4"	54.1	47.8
RPH4-24-24	1-1/2"	63.5	57.0
RPH4-32-32	2"	79.4	71.2



SAE FLANGE 90°SWEPT ELBOW
CODE 62:RPH9

REF. NO.	HOSE I.D.	A mm	C mm
RPH9-08-08	1/2"	31.8	27.0
RPH9-12-12	3/4"	41.4	35.2
RPH9-16-16	1"	47.8	43.0
RPH9-20-20	1-1/4"	54.1	47.8
RPH9-24-24	1-1/2"	63.5	57.0
RPH9-32-32	2"	79.4	71.2

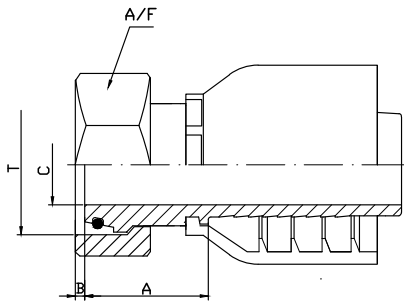


HOSE SPLICER:RHHM

REF. NO.	HOSE I.D.	A mm	C mm	HEX mm
RHHM-06-06	3/8"	84.0	16.0	17.0
RHHM-08-08	1/2"	89.0	20.5	22.0
RHHM-12-12	3/4"	94.0	25.0	30.0
RHHM-16-16	1"	114.0	30.0	36.0

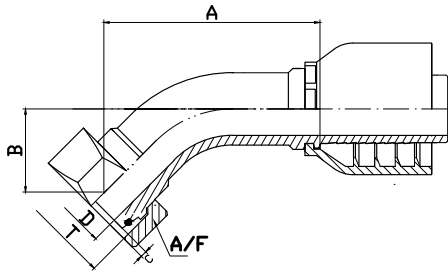


METRIC SWIVEL FEMALE 24° CONE WITH O'RING LIGHT DUTY: PMRL



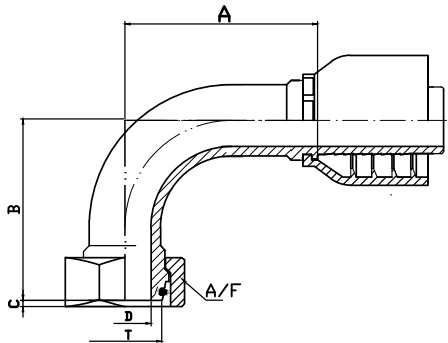
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
M12X1.5	12	3/16	4.8	03	PMRL-12-03	14.0	24.1	1.2	3.0
M14X1.5	14	1/4	6.4	04	PMRL-14-04	17.0	24.5	1.8	4.0
M16X1.5	16	1/4	6.4	04	PMRL-16-04	19.0	26.0	2.3	4.0
M16X1.5	16	5/16	7.9	05	PMRL-16-05	19.0	26.0	2.3	5.5
M18X1.5	18	5/16	7.9	05	PMRL-18-05	22.0	26.0	2.5	5.5
M18X1.5	18	3/8	9.5	06	PMRL-18-06	22.0	26.6	2.5	7.0
M22X1.5	22	3/8	9.5	06	PMRL-22-06	27.0	30.1	2.5	7.0
M22X1.5	22	1/2	12.7	08	PMRL-22-08	27.0	29.3	2.5	9.5
M26X1.5	26	1/2	12.7	08	PMRL-26-08	32.0	31.3	2.5	9.5
M26X1.5	26	5/8	15.9	10	PMRL-26-10	32.0	30.3	2.5	12.0
M30X2	30	3/4	19.1	12	PMRL-30-12	36.0	33.0	3.5	15.0
M36X2	36	3/4	19.1	12	PMRL-36-12	41.0	34.5	3.7	15.0
M36X2	36	1	25.4	16	PMRL-36-16	41.0	34.3	3.7	19.8
M45X2	45	1-1/4	31.8	20	PMRL-45-20	50.0	39.0	4.0	26.0
M52X2	52	1-1/2	38.1	24	PMRL-52-24	60.0	39.5	4.5	32.0

METRIC SWIVEL FEMALE 24° CONE WITH O'RING 45° SWEEP ELBOW LIGHT DUTY: PMRL4



Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M12X1.5	12	3/16	4.8	03	PMRL4-12-03	14.0	34.2	16.7	1.2	3.0
M14X1.5	14	1/4	6.4	04	PMRL4-14-04	17.0	38.3	17.7	1.8	4.0
M16X1.5	16	1/4	6.4	04	PMRL4-16-04	19.0	39.3	18.8	2.3	4.0
M16X1.5	16	5/16	7.9	05	PMRL4-16-05	19.0	38.7	17.5	2.3	5.5
M18X1.5	18	5/16	7.9	05	PMRL4-18-05	22.0	39.2	18.1	2.5	5.5
M18X1.5	18	3/8	9.5	06	PMRL4-18-06	22.0	42.6	19.2	2.5	7.0
M22X1.5	22	3/8	9.5	06	PMRL4-22-06	27.0	44.9	21.5	2.5	7.0
M22X1.5	22	1/2	12.7	08	PMRL4-22-08	27.0	49.9	22.4	2.5	9.5
M26X1.5	26	1/2	12.7	08	PMRL4-26-08	32.0	51.7	24.0	2.5	9.5
M26X1.5	26	5/8	15.9	10	PMRL4-26-10	32.0	60.3	27.3	2.5	12.5
M30X2	30	3/4	19.1	12	PMRL4-30-12	36.0	67.5	30.2	3.5	15.0
M36X2	36	3/4	19.1	12	PMRL4-36-12	41.0	69.9	32.5	3.7	15.0
M36X2	36	1	25.4	16	PMRL4-36-16	41.0	79.7	33.6	3.7	19.8
M45X2	45	1-1/4	31.8	20	PMRL4-45-20	50.0	96.7	40.8	4.0	26.0
M52X2	52	1-1/2	38.1	24	PMRL4-52-24	60.0	109.5	45.8	4.5	32.0

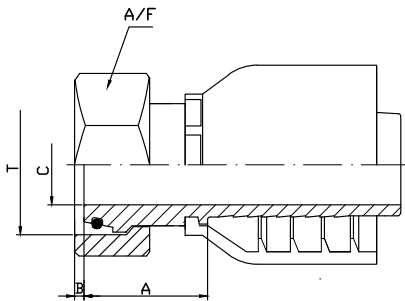
METRIC SWIVEL FEMALE 24° CONE WITH O'RING 90° SWEEP ELBOW LIGHT DUTY: PMRL9



Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M12X1.5	12	3/16	4.8	03	PMRL9-12-03	14.0	25.5	30.6	1.2	3.0
M14X1.5	14	1/4	6.4	04	PMRL9-14-04	17.0	29.0	31.0	1.8	4.0
M16X1.5	16	1/4	6.4	04	PMRL9-16-04	19.0	29.0	31.0	2.3	4.0
M16X1.5	16	5/16	7.9	05	PMRL9-16-05	19.0	31.0	32.7	2.3	5.5
M18X1.5	18	5/16	7.9	05	PMRL9-18-05	22.0	31.0	33.5	2.5	5.5
M18X1.5	18	3/8	9.5	06	PMRL9-18-06	22.0	34.0	36.7	2.5	7.0
M22X1.5	22	3/8	9.5	06	PMRL9-22-06	27.0	34.0	39.9	2.5	7.0
M22X1.5	22	1/2	12.7	08	PMRL9-22-08	27.0	40.0	43.8	2.5	9.5
M26X1.5	26	1/2	12.7	08	PMRL9-26-08	32.0	40.0	46.3	2.5	9.5
M26X1.5	26	5/8	15.9	10	PMRL9-26-10	32.0	40.0	54.3	2.5	12.5
M30X2	30	3/4	19.1	12	PMRL9-30-12	36.0	55.0	61.9	3.5	15.0
M36X2	36	3/4	19.1	12	PMRL9-36-12	41.0	55.0	65.1	3.7	15.0
M36X2	36	1	25.4	16	PMRL9-36-16	41.0	73.0	72.0	3.7	19.8
M45X2	45	1-1/4	31.8	20	PMRL9-45-20	50.0	87.8	87.4	4.0	26.0
M52X2	52	1-1/2	38.1	24	PMRL9-52-24	60.0	103.0	101.5	4.5	32.0

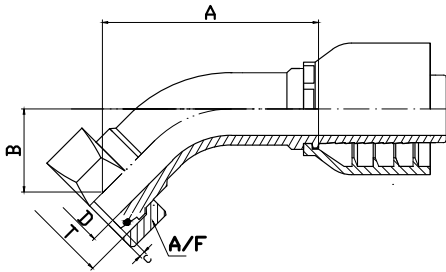


METRIC SWIVEL FEMALE 24° CONE WITH O'RING HEAVY DUTY: PMRH



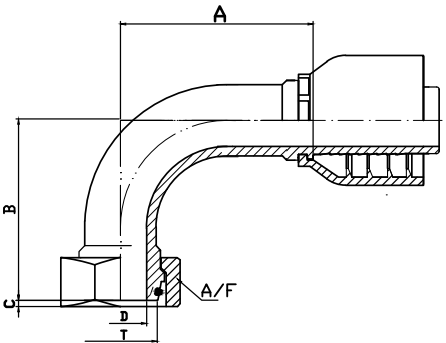
Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm
		in	mm	dash					
M16X1.5	16	3/16	4.8	03	PMRH-16-03	19.0	26.1	4.4	3.0
M16X1.5	16	1/4	6.4	04	PMRH-16-04	19.0	26.6	4.4	4.0
M18X1.5	18	1/4	6.4	04	PMRH-18-04	22.0	28.0	3.0	4.0
M20X1.5	20	5/16	7.9	05	PMRH-20-05	24.0	28.1	2.5	5.5
M20X1.5	20	3/8	9.5	06	PMRH-20-06	24.0	28.6	2.5	7.0
M22X1.5	22	3/8	9.5	06	PMRH-22-06	27.0	32.6	3.5	7.0
M24X1.5	24	1/2	12.7	08	PMRH-24-08	30.0	32.3	4.5	9.5
M30X2	30	5/8	15.9	10	PMRH-30-10	36.0	37.3	4.0	12.5
M36X2	36	3/4	19.1	12	PMRH-36-12	46.0	40.5	4.5	15.0
M42X2	42	1	25.4	16	PMRH-42-16	50.0	43.8	6.3	19.8
M52X2	52	1-1/4	31.8	20	PMRH-52-20	60.0	49.5	8.0	26.0

METRIC SWIVEL FEMALE 24° CONE WITH O'RING 45° SWEEP ELBOW HEAVY DUTY: PMRH4



Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M16X1.5	16	3/16	4.8	03	PMRH4-16-03	19.0	34.1	17.0	4.4	3.0
M16X1.5	16	1/4	6.4	04	PMRH4-16-04	19.0	38.2	17.6	4.4	4.0
M18X1.5	18	1/4	6.4	04	PMRH4-18-04	22.0	40.6	20.0	3.0	4.0
M20X1.5	20	5/16	7.9	05	PMRH4-20-05	24.0	41.0	19.9	2.5	5.5
M20X1.5	20	3/8	9.5	06	PMRH4-20-06	24.0	44.4	21.0	2.5	7.0
M22X1.5	22	3/8	9.5	06	PMRH4-22-06	27.0	46.3	22.7	3.5	7.0
M24X1.5	24	1/2	12.7	08	PMRH4-24-08	30.0	51.3	23.6	4.5	9.5
M30X2	30	5/8	15.9	10	PMRH4-30-10	36.0	64.0	31.0	4.0	12.5
M36X2	36	3/4	19.1	12	PMRH4-36-12	46.0	72.6	35.1	4.5	15.0
M42X2	42	1	25.4	16	PMRH4-42-16	50.0	82.8	38.1	6.3	19.8
M52X2	52	1-1/4	31.8	20	PMRH4-52-20	60.0	101.5	45.8	8.0	26.0

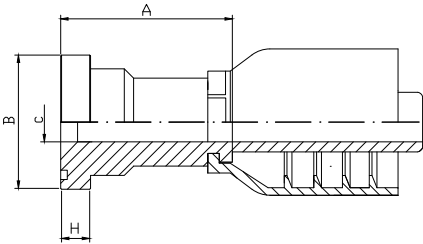
METRIC SWIVEL FEMALE 24° CONE WITH O'RING 90° SWEEP ELBOW HEAVY DUTY: PMRH9



Thread T	Dash No.	Hose Bore			Part No.	A/F mm	Dim A mm	Dim B mm	Dim C mm	Dim D mm
		in	mm	dash						
M16X1.5	16	3/16	4.8	03	PMRH9-16-03	19.0	25.5	31.0	4.4	3.0
M16X1.5	16	1/4	6.4	04	PMRH9-16-04	19.0	29.0	33.1	4.4	4.0
M18X1.5	18	1/4	6.4	04	PMRH9-18-04	22.0	29.0	36.5	3.0	4.0
M20X1.5	20	5/16	7.9	05	PMRH9-20-05	24.0	31.0	36.0	2.5	5.5
M20X1.5	20	3/8	9.5	06	PMRH9-20-06	24.0	34.0	39.2	2.5	7.0
M22X1.5	22	3/8	9.5	06	PMRH9-22-06	27.0	34.0	41.7	3.5	7.0
M24X1.5	24	1/2	12.7	08	PMRH9-24-08	30.0	40.0	45.6	4.5	9.5
M30X2	30	5/8	15.9	10	PMRH9-30-10	36.0	49.0	59.6	4.0	12.5
M36X2	36	3/4	19.1	12	PMRH9-36-12	46.0	55.0	68.8	4.5	15.0
M42X2	42	1	25.4	16	PMRH9-42-16	50.0	73.0	78.3	6.3	19.8
M52X2	52	1-1/4	31.8	20	PMRH9-52-20	60.0	87.8	94.4	8.0	26.0

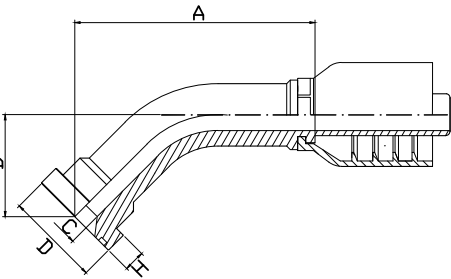


SAE FLANGE 3000PSI: PPA



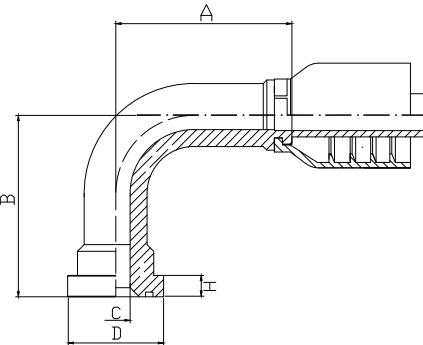
Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim H
in	mm	dash	in	mm	dash		mm	mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PPA-08-08	46.8	30.2	9.5	6.73
3/4	19.0	12	1/2	12.7	08	PPA-12-08	46.8	38.1	9.5	6.73
1/2	12.7	08	5/8	15.9	10	PPA-08-10	47.8	30.2	12.5	6.73
3/4	19.0	12	5/8	15.9	10	PPA-12-10	45.8	38.1	12.5	6.73
3/4	19.0	12	3/4	19.0	12	PPA-12-12	50.5	38.1	15.0	6.73
1	25.4	16	3/4	19.0	12	PPA-16-12	46.5	44.5	15.0	8.00
1	25.4	16	1	25.4	16	PPA-16-16	54.8	44.5	19.8	8.00
1-1/4	31.8	20	1	25.4	16	PPA-20-16	51.8	50.8	19.8	8.00
1-1/4	31.8	20	1-1/4	31.8	20	PPA-20-20	66.5	50.8	26.0	8.00
1-1/2	38.1	24	1-1/4	31.8	20	PPA-24-20	52.5	60.3	26.0	8.00
1-1/2	38.1	24	1-1/2	38.1	24	PPA-24-24	63.0	60.3	32.0	8.00
2	50.8	32	1-1/2	38.1	24	PPA-32-24	53.0	71.4	32.0	9.53
2	50.8	32	2	50.8	32	PPA-32-32	69.9	71.4	42.0	9.53
2-1/2	63.5	40	2	50.8	32	PPA-40-32	63.9	84.1	42.0	9.53

SAE FLANGE 3000PSI 45° SWEPT ELBOW: PPA4



Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D	Dim H
in	mm	dash	in	mm	dash		mm	mm	mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PPA4-08-08	53.2	21.5	9.5	30.2	6.73
3/4	19.0	12	1/2	12.7	08	PPA4-12-08	54.9	23.3	9.5	38.1	6.73
1/2	12.7	08	5/8	15.9	10	PPA4-08-10	56.7	24.5	12.5	30.2	6.73
3/4	19.0	12	5/8	15.9	10	PPA4-12-10	58.6	26.3	12.5	38.1	6.73
3/4	19.0	12	3/4	19.0	12	PPA4-12-12	66.6	27.7	15.0	38.1	6.73
1	25.4	16	3/4	19.0	12	PPA4-16-12	67.3	28.2	15.0	44.5	8.00
1	25.4	16	1	25.4	16	PPA4-16-16	79.7	32.7	19.8	44.5	8.00
1-1/4	31.8	20	1	25.4	16	PPA4-20-16	80.7	33.7	19.8	50.8	8.00
1-1/4	31.8	20	1-1/4	31.8	20	PPA4-20-20	92.2	35.1	26.0	50.8	8.00
1-1/2	38.1	24	1-1/4	31.8	20	PPA4-24-20	95.0	37.9	26.0	60.3	8.00
1-1/2	38.1	24	1-1/2	38.1	24	PPA4-24-24	105.2	41.5	32.0	60.3	8.00
2	50.8	32	1-1/2	38.1	24	PPA4-32-24	106.6	42.9	32.0	71.4	9.53
2	50.8	32	2	50.8	32	PPA4-32-32	125.5	48.3	42.0	71.4	9.53

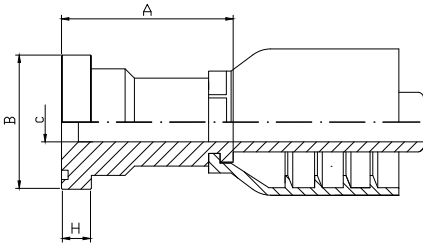
SAE FLANGE 3000PSI 90° SWEPT ELBOW: PPA9



Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D	Dim H
in	mm	dash	in	mm	dash		mm	mm	mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PPA9-08-08	46.6	44.5	9.5	30.2	6.73
3/4	19.0	12	1/2	12.7	08	PPA9-12-08	46.6	47.0	9.5	38.1	6.73
1/2	12.7	08	5/8	15.9	10	PPA9-08-10	49.4	50.3	12.5	30.2	6.73
3/4	19.0	12	5/8	15.9	10	PPA9-12-10	49.4	52.8	12.5	38.1	6.73
3/4	19.0	12	3/4	19.0	12	PPA9-12-12	59.5	58.4	15.0	38.1	6.73
1	25.4	16	3/4	19.0	12	PPA9-16-12	59.5	59.5	15.0	44.5	8.00
1	25.4	16	1	25.4	16	PPA9-16-16	73.5	70.5	19.8	44.5	8.00
1-1/4	31.8	20	1	25.4	16	PPA9-20-16	73.5	72.0	19.8	50.8	8.00
1-1/4	31.8	20	1-1/4	31.8	20	PPA9-20-20	89.0	79.0	26.0	50.8	8.00
1-1/2	38.1	24	1-1/4	31.8	20	PPA9-24-20	89.0	83.0	26.0	60.3	8.00
1-1/2	38.1	24	1-1/2	38.1	24	PPA9-24-24	103.7	95.0	32.0	60.3	8.00
2	50.8	32	1-1/2	38.1	24	PPA9-32-24	103.7	97.0	32.0	71.4	9.53
2	50.8	32	2	50.8	32	PPA9-32-32	126.1	113.5	42.0	71.4	9.53

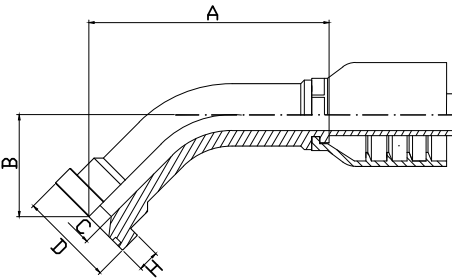


SAE FLANGE 6000PSI: PPH



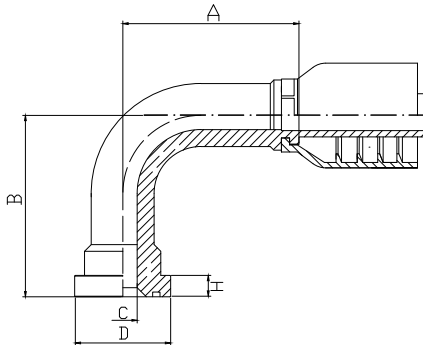
Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim H
in	mm	dash	in	mm	dash		mm	mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PPH-08-08	46.8	31.8	9.5	7.75
3/4	19.0	12	1/2	12.7	08	PPH-12-08	48.8	41.3	9.5	8.76
1/2	12.7	08	5/8	15.9	10	PPH-08-10	47.8	31.8	12.5	7.75
3/4	19.0	12	5/8	15.9	10	PPH-12-10	45.8	41.3	12.5	8.76
3/4	19.0	12	3/4	19.0	12	PPH-12-12	48.5	41.3	15.0	8.76
1	25.4	16	3/4	19.0	12	PPH-16-12	53.5	47.6	15.0	9.53
1	25.4	16	1	25.4	16	PPH-16-16	63.8	47.6	19.8	9.53
1-1/4	31.8	20	1	25.4	16	PPH-20-16	61.8	54.0	19.8	10.29
1-1/4	31.8	20	1-1/4	31.8	20	PPH-20-20	73.5	54.0	26.0	10.29
1-1/2	38.1	24	1-1/4	31.8	20	PPH-24-20	72.5	63.5	26.0	12.57
1-1/2	38.1	24	1-1/2	38.1	24	PPH-24-24	83.0	63.5	32.0	12.57
2	50.8	32	1-1/2	38.1	24	PPH-32-24	93.0	79.4	32.0	12.57
2	50.8	32	2	50.8	32	PPH-32-32	106.9	79.4	42.0	12.57

SAE FLANGE 6000PSI 45° SWEPT ELBOW: PPH4



Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D	Dim H
in	mm	dash	in	mm	dash		mm	mm	mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PPH4-08-08	53.9	22.3	9.5	31.8	7.75
3/4	19.0	12	1/2	12.7	08	PPH4-12-08	57.8	26.2	9.5	41.3	8.76
1/2	12.7	08	5/8	15.9	10	PPH4-08-10	56.9	25.7	12.5	31.8	7.75
3/4	19.0	12	5/8	15.9	10	PPH4-12-10	60.4	27.8	12.5	41.3	8.76
3/4	19.0	12	3/4	19.0	12	PPH4-12-12	69.4	30.5	15.0	41.3	8.76
1	25.4	16	3/4	19.0	12	PPH4-16-12	72.2	33.3	15.0	47.6	9.53
1	25.4	16	1	25.4	16	PPH4-16-16	84.7	37.6	19.8	47.6	9.53
1-1/4	31.8	20	1	25.4	16	PPH4-20-16	87.1	40.0	19.8	54.0	10.29
1-1/4	31.8	20	1-1/4	31.8	20	PPH4-20-20	100.0	42.8	26.0	54.0	10.29
1-1/2	38.1	24	1-1/4	31.8	20	PPH4-24-20	104.9	47.8	26.0	63.5	12.57
1-1/2	38.1	24	1-1/2	38.1	24	PPH4-24-24	115.4	51.7	32.0	63.5	12.57
2	50.8	32	1-1/2	38.1	24	PPH4-32-24	122.9	59.2	32.0	79.4	12.57
2	50.8	32	2	50.8	32	PPH4-32-32	151.6	67.8	42.0	79.4	12.57

SAE FLANGE 6000PSI 90° SWEPT ELBOW: PPH9



Nominal Flange Size			Hose Bore			Part No.	Dim A	Dim B	Dim C	Dim D	Dim H
in	mm	dash	in	mm	dash		mm	mm	mm	mm	mm
1/2	12.7	08	1/2	12.7	08	PPH9-08-08	46.6	45.5	9.5	31.8	7.75
3/4	19.0	12	1/2	12.7	08	PPH9-12-08	46.6	51.3	9.5	41.3	8.76
1/2	12.7	08	5/8	15.9	10	PPH9-08-10	49.3	51.2	12.5	31.8	7.75
3/4	19.0	12	5/8	15.9	10	PPH9-12-10	49.3	55.3	12.5	41.3	8.76
3/4	19.0	12	3/4	19.0	12	PPH9-12-12	59.5	62.5	15.0	41.3	8.76
1	25.4	16	3/4	19.0	12	PPH9-16-12	59.5	66.5	15.0	47.6	9.53
1	25.4	16	1	25.4	16	PPH9-16-16	73.5	77.5	19.8	47.6	9.53
1-1/4	31.8	20	1	25.4	16	PPH9-20-16	73.5	81.0	19.8	54.0	10.29
1-1/4	31.8	20	1-1/4	31.8	20	PPH9-20-20	89.0	90.4	26.0	54.0	10.29
1-1/2	38.1	24	1-1/4	31.8	20	PPH9-24-20	89.0	97.4	26.0	63.5	12.57
1-1/2	38.1	24	1-1/2	38.1	24	PPH9-24-24	103.7	108.9	32.0	63.5	12.57
2	50.8	32	1-1/2	38.1	24	PPH9-32-24	103.7	120.4	32.0	79.4	12.57
2	50.8	32	2	50.8	32	PPH9-32-32	136.9	144.5	42.0	79.4	12.57