

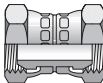
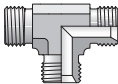
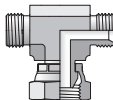
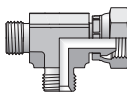
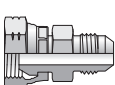
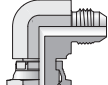
Straights	HMK4 Union  H6	WMK4WL4NM Bulkhead Union  H6	F6MK4 60° Swivel / 60° Cone  H7	H6MK4 Swivel Union  H7	FMK4 60° Cone / NPTF  H7
	F3MK4 60° Cone / BSPT  H7	G4MK4 60° Cone / BSPP  H8	K4HF80 60° Cone / Metric  H8	Elbows	EMK4 Union Elbow  H9
E6MK4 Swivel Union  H9	Tees	JMK4 Union Tee  H9	S6MK4 60° Swivel Branch Tee  H10		R6MK4 60° Swivel Run Tee  H10
Plug and Cap		PNMK4 Hex Head Plug  H8	FNMK4 Cap  H8		

TABLE
OF
CONTENTS

Conversion Adapters (Shown in Section J)

K4 BSP Conversion Adapters	XHMK46 37° Flare / BSPP Swivel  J5	XEMK46 37° Flare / BSPP Swivel  J6
---	---	---

O-Rings and Seals (Shown in Section M)

K4 BSP O-Rings and Seals	D9DT BSPP Bonded Seal  M7
---	--

Dimensions and pressures for reference only, subject to change.

K4 BSP Adapters

Parker K4 (BSP) and K46 (swivel) adapters are typically used as hose adapters on equipment designed and/or manufactured throughout Europe, especially equipment with ties to the UK, Scandinavia, the Netherlands, Spain and Italy. BSP cone adapters are similar in function to NPSM pipe swivel fittings (also called 07 Adapters) but with BSPP threads.

The metal-to-metal sealing is achieved by a single line of contact between the conical surface of the 60° cone seat and the corresponding surface of the ballnose or cone swivel, as shown in Fig. H1.

K4 adapters are manufactured in accordance with BS5200 standards. The 60° internal seat is designed for sealing with BSP hose swivel connections offered by many manufacturers. K4 adapters mate with the Parker hose fitting series shown in Table H1.

Further enhancing the flexibility of the K4 adapter product line is the ability for the male BSP cone end of the straight fittings to also be used as a port adapter in ISO 1179-1 / DIN 3852 ports. This is accomplished with the addition of a bonded seal (often referred to as a Dowty® seal). This product feature is illustrated in Fig. H2.

Design and Construction

Construction: Shaped K4 adapters are manufactured from a hot forged construction. Straight adapters are manufactured from cold drawn barstock.

Threads: The standard K4 products are manufactured with the thread forms listed below:

BSPP Threads: ISO 228-1 G
BSPT Threads: ISO 7/1, JIS B 0203
NPTF Threads: SAE J476, ANSI B1.20.3, FED-STD-H28/8

Reference Locations

Dynamic Pressure Ratings: Please refer to the last column of the part number tables located on the following pages of this section for appropriate dynamic pressure ratings.

Standard Material Specifications: Please refer to Table S34 located in the General Technical section.

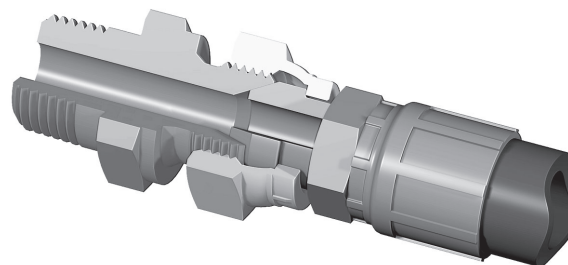


Fig. H1 – K4 Interface

Adapter Connection End	Mating Parker Hose Fitting Series
K4 / K46	D9/92, B1, B2, B4

Table H1 – Parker K4 Fittings Hose Adaptability

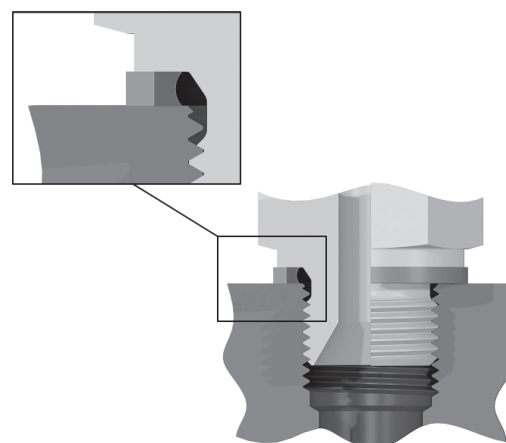


Fig. H2 – K4 End Used as a BSPP Port Adapter (in ISO 1179/ DIN 3852, Part 2 Port)

TABLE
OF
CONTENTS

VISUAL
INDEX

H

60° Cone Adapters: JIS vs. K4

K4 Adapters, while very similar to JIS P4 cones (shown in previous section), are not interchangeable.

Parker's P4 JIS 60° cone adapters are manufactured in accordance to JIS B8363 while Parker's K4 BSP adapters are manufactured in accordance to BS5200. The following are some pronounced differences that may help in distinguishing between the K4 and P4 fittings:

1. Thread length ("A" dimensions)
2. 60° angle diameter ("B" dimensions)
3. The undercut area (area between threads and hex body) on the straight K4 fittings incorporates a bonded seal "locating pilot" for bonded seal
4. Parker's JIS fittings are stamped with "JIS" on the forging body or hex of fitting

See Figs. H3 and H4 for details and see Tables H2 and H3 below for specific dimensional differences.

Size	BSPP Thread	M	A	B
2	1/8-28	0.38	0.418	0.276
4	1/4-19	0.51	0.570	0.394
6	3/8-19	0.65	0.609	0.531
8	1/2-14	0.82	0.726	0.650
12	3/4-14	1.04	0.805	0.866
16	1-11	1.30	0.883	1.102
20	1 1/4-11	1.64	0.945	1.417
24	1 1/2-11	1.87	0.962	1.654
32	2-11	2.34	1.102	2.126

Table H2 – Dimensions of JIS B8363 60° Cone Connection (JIS P4)

Size	BSPP Thread	M	A	B
2	1/8-28	0.38	0.315	0.295
4	1/4-19	0.51	0.433	0.409
6	3/8-19	0.65	0.472	0.551
8	1/2-14	0.82	0.551	0.689
10	5/8-14	0.90	0.630	0.760
12	3/4-14	1.04	0.630	0.902
16	1-11	1.30	0.748	1.130
20	1 1/4-11	1.64	0.787	1.449
24	1 1/2-11	1.87	0.866	1.681
32	2-11	2.34	0.984	2.150

Table H3 – Dimensions of BS B5200 60° Cone Connection (K4)

While the 60° cone versions of JIS and K4 fittings utilize the same BSPP threads and seat angle, not all dimensions are consistent. Therefore, they cannot be interchanged because the differences can cause leakage problems. An example of this is illustrated in Fig. H5, where a gap exists between sealing surfaces. The combination of matching proper components will create an effective seal as illustrated in Fig H6.

For more information, see "BSPP 60° Cone Fittings: Looks can be deceiving" article at TFDTechConnect.com.

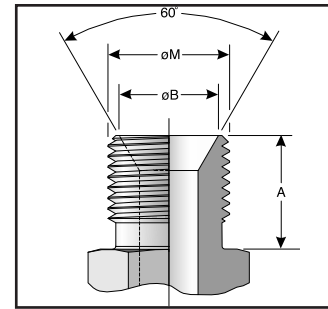


Fig. H3 – JIS B8363 60° Cone Connection (P4)

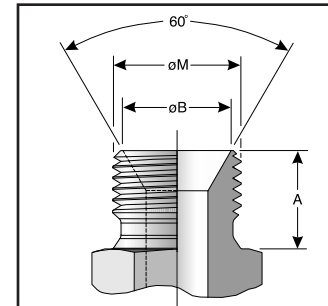


Fig. H4 – BS B5200 60° Cone Connection (K4)

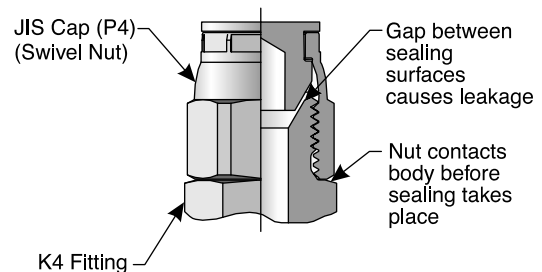


Fig. H5 – Illustration Showing Potential Leakage Problem When Mixing JIS and K4 Components

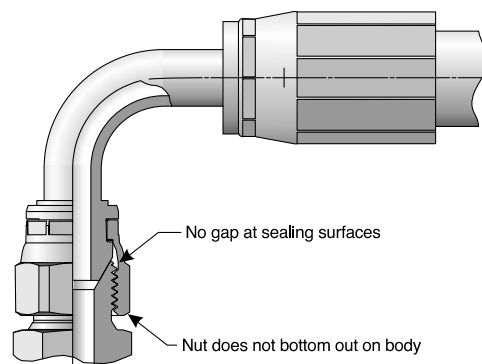


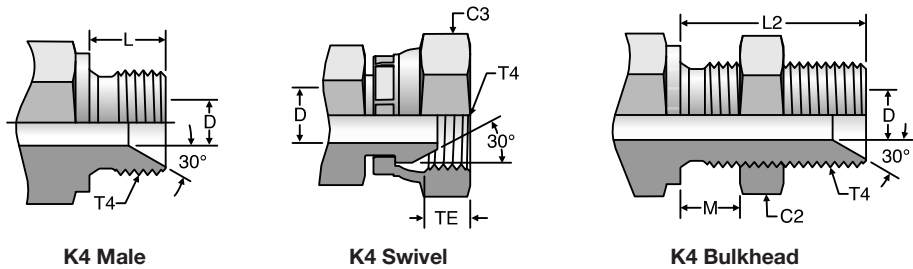
Fig. H6 – An Effective Seal Created with the Proper Combination of Components

Dimensions and pressures for reference only, subject to change.

K4 BSP Ends

TABLE
OF
CONTENTS

VISUAL
INDEX



	BSPP Thread	Bulkhead Nut Hex	Swivel Hex	Drill	Male Turn Back	Bulkhead Length	Max Bulkhead Thickness	Assembly Allowance
Dash Size	T4 BSPP	C2 (mm)	C3 (mm)	D (mm)	L (mm)	L2 (mm)	M (mm)	TE (mm)
2	1/8-28	—	14	3.5	8	—	—	—
4	1/4-19	19	19	4.7	11	28	9.5	7.3
6	3/8-19	22	22	7.9	12	32	12.5	8.4
8	1/2-14	27	27	11.1	14	35	12.3	9.3
10	5/8-14	30	30	14.3	16	35	10.7	—
12	3/4-14	36	32	16.7	16	38	13.3	11.3
16	1-11	41	41	22.2	19	41	10.0	13.6
20	1 1/4-11	50	50	28.6	20	44	12.0	—
24	1 1/2-11	55	60	33.3	22	48	14.0	—
32	2-11	—	—	46.0	25	—	—	—

H

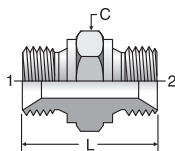
Dimensions and pressures for reference only, subject to change.



HMK4

Union
60° Cone / 60° Cone

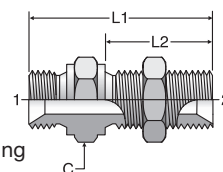
Mates with 92, B1, B2 and B4 style hose fitting



WMK4WL4NM

Bulkhead Union
60° Cone / 60° Cone

Mates with 92, B1, B2 and B4 style hose fitting



TUBE FITTING PART #	END SIZE		C HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1 BSPP	2 BSPP			S
2HMK4	1/8 - 28	1/8 - 28	14	23.5	5.1
4-2HMK4	1/4 - 19	1/8 - 28	19	28.0	5.1
4HMK4	1/4 - 19	1/4 - 19	19	31.5	5.1
6-4HMK4	3/8 - 19	1/4 - 19	22	33.2	5.1
6HMK4	3/8 - 19	3/8 - 19	22	34.7	5.1
8-4HMK4	1/2 - 14	1/4 - 19	27	36.7	2.9
8-6HMK4	1/2 - 14	3/8 - 19	27	38.2	2.9
8HMK4	1/2 - 14	1/2 - 14	27	40.7	2.9
10-8HMK4	5/8 - 14	1/2 - 14	30	43.2	2.9
10HMK4	5/8 - 14	5/8 - 14	30	45.2	2.9
12-4HMK4	3/4 - 14	1/4 - 19	32	39.2	2.9
12-6HMK4	3/4 - 14	3/8 - 19	32	40.7	2.9
12-8HMK4	3/4 - 14	1/2 - 14	32	43.2	2.9
12-10HMK4	3/4 - 14	5/8 - 14	32	45.2	2.9
12HMK4	3/4 - 14	3/4 - 14	32	45.2	2.9
16-8HMK4	1 - 11	1/2 - 14	41	46.9	1.7
16-10HMK4	1 - 11	5/8 - 14	41	48.9	1.7
16-12HMK4	1 - 11	3/4 - 14	41	48.9	1.7
16HMK4	1 - 11	1 - 11	41	51.9	1.7
20-12HMK4	1 1/4 - 11	3/4 - 14	50	57.4	1.5
20-16HMK4	1 1/4 - 11	1 - 11	50	60.4	1.5
20HMK4	1 1/4 - 11	1 1/4 - 11	50	61.4	1.5
24-16HMK4	1 1/2 - 11	1 - 11	55	64.4	1.5
24-20HMK4	1 1/2 - 11	1 1/4 - 11	55	65.4	1.5
24HMK4	1 1/2 - 11	1 1/2 - 11	55	67.4	1.5
32-24HMK4	2 - 11	1 1/2 - 11	70	72.9	1.0
32HMK4	2 - 11	2 - 11	70	76.4	1.0

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

TUBE FITTING PART #	END SIZE	C HEX (mm)	L1 (mm)	L2 (mm)	Dynamic Pressure (x 1,000 PSI)
	1 & 2 BSPP				S
4WMK4WL4NM	1/4 - 19	19	49	28	5.1
6WMK4WL4NM	3/8 - 19	22	55	32	5.1
8WMK4WL4NM	1/2 - 14	27	62	35	2.9
10WMK4WL4NM	5/8 - 14	30	64	35	2.9
12WMK4WL4NM	3/4 - 14	32	67	38	2.9
16WMK4WL4NM	1 - 11	41	74	41	1.7
20WMK4WL4NM	1 1/4 - 11	50	85	44	1.5
24WMK4WL4NM	1 1/2 - 11	55	93	48	1.5

Includes Bulkhead nut.

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

TABLE
OF
CONTENTS

VISUAL
INDEX

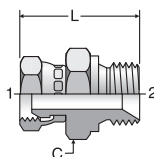
FAQs

Dimensions and pressures for reference only, subject to change.

F6MK4

Swivel Nut Connector
60° Swivel / 60° Cone

Mates with D9/92, B1, B2 and B4 style hose fitting



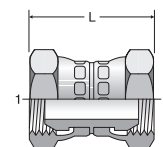
TUBE FITTING PART #	END SIZE		C HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1 BSPP	2 BSPP			S
4-4F6MK4	1/4 - 19	1/4 - 19	19	36.6	5.1
4-6F6MK4	1/4 - 19	3/8 - 19	22	38.5	5.1
4-8F6MK4	1/4 - 19	1/2 - 14	27	42.0	2.9
6-4F6MK4	3/8 - 19	1/4 - 19	22	38.3	5.1
6-6F6MK4	3/8 - 19	3/8 - 19	22	40.0	5.1
6-8F6MK4	3/8 - 19	1/2 - 14	27	43.6	2.9
8-6F6MK4	1/2 - 14	3/8 - 19	27	43.5	2.9
8-8F6MK4	1/2 - 14	1/2 - 14	27	46.1	2.9
8-12F6MK4	1/2 - 14	3/4 - 14	32	48.0	2.9
12-8F6MK4	3/4 - 14	1/2 - 14	32	48.6	2.9
12-12F6MK4	3/4 - 14	3/4 - 14	32	50.0	2.9
12-16F6MK4	3/4 - 14	1 - 11	41	54.3	1.7
16-16F6MK4	1 - 11	1 - 11	41	57.3	1.7

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

H6MK4

Swivel Nut Union
60° Swivel / 60° Swivel

Mates with D9 style hose fitting



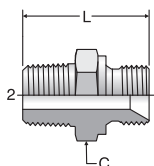
TUBE FITTING PART #	END SIZE		L (mm)	Dynamic Pressure (x 1,000 PSI)
	1 BSPP	2 BSPP		S
4H6MK4	1/4 - 19	1/4 - 19	37.0	5.1
6-4H6MK4	3/8 - 19	1/4 - 19	38.6	5.1
6H6MK4	3/8 - 19	3/8 - 19	40.5	5.1
8-4H6MK4	1/2 - 14	1/4 - 19	41.5	2.9
8-6H6MK4	1/2 - 14	3/8 - 19	42.9	2.9
8H6MK4	1/2 - 14	1/2 - 14	45.8	2.9
10H6MK4	5/8 - 14	5/8 - 14	47.5	2.9
12-8H6MK4	3/4 - 14	1/2 - 14	48.2	2.9
12H6MK4	3/4 - 14	3/4 - 14	49.5	2.9
16H6MK4	1 - 11	1 - 11	57.5	1.7
20H6MK4	1 1/4 - 11	1 1/4 - 11	66.0	1.5
24H6MK4	1 1/2 - 11	1 1/2 - 11	70.0	1.5

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

FMK4

NPTF Male Connector
60° Cone / NPTF

Mates with 92, B1, B2 and B4 style hose fitting



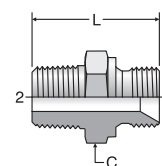
TUBE FITTING PART #	END SIZE		C HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1 BSPP	2 NPTF			S
2FMK4	1/8 - 28	1/8 - 27	14	24.4	5.1
2-4FMK4	1/8 - 28	1/4 - 18	19	28.9	5.1
4FMK4	1/4 - 19	1/8 - 18	19	28.9	5.1
4-4FMK4	1/4 - 19	1/4 - 18	19	33.4	5.1
4-6FMK4	1/4 - 19	3/8 - 18	19	33.6	5.1
6FMK4	3/8 - 19	1/4 - 18	22	35.1	5.1
6-6FMK4	3/8 - 19	3/8 - 18	22	35.1	5.1
6-8FMK4	3/8 - 19	1/2 - 14	22	39.9	5.1
8FMK4	1/2 - 14	3/8 - 18	27	38.6	2.9
8-8FMK4	1/2 - 14	1/2 - 14	27	43.4	2.9
8-12FMK4	1/2 - 14	3/4 - 14	27	43.9	2.9
12-8FMK4	3/4 - 14	1/2 - 14	32	45.9	2.9
12FMK4	3/4 - 14	3/4 - 14	32	45.9	2.9
12-16FMK4	3/4 - 14	1 - 11 1/2	36	50.8	2.9
16-12FMK4	1 - 11	3/4 - 14	41	49.6	1.7
16FMK4	1 - 11	1 - 11 1/2	41	54.5	1.7

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

F3MK4

BSPT Male Connector
60° Cone / BSPT

Mates with 92, B1, B2 and B4 style hose fitting



TUBE FITTING PART #	END SIZE		C HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1 BSPP	2 BSPT			S
2F3MK4	1/8 - 28	1/8 - 28	14	24.4	5.1
2-4F3MK4	1/8 - 28	1/4 - 19	14	28.9	5.1
4F3MK4	1/4 - 19	1/8 - 28	19	28.9	5.1
4-4F3MK4	1/4 - 19	1/4 - 19	19	33.4	5.1
4-6F3MK4	1/4 - 19	3/8 - 19	19	33.4	5.1
6F3MK4	3/8 - 19	1/4 - 19	22	35.1	5.1
6-6F3MK4	3/8 - 19	3/8 - 19	22	35.1	5.1
6-8F3MK4	3/8 - 19	1/2 - 14	22	39.9	2.9
8F3MK4	1/2 - 14	3/8 - 19	27	38.6	5.1
8-8F3MK4	1/2 - 14	1/2 - 14	22	43.4	2.9
10F3MK4	5/8 - 14	1/2 - 14	27	45.9	2.9
10-12F3MK4	5/8 - 14	3/4 - 14	30	45.9	2.9
12F3MK4	3/4 - 14	3/4 - 14	30	45.9	2.9
12-8F3MK4	3/4 - 14	1/2 - 14	32	46.0	1.7
12-16F3MK4	3/4 - 14	1 - 11	36	50.8	1.7
16F3MK4	1 - 11	1 - 11	41	54.5	1.7
16-12F3MK4	1 - 11	3/4 - 14	41	49.6	1.7
20F3MK4	1 1/4 - 11	1 1/4 - 11	50	63.7	1.5
24F3MK4	1 1/2 - 11	1 1/2 - 11	55	68.5	1.5

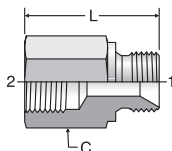
WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Dimensions and pressures for reference only, subject to change.

G4MK4

BSPF Female Connector
60° Cone / BSPF

Mates with 92, B1, B2 and B4 style hose fitting



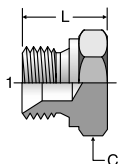
TUBE FITTING PART #	END SIZE		C HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1	2			S
	BSPP	BSPP			
6G4MK4	3/8 - 19	1/4 - 19	22	37.1	5.1
6-6G4MK4	3/8 - 19	3/8 - 19	23	36.9	2.9
8-4G4MK4	1/2 - 14	1/4 - 19	27	38.0	2.9
8G4MK4	1/2 - 14	3/8 - 19	30	45.3	2.9
12-4G4MK4	3/4 - 14	1/4 - 19	32	40.0	2.9
12-6G4MK4	3/4 - 14	3/8 - 19	32	41.6	2.9
12-8G4MK4	3/4 - 14	1/2 - 14	32	47.3	2.9
16-4G4MK4	1 - 11	1/4 - 19	41	43.0	1.7
16-6G4MK4	1 - 11	3/8 - 19	41	44.6	1.7
16-8G4MK4	1 - 11	1/2 - 14	41	50.3	1.7
16-12G4MK4	1 - 11	3/4 - 14	41	52.2	1.7

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

PNMK4

Hex Plug
60° Cone

Mates with 92, B1, B2 and B4 style hose fitting

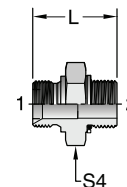


TUBE FITTING PART #	END SIZE		C HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1	2			S
	BSPP	BSPP			
2PNMK4	1/8 - 28		14	14.3	5.1
4PNMK4	1/4 - 19		19	18.8	5.1
6PNMK4	3/8 - 19		22	20.5	5.1
8PNMK4	1/2 - 14		27	24.0	2.9
10PNMK4	5/8 - 14		30	24.0	2.9
12PNMK4	3/4 - 14		32	26.5	2.9
16PNMK4	1 - 11		41	30.2	1.7
20PNMK4	1 1/4 - 11		50	38.7	1.5
24PNMK4	1 1/2 - 11		55	42.7	1.5
32PNMK4	2 - 11		70	48.2	1.0

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

K4HF80

Metric Male Connector
BSP 60° Cone / Metric-ORR
(for ISO 9974 / DIN 3852-1 Port)



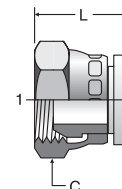
TUBE FITTING PART #	End Size		S4 Hex (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1	2			S
	BSPP	Metric Str			
2M10K4HF80	1/8-28	M10X1	17	25.7	5.1
4M12K4HF80	1/4-19	M12X1.5	19	30.1	5.1
4M14K4HF80	1/4-19	M14X1.5	19	30.1	5.1
6M16K4HF80	3/8-19	M16X1.5	22	32.6	5.1
8M16K4HF80	1/2-14	M16X1.5	27	34.6	2.9
6M18K4HF80	3/8-19	M18X1.5	27	34.1	2.9
8M18K4HF80	1/2-14	M18X1.5	27	33.1	2.9
8M22K4HF80	1/2-14	M22X1.5	32	40.4	2.9
12M27K4HF80	3/4-14	M27X2	41	47.9	2.9
16M33K4HF80	1-11	M33X2	41	56.7	1.7

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

FNMK4

Cap
60° Cone

Mates with D9 style hose fitting



TUBE FITTING PART #	END SIZE		C HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1	2			S
	BSPP	BSPP			
2FNMK4	1/8 - 28		14	16.0	5.1
4FNMK4	1/4 - 19		19	20.6	5.1
6FNMK4	3/8 - 19		22	22.3	5.1
8FNMK4	1/2 - 14		27	22.7	2.9
10FNMK4	5/8 - 14		30	26.6	2.9
12FNMK4	3/4 - 14		32	28.0	2.9
16FNMK4	1 - 11		41	31.6	1.7
20FNMK4	1 1/4 - 11		50	35.9	1.5
24FNMK4	1 1/2 - 11		60	37.9	1.5

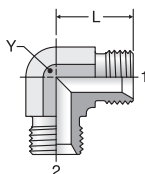
WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Dimensions and pressures for reference only, subject to change.

EMK4

Union Elbow
60° Cone / 60° Cone

Mates with D9/92, B1, B2 and B4
style hose fitting

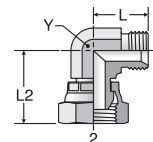


TUBE FITTING PART #	END SIZE		L (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI) S
	1	2			
	BSPP	BSPP			
2EMK4	1/8 - 28	1/8 - 28	17	11	5.1
4EMK4	1/4 - 19	1/4 - 19	24	14	5.1
6EMK4	3/8 - 19	3/8 - 19	27	19	5.1
8EMK4	1/2 - 14	1/2 - 14	32	22	2.9
10EMK4	5/8 - 14	5/8 - 14	34	22	2.9
12EMK4	3/4 - 14	3/4 - 14	36	27	2.9
16EMK4	1 - 11	1 - 11	42	33	1.7
20EMK4	1 1/4 - 11	1 1/4 - 11	48	41	1.5
24EMK4	1 1/2 - 11	1 1/2 - 11	54	48	1.5

C6MK4

Swivel Nut Elbow
60° Cone / 60° Swivel

Mates with D9/92, B1, B2 and B4
style hose fitting

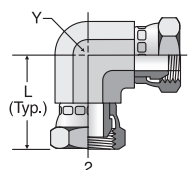


TUBE FITTING PART #	END SIZE		L (mm)	L2 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI) S
	1	2				
	BSPP	BSPP				
2C6MK4	1/8 - 28	1/8 - 28	17	18	11	5.1
4C6MK4	1/4 - 19	1/4 - 19	24	25	19	5.1
6C6MK4	3/8 - 19	3/8 - 19	27	26	22	5.1
8C6MK4	1/2 - 14	1/2 - 14	32	32	27	2.9
10C6MK4	5/8 - 14	5/8 - 14	34	30	27	2.9
12C6MK4	3/4 - 14	3/4 - 14	36	33	33	2.9
16C6MK4	1 - 11	1 - 11	42	38	41	1.7
20C6MK4	1 1/4 - 11	1 1/4 - 11	48	48	48	1.5
24C6MK4	1 1/2 - 11	1 1/2 - 11	54	50	48	1.5

E6MK4

Swivel Nut Union Elbow
60° Swivel / 60° Swivel

Mates with D9 style hose fitting

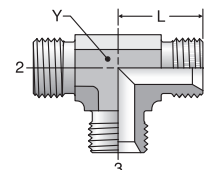


TUBE FITTING PART #	END SIZE		L (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI) S
	1	2			
	BSPP	BSPP			
4E6MK4	1/4 - 19	1/4 - 19	30.5	14	5.1
6E6MK4	3/8 - 19	3/8 - 19	33.0	19	5.1
8E6MK4	1/2 - 14	1/2 - 14	38.8	22	2.9
10E6MK4	5/8 - 14	5/8 - 14	39.4	22	2.9
12E6MK4	3/4 - 14	3/4 - 14	42.3	27	2.9
16E6MK4	1 - 11	1 - 11	49.0	33	1.7
20E6MK4	1 1/4 - 11	1 1/4 - 11	58.2	41	1.5
24E6MK4	1 1/2 - 11	1 1/2 - 11	63.3	48	1.5

JMK4

Union Tee
60° Cone (all three ends)

Mates with 92, B1, B2 and B4 style
hose fitting



TUBE FITTING PART #	END SIZE			L (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI) S
	1	2	3			
	BSPP	BSPP	BSPP			
2JMK4	1/8 - 28	1/8 - 28	1/8 - 28	17	11	5.1
4JMK4	1/4 - 19	1/4 - 19	1/4 - 19	24	19	5.1
6JMK4	3/8 - 19	3/8 - 19	3/8 - 19	27	22	5.1
8JMK4	1/2 - 14	1/2 - 14	1/2 - 14	32	27	2.9
10JMK4	5/8 - 14	5/8 - 14	5/8 - 14	34	27	2.9
12JMK4	3/4 - 14	3/4 - 14	3/4 - 14	36	33	2.9
16JMK4	1 - 11	1 - 11	1 - 11	42	41	1.7
20JMK4	1 1/4 - 11	1 1/4 - 11	1 1/4 - 11	48	48	1.5
24JMK4	1 1/2 - 11	1 1/2 - 11	1 1/2 - 11	54	48	1.5

TABLE
OF
CONTENTS

VISUAL
INDEX

FAQs

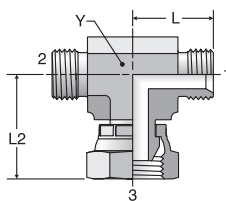
H

Dimensions and pressures for reference only, subject to change.

S6MK4

Swivel Nut Branch Tee
60° Cone / 60° Cone / 60° Swivel

Mates with D9/92, B1, B2 and B4 style hose fitting

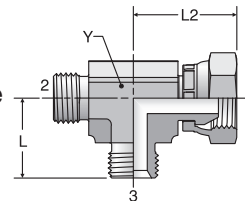


TUBE FITTING PART #	END SIZE			L (mm)	L2 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI) S
	1 BSPP	2 BSPP	3 BSPP				
2S6MK4	1/8 - 28	1/8 - 28	1/8 - 28	17	22.0	11	5.1
4S6MK4	1/4 - 19	1/4 - 19	1/4 - 19	24	31.2	19	5.1
6S6MK4	3/8 - 19	3/8 - 19	3/8 - 19	27	36.2	27	5.1
8S6MK4	1/2 - 14	1/2 - 14	1/2 - 14	32	41.0	27	2.9
10S6MK4	5/8 - 14	5/8 - 14	5/8 - 14	34	41.6	27	2.9
12S6MK4	3/4 - 14	3/4 - 14	3/4 - 14	36	45.3	33	2.9
16S6MK4	1 - 11	1 - 11	1 - 11	42	53.9	41	1.8
20S6MK4	1 1/4 - 11	1 1/4 - 11	1 1/4 - 11	48	60.0	48	1.5

R6MK4

Swivel Nut Run Tee
60° Swivel / 60° Cone / 60° Cone

Mates with D9/92, B1, B2 and B4 style hose fitting

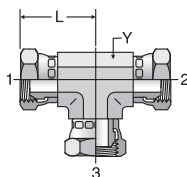


TUBE FITTING PART #	END SIZE			L (mm)	L2 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI) S
	1 BSPP	2 BSPP	3 BSPP				
2R6MK4	1/8 - 28	1/8 - 28	1/8 - 28	17	22.0	11	5.1
4R6MK4	1/4 - 19	1/4 - 19	1/4 - 19	24	31.2	19	5.1
6R6MK4	3/8 - 19	3/8 - 19	3/8 - 19	27	36.2	27	5.1
8R6MK4	1/2 - 14	1/2 - 14	1/2 - 14	32	41.0	27	2.9
10R6MK4	5/8 - 14	5/8 - 14	5/8 - 14	34	41.6	27	2.9
12R6MK4	3/4 - 14	3/4 - 14	3/4 - 14	36	45.3	33	2.9
16R6MK4	1 - 11	1 - 11	1 - 11	42	53.9	41	1.8
20R6MK4	1 1/4 - 11	1 1/4 - 11	1 1/4 - 11	48	60.0	48	1.5

J6MK4

Swivel Nut Union Tee
60° Swivel (all three ends)

Mates with D9 style hose fitting



TUBE FITTING PART #	END SIZE			L (TYP.) (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI) S
	1 BSPP	2 BSPP	3 BSPP			
4J6MK4	1/4 - 19	1/4 - 19	1/4 - 19	30.5	14	5.1
6J6MK4	3/8 - 19	3/8 - 19	3/8 - 19	33.0	19	5.1
8J6MK4	1/2 - 14	1/2 - 14	1/2 - 14	38.8	22	2.9
10J6MK4	5/8 - 14	5/8 - 14	5/8 - 14	39.4	22	2.9
12J6MK4	3/4 - 14	3/4 - 14	3/4 - 14	42.3	27	2.9
16J6MK4	1 - 11	1 - 11	1 - 11	49.0	33	1.7
20J6MK4	1 1/4 - 11	1 1/4 - 11	1 1/4 - 11	58.2	41	1.5

TABLE
OF
CONTENTS

VISUAL
INDEX

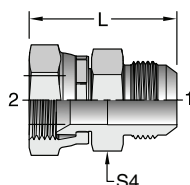
FAQs

Dimensions and pressures for reference only, subject to change.

[Click here for CADs, Support Resources or to Configure Parts Online](#)

XHT46

BSPP Swivel Adapter
37° Flare / 30° Flare Swivel

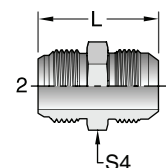


TUBE FITTING PART #	End Size		S4 Hex (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI)
	1 (in.)	2 BSPP			-S
4 XHT46	1/4	1/4-19	9/16	1.22	5.0
6 XHT46	3/8	3/8-19	11/16	1.32	5.0
8 XHT46	1/2	1/2-14	7/8	1.46	5.0
12 XHT46	3/4	3/4-14	1 1/4	1.92	4.0
16 XHT46	1	1-11	1 1/2	2.05	3.0

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

XHT4

Union Adapter
37° Flare / JIS 30° Flare

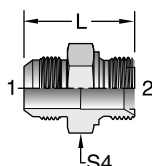


TUBE FITTING PART #	End Size		S4 Hex (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI)
	1 (in.)	2 BSPP			-S
4-4 XHT4	1/4	1/4-19	3/4	1.42	5.0
6 XHT4	3/8	3/8-19	3/4	1.55	5.0
8 XHT4	1/2	1/2-14	7/8	1.75	5.0
12 XHT4	3/4	3/4-14	1 1/8	2.06	4.0
16 XHT4	1	1-11	1 3/8	2.17	3.0

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

XHK4

BSPP Swivel Adapter
37° Flare / 60° Cone

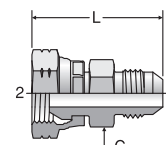


TUBE FITTING PART #	End Size		S4 Hex (in.)	L (in.)	Dynamic Pressure (x 1,000 PSI)
	1 (in.)	2 BSPP			-S
4-4 XHK4	1/4	1/4-19	3/4	1.25	5.1
6-4 XHK4	3/8	1/4-19	7/8	1.42	2.9
6-6 XHK4	3/8	3/8-19	7/8	1.46	2.9
8-6 XHK4	1/2	3/8-19	1 1/16	1.61	2.9
8-8 XHK4	1/2	1/2-14	1 1/16	1.69	2.9
10-8 XHK4	5/8	1/2-14	1 1/8	1.89	2.9
12-12 XHK4	3/4	3/4-14	1 5/16	2.13	2.9
12-16XHK4	3/4	1-11	1 5/8	2.27	1.7
16-16 XHK4	1	1-11	1 5/8	2.32	1.7

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

XHMK46

BSPP Swivel Adapter
37° Flare / BSPP 60° Cone
Swivel



Swivel end mates with BS5200 (Parker K4) adapters and Parker D9 hose fittings.

TUBE FITTING PART #	END SIZE		C HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1 (in.)	2 BSPP			S
6-4XHMK46	3/8	1/4-19	17	40.0	5.0
6XHMK46	3/8	3/8-19	17	39.2	4.0
8-6XHMK46	1/2	3/8-19	19	42.3	4.0
8XHMK46	1/2	1/2-14	19	45.0	4.0
10-8XHMK46	5/8	1/2-14	24	48.6	4.0
12XHMK46	3/4	3/4-14	30	50.0	4.0
12-16XHMK46	3/4	1-11	36	56.8	3.0
16XHMK46	1	1-11	36	58.0	3.0

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Dimensions and pressures for reference only, subject to change.

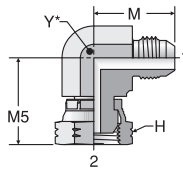


[Click here for CADs, Support Resources or to Configure Parts Online](#)

XEMK46

90° BSP Swivel Adapter
37° Flare / BSPP 60° Cone
Swivel

Swivel end mates with BS5200
(Parker K4) adapters and Parker
D9 hose fittings.

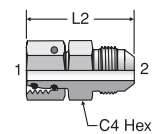


* Y – Across wrench flats

TUBE FITTING PART #	END SIZE		M (mm)	M5 (mm)	Y (mm)	Dynamic Pressure (x 1,000 PSI) S
	1 (in.)	2 BSPP				
6-4XEMK46	3/8	1/4-19	26.9	33.2	19	4.0
6XEMK46	3/8	3/8-19	26.9	32.6	19	4.0
8-6XEMK46	1/2	3/8-19	31.8	32.6	19	4.0
8XEMK46	1/2	1/2-14	31.8	38.8	22	4.0
10-8XEMK46	5/8	1/2-14	36.8	38.8	22	4.0
12XEMK46	3/4	3/4-14	42.2	40.3	27	4.0
12-16XEMK46	3/4	1-11	42.2	48.8	33	3.0
16XEMK46	1	1-11	46.0	48.8	33	3.0

XHU86

EO Swivel Adapter
Metric Swivel (EO) / 37° Flare



TUBE FITTING PART #	END SIZE		C4 HEX (in.)	L2 (in.)	Dynamic Pressure (x 1,000 PSI)		
	1	2			S	SS	B
	EO Swivel	(in.)					
L Series							
4-6L XHU86	6L	1/4	1/2	1.47	4.5	4.5	2.9
6-8L XHU86	8L	3/8	5/8	1.52	4.5	4.5	2.9
6-10L XHU86	10L	3/8	5/8	1.57	4.5	4.5	2.9
8-12L XHU86	12L	1/2	13/16	1.69	4.5	4.5	2.9
10-15L XHU86	15L	5/8	15/16	1.98	4.5	4.5	2.9
12-18L XHU86	18L	3/4	1 1/8	2.11	4.5	4.5	2.9
16-22L XHU86	22L	1	1 3/8	2.36	2.3	2.3	1.5
16-28L XHU86	28L	1	1 3/8	2.45	2.3	2.3	1.5
S Series							
4-6S XHU86	6S	1/4	1/2	1.49	7.5	7.5	4.9
6-8S XHU86	8S	3/8	5/8	1.57	7.5	7.5	4.9
6-10S XHU86	10S	3/8	11/16	1.57	7.5	7.5	4.9
8-12S XHU86	12S	1/2	13/16	1.75	6.0	6.0	3.9
10-16S XHU86	16S	5/8	15/16	2.04	5.0	5.0	3.3
12-20S XHU86	20S	3/4	1 1/8	2.29	5.0	5.0	3.3
16-25S XHU86	25S	1	1 3/8	2.45	4.5	4.5	2.9

WARNING: This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

TABLE
OF
CONTENTS

VISUAL
INDEX

FAQs

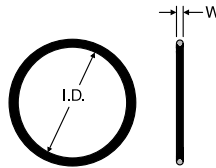
ASSEMBLY

TUBE FAB
EQUIP

Dimensions and pressures for reference only, subject to change.

[Click here for Support Resources or to Configure Parts Online](#)

JIS B2351 O-Ring



TUBE FITTING PART #	JIS DASH SIZE	T4 THREAD BSPP	I.D. (mm)	W (mm)	JIS B 2401 Description
P8 O-RING	2	1/8-28	7.8	1.9	O-RING CLASS 1 B P 8
P11 O-RING	4	1/4-19	10.8	2.4	O-RING CLASS 1 B P 11
P14 O-RING	6	3/8-19	13.8	2.4	O-RING CLASS 1 B P 14
P18 O-RING	8	1/2-14	17.8	2.4	O-RING CLASS 1 B P 18
P24 O-RING	12	3/4-14	23.7	3.5	O-RING CLASS 1 B P 24
P29 O-RING	16	1-11	28.7	3.5	O-RING CLASS 1 B P 29

* NBR is the standard compound — 90-durometer Nitrile.

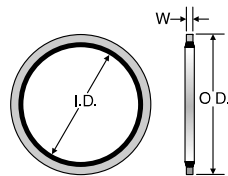
TABLE
OF
CONTENTS

VISUAL
INDEX

FAQs

BSPP Bonded Seal

Used on K4 Style Straight Fittings
as a Port Seal
For use with ISO 1179 / DIN 3852-2 port



TUBE FITTING PART #	BSPP THREAD SIZE	O.D. (mm)	I.D. (mm)	W (mm)	Material		
					S*	SS	B
D9DT-2	1/8-28	15.9	10.4	2.0	•		
D9DT-4	1/4-19	20.6	13.7	2.0	•		
D9DT-6	3/8-19	23.8	17.3	2.0	•		
D9DT-8	1/2-14	28.6	21.5	2.3	•		
D9DT-10	5/8-14	31.8	23.5	2.3	•		
D9DT-12	3/4-14	34.9	27.1	2.3	•		
D9DT-16	1-11	42.8	33.9	2.3	•		
D9DT-20	1 1/4-11	52.4	42.9	3.3	•		
D9DT-24	1 1/2-11	58.6	48.4	3.3	•		

* NBR is the standard elastomer compound — 90-durometer Nitrile
Zinc plated steel ring

EO-2 Sealing Ring

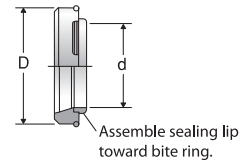
Specify size and material

Examples:

DOZ10S (standard steel with NBR)

DOZ10SVIT (standard steel with FKM)

DOZ10S71 (standard stainless steel with FKM)



TUBE FITTING PART #	SERIES	TUBE O.D. (mm)	D (mm)	d (mm)	Material		
					S	SS	
					NBR*	FKM**	FKM***
DOZ04LL	LL	4	6.8	4	•		
DOZ06LL	very light	6	8.8	6	•		
DOZ06L	L	6	10.3	6	•	•	•
DOZ08L	light	8	12.3	8	•	•	•
DOZ10L		10	14.3	10	•	•	•
DOZ12L		12	16.3	12	•	•	•
DOZ15L		15	20.3	15	•	•	•
DOZ18L		18	24.3	18	•	•	•
DOZ22L		22	27.7	22	•	•	•
DOZ28L		28	33.7	28	•	•	•
DOZ35L		35	42.7	35	•	•	•
DOZ42L		42	49.7	42	•	•	•
DOZ06S	S	6	12.3	6	•	•	•
DOZ08S	heavy	8	14.3	8	•	•	•
DOZ10S		10	16.3	10	•	•	•
DOZ12S		12	18.3	12	•	•	•
DOZ14S		14	20.3	14	•	•	•
DOZ16S		16	22.3	16	•	•	•
DOZ20S		20	27.7	20	•	•	•
DOZ25S		25	33.7	25	•	•	•
DOZ30S		30	39.7	30	•	•	•
DOZ38S		38	49.7	38	•	•	•

* Steel black zinc plated with NBR 90-durometer Nitrile compound.

** Steel black zinc plated with FKM 90-durometer fluorocarbon compound.

*** Stainless steel with FKM 90-durometer fluorocarbon compound.

Dimensions for reference only, subject to change.