

Komatsu Style Adapters

The 30° flare, metric thread interface, also known as the Komatsu style flare fitting, is one of the most common specialized OEM mobile equipment fittings in the marketplace. Parker offers a line of caps, plugs and conversion adapters to mate with this specialty connection. Parker's line of products is designated as "KA" adapters.

The Komatsu style connection is generally rated at 4000 psi (280 kg/cm² or 27.5 Mpa). Parker's caps, plugs and conversion adapters are rated at the full pressure rating in sizes 4-16, with slight pressure reductions in the less common sizes of -20 and -24.

Parker's offering of Komatsu style adapters allow for more aftermarket flexibility. Parker's caps and plugs enable technicians to protect critical sealing surfaces of hoses and adapters from damage and contamination. This protection is important during testing, repair and/or implement installation and removal.

Parker's line of Komatsu style conversion adapters are ideal for emergency situations, field repair, or "plumbing in" hydraulic attachments and options. Parker's exclusive swivel nut design minimizes the sealing surface damage to mating components.

Design and Construction

Parker's line of Komatsu style fitting is sold only as a hose adapter and thus tube nuts and sleeves are not available. The adapter consists of a single body. The mating hose swivel mates directly to the 30° nose of the adapter, as shown in Fig. J1. This simple, metal-to-metal connection provides a very effective seal between the fitting nose and the hose swivel seat.

The Komatsu style adapter offers the traditional advantages of the 37° flare fitting but incorporates the following differences:

- 1) 30° nose flare
- 2) Metric threads with 1.5 mm pitch
- 3) Used only as a hose adapter
- 4) Heavy duty crimp nut for higher assembly torques

Due to the prevalent field repair needs of mobile equipment and relative simplicity of the Komatsu style fitting, several manufacturers offer a similar product line. Even though some manufacturers conform to the same dimensional standards, there are significant performance advantages to Parker's product offering due to higher integrity manufacturing methods and Parker's commitment to quality.



Fig. J1 – Cutaway of Komatsu Style Adapter

Product Specifications

Komatsu style fittings are offered in eight common sizes. See Table J1 below, which shows the Komatsu nominal size and the equivalent Parker TFD Dash Size. The table also shows the equivalent Parker Hose Products / Parflex Division mating hose series.

Komatsu Nominal Size	Parker TFD Equivalent Dash Size	Komatsu Thread	Parker Hose Fitting Mating Series
02	-4	M14 x 1.5	MU
03	-6	M18 x 1.5	MU
04	-8	M22 x 1.5	MU
05	-10	M24 x 1.5	XU
06	-12	M30 x 1.5	XU
10	-16	M33 x 1.5	XU
12	-20	M36 x 1.5	XU
14	-24	M42 x 1.5	XU

Table J1 – Parker equivalent dash sizes and mating hose series for Komatsu Style Fittings

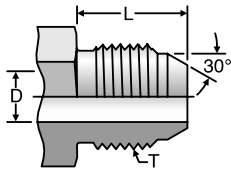
Reference Locations

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

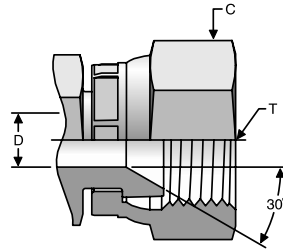
Standard Material Specifications: Please refer to Table U1 located in the Appendix Section.

Dimensions and pressures for reference only, subject to change.

Komatsu Ends



**Komatsu Male,
30° Flare**



Komatsu Swivel

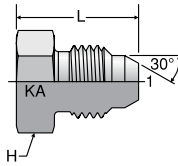
	Metric Thread	Hex	Drill	Male Turn Back
Dash Size	T Metric	C (mm)	D (mm)	L (mm)
4	M14x1.5	19	5	17.0
6	M18x1.5	24	8	18.0
8	M22x1.5	27	10	20.0
10	M24x1.5	32	13	33.0
12	M30x1.5	36	14	26.0
16	M33x1.5	41	19	30.0

Dimensions and pressures for reference only, subject to change.

PNMKA

Plug
30° Flare

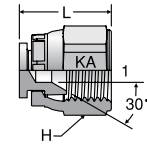
Mates with XU and MU series hose fittings



TUBE FITTING PART #	END SIZE		H HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1 Metric Thread				S
4PNMKA	M14 X 1.5		17	23.4	4.0
6PNMKA	M18 X 1.5		22	25.1	4.0
8PNMKA	M22 X 1.5		24	28.7	4.0
10PNMKA	M24 X 1.5		27	32.0	4.0
12PNMKA	M30 X 1.5		32	36.6	4.0
16PNMKA	M33 X 1.5		38	40.6	4.0

FNMKA

Cap
30° Flare

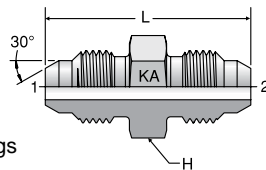


TUBE FITTING PART #	END SIZE		H HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1 Metric Thread				S
4FNMKA	M14 X 1.5		19	21.4	4.0
6FNMKA	M18 X 1.5		24	23.1	4.0
8FNMKA	M22 X 1.5		27	27.1	4.0
10FNMKA	M24 X 1.5		32	31.8	4.0
12FNMKA	M30 X 1.5		36	35.5	4.0
16FNMKA	M33 X 1.5		41	40.9	4.0

HMKA

Male Union
30° Flare

Mates with XU and MU series hose fittings

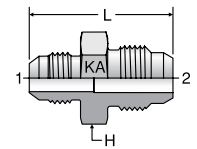


TUBE FITTING PART #	END SIZE		H HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1&2 Metric Thread				S
4-4HMKA	M14 X 1.5		17	39.4	4.0
6-6HMKA	M18 X 1.5		22	43.4	4.0
8-8HMKA	M22 X 1.5		24	47.5	4.0
10-10HMKA	M24 X 1.5		27	52.1	4.0
12-12HMKA	M30 X 1.5		32	63.2	4.0
16-16HMKA	M33 X 1.5		38	72.1	4.0

XHMKA

37° Conversion Adapter
30° Flare / 37° Flare

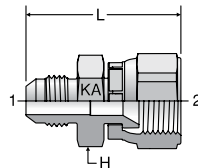
End 2 mates with XU and MU series hose fittings



TUBE FITTING PART #	END SIZE		H HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1 (in.)	2 Metric Thread			S
4-4XHMKA	1/4	M14 X 1.5	17	37.1	4.0
6-6XHMKA	3/8	M18 X 1.5	22	39.6	4.0
8-8XHMKA	1/2	M22 X 1.5	24	44.2	4.0
10-10XHMKA	5/8	M24 X 1.5	27	49.8	4.0
12-12XHMKA	3/4	M30 X 1.5	32	59.2	4.0
16-16XHMKA	1	M33 X 1.5	38	65.3	4.0

XHMKA6

37° Swivel Conversion Adapter
37° Flare / 30° Swivel



TUBE FITTING PART #	END SIZE		H HEX (mm)	L (mm)	Dynamic Pressure (x 1,000 PSI)
	1 (in.)	2 Metric Thread			S
4-4XHMKA6	1/4	M14 X 1.5	17	40.6	4.0
6-6XHMKA6	3/8	M18 X 1.5	22	42.7	4.0
8-8XHMKA6	1/2	M22 X 1.5	24	49.0	4.0
10-10XHMKA6	5/8	M24 X 1.5	27	57.4	4.0
12-12XHMKA6	3/4	M30 X 1.5	32	65.8	4.0
16-16XHMKA6	1	M33 X 1.5	38	73.9	4.0

Dimensions and pressures for reference only, subject to change.

