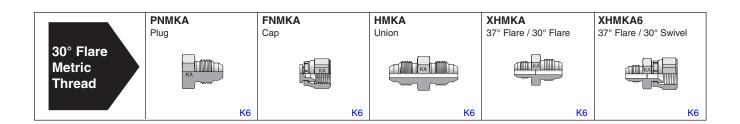


Komatsu[®] Style Adapters



The Fitting Authority



Dimensions and pressures for reference only, subject to change.



Introduction

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. 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.

Materials Specifications

Komatsu style components are manufactured using state-ofthe-art equipment and manufacturing technologies to assure construction integrity, highest strength, long service life and the highest quality. At the heart of the Komatsu Style product line is the finest raw materials and manufacturing technologies as outlined in Table K1 and discussed below:

Komatsu Style Adapter Bodies: Komatsu style fittings are manufactured in five configurations. All straight bodies are manufactured from cold drawn bar stock.

Komatsu Style Crimp Swivel Nuts: Komatsu style crimp nuts are machined from cold drawn barstock.



Fig. K1 - Cutaway of Komatsu Style Adapter

Komatsu Style	Steel		
Adapters	Туре		
Bodies	12L14		
Crimp Nuts	1215 or 1018		

Table K1 – Standard Material Specifications for Komatsu Style Adapters

Note: On request, Komatsu style fittings can be furnished in materials other than those shown above.

Finish: Zinc with yellow chromate (being changed to zinc chromium 6 free) is used on all standard steel products.



Product Specifications

Komatsu style fittings are offered in eight common sizes. See Table K2 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 Parker TFD Nominal Equivalent Size 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 1.4	XU
06	-12	M30 x 1.5	ΧU
10	-16	M33 x 1.5	ΧU
12	-20	M36 x 1.5	XU
14	-24	M42 x 1.5	ΧU

Table K2 – Parker equivalent dash sizes and mating hose series for Komatsu Style Fittings



Fig. K2 – Komatsu Style Caps and Plugs



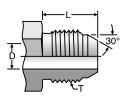
Fig. K3 – Komatsu Style Conversion Adapter

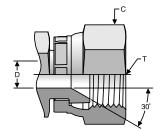
Assembly and Installation

Please refer to Section T for the assembly and installation instructions for Komatsu® Style Adapters.



Komatsu Ends





Komatsu Male, 30° Flare

Komatsu Swivel

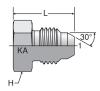
	Metric Thread	Hex	Drill	Male Turn Back
Dash Size	T Metric	C (mm)	D (mm)	L (mm)
4	M14x1.5	19	0.197	16.0
6	M18x1.5	24	0.315	18.0
8	M22x1.5	27	0.394	20.0
10	M24x1.5	32	0.512	21.5
12	M30x1.5	36	0.551	26.0
16	M33x1.5	41	0.748	30.0



PNMKA

Plug 30° Flare

Mates with XU and MU series hose fittings



FNMKA

Cap 30° Flare



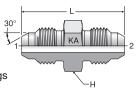
TUBE FITTING	FITTING 1		L	STANDARD Dynamic Pressure (x 1,000 PSI)
PART # 4PNMKA	Metric Thread M14 X 1.5	(mm) 17	(mm) 23.4	S 4.0
				-
6PNMKA M18 X 1.5		22	25.1	4.0
8PNMKA	M22 X 1.5	24	28.7	4.0
10PNMKA	M24 X 1.5	27	32.0	4.0
12PNMKA	M30 X 1.5	32	36.6	4.0
16PNMKA	M33 X 1.5	38	40.6	4.0

TUBE FITTING PART #	END SIZE 1 Metric Thread	H HEX (mm)	L (mm)	STANDARD Dynamic Pressure (x 1,000 PSI) 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



XHMKA

37° Conversion Adapter 30° Flare / 37° Flare



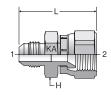
End 2 mates with XU and MU series hose fittings

TUBE FITTING	END SIZE 1&2 H Metric HEX			STANDARD Dynamic Pressure (x 1,000 PSI)
			. - .	_
PART #	Thread	(mm)	(mm)	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

TUBE	END SIZE		н		STANDARD Dynamic Pressure
FITTING	1 2		HEX	L	(x 1,000 PSI)
PART #	(in.)	Metric Thread	(mm)	(mm)	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	END SIZE				STANDARD Dynamic Pressure
FITTING	1 2		HEX	L	(x 1,000 PSI)
PART #	(in.)	Metric Thread	(mm)	(mm)	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

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