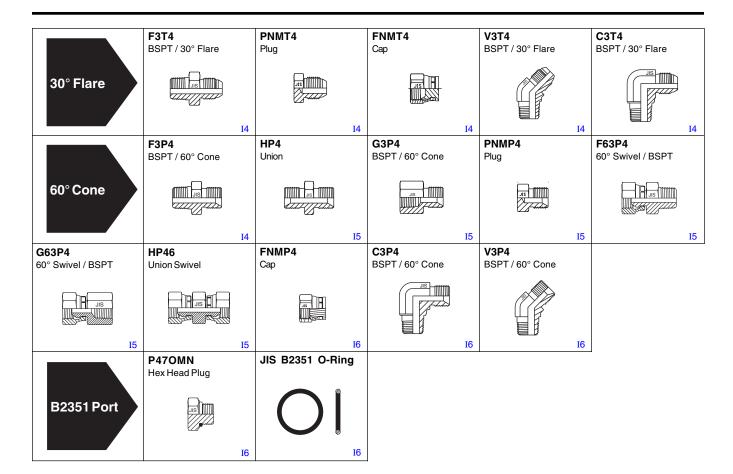


# JIS Fittings



The Fitting Authority





#### Introduction

Parker introduced Japanese Industrial Standard (JIS) adapters in the early 1990s to address market requirements for OEM and replacement fittings. These fittings are typically used as hose adapters on equipment designed and/or manufactured in Japan and Korea. Parker's JIS adapters are designed with 30° flare and 60° cone connections and typically incorporate BSP threads.

Parker JIS adapters are designed with BSPP and BSPT port ends and two styles of hose ends: T4 (30° flare, BSPP threads) and P4 (60° cone, BSPP threads). Two additional Parker series of fittings, KA (Komatsu flare) and K4 (BS B5200) adapters, are similar to JIS style fittings and appear in section J and section K of this catalog.

The T4 and P4 interfaces provide end user flexibility of connecting to the most common Parker hose ends available as listed in Table I1.

Parker's JIS adapter offering that uses the BSPP port connection are manufactured in accordance with the JIS B2351 type "O" port connection which is commonly used for higher pressure systems. Fig. I2 illustrates this port connection and Table I2 shows appropriate JIS B2351 O-rings and dash sizes.

It should be noted that Parker offers two very similar cone style BSPP adapters — P4 and K4. Parker's K4 (60 cone, BSPP) fittings conform to BS5200, while Parker's JIS cone adapters meet JIS B8363 specifications. *These fittings, while very similar, are not interchangeable.* See the K4 section of this catalog for more specific information on interchangeability.

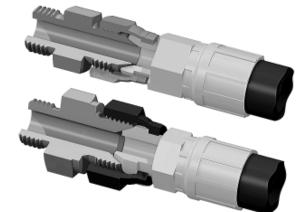


Fig. I1 - JIS T4 and P4 Interfaces

Adapter Connection End	Mating Parker Hose Fitting Series				
P4 / P46	UT, GU, G1, G2				
T4 / T46	FU				

Table I1 – Parker JIS Fittings Hose Adaptability

## **Design and Construction**

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

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

BSPP Threads: ISO 228-1 G, JIS B 0202, BSPT Threads: ISO 7/1, JIS B 0203

**Identification:** All Parker JIS fittings are stamped with "JIS" for positive identification and differentiation from similar style fittings.

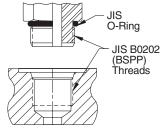


Fig. I2 – JIS B2351 Type "O" Port Connection

"G" Thread BSPP per ISO 228-1	Dash	Port O-Ring (See
JIS B 0202	Size	Pg. I 6)
1/8-28	2	P8
1/4-19	4	P11
3/8-19	6	P14
1/2-14	8	P18
3/4-14	12	P24
1-11	16	P29

Table I2 – JIS B2351 Port Threads and O-Rings as shown in Fig. I2

### **Materials Specifications**

JIS fitting components are manufactured using state-of-the-art equipment and manufacturing technologies to assure construction integrity, highest strength, long service life and the highest quality. These materials are shown in Table I3.

Upon request, JIS fittings can be furnished in materials other than Parker's standard steel offering.

IIC Adoptoro		Steel
JIS Adapters	ASTM	Type
Forged Bodies	A576	1214/1215
Bar Stock Bodies	A108	12L14

Table I3 – Standard Material Specifications for Parker Japanese Industrial Standard (JIS) Fittings



**F3T4** 

**Full Dimensions** 

Male Connector 30° Flare / BSPT



Mates with FU Style hose fittings

TUBE	END	SIZE	н		STANDARD Dynamic Pressure
FITTING	1	2	HEX	L	(x 1,000 PSI)
PART #	BSPP	BSPT	(in.)	(in.)	-S
4F3T4	1/4-19	1/4-19	0.75	1.46	5.0
4-6F3T4	1/4-19	3/8-19	0.88	1.51	5.0
6-4F3T4	3/8-19	1/4-19	0.88	1.59	5.0
6F3T4	3/8-19	3/8-19	0.88	1.59	5.0
8-6F3T4	1/2-14	3/8-19	1.06	1.70	5.0
8F3T4	1/2-14	1/2-14	1.06	1.89	5.0
12F3T4	3/4-14	3/4-14	1.44	2.10	4.0
16F3T4	1-11	1-11	1.63	2.30	3.0

#### PNMT4

Plug 30° Flare



Mates with FU Style hose fittings

	END			STANDARD Dynamic
TUBE	SIZE	Н		Pressure
FITTING	1	HEX	L	(x 1,000 PSI)
PART #	BSPP	(mm)	(in.)	-S
4PNMT4	1/4-19	17	0.89	5.0
6PNMT4	3/8-19	19	0.97	5.0
8PNMT4	1/2-14	22	1.11	5.0
12PNMT4	3/4-14	30	1.26	4.0
16PNMT4	1-11	36	1.30	3.0









#### FNMT4

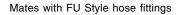
Cap 30° Flare



3		4
	3	31

**Full Dimensions** 

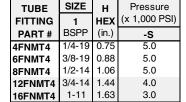
45° Male Elbow 30° Flare / BSPT





	Across	wrench	flats
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TUBE	END	SIZE				STANDARD Dynamic Pressure
FITTING	1	2	L4	L5	U	(x 1,000 PSI)
PART #	BSPP	BSPT	(in.)	(in.)	(in.)	-S
4V3T4	1/4-19	1/4-19	0.75	0.87	0.56	5.0
6V3T4	3/8-19	3/8-19	0.87	0.97	0.75	5.0
8V3T4	1/2-14	1/2-14	1.06	1.10	0.88	5.0
12V3T4	3/4-14	3/4-14	1.18	1.24	1.06	4.0
16V3T4	1-11	1-11	1.37	1.26	1.31	3.0



**END** 

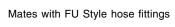
**C3T4** 

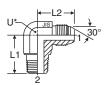
**Full Dimensions** 

STANDARD

Dynamic

Male Elbow 30° Flare / BSPT





\* Across wrench flats

TUBE	END	SIZE				STANDARD Dynamic Pressure
FITTING	1	2	L1	L2	U	(x 1,000 PSI)
PART #	BSPP	BSPT	(in.)	(in.)	(in.)	-S
4C3T4	1/4-19	1/4-19	1.00	0.98	0.56	5.0
6C3T4	3/8-19	3/8-19	1.18	1.14	0.75	5.0
8C3T4	1/2-14	1/2-14	1.42	1.33	0.88	5.0
12C3T4	3/4-14	3/4-14	1.69	1.50	1.06	4.0
16C3T4	1-11	1-11	1.97	1.74	1.31	3.0

**F3P4** 

**Full Dimensions** 

Male Connector 60° Cone / BSPT



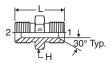
Mates with GU, G1 and G2 Style hose fittings

TUBE	END	SIZE	Н		STANDARD Dynamic Pressure
<b>FITTING</b>	1	2	HEX	L	(x 1,000 PSI)
PART #	BSPP	BSPT	(in.)	(in.)	-S
4F3P4	1/4-19	1/4-19	0.75	1.44	5.0
6F3P4	3/8-19	3/8-19	0.88	1.50	5.0
8F3P4	1/2-14	1/2-14	1.06	1.81	5.0
12F3P4	3/4-14	3/4-14	1.44	2.05	4.0
16F3P4	1-11	1-11	1.63	2.28	3.0

HP4

**Full Dimensions** 

Union 60° Cone



Mates with GU, G1 and G2 Style hose fittings

					STANDARD Dynamic
TUBE	END	SIZE	Н		Pressure
FITTING	1	2	HEX	L	(x 1,000 PSI)
PART #	BSPP	BSPP	(in.)	(in.)	-S
4HP4	1/4-19	1/4-19	0.75	1.34	5.0
6HP4	3/8-19	3/8-19	0.88	1.50	5.0
8HP4	1/2-14	1/2-14	1.06	1.81	5.0
12HP4	3/4-14	3/4-14	1.44	2.05	4.0
16HP4	1-11	1-11	1.63	2.28	3.0

**G3P4** 

**Full Dimensions** 

Female Connector 60° Cone / BSPT



Mates with GU, G1 and G2 Style hose fittings

					STANDARD Dynamic
TUBE	END	SIZE	Н		Pressure
FITTING	1	2	HEX	L	(x 1,000 PSI)
PART #	BSPP	BSPT	(in.)	(in.)	-S
4G3P4	1/4-19	1/4-19	0.75	1.22	5.0
6G3P4	3/8-19	3/8-19	0.88	1.34	5.0
8G3P4	1/2-14	1/2-14	1.06	1.58	5.0
12G3P4	3/4-14	3/4-14	1.44	1.73	4.0
16G3P4	1-11	1-11	1.63	1.93	3.0









#### PNMP4

Plug 60° Cone



Mates with GU, G1 and G2 Style hose fittings

TUBE FITTING	END SIZE	H HEX	STANDARD Dynamic Pressure (x 1,000 PSI)
PART #	BSPP	(mm)	-S
4PNMP4	1/4-19	17	5.0
6PNMP4	3/8-19	19	5.0
8PNMP4	1/2-14	22	5.0
12PNMP4	1/2-14	30	4.0
16PNMP4	1-11	36	3.0

**F63P4** 

**Full Dimensions** 

Swivel Male Connector 60° Swivel / BSPT



Mates with UT Style hose fittings

TUBE	END	SIZE	H1		STANDARD Dynamic Pressure
FITTING	1	2	HEX	L	(x 1,000 PSI)
PART #	BSPP	BSPT	(in.)	(in.)	-S
4F63P4	1/4-19	1/4-19	0.75	1.73	5.0
6F63P4	3/8-19	3/8-19	0.88	1.94	5.0
8F63P4	1/2-14	1/2-14	1.06	2.25	5.0
12F63P4	3/4-14	3/4-14	1.44	2.55	4.0
16F63P4	1-11	1-11	1.63	2.77	3.0

**G63P4** 



Swivel Female Connector 60° Swivel / BSPT



Mates with UT Style hose fittings

TUBE	END	SIZE	H1		STANDARD Dynamic Pressure
FITTING	1	2	HEX	L	(x 1,000 PSI)
PART #	BSPP	BSPT	(in.)	(in.)	-S
4G63P4	1/4-19	1/4-19	0.75	1.61	5.0
6G63P4	3/8-19	3/8-19	0.88	1.78	5.0
8G63P4	1/2-14	1/2-14	1.06	2.02	5.0
12G63P4	3/4-14	3/4-14	1.44	2.20	4.0
16G63P4	1-11	1-11	1.63	2.52	3.0

**HP46** 

**I**5

**Full Dimensions** 

Swivel Union Connector 60° Swivel



Mates with UT Style hose fittings

TUBE	END	SIZE	H1		STANDARD Dynamic Pressure
FITTING	1	2	HEX	L	(x 1,000 PSI)
PART #	BSPP	BSPP	(in.)	(in.)	-S
4HP46	1/4-19	1/4-19	0.75	2.12	5.0
6HP46	3/8-19	3/8-19	0.88	2.37	5.0
8HP46	1/2-14	1/2-14	1.06	2.73	5.0
12HP46	3/4-14	3/4-14	1.44	2.96	4.0
16HP46	1-11	1-11	1.63	3.24	3.0



#### FNMP4

Cap 60° Cone



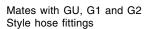
Mates with UT Style hose fittings

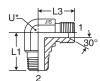
TUBE	END SIZE	н	STANDARD Dynamic Pressure
FITTING	1		(x 1,000 PSI)
PART #	BSPP	(in.)	-S
4FNMP4	1/4-19	0.75	5.0
6FNMP4	3/8-19	0.88	5.0
8FNMP4	1/2-14	1.06	5.0
12FNMP4	3/4-14	1.44	4.0
16FNMP4	1-11	1.63	3.0

C3P4

**Full Dimensions** 

90° Male Elbow 60° Cone / BSPT





\* Across wrench flats

						STANDARD Dynamic
TUBE	END	SIZE				Pressure
FITTING	1	2	L1	L3	U	(x 1,000 PSI)
PART #	BSPP	BSPT	(in.)	(in.)	(in.)	-S
4C3P4	1/4-19	1/4-19	1.00	0.96	0.56	5.0
6C3P4	3/8-19	3/8-19	1.18	1.14	0.75	5.0
8C3P4	1/2-14	1/2-14	1.42	1.28	0.88	5.0
12C3P4	3/4-14	3/4-14	1.69	1.56	1.06	4.0
16C3P4	1-11	1-11	1.97	1.74	1.31	3.0









#### **V3P4**



45° Male Elbow 60° Cone / BSPT



Mates with GU, G1 and G2 Style hose fittings

TUBE	END SIZE					STANDARD Dynamic Pressure
<b>FITTING</b>	1	2	L4	L6	U	(x 1,000 PSI)
PART #	BSPP	BSPT	(in.)	(in.)	(in.)	-S
4V3P4	1/4-19	1/4-19	0.75	0.81	0.56	5.0
6V3P4	3/8-19	3/8-19	0.87	0.91	0.75	5.0
8V3P4	1/2-14	1/2-14	1.06	1.05	0.88	5.0
12V3P4	3/4-14	3/4-14	1.18	1.18	1.06	4.0
16V3P4	1-11	1-11	1.37	1.30	1.31	3.0

#### **P470MN**

Plug

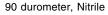
Hex head plug for JIS B2351



TUBE	END SIZE	н			STANDARD Dynamic Pressure
FITTING	1	HEX	L	XX	(x 1,000 PSI)
PART #	BSPP	(mm)	(mm)	(mm)	-S
4P47OMN	1/4-19	19	19.1	7.9	5.0
6P47OMN	3/8-19	22	20.0	8.8	5.0
8P47OMN	1/2-14	27	24.1	9.6	5.0
12P47OMN	3/4-14	36	26.9	12.4	4.0
16P47OMN	1-11	41	31.0	12.5	3.0

## **JIS B2351 O-Ring**

O-Ring





TUBE	JIS	T4			
FITTING	DASH	THREAD	I.D.	W	JIS B 2401
PART #	SIZE	BSPP	(mm)	(mm)	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