Parker
Instrumentation

CPI™
Tube Fittings

Catalog 4230
Revised, February 2000

Introduction

Parker CPI™ Instrumentation Tube Fittings are designed as leak-free connections for process, power and instrumentation applications. These world renowned single ferrule fittings are manufactured to the highest quality standards and are available in a broad range of sizes, materials and configurations.

Features

The Parker CPI™ tube fittings shown in this catalog have been designed to meet the most stringent demands of quality tube line fabrication.

Design

The Parker CPI™ single ferrule system requires only two metal-to-metal seal points to effect a leak-tight seal. These seals are to the fitting body and to the tubing. The Parker CPI™ design reduces potential leak paths by having fewer components.

Pipe Fittings/Adapters

Parker CPI™ tube fittings are available in a wide variety of ISO and ANSI pipe thread configurations. For a full line of these fittings, see Catalog 4260.

Tubing

Parker CPI™ tube fittings can be used with a wide variety of tubing materials and a broad range of tube wall thicknesses. CPI™ tube fittings seal equally well on both thin wall and heavy wall tubing. **Tubing and fitting materials should be selected to be compatible with the fluid media. Due to thermal expansion characteristics and chemical stability, the tubing should be of the same material as the fitting.**

Remake

The Parker CPI™ tube fitting is designed so that repeated remakes will not affect sealing performance. Even in the over-made condition sealing ability is excellent. The single-ferrule design is responsible for this performance.

Temperature Cycling

The Parker CPI™ single ferrule design allows the ferrule to bow during make-up. The bowing action of the ferrule creates an active element that can expand and contract with temperature cycling and maintain a leak-tight seal.

No Distortion

In make-up, the single ferrule design exerts no undue force in an outward direction to distort the fitting and nut. This assures that the nut will back-off freely for disassembly and permits a greater number of remakes.

No Tube Twist

No rotational forces are imparted to the tubing during assembly. The tube is not prestressed by twisting and a better seal is assured.

Packaging

Parker CPI™ tube fittings are packaged to insure cleanliness. Plastic thread protectors are used on the fittings and are mounted in plastic trays. The trays are shrink wrapped, then boxed and shrink wrapped again.

Materials

CPI™ tube fittings are standard in heat code traceable 316 stainless steel. Other materials include steel, brass, aluminum, nickel-copper, Hastelloy C-276®, Alloy 600, and Carpenter20®.

Nomenclature

Parker CPI™ tube fittings part numbers are constructed from symbols that identify the size and style of the fitting and materials used.

Assembly, Remake, Gaugeability

CPI™ tube fittings are fully gaugeable. For proper assembly and remake of Parker CPI™ tube fittings, refer to page 74 in the engineering report section. For gauging of Parker CPI™ tube fittings, refer to page 74.

Pressure Rating & Tubing Selection

For working pressures of CPI™ tube connections, please see the Instrument Tubing Selection Guide, found in the Technical Section of your Parker Instrumentation Products Master Binder, or the Parker Instrument Tube Fitting Installation Manual (Bulletin 4200-B4).

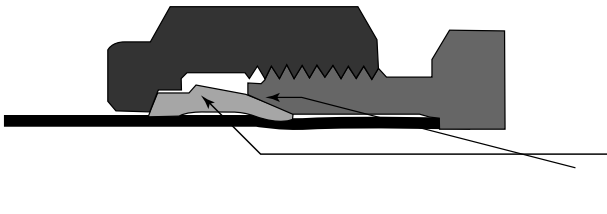
In some cases where a male or female pipe thread is the second end of a Parker CPI™ tube fitting, such threads may be the pressure limiting factor of the tubing system. See Catalog 4260, Instrumentation Pipe Fittings for pressure ratings of Parker Instrumentation Pipe Fittings.

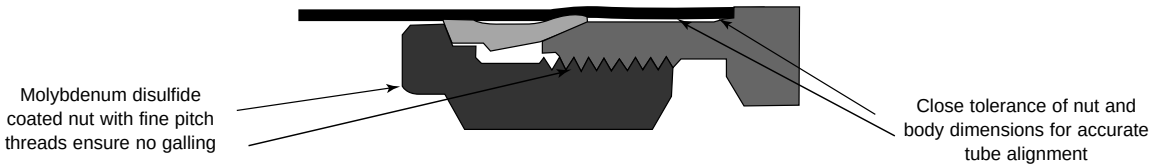
Huntsville, Alabama, USA


Barnstaple, UK

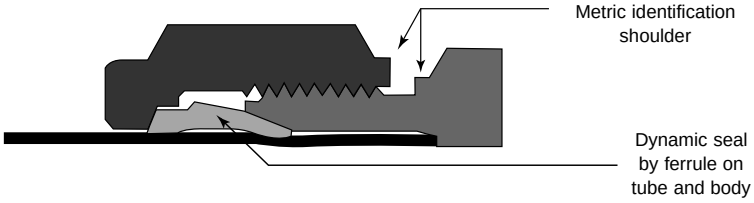
The Parker CPI™ tube fitting consists of three precision engineered parts designed under strict adherence to quality control programs to provide secure leak-free connections capable of satisfying high pressure, vacuum and vibration applications.

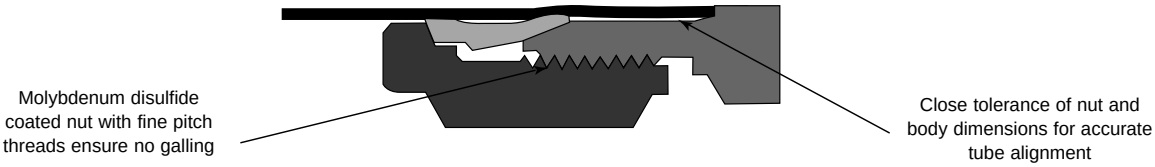
Inch





Metric

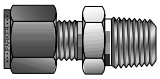




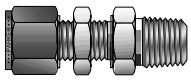
The single ferrule system requires only two metal-to-metal seal points to effect a leak-tight seal. These seals are to the fitting body and to the tubing. The CPI™ design reduces potential leak paths by having fewer components. The design of the single ferrule reduces the contact-area between the ferrule and body. Therefore, it increases the pressure between those two components and sealing is improved. The Parker Suparcase™ ferrule provides a positive seal on the tube. Prelubrication of CPI™ nuts (molybdenum disulfide) combined with quality machining eliminates the need for any additional thread lubricants or anti-galling compounds.

Visual Index

Tube to Male Pipe



FBZ
Male
Connnector
pages 8, 9, 10, 11, 12



FH2BZ
Male Bulkhead Connector
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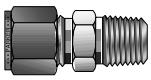
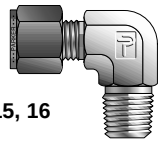
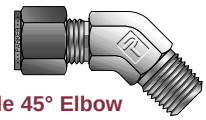


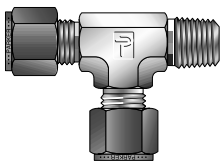
FH4BZ
Thermocouple Connector
page 14



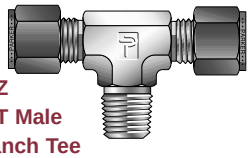
CBZ
Male Elbow
pages 14, 15, 16



VBZ
NPT Male 45° Elbow
page 17

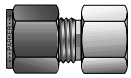


RBZ
NPT Male Run Tee
page 18



SBZ
NPT Male
Branch Tee
page 19

Tube to Female Pipe



GBZ
Female Connnector
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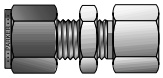

GH2BZ
Female Bulkhead Connector
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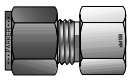
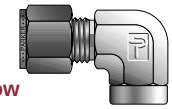


GBZ
Gauge Connector
pages 22, 23



DBZ
Female Elbow
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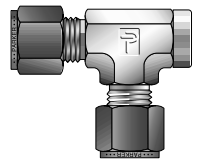
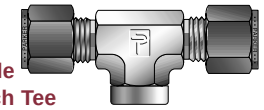
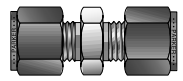


MBZ
Female
Run Tee
page 24



OBZ
Female
Branch Tee
page 25

Tube to Tube Unions



HBZ
Union
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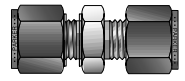

HBZ
Conversion Union
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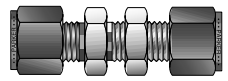
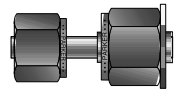
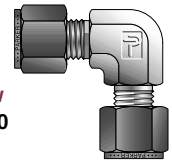


WBZ
Bulkhead Union
page 28



DEBTA
Dielectric Union Assembly
page 29



EBZ
Union Elbow
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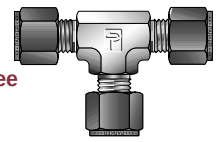
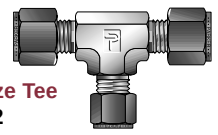
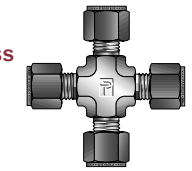


JBZ
Union Tee
page 31



JBZ
Drop Size Tee
page 32



KBZ
Union Cross
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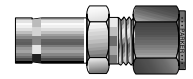
Port Connectors



TRBZ
Tube End Reducer
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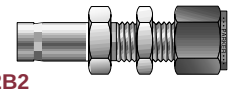

T2H2B2
Tube End Bulkhead Adapter
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ZPC
Port Connector
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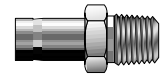

T2HF
Tube End Male Adapter
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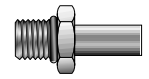

T2HOA
Tube End to
SAE Straight Thread Adapter
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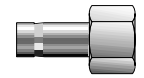

T2HG
Tube End Female Adapter
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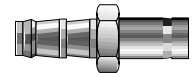

P2T2
Push-Lok to Tube Adapter
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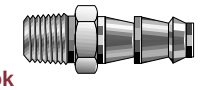

P2HF
Push-Lok
to Male Adapter
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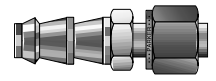

P2BZ6
Push-Lok to CPI™
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ZP2
Push-Lok to Port Connector
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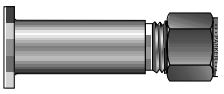

LJFBZ
Lapped Joint Tube Adapters
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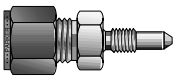
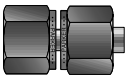


ZH2BX
DP Transmitter
Calibration Adapters
page 46

37° Flare (AN) to CPI™



X6HBZ6
37°Flare (AN) to CPI™
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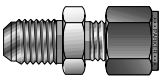
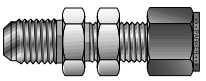


XHBZ
37° Flare Connector
to CPI™
page 47



XH2BZ
37° Flare Bulkhead Connector
to CPI™
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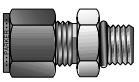
Tube to "O" Ring Seal



ZHBA
Male Connector
SAE Straight Thread
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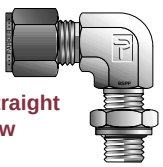
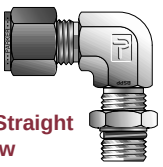


C5BZ
Male SAE Straight
Thread Elbow
page 50



C5BZ (R)
Male BSPP Straight
Thread Elbow
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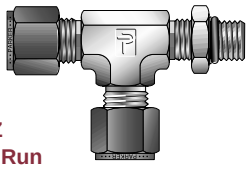

R5BZ
Male Run
Tee SAE Straight Thread
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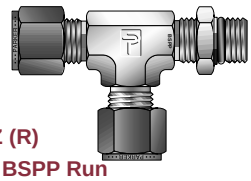

S5BZ (R)
Male BSPP Run
Tee Straight Thread
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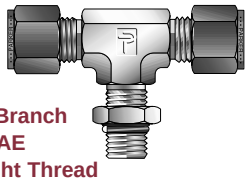

S5BZ
Male Branch
Tee SAE
Straight Thread
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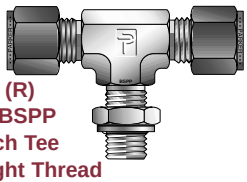

S5BZ (R)
Male BSPP
Branch Tee
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ZH3BA
Long
Male Connector
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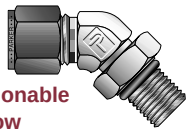
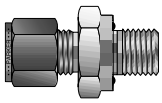
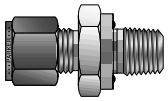


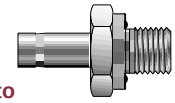
V5BZ
45° Positionable
Male Elbow
page 53



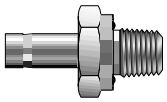
ZHBA5
Male Connector to "O" Ring
Straight Thread
page 54



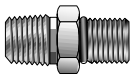
ZHBF5
Male Connector to "O" Ring
Pipe Thread
page 54



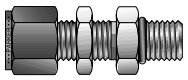
T2HOA5
Tube End to
"O" Ring Straight Thread
page 55



T2HOF5
Tube End to
"O" Ring Pipe Thread
page 55

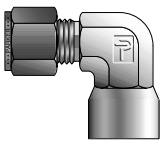


FHOA
Pipe Thread to
SAE Straight Thread Adapter
page 56

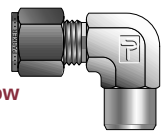


AH2BZ
Bulkhead to
Conversion Adapter
page 56

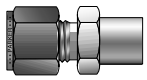
Tube to Welded Systems



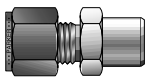
ZEBW
Socket Weld
Elbow
page 58



ZEBW2
Buttweld Elbow
page 58

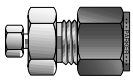


ZHBW
Socket Weld Connector
page 59

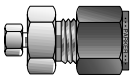


ZHBW2
Buttweld Connector
pages 59, 60

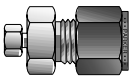
Analytical Fittings



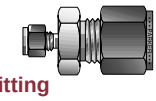
Z2HCZ7
Column End
Fitting
page 62



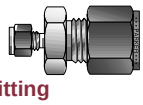
Z3HCZ7
Column End Fitting
page 62



ZHCZ7
Column End Fitting
(without Frit)
page 63

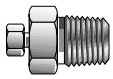


Z2HCZ
Column End Fitting
page 63



ZHCZ
Column End Fitting
(without Frit)
page 64

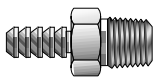
Z7HBZ7-SS
Union Connector
page 64



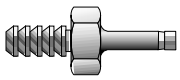
FBZ7
Male Connector
page 65

ZHBS
Sanitary
Flange Fitting
page 65

Barbed Fittings



B2HF
Barbed
Connector to Male Pipe
page 66



B2HT2
Barbed
Connector to Tube Adapter
page 66

HCS
Hose Connector
Sleeve
page 66

Components

TIZ
Insert
page 67

BZ
Tube Nut
pages 67, 68

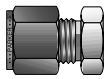
TZ Ferrules
page 68

BZI
Inverted
Tube Nut
page 68

BZP
Knurled Nut
page 68

Ferrule
Holder
page 69

FNZ Plug
page 70



PNBZ Cap
pages 70, 71

MDF
Vent Protector
page 71

Sealing
Washers
page 72

WLZ
Bulkhead Locknut
page 73

WLN
Bulkhead Locknut
page 73

L5N
Accessory Locknut
page 73

Table 1 – Typical Raw Material Specifications

BASIC FITTING MATERIAL	BAR STOCK	FORGING	COMMON TUBING SPECIFICATION
BRASS	CA-360 QQ-B 626 Alloy 360 ASTM-B16 Alloy 360 CA-345 ASTM-B-453 Alloy 345 BS970 316-S31 DIN 4401 ASME SA479-316	CA-377 QQ-B 626 Alloy 377 ASTM-B-124 Alloy 377 BS2872 CZ122	ASTM-B75 ASME-SB75 (TEMPER "O")
STAINLESS STEEL (Type 316)(1)	ASME-SA-479 Type 316-SS BS970 316-S31 DIN 4401	ASME-SA-182 316 BS970 316-S31 DIN 4401	ASME-SA-213 ASTM-A-213 ASTM-A-249 ASTM-A-269(2) MIL T-8504 MIL T-8506
STEEL	ASTM-A-108 QQ-S-637	ASTM-A-576	SAE J524b SAE J525b ASTM-A-179
ALUMINUM	2017-T4 or 2024-T4 ASTM-B211 QQ-A-225/5 or 6	2014T (as fabricated) ASTM-B-211 QQ-A-225/4	303, 6061T6 ASTM-B-210
NICKEL-COPPER	ASTM-B-164 QQ-N-281 BS3076 NA13	ASTM-B-164 QQ-N-281 BS3076 NA13	ASTM-B-165
HASTELLOY C-276®	ASTM-B-574 ASTMB575	ASTM-B-574	ASTM-B-622 ASTM-B-626
ALLOY 600	ASTM B-166 ASME-SB-166	ASTM-B-564	ASTM-B-163
CARPENTER 20®	ASTM-B-473	ASTM-B-462 ASTM-B-472	ASTM-B-468
TITANIUM	ASTM-B-348	ASTM-B-381	ASTM-B-338
INCOLOY 625 INCOLOY 825	BS3076 NA16 ASTMB425	BS3076 NA16 ASTMB425	ASTM-B-625 ASTM-B-444 ASTM-B-423 ASTM-B-829
6MO	UNS S31254 ASTM A479	UNS S31254 ASTM A 479	ASTM-A-269

(1) If more specific information, including heat code traceability, is required, your Parker Hannifin CPI™ distributor will provide details.
(2) Stainless steel CPI™ tube fittings work reliably on both seamless and welded-redrawn, fully annealed type 304, 316 and 316L tubing.

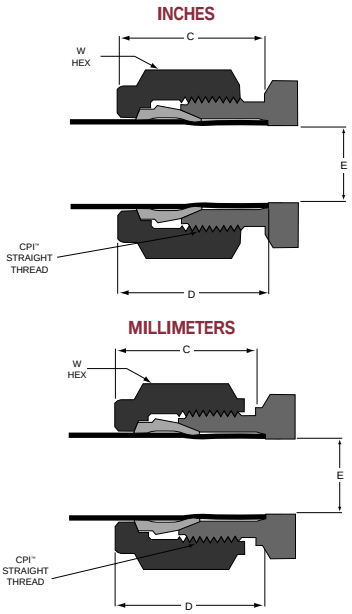
Tube End Dimensional Data

SIZE NO.	INCHES TUBE O.D.	CPI™ STRAIGHT THREAD	†C	W HEX	E DIA.	†D TUBE INS. DEPTH
1	1/16	10-32	.43	5/16	.052	.34
2	1/8	5/16-20	.60	7/16	.093	.50
3	3/16	3/8-20	.64	1/2	.125	.54
4	1/4	7/16-20	.70	9/16	.187	.60
5	5/16	1/2-20	.73	5/8	.250	.64
6	3/8	9/16-20	.76	11/16	.281	.67
8	1/2	3/4-20	.87	7/8	.406	.90
10	5/8	7/8-20	.87	1	.500	.96
12	3/4	1-20	.87	1-1/8	.625	.96
14	7/8	1-1/8-20	.87	1-1/4	.750	1.03
16	1	1-5/16-20	1.05	1-1/2	.875	1.24
20	1-1/4	1-5/8-20	1.52	1-7/8	1.09	1.61
24	1-1/2	1-15/16-20	1.77	2-1/4	1.34	1.96
32	2	2-5/8-20	2.47	2-3/4	1.81	2.65

NOTE: Dimensions C and D are shown in the finger-tight position.

† Average Value

Dimensions for reference only, subject to change.



SIZE NO.	MILLIMETERS TUBE O.D.	CPI™ STRAIGHT THREAD	†C	W HEX	E DIA.	†D TUBE INS. DEPTH
2	2mm	5/16-20	15,3	12,0	1,7	12,9
3	3mm	5/16-20	15,3	12,0	2,4	12,9
4	4mm	3/8-20	16,1	12,0	2,4	13,7
6	6mm	7/16-20	17,7	14,0	4,8	15,3
8	8mm	1/2-20	18,6	15,0	6,4	16,2
10	10mm	5/8-20	19,5	18,0	7,9	17,2
12	12mm	3/4-20	22,0	22,0	9,5	22,8
14	14mm	7/8-20	22,0	24,0	11,1	24,4
15	15mm	7/8-20	22,0	24,0	11,9	24,4
16	16mm	7/8-20	22,0	24,0	12,7	24,4
18	18mm	1-20	22,0	27,0	15,1	24,4
20	20mm	1-1/8-20	22,0	30,0	15,9	26,0
22	22mm	1-1/8-20	22,0	30,0	18,3	26,0
25	25mm	1-5/16-20	26,5	35,0	21,8	31,3

NOTE: Dimensions C and D are shown in the finger-tight position.

† Average Value

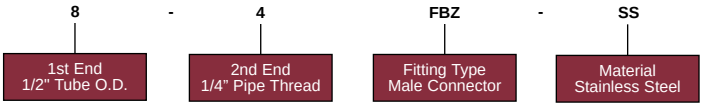
Dimensions for reference only, subject to change.

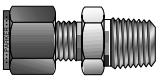
Nomenclature

Parker CPI™ tube fittings part numbers are constructed from symbols that identify the size and style of the fitting and material used.

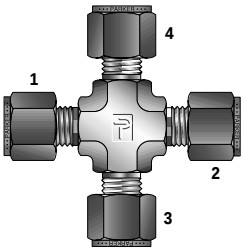
Example: The part number shown below is for a Parker CPI™ stainless steel male connector for 1/2" O.D. tube (–8) and 1/4" male pipe thread (–4).

How To Order Inch Parts





Parker CPI™ tube fittings are ordered by part number as listed in this catalog.



Size: Tube and pipe thread sizes are designed by the number of sixteenths of an inch (1/2" tube = 8/16" = 8). (1/4" pipe thread = 4/16" = 4).

Straights & Elbows: Call out largest CPI™ tube end size first followed by the smaller CPI™ tube end or pipe thread size.

Tees & Crosses: For drop size tees – first size the run (1 to 2) and then branch (3). Example – the size designator for a male run tee for 3/8" O.D. tube and 1/4" male pipe thread would be 6-4-6 RBZ. For crosses – first size the run (1 to 2) and then the branch (3 to 4). For tees with all ends the same, use the tube and size before the style designator; i.e. 4-4-4 JBZ

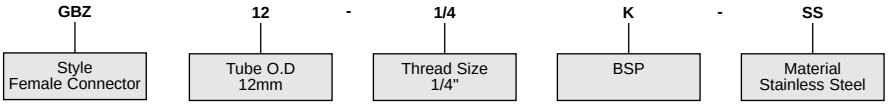
Type: A letter or combination of letters and numbers are used to designate the type of fitting. (i.e. MBT = male branch tee, FA = female adapter, etc.) See the visual index for fitting types.

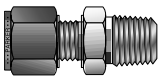
Material: Basic material type (B = brass, 316 = stainless steel, type 316; S = steel; A = aluminum; M = Monel; HC = Hastelloy C-276®; IN = Alloy 600; SS20 = Carpenter 20®; 6MO = 6MO; 625 = 625; 825 = 825; T = Titanium). Parker CPI™ tube fittings, for special applications, can be furnished in almost any material suitable for machining.

Special Fittings: If there is any question as to the fitting desired, particularly for special fitting configurations, it is suggested that a customer print be submitted with the fitting request for quote.

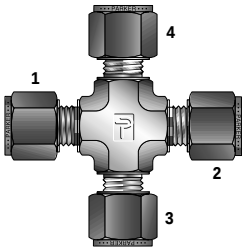
Availability: Items priced in current price list 4230 are carried in stock. Price and delivery for non-stocked items quoted on request through the Quick Response Department.

How To Order Metric Parts





Parker CPI™ tube fittings are ordered by part number as listed in this catalog.



Size: Metric tube is designated in millimeters and prefixed “M” (i.e. 12mm tube = M12.) The pipe thread size is written as a fraction (i.e. 1/4 NPT = 1/4N).

Straights & Elbows: Call out largest CPI™ tube end size first followed by the smaller CPI™ tube end or pipe thread size.

Tees & Crosses: For drop size tees – first size the run (1 to 2) and then branch (3). Example – the size designator for a male run tee for 6mm tube and 1/4" male pipe thread would be RBZ 6-1/4-6. For crosses – first size the run (1 to 2) and then the branch (3 to 4). For tees with all ends the same size, use the tube end size after the style designator; i.e, JBZ 4-4-4

Type: A letter or combination of letters and numbers are used to designate the type of fitting. See the visual index for fitting types.

Material: Basic material type (B = brass, 316 = stainless steel, type 316; S = steel; A = aluminum; M = Monel; HC = Hastelloy C-276®; IN = Alloy 600; SS20 = Carpenter 20®; 6MO = 6MO; 625 = 625; 825 = 825; T = Titanium). Parker CPI™ tube fittings, for special applications, can be furnished in almost any material suitable for machining.

Thread types:

K = BSP Taper	BS21, ISO7/1, DIN 2999
R = BSPP	BS2779, ISO 228/1+2, DIN 3852 FORM A
BR = BSPP	BS2779, ISO 228/1+2, DIN 3852 FORM B
M = Metric	BS2779, ISO 228/1+2, DIN 3852
RED = BSPP	BS2779, ISO 228/1+2, DIN 3852 with elastic sealing

Please see visual index.

Color Coding

For easy reference, table heads are color indicated as follows:

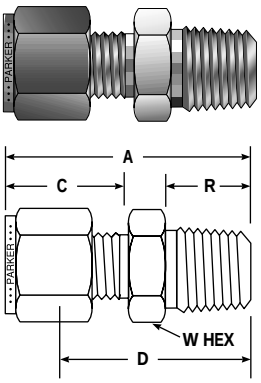
fractional

metric

Availability: Items priced in current price list 4230 are carried in stock. Price and delivery for non-stocked items quoted on request through the Parker ICD Quick Response Department.

NOTE: Hastelloy C-276 is a registered trademark of Cabot Corporation. Carpenter 20 is a registered trademark of Carpenter Technology Corporation.

FBZ
NPT Male Connector
For fractional tube



PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	A	C	D	R	W HEX
1-1 FBZ	100-1-1	1/16	1/16	.93	.43	.78	.38	5/16
1-2 FBZ	100-1-2	1/16	1/8	1.03	.43	.88	.38	7/16
1-4 FBZ	100-1-4	1/16	1/4	1.23	.43	1.08	.56	9/16
2-1 FBZ	200-1-1	1/8	1/16	1.17	.60	.91	.38	3/8
2-2 FBZ	200-1-2	1/8	1/8	1.20	.60	.94	.38	7/16
2-4 FBZ	200-1-4	1/8	1/4	1.40	.60	1.14	.56	9/16
2-6 FBZ	200-1-6	1/8	3/8	1.42	.60	1.16	.56	11/16
2-8 FBZ	200-1-8	1/8	1/2	1.67	.60	1.41	.75	7/8
3-1 FBZ	300-1-1	3/16	1/16	1.23	.64	.97	.38	7/16
3-2 FBZ	300-1-2	3/16	1/8	1.23	.64	.97	.38	7/16
3-4 FBZ	300-1-4	3/16	1/4	1.43	.64	1.17	.56	9/16
4-1 FBZ	400-1-1	1/4	1/16	1.29	.70	1.00	.38	1/2
4-2 FBZ	400-1-2	1/4	1/8	1.29	.70	1.00	.38	1/2
4-4 FBZ	400-1-4	1/4	1/4	1.49	.70	1.20	.56	9/16
4-6 FBZ	400-1-6	1/4	3/8	1.51	.70	1.22	.56	11/16
4-8 FBZ	400-1-8	1/4	1/2	1.76	.70	1.47	.75	7/8
4-12 FBZ	400-1-12	1/4	3/4	1.82	.70	1.53	.75	1-1/16
5-2 FBZ	500-1-2	5/16	1/8	1.34	.73	1.05	.38	9/16
5-4 FBZ	500-1-4	5/16	1/4	1.52	.73	1.23	.56	9/16
5-6 FBZ	500-1-6	5/16	3/8	1.55	.73	1.25	.56	11/16
6-2 FBZ	600-1-2	3/8	1/8	1.38	.76	1.09	.38	5/8
6-4 FBZ	600-1-4	3/8	1/4	1.57	.76	1.28	.56	5/8
6-6 FBZ	600-1-6	3/8	3/8	1.57	.76	1.28	.56	11/16
6-8 FBZ	600-1-8	3/8	1/2	1.82	.76	1.53	.75	7/8
6-12 FBZ	600-1-12	3/8	3/4	1.88	.76	1.59	.75	1-1/16
8-2 FBZ	810-1-2	1/2	1/8	1.53	.87	1.13	.38	13/16
8-4 FBZ	810-1-4	1/2	1/4	1.71	.87	1.31	.56	13/16
8-6 FBZ	810-1-6	1/2	3/8	1.71	.87	1.31	.56	13/16
8-8 FBZ	810-1-8	1/2	1/2	1.93	.87	1.53	.75	7/8
8-12 FBZ	810-1-12	1/2	3/4	1.99	.87	1.59	.75	1-1/16
8-16 FBZ	810-1-16	1/2	1	2.28	.87	1.88	.94	1-3/8
10-6 FBZ	1010-1-6	5/8	3/8	1.74	.87	1.34	.56	15/16
10-8 FBZ	1010-1-8	5/8	1/2	1.93	.87	1.53	.75	15/16
10-12 FBZ	1010-1-12	5/8	3/4	1.99	.87	1.59	.75	1-1/16
12-8 FBZ	1210-1-8	3/4	1/2	1.99	.87	1.59	.75	1-1/16
12-12 FBZ	1210-1-12	3/4	3/4	1.99	.87	1.59	.75	1-1/16
12-16 FBZ	1210-1-16	3/4	1	2.28	.87	1.88	.94	1-3/8
14-12 FBZ	1410-1-12	7/8	3/4	1.99	.87	1.59	.75	1-3/16
14-16 FBZ	1410-1-16	7/8	1	2.28	.87	1.88	.94	1-3/8
16-8 FBZ	1610-1-8	1	1/2	2.27	1.05	1.78	.75	1-3/8
16-12 FBZ	1610-1-12	1	3/4	2.27	1.05	1.78	.75	1-3/8
16-16 FBZ	1610-1-16	1	1	2.46	1.05	1.97	.94	1-3/8
20-20 FBZ	2000-1-20	1-1/4	1-1/4	3.03	1.52	2.17	.97	1-3/4
24-24 FBZ	2400-1-24	1-1/2	1-1/2	3.50	1.77	2.44	1.00	2-1/8
32-32 FBZ	3200-1-32	2	2	4.47	2.47	3.00	1.04	2-3/4

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

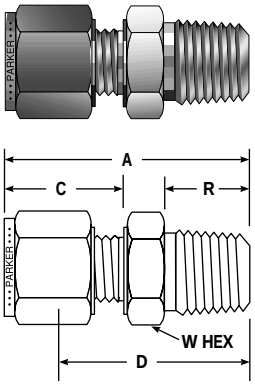
Color Coding

For easy reference, table heads are color indicated as follows:

fractional

metric

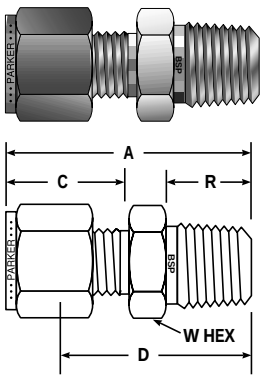
FBZ
NPT Male Connector
For metric tube



PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						
		TUBE O.D.	NPT THREAD	A	C	D	R	W HEX
FBZ 2-1/8	2MO-1-2	2	1/8	29,7	15,3	23,1	9,5	12,0
FBZ 3-1/8	3MO-1-2	3	1/8	29,7	15,3	23,1	9,5	12,0
FBZ 3-1/4	3MO-1-4	3	1/4	35,3	15,3	28,7	14,3	14,0
FBZ 4-1/8	4MO-1-2	4	1/8	31,2	16,1	24,6	9,5	12,0
FBZ 4-1/4	4MO-1-4	4	1/4	36,3	16,1	29,7	14,3	14,0
FBZ 6-1/8	6MO-1-2	6	1/8	32,9	17,7	25,4	9,5	14,0
FBZ 6-1/4	6MO-1-4	6	1/4	38,1	17,7	30,6	14,3	14,0
FBZ 6-3/8	6MO-1-6	6	3/8	38,5	17,7	31,0	14,3	18,0
FBZ 6-1/2	6MO-1-8	6	1/2	44,8	17,7	37,3	19,1	22,0
FBZ 8-1/8	8MO-1-2	8	1/8	34,2	18,6	26,7	9,5	15,0
FBZ 8-1/4	8MO-1-4	8	1/4	38,8	18,6	31,3	14,3	15,0
FBZ 8-3/8	8MO-1-6	8	3/8	39,3	18,6	31,8	14,3	18,0
FBZ 8-1/2	8MO-1-8	8	1/2	45,6	18,6	38,1	19,1	22,0
FBZ 10-1/8	10MO-1-2	10	1/8	36,1	19,5	28,6	9,5	18,0
FBZ 10-1/4	10MO-1-4	10	1/4	40,9	19,5	33,3	14,3	18,0
FBZ 10-3/8	10MO-1-6	10	3/8	40,9	19,5	33,3	14,3	18,0
FBZ 10-1/2	10MO-1-8	10	1/2	47,5	19,5	38,9	19,1	22,0
FBZ 10-3/4	10MO-1-12	10	3/4	46,4	19,5	38,9	19,1	27,0
FBZ 10-1	10MO-1-16	10	1	55,0	19,5	47,5	23,8	35,0
FBZ 12-1/4	12MO-1-4	12	1/4	43,4	22,0	33,3	14,3	22,0
FBZ 12-3/8	12MO-1-6	12	3/8	43,4	22,0	33,3	14,3	22,0
FBZ 12-1/2	12MO-1-8	12	1/2	49,0	22,0	38,9	19,1	22,0
FBZ 12-3/4	12MO-1-12	12	3/4	50,5	22,0	40,4	19,1	27,0
FBZ 14-1/4	14MO-1-4	14	1/4	44,2	22,0	34,1	14,3	24,0
FBZ 14-3/8	14MO-1-6	14	3/8	44,2	22,0	34,1	14,3	24,0
FBZ 14-1/2	14MO-1-8	14	1/2	49,0	22,0	38,9	19,1	24,0
FBZ 15-1/2	15MO-1-8	15	1/2	49,0	22,0	38,9	19,1	24,0
FBZ 16-3/8	16MO-1-6	16	3/8	44,1	22,0	34,01	14,3	24,0
FBZ 16-1/2	16MO-1-8	16	1/2	49,0	22,0	38,9	19,1	24,0
FBZ 16-3/4	16MO-1-12	16	3/4	50,5	22,0	40,5	19,1	27,0
FBZ 18-1/2	18MO-1-8	18	1/2	50,6	22,0	40,5	19,1	27,0
FBZ 18-3/4	18MO-1-12	18	3/4	50,6	22,0	40,5	19,1	27,0
FBZ 20-1/2	20MO-1-8	20	1/2	50,6	22,0	42,2	19,1	30,0
FBZ 20-3/4	20MO-1-12	20	3/4	52,3	22,0	42,2	19,1	30,0
FBZ 20-1	20MO-1-16	20	1	57,7	22,0	47,6	23,8	35,0
FBZ 22-3/4	22MO-1-12	22	3/4	52,3	22,0	42,2	19,1	35,0
FBZ 25-1/2	25MO-1-8	25	1/2	57,5	26,5	45,3	19,1	35,0
FBZ 25-3/4	25MO-1-12	25	3/4	57,5	26,5	45,2	19,1	35,0
FBZ 25-1	25MO-1-16	25	1	62,3	26,5	50,0	23,8	35,0

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

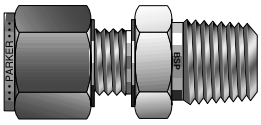
FBZ
BSP Taper Male Connector
For fractional tube

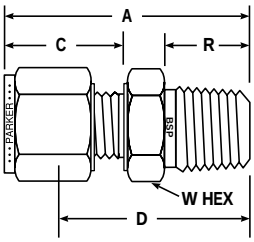


PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		TUBE O.D.	BSPT THREAD	A	C	D	W R	HEX	BORE
2-2K FBZ	200-1-2RT	1/8	1/8	1.20	.60	.938	.38	7/16	.19
2-4K FBZ	200-1-4RT	1/8	1/4	1.40	.60	1.14	.56	9/16	.19
4-2K FBZ	400-1-2RT	1/4	1/8	1.30	.70	1.00	.38	1/2	.19
4-4K FBZ	400-1-4RT	1/4	1/4	1.50	.70	1.20	.56	9/16	.19
4-6K FBZ	400-1-6RT	1/4	3/8	1.52	.70	1.22	.56	11/16	.19
4-8K FBZ	400-1-8RT	1/4	1/2	1.77	.70	1.47	.75	7/8	.19
5-2K FBZ	500-1-2RT	5/16	1/8	1.34	.73	1.05	.38	9/16	.19
5-4K FBZ	500-1-4RT	5/16	1/4	1.52	.73	1.23	.56	9/16	.19
6-2K FBZ	600-1-2RT	3/8	1/8	1.39	.76	1.09	.38	5/8	.19
6-4K FBZ	600-1-4RT	3/8	1/4	1.57	.76	1.28	.56	5/8	.28
6-6K FBZ	600-1-6RT	3/8	3/8	1.57	.76	1.28	.56	11/16	.28
6-8K FBZ	600-1-8RT	3/8	1/2	1.82	.76	1.53	.75	7/8	.28
8-4K FBZ	810-1-4RT	1/2	1/4	1.69	.86	1.31	.56	13/16	.28
8-6K FBZ	810-1-6RT	1/2	3/8	1.69	.86	1.31	.56	13/16	.38
8-8K FBZ	810-1-8RT	1/2	1/2	1.91	.66	1.53	.75	7/8	.41

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

FBZ
BSP Taper Male Connector
For metric tube

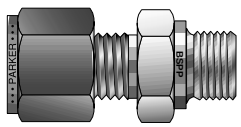


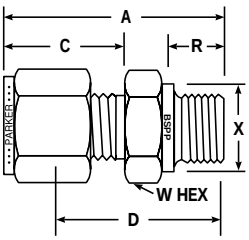


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						
		TUBE O.D.	BSPT THREAD	A	C	D	R	W HEX
FBZ 2-1/8K	2MO-1-2RT	2	1/8	29,7	15,3	23,1	9,5	12,0
FBZ 3-1/8K	3MO-1-2RT	3	1/8	29,7	15,3	23,1	9,7	12,0
FBZ 3-1/4K	3MO-1-4RT	3	1/4	35,3	15,3	28,7	14,2	14,0
FBZ 4-1/8K	4MO-1-2RT	4	1/8	31,2	16,1	24,6	9,7	12,0
FBZ 4-1/4K	4MO-1-4RT	4	1/4	36,3	16,1	29,7	14,2	14,0
FBZ 6-1/8K	6MO-1-2RT	6	1/8	32,9	17,7	25,4	9,7	14,0
FBZ 6-1/4K	6MO-1-4RT	6	1/4	40,0	17,7	30,5	14,2	14,0
FBZ 6-3/8K	6MO-1-6RT	6	3/8	38,5	17,7	31,0	14,2	18,0
FBZ 6-1/2K	6MO-1-8RT	6	1/2	45,6	17,7	38,1	19,1	22,0
FBZ 8-1/8K	8MO-1-2RT	8	1/8	33,9	18,6	26,4	9,5	15,0
FBZ 8-1/4K	8MO-1-4RT	8	1/4	38,7	18,6	31,2	14,2	15,0
FBZ 8-3/8K	8MO-1-6RT	8	3/8	39,3	18,6	31,8	14,2	18,0
FBZ 8-1/2K	8MO-1-8RT	8	1/2	45,6	18,6	38,1	19,1	22,0
FBZ 10-1/8K	10MO-1-2RT	10	1/8	36,2	19,5	28,6	9,5	18,0
FBZ 10-1/4K	10MO-1-4RT	10	1/4	40,9	19,5	33,3	14,2	18,0
FBZ 10-3/8K	10MO-1-6RT	10	3/8	40,9	19,5	33,3	14,2	18,0
FBZ 10-1/2K	10MO-1-8RT	10	1/2	46,5	19,5	38,9	19,1	22,0
FBZ 12-1/4K	12MO-1-4RT	12	1/4	43,4	22,0	33,3	14,2	22,0
FBZ 12-3/8K	12MO-1-6RT	12	3/8	43,4	22,0	33,3	14,2	22,0
FBZ 12-1/2K	12MO-1-8RT	12	1/2	49,0	22,0	38,9	19,1	22,0
FBZ 12-3/4K	12MO-1-12RT	12	3/4	49,5	22,0	40,4	19,1	27,0
FBZ 15-1/2K	15MO-1-8RT	15	1/2	49,0	22,0	38,9	19,1	24,0
FBZ 16-3/8K	16MO-1-6RT	16	3/8	44,2	22,0	34,1	14,2	24,0
FBZ 16-1/2K	16MO-1-8RT	16	1/2	49,0	22,0	38,9	19,1	24,0
FBZ 16-3/4K	16MO-1-12RT	16	3/4	49,5	22,0	40,5	19,1	27,0
FBZ 18-1/2K	18MO-1-8RT	18	1/2	50,6	22,0	40,4	19,1	27,0
FBZ 18-3/4K	18MO-1-12RT	18	3/4	50,6	22,0	40,4	19,1	27,0
FBZ 20-1/2K	20MO-1-8RT	20	1/2	52,3	22,0	42,2	19,1	30,0
FBZ 20-3/4K	20MO-1-12RT	20	3/4	52,3	22,0	42,2	19,1	30,0
FBZ 22-3/4K	22MO-1-12RT	22	3/4	52,3	22,0	42,2	19,1	30,0
FBZ 25-3/4K	25MO-1-12RT	25	3/4	57,5	26,5	45,2	19,1	35,0
FBZ 25-1K	25MO-1-16RT	25	1	62,3	26,5	50,0	23,9	35,0

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

FBZ
BSPP Male Connector
For fractional tube

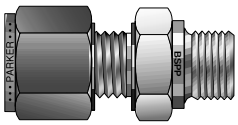


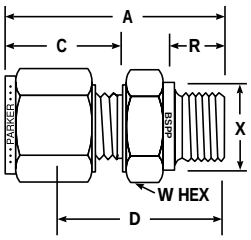


PARKER PART NO.	INTER-CHANGES WITH	INCHES								
		TUBE O.D.	BSPP THREAD	A	C	D	R	X	W HEX	BORE
2-2R FBZ	200-1-2RS	1/8	1/8	1.18	.60	.92	.28	.54	9/16	.16
2-4R FBZ	200-1-4RS	1/8	1/4	1.27	.60	1.13	.44	.70	3/4	.09
2-6R FBZ	200-1-6RS	1/8	3/8	1.46	.60	1.17	.44	.86	7/8	.28
4-2R FBZ	400-1-2RS	1/4	1/8	1.28	.70	.98	.28	.54	9/16	.16
4-4R FBZ	400-1-4RS	1/4	1/4	1.49	.70	1.19	.44	.70	3/4	.19
4-6R FBZ	400-1-6RS	1/4	3/8	1.55	.70	1.25	.44	.86	7/8	.19
4-8R FBZ	400-1-8RS	1/4	1/2	1.77	.70	1.47	.56	1.01	1-1/16	.19
6-2R FBZ	600-1-2RS	3/8	1/8	1.35	.76	1.06	.28	.54	5/8	.16
6-4R FBZ	600-1-4RS	3/8	1/4	1.54	.76	1.25	.44	.70	3/4	.25
6-6R FBZ	600-1-6RS	3/8	3/8	1.57	.76	1.28	.44	.86	7/8	.28
6-8R FBZ	600-1-8RS	3/8	1/2	1.82	.76	1.53	.56	1.01	1-1/16	.28
8-4R FBZ	810-1-4RS	1/2	1/4	1.66	.86	1.28	.44	.70	13/16	.25
8-6R FBZ	810-1-6RS	1/2	3/8	1.69	.86	1.31	.44	.86	7/8	.31
8-8R FBZ	810-1-8RS	1/2	1/2	1.91	.86	1.53	.56	1.01	1-1/16	.41
12-8R FBZ	1210-1-8RS	3/4	1/2	1.93	.86	1.53	.56	1.01	1-1/16	.41
12-12R FBZ	1210-1-12RS	3/4	3/4	2.07	.86	1.69	.63	1.25	1-3/8	.63
16-8R FBZ	1610-1-8RS	1	1/2	2.21	1.04	1.72	.56	1.01	1-3/8	.41
16-16R FBZ	1610-1-16RS	1	1	2.35	1.04	1.88	.72	1.52	1-5/8	.88

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
Sealing washer must be used with BSPP end shown ISO228/1 (Form A).
For Form B undercut change part number and add B before R. e.g. 2-2BR FBZ.

FBZ
BSPP Male Connector
For metric tube

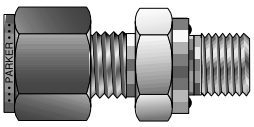


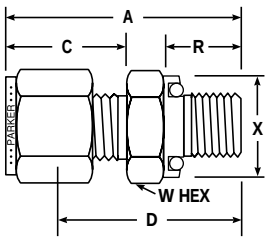


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS							
		TUBE O.D.	BSPP THREAD	A	C	D	R	X	W HEX
FBZ 2-1/8R	2MO-1-2RS	2	1/8	28,4	15,3	21,8	7,1	14,0	13,7
FBZ 3-1/8R	3MO-1-2RS	3	1/8	30,0	15,3	23,4	7,1	13,7	14,0
FBZ 3-1/4R	3MO-1-4RS	3	1/4	35,3	15,3	28,7	11,2	17,8	19,0
FBZ 6-1/8R	6MO-1-2RS	6	1/8	32,5	17,7	25,0	7,1	13,7	14,0
FBZ 6-1/4R	6MO-1-4RS	6	1/4	37,7	17,7	30,2	11,2	17,8	19,0
FBZ 6-3/8R	6MO-1-6RS	6	3/8	39,0	17,7	31,5	11,2	21,8	22,0
FBZ 6-1/2R	6MO-1-8RS	6	1/2	45,6	17,7	38,1	14,2	25,7	27,0
FBZ 8-1/8R	8MO-1-2RS	8	1/8	33,1	18,6	25,6	7,1	15,0	13,7
FBZ 8-1/4R	8MO-1-4RS	8	1/4	38,5	18,6	31,0	11,2	17,8	19,0
FBZ 8-3/8R	8MO-1-6RS	8	3/8	39,8	18,6	32,3	11,2	21,8	22,0
FBZ 8-1/2R	8MO-1-8RS	8	1/2	45,6	18,6	38,1	14,2	25,7	27,0
FBZ 10-1/4R	10MO-1-4RS	10	1/4	39,4	19,5	31,8	11,2	17,8	19,0
FBZ 10-3/8R	10MO-1-6RS	10	3/8	40,6	19,5	33,0	11,2	21,8	22,0
FBZ 10-1/2R	10MO-1-8RS	10	1/2	46,5	19,5	38,9	14,2	25,7	27,0
FBZ 12-1/4R	12MO-1-4RS	12	1/4	42,6	22,0	32,5	11,2	17,8	22,0
FBZ 12-3/8R	12MO-1-6RS	12	3/8	43,1	22,0	33,0	11,2	21,8	22,0
FBZ 12-1/2R	12MO-1-8RS	12	1/2	49,0	22,0	38,9	14,2	25,7	27,0
FBZ 12-3/4R	12MO-1-12RS	12	3/4	52,8	22,0	42,7	16,0	31,8	35,0
FBZ 16-3/8R	16MO-1-6RS	16	3/8	43,5	22,0	33,4	11,2	22,0	21,8
FBZ 16-1/2R	16MO-1-8RS	16	1/2	49,0	22,0	38,9	14,2	26,0	27,0
FBZ 18-1/2R	18MO-1-8RS	18	1/2	49,0	22,0	38,9	14,2	26,0	27,0
FBZ 18-3/4R	18MO-1-12RS	18	3/4	53,1	22,0	43,0	16,0	35,0	32,0
FBZ 20-1/2R	20MO-1-8RS	20	1/2	50,5	22,0	40,4	14,2	30,0	25,7
FBZ 20-3/4R	20MO-1-12RS	20	3/4	52,8	22,0	42,7	16,0	32,0	35,0
FBZ 22-3/4R	22MO-1-12RS	22	3/4	52,8	22,0	42,7	16,0	32,0	35,0
FBZ 25-3/4R	25MO-1-12RS	25	3/4	59,8	26,5	47,6	16,0	35,0	31,8
FBZ 25-1R	25MO-1-16RS	25	1	60,1	26,5	47,8	18,3	39,0	41,0

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
Sealing washer must be used with BSPP end shown ISO228/1 (Form A).
For Form B undercut change part number and add B before R. e.g. FBZ 6-1/4BR

FBZ
BSPP Male Connector with ED seal
For fractional tube

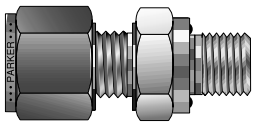


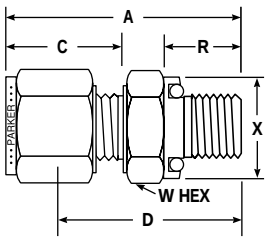


PARKER PART NO.	INTER-CHANGES WITH	INCHES								
		TUBE O.D.	BSPP THREAD	A	C	D	R	X	W HEX	BORE
4-4ED FBZ	–	1/4	1/4	1.48	.70	1.19	.47	.74	3/4	.19
4-8ED FBZ	–	1/4	1/2	1.76	.70	1.38	.55	1.04	1-1/16	.19
6-6ED FBZ	–	3/8	3/8	1.60	.76	1.31	.47	.86	7/8	.28
8-4ED FBZ	–	1/2	1/4	1.69	.86	1.31	.47	.74	13/16	.25
8-6ED FBZ	–	1/2	3/8	1.69	.86	1.31	.47	.86	7/8	.31
8-8ED FBZ	–	1/2	1/2	1.85	.86	1.47	.55	1.04	1-1/16	.41
12-12ED FBZ	–	3/4	3/4	1.98	.86	1.59	.63	1.25	1-5/16	.63

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
ED fittings are supplied with sealing washers in Buna-N as standard, suitable for temperatures of between –35°C and +100°C (–31°F to +212°F). Viton seals are available upon request which are suitable for temperatures of between –25°C and +120°C (–13°F to +248°F).

FBZ
BSPP Male Connector with ED seal
For metric tube

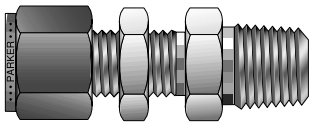


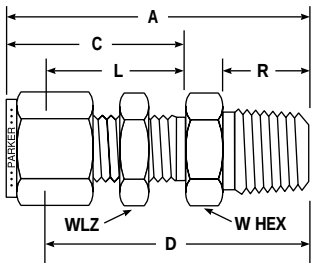


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS							
		TUBE O.D.	BSPP THREAD	A	C	D	R	X	W HEX
FBZ6-1/8ED	–	6	1/8	32,5	17,7	25,0	7,9	13,7	14,0
FBZ6-1/4ED	–	6	1/4	38,2	17,7	30,7	11,9	18,8	19,0
FBZ6-3/8ED	–	6	3/8	39,5	17,7	32,0	11,9	21,8	22,0
FBZ6-1/2ED	–	6	1/2	44,5	17,7	37,0	14,0	26,4	27,0
FBZ10-1/4ED	–	10	1/4	40,0	19,5	32,3	11,9	18,8	19,0
FBZ10-3/8ED	–	10	3/8	41,1	19,5	38,1	11,9	21,8	22,0
FBZ10-1/2ED	–	10	1/2	46,0	19,5	38,4	14,0	26,4	27,0
FBZ12-1/4ED	–	12	1/4	43,1	22,0	33,0	11,9	18,8	22,0
FBZ12-3/8ED	–	12	3/8	43,6	22,0	33,5	11,9	21,8	22,0
FBZ12-1/2ED	–	12	1/2	48,5	22,0	38,4	14,0	26,4	27,0

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
ED fittings are supplied with sealing washers in Buna-N as standard, suitable for temperatures of between –35°C and +100°C (–31°F to +212°F). Viton seals are available upon request which are suitable for temperatures of between –25°C and +120°C (–13°F to +248°F).

FH2BZ
NPT Male Bulkhead Connector
For fractional tube

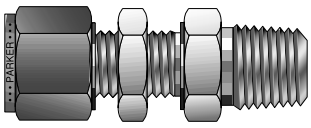


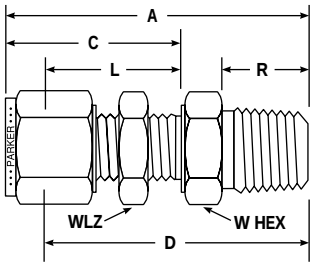


PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		TUBE O.D.	NPT PIPE THREAD	A	C	D	L	R	W HEX
1-1 FH2BZ	100-11-1	1/16	1/16	1.19	.68	1.04	.53	.38	5/16
1-2 FH2BZ	100-11-2	1/16	1/8	1.27	.68	1.12	.53	.38	7/16
2-2 FH2BZ	200-11-2	1/8	1/8	1.83	1.23	1.57	.97	.38	1/2
3-2 FH2BZ	300-11-2	3/16	1/8	1.89	1.26	1.63	1.00	.38	9/16
4-2 FH2BZ	400-11-2	1/4	1/8	1.95	1.31	1.66	1.02	.38	5/8
4-4 FH2BZ	400-11-4	1/4	1/4	2.132	1.31	1.84	1.02	.56	5/8
4-6 FH2BZ	400-11-6	1/4	3/8	2.162	1.31	1.87	1.02	.56	11/16
4-8 FH2BZ	400-11-8	1/4	1/2	2.374	1.31	2.08	1.02	.75	7/8
5-2 FH2BZ	500-11-2	5/16	1/8	2.08	1.42	1.78	1.12	.38	11/16
5-4 FH2BZ	500-11-4	5/16	1/4	2.27	1.42	1.97	1.12	.56	11/16
6-2 FH2BZ	600-11-2	3/8	1/8	2.08	1.44	1.79	1.15	.38	3/4
6-4 FH2BZ	600-11-4	3/8	1/4	2.265	1.44	1.98	1.15	.56	3/4
6-6 FH2BZ	600-11-6	3/8	3/8	2.265	1.44	1.98	1.15	.56	3/4
6-8 FH2BZ	600-11-8	3/8	1/2	2.48	1.44	2.22	1.15	.75	7/8
8-4 FH2BZ	810-11-4	1/2	1/4	2.494	1.65	2.09	1.25	.56	15/16
8-6 FH2BZ	810-11-6	1/2	3/8	2.494	1.65	2.09	1.25	.56	15/16
8-8 FH2BZ	810-11-8	1/2	1/2	2.712	1.65	2.31	1.25	.75	15/16
8-12 FH2BZ	810-11-12	1/2	3/4	2.722	1.65	2.32	1.25	.75	1-1/8
10-6 FH2BZ	1010-11-6	5/8	3/8	2.628	1.68	2.23	1.28	.56	1-1/16
10-8 FH2BZ	1010-11-8	5/8	1/2	2.816	1.68	2.42	1.28	.75	1-1/16
12-8 FH2BZ	1210-11-8	3/4	1/2	3.00	1.87	2.60	1.47	.75	1-3/16
12-12 FH2BZ	1210-11-12	3/4	3/4	3.00	1.87	2.60	1.47	.75	1-3/16
14-12 FH2BZ	1410-11-12	7/8	3/4	3.31	2.09	2.91	1.69	.75	1-3/8
16-12 FH2BZ	1610-11-12	1	3/4	3.54	2.27	3.01	1.78	.75	1-5/8
16-16 FH2BZ	1610-11-16	1	1	3.72	2.27	3.19	1.78	.94	1-5/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
For bulkhead hole drill size and maximum bulkhead thickness, see Page 28, Part WBZ.

FH2BZ
NPT Male Bulkhead Connector
For metric tube



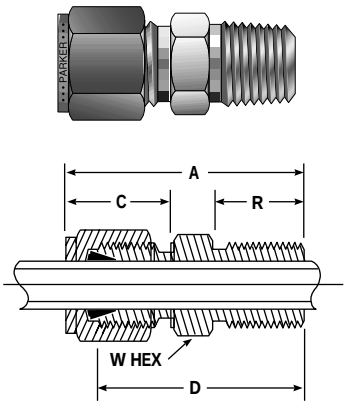


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS									
		TUBE O.D.	NPT THREAD	A	C	D	L	R	W HEX	B'HEAD HOLE DRILL SIZE	MAX. B'HEAD THICK.
FH2BZ 6-1/8	6MO-11-2	6	1/8	49,6	33,7	42,1	26,2	9,5	16,0	11,5	10,2
FH2BZ 6-1/4	6MO-11-4	6	1/4	53,5	33,7	46,0	26,2	14,3	16,0	11,5	10,2
FH2BZ 8-1/8	8MO-11-2	8	1/8	52,3	36,0	44,8	28,5	9,5	18,0	13,1	11,2
FH2BZ 8-1/4	8MO-11-4	8	1/4	57,5	36,0	50,0	28,5	14,3	18,0	13,1	11,2
FH2BZ 10-1/4	10MO-11-4	10	1/4	58,4	37,0	50,8	29,4	14,3	22,0	16,3	11,2
FH2BZ 10-3/8	10MO-11-6	10	3/8	58,4	37,0	50,8	29,4	14,3	22,0	16,3	11,2
FH2BZ 10-1/2	10MO-11-8	10	1/2	63,1	37,0	55,5	29,4	19,0	22,0	16,3	11,2
FH2BZ 12-1/4	12MO-11-4	12	1/4	63,3	10,1	53,2	31,8	14,3	24,0	19,5	12,7
FH2BZ 12-3/8	12MO-11-6	12	3/8	64,5	10,1	54,4	31,8	14,3	24,0	19,5	12,7
FH2BZ 12-1/2	12MO-11-8	12	1/2	67,5	10,1	57,4	31,8	19,0	24,0	19,5	12,7

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

FH4BZ Thermocouple Connector

For fractional tube

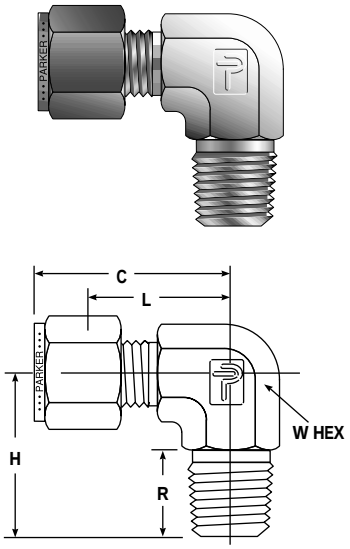


PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	A	C	D	R	W HEX
1-1 FH4BZ	100-1-1BT	1/16	1/16	.93	.43	.78	.38	5/16
1-2 FH4BZ	100-1-2BT	1/16	1/8	1.03	.43	.88	.38	7/16
1-4 FH4BZ	100-1-4BT	1/16	1/4	1.23	.43	1.08	.56	9/16
2-1 FH4BZ	200-1-1BT	1/8	1/16	1.17	.60	.91	.38	3/8
2-2 FH4BZ	200-1-2BT	1/8	1/8	1.20	.60	.94	.38	7/16
2-4 FH4BZ	200-1-4BT	1/8	1/4	1.40	.60	1.14	.56	9/16
3-2 FH4BZ	300-1-2BT	3/16	1/8	1.23	.64	.97	.38	7/16
3-4 FH4BZ	300-1-4BT	3/16	1/4	1.43	.64	1.17	.56	9/16
4-2 FH4BZ	400-1-2BT	1/4	1/8	1.29	.70	1.00	.38	1/2
4-4 FH4BZ	400-1-4BT	1/4	1/4	1.49	.70	1.20	.56	9/16
4-6 FH4BZ	400-1-6BT	1/4	3/8	1.51	.70	1.22	.56	11/16
4-8 FH4BZ	400-1-8BT	1/4	1/2	1.76	.70	1.47	.75	7/8
5-4 FH4BZ	500-1-4BT	5/16	1/4	1.52	.73	1.23	.56	9/16
6-4 FH4BZ	600-1-4BT	3/8	1/4	1.57	.76	1.28	.56	5/8
6-6 FH4BZ	600-1-6BT	3/8	3/8	1.57	.76	1.28	.56	11/16
6-8 FH4BZ	600-1-8BT	3/8	1/2	1.82	.76	1.53	.75	7/8
6-12 FH4BZ	600-1-12BT	3/8	3/4	1.88	.76	1.59	.75	1-1/16
8-8 FH4BZ	810-1-8BT	1/2	1/2	1.93	.87	1.53	.76	7/8
8-12 FH4BZ	810-1-12BT	1/2	3/4	1.99	.87	1.59	.75	1-1/16
10-12 FH4BZ	1010-1-12BT	5/8	3/4	1.99	.87	1.59	.75	1-1/16
12-12 FH4BZ	1210-1-12BT	3/4	3/4	1.99	.87	1.59	.75	1-1/16
16-12 FH4BZ	1610-1-12BT	1	3/4	2.27	1.05	1.78	.75	1-3/8
16-16 FH4BZ	1610-1-16BT	1	1	2.46	1.05	1.97	.94	1-3/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

CBZ NPT Male Elbow

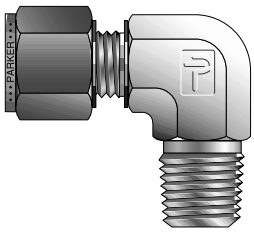
For fractional tube

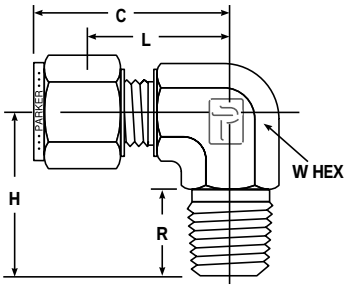


PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	C	H	L	R	W HEX
1-1 CBZ	100-2-1	1/16	1/16	.75	.71	.60	.38	7/16
1-2 CBZ	100-2-2	1/16	1/8	.75	.71	.60	.38	7/16
2-1 CBZ	200-2-1	1/8	1/16	.93	.71	.67	.38	7/16
2-2 CBZ	200-2-2	1/8	1/8	.93	.71	.67	.38	7/16
2-4 CBZ	200-2-4	1/8	1/4	.98	1.00	.72	.56	9/16
3-2 CBZ	300-2-2	3/16	1/8	1.00	.74	.74	.38	1/2
3-4 CBZ	300-2-4	3/16	1/4	1.01	.94	.75	.56	9/16
4-1 CBZ	400-2-1	1/4	1/16	1.06	.74	.77	.38	1/2
4-2 CBZ	400-2-2	1/4	1/8	1.08	.76	.79	.38	1/2
4-4 CBZ	400-2-4	1/4	1/4	1.07	1.00	.78	.56	9/16
4-6 CBZ	400-2-6	1/4	3/8	1.17	1.03	.88	.56	11/16
4-8 CBZ	400-2-8	1/4	1/2	1.26	1.31	.97	.75	7/8
5-2 CBZ	500-2-2	5/16	1/8	1.17	.82	.88	.38	5/8
5-4 CBZ	500-2-4	5/16	1/4	1.17	1.01	.88	.56	5/8
5-6 CBZ	500-2-6							
6-2 CBZ	600-2-2	3/8	1/8	1.20	.82	.91	.38	5/8
6-4 CBZ	600-2-4	3/8	1/4	1.20	1.01	.91	.56	5/8
6-6 CBZ	600-2-6	3/8	3/8	1.26	1.03	.94	.56	11/16
6-8 CBZ	600-2-8	3/8	1/2	1.32	1.31	1.03	.75	7/8
6-12 CBZ	600-2-12	3/8	3/4	1.45	1.50	1.16	.75	1-1/16
8-4 CBZ	810-2-4	1/2	1/4	1.42	1.12	1.02	.56	13/16
8-6 CBZ	810-2-6	1/2	3/8	1.42	1.12	1.02	.56	13/16
8-8 CBZ	810-2-8	1/2	1/2	1.43	1.31	1.03	.75	7/8
8-12 CBZ	810-2-12	1/2	3/4	1.53	1.50	1.13	.75	1-1/16
10-6 CBZ	1010-2-6	5/8	3/8	1.43	1.25	1.03	.56	7/8
10-8 CBZ	1010-2-8	5/8	1/2	1.43	1.31	1.03	.75	7/8
10-12 CBZ	1010-2-12	5/8	3/4	1.56	1.50	1.16	.75	1-1/16
12-8 CBZ	1210-2-8	3/4	1/2	1.56	1.50	1.16	.75	1-1/16
12-12 CBZ	1210-2-12	3/4	3/4	1.56	1.50	1.16	.75	1-1/16
14-12 CBZ	1410-2-12	7/8	3/4	1.76	1.66	1.36	.75	1-3/8
16-12 CBZ	1610-2-12	1	3/4	1.94	1.65	1.45	.75	1-3/8
16-16 CBZ	1610-2-16	1	1	1.94	1.84	1.45	.94	1-3/8
20-20 CBZ	2000-2-20	1-1/4	1-1/4	2.61	1.88	1.75	.97	1-5/8
24-24 CBZ	2400-2-24	1-1/2	1-1/2	3.06	2.38	2.00	1.00	1-7/8
32-32 CBZ	3200-2-32	2	2	4.22	2.79	2.75	1.04	2-13/16

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

CBZ
NPT Male Metric Elbow
For metric tube

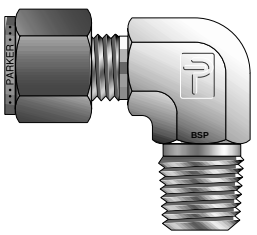


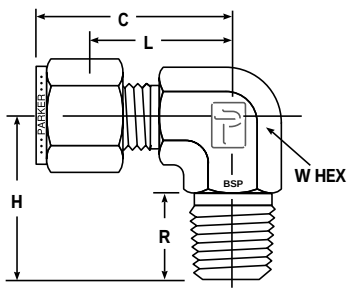


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						INCH
		TUBE O.D.	NPT THREAD	C	H	L	R	W HEX
CBZ 3-1/8	3MO-2-2	3	1/8	23,6	17,8	17,0	9,7	7/16
CBZ 3-1/4	3MO-2-4	3	1/4	24,6	23,4	18,0	14,2	1/2
CBZ 4-1/8	4M0-2-2	4	1/8	25,4	18,8	19,2	9,7	1/2
CBZ 4-1/4	4MO-2-4	4	1/4	26,2	25,4	19,6	14,2	1/2
CBZ 6-1/8	6MO-2-2	6	1/8	27,0	18,8	19,6	9,7	1/2
CBZ 6-1/4	6MO-2-4	6	1/4	27,0	23,4	19,6	14,2	1/2
CBZ 6-3/8	6MO-2-6	6	3/8	29,8	26,2	22,4	14,2	11/16
CBZ 6-1/2	6MO-2-8	6	1/2	31,8	33,0	24,4	19,0	13/16
CBZ 8-1/8	8MO-2-2	8	1/8	28,8	19,8	21,3	9,7	9/16
CBZ 8-1/4	8MO-2-4	8	1/4	28,8	24,4	21,3	14,2	9/16
CBZ 8-3/8	8MO-2-6	8	3/8	30,6	26,2	23,1	14,2	11/16
CBZ 8-1/2	8MO-2-8	8	1/2	32,7	33,0	25,2	19,1	13/16
CBZ 10-1/8	10MO-2-8	10	1/8	31,5	21,6	23,9	9,7	11/16
CBZ 10-1/4	10MO-2-4	10	1/4	31,5	26,2	23,9	14,2	11/16
CBZ 10-3/8	10MO-2-6	10	3/8	31,5	26,2	23,9	14,2	11/16
CBZ 10-1/2	10MO-2-8	10	1/2	33,5	33,0	25,9	19,0	13/16
CBZ 12-1/4	12MO-2-4	12	1/4	36,0	28,2	25,9	14,2	13/16
CBZ 12-3/8	12MO-2-6	12	3/8	36,0	28,2	25,9	14,2	13/16
CBZ 12-1/2	12MO-2-8	12	1/2	36,0	33,0	25,9	19,0	13/16
CBZ 12-3/4	12MO-2-12	12	3/4	39,8	36,8	29,7	19,0	1-1/16
CBZ 15-1/2	15MO-2-8	15	1/2	38,0	35,1	27,9	19,0	15/16
CBZ 16-3/8	16MO-2-6	16	3/8	38,0	30,2	27,9	14,2	15/16
CBZ 16-1/2	16MO-2-8	16	1/2	38,0	35,1	27,9	19,0	15/16
CBZ 16-3/4	16MO-2-12	16	3/4	39,8	36,8	29,7	19,0	1-1/16
CBZ 18-1/2	18MO-2-8	18	1/2	39,8	36,8	29,7	19,0	1-1/16
CBZ 18-3/4	18MO-2-12	18	3/4	39,8	36,8	29,7	19,0	1-1/16
CBZ 20-1/2	20MO-2-8	20	1/2	44,6	41,7	34,5	19,0	1-3/8
CBZ 20-3/4	20MO-2-12	20	3/4	44,6	41,7	34,5	19,0	1-3/8
CBZ 22-3/4	22MO-2-12	22	3/4	44,6	41,7	34,5	19,0	1-3/8
CBZ 25-3/4	25MO-2-12	25	3/4	49,1	41,7	36,8	19,0	1-3/8
CBZ 25-1	25MO-2-16	25	1	49,1	46,5	36,8	23,9	1-3/8

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

CBZ
BSP Taper
Male Elbow
For fractional tube



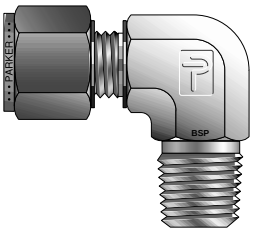


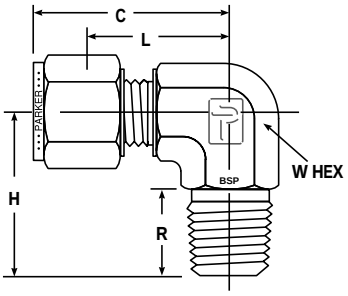
PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	BSPT THREAD	C	H	L	R	W HEX
4-2K CBZ	400-2-2RT	1/4	1/8	1.02	.78	.72	.38	7/16
4-4K CBZ	400-2-4RT	1/4	1/4	1.08	.94	.78	.56	9/16
4-6K CBZ	400-2-6RT	1/4	3/8	1.17	1.03	.88	.56	11/16
4-8K CBZ	400-2-8RT	1/4	1/2	1.26	1.31	.97	.75	7/8
5-4K CBZ	500-2-4RT	5/16	1/4	1.17	.82	.88	.38	5/8
6-4K CBZ	600-2-4RT	3/8	1/4	1.13	1.00	.84	.56	9/16
6-6K CBZ	600-2-4RT	3/8	3/8	1.26	1.03	.94	.56	11/16
8-6K CBZ	810-2-6RT	1/2	3/8	1.35	1.25	.97	.56	3/4
8-8K CBZ	810-2-8RT	1/2	1/2	1.41	1.31	1.03	.75	7/8

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

CBZ
BSP Taper Male Elbow

For metric tube

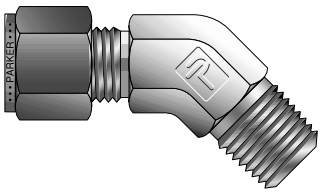


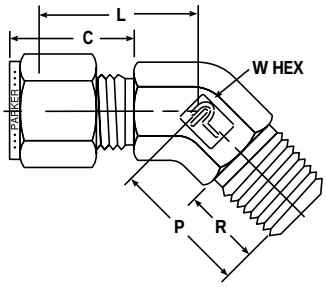


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						INCH
		TUBE O.D.	BSP TR THREAD	C	H	L	R	W HEX
CBZ3-1/8	3MO-2-2RT	3	1/8	23,6	17,8	17,0	9,7	7/16
CBZ3-1/4	3MO-2-4RT	3	1/4	24,6	23,4	18,0	14,2	1/2
CBZ4-1/8	4MO-2-2RT	4	1/8	25,4	18,8	18,8	9,7	1/2
CBZ4-1/4	4MO-2-4RT	4	1/4	24,6	23,4	18,8	14,2	1/2
CBZ6-1/8	6MO-2-2RT	6	1/8	27,0	18,8	19,6	9,7	1/2
CBZ6-1/4	6MO-2-4RT	6	1/4	27,0	23,4	19,6	14,2	1/2
CBZ6-3/8	6MO-2-6RT	6	3/8	29,8	26,2	22,4	14,2	11/16
CBZ6-1/2	6MO-2-8RT	6	1/2	31,8	33,0	24,4	19,0	13/16
CBZ8-1/8	8MO-2-2RT	8	1/8	28,8	19,8	21,3	9.7	9/16
CBZ8-1/4	8MO-2-4RT	8	1/4	28,8	24,4	21,3	14,2	9/16
CBZ8-3/8	8MO-2-6RT	8	3/8	30,6	26,2	23,1	14,2	11/16
CBZ8-1/2	8MO-2-8RT	8	1/2	32,7	33,0	25,2	19,1	13/16
CBZ10-1/8	10MO-2-2RT	10	1/8	31,5	21,6	23,9	9,7	11/16
CBZ10-1/4	10MO-2-4RT	10	1/4	31,5	26,2	23,9	14,2	11/16
CBZ10-3/8	10MO-2-6RT	10	3/8	31,5	26,2	23,9	14,2	11/16
CBZ10-1/2	10MO-2-8RT	10	1/2	33,5	33,0	25,9	19,0	13/16
CBZ12-1/4	12MO-2-4RT	12	1/4	36,0	28,2	25,9	14,2	13/16
CBZ12-3/8	12MO-2-6RT	12	3/8	36,0	28,2	25,9	14,2	13/16
CBZ12-1/2	12MO-2-8RT	12	1/2	36,0	33,0	25,9	19,0	13/16
CBZ12-3/4	12MO-2-12RT	12	3/4	39,8	36,8	29,7	19,1	1-1/16
CBZ16-3/8	16MO-2-6RT	16	3/8	38,0	30,2	27,9	14,2	15/16
CBZ16-1/2	16MO-2-8RT	16	1/2	38,0	35,1	27,9	19,0	15/16
CBZ18-1/2	18MO-2-8RT	18	1/2	39,8	36,8	29,7	19,0	1-1/16
CBZ18-3/4	18MO-2-12RT	18	3/4	39,8	36,8	29,7	19,0	1-1/16
CBZ20-3/4	20MO-2-12RT	20	3/4	44,6	41,7	34,5	19,0	1-3/8
CBZ25-3/4	25MO-2-12RT	25	3/4	49,0	41,7	36,8	19,1	1-3/8
CBZ25-1	25MO-2-16RT	25	1	49,1	46,5	36,8	23,9	1-3/8

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

VBZ
NPT Male 45° Elbow
For fractional tube

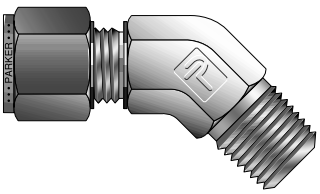


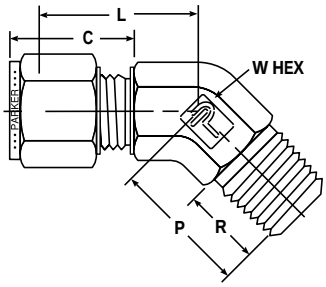


PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	C	L	P	R	W HEX
1-1 VBZ	100-5-1	1/16	1/16	.43	.468	.569	.38	3/8
2-1 VBZ	200-5-2	1/8	1/8	.60	.59	.66	.38	7/16
3-2 VBZ	300-5-2	3/16	1/8	.64	.56	.58	.38	7/16
4-2 VBZ	400-5-2	1/4	1/8	.70	.63	.66	.38	9/16
4-4 VBZ	400-5-4	1/4	1/4	.70	.66	.86	.56	9/16
5-2 VBZ	500-5-2	5/16	1/8	.73	.66	.66	.38	9/16
6-2 VBZ	600-5-2	3/8	1/8	.76	.72	.67	.38	9/16
6-4 VBZ	600-5-4	3/8	1/4	.76	.72	.86	.56	9/16
6-6 VBZ	600-5-6	3/8	3/8	.76	.75	.95	.56	3/4
8-6 VBZ	810-5-6	1/2	3/8	.87	.75	.95	.56	3/4
10-8 VBZ	1010-5-8	5/8	1/2	.87	.81	1.17	.75	7/8
12-12 VBZ	1210-5-8	3/4	3/4	.87	.84	1.20	.75	1-1/16
14-12 VBZ	1410-5-8	7/8	3/4	.87	1.36	1.27	.75	1-5/16
16-12 VBZ	1610-5-8	1	1	1.05	1.19	1.48	.94	1-5/16

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

VBZ
NPT Male 45° Elbow
For metric tube

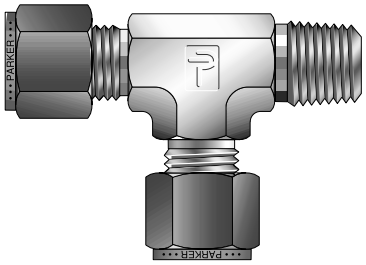


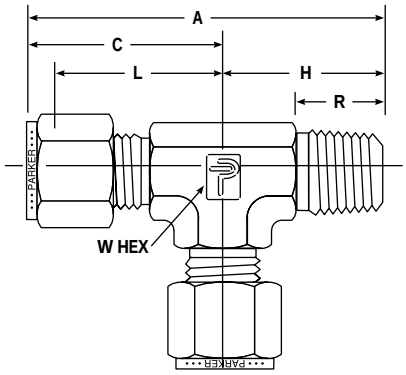


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						
		TUBE O.D.	NPT PIPE THREAD	C	L	P	R	W HEX
VBZ 6-1/8	–	6	1/8	17,7	16,0	16,8	9,5	14,0
VBZ 6-1/4	–	6	1/4	17,7	16,0	21,8	14,3	14,0
VBZ 8-1/8	–	8	1/8	18,6	16,8	16,8	9,5	14,0
VBZ 10-1/4	–	10	1/4	19,5	19,0	24,1	14,3	19,0
VBZ 12-3/8	–	12	3/8	22,0	19,0	24,1	14,3	19,0
VBZ 12-1/2	–	12	1/2	22,0	20,6	29,7	19,0	22,0
VBZ 16-1/2	–	16	1/2	22,0	20,6	29,7	19,0	22,0

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

RBZ
NPT Male Run Tee
For fractional tube

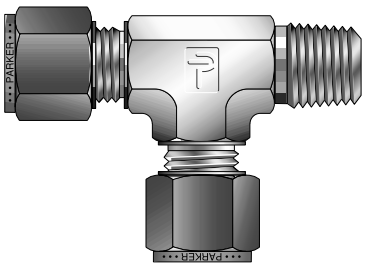


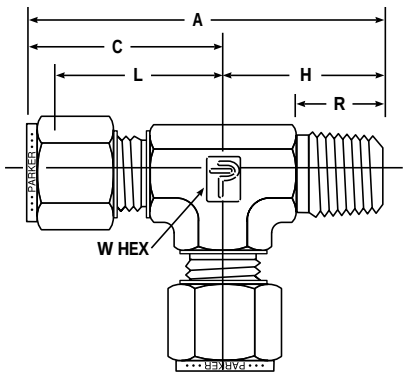


PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		TUBE O.D.	NPT PIPE THREAD	A	C	H	L	R	W HEX
2-2-2 RBZ	200-3-2TMT	1/8	1/8	1.67	.92	.71	.66	.38	5/16
2-4-2 RBZ	200-3-4TMT	1/8	1/4	1.98	.98	1.00	.72	.56	1/2
3-2-3 RBZ	300-3-2TMT	3/16	1/8	1.74	1.00	.74	.74	.38	1/2
4-2-4 RBZ	400-3-2TMT	1/4	1/8	1.80	1.06	.74	.77	.38	1/2
4-4-4 RBZ	400-3-4TMT	1/4	1/4	2.07	1.07	1.00	.78	.56	9/16
5-2-5 RBZ	500-3-2TMT	5/16	1/8	2.00	1.17	.82	.88	.38	5/8
5-4-5 RBZ	500-3-4TMT	5/16	1/4	2.18	1.17	1.01	.88	.56	5/8
6-4-6 RBZ	600-3-4TMT	3/8	1/4	2.21	1.20	1.01	.91	.56	5/8
6-6-6 RBZ	600-3-6TMT	3/8	3/8	2.43	1.31	1.12	1.02	.56	13/16
8-6-8 RBZ	810-3-6TMT	1/2	3/8	2.82	1.42	1.12	1.02	.56	13/16
8-8-8 RBZ	810-3-8TMT	1/2	1/2	2.74	1.43	1.31	1.03	.75	7/8
10-8-10 RBZ	1010-3-8TMT	5/8	1/2	2.81	1.43	1.38	1.03	.75	7/8
12-12-12 RBZ	1210-3-12TMT	3/4	3/4	3.06	1.56	1.50	1.16	.75	1-1/16
14-12-14 RBZ	1410-3-12TMT	7/8	3/4	3.26	1.76	1.50	1.36	.75	1-5/16
16-12-16 RBZ	1610-3-12TMT	1	3/4	3.60	1.94	1.66	1.45	.75	1-5/16
16-16-16 RBZ	1610-3-16TMT	1	1	3.78	1.94	1.84	1.45	.94	1-3/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

RBZ
NPT Male Run Tee
For metric tube

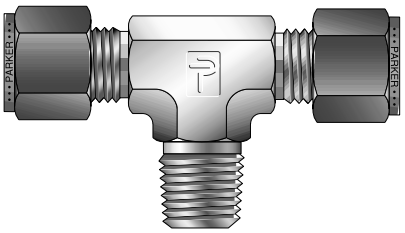


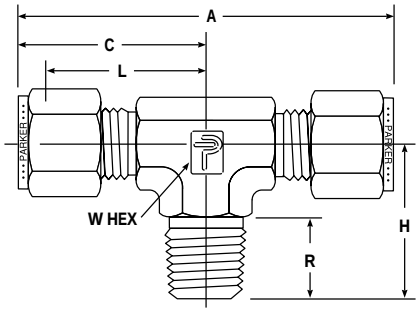


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS							INCH
		TUBE O.D.	NPT THREAD	A	C	H	L	R	W HEX
RBZ 6-1/8-6	6MO-3-2TMT	6	1/8	45,8	27,0	18,0	19,6	9,7	1/2
RBZ 6-1/4-6	6MO-3-4TMT	6	1/4	50,3	27,0	23,4	19,6	14,2	1/2
RBZ 8-1/8-8	8MO-3-2TMT	8	1/8	50,7	29,9	20,8	22,4	9,7	5/8
RBZ 8-1/4-8	8MO-3-4TMT	8	1/4	55,3	29,9	25,4	22,4	14,2	5/8
RBZ 10-1/4-10	10MO-3-4TMT	10	1/4	61,7	33,5	28,2	25,9	14,2	13/16
RBZ 10-1/2-10	10MO-3-8TMT	10	1/2	66,5	33,5	33,0	25,9	19,0	13/16
RBZ 12-1/4-12	12MO-3-4TMT	12	1/4	64,2	36,0	28,2	25,9	14,2	13/16
RBZ 12-3/8-12	12MO-3-6TMT	12	3/8	64,2	36,0	28,2	25,9	14,2	13/16
RBZ 12-1/2-12	12MO-3-8TMT	12	1/2	69,0	36,0	33,0	25,9	19,0	13/16
RBZ 16-1-16	16MO-3-16TMT	16	1	93,1	46,6	46,5	34,4	23,9	1-3/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

SBZ
NPT Male Branch Tee
For fractional tube

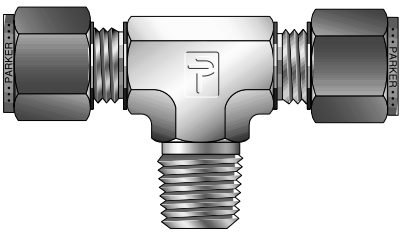


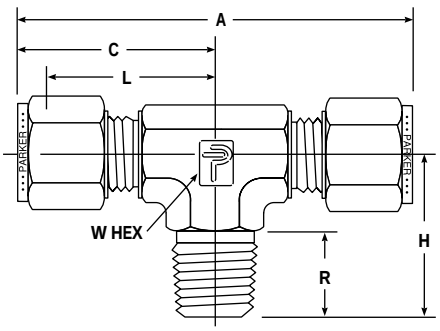


PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		TUBE O.D.	NPT PIPE THREAD	A	C	H	L	R	W HEX
2-2-2 SBZ	200-3-2TTM	1/8	1/8	1.86	.93	.71	.67	.38	7/16
2-2-4 SBZ	200-3-4TTM	1/8	1/4	1.96	.98	1.00	.72	.56	9/16
3-3-2 SBZ	300-3-2TTM	3/16	1/8	2.00	1.00	.74	.74	.38	1/2
4-4-2 SBZ	400-3-2TTM	1/4	1/8	2.12	1.06	.74	.77	.38	1/2
4-4-4 SBZ	400-3-4TTM	1/4	1/4	2.14	1.07	1.00	.78	.56	9/16
5-5-2 SBZ	500-3-2TTM	5/16	1/8	2.34	1.17	.82	.88	.38	5/8
5-5-4 SBZ	500-3-4TTM	5/16	1/4	2.34	1.17	1.01	.88	.56	5/8
6-6-4 SBZ	600-3-4TTM	3/8	1/4	2.40	1.20	1.01	.91	.56	5/8
6-6-6 SBZ	600-3-6TTM	3/8	3/8	2.62	1.31	1.12	1.02	.56	13/16
8-8-6 SBZ	810-3-6TTM	1/2	3/8	2.84	1.42	1.12	1.02	.56	13/16
8-8-8 SBZ	810-3-8TTM	1/2	1/2	2.86	1.43	1.31	1.03	.75	7/8
10-10-8 SBZ	1010-3-8TTM	5/8	1/2	2.86	1.43	1.31	1.03	.75	7/8
12-12-12 SBZ	1210-3-12TTM	3/4	3/4	3.12	1.56	1.50	1.16	.75	1-1/16
14-14-12 SBZ	1410-3-12TTM	7/8	3/4	3.52	1.76	1.50	1.36	.75	1-3/8
16-16-12 SBZ	1610-3-12TTM	1	3/4	3.88	1.94	1.66	1.45	.75	1-3/8
16-16-16 SBZ	1610-3-16TTM	1	1	3.88	1.94	1.84	1.45	.94	1-3/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

SBZ
NPT Male Branch Tee
For metric tube

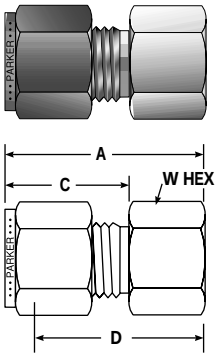




PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS							INCH
		TUBE O.D.	NPT THREAD	A	C	H	L	R	W HEX
SBZ 6-6-1/8	6MO-3TTM	6	1/8	53,9	27,0	18,8	19,6	9,7	1/2
SBZ 6-6-1/4	6MO-3-4TTM	6	1/4	53,9	27,0	23,4	19,6	14,2	1/2
SBZ 8-8-1/8	8MO-3TTM	8	1/8	59,7	29,9	20,8	22,4	9,7	5/8
SBZ 8-8-1/4	8MO-3-4TTM	8	1/4	59,7	29,9	25,4	22,4	14,2	5/8
SBZ 10-10-1/4	10MO-3-4TTM	10	1/4	67,0	33,5	28,2	25,9	14,2	13/16
SBZ 10-10-3/8	10MO-3-6TTM	10	3/8	67,0	33,5	28,2	25,9	14,2	13/16
SBZ 12-12-1/4	12MO-3-4TTM	12	1/4	72,0	36,0	28,2	25,9	14,2	13/16
SBZ 12-12-3/8	12MO-3-6TTM	12	3/8	72,0	36,0	28,2	25,9	14,2	13/16
SBZ 12-12-1/2	12MO-3-8TTM	12	1/2	72,0	36,0	33,0	25,9	19,0	13/16
SBZ 16-16-1/2	16MO-3-8TTM	16	1/2	77,6	38,8	35,8	28,7	19,1	1

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

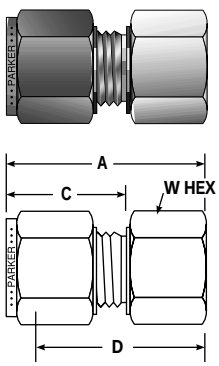
GBZ
NPT Female Connector
For fractional tube



PARKER PART NO.	INTER-CHANGES WITH	INCHES					
		TUBE O.D.	NPT PIPE THREAD	A	C	D	W HEX
1-1 GBZ	100-7-1	1/16	1/16	.93	.43	.78	7/16
1-2 GBZ	100-7-2	1/16	1/8	.95	.43	.81	9/16
2-2 GBZ	200-7-2	1/8	1/8	1.14	.60	.88	9/16
2-4 GBZ	200-7-4	1/8	1/4	1.32	.60	1.06	3/4
3-2 GBZ	300-7-2	3/16	1/8	1.17	.64	.91	9/16
3-4 GBZ	300-7-4	3/16	1/4	1.35	.64	1.09	3/4
4-2 GBZ	400-7-2	1/4	1/8	1.23	.70	.94	9/16
4-4 GBZ	400-7-4	1/4	1/4	1.42	.70	1.13	3/4
4-6 GBZ	400-7-6	1/4	3/8	1.48	.70	1.19	7/8
4-8 GBZ	400-7-8	1/4	1/2	1.67	.70	1.38	1-1/16
5-2 GBZ	500-7-2	5/16	1/8	1.27	.73	.97	9/16
5-4 GBZ	500-7-4	5/16	1/4	1.46	.73	1.16	3/4
5-6 GBZ	500-7-6	5/16	3/8		.73	1.219	7/8
6-2 GBZ	600-7-2	3/8	1/8	1.29	.76	1.00	5/8
6-4 GBZ	600-7-4	3/8	1/4	1.48	.76	1.19	3/4
6-6 GBZ	600-7-6	3/8	3/8	1.54	.76	1.25	7/8
6-8 GBZ	600-7-8	3/8	1/2	1.73	.76	1.44	1-1/16
6-12 GBZ	600-7-12	3/8	3/4	1.85	.76	1.56	1-1/4
8-4 GBZ	810-7-4	1/2	1/4	1.59	.87	1.19	13/16
8-6 GBZ	810-7-6	1/2	3/8	1.65	.87	1.25	7/8
8-8 GBZ	810-7-8	1/2	1/2	1.84	.87	1.44	1-1/16
8-12 GBZ	810-7-12	1/2	3/4	1.96	.87	1.56	1-1/4
10-6 GBZ	1010-7-6	5/8	3/8	1.65	.87	1.25	15/16
10-8 GBZ	1010-7-8	5/8	1/2	1.84	.87	1.44	1-1/16
10-12 GBZ	1010-7-12	5/8	3/4	1.96	.87	1.56	1-3/8
12-8 GBZ	1210-7-8	3/4	1/2	1.84	.87	1.44	1-1/16
12-12 GBZ	1210-7-12	3/4	3/4	1.96	.87	1.56	1-3/8
14-12 GBZ	1410-7-12	7/8	3/4	1.96	.87	1.56	1-3/8
16-12 GBZ	1610-7-12	1	3/4	2.15	1.05	1.66	1-3/8
16-16 GBZ	1610-7-16	1	1	2.46	1.05	1.97	1-5/8
20-16 GBZ	2000-7-16	1-1/4	1	2.92	1.52	2.06	1-3/4
20-20 GBZ	2000-7-20	1-1/4	1-1/4	2.94	1.52	2.08	2
24-24 GBZ	2400-7-24	1-1/2	1-1/2	3.28	1.77	2.22	2-3/8
32-32 GBZ	3200-7-32	2	2	4.00	2.47	2.53	2-7/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

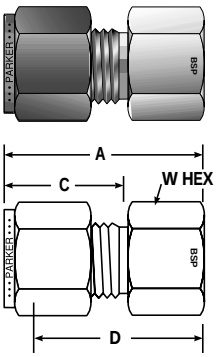
GBZ
NPT Female Connector
For metric tube



PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS					
		TUBE O.D.	NPT THREAD	A	C	D	W HEX
GBZ 3-1/8	3MO-7-2	3	1/8	28,8	15,3	22,2	14,0
GBZ 3-1/4	3MO-7-4	3	1/4	33,6	15,3	27,0	19,0
GBZ 4-1/8	4MO-7-2	4	1/8	29,6	16,1	23,0	14,0
GBZ 6-1/8	6MO-7-2	6	1/8	31,3	17,7	23,8	14,0
GBZ 6-1/4	6MO-7-4	6	1/4	36,1	17,7	28,6	19,0
GBZ 6-3/8	6MO-7-6	6	3/8	37,7	17,7	30,2	22,0
GBZ 6-1/2	6MO-7-8	6	1/2	42,5	17,7	35,0	27,0
GBZ 8-1/8	8MO-7-2	8	1/8	32,1	18,6	24,6	14,0
GBZ 8-1/4	8MO-7-4	8	1/4	36,9	18,6	29,4	19,0
GBZ 8-3/8	8MO-7-6	8	3/8	38,5	18,6	31,0	22,0
GBZ 10-1/4	10MO-7-4	10	1/4	37,8	19,5	30,2	19,0
GBZ 10-3/8	10MO-7-6	10	3/8	39,4	19,5	31,8	22,0
GBZ 10-1/2	10MO-7-8	10	1/2	44,1	19,5	36,5	27,0
GBZ 12-1/4	12MO-7-4	12	1/4	41,9	22,0	31,8	22,0
GBZ 12-3/8	12MO-7-6	12	3/8	41,9	22,0	31,8	22,0
GBZ 12-1/2	12MO-7-8	12	1/2	46,6	22,0	36,5	27,0
GBZ 16-3/8	16MO-7-6	16	3/8	41,9	22,0	31,8	27,0
GBZ 16-1/2	16MO-7-8	16	1/2	46,9	22,0	36,5	27,0
GBZ 10-1/2	20MO-7-8	20	1/2	47,9	22,0	37,8	30,0
GBZ 20-3/4	20MO-7-12	20	3/4	49,7	22,0	39,6	35,0
GBZ 22-3/4	22MO-7-12	22	3/4	49,7	22,0	39,6	35,0
GBZ 25-3/4	25MO-7-12	25	3/4	53,6	26,5	41,3	35,0
GBZ 25-1	25MO-7-16	25	1	62,3	26,5	50,0	41,0

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

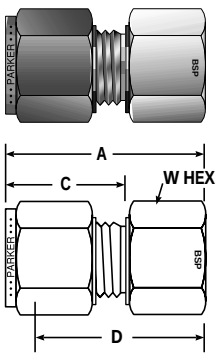
GBZ
BSP Taper Female Connector
For fractional tube



PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	BSP THREAD	A	C	D	W HEX	BORE
4-2K GBZ	400-7-2RT	1/4	1/8	1.24	.70	.94	9/16	.19
4-4K GBZ	400-7-4RT	1/4	1/4	1.42	.70	1.13	3/4	.19
4-6K GBZ	400-7-6RT	1/4	3/8	1.49	.70	1.19	7/8	.19
4-8K GBZ	400-7-8RT	1/4	1/2	1.68	.70	1.38	1-1/16	.19
6-4K GBZ	600-7-4RT	3/8	1/4	1.48	.76	1.19	3/4	.28
6-6K GBZ	600-7-6RT	3/8	3/8	1.54	.76	1.25	7/8	.28
6-8K GBZ	600-7-8RT	3/8	1/2	1.73	.76	1.44	1-1/16	.28
8-4K GBZ	810-7-4RT	1/2	1/4	1.59	.87	1.19	13/16	.406
8-6K GBZ	810-7-6RT	1/2	3/8	1.65	.87	1.25	7/8	.406
8-8K GBZ	810-7-8RT	1/2	1/2	1.84	.87	1.44	1-1/16	.406

Dimensions for reference only, subject to change.

GBZ
BSP Taper Female Connector
For metric tube

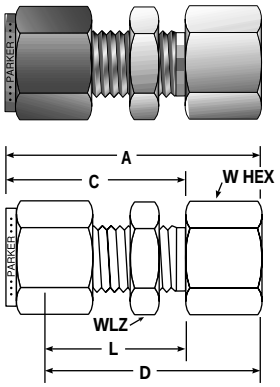


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS					
		TUBE O.D.	BSP THREAD	A	C	D	W HEX
GBZ3-1/8K	3MO-7-2RT	3	1/8	29,2	15,3	22,6	14,0
GBZ6-1/8K	6MO-7-2RT	6	1/8	31,3	17,7	23,8	14,0
GBZ6-1/4K	6MO-7-4RT	6	1/4	35,8	17,7	28,3	19,0
GBZ6-3/8K	6MO-7-6RT	6	3/8	37,6	17,7	30,1	22,0
GBZ6-1/2K	6MO-7-8RT	6	1/2	42,5	17,7	35,0	27,0
GBZ8-1/8K	8MO-7-2RT	8	1/8	32,8	18,6	25,3	15,0
GBZ8-1/4K	8MO-7-4RT	8	1/4	37,0	18,6	29,5	19,0
GBZ8-3/8K	8MO-7-6RT	8	3/8	38,5	18,6	31,0	22,0
GBZ8-1/2K	8MO-7-8RT	8	1/2	43,3	18,6	35,8	27,0
GBZ10-1/8K	10MO-7-2RT	10	1/8	33,0	19,5	25,4	18,0
GBZ10-1/4K	10MO-7-4RT	10	1/4	37,8	19,5	30,2	19,0
GBZ10-3/8K	10MO-7-6RT	10	3/8	39,4	19,5	31,8	22,0
GBZ10-1/2K	10MO-7-8RT	10	1/2	44,2	19,5	36,6	27,0
GBZ12-1/4K	12MO-7-4RT	12	1/4	40,3	22,0	30,2	22,0
GBZ12-3/8K	12MO-7-6RT	12	3/8	41,9	22,0	31,8	22,0
GBZ12-1/2K	12MO-7-8RT	12	1/2	46,7	22,0	36,6	27,0
GBZ16-1/2K	16MO-7-8RT	16	1/2	48,4	22,0	38,3	18,0
GBZ20-1/2K	20MO-7-8RT	20	1/2	54,7	22,0	44,6	30,0
GBZ20-3/4K	20MO-7-12RT	20	3/4	49,7	22,0	39,6	35,0
GBZ22-1K	22MO-7-16RT	22	1	57,9	22,0	47,8	41,0
GBZ25-3/4K	25MO-7-12RT	25	3/4	54,3	26,5	42,1	35,0
GBZ25-1K	25MO-7-16RT	25	1	61,5	26,5	49,3	41,0

NOTE: A and C dimensions are typical finger-tight.

Dimensions for reference only, subject to change.

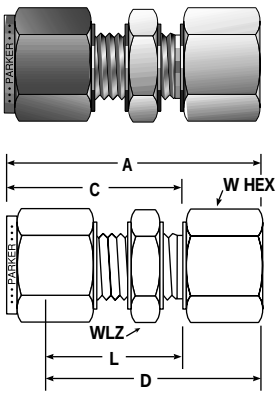
GH2BZ
NPT Female Bulkhead Connector
For fractional tube



PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	A	C	D	L	W HEX
2-2 GH2BZ	200-71-2	1/8	1/8	1.76	1.23	1.50	.97	9/16
3-2 GH2BZ	300-71-2	3/16	1/8	1.79	1.26	1.53	1.00	9/16
4-2 GH2BZ	400-71-2	1/4	1/8	1.85	1.31	1.56	1.02	5/8
4-4 GH2BZ	400-71-4	1/4	1/4	2.04	1.31	1.75	1.02	3/4
5-2 GH2BZ	500-71-2	5/16	1/8	1.96	1.42	1.66	1.12	11/16
5-8 GH2BZ	500-71-8	5/16	1/2	2.38	1.42	2.08	1.12	1-1/16
6-4 GH2BZ	600-71-4	3/8	1/4	2.17	1.44	1.88	1.15	3/4
8-6 GH2BZ	810-71-6	1/2	3/8	2.43	1.65	2.03	1.25	15/16
8-8 GH2BZ	810-71-8	1/2	1/2	2.62	1.65	2.22	1.25	1-1/16
10-8 GH2BZ	1010-71-8	5/8	1/2	2.65	1.68	2.25	1.28	1-1/16
12-12 GH2BZ	1210-71-12	3/4	3/4	2.90	1.87	2.50	1.47	1-3/8
14-12 GH2BZ	1410-71-12	7/8	3/4	3.18	2.09	2.78	1.69	1-3/8
16-16 GH2BZ	1610-71-16	1	1	3.68	2.27	3.19	1.78	1-5/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
For bulkhead hole drill size and maximum bulkhead thickness, see Page 28, Part WBZ.

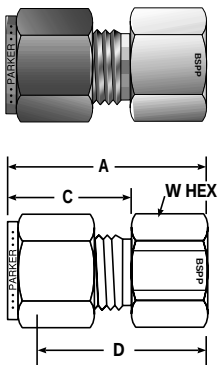
GH2BZ
NPT Female Bulkhead Connector
For metric tube



PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS								
		TUBE O.D.	NPT THREAD	A	C	D	L	W HEX	B'HEAD HOLE DRILL SIZE	MAX. B'HEAD THICK.
GH2BZ 6-1/8	6MO-71-2	6	1/8	47,2	33,7	39,7	26,2	16,0	11,5	10,2
GH2BZ 6-1/4	6MO-71-4	6	1/4	52,0	33,7	44,5	26,2	19,0	11,5	10,2
GH2BZ 8-1/8	8MO-71-2	8	1/8	49,6	36,1	42,1	28,5	18,0	13,1	11,2
GH2BZ 10-1/4	10MO-71-4	10	1/4	55,2	37,0	47,6	29,4	19,0	16,3	11,2
GH2BZ 12-3/8	12MO-71-6	12	3/8	60,9	41,9	50,8	31,8	24,0	19,5	12,7
GH2BZ 12-1/2	12MO-71-8	12	1/2	66,4	41,9	56,3	31,8	27,0	19,5	12,7

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
For bulkhead hole drill size and maximum bulkhead thickness, see Page 28, Part WBZ.

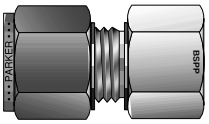
GBZ
BSPP Gauge Connector
For fractional tube

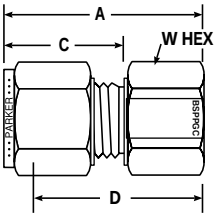


PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	BSPP THREAD	A	C	D	W HEX	BORE
4-4GC GBZ	400-7-4RG	1/4	1/4	1.48	.70	1.19	3/4	.19
4-6GC GBZ	400-7-6RG	1/4	3/8	1.48	.70	1.19	7/8	.19
4-8GC GBZ	400-7-8RG	1/4	1/2	1.70	.70	1.41	1-1/16	.19
5-4GC GBZ	500-7-4RG	5/16	1/4	1.51	.73	1.22	3/4	.21
5-8GC GBZ	500-7-8RG	5/16	1/2	1.59	.73	1.30	1-1/16	.28
6-4GC GBZ	600-7-4RG	3/8	1/4	1.55	.76	1.25	3/4	.21
6-6GC GBZ	600-7-6RG	3/8	3/8	1.55	.76	1.25	7/8	.26
6-8GC GBZ	600-7-8RG	3/8	1/2	1.63	.76	1.33	1-1/16	.28
8-4GC GBZ	810-7-4RG	1/2	1/4	1.65	.86	1.25	13/16	.21
8-6GC GBZ	810-7-6RG	1/2	3/8	1.75	.86	1.35	7/8	.26
8-8GC GBZ	810-7-8RG	1/2	1/2	1.90	.86	1.50	1-1/16	.28

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
See Catalog 4260 Pipe/ISO Fittings for detailed information.
Copper Sealing Washer on page 72 to be used with this fitting.

GBZ
BSPP Gauge Connector
For metric tube

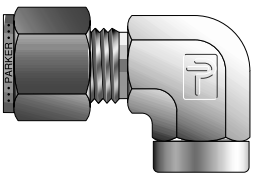


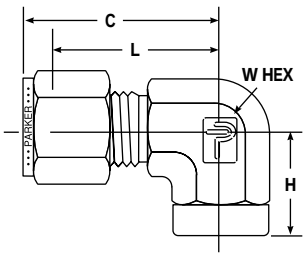


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS					
		TUBE O.D.	BSPP THREAD	A	C	D	W HEX
GBZ 3-1/4GC	3MO-7-4RG	3	1/4	35,3	15,3	28,7	19,0
GBZ 6-1/4GC	6MO-7-4RG	6	1/4	37,7	17,7	30,2	19,0
GBZ 6-3/8GC	6MO-7-6RG	6	3/8	37,7	17,7	30,2	22,0
GBZ 6-1/2GC	6MO-7-8RG	6	1/2	43,2	17,7	35,7	27,0
GBZ 8-1/4GC	8MO-7-4RG	8	1/4	38,5	18,6	31,0	19,0
GBZ 8-3/8GC	8MO-7-6RG	8	3/8	40,8	18,6	33,3	22,0
GBZ 8-1/2GC	8MO-7-8RG	8	1/2	44,0	18,6	36,5	27,0
GBZ 10-1/4GC	10MO-7-4RG	10	1/4	39,4	19,5	31,8	19,0
GBZ 10-3/8GC	10MO-7-6RG	10	3/8	38,8	19,5	31,2	22,0
GBZ 10-1/2GC	10MO-7-8RG	10	1/2	41,3	19,5	33,7	27,0
GBZ 12-1/4GC	12MO-7-4RG	12	1/4	41,9	22,0	31,8	22,0
GBZ 12-3/8GC	12MO-7-6RG	12	3/8	44,4	22,0	34,3	22,0
GBZ 12-1/2GC	12MO-7-8RG	12	1/2	48,2	22,0	38,1	27,0

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
See Catalog 4260 Pipe/ISO Fittings for detailed information.
Copper Sealing Washer on page 72 to be used with this fitting.

DBZ
NPT Female Elbow
For fractional tube

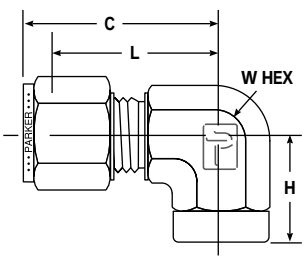




PARKER PART NO.	INTER-CHANGES WITH	INCHES					
		TUBE O.D.	NPT PIPE THREAD	C	H	L	W HEX
1-1 DBZ	100-8-1	1/16	1/16	.71	.56	.56	7/16
1-2 DBZ	100-8-2	1/16	1/8	.81	.75	.66	9/16
2-2 DBZ	200-8-2	1/8	1/8	.98	.75	.72	9/16
2-4 DBZ	200-8-4	1/8	1/4	1.08	.88	.82	11/16
3-2 DBZ	300-8-2	3/16	1/8	1.01	.75	.75	9/16
4-2 DBZ	400-8-2	1/4	1/8	1.07	.75	.78	9/16
4-4 DBZ	400-8-4	1/4	1/4	1.17	.88	.88	11/16
4-6 DBZ	400-8-6	1/4	3/8	1.26	.88	.97	7/8
4-8 DBZ	400-8-8	1/4	1/2	1.35	1.13	1.06	1-1/16
5-2 DBZ	500-8-2	5/16	1/8	1.17	.75	.88	5/8
5-4 DBZ	500-8-4	5/16	1/4	1.20	.88	.91	11/16
6-2 DBZ	600-8-2	3/8	1/8	1.20	.75	.91	5/8
6-4 DBZ	600-8-4	3/8	1/4	1.23	.88	.94	11/16
6-6 DBZ	600-8-6	3/8	3/8	1.32	.88	1.03	7/8
6-8 DBZ	600-8-8	3/8	1/2	1.42	1.13	1.13	1-1/16
8-4 DBZ	810-8-4	1/2	1/4	1.42	.88	1.02	13/16
8-6 DBZ	810-8-6	1/2	3/8	1.43	.88	1.03	7/8
8-8 DBZ	810-8-8	1/2	1/2	1.53	1.13	1.13	1-1/16
10-6 DBZ	1010-8-6	5/8	3/8	1.43	.88	1.03	7/8
10-8 DBZ	1010-8-8	5/8	1/2	1.53	1.13	1.13	1-1/16
12-8 DBZ	1210-8-8	3/4	1/2	1.56	1.13	1.16	1-1/16
12-12 DBZ	1210-8-12	3/4	3/4	1.65	1.25	1.36	1-3/8
14-12 DBZ	1410-8-12	7/8	3/4	1.76	1.25	1.36	1-3/8
16-12 DBZ	1610-8-12	1	3/4	1.94	1.25	1.45	1-3/8
16-16 DBZ	1610-8-16	1	1	2.02	1.50	1.53	1-5/8

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

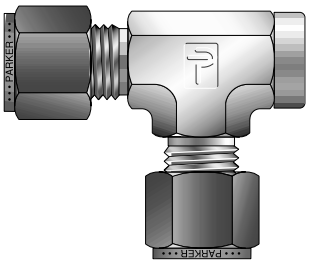
DBZ
NPT Female Elbow
For metric tube

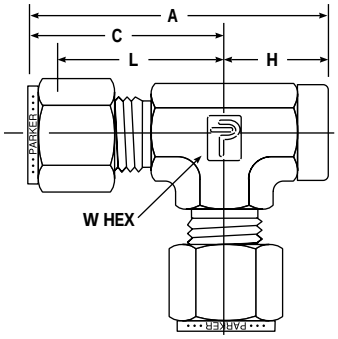


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS					INCH
		TUBE O.D.	NPT THREAD	C	H	L	W HEX
DBZ 6-1/8	6MO-8-2	6	1/8	27,0	19,0	19,6	1/2
DBZ 6-1/4	6MO-8-4	6	1/4	29,8	22,4	22,4	11/16
DBZ 8-1/8	8MO-8-2	8	1/8	28,8	19,1	21,3	9/16
DBZ 8-1/4	8MO-8-4	8	1/4	30,6	22,4	23,1	11/16
DBZ 10-1/4	10MO-8-4	10	1/4	33,5	22,4	25,9	13/16
DBZ 10-3/8	10MO-8-6	10	3/8	33,5	22,4	25,9	13/16
DBZ 10-1/2	10MO-8-8	10	1/2	36,3	28,5	28,7	1
DBZ 12-1/4	12MO-8-4	12	1/4	36,0	22,4	25,9	13/16
DBZ 12-3/8	12MO-8-6	12	3/8	36,0	22,4	25,9	13/16
DBZ 12-1/2	12MO-8-8	12	1/2	38,8	28,4	28,7	1
DBZ 16-3/8	16MO-8-6	16	3/8	39,5	23,6	29,7	1-1/16
DBZ 16-1/2	16MO-8-8	16	1/2	39,5	28,4	29,7	1-1/16

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

MBZ
NPT Female Run Tee
For fractional tube

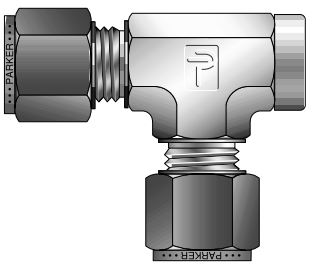


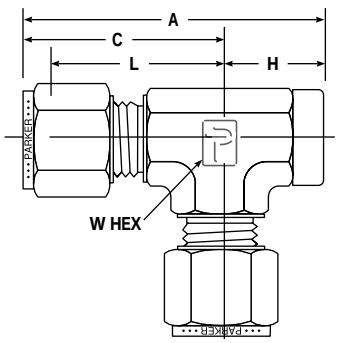


PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	A	C	H	L	W HEX
2-2-2 MBZ	200-3-2TFT	1/8	1/8	1.76	1.01	.75	.75	9/16
3-2-3 MBZ	300-3-2TFT	3/16	1/8	1.76	1.01	.75	.75	9/16
4-2-4 MBZ	400-3-2TFT	1/4	1/8	1.82	1.07	.75	.78	9/16
4-4-4 MBZ	400-3-4TFT	1/4	1/4	2.08	1.20	.88	.91	3/4
5-2-5 MBZ	500-3-2TFT	5/16	1/8	1.92	1.17	.75	.88	5/8
6-4-6 MBZ	600-3-4TFT	3/8	1/4	2.14	1.26	.88	.97	3/4
8-4-8 MBZ	810-3-4TFT	1/2	1/2	2.56	1.43	1.13	1.13	13/16
8-6-8 MBZ	810-3-6TFT	1/2	3/8	2.34	1.43	.91	1.03	7/8
8-8-8 MBZ	810-3-8TFT	1/2	1/2	2.66	1.53	1.13	1.13	1-1/16
10-8-10 MBZ	1010-3-8TFT	5/8	1/2	2.66	1.53	1.13	1.13	1-1/16
12-12-12 MBZ	1210-3-12TFT	3/4	3/4	2.90	1.65	1.25	1.36	1-3/8
14-8-14 MBZ	1410-3-8TFT	7/8	1/2	3.01	1.76	1.25	1.36	1-3/8
14-12-14 MBZ	1410-3-12TFT	7/8	3/4	3.01	1.76	1.25	1.36	1-3/8
16-12-16 MBZ	1610-3-12TFT	1	3/4	3.19	1.94	1.25	1.45	1-3/8
16-16-16 MBZ	1610-3-16TFT	1	1	3.52	2.02	1.50	1.53	1-3/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

MBZ
NPT Female Run Tee
For metric tube



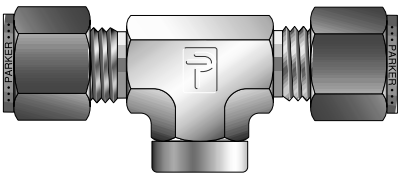


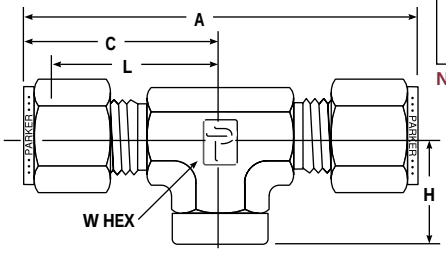
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						INCH
		TUBE O.D.	NPT THREAD	A	C	H	L	W HEX
MBZ 6-1/8-6	6MO-3TFT	6	1/8	46,0	27,0	19,0	19,6	1/2
MBZ 6-1/4-6	6MO-3-4TFT	6	1/4	52,1	29,8	22,4	22,4	11/16
MBZ 6-1/8-6	8MO-3TFT	8	1/8	48,9	29,9	19,0	22,4	5/8
MBZ 10-1/4-10	10MO-3TFT	10	1/4	55,9	33,5	22,4	25,9	13/16
MBZ 12-1/4-12	12MO-3-4TFT	12	1/4	58,4	36,0	22,4	25,9	13/16
MBZ 12-3/8-12	12MO-3TFT	12	3/8	58,4	36,0	22,4	25,9	13/16
MBZ 12-1/2-12	12MO-3-8TFT	12	1/2	67,3	38,8	28,5	28,7	1
MBZ 16-1/2-16	16MO-3TTF	16	1/2	68,2	39,8	28,4	29,7	1-1/16

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

OBZ NPT Female Branch Tee

For fractional tube



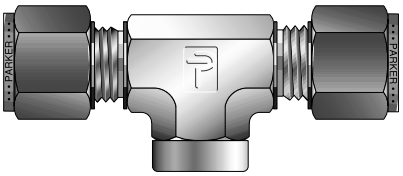


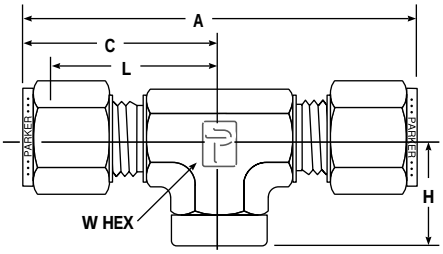
PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	A	C	H	L	W HEX
2-2-2 OBZ	200-3-2TTF	1/8	1/8	2.02	1.01	.75	.75	9/16
3-3-2 OBZ	300-3-2TTF	3/16	1/8	2.02	1.01	.75	.75	9/16
4-4-2 OBZ	400-3-2TTF	1/4	1/8	2.14	1.07	.75	.78	9/16
4-4-4 OBZ	400-3-4TTF	1/4	1/4	2.40	1.20	.88	.91	3/4
5-5-2 OBZ	500-3-2TTF	5/16	1/8	2.34	1.17	.75	.88	5/8
6-6-4 OBZ	600-3-4TTF	3/8	1/4	2.52	1.26	.88	.97	3/4
8-8-4 OBZ	810-3-4TTF	1/2	1/4	2.86	1.43	.88	1.02	13/16
8-8-6 OBZ	810-3-6TTF	1/2	3/8	2.86	1.43	.91	1.03	7/8
8-8-8 OBZ	810-3-8TTF	1/2	1/2	3.06	1.53	1.13	1.13	1-1/16
10-10-8 OBZ	1010-3-8TTF	5/8	1/2	3.06	1.53	1.13	1.13	1-1/16
12-12-12 OBZ	1210-3-12TTF	3/4	3/4	3.30	1.65	1.25	1.36	1-3/8
14-14-12 OBZ	1410-3-12TTF	7/8	3/4	3.52	1.76	1.25	1.36	1-3/8
16-16-12 OBZ	1610-3-12TTF	1	3/4	3.88	1.94	1.25	1.45	1-3/8
16-16-16 OBZ	1610-3-16TTF	1	1	4.04	2.02	1.50	1.53	1-3/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

OBZ NPT Female Branch Tee

For metric tube



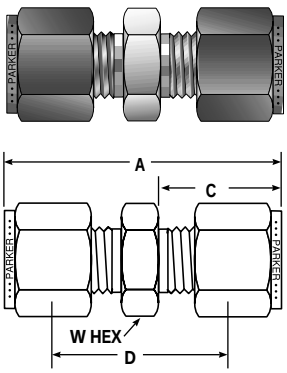


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						INCH
		TUBE O.D.	NPT THREAD	A	C	H	L	W HEX
OBZ 6-6-1/8	6MO-3TTF	6	1/8	53,9	27,0	19,0	19,6	1/2
OBZ 6-6-1/4	6MO-3-4TTF	6	1/4	59,5	29,8	22,4	22,4	11/16
OBZ 8-8-1/8	8MO-3TTF	8	1/8	59,7	29,9	19,0	22,4	5/8
OBZ 10-10-1/4	10MO-3TTF	10	1/4	67,0	33,5	22,4	25,9	13/16
OBZ 12-12-1/8	12MO-3TTF	12	1/8	72,0	36,0	22,3	25,9	13/16
OBZ 12-12-1/4	12MO-3-4TTF	12	1/4	72,0	36,0	22,3	25,9	13/16
OBZ 12-12-3/8	12MO-3TTF	12	3/8	72,0	36,0	22,4	25,9	13/16
OBZ 12-12-1/2	12MO-3-8TTF	12	1/2	77,6	38,8	28,5	28,7	1
OBZ 16-16-1/2	16MO-3TTF	16	1/2	77,6	38,8	28,4	28,7	1

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

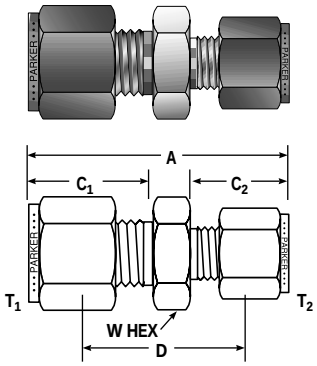
HBZ Union

For fractional tube



HBZ Reducing Union

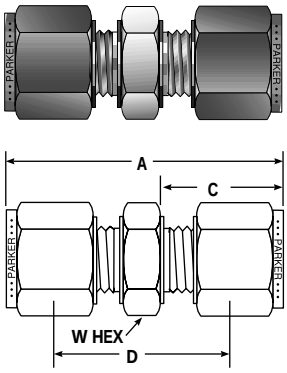
For fractional tube



PARKER PART NO.	INTER-CHANGES WITH	INCHES				
		TUBE O.D.	A	C	D	W HEX
1-1 HBZ	100-6	1/16	.99	.43	.69	5/16
2-1 HBZ	200-6-1	1/8-1/16	1.21	.60	.81	7/16
2-2 HBZ	200-6	1/8	1.39	.60	.88	7/16
3-1 HBZ	300-6-1	3/16-1/16	1.27	.64	.86	7/16
3-2 HBZ	300-6-2	3/16-1/8	1.44	.64	.92	7/16
3-3 HBZ	300-6	3/16	1.48	.64	.95	7/16
4-1 HBZ	400-6-1	1/4-1/16	1.38	.70	.91	1/2
4-2 HBZ	400-6-2	1/4-1/8	1.52	.70	.97	1/2
4-3 HBZ	400-6-3	1/4-3/16	1.55	.70	1.00	1/2
4-4 HBZ	400-6	1/4	1.62	.70	1.03	1/2
5-2 HBZ	500-6-2	5/16-1/8	1.58	.73	1.03	9/16
5-4 HBZ	500-6-4	5/16-1/4	1.67	.73	1.08	9/16
5-5 HBZ	500-6	5/16	1.70	.73	1.11	9/16
6-1 HBZ	600-6-1	3/8-1/16	1.44	.76	1.00	5/8
6-2 HBZ	600-6-2	3/8-1/8	1.61	.76	1.06	5/8
6-4 HBZ	600-6-4	3/8-1/4	1.71	.76	1.13	5/8
6-5 HBZ	600-6-5	3/8-5/16	1.75	.76	1.16	5/8
6-6 HBZ	600-6	3/8	1.77	.76	1.19	5/8
8-2 HBZ	810-6-2	1/2-1/8	1.75	.87	1.09	13/16
8-4 HBZ	810-6-4	1/2-1/4	1.85	.87	1.16	13/16
8-6 HBZ	810-6-6	1/2-3/8	1.91	.87	1.22	13/16
8-8 HBZ	810-6	1/2	2.02	.87	1.22	13/16
10-6 HBZ	1010-6-6	5/8-3/8	1.94	.87	1.25	15/16
10-8 HBZ	1010-6-8	5/8-1/2	2.05	.87	1.25	15/16
10-10 HBZ	1010-6	5/8	2.05	.87	1.25	15/16
12-4 HBZ	1210-6-4	3/4-1/4	1.95	.87	1.25	1-1/16
12-6 HBZ	1210-6-6	3/4-3/8	2.00	.87	1.31	1-1/16
12-8 HBZ	1210-6-8	3/4-1/2	2.11	.87	1.31	1-1/16
12-10 HBZ	1210-6-10	3/4-5/8	2.11	.87	1.31	1-1/16
12-12 HBZ	1210-6	3/4	2.11	.87	1.31	1-1/16
14-14 HBZ	1410-6	7/8	2.18	.87	1.38	1-3/16
16-8 HBZ	1610-6-8	1-1/2	2.39	1.05	1.50	1-3/8
16-12 HBZ	1610-6-12	1-3/4	2.39	1.05	1.50	1-3/8
16-16 HBZ	1610-6	1	2.57	1.05	1.59	1-3/8
20-20 HBZ	2010-6	1-1/4	3.61	1.52	1.89	1-3/4
24-24 HBZ	2410-6	1-1/2	4.23	1.77	2.11	2-1/8
32-32 HBZ	3210-6	2	5.88	2.47	2.94	2-3/4

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

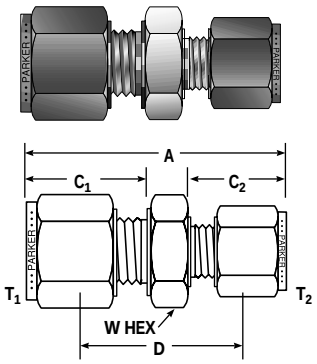
HBZ Union
For metric tube



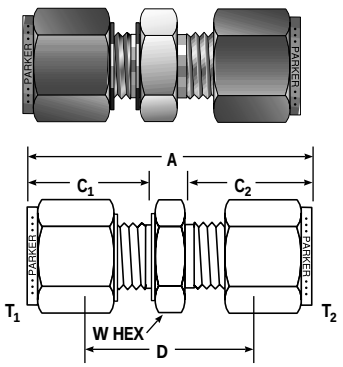
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS				
		TUBE O.D.	A	C	D	W HEX
HBZ 2-2	2MO-6	2	35,6	15,3	22,4	12,0
HBZ 3-2	3MO-6-2M	3	35,8	15,3	22,6	12,0
HBZ 3-3	3MO-6	3	35,3	15,3	22,1	12,0
HBZ 4-4	4MO-4	4	37,4	16,1	24,2	12,0
HBZ 6-2	6MO-6-2M	6	38,7	17,7	24,6	14,0
HBZ 6-3	6MO-6-3M	6	38,7	17,7	24,6	14,0
HBZ 6-4	6MO-6-4M	6	39,5	17,7	25,4	14,0
HBZ 6-6	6MO-6	6	41,2	17,7	26,2	14,0
HBZ 8-6	8MO-6-6M	8	42,4	18,6	27,4	15,0
HBZ 8-8	8MO-6	8	43,2	18,6	28,2	15,0
HBZ 10-6	10MO-6-6M	10	44,5	19,5	29,4	18,0
HBZ 10-8	10MO-6-8M	10	44,5	19,5	29,4	18,0
HBZ 10-10	10MO-6	10	46,2	19,5	31,0	18,0
HBZ 12-6	12MO-6-6M	12	47,0	22,0	29,4	22.0
HBZ 12-8	12MO-6-8M	12	47,8	22,0	30,2	22,0
HBZ 12-10	12MO-6-10M	12	48,7	22,0	31,0	22,0
HBZ 12-12	12MO-6	12	51,2	22,0	31,0	22,0
HBZ 14-14	14MO-6	14	52,0	22,0	31,8	24,0
HBZ 15-15	15MO-6	15	52,0	22,0	31,8	24,0
HBZ 16-12	16MO-6-12M	16	52,0	22,0	31,8	24,0
HBZ 16-16	16MO-6	16	52,0	22,0	31,8	24,0
HBZ 18-12	18MO-6-12M	18	53,5	22,0	33,3	27,0
HBZ 18-18	18MO-6	18	53,5	22,0	33,3	27,0
HBZ 20-20	20MO-6	20	55,0	22,0	34,8	30,0
HBZ 22-22	22MO-6	22	55,0	22,0	34,8	30,0
HBZ 25-18	25MO-6-18M	25	60,5	26,5	38,1	35,0
HBZ 25-20	25MO-6-20M	25	62,3	26,5	39,9	35,0
HBZ 25-25	25MO-6	25	65,1	26,5	40,5	35,0

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

HBZ Reducing Union
For metric tube



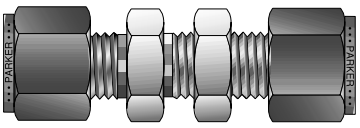
HBZ Conversion Union
For metric tube

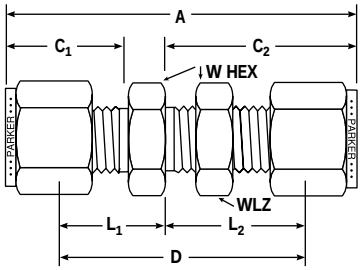


PARKER PART NO.	INTER-CHANGES WITH	TUBE O.D.		MILLIMETERS				
		T_1 MM	T_2 INCH	A	C_1	C_2	D	W HEX
HBZ 3-1/8	3MO-6-2	3	1/8	36,3	15,3	15,3	22,6	12,0
HBZ 4-1/8	4MO-6-2	4	1/8	36,5	16,1	15,3	23,6	12,0
HBZ 4-1/4	4MO-6-4	4	1/4	39,3	16,1	17,7	26,4	14,0
HBZ 6-1/8	6MO-6-2	6	1/8	38,5	17,7	15,3	24,6	14,0
HBZ 6-1/4	6MO-6-4	6	1/4	41,1	17,7	17,7	25,9	14,0
HBZ 6-5/16	6MO-6-5	6	5/16	42,3	17,7	18,8	27,2	14,0
HBZ 8-1/4	8MO-6-4	8	1/4	42,3	18,6	17,7	27,2	15,0
HBZ 8-6	8MO-6-6	8	6	44,0	18,6	19,3	29,1	15,0
HBZ 10-1/8	10MO-6-2	10	1/8	41,8	19,5	15,3	27,9	18,0
HBZ 10-1/4	10MO-6-4	10	1/4	44,5	19,5	17,7	29,2	18,0
HBZ 10-3/8	10MO-6-6	10	3/8	46,0	19,5	19,3	30,7	18,0
HBZ 12-3/8	12MO-6-6	12	3/8	48,4	22,0	19,3	30,7	22,0
HBZ 12-1/2	12MO-6-8	12	1/2	51,1	22,0	21,8	31,0	22,0
HBZ 15-1/2	15MO-6-8	15	1/2	52,0	22,0	21,8	32,0	24,0
HBZ 16-3/8	16MO-6-6	16	3/8	52,0	22,0	19,3	34,3	24,0
HBZ 18-3/4	18MO-6-12	18	3/4	53,5	22,0	21,8	33,5	27,0

NOTE: A, C_1 and C_2 dimensions are typical finger-tight. Dimensions for reference only, subject to change.

WBZ
Bulkhead Union
For fractional tube

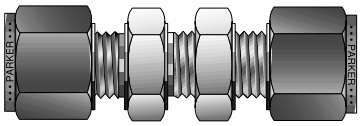


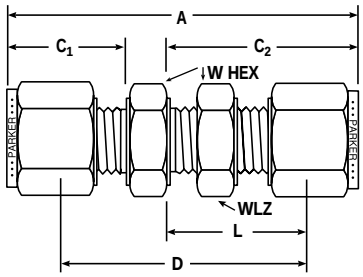


PARKER PART NO.	INTER-CHANGES WITH	INCHES									
		TUBE O.D.	A	C_1	D	C_2	L_1	L_2	W HEX	BULKHEAD HOLE DRILL SIZE	MAXIMUM BULKHEAD THICKNESS
1-1 WBZ	100-61	1/16	1.23	.43	.94	.68	.28	.53	5/16	13/64	1/8
2-2 WBZ	200-61	1/8	2.02	.60	1.50	1.23	.34	.97	1/2	21/64	1/2
3-3 WBZ	300-61	3/16	2.11	.64	1.59	1.26	.38	1.00	9/16	25/64	1/2
4-2 WBZ	400-61-2	1/4	2.17	.70	1.03	1.23	.41	.97	5/8	21/64	1/2
4-4 WBZ	400-61	1/4	2.27	.70	1.69	1.31	.41	1.02	5/8	29/64	17/32
5-5 WBZ	500-61	5/16	2.40	.73	1.81	1.42	.44	1.12	11/16	33/64	9/16
6-6 WBZ	600-61	3/8	2.46	.76	1.88	1.44	.47	1.15	3/4	37/64	9/16
8-8 WBZ	810-61	1/2	2.80	.87	2.00	1.65	.47	1.25	15/16	49/64	19/32
10-10 WBZ	1010-61	5/8	2.86	.87	2.06	1.68	.47	1.28	1-1/16	57/64	19/32
12-12 WBZ	1210-61	3/4	3.11	.87	2.31	1.87	.47	1.47	1-3/16	1-1/64	25/32
14-14 WBZ	1410-61	7/8	3.33	.87	2.53	2.09	.47	1.69	1-3/8	1-9/64	15/16
16-16 WBZ	1610-61	1	3.78	1.05	2.81	2.27	.56	1.78	1-5/8	1-21/64	15/16

NOTE: For reducer sizes call out short end first.
Dimensions for reference only, subject to change.
A, C_1 and C_2 dimensions are typical finger-tight.
For replacement bulkhead nuts, see Page 73, Part WLZ.

WBZ
Bulkhead Union
For metric tube





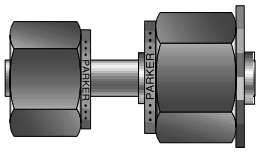
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS								
		TUBE O.D.	A	C_1	C_2	D	L	W HEX	B'HEAD HOLE DRILL SIZE	MAX. B'HEAD THICK.
WBZ 3-3	3MO-61	3	51,3	15,3	31,2	38,2	24,6	14,0	8,3	12,7
WBZ 4-4	4MO-61	4	53,7	16,1	32,0	40,5	25,4	14,0	9,9	12,7
WBZ 6-6	6MO-61	6	57,9	17,7	33,7	42,9	26,2	16,0	11,5	10,2
WBZ 8-8	8MO-61	8	61,0	18,6	36,0	46,0	28,5	18,0	13,1	11,2
WBZ 10-10	10MO-61	10	63,6	19,5	37,0	48,4	29,4	22,0	16,3	11,2
WBZ 12-12	12MO-61	12	71,0	22,0	41,9	50,8	31,8	24,0	19,5	12,7
WBZ 15-15	15MO-61	15	72,5	22,0	42,6	52,3	32,5	27,0	22,5	12,7
WBZ 16-16	16MO-61	16	72,6	22,0	42,6	52,4	32,5	27,0	22,5	12,7
WBZ 18-18	18MO-61	18	78,9	22,0	47,4	58,7	37,3	30,0	26,0	16,8
WBZ 20-20	20MO-61	20	88,2	22,0	51,0	68,0	40,9	35,0	29,0	19,0
WBZ 25-25	25MO-61	25	95,8	26,5	54,4	71,4	42,2	41,0	33,8	24,0

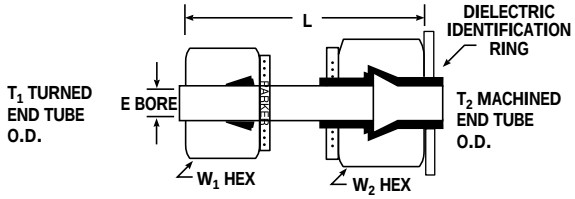
NOTE: A, C_1 and C_2 dimensions are typical finger-tight.
Dimensions for reference only, subject to change.
For replacement bulkhead nuts, see Page 73, Part WLZ.
For reducer sizes call out short end first.

DEBTA Dielectric Union Adapter

For fractional tube

includes nuts, machined tube with molded ferrule, preset ferrule, and dielectric identification ring





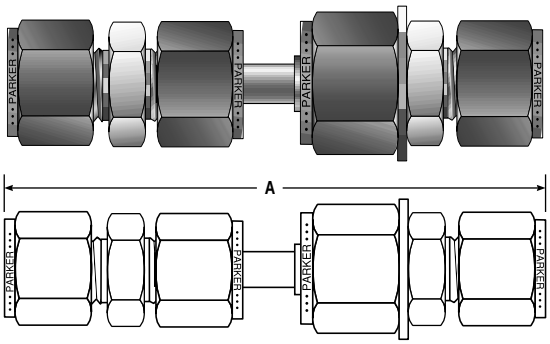
PARKER ADAPTER PART NO.	INCHES					
	TUBE END T_1	TUBE END T_2	L	E BORE	W_1 HEX	W_2 HEX
6-8 DEBTA-SS	3/8	1/2	2.08	.30	11/16	7/8
8-10 DEBTA-SS	1/2	5/8	2.58	.38	7/8	1

Note: Makeup instructions included with parts in box when ordered as an Adapter only.
*Other end connectors available upon request. Dimensions for reference only, subject to change.

DEBTA Dielectric Assembly

For fractional tube

includes dielectric union adapter with assembled tube fitting unions



PARKER ASSEMBLY PART NO.	INCHES		
*COMPRESSION	A†	ADAPTER	END CONNECTORS
4H DEBTA	4.08	6-8 DEBTA	6-4HBZ 8-4HBZ
6H DEBTA	4.20	6-8 DEBTA	6-6HBZ 8-6HBZ
8H DEBTA	4.79	8-10 DEBTA	8-8HBZ 10-8HBZ

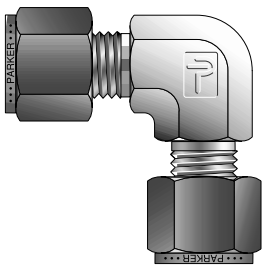
*COMPRESSION–FEMALE PIPE	A	ADAPTER	END CONNECTORS
4G DEBTA	3.59	6-8 DEBTA	6-4GBZ 8-4GBZ
6G DEBTA	3.71	6-8 DEBTA	6-6GBZ 8-6GBZ
8G DEBTA	4.40	8-10 DEBTA	8-8GBZ 10-8GBZ

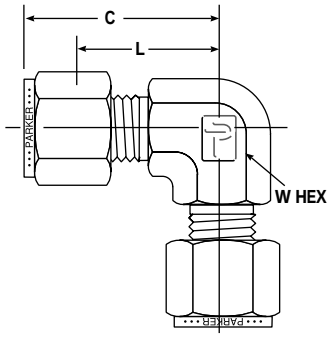
*COMPRESSION–MALE PIPE	A	ADAPTER	END CONNECTORS
4F DEBTA	3.80	6-8 DEBTA	6-4FBZ 8-4FBZ
6F DEBTA	3.80	6-8 DEBTA	6-6FBZ 8-6FBZ
8F DEBTA	4.58	8-10 DEBTA	8-8FBZ 10-8FBZ

†Finger tight assembly dimensions.

EBZ Union Elbow

For fractional tube

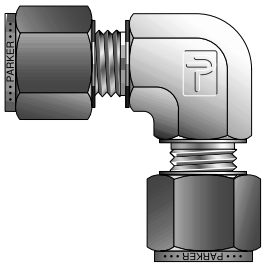


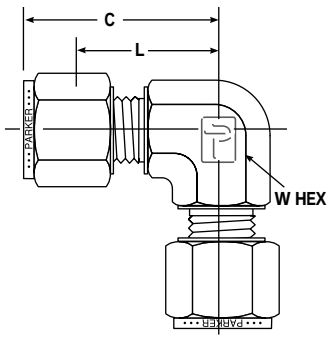


PARKER PART NO.	INTER-CHANGES WITH	INCHES			
		TUBE O.D.	C	L	W HEX
1-1 EBZ	100-9	1/16	.71	.56	3/8
2-2 EBZ	200-9	1/8	.88	.62	3/8
3-3 EBZ	300-9	3/16	1.00	.74	1/2
4-4 EBZ	400-9	1/4	1.06	.77	1/2
5-5 EBZ	500-9	5/16	1.17	.88	5/8
6-6 EBZ	600-9	3/8	1.20	.91	5/8
8-8 EBZ	810-9	1/2	1.42	1.02	13/16
10-10 EBZ	1010-9	5/8	1.43	1.03	7/8
12-12 EBZ	1210-9	3/4	1.56	1.16	1-1/16
14-14 EBZ	1410-9	7/8	1.76	1.36	1-3/8
16-16 EBZ	1610-9	1	1.94	1.45	1-3/8
20-20 EBZ	2000-9	1-1/4	2.61	1.75	1-5/8
24-24 EBZ	2400-9	1-1/2	3.06	2.00	1-7/8
32-32 EBZ	3200-9	2	4.22	2.75	2-13/16

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

EBZ
Union Elbow
For metric tube



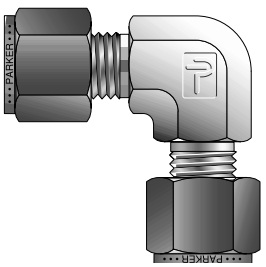


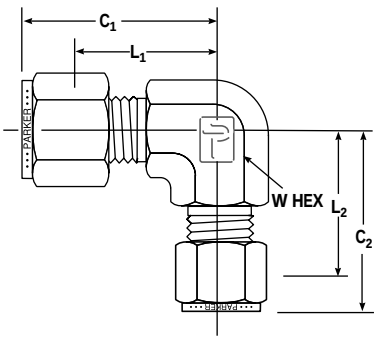
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS			INCH
		TUBE O.D.	C	L	W HEX
EBZ 3-3	3MO-9	3	22,3	15,7	3/8
EBZ 4-4	4MO-9	4	25,4	18,8	1/2
EBZ 6-6	6MO-9	6	27,0	19,6	1/2
EBZ 8-8	8MO-9	8	28.8	21,3	9/16
EBZ 10-10	10MO-9	10	31,5	23,9	11/16
EBZ 12-12	12MO-9	12	36,0	25,9	13/16
EBZ 14-14	14MO-9	14	38,1	28,0	15/16
EBZ 15-15	15MO-9	15	38,0	27,9	15/16
EBZ 16-16	16MO-9	16	38,0	27,9	15/16
EBZ 18-18	18MO-9	18	39,8	29,7	1-1/16
EBZ 20-20	20MO-9	20	44,6	34,5	1-3/8
EBZ 22-22	22MO-9	22	44,6	34,5	1-3/8
EBZ 25-25	25MO-9	25	49,1	36,8	1-3/8

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

For drop size ebows in metric sizes, contact Parker ICD

EBZ
Drop Size Elbows
For fractional tube



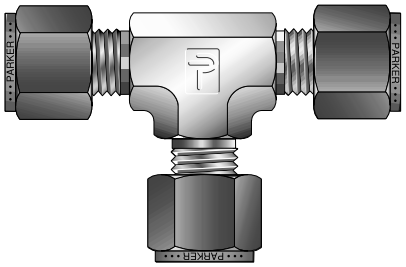


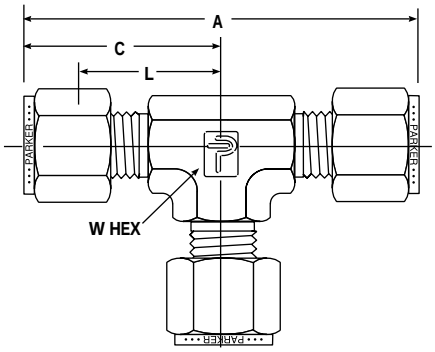
PARKER PART NO.	INTER-CHANGES WITH	INCHES					
		TUBE O.D.	L_1	C_1	L_2	C_2	W HEX
3-2 EBZ	300-9-2	3/16-1/8	.69	.96	.66	.92	7/16
4-2 EBZ	400-9-2	1/4-1/8	.77	1.06	.70	.96	1/2
5-2 EBZ	500-9-2	5/16-1/8	.88	1.17	.78	1.04	5/8
5-4 EBZ	500-9-4	5/16-1/4	.88	1.17	.85	1.14	5/8
6-2 EBZ	600-9-2	3/8-1/8	.91	1.20	.78	1.04	5/8
6-4 EBZ	600-9-4	3/8-1/4	.91	1.20	.85	1.09	5/8
6-5 EBZ	600-9-5	3/8-5/16	.91	1.20	.88	1.17	5/8
8-4 EBZ	810-9-4	1/2-1/4	1.02	1.42	.96	1.25	13/16
8-5 EBZ	810-9-5	1/2-5/16	1.02	1.42	.99	1.28	13/16
8-6 EBZ	810-9-6	1/2-3/8	1.02	1.42	1.02	1.31	13/16
10-6 EBZ	1010-9-6	5/8-3/8	1.03	1.43	1.03	1.32	7/8
10-8 EBZ	1010-9-8	5/8-1/2	1.03	1.43	1.03	1.43	7/8
12-4 EBZ	1210-9-4	3/4-1/4	1.16	1.56	1.09	1.38	1-1/16
12-6 EBZ	1210-9-6	3/4-3/8	1.16	1.56	1.16	1.45	1-1/16
12-8 EBZ	1210-9-8	3/4-1/2	1.16	1.56	1.16	1.56	1-1/16
14-4 EBZ	1410-9-4	7/8-1/4	1.36	1.76	1.22	1.51	1-3/8
16-8 EBZ	1610-9-8	1-1/2	1.45	1.94	1.22	1.62	1-5/16
16-12 EBZ	1610-9-12	1-3/4	1.45	1.94	1.36	1.76	1-3/8

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

JBZ Union Tee

For fractional tube



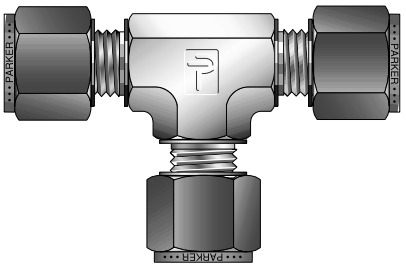


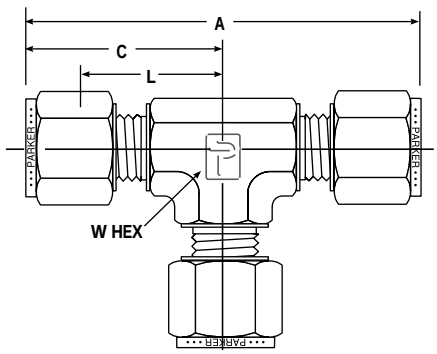
PARKER PART NO.	INTER-CHANGES WITH	INCHES				
		TUBE O.D.	A	C	L	W HEX
1-1-1 JBZ	100-3	1/16	1.42	.71	.56	3/8
2-2-2 JBZ	200-3	1/8	1.76	.88	.62	3/8
3-3-3 JBZ	300-3	3/16	2.00	1.00	.74	1/2
4-4-4 JBZ	400-3	1/4	2.12	1.06	.77	1/2
5-5-5 JBZ	500-3	5/16	2.34	1.17	.88	5/8
6-6-6 JBZ	600-3	3/8	2.40	1.20	.91	5/8
8-8-8 JBZ	810-3	1/2	2.84	1.42	1.02	13/16
10-10-10 JBZ	1010-3	5/8	2.86	1.43	1.03	7/8
12-12-12 JBZ	1210-3	3/4	3.12	1.56	1.16	1-1/16
14-14-14 JBZ	1410-3	7/8	3.52	1.76	1.36	1-3/8
16-16-16 JBZ	1610-3	1	3.88	1.94	1.45	1-3/8
20-20-20 JBZ	2000-3	1-1/4	5.22	2.61	1.75	1-5/8
24-24-24 JBZ	2400-3	1-1/2	6.12	3.06	2.00	1-7/8
32-32-32 JBZ	3200-3	2	8.44	4.22	2.75	2-13/16

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

JBZ Union Tee

For metric tube



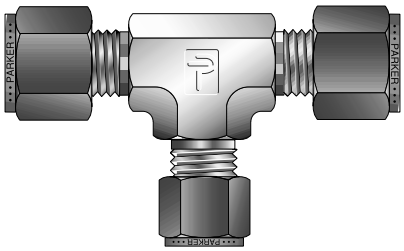


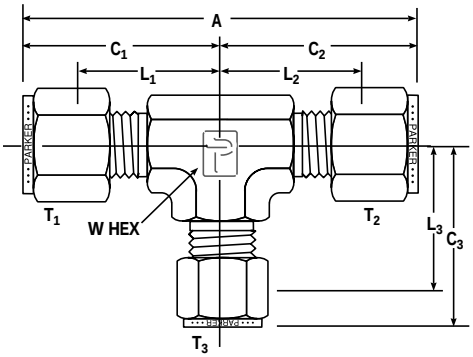
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS				INCH
		TUBE O.D.	A	C	L	W HEX
JBZ 2-2-2	2MO-3	2	44,7	22,3	15,7	3/8
JBZ 3-3-3	3MO-3	3	44,7	22,3	15,7	3/8
JBZ 4-4-4	4MO-3	4	50,8	25,4	18,8	1/2
JBZ 6-6-6	6MO-3	6	53,9	27,0	19,6	1/2
JBZ 8-8-8	8MO-3	8	59,7	29,9	22,4	5/8
JBZ 10-10-10	10MO-3	10	63,0	31,5	23,9	11/16
JBZ 12-12-12	12MO-3	12	72,0	36,0	25,9	13/16
JBZ 14-14-14	14MO-3	14	77,6	38,8	28,7	1
JBZ 15-15-15	15MO-3	15	77,6	38,8	28,7	1
JBZ 16-16-16	16MO-3	16	77,6	38,8	28,7	1
JBZ 18-18-18	18MO-3	18	79,5	38,8	29,7	1-1/16
JBZ 20-20-20	20MO-3	20	89,3	44,6	34,5	1-3/8
JBZ 22-22-22	22MO-3	22	89,3	44,6	34,5	1-3/8
JBZ 25-25-25	25MO-3	25	98,3	49,1	36,8	1-3/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

JBZ
Drop Size Tees
For fractional tube

Eliminates the extra connection when adapting with a tube stub reducer



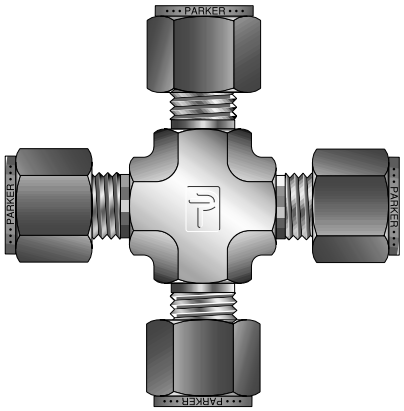


PARKER PART NO.	INTERCHANGES WITH	INCHES										
		T_1 TUBE O.D.	T_2 TUBE O.D.	T_3 TUBE O.D.	A	L_1	C_1	L_2	C_2	L_3	C_3	W HEX
4-4-2 JBZ	400-3-4-2	1/4	1/4	1/8	2.10	.76	1.05	.76	1.05	.70	.96	1/2
6-6-4 JBZ	600-3-6-4	3/8	3/8	1/4	2.40	.91	1.20	.91	1.20	.85	1.14	5/8
6-4-6 JBZ	600-3-4-6	3/8	1/4	3/8	2.34	.91	1.20	.85	1.14	.91	1.20	5/8
6-4-4 JBZ	600-3-4-4	3/8	1/4	1/4	2.34	.91	1.20	.85	1.14	.85	1.14	5/8
8-8-6 JBZ	810-3-8-6	1/2	1/2	3/8	2.84	1.02	1.42	1.02	1.42	1.02	1.31	13/16
8-8-4 JBZ	810-3-8-4	1/2	1/2	1/4	2.84	1.02	1.42	1.02	1.42	.96	1.25	13/16
8-6-8 JBZ	810-3-6-8	1/2	3/8	1/2	2.73	1.02	1.42	1.02	1.31	1.02	1.42	13/16
8-4-8 JBZ	810-3-4-8	1/2	1/4	1/2	2.67	1.02	1.42	.96	1.25	1.02	1.42	13/16
8-6-6 JBZ	810-3-6-6	1/2	3/8	3/8	2.73	1.02	1.42	1.02	1.31	1.02	1.31	13/16
8-4-4 JBZ	810-3-4-4	1/2	1/4	1/4	2.67	1.02	1.42	.96	1.25	.96	1.25	13/16
10-10-8 JBZ	1010-3-10-8	5/8	5/8	1/2	2.86	103	1.43	1.03	1.43	1.03	1.43	7/8
10-10-6 JBZ	1010-3-10-6	5/8	5/8	3/8	2.86	1.03	1.43	1.03	1.43	1.03	1.32	7/8
10-8-8 JBZ	1010-3-8-8	5/8	1/2	1/2	2.86	1.03	1.43	1.03	1.43	1.03	1.43	7/8
10-8-6 JBZ	1010-3-8-6	5/8	1/2	3/8	2.86	1.03	1.43	1.03	1.43	1.03	1.32	7/8
10-6-6 JBZ	1010-3-6-6	5/8	3/8	3/8	2.75	1.03	1.43	1.03	1.32	1.03	1.32	7/8
10-6-8 JBZ	1010-3-6-8	5/8	3/8	1/2	2.75	1.03	1.43	1.03	1.32	1.03	1.43	7/8
12-12-10 JBZ	1210-3-12-10	3/4	3/4	5/8	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-12-8 JBZ	1210-3-12-8	3/4	3/4	1/2	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-12-6 JBZ	1210-3-12-6	3/4	3/4	3/8	3.12	1.16	1.56	1.16	1.56	1.16	1.45	1-1/16
12-12-4 JBZ	1210-3-12-4	3/4	3/4	1/4	3.12	1.16	1.56	1.16	1.56	1.09	1.38	1-1/16
12-10-10 JBZ	1210-3-10-10	3/4	5/8	5/8	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-8-8 JBZ	1210-3-8-8	3/4	1/2	1/2	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-6-6 JBZ	1210-3-6-6	3/4	3/8	3/8	3.01	1.16	1.56	1.16	1.45	1.16	1.45	1-1/16
12-10-8 JBZ	1210-3-10-8	3/4	5/8	1/2	3.12	1.16	1.56	1.16	1.56	1.16	1.56	1-1/16
12-10-6 JBZ	1210-3-10-6	3/4	5/8	3/8	3.12	1.16	1.56	1.16	1.56	1.16	1.45	1-1/16
12-8-6 JBZ	1210-3-8-6	3/4	1/2	3/8	3.12	1.16	1.56	1.16	1.56	1.16	1.45	1-1/16
14-14-6 JBZ	1410-3-14-6	7/8	7/8	3/8	3.52	1.36	1.76	1.36	1.76	1.36	1.65	1-3/8
14-14-4 JBZ	1410-3-14-4	7/8	7/8	1/4	3.52	1.36	1.76	1.36	1.76	1.30	1.59	1-3/8
14-12-12 JBZ	1410-3-12-12	7/8	3/4	3/4	3.52	1.36	1.76	1.36	1.76	1.36	1.76	1-3/8
14-12-8 JBZ	1410-3-12-8	7/8	3/4	1/2	3.52	1.36	1.76	1.36	1.76	1.36	1.76	1-3/8
14-12-6 JBZ	1410-3-12-6	7/8	3/4	3/8	3.52	1.36	1.76	1.36	1.76	1.36	1.65	1-3/8
14-10-6 JBZ	1410-3-10-6	7/8	5/8	3/8	3.52	1.36	1.76	1.36	1.76	1.36	1.65	1-3/8
14-8-12 JBZ	1410-3-8-12	7/8	1/2	3/4	3.52	1.36	1.76	1.36	1.76	1.36	1.76	1-3/8
16-16-12 JBZ	1610-3-16-12	1	1	3/4	3.88	1.45	1.94	1.45	1.94	1.36	1.76	1-5/16
16-16-10 JBZ	1610-3-16-10	1	1	5/8	3.88	1.45	1.94	1.45	1.94	1.36	1.76	1-5/16
16-16-8 JBZ	1610-3-16-8	1	1	1/2	3.88	1.45	1.94	1.45	1.94	1.36	1.76	1-5/16
16-16-6 JBZ	1610-3-16-6	1	1	3/8	3.88	1.45	1.94	1.45	1.94	1.36	1.65	1-5/16
16-16-4 JBZ	1610-3-16-4	1	1	1/4	3.88	1.45	1.94	1.45	1.94	1.30	1.59	1-5/16
16-12-16 JBZ	1610-3-12-16	1	3/4	1	3.70	1.45	1.94	1.36	1.76	1.45	1.94	1-5/16
16-14-14 JBZ	1610-3-14-14	1	7/8	7/8	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-14-12 JBZ	1610-3-14-12	1	7/8	3/4	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-14-8 JBZ	1610-3-14-8	1	7/8	1/2	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-14-6 JBZ	1610-3-14-6	1	7/8	3/8	3.70	1.45	1.94	1.36	1.76	1.36	1.65	1-5/16
16-14-4 JBZ	1610-3-14-4	1	7/8	1/4	3.70	1.45	1.94	1.36	1.76	1.30	1.59	1-5/16
16-16-14 JBZ	1610-3-16-14	1	1	7/8	3.70	1.45	1.94	1.45	1.76	1.36	1.76	1-5/16
16-12-10 JBZ	1610-3-12-10	1	3/4	5/8	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-12-8 JBZ	1610-3-12-8	1	3/4	1/2	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-10-6 JBZ	1610-3-10-6	1	5/8	3/8	3.70	1.45	1.94	1.36	1.76	1.36	1.65	1-5/16
16-8-16 JBZ	1610-3-8-16	1	1/2	1	3.70	1.45	1.94	1.36	1.76	1.45	1.94	1-5/16
16-8-8 JBZ	1610-3-8-8	1	1/2	1/2	3.70	1.45	1.94	1.36	1.76	1.36	1.76	1-5/16
16-8-6 JBZ	1610-3-8-6	1	1/2	3/8	3.70	1.45	1.94	1.36	1.76	1.36	1.65	1-5/16
16-8-4 JBZ	1610-3-8-4	1	1/2	1/4	3.70	1.45	1.94	1.36	1.76	1.30	1.59	1-5/16
16-6-6 JBZ	1610-3-6-6	1	3/8	3/8	3.59	1.45	1.94	1.36	1.65	1.36	1.65	1-5/16

NOTE: C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

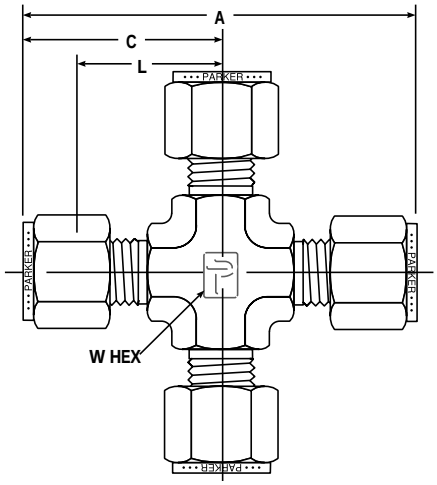
For drop size tees in metric sizes, contact Parker ICD.

KBZ
Union Cross
For fractional tube

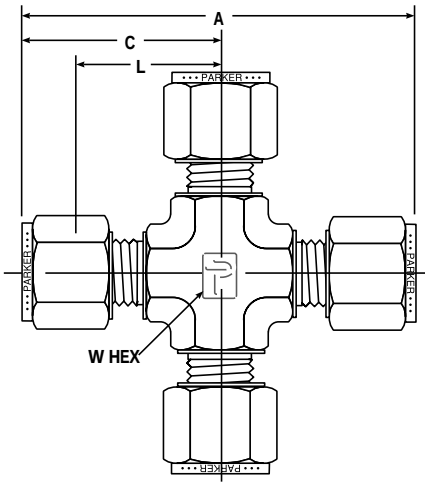


PARKER PART NO.	INTER-CHANGES WITH	INCHES				
		TUBE O.D.	A	C	L	W HEX
2 KBZ	200-4	1/8	1.84	.92	.66	7/16
3 KBZ	300-4	3/16	1.92	.95	.69	7/16
4 KBZ	400-4	1/4	2.02	1.01	.72	7/16
5 KBZ	500-4	5/16	2.28	1.14	.84	9/16
6 KBZ	600-4	3/8	2.26	1.13	.84	9/16
8 KBZ	810-4	1/2	2.74	1.37	.97	3/4
10 KBZ	1010-4	5/8	2.86	1.43	1.03	1-1/16
12 KBZ	1210-4	3/4	3.12	1.56	1.16	1-1/16
14 KBZ	1410-4	7/8	3.52	1.76	1.36	1-5/16
16 KBZ	1610-4	1	3.86	1.93	1.45	1-5/16

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.



KBZ
Union Cross
For metric tube

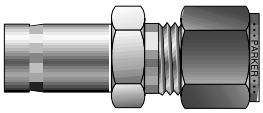


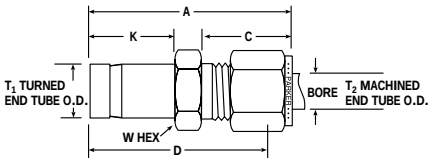
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS				INCH
		TUBE O.D.	A	C	L	W HEX
KBZ3	3MO-4	3	44,7	22,3	15,7	7/16
KBZ4	4MO-4	4	50,8	25,4	18,8	1/2
KBZ6	6MO-4	6	53,9	27,0	19,6	1/2
KBZ8	8MO-4	8	59,7	29,9	22,4	5/8
KBZ10	10MO-4	10	67,0	33,5	25,9	13/16
KBZ12	12MO-4	12	72,0	36,0	25,9	13/16
KBZ16	16MO-4	16	74,0	37,0	26,9	15/16
KBZ18	18MO-4	18	76,6	38,3	28,2	1-1/16

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

TRBZ Tube End Reducer

For fractional tube





PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		T_1 TURNED END TUBE O.D.	T_2 MACHINE END TUBE O.D.	A	C	D	K	W HEX	BORE
2-1 TRBZ	100-R-2	1/8	1/16	1.12	.43	.97	.44	5/16	.05
3-1 TRBZ	100-R-3	3/16	1/16	1.17	.43	1.02	.61	5/16	.05
4-1 TRBZ	100-R-4	1/4	1/16	1.27	.43	1.12	.64	7/16	.05
1-2 TRBZ	200-R-1	1/16	1/8	1.24	.60	.98	.44	7/16	.09
2-2 TRBZ	200-R-2	1/8	1/8	1.37	.60	1.11	.56	7/16	.07
3-2 TRBZ	200-R-3	3/16	1/8	1.42	.60	1.16	.61	7/16	.09
4-2 TRBZ	200-R-4	1/4	1/8	1.44	.60	1.18	.64	7/16	.09
5-2 TRBZ	200-R-5	5/16	1/8	1.49	.73	1.23	.68	7/16	.09
6-2 TRBZ	200-R-6	3/8	1/8	1.55	.60	1.29	.72	7/16	.09
8-2 TRBZ	200-R-8	1/2	1/8	1.82	.60	1.56	.98	9/16	.09
1-3 TRBZ	300-R-1	1/16	3/16	1.29	.64	1.02	.44	7/16	.13
2-3 TRBZ	300-R-2	1/8	3/16	1.41	.63	1.14	.56	7/16	.13
4-3 TRBZ	300-R-4	1/4	3/16	1.49	.63	1.22	.64	7/16	.13
5-3 TRBZ	300-R-5	5/16	3/16	1.53	.73	1.26	.68	7/16	.13
8-3 TRBZ	300-R-8	1/2	3/16	1.86	.87	1.59	.98	9/16	.13
1-4 TRBZ	400-R-1	1/16	1/4	1.35	.70	1.06	.44	1/2	.19
2-4 TRBZ	400-R-2	1/8	1/4	1.48	.70	1.19	.56	1/2	.19
3-4 TRBZ	400-R-3	3/16	1/4	1.52	.70	1.23	.61	1/2	.19
4-4 TRBZ	400-R-4	1/4	1/4	1.55	.70	1.26	.64	1/2	.19
5-4 TRBZ	400-R-5	5/16	1/4	1.59	.70	1.30	.68	1/2	.19
6-4 TRBZ	400-R-6	3/8	1/4	1.64	.70	1.35	.72	1/2	.19
8-4 TRBZ	400-R-8	1/2	1/4	1.91	.70	1.62	.98	9/16	.19
10-4 TRBZ	400-R-10	5/8	1/4	2.00	.70	1.71	1.03	11/16	.19
12-4 TRBZ	400-R-12	3/4	1/4	2.01	.70	1.72	1.03	13/16	.19
2-5 TRBZ	500-R-2	1/8	5/16	1.52	.73	1.23	.56	9/16	.25
3-5 TRBZ	500-R-3	3/16	5/16	1.57	.73	1.28	.61	9/16	.25
4-5 TRBZ	500-R-4	1/4	5/16	1.60	.73	1.31	.64	9/16	.25
6-5 TRBZ	500-R-6	3/8	5/16	1.68	.73	1.39	.72	9/16	.25
8-5 TRBZ	500-R-8	1/2	5/16	1.94	.73	1.65	.98	9/16	.25
10-5 TRBZ	500-R-10	5/8	5/16	2.03	.87	1.74	1.03	11/16	.25
12-5 TRBZ	500-R-12	3/4	5/16	2.04	.87	1.75	1.03	13/16	.25
2-6 TRBZ	600-R-2	1/8	3/8	1.57	.76	1.28	.56	5/8	.28
4-6 TRBZ	600-R-4	1/4	3/8	1.65	.76	1.36	.64	5/8	.28
5-6 TRBZ	600-R-5	5/16	3/8	1.69	.76	1.40	.68	5/8	.28
6-6 TRBZ	600-R-6	3/8	3/8	1.73	.76	1.44	.72	5/8	.28
8-6 TRBZ	600-R-8	1/2	3/8	1.99	.76	1.70	.98	5/8	.28
10-6 TRBZ	600-R-10	5/8	3/8	2.06	.76	1.77	1.03	11/16	.28
12-6 TRBZ	600-R-12	3/4	3/8	2.07	.76	1.78	1.03	13/16	.28
14-6 TRBZ	600-R-14	7/8	3/8	2.15	.87	1.86	1.08	15/16	.28
2-8 TRBZ	810-R-2	1/8	1/2	1.71	.87	1.31	.56	13/16	.41
3-8 TRBZ	810-R-3	3/16	1/2	1.76	.87	1.36	.61	13/16	.41
4-8 TRBZ	810-R-4	1/4	1/2	1.79	.87	1.39	.64	13/16	.41
5-8 TRBZ	810-R-5	5/16	1/2	1.83	.87	1.43	.68	13/16	.41
6-8 TRBZ	810-R-6	3/8	1/2	1.88	.87	1.48	.72	13/16	.41
8-8 TRBZ	810-R-8	1/2	1/2	2.13	.87	1.73	.98	13/16	.41
10-8 TRBZ	810-R-10	5/8	1/2	2.18	.87	1.78	1.03	13/16	.41
12-8 TRBZ	810-R-12	3/4	1/2	2.18	.87	1.78	1.03	13/16	.41
16-8 TRBZ	810-R-16	1	1/2	2.54	.87	2.14	1.39	1-1/16	.41
4-10 TRBZ	1010-R-4	1/4	5/8	1.88	.87	1.48	.64	15/16	.50
5-10 TRBZ	1010-R-5	5/16	5/8	1.92	.87	1.52	.68	15/16	.50
6-10 TRBZ	1010-R-6	3/8	5/8	1.96	.87	1.56	.72	15/16	.50
8-10 TRBZ	1010-R-8	1/2	5/8	2.16	.87	1.76	.98	15/16	.50
12-10 TRBZ	1010-R-12	3/4	5/8	2.21	.87	1.81	1.03	15/16	.50
14-10 TRBZ	1010-R-14	7/8	5/8	2.26	.87	1.86	1.08	15/16	.50
16-10 TRBZ	1010-R-16	1	5/8	2.40	.87	2.00	1.30	1-1/16	.50
4-12 TRBZ	1210-R-4	1/4	3/4	1.90	.87	1.50	.64	1-1/16	.63
5-12 TRBZ	1210-R-5	5/16	3/4	1.93	.87	1.53	.68	1-1/16	.63
6-12 TRBZ	1210-R-6	3/8	3/4	1.97	.87	1.57	.72	1-1/16	.63
8-12 TRBZ	1210-R-8	1/2	3/4	2.23	.87	1.83	.98	1-1/16	.63
10-12 TRBZ	1210-R-10	5/8	3/4	2.28	.87	1.88	1.03	1-1/16	.63
14-12 TRBZ	1210-R-14	7/8	3/4	2.33	.87	1.93	1.08	1-1/16	.63
16-12 TRBZ	1210-R-16	1	3/4	2.54	.87	2.14	1.39	1-1/16	.63
6-14 TRBZ	1410-R-6	3/8	7/8	2.03	.87	1.63	.72	1-3/16	.75
10-14 TRBZ	1410-R-10	5/8	7/8	2.34	.87	1.94	1.03	1-3/16	.75
12-14 TRBZ	1410-R-12	3/4	7/8	2.34	.87	1.94	1.03	1-3/16	.75
16-14 TRBZ	1410-R-16	1	7/8	2.60	1.05	2.20	1.30	1-3/16	.75
8-16 TRBZ	1610-R-8	1/2	1	2.50	1.05	2.01	.98	1--3/8	.38
10-16 TRBZ	1610-R-10	5/8	1	2.50	1.05	2.06	1.03	1-3/8	.50
12-16 TRBZ	1610-R-12	3/4	1	2.54	1.05	2.06	1.03	1-3/8	.88
14-16 TRBZ	1610-R-14	7/8	1	2.60	1.05	2.11	1.08	1-3/8	.88
24-16 TRBZ	1610-R-24	1-1/2	1	3.62	1.05	3.13	2.05	1-5/8	.88
16-20 TRBZ	2000-R-16	1	1-1/4	3.39	1.52	2.53	1.30	1-3/4	1.09
16-24 TRBZ	2400-R-16	1	1-1/2	3.75	1.05	2.69	1.30	2-1/8	1.34
24-20 TRBZ	2000-R-24	1-1/2	1-1/4	4.12	1.52	3.26	2.05	1-3/4	1.09
20-16 TRBZ	1610-R-20	1-1/4	1	3.18	1.52	2.69	1.71	1-3/8	.88
20-24 TRBZ	2400-R-20	1	1-1/2	4.17	1.77	3.11	1.30	2-1/8	1.34
32-24 TRBZ	2400-R-32	2	1-1/2	5.16	1.77	4.10	2.74	2-1/4	1.34
24-32 TRBZ	3200-R-24	1-1/2	2	5.46	2.47	3.99	2.05	2-3/4	1.81

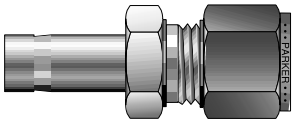
NOTE: A and C dimensions are typical finger-tight.

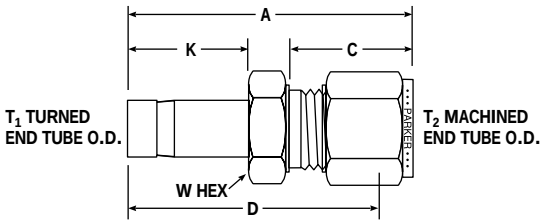
Dimensions for reference only, subject to change.

Size 4 and above tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.

*Size 1, 2, and 3 do not require a groove.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

TRBZ
Tube End Converter
For metric tube

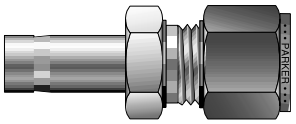


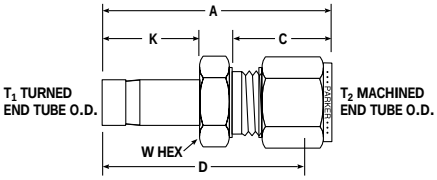


PARKER PART NO.	INTER-CHANGES WITH	TUBE O.D.		MILLIMETERS					
		T_1 INCH	T_2 MM	A	C	D	K	W A/F HEX	BORE
TRBZ3-2	3MO-R-2	1/8	3	34,3	15,3	27,7	13,5	12,0	1,4
TRBZ3-4	3MO-R-4	1/4	3	36,1	15,3	29,5	16,0	12,0	4,8
TRBZ6-4	6MO-R-4	1/4	6	39,3	17,7	31,8	16,0	14,0	4,8
TRBZ6-5	6MO-R-5	5/16	6	40,0	17,7	32,5	16,8	14,0	6,4
TRBZ6-6	6MO-R-6	3/8	6	40,8	17,7	33,3	17,5	14,0	7,1
TRBZ6-8	6MO-R-8	1/2	6	46,4	17,7	38,9	23,1	14,0	9,9
TRBZ8-6	8MO-R-6	3/8	8	42,0	18,6	34,5	17,5	15,0	7,1
TRBZ8-8	8MO-R-8	1/2	8	47,5	18,6	40,1	23,1	15,0	9,9
TRBZ10-6	10MO-R-6	3/8	10	44,4	19,5	36,8	17,5	18,0	7,1
TRBZ10-8	10MO-R-8	1/2	10	47,6	19,5	41,4	23,1	18,0	9,9
TRBZ12-8	12MO-R-8	1/2	12	52,3	22,0	42,2	23,1	22,0	9,9
TRBZ12-12	12MO-R-12	3/4	12	53,8	22,0	43,7	24,6	22,0	15,1
TRBZ18-12	18MO-R-12	3/4	18	57,5	22,0	47,5	24,6	27,0	15,1

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
Size 1, 2, and 3 do not require a groove.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

TRBZ
Tube End Reducer
For metric tube

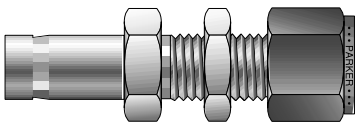


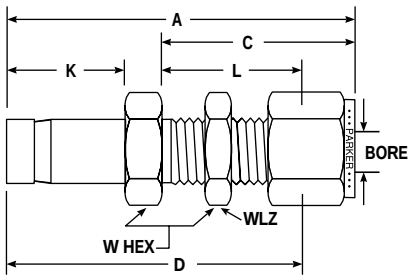


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS								
		TUBE O.D.								
		T_1	T_2	A	C	D	K	Q	W HEX	BORE
TRBZ 3-2	2MO-R-3M	3	2	34,3	15,3	27,7	13,5	0,6	14,0	1,4
TRBZ 3-6	6MO-R-3M	3	6	37,0	17,7	29,5	13,5	0,6	14,0	1,4
TRBZ 4-3	3MO-R-4M	4	3	35,0	15,3	28,4	14,3	1,0	12,0	2,0
TRBZ 6-3	3MO-R-6M	6	3	36,1	15,3	29,5	15,9	1,0	12,0	2,4
TRBZ 6-4	4MO-R-6M	6	4	37,1	16,1	30,5	15,9	1,0	12,0	3,0
TRBZ 6-8	8MO-R-6M	6	8	40,0	18,6	32,5	15,9	1,0	15,0	4,0
TRBZ 6-10	10MO-R-6M	6	10	41,7	19,5	34,1	15,9	1,0	18,0	4,0
TRBZ 6-12	12MO-R-6M	6	12	44,9	22,0	34,8	15,9	1,0	22,0	4,0
TRBZ 8-6	6MO-R-8M	8	6	40,0	17,7	32,5	16,7	0,8	14,0	4,8
TRBZ 8-10	10MO-R-8M	8	10	43,4	19,5	35,8	15,3	1,5	19,5	18,0
TRBZ 10-3	3MO-R-10M	10	3	38,6	15,3	32,0	17,7	2,0	15,3	12,0
TRBZ 10-6	6MO-R-10M	10	6	40,8	17,7	33,3	17,5	1,3	14,0	4,8
TRBZ 10-8	8MO-R-10M	10	8	42,0	18,6	34,5	17,5	1,3	15,0	6,4
TRBZ 10-12	12MO-R-10M	10	12	46,6	22,0	36,5	17,5	1,3	22,0	7,5
TRBZ 12-6	6MO-R-12M	12	6	46,4	17,7	38,9	23,0	1,4	14,0	4,8
TRBZ 12-8	8MO-R-12M	12	8	47,6	18,6	40,1	23,0	1,4	15,0	6,4
TRBZ 12-10	10MO-R-12M	12	10	49,7	19,5	42,1	23,0	1,4	18,0	7,9
TRBZ 12-16	16MO-R-12M	12	16	53,0	22,0	42,9	23,0	1,4	24,0	9,1
TRBZ 12-18	18MO-R-12M	12	18	54,6	22,0	44,5	23,0	1,4	27,0	9,1
TRBZ 15-10	10MO-R-15M	15	10	51,3	19,5	43,7	23,8	1,6	27,0	7,9
TRBZ 16-12	12MO-R-16M	16	12	53,8	22,0	43,7	24,6	1,7	22,0	9,5
TRBZ 16-18	18MO-R-16M	16	18	56,1	22,0	46,0	24,6	1,7	27,0	12,7
TRBZ 16-20	20MO-R-16M	16	20	57,9	22,0	47,8	24,6	1,7	27,0	12,7
TRBZ 16-25	25MO-R-16M	16	25	63,2	26,5	51,0	24,8	2,0	26,5	35,0
TRBZ 20-12	12MO-R-20M	20	12	56,1	22,0	46,0	25,4	2,5	22,0	9,5
TRBZ 20-16	16MO-R-20M	20	16	55,3	22,0	45,2	25,6	2,5	22,0	24,0
TRBZ 20-18	18MO-R-20M	20	18	57,6	22,0	47,5	25,4	2,5	27,0	15,1
TRBZ 20-25	25MO-R-20M	20	25	64,5	26,5	52,3	25,4	2,5	35,0	15,1
TRBZ 25-12	12MO-R-25M	25	12	60,9	22,0	50,8	31,8	2,6	27,0	9,5
TRBZ 25-16	16MO-R-25M	25	16	64,0	22,0	51,8	32,0	3,0	22,0	27,0
TRBZ 25-18	18MO-R-25M	25	18	62,5	22,0	52,4	31,8	2,6	27,0	15,1
TRBZ 25-20	20MO-R-25M	25	20	64,2	22,0	54,1	31,8	2,6	30,0	15,8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
Tube stub is pre-grooved as standard.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

T2H2B2
Tube End Bulkhead Adapter
For fractional tube

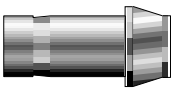


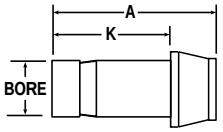


PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		TUBE O.D.	A	C	L	K	D	Bore	W HEX
2-2 T2H2BZ	200-R1-2	1/8	2.00	1.23	.97	.56	1.74	.093	1/2
4-4 T2H2BZ	400-R1-4	1/4	2.20	1.31	1.02	.64	1.91	.187	5/8
6-6T2H2BZ	600-R1-6	3/8	2.44	1.45	1.16	.72	2.15	.281	3/4
8-8 T2H2BZ	810-R1-8	1/2	2.95	1.65	1.25	.98	2.55	.406	15/16

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

ZPC
Port Connector
For fractional tube



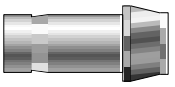


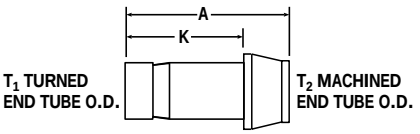
PARKER PART NO.	INTER-CHANGES WITH	INCHES			
		TUBE O.D.	A	K	BORE
1-1 ZPC	101-PC	1/16	.69	.44	.031
1-2 ZPC	201-PC-1	1/16-1/8	.91	.44	.031
1-4 ZPC	401-PC-1	1/16-1/4	.97	.44	.031
2-2 ZPC	201-PC	1/8	.97	.65	.078
2-4 ZPC	401-PC-2	1/8-1/4	1.08	.56	.078
2-6 ZPC	601-PC-2	1/8-3/8	1.11	.56	.031
3-3 ZPC	301-PC	3/16	1.02	.70	.116
4-4 ZPC	401-PC	1/4	1.07	.76	.156
4-6 ZPC	601-PC-4	1/4-3/8	1.15	.64	.156
4-8 ZPC	811-PC-4	1/4-1/2	1.36	.64	.156
5-5 ZPC	501-PC	5/16	1.12	.81	.219
6-6 ZPC	601-PC	3/8	1.16	.84	.281
6-8 ZPC	811-PC-6	3/8-1/2	1.40	.72	.281
8-8 ZPC	811-PC	1/2	1.59	1.11	.375
8-12 ZPC	1211-PC-8	1/2-3/4	1.72	.91	.375
10-10 ZPC	1011-PC	5/8	1.64	1.16	.469
12-12 ZPC	1211-PC	3/4	1.65	1.16	.578
16-16 ZPC	1611-PC	1	2.12	1.44	.813
20-20 ZPC	2011-PC	1-1/4	2.85	2.03	1.000

Dimensions for reference only, subject to change.

NOTE: Tube stub is pre-grooved as standard. (Size 1, 2, and 3 not grooved). Generic (non-grooved 4-16) can be ordered through Quick Response Department.
The machined ferrule end (T_2) requires only 1/4 turn from finger tight to assemble.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

ZPC
Port Connector
For metric tube



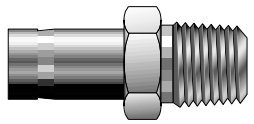


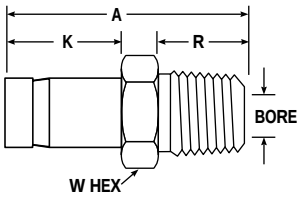
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS				
		TUBE O.D.		A	K	BORE
		T_1	T_2			
ZPC 3-3	3M1-PC	3	3	22,2	15,7	1,6
ZPC 6-6	6M1-PC	6	6	24,6	18,7	3,0
ZPC 8-8	8M1-PC	8	8	25,9	20,0	5,0
ZPC 10-10	10M1-PC	10	10	26,1	20,2	6,0
ZPC 12-12	12M1-PC	12	12	35,8	26,0	8,0
ZPC 16-16	16M1-PC	16	16	40,5	27,7	12,0
ZPC 3-6	6M1-PC-3M	3	6	22,6	13,5	1,6
ZPC 6-8	8M1-PC-6M	6	8	25,5	16,1	3,0
ZPC 6-10	10M1-PC-6M	6	10	25,5	16,1	3,0
ZPC 6-12	12M1-PC-6M	6	12	31,2	16,1	3,0
ZPC 8-10	10M1-PC-8M	8	10	29,5	16,8	5,0
ZPC 8-12	12M1-PC-8M	8	12	31,4	16,8	5,0

Dimensions for reference only, subject to change.

NOTE: Tube stub is pre-grooved as standard. (Size M2, M3, and M4 not grooved).
The machined ferrule end (T_2) requires only 1/4 turn from finger tight to assemble.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

T2HF
NPT Tube End
Male Adapter
For fractional tube



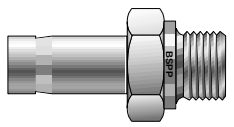


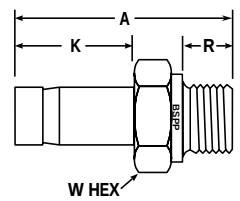
PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	NPT PIPE THREAD	A	R	K	W HEX	BORE
1-2 T2HF	1-TA-1-1	1/16	1/8	1.06	.38	.44	7/16	.031
2-2 T2HF	2-TA-1-2	1/8	1/8	1.19	.38	.56	7/16	.078
2-4 T2HF	2-TA-1-4	1/8	1/4	1.41	.56	.56	9/16	.078
3-2 T2HF	3-TA-1-2	3/16	1/8	1.23	.38	.61	7/16	.116
3-4 T2HF	3-TA-1-4	3/16	1/4	1.45	.56	.61	9/16	.116
4-2 T2HF	4-TA-1-2	1/4	1/8	1.25	.38	.64	7/16	.156
4-4 T2HF	4-TA-1-4	1/4	1/4	1.48	.56	.64	9/16	.156
4-6 T2HF	4-TA-1-6	1/4	3/8	1.50	.56	.64	11/16	.156
4-8 T2HF	4-TA-1-8	1/4	1/2	1.72	.75	.64	7/8	.156
5-2 T2HF	5-TA-1-2	5/16	1/8	1.30	.38	.68	7/16	.219
5-4 T2HF	5-TA-1-4	5/16	1/4	1.52	.56	.68	9/16	.219
5-6 T2HF	5-TA-1-6	5/16	3/8	1.56	.56	.68	11/16	.219
5-8 T2HF	5-TA-1-8	5/16	1/2	1.77	.75	.68	7/8	.219
6-2 T2HF	6-TA-1-2	3/8	1/8	1.34	.38	.72	7/16	.281
6-4 T2HF	6-TA-1-4	3/8	1/4	1.56	.56	.72	9/16	.281
6-6 T2HF	6-TA-1-6	3/8	3/8	1.60	.56	.72	11/16	.28
6-8 T2HF	6-TA-1-8	3/8	1/2	1.81	.75	.72	7/8	.281
8-4 T2HF	8-TA-1-4	1/2	1/4	1.83	.56	.98	9/16	.281
8-6 T2HF	8-TA-1-6	1/2	3/8	1.86	.56	.98	11/16	.375
8-8 T2HF	8-TA-1-8	1/2	1/2	2.08	.75	.98	7/8	.375
10-6 T2HF		5/8	3/8	1.91	.56	1.03	11/16	.375
10-8 T2HF	10-TA-1-8	5/8	1/2	2.13	.75	1.03	7/8	.469
10-12 T2HF		5/8	3/4	2.13	.75	1.03	1-1/16	.469
12-8 T2HF	12-TA-1-8	3/4	1/2	2.13	.75	1.03	7/8	.469
12-12 T2HF	12-TA-1-12	3/4	3/4	2.13	.75	1.03	1-1/16	.578
12-16 T2HF	12-TA-1-16	3/4	1	2.41	.94	1.03	1-3/8	.813
16-12 T2HF	16-TA-1-12	1	3/4	2.39	.75	1.30	1-1/16	.813
16-16 T2HF	16-TA-1-16	1	1	2.68	.94	1.30	1-3/8	.813
20-20 T2HBF	20-TA-1-20	1-1/4	1-1/4	3.16	.97	1.71	1-3/4	1.00
24-24 T2HBF	24-TA-1-24	1-1/2	1-1/2	3.72	1.00	2.05	2-1/8	1.25
32-32 T2HBF	32-TA-1-32	2	2	4.70	1.04	2.74	2-3/4	1.72

Dimensions for reference only, subject to change.

NOTE: Add -Z6 for assembly of nuts and ferrules on the tube stub end.
Tube stub is pre-grooved as standard.
Generic (non-grooved) can be ordered through Quick Response Department.
Inch sizes 1, 2, and 3 and metric sizes 2, 3, and 4mm do not have grooves.

T2HF
BSPP Tube End
Male Adapter
For fractional tube



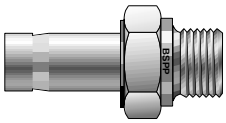


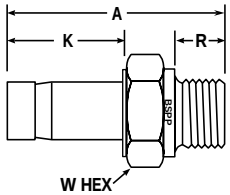
PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	BSPP THREAD	A	K	R	HEX	BORE
2-2R T2HF	2TA-1-2RS	1/8	1/8	1.12	.56	.28	9/16	.08
2-4R T2HF	2TA-1-4RS	1/8	1/4	1.39	.56	.44	3/4	.05
4-2R T2HF	4TA-1-2RS	1/4	1/8	1.22	.64	.28	9/16	.16
4-4R T2HF	4TA-1-4RS	1/4	1/4	1.48	.64	.44	3/4	.18
6-2R T2HF	6TA-1-2RS	3/8	1/8	1.30	.72	.28	3/4	.05
6-4R T2HF	6TA-1-4RS	3/8	1/4	1.56	.72	.44	3/4	.25
6-6R T2HF	6TA-1-6RS	3/8	3/8	1.59	.72	.44	7/8	.28
6-8R T2HF	6TA-1-8RS	3/8	1/2	1.84	.72	.56	1-1/8	.28
8-4R T2HF	8TA-1-4RS	1/2	1/4	1.81	.98	.44	3/4	.25
8-6R T2HF	8TA-1-6RS	1/2	3/8	1.85	.98	.44	7/8	.38
8-8R T2HF	8TA-1-8RS	1/2	1/2	2.10	.98	.56	1-1/8	.38
10-8R T2HF	10TA-1-8RS	5/8	1/2	2.15	1.03	.56	1-1/8	.38
12-12R T2HF	12TA-1-12RS	3/4	3/4	2.22	1.03	.63	1-3/8	.57
16-16R T2HF	16TA-1-16RS	1	1	2.40	1.30	.72	1-5/8	.88

Dimensions for reference only, subject to change.

NOTE: Add -Z6 for assembly of nuts and ferrules on the tube stub end.
Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
Bonded sealing washer must be used with this design.

T2HF
BSPP Tube End Male Adapter
For metric tube

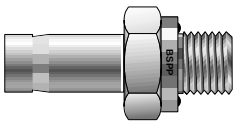


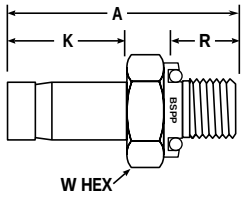


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS								
		TUBE O.D.	BSPP THREAD	A	K	Q	R	X	W HEX	BORE
T2HF 3-1/8R	3-MTA-1-2RS	3	1/8	29,6	13,5	0,6	7,1	13,7	14,0	1,8
T2HF 4-1/8R	4-MTA-1-2RS	4	1/8	31,8	14,3	1,0	7,1	13,7	14,0	2,0
T2HF 6-1/8R	6-MTA-1-2RS	6	1/8	33,3	15,9	1,0	7,1	13,7	14,0	4,0
T2HF 6-1/4R	6-MTA-1-4RS	6	1/4	38,1	15,9	1,0	11,2	17,8	19,0	4,0
T2HF 8-1/4R	8-MTA-1-4RS	8	1/4	38,9	16,7	0,8	11,2	17,8	19,0	6,4
T2HF 10-1/4R	10-MTA-1-4RS	10	1/4	39,7	17,5	1,3	11,2	17,8	19,0	6,4
T2HF 10-3/8R	10-MTA-1-6RS	10	3/8	38,9	17,5	1,3	11,2	21,8	22,0	7,5
T2HF 10-1/2R	10-MTA-1-8RS	10	1/2	42,9	17,5	1,3	14,2	25,7	27,0	7,5
T2HF 12-1/4R	12-MTA-1-4RS	12	1/4	43,7	23,0	1,4	11,2	17,8	19,0	6,4
T2HF 12-3/8R	12-MTA-1-6RS	12	3/8	44,5	23,0	1,4	11,2	21,8	22,0	7,9
T2HF 12-1/2R	12-MTA-1-8RS	12	1/2	49,2	23,0	1,4	14,2	25,7	27,0	9,1
T2HF 16-1/2R	16-MTA-1-8RS	16	1/2	50,8	24,6	1,7	14,2	25,7	27,0	11,9
T2HF 20-3/4R	20-MTA-1-12RS	20	3/4	54,0	25,4	2,5	16,0	31,8	33,0	15,1
T2HF 25-1R	25-MTA-1-16RS	25	1	65,1	31,8	2,6	18,3	38,6	41,0	19,8

NOTE: Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
Bonded sealing washer must be used with this design. Dimensions for reference only, subject to change.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

T2HF
BSPP Tube End Male Adapter with ED Seal
For fractional tube

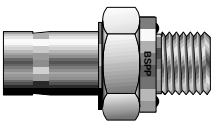


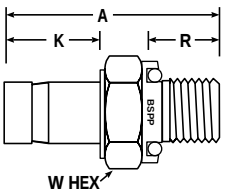


PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		TUBE O.D.	BSPP THREAD	A	K	R	X	W HEX	BORE
4-4 T2HF	–	1/4	1/4	1.50	.63	.47	.74	3/4	.18
4-6 T2HF	–	1/4	3/8	1.50	.63	.47	.86	3/4	.18
8-4 T2HF	–	1/2	1/4	1.75	.91	.47	.74	3/4	.25
8-6 T2HF	–	1/2	3/8	1.78	.91	.47	.86	7/8	.31
8-8 T2HF	–	1/2	1/2	1.94	.91	.55	1.04	1.1/16	.39

NOTE: Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
ED fitttings are supplied with sealing washers in Buna-N as standard, suitable for temperatures between –35°C and +100°C (–31°F to +212°F). Viton seals are available upon request which are suitable for temperatures between –25°C and +120°C (-13°F to +248°F). Dimensions for reference only, subject to change.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

T2HF
BSPP Tube End Male Adapter with ED Seal
For metric tube



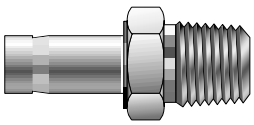


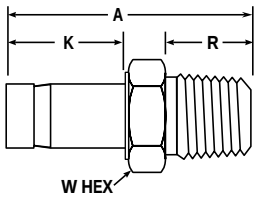
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						
		TUBE O.D.	BSPP THREAD	A	K	R	W HEX	BORE
T2HF 6-1	–	6	1/4	36,6	15,9	7,9	19,0	4,0
T2HF 6-1/2	–	6	1/2	42,7	15,9	14,0	27,0	4,0
T2HF 10-1/4	–	10	1/4	38,1	17,5	11,9	19,0	6,4
T2HF 10-1/2	–	10	1/2	44,2	17,5	14,0	27,0	7,5
T2HF 12-1/4	–	12	1/4	43,7	23,0	11,9	19,0	6,4
T2HF 12-3/8	–	12	3/8	45,0	23,0	11,9	22,0	7,9
T2HF 12-1/2	–	12	1/2	49,8	23,0	14,0	27,0	9,1

NOTE: Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
ED fittings are supplied with sealing washers in Buna-N as standard, suitable for temperatures between –35°C and +100°C (–31°F to +212°F). Viton seals are available upon request which are suitable for temperatures between –25°C and +120°C (13°F to +248°F).
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

Dimensions for reference only, subject to change.

T2HF
NPT Male Adapter
For metric tube



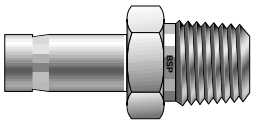


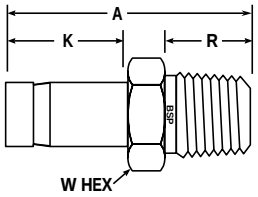
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						
		TUBE O.D.	NPT THREAD	A	K	R	W HEX	BORE
T2HF 3-1/8	3-MTA-1-2	3	1/8	30,4	15,0	9,7	12,0	1,8
T2HF 4-1/8	4-MTA-1-2	4	1/8	30,4	15,0	9,7	12,0	2,0
T2HF 6-1/8	6-MTA-1-2	6	1/8	33,2	17,9	9,7	12,0	4,0
T2HF 6-1/4	6-MTA-1-4	6	1/4	39,9	17,9	14,2	12,0	4,0
T2HF 6-3/8	6-MTA-1-6	6	3/8	40,8	17,9	14,2	18,0	3,0
T2HF 6-1/2	6-MTA-1-8	6	1/2	46,4	17,9	19,1	22,0	3,0
T2HF 8-1/4	8-MTA-1-4	8	1/4	38,4	17,7	14,2	14,0	6,4
T2HF 8-3/8	8-MTA-1-6	8	3/8	40,6	17,7	14,2	18,0	6,4
T2HF 10-1/4	10-MTA-1-4	10	1/4	43,2	21,0	14,2	14,0	7,5
T2HF 10-3/8	10-MTA-1-6	10	3/8	43,9	21,0	14,2	18,0	7,5
T2HF 10-1/2	10-MTA-1-8	10	1/2	49,5	21,0	19,1	22,0	7,5
T2HF 12-1/4	12-MTA-1-4	12	1/4	49,3	26,0	14,2	16,0	9,1
T2HF 12-3/8	12-MTA-1-6	12	3/8	50,0	26,0	14,2	18,0	9,1
T2HF 12-1/2	12-MTA-1-8	12	1/2	54,8	26,0	19,1	22,0	9,1
T2HF 16-1/2	16-MTA-1-8	16	1/2	52,4	26,2	19,1	22,0	12,7
T2HF 16-3/4	16-MTA-1-12	16	3/4	55,3	26,2	19,1	27,0	12,7
T2HF 20-1/2	20-MTA-1-8	20	1/2	54,1	26,6	19,1	22,0	15,0
T2HF 20-3/4	20-MTA-1-12	20	3/4	55,7	26,6	19,1	27,0	15,1
T2HF 25-1	25-MTA-1-16	25	1	69,2	32,9	23,9	35,0	19,8

NOTE: Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

Dimensions for reference only, subject to change.

T2HF
BSP Taper Male Adapter
For fractional tube



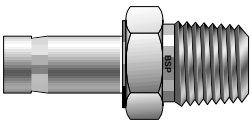


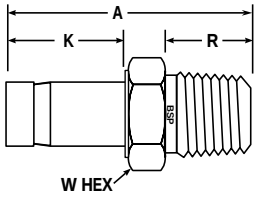
PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	BSPT THREAD	A	K	R	W HEX	BORE
4-2K T2HF	4-TA-1-2RT	1/4	1/8	1.27	.64	.38	7/16	.16
4-4K T2HF	4-TA-1-4RT	1/4	1/4	1.49	.64	.56	9/16	.16
4-6K T2HF	4-TA-1-6RT	1/4	3/8	1.44	.64	.56	11/16	.16
4-8K T2HF	4-TA-1-8RT	1/4	1/2	1.66	.64	.75	7/8	.22
5-2K T2HF	5-TA-1-2RT	5/16	1/8	1.31	.68	.38	7/16	.22
5-4K T2HF	5-TA-1-4RT	5/16	1/4	1.52	.68	.56	9/16	.22
6-4K T2HF	6-TA-1-4RT	3/8	1/4	1.57	.72	.56	9/16	.28
6-6K T2HF	6-TA-1-6RT	3/8	3/8	1.61	.72	.56	11/16	.28
6-8K T2HF	6-TA-1-8RT	3/8	1/2	1.82	.72	.75	7/8	.28
8-4K T2HF	8-TA-1-4RT	1/2	1/4	1.83	.98	.56	9/16	.38
8-6K T2HF	8-TA-1-6RT	1/2	3/8	1.87	.98	.56	11/16	.38
8-8K T2HF	8-TA-1-8RT	1/2	1/2	2.08	.98	.75	7/8	.38
10-8K T2HF	10-TA-1-8RT	5/8	1/2	2.14	1.03	.75	7/8	.47

NOTE: Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

Dimensions for reference only, subject to change.

T2HF
BSP Taper Male Adapter
For metric tube



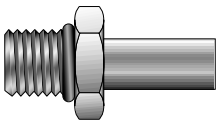


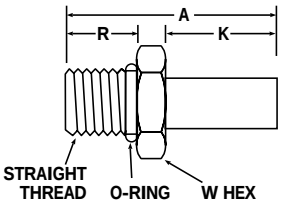
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						
		TUBE O.D.	BSPT THREAD	A	K	R	W HEX	BORE
T2HF 3-1/8K	3-MTA-1-2RT	3	1/8	30,4	15,0	9,7	12,0	1,8
T2HF 4-1/8K	4-MTA-1-2RT	4	1/8	30,4	15,0	9,7	12,0	2,0
T2HF 6-1/8K	6-MTA-1-2RT	6	1/8	33,2	17,9	9,7	12,0	4,0
T2HF 6-1/4K	6-MTA-1-4RT	6	1/4	39,9	17,9	14,2	12,0	4,0
T2HF 8-1/4K	8-MTA-1-4RT	8	1/4	38,4	17,7	14,2	14,0	6,4
T2HF 8-3/8K	8-MTA-1-6RT	8	3/8	40,6	17,7	14,2	18,0	5,0
T2HF 10-1/4K	10-MTA-1-4RT	10	1/4	43,2	21,0	14,2	14,0	7,1
T2HF 10-3/8K	10-MTA-1-6RT	10	3/8	43,9	21,0	14,2	18,0	7,5
T2HF 10-1/2K	10-MTA-1-8RT	10	1/2	49,5	21,0	19,1	22,0	7,5
T2HF 12-1/4K	12-MTA-1-4RT	12	1/4	49,3	26,0	14,2	16,0	7,1
T2HF 12-3/8K	12-MTA-1-6RT	12	3/8	50,0	26,0	14,2	18,0	9,1
T2HF 12-1/2	12-MTA-1-8RT	12	1/2	54,8	26,0	19,1	22,0	9,1
T2HF 16-1/2	16-MTA-1-8RT	16	1/2	52,4	26,2	19,1	22,0	12,7
T2HF 20-3/4K	20-MTA-1-12RT	20	3/4	55,7	26,6	19,1	27,0	15,1
T2HF 25-1K	25-MTA-1-16RT	25	1	69,2	32,9	23,9	35,0	19,8

NOTE: Tube stub is pre-grooved as standard. Sizes 3mm & 4mm do not have pre-groove.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

Dimensions for reference only, subject to change.

T2HOA
Tube End to SAE Straight Thread Adapter
For fractional tube

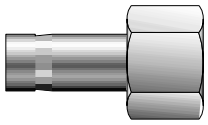


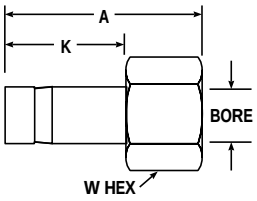


PARKER PART NO.	INCHES							O-RING APR UNIFORM DASH NO.
	INTER-CHANGES WITH	T TUBE O.D.	STRAIGHT THREAD SIZE	A	K	R	W HEX	
6-4 T2HOA	6-TA-1-4ST	3/8	7/16-20	1.46	.69	.36	9/16	3-904
6-8 T2HOA	6-TA-1-8ST	3/8	3/4-16	1.59	.69	.44	7/8	3-908
8-6 T2HOA	8-TA-1-6ST	1/2	9/16-18	1.74	.91	.39	11/16	3-906
10-10 T2HOA	10-TA-1-10ST	5/8	7/8-14	1.94	.91	.50	1	3-910
24-24 T2HOA*	24-TA-1-24ST	1-1/2	1-7/8-12	3.28	2.05	.59	2-1/8	3-924

NOTE: A dimension is typical finger-tight. Dimensions for reference only, subject to change.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.
* Size 20, 24, 32 are pre-assembled with nut and ferrule.

T2HG
NPT Tube End Female Adapter
For fractional tube



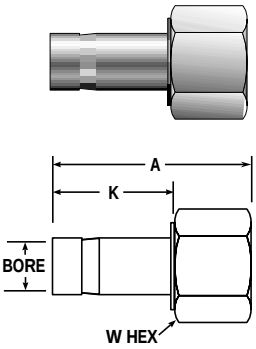


PARKER PART NO.	INTER-CHANGES WITH	INCHES					
		TUBE O.D.	NPT PIPE THREAD	A	K	W HEX	BORE
1-2 T2HG	1-TA-7-2	1/16	1/8	1.07	.44	9/16	.03
2-2 T2HG	2-TA-7-2	1/8	1/8	1.23	.56	9/16	.09
2-4 T2HG	2-TA-7-4	1/8	1/4	1.41	.56	3/4	.09
3-2 T2HG	3-TA-7-2	3/16	1/8	1.28	.61	9/16	.12
3-4 T2HG	3-TA-7-4	3/16	1/4	1.45	.61	3/4	.12
4-2 T2HG	4-TA-7-2	1/4	1/8	1.31	.63	9/16	.19
4-4 T2HG	4-TA-7-4	1/4	1/4	1.48	.63	3/4	.19
4-6 T2HG	4-TA-7-6	1/4	3/8	1.50	.63	7/8	.19
4-8 T2HG	4-TA-7-8	1/4	1/2	1.80	.63	1-1/16	.19
5-2 T2HG	5-TA-7-2	5/16	1/8	1.54	.68	9/16	.22
5-4 T2HG	5-TA-7-4	5/16	1/4	1.52	.68	3/4	.22
5-6 T2HG	5-TA-7-6	5/16	3/8	1.59	.68	7/8	.22
5-8 T2HG	5-TA-7-8	3/16	1/2	1.84	.68	1-1/16	.22
6-2 T2HG	6-TA-7-2	3/8	1/8	1.36	.72	9/16	.28
6-4 T2HG	6-TA-7-4	3/8	1/4	1.55	.72	3/4	.28
6-6 T2HG	6-TA-7-6	3/8	3/8	1.59	.72	7/8	.28
6-8 T2HG	6-TA-7-8	3/8	1/2	1.84	.72	1-1/16	.28
8-4 T2HG	8-TA-7-4	1/2	1/4	1.83	.98	3/4	.39
8-6 T2HG	8-TA-7-6	1/2	3/8	1.89	.98	7/8	.39
8-8 T2HG	8-TA-7-8	1/2	1/2	2.14	.98	1-1/16	.39
10-6 T2HG	10-TA-7-6	5/8	3/8	1.94	1.03	7/8	.47
10-8 T2HG	10-TA-7-8	5/8	1/2	2.19	1.03	1-1/16	.47
10-12 T2HG	10-TA-7-12	3/8	3/4	2.22	1.03	1-1/4	.47
12-8 T2HG	12-TA-7-8	3/4	1/2	2.19	1.03	1-1/16	.58
12-12 T2HG	12-TA-7-12	3/4	3/4	2.22	1.03	1-1/4	.58
12-16 T2HG	12-TA-7-16	3/4	1	2.56	1.03	1-5/8	.58
14-12 T2HG	14-TA-7-12	7/8	3/4	2.27	1.08	1-1/4	.58
16-12 T2HG	16-TA-7-12	1	3/4	2.48	1.30	1-5/16	.81
16-16 T2HG	16-TA-7-16	1	1	2.83	1.30	1-5/8	.81
20-20 T2HG	20-TA-7-20	1-1/4	1-1/4	3.06	1.71	2-1/8	1.00
24-24 T2HG	24-TA-7-24	1-1/2	1-1/2	3.50	2.05	2-3/8	1.25
32-32 T2HG	32-TA-7-32	2	2	4.23	2.74	2-7/8	1.72

NOTE: Tube stub is pre-grooved as standard. Sizes 1, 2 & 3 do not have pre-groove.
Generic (non-grooved) can be ordered through Quick Response Department.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.
Dimensions for reference only, subject to change.

T2HG NPT Tube End Female Adapter

For metric tube

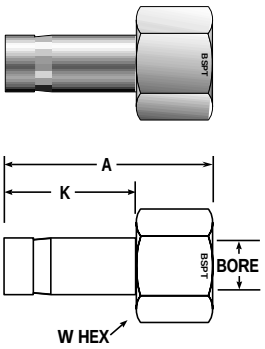


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS					
		TUBE O.D.	NPT THREAD	A	K	W HEX	BORE
T2HG 3-1/8	3-MTA-7-2	3	1/8	31,3	13,5	14,0	1,3
T2HG 4-1/8	4-MTA-7-2	4	1/8	29,4	14,3	14,0	2,0
T2HG 4-1/4							
T2HG 6-1/8	6-MTA-7-2	6	1/8	29,4	15,9	14,0	4,0
T2HG 6-1/4	6-MTA-7-4	6	1/4	34,1	15,9	19,0	4,0
T2HG 8-1/8	8-MTA-7-2	8	1/8	35,5	16,7	14,0	6,4
T2HG 8-1/4	8-MTA-7-4	8	1/4	35,1	16,7	19,0	6,4
T2HG 8-3/8	8-MTA-7-6	8	3/8	36,5	16,7	22,0	6,4
T2HG 10-1/4	10-MTA-7-4	10	1/4	37,3	17,5	19,0	7,5
T2HG 10-3/8	10-MTA-7-6	10	3/8	37,3	17,5	22,0	7,5
T2HG 10-1/2	10-MTA-7-8	10	1/2	42,1	17,5	27,0	7,5
T2HG 12-1/4	12-MTA-7-4	12	1/4	41,3	23,0	19,0	9,1
T2HG 12-3/8	12-MTA-7-6	12	3/8	42,9	23,0	22,0	9,1
T2HG 12-1/2	12-MTA-7-8	12	1/2	47,6	23,0	27,0	9,1
T2HG 16-1/2	16-MTA-7-8	16	1/2	49,2	24,6	27,0	12,7
T2HG 18-3/4	18-MTA-7-12	18	3/4	52,4	24,6	33,0	14,0
T2HG 20-1/2	20-MTA-7-8	20	1/2	50,0	25,6	27,0	15,0
T2HG 20-3/4	20-MTA-7-12	20	3/4	53,2	25,4	33,0	15,1
T2HG 25-1	25-MTA-7-16	25	1	66,7	31,8	41,0	19,8

NOTE: Tube stub is pre-grooved as standard. Dimensions for reference only, subject to change.
Generic (non-grooved) can be ordered through Quick Response Department.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

T2HG BSP Taper Female Adapter

For fractional tube

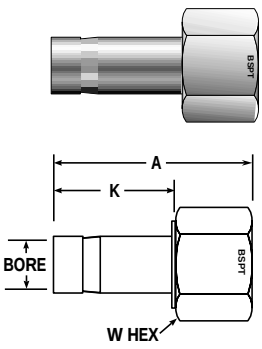


PARKER PART NO.	INTER-CHANGES WITH	INCHES					
		TUBE O.D.	BSPT THREAD	A	K	W HEX	BORE
4-2K T2HG	4-TR-7-2RT	1/4	1/8-28	1.31	.64	9/16	.156
4-4K T2HG	4-TR-7-4RT	1/4	1/4-19	1.48	.64	3/4	.156
6-4K T2HG	6-TR-7-4RT	3/8	1/4-19	1.56	.72	3/4	.281
6-6K T2HG	6-TR-7-6RT	3/8	3/8-19	1.63	.72	7/8	.281
8-4K T2HG	8-TR-7-4RT	1/2	1/4-19	1.83	.98	3/4	.375
8-6K T2HG	8-TR-7-6RT	1/2	3/8-19	1.89	.98	7/8	.375
8-8K T2HG	8-TR-7-8RT	1/2	1/2-14	2.14	.98	1-1/16	.375

NOTE: Tube stub is pre-grooved as standard. Dimensions for reference only, subject to change.
Generic (non-grooved) can be ordered through Quick Response Department.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

T2HG BSP Taper Female Adapter

For metric tube

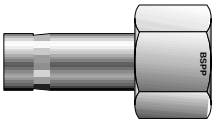


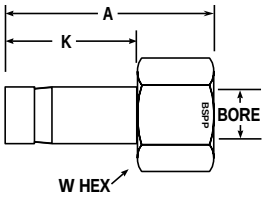
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS					
		TUBE O.D.	BSPT THREAD	A	K	W HEX	BORE
T2HG 3-1/8K	3-MTA-7-2RT	3	1/8	27,8	13,5	14,0	1,8
T2HG 4-1/8K	4-MTA-7-2RT	4	1/8	28,6	14,3	14,0	2,0
T2HG 6-1/8K	6-MTA-7-2RT	6	1/8	30,2	15,9	14,0	4,0
T2HG 8-1/4K	8-MTA-7-4RT	8	1/4	39,1	16,7	19,0	6,4
T2HG 10-1/4K	10-MTA-7-4RT	10	1/4	36,5	17,5	19,0	7,5
T2HG 10-3/8K	10-MTA-7-6RT	10	3/8	31,8	17,5	22,0	7,5
T2HG 10-1/2K	10-MTA-7-8RT	10	1/2	41,3	17,5	27,0	7,5
T2HG 12-1/4K	12-MTA-7-4RT	12	1/4	40,5	23,0	19,0	9,1
T2HG 12-3/8K	12-MTA-7-6RT	12	3/8	43,7	23,0	22,0	9,1
T2HG 12-1/2K	12-MTA-7-8RT	12	1/2	46,8	23,0	27,0	9,1
T2HG 16-1/2K	16-MTA-7-8RT	16	1/2	48,4	24,6	27,0	12,7
T2HG 18-3/4K	18-MTA-7-12RT	18	3/4	51,6	24,6	32,0	14,0
T2HG 20-3/4K	20-MTA-7-12RT	20	3/4	52,4	25,4	32,0	15,1
T2HG 25-1K	25-MTA-7-16RT	25	1	66,7	31,8	41,0	19,8

NOTE: Tube stub is pre-grooved as standard. Dimensions for reference only, subject to change.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

T2HG BSPP Female Adapter

For fractional tube



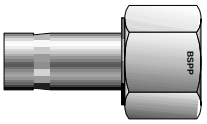


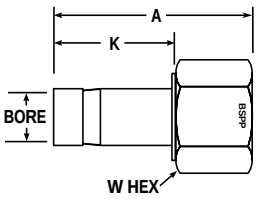
PARKER PART NO.	INTER-CHANGES WITH	INCHES					
		TUBE O.D.	BSPP THREAD	A	K	W HEX	BORE
4-4R T2HG	4-TA-7-4RP	1/4	1/4	1.47	.63	3/4	.18
6-6R T2HG	6-TA-7-6RP	3/8	3/8	1.53	.69	7/8	.28
8-8R T2HG	8-TA-7-8RP	1/2	1/2	1.91	.91	1-1/16	.39

NOTE: Copper washer must be used for this design. Dimensions for reference only, subject to change.
Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

T2HG BSPP Female Adapter

For metric tube



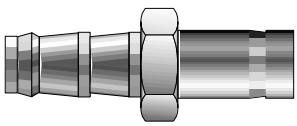


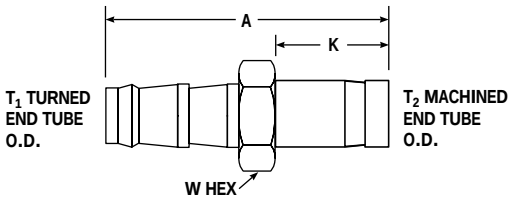
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS					
		TUBE O.D.	BSPP THREAD	A	K	W HEX	BORE
T2HG 3-1/8R	3-MTA-7-2RP	3	1/8	28,6	13,5	14,0	1,8
T2HG 3-1/4R	3-MTA-7-4RP	3	1/4	28,6	13,7	19,0	1,6
T2HG 4-1/8R	4-MTA-7-2RP	4	1/8	29,4	14,3	14,0	2,0
T2HG 6-1/8R	6-MTA-7-4RP	6	1/8	31,0	15,9	14,0	4,0
T2HG 6-1/4R	6-MTA-7-4RP	6	1/4	37,3	15,9	19,0	4,0
T2HG 8-1/4R	8-MTA-7-4RP	8	1/4	38,1	16,7	19,0	6,4
T2HG 10-1/4R	10-MTA-7-4RP	10	1/4	38,9	17,5	19,0	7,5
T2HG 10-1/2R	10-MTA-7-8RP	10	1/2	43,7	17,5	27,0	7,5
T2HG 12-3/8R	12-MTA-7-6RP	12	3/8	44,5	23,0	22,0	9,1
T2HG 12-1/2R	12-MTA-7-8RP	12	1/2	48,4	23,0	27,0	9,1
T2HG 16-1/2R	16-MTA-7-8RP	16	1/2	50,0	24,6	27,0	12,7
T2HG 18-3/4R	18-MTA-7-12RP	18	3/4	53,2	24,6	33,0	14,0
T2HG 20-3/4R	20-MTA-7-12RP	20	3/4	54,0	25,4	33,0	15,1
T2HG 25-1R	25-MTA-7-16RP	25	1	67,5	31,8	41,0	19,8

NOTE: Copper washer must be used for this design. Dimensions for reference only, subject to change.
Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

P2T2 Push-Lok to Tube Adapter

For fractional tube

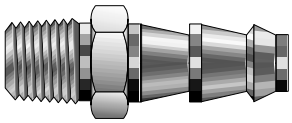


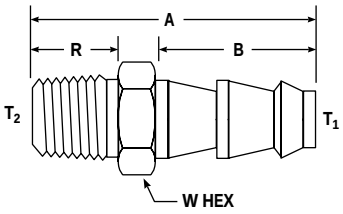


PARKER PART NO.	INTER-CHANGES WITH	INCHES				
		T_1 TUBE O.D.	T_2 HOSE SIZE	A	K	W HEX
4-4 P2T2	PB4-TA4	1/4	–4	1.80	.64	7/16
6-6 P2T2	PB6-TA6	3/8	–6	2.02	.72	9/16
8-8 P2T2	PB8-TA8	1/2	–8	2.42	.98	11/16

NOTE: Drawing does not show Push-Lok collar. Dimensions for reference only, subject to change.
Tube stub is pre-grooved as standard. Generic (non-grooved) can be ordered through Quick Response Department.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

P2HF
Push-Lok to Male Adapter
For fractional tube

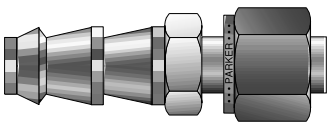


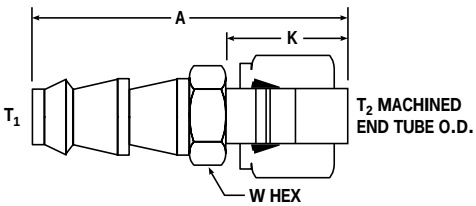


PARKER PART NO.	INTER-CHANGES WITH	INCHES					
		T_2 NPT PIPE THREAD	T_1 HOSE SIZE	A	B	R	W HEX
4-4 P2HF	PB4-PM4	1/4	1/4	1.65	.80	.56	9/16
6-6 P2HF	PB6-PM6	3/8	3/8	1.828	.95	.56	11/16
8-8 P2HF	PB8-PM8	1/2	1/2	2.194	1.10	.75	7/8

NOTE: Drawing does not show Push-Lok collar. Dimensions for reference only, subject to change.

P2BZ6
Push-Lok to CPI™
For fractional tube

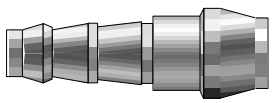


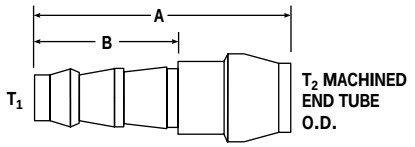


PARKER PART NO.	INTER-CHANGES WITH	INCHES				
		T_2 TUBE O.D.	T_1 HOSE SIZE	A	K	W HEX
4-4 P2BZ6	PB4-TA4	1/4	–4	1.77	.72	7/16
6-6 P2BZ6	PB6-TA6	3/8	–6	1.98	.78	9/16
8-8 P2BZ6	PB8-TA8	1/2	–8	2.42	1.03	11/16

NOTE: A dimension is typical finger-tight. Dimensions for reference only, subject to change.
Drawing does not show Push-Lok collar. Assembly includes nut and ferrules.

ZP2
Push-Lok to Port Connector
For fractional tube



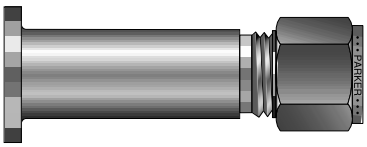


PARKER PART NO.	INCHES			
	T_1 HOSE SIZE	T_2 PORT SIZE	A	B
4-6 ZP2	–4	3/8	1.40	.80

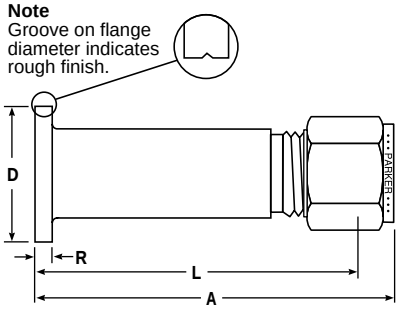
Dimensions for reference only, subject to change.

NOTE: Drawing does not show Push-Lok collar and size 6 CPI™ nut.

LJFBZ
Lapped Joint Tube Adapters
For metric tube



Note
Groove on flange diameter indicates rough finish.



PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS						
		TUBE O.D.	FLANGE SIZE	A	D	L	R	SURFACE FINISH
LJFBZ10-5	10M0-1-0005	10	DN15(½"NB)	83,0	34,5	75,5	6,5	Smooth 3,2-6,3 Ra
LJFBZ10-9	10M0-1-0006	10	DN15(½"NB)	83,0	34,5	75,5	6,5	Rough 6,3-12,5 Ra
LJFBZ12-5	–	12	DN15(½"NB)	85,0	34,5	75,4	6,5	Smooth 3,2-6,3 Ra
LJFBZ12-9	–	12	DN15(½"NB)	85,0	34,5	75,4	6,5	Rough 6,3-12,5 Ra

NOTE: Groove on flange diameter indicates rough finish. Dimensions for reference only, subject to change.

The lapped joint tube adaptor is a fitting designed to be used with a lap joint flange which enables a direct hook-up to the instrument tube from the process line.

The compression fitting is incorporated into the body of the adaptor thus the number of components needed for hook-up is reduced. It is therefore cost efficient as well as space saving.

The face of the fitting forms the gasket face of the flange and comes with either a smooth or serrated surface finish.

Adapters to suit other tube and flange sizes may be furnished upon request.

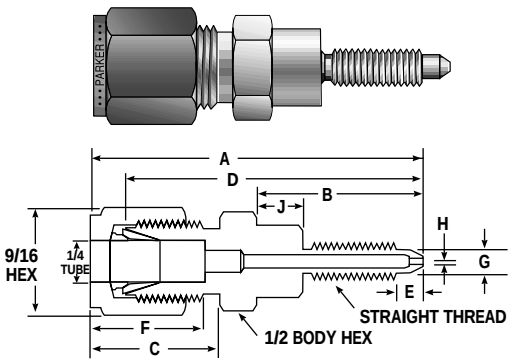
ZH2BX
DP Transmitter Calibration Adapters
For fractional tube

Parker CPI™ adapters connect directly to the bleed port of a differential pressure transmitter so that the calibration process can be simplified. Two sizes of adapters (1/4-28 Thd., 5/16-24 Thd.) are available to fit the vent ports of Rosemount, Honeywell, and Foxboro DP transmitters. Both adapters are available in 316SS.

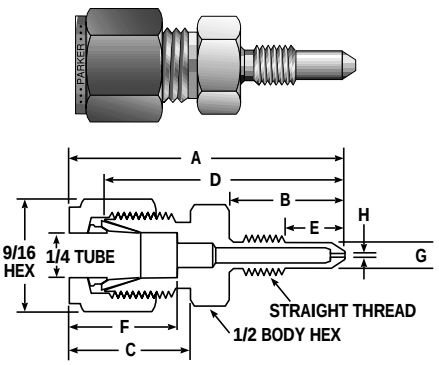
TRANSMITTER TYPE	PARKER PART NO.	INTERCHANGES WITH
Rosemount/Foxboro	4-2 ZH2BX-SS-D950373	SS-400-1-0253
Honeywell	4-2 ZH2BX-SS-D940336	SS-400-1-0257

STRAIGHT THREAD	INCHES									
	A	B	C	D	E	F	G	H	J	HEX
1/4-28	1.75	.80	.70	1.46	.47	.60	.20	.03	–	1/2
5/16-24	2.32	1.00	.70	2.03	.24	.60	.25	.06	.41	1/2

Dimensions for reference only, subject to change.

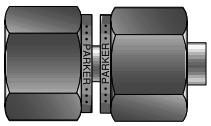


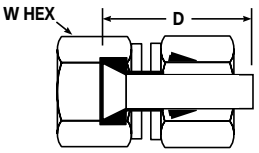
Calibration Adapter For Rosemount/Foxboro DP Transmitters



Calibration Adapter For Honeywell DP Transmitters

X6HBZ6
37° Flare (AN) to CPI™
For fractional tube

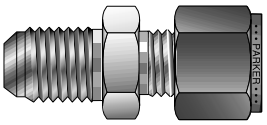


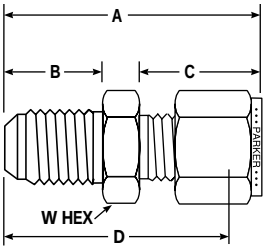


PARKER PART NO.	INTER-CHANGES WITH	INCHES		
		TUBE O.D.	D	W HEX
2-2 X6HBZ6	200-A-2 ANF	1/8	.88	3/8
4-4 X6HBZ6	400-A-4 ANF	1/4	.96	9/16
5-5 X6HBZ6	500-A-5-ANF	5/16	1.03	5/8
6-6 X6HBZ6	600-A-6 ANF	3/8	1.07	11/16
8-8 X6HBZ6	810-A-8 ANF	1/2	1.37	7/8
10-10 X6HBZ6	1010-A-10ANF	5/8	1.56	1
12-12 X6HBZ6	1210-A-12ANF	3/4	1.49	1-1/4
16-16 X6HBZ6	1610-A-16ANF	1	1.80	1-1/2

Dimensions for reference only, subject to change.

XHBZ
37° Flare Connector
For fractional tube

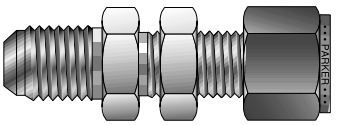


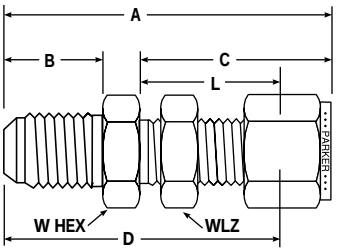


PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		FLARE END	TUBE O.D.	A	B	C	D	W HEX
2-1 XHBZ	100-6-2 AN	1/8	1/16	1.07	.45	.43	.92	7/16
2-2 XHBZ	200-6-2 AN	1/8	1/8	1.28	.45	.60	1.02	7/16
3-3 XHBZ	300-6-3 AN	3/16	3/16	1.32	.48	.64	1.06	7/16
4-2 XHBZ	200-6-4 AN	1/4	1/8	1.39	.55	.60	1.13	1/2
4-4 XHBZ	400-6-4 AN	1/4	1/4	1.48	.55	.70	1.19	1/2
4-6 XHBZ	600-6-4 AN	1/4	3/8	1.56	.55	.76	1.27	5/8
5-5 XHBZ	500-6-5 AN	5/16	5/16	1.52	.55	.73	1.22	9/16
6-6 XHBZ	600-6-6 AN	3/8	3/8	1.56	.56	.76	1.27	5/8
8-8 XHBZ	810-6-8 AN	1/2	1/2	1.81	.66	.87	1.41	13/16
10-10 XHBZ	1010-6-10 AN	5/8	5/8	1.93	.76	.87	1.53	15/16
12-12 XHBZ	1210-6-12 AN	3/4	3/4	2.11	.86	.87	1.70	1-1/8
16-16 XHBZ	1610-6-16 AN	1	1	2.43	.91	1.05	1.94	1-3/8

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

XH2BZ
37° Flare Bulkhead Connector
For fractional tube





PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		FLARE END	TUBE O.D.	A	D	C	L	B	W HEX
2-2 XH2BZ	200-61-2 AN	1/8	1/8	1.91	1.65	1.23	.97	.45	1/2
3-3 XH2BZ	300-61-3 AN	3/16	3/16	1.98	1.71	1.26	1.00	.48	9/16
4-2 XH2BZ	200-61-4 AN	1/4	1/8	2.04	1.78	1.23	.97	.55	5/8
4-4 XH2BZ	400-61-4 AN	1/4	1/4	2.12	1.83	1.31	1.02	.55	5/8
4-6 XH2BZ	600-61-4 AN	1/4	3/8	2.25	1.96	1.44	1.15	.55	3/4
5-5 XH2BZ	500-61-5 AN	5/16	5/16	2.21	1.92	1.41	1.12	.55	11/16
6-6 XH2BZ	600-61-6 AN	3/8	3/8	2.25	1.96	1.44	1.15	.56	3/4
8-8 XH2BZ	810-61-8 AN	1/2	1/2	2.59	2.19	1.65	1.25	.66	15/16
10-10 XH2BZ	1010-61-10 AN	5/8	5/8	2.74	2.34	1.68	1.28	.76	1-1/16
12-12 XH2BZ	1210-61-12 AN	3/4	3/4	3.11	2.71	1.87	1.47	.86	1-3/16
16-16 XH2BZ	1610-61-16 AN	1	1	3.65	3.16	2.27	1.78	.91	1-9/16

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
For bulkhead hole drill size and maximum bulkhead thickness, see Page 28, Part WBZ

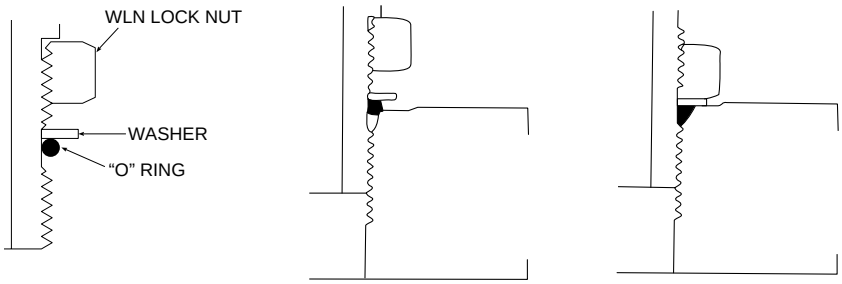
Introduction

BSPP / SAE Straight Thread Fittings Installation Procedure

1. Lubricate “O” ring with a lubricant that is compatible with the system.
2. Screw fitting into the straight thread port until the metal back-up washer contacts the face of the port.
3. Position the fitting by backing it out *no more than one turn.*
4. Hold the fitting in position and tighten the locknut until the washer contacts the face of the port. (See torque chart.)

NOTE: WLN Lock Nuts are ordered separately by size and part number. Refer to page 73.

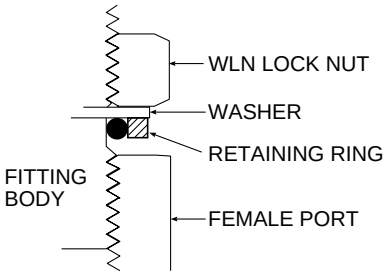
SAE



Size	Straight Port		Adjustable Port	
	Torque (in-lbs)	(F.F.F.T.)	Torque (in-lbs)	(F.F.F.T)
4	245 ± 10	1.0 ± .25	200 ± 10	1.5 ± 25
6	630 ± 25	1.5 ± .25	400 ± 10	1.5 ± 25
8	1150 ± 50	1.5 ± .25	640 ± 10	1.5 ± 25
10	1550 ± 50	1.5 ± .25	1125 ± 50	1.5 ± 25
12	2050 ± 50	1.5 ± .25	1450 ± 50	1.5 ± 25
16	3000 ± 50	1.5 ± .25	2150 ± 50	1.5 ± 25
20	3400 ± 100	1.5 ± .25	2800 ± 100	2.0 ± 25
24	4500 ± 100	1.5 ± .25	3450 ± 100	2.0 ± 25

NOTES
- Restrain fitting body on adjustables if necessary in installation.
- Values in charts are for assemblies with O-ring lubricated.
- Use upper limits of torque ranges for stainless steel fittings.

BSPP



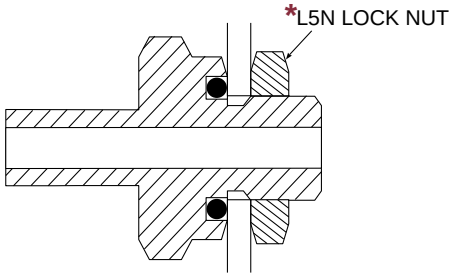
Face Seal “O” Ring Fittings Installation Procedure

The “O” ring requires a smooth, flat seating surface.This surface must be perpendicular to the axis of the threads.

1. Turn the “O” ring seal fitting in the port until finger tight.
2. The “squeezing” effect on the “O” ring can be felt during the last 1/4 turn.
3. Snug lightly with a wrench.

*Typical Application

The fitting can be adapted as a bulkhead fitting on thin wall tanks or vessels, eliminating welding, brazing or threading. Simply order the L5N locknut to take advantage of this option.



PORT SIZE	STRAIGHT THREAD MACHINE LENGTH	L5N LOCKNUT THICKNESS	MAXIMUM TANK WALL THICKNESS
2	.297	.219	.078 = 5/64
3	.297	.219	.078 = 5/64
4	.360	.250	.109 = 7/65
5	.360	.250	.109 = 7/64
6	.391	.265	.125 = 1/8
8	.438	.312	.125 = 1/8
10	.500	.360	.140 = 9/64
12	.594	.406	.188 = 3/16
14	.594	.406	.188 = 3/16
16	.594	.406	.188 = 3/16

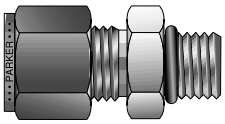
Notes

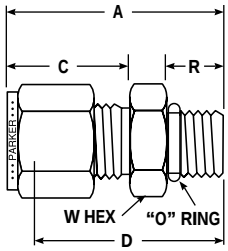
Standard “O” rings are Buna-N material. For other “O” rings, state material after the part number.

L5N locknuts are ordered separately by size and part number. Refer to page 73.

O-rings used with SAE/MS straight threads are Buna-N. Other O-ring materials are available on request. Lubricate O-ring with a lubricant compatible with the system fluid, environment and O-ring material.

ZHBA
Male Connector to SAE Straight Thread
For fractional tube

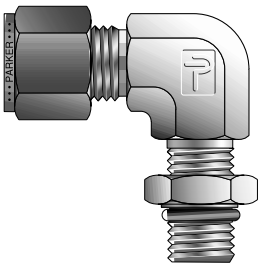


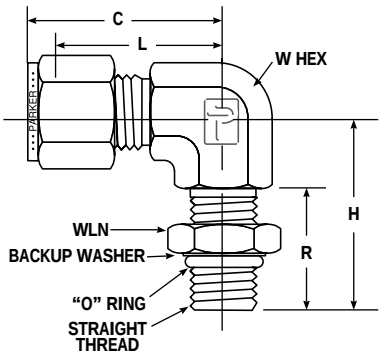


PARKER PART NO.	INTER-CHANGES WITH	INCHES							O-RING AS UNIFORM DASH NO.
		TUBE O.D.	STRAIGHT THREAD SIZE	A	C	D	R	W HEX	
1-2 ZHBA	100-1-2 ST	1/16	5/16-24	.92	.43	.77	.30	7/16	3-902
2-2 ZHBA	200-1-2 ST	1/8	5/16-24	1.18	.60	.92	.30	7/16	3-902
2-6 ZHBA	200-1-6 ST	1/8	9/16-18	1.35	.60	1.06	.39	11/16	3-906
3-3 ZHBA	300-1-3 ST	3/16	3/8-24	1.20	.64	.94	.30	1/2	3-903
4-4 ZHBA	400-1-4 ST	1/4	7/16-20	1.34	.70	1.05	.36	9/16	3-904
4-6 ZHBA	400-1-6 ST	1/4	9/16-18	1.40	.70	1.11	.39	11/16	3-906
4-8 ZHBA	400-1-8 ST	1/4	3/4-16	1.48	.70	1.19	.44	7/8	3-908
4-10 ZHBA	400-1-10 ST	1/4	7/8-14	1.60	.70	1.31	.50	1	3-910
5-5 ZHBA	500-1-5 ST	5/16	1/2-20	1.37	.73	1.08	.36	5/8	3-905
6-4 ZHBA	600-1-4 ST	3/8	7/16-20	1.40	.76	1.11	.36	5/8	3-904
6-6 ZHBA	600-1-6 ST	3/8	9/16-18	1.46	.76	1.17	.39	11/16	3-906
6-8 ZHBA	600-1-8 ST	3/8	3/4-16	1.54	.76	1.25	.44	7/8	3-908
6-10 ZHBA	600-1-10 ST	3/8	7/8-14	1.67	.76	1.38	.50	1.00	3-910
8-6 ZHBA	810-1-6 ST	1/2	9/16-18	1.54	.87	1.14	.39	7/8	3-906
8-8 ZHBA	810-1-8 ST	1/2	3/4-16	1.65	.87	1.25	.44	7/8	3-908
8-12 ZHBA	810-1-12 ST	1/2	1-1/16-12	1.93	.87	1.53	.59	1-1/4	3-912
10-10 ZHBA	1010-1-10 ST	5/8	7/8-14	1.78	.87	1.38	.50	1	3-910
12-10 ZHBA	1210-1-10 ST	3/4	7/8-14	1.68	.87	1.28	.50	1-1/8	3-910
12-12 ZHBA	1210-1-12 ST	3/4	1-1/16-12	1.93	.87	1.53	.59	1-1/4	3-912
14-14 ZHBA	1410-1-14 ST	7/8	1-3/16-12	1.93	.87	1.53	.59	1-3/8	3-914
16-12 ZHBA	1610-1-12 ST	1	1-1/16-12	2.12	1.05	1.63	.59	1-3/8	3-912
16-16 ZHBA	1610-1-16 ST	1	1-5/16-12	2.15	1.04	1.66	.59	1-1/2	3-916
20-20 ZHBA	2010-1-20 ST	1-1/4	1-5/8-12	2.59	1.52	1.82	.59	1-7/8	3-920
24-24 ZHBA	2410-1-24 ST	1-1/2	1-7/8-12	3.05	1.77	1.99	.59	2-1/8	3-924
32-32 ZHBA	3210-1-32 ST	2	2-1/2-12	4.00	2.47	2.53	.59	2-3/4	3-932

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
For use with SAE J.1926/1 port can also be used with MS-16142 port.

C5BZ
Male SAE Straight Thread Elbow
For fractional tube

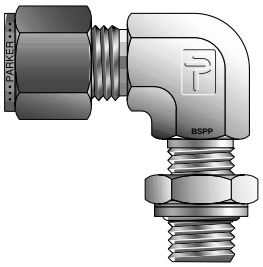


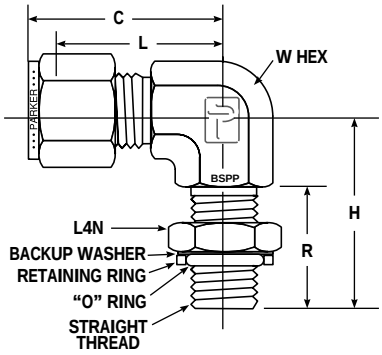


PARKER PART NO.	INTER-CHANGES WITH	INCHES							O-RING ARP UNIFORM DASH NO.
		TUBE O.D.	STRAIGHT THREAD SIZE	C	H	L	R	W HEX	
4-4 C5BZ	400-2-4ST	1/4	7/16-20	1.12	1.13	.83	.83	1/2	3-904
6-6 C5BZ	600-2-6ST	3/8	9/16-18	1.26	1.27	.97	.84	9/16	3-906
8-8 C5BZ	810-2-8ST	1/2	3/4-16	1.48	1.48	1.08	.97	3/4	3-908
12-12 C5BZ	1210-2-12ST	3/4	1-1/16-12	1.63	1.92	1.23	1.28	1-1/16	3-912
16-16 C5BZ	1610-2-16ST	1	1-5/16-12	1.87	2.11	1.38	1.28	1-5/16	3-916
24-24 C5BZ	2410-2-24ST	1-1/2	1-7/8-12		2.33	2.00	1.16	1-7/8	3-924

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

C5BZ
BSPP Male Elbow (Positionable)
For fractional tube

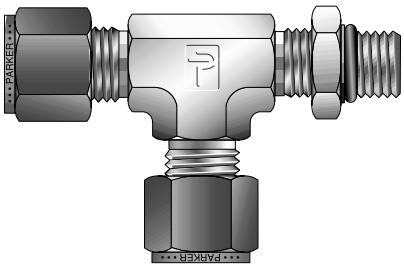


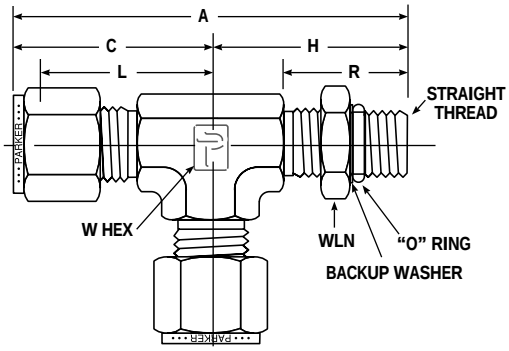


PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	BSPP THREAD	C	H	L	R	W HEX
4-2R C5BZ	400-2-2PR	1/4	1/8-28	1.14	1.25	.85	.81	9/16
4-4R C5BZ	400-2-4PR	1/4	1/4-19	1.31	1.27	.85	.83	9/16
6-4R C5BZ	600-2-4PR	3/8	1/4-19	1.31	1.27	1.02	.83	9/16
6-6R C5BZ	600-2-6PR	3/8	3/8-19	1.50	1.46	1.02	.83	3/4
8-4R C5BZ	810-2-4PR	1/2	1/4-19	1.50	1.38	1.10	.83	7/8
8-6R C5BZ	810-2-6PR	1/2	3/8-19	1.48	1.46	1.10	.85	7/8
8-8R C5BZ	810-2-8PR	1/2	1/2-14	1.50	1.70	1.10	1.09	7/8
10-8R C5BZ	1010-2-8PR	5/8	1/2-14	1.50	1.81	1.10	1.09	1-1/16
12-8R C5BZ	1210-2-8PR	3/4	1/2-14	1.57	1.81	1.17	1.09	1-1/16
12-12R C5BZ	1210-2-12PR	3/4	3/4-14	1.57	1.92	1.17	1.20	1-1/16
16-12R C5BZ	1610-2-12PR	1	3/4-14	1.94	2.11	1.45	1.20	1-5/16
16-16R C5BZ	1610-2-16PR	1	1-11	1.94	2.11	1.45	1.20	1-5/16

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.
Connects fractional tube to female ISO parallel thread.

R5BZ
Male Run Tee SAE Straight Thread
For fractional tube



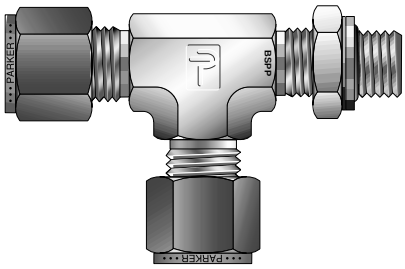


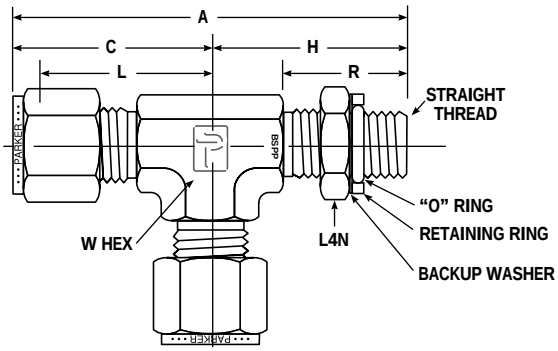
PARKER PART NO.	INTER-CHANGES WITH	INCHES								O-RING ARP UNIFORM DASH NO.
		TUBE O.D.	STRAIGHT THREAD SIZE	A	C	H	L	R	W HEX	
4-4-4 R5BZ	400-3TST	1/4	7/16-20	2.25	1.12	1.13	.83	.83	7/16	3-904
6-6-6 R5BZ	600-3TST	3/8	9/16-18	2.53	1.26	1.27	.97	.84	9/16	3-906
8-8-8 R5BZ	810-3TST	1/2	3/4-16	3.59	1.48	1.48	1.08	.97	3/4	3-908
12-12-12 R5BZ	1210-3TST	3/4	1-1/16-12	3.55	1.63	1.92	1.23	1.28	1-1/16	3-912
16-16-16 R5BZ	1610-3TST	1	1-5/16-12	3.98	1.87	2.11	1.38	1.28	1-5/16	3-916

NOTE: A and C dimensions are typical finger-tight.

Dimensions for reference only, subject to change.

R5BZ
BSPP Male Run Tee (Positionable)
For fractional tube



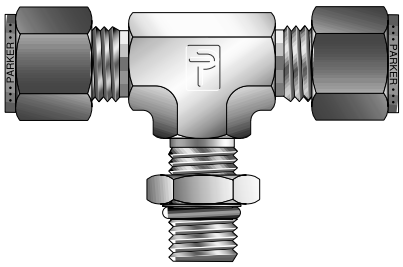


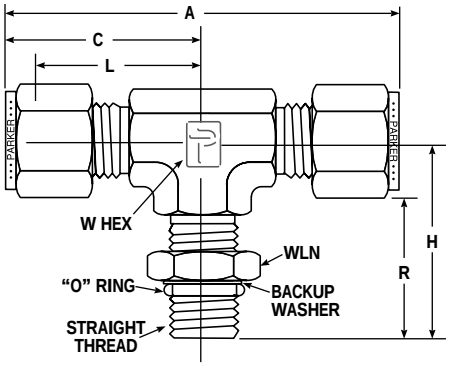
PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	BSPP THREAD	C	H	L	R	W HEX
4-2R-4 R5BZ	400-3TRT	1/4	1/8-28	1.14	1.25	.85	.81	9/16
4-4R-4 R5BZ	400-3-4TRT	1/4	1/4-19	1.14	1.28	.85	.83	9/16
6-4R-6 R5BZ	600-3TRT	3/8	1/4-19	1.31	1.27	1.02	.83	9/16
8-6R-8 R5BZ	810-3TRT	1/2	3/8-19	1.50	1.36	1.10	.85	7/8
8-8R-8 R5BZ	810-3-8TRT	1/2	1/2-14	1.50	1.71	1.10	1.09	7/8
10-8R-10 R5BZ	1010-3TRT	5/8	1/2-14	1.50	1.81	1.10	1.09	1-1/16
12-8R-12 R5BZ	1210-3-8TRT	3/4	1/2-14	1.567	1.81	1.17	1.09	1-1/16
12-12R-12 R5BZ	1210-3TRT	3/4	3/4-14	1.57	1.92	1.17	1.20	1-1/16
16-16R-16 R5BZ	1610-3TRT	1	1-11	1.94	2.11	1.45	1.20	1-5/16

NOTE: C dimension is typical finger-tight.

Dimensions for reference only, subject to change.

S5BZ
Male Branch Tee
SAE Straight Thread
For fractional tube

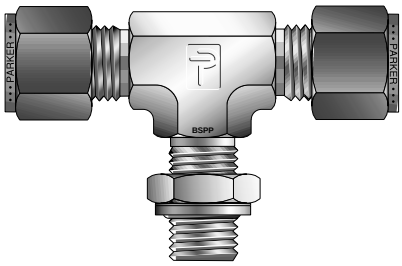


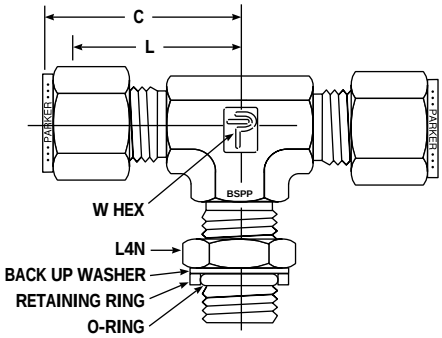


PARKER PART NO.	INTER-CHANGES WITH	INCHES								O-RING ARP UNIFORM DASH NO.
		TUBE O.D.	STRAIGHT THREAD SIZE	A	C	H	L	R	W HEX	
4-4 S5BZ	400-3TTS	1/4	7/16-20	2.24	1.12	1.13	.83	.83	7/16	3-904
6-6 S5BZ	600-3TTS	3/8	9/16-18	2.52	1.26	1.27	.97	.84	9/16	3-906
8-8 S5BZ	810-3TTS	1/2	3/4-16	2.96	1.48	1.48	1.08	.97	3/4	3-908
12-12 S5BZ	1210-3TTS	3/4	1-1/16-12	3.26	1.63	1.92	1.23	1.28	1-1/16	3-912
16-16 S5BZ	1610-3TTS	1	1-5/16-12	3.74	1.87	2.11	1.38	1.28	1-5/16	3-916

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

S5BZ
BSPP Male Branch Tee (Positionable)
For fractional tube

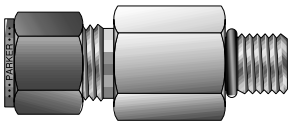


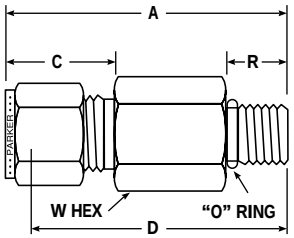


PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	BSPP THREAD	C	H	L	R	W HEX
4-4-2R S5BZ	400-3TTR	1/4	1/8-28	1.14	1.25	.85	.81	9/16
4-4-4R S5BZ	400-3-4TTR	1/4	1/4-19	1.14	1.27	.85	.83	9/16
6-6-4R S5BZ	600-3TTR	3/8	1/4-19	1.31	1.27	1.02	.83	9/16
8-8-6R S5BZ	810-3TTR	1/2	3/8-19	1.50	1.36	1.10	.85	7/8
8-8-8R S5BZ	810-3-8TTR	1/2	1/2-14	1.50	1.71	1.10	1.09	7/8
10-10-8R S5BZ	1010-3TTR	5/8	1/2-14	1.50	1.81	1.10	1.09	1-1/16
12-12-8R S5BZ	1210-3-8TTR	3/4	1/2-14	1.57	1.81	1.17	1.09	1-1/16
12-12-12R S5BZ	1210-3-TTR	3/4	3/4-14	1.57	1.92	1.17	1.20	1-1/16
16-16-16R S5BZ	1610-3TTR	1	1-11	1.94	2.11	1.45	1.20	1-5/16

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.
Connects fractional tube to female ISO parallel thread.

ZH3BA
Long Male Connector
SAE/MS Straight Thread
For fractional tube

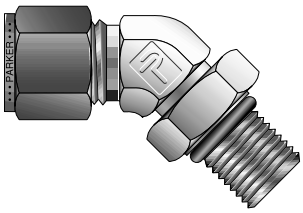


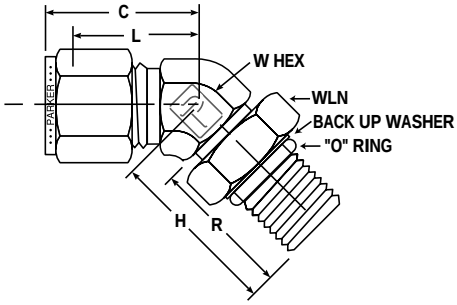


PARKER PART NO.	INTERCHANGES WITH	INCHES								ST O-RING UNIFORM SIZE NO.
		T TUBE O.D.	S-SAE/MS THREAD SIZE	A	R	C	D	E MIN. OPENING	W HEX	
4-4 ZH3BA	400-1L-4ST	1/4	7/16-20	2.26	.36	.70	1.97	.19	9/16	-904
6-6 ZH3BA	600-1L-6ST	3/8	9/16-18	2.48	.39	.76	2.19	.28	11/16	-906
8-8 ZH3BA	810-1L-8ST	1/2	3/4-16	3.01	.44	.86	2.58	.41	7/8	-908
12-12 ZH3BA	1210-1L-12ST	3/4	1-1/16-12	3.88	.59	.86	3.48	.62	1-1/4	-912
16-16 ZH3BA	1610-1L-16ST	1	1-5/16-12	4.34	.59	1.04	3.86	.88	1-1/2	-916

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

V5BZ
45° Positionable Male Elbow
SAE/MS Straight Thread
For fractional tube

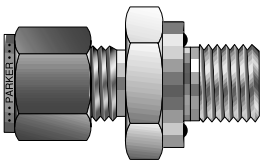


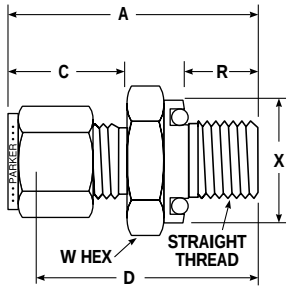


PARKER PART NO.	INTERCHANGES WITH	INCHES							O-RING UNIFORM SIZE NUMBER
		TUBE O.D.	STRAIGHT THREAD SIZE	C	H	L	R	W HEX	
4-4 V5BZ	400-5-4ST	1/4	7/16-20	.93	1.02	.65	.75	7/16	3-904
6-6 V5BZ	600-5-6ST	3/8	9/16-18	1.01	1.27	.72	.77	9/16	3-906
8-8 V5BZ	810-5-8ST	1/2	3/4-16	1.15	1.48	.75	.88	3/4	3-908
12-12 V5BZ	1210-5-12ST	3/4	1-1/16-12	1.63	1.92	1.23	1.16	1-1/16	3-912
16-16 V5BZ	1610-5-16ST	1	1-5/16-12	1.87	2.11	1.39	1.16	1-5/16	3-916

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.
• Adapts to SAE J1926 straight thread boss and MS16142 boss.

ZHBA5
Male Connector to "O" Ring Straight Thread
For fractional tube

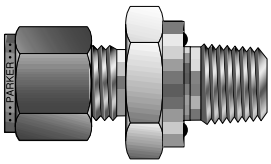


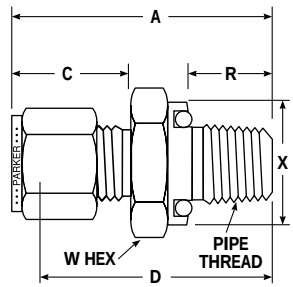


PARKER PART NO.	INTER-CHANGES WITH	INCHES								O-RING ARP UNIFORM DASH NO.
		TUBE O.D.	STRAIGHT THREAD SIZE	A	C	D	R	X DIA.	W HEX	
1-2 ZHBA5	100-1-OR	1/16	5/16-24	1.06	.43	.91	.34	.55	9/16	2-011
2-2 ZHBA5	200-1-OR	1/8	5/16-24	1.29	.60	1.03	.34	.55	9/16	2-011
3-3 ZHBA5	300-1-OR	3/16	3/8-24	1.35	.64	1.09	.38	.62	5/8	2-012
4-4 ZHBA5	400-1-OR	1/4	7/16-20	1.51	.70	1.22	.41	.74	3/4	2-111
5-5 ZHBA5	500-1-OR	5/16	1/2-20	1.61	.73	1.31	.44	.86	7/8	2-112
6-6 ZHBA5	600-1-OR	3/8	9/16-18	1.67	.76	1.38	.44	.93	15/16	2-113
8-8 ZHBA5	810-1-OR	1/2	3/4-16	1.81	.87	1.41	.47	1.12	1-1/8	2-116
10-10 ZHBA5	1010-1-OR	5/8	7/8-14	1.90	.87	1.50	.47	1.30	1-3/8	2-212
12-12 ZHBA5	1210-1-OR	3/4	1-1/16-12	2.06	.87	1.66	.56	1.49	1-1/2	2-215
14-12 ZHBA5	1410-1-OR	7/8	1-1/16-12	2.06	.87	1.66	.56	1.49	1-1/2	2-215
16-16 ZHBA5	1610-1-OR	1	1-5/16-12	2.30	1.05	1.81	.56	1.74	1-3/4	2-219

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

ZHBF5
Male Connector to "O" Ring Pipe Thread
For fractional tube

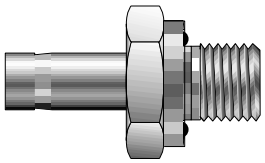


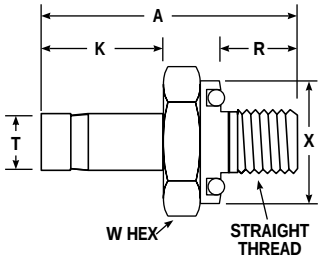


PARKER PART NO.	INTER-CHANGES WITH	INCHES								O-RING ARP UNIFORM DASH NO.
		TUBE O.D.	NPT PIPE THREAD	A	C	D	R	X DIA.	W HEX	
1-2 ZHBF5	100-1-2-OR	1/16	1/8	1.12	.43	.97	.28	.74	3/4	2-011
2-2 ZHBF5	200-1-2-OR	1/8	1/8	1.29	.60	1.03	.28	.74	3/4	2-011
2-4 ZHBF5	200-1-4-OR	1/8	1/4	1.43	.60	1.17	.38	.93	15/16	2-113
3-2 ZHBF5	300-1-2-OR	3/16	1/8	1.32	.64	1.06	.28	.74	3/4	2-011
3-4 ZHBF5	300-1-4-OR	3/16	1/4	1.46	.64	1.20	.38	.93	15/16	2-113
4-2 ZHBF5	400-1-2-OR	1/4	1/8	1.38	.70	1.09	.28	.74	3/4	2-011
4-4 ZHBF5	400-1-4-OR	1/4	1/4	1.51	.70	1.22	.38	.93	15/16	2-113
4-6 ZHBF5	400-1-6-OR	1/4	3/8	1.57	.70	1.28	.41	1.12	1-1/8	2-116
5-2 ZHBF5	500-1-2-OR	5/16	1/8	1.43	.73	1.13	.28	.74	3/4	2-011
5-4 ZHBF5	500-1-4-OR	5/16	1/4	1.46	.73	1.25	.38	.93	15/16	2-113
6-2 ZHBF5	600-1-2-OR	3/8	1/8	1.45	.76	1.16	.28	.74	3/4	2-011
6-4 ZHBF5	600-1-4-OR	3/8	1/4	1.57	.76	1.28	.38	.93	15/16	2-113
6-6 ZHBF5	600-1-6-OR	3/8	3/8	1.63	.76	1.34	.41	1.12	1-1/8	2-116
6-8 ZHBF5	600-1-8-OR	3/8	1/2	1.85	.76	1.56	.53	1.30	1-3/8	2-212
8-4 ZHBF5	810-1-4-OR	1/2	1/4	1.68	.87	1.28	.38	.93	15/16	2-113
8-6 ZHBF5	810-1-6-OR	1/2	3/8	1.76	.87	1.36	.41	1.12	1-1/8	2-116
8-8 ZHBF5	810-1-8-OR	1/2	1/2	1.98	.87	1.58	.53	1.30	1-3/8	2-212
10-8 ZHBF5	1010-1-8-OR	5/8	1/2	1.96	.87	1.56	.53	1.30	1-3/8	2-212
10-12 ZHBF5	1010-1-8-OR	5/8	3/4	2.06	.87	1.66	.56	1.49	1-1/2	2-215
12-8 ZHBF5	1210-1-8-OR	3/4	1/2	1.98	.87	1.58	.53	1.30	1-3/8	2-212
12-12 ZHBF5	1210-1-12-OR	3/4	3/4	2.06	.87	1.66	.56	1.49	1-1/2	2-215
16-12 ZHBF5	1610-1-12-OR	1	3/4	2.24	1.05	1.75	.56	1.49	1-1/2	2-215
16-16 ZHBF5	1610-1-16-OR	1	1	2.40	1.05	1.91	.66	1.74	1-3/4	2-219

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

T2HOA5
Tube End to “O” Ring Straight Thread
For fractional tube



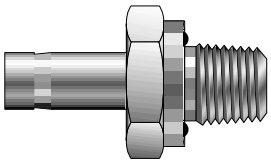


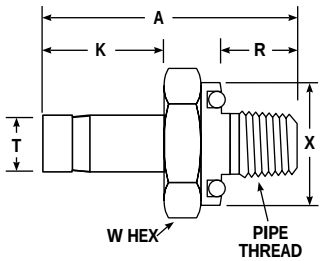
PARKER PART NO.	INTER-CHANGES WITH	INCHES							O-RING ARP UNIFORM DASH NO.
		T TUBE O.D.	STRAIGHT THREAD SIZE	A	K	R	X DIA.	W HEX	
2-2 T2HOA5	2-TA-OR-ST	1/8	5/16-24	1.22	.53	.34	.55	9/16	2-011
3-3 T2HOA5	3-TA-OR-ST	3/16	3/8-24	1.38	.56	.38	.62	5/8	2-012
4-4 T2HOA5	4-TA-OR-ST	1/4	7/16-20	1.55	.63	.41	.74	3/4	2-111
5-5 T2HOA5	5-TA-OR-ST	5/16	1/2-20	1.64	.66	.44	.86	7/8	2-112
6-6 T2HOA5	6-TA-OR-ST	3/8	9/16-18	1.70	.69	.47	.93	15/16	2-113
8-8 T2HOA5	8-TA-OR-ST	1/2	3/4-16	1.95	.91	.47	1.12	1-1/8	2-116
10-10 T2HOA5	10-TA-OR-ST	5/8	7/8-14	2.12	.97	.47	1.30	1-3/8	2-212
12-12 T2HOA5	12-TA-OR-ST	3/4	1-1/16-12	2.16	.97	.56	1.49	1-1/2	2-215
16-16 T2HOA5	16-TA-OR-ST	1	1-5/16-12	2.47	1.22	.56	1.74	1-3/4	2-219

NOTE: Add -Z6 for assembly of nuts and ferrules on the tube stub end.

Dimensions for reference only, subject to change.

T2HOF5
Tube End to “O” Ring Pipe Thread
For fractional tube



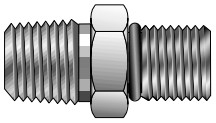


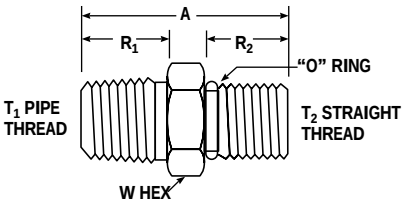
PARKER PART NO.	INTER-CHANGES WITH	INCHES							O-RING ARP UNIFORM DASH NO.
		T TUBE O.D.	NPT PIPE THREAD	A	K	R	X DIA.	W HEX	
1-2 T2HOF5	1-TA-1-20R	1/16	1/8	1.03	.34	.28	.74	3/4	2-111
4-2 T2HOF5	4-TA-1-2OR	1/4	1/8	1.31	.63	.28	.74	3/4	2-111
4-4 T2HOF5	4-TA-1-4OR	1/4	1/4	1.44	.63	.38	.93	15/16	2-113
4-6 T2HOF5	4-TA-1-6OR	1/4	3/8	1.50	.63	.41	1.12	1-1/8	2-116
5-2 T2HOF5	5-TA-1-2OR	5/16	1/8	1.34	.66	.28	.74	3/4	2-111
5-4 T2HOF5	5-TA-1-4OR	5/16	1/4	1.47	.66	.38	.93	15/16	2-113
6-2 T2HOF5	6-TA-1-2OR	3/8	1/8	1.38	.69	.28	.74	3/4	2-111
6-4 T2HOF5	6-TA-1-4OR	3/8	1/4	1.50	.69	.38	.93	15/16	2-113
6-6 T2HOF5	6-TA-1-6OR	3/8	3/8	1.59	.69	.41	1.12	1-1/8	2-116
8-6 T2HOF5	8-TA-1-6OR	1/2	3/8	1.78	.91	.41	1.12	1-1/8	2-116
10-8 T2HOF5	10-TA-1-8OR	5/8	1/2	2.14	.97	.53	1.30	1-3/8	2-212
12-12 T2HOF5	12-TA-1-12OR	3/4	3/4	2.16	.97	.56	1.49	1-1/2	2-215
16-16 T2HOF5	16-TA-1-16OR	1	1	2.56	1.22	.66	1.65	1-3/4	2-219

NOTE: Add -Z6 for assembly of nuts and ferrules on the tube stub end.

Dimensions for reference only, subject to change.

FHOA
Pipe Thread to SAE Straight Thread Adapter
For fractional tube



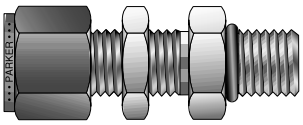


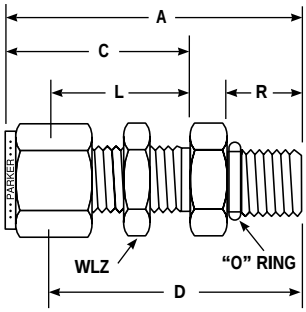
PARKER PART NO.	INTER-CHANGES WITH	INCHES						O-RING AS UNIFORM DASH NO.
		T_2 STRAIGHT THREAD	NPT T_1 PIPE THREAD	A	R_1	R_2	W HEX	
4-4 FHOA	4SAE-1-4	1/4-18	7/16-20	1.20	.56	.36	9/16	3-904
6-6 FHOA	6-SAE-1-6	3/8-18	9/16-18	1.26	.56	.39	11/16	3-906
8-8 FHOA	8-SAE-1-8	1/2-14	3/4- 16	1.53	.75	.44	7/8	3-908
12-12 FHOA	12-SAE-1-12	3/4-14	1-1/16-12	1.75	.75	.59	1-1/4	3-912
16-16 FHOA	16-SAE-1-16	1-11-1/2	1-5/16-12	2.00	.94	.59	1-1/2	3-916

NOTE: A and C dimensions are typical finger-tight.
For use with SAE J.1926/1 port can also be used with MS-16142 port.

Dimensions for reference only, subject to change.

AH2BZ
Bulkhead to SAE Conversion Adapter
For fractional tube





PARKER PART NO.	INTER-CHANGES WITH	INCHES									
		TUBE O.D.	STRAIGHT THREAD SIZE	A	C	D	R	L	W HEX	BULKHEAD HOLD DRILL SIZE	MAX. BULKHEAD THICKNESS
4-6 AH2BZ	400-61-6ST	1/4	9/16-18	1.74	1.17	1.45	.39	.88	3/4	37/64	9/16
6-6 AH2BZ	600-61-6ST	3/8	9/16-18	1.81	1.24	1.52	.39	.94	3/4	37/64	9/16

NOTE: A and C dimensions are typical finger-tight.
For use with SAE J.1926/1 port can also be used with MS-16142 port.

Dimensions for reference only, subject to change.

General

The weld used in joining a tube to a socket weld tube fitting is like any other type of “tee” weld. The root (i.e., the point of intersection of the outside of the tube and annular end area of the fitting) must be included in the weld zone.

Careful welding procedures are normally followed to assure that this root area is included in the weld. If penetration is not achieved, the joint will have two built-in stress risers which may greatly reduce the strength of the weld. Upon application of an extreme load, these stress risers could result in cracks which could propagate out through the weld or tube depending upon the direction of the greatest load.

Often to achieve full root penetration in TIG welding of stainless steels, a fusion pass will be made first, followed by a final pass utilizing a filler rod to achieve the desired fillet size.

Assembly

The codes applicable to the welding of socket weld fittings require that the tube be inserted into the socket until bottomed against the stop. The tube is then to be backed out approximately 1/16 of an inch and then welded.

If the tube is not backed out, but welded when against a flat bottom stop, the contraction of the weld fillet and fitting socket can combine to produce a static stress on the weld. During thermal transients, the fitting and the portion of the tube within the fitting may experience a differential rate of heating or cooling, again adding to the stress level in the weld.

Tacking

If the weld joint is to be “tacked” before welding, it is recommended that the “Tack” weld build-up be held to a minimum.

Excessive build-up on the “tack” may cause an interrupted final bead and a stress riser or lack of complete fusion.

Backing Gas

Backing gas is an inert gas used to flood the interior of the fittings and tube system during welding. It serves the same purpose internally as the shielding gas used in TIG or MIG welding. By reducing the interior oxygen level to as low as practicable, it also serves to control the combustion of contaminates that could affect weld quality.

When a backing gas is not used and nearly 100% weld penetration is achieved, blisters will tend to form on the internal tube wall. This will result in scale which may later break loose. Therefore, in 0.050 wall or thinner tube or where the wall thickness is such that the selected weld process may burn through, the use of a backing gas is mandatory.

In most cases the backing gas will be argon or helium connected to the system through a control regulator. Flow rates, while small, should be high enough to purge the system. Welds should be made in downstream sequence from the gas connection.

Note that the entire system should be purged to insure that there are no openings that will allow air to be drawn into the system.

The use of backing gas, while often not mandatory, will give a better weld joint. This is because the effects of contaminate combustion by-products are eliminated and because the welds are made and cooled under a shielded atmosphere, thus eliminating internal scaling or blistering.

Welding Methods
300 Series Stainless Steels

May be welded by the TIG, MIG, or stick arc-weld process.

TIG welding is recommended as being best for welding Weld-lok systems because it allows better operator control of heat penetration and filler material deposition.

Stick arc welding is not recommended in many cases because of the likelihood of excessive burn-through and improper root penetration. In all cases where stick welding is used, it is recommended that backing gas be used.

MIG welding gives the same characteristics as stick electrode welding with faster deposition of the filler material. As this process runs “hotter” than the stick process, the use of a backing gas is mandatory. It should be noted that in welding the relatively small fitting sizes found in the Weld-lok line, filler deposition rate economies are not a factor and therefore the MIG method is not commonly applied.

C1018 Steel Fittings

May be welded by the TIG, MIG, stick and oxyacetylene methods. As scale formation remains a problem, the use of a backing gas is still recommended.

Carbide Precipitation

When unstabilized stainless steels are heated to 800°–1500°F during welding, the chromium in the steel combines with the carbon to form chrome carbides which tend to form along the grain boundaries of the metal (carbide precipitation). This lowers the dissolved chromium content in these areas and thus lowers their corrosion resistance, making them vulnerable to intergranular corrosion. Carbide precipitation is reduced by holding the carbon content of the material to a very low value. This limits the amount of carbon available to combine with the chromium. The “L” series (extra low carbon) stainless steels are often used for this purpose, but their use reduces system design stress by approximately 15%. Parker Weld-lok fittings are made from a select 316 series with carbon content in the low range of 0.04 to 0.07 percent. This results in a welded fitting with good corrosion resistance and a high strength factor.

All Parker Weld-lok fittings in stainless steel are supplied in the solution treated condition, capable of passing ASTM-A-262 Tests for Detecting Susceptibility to Intergranular Corrosion.

Arc Polarity

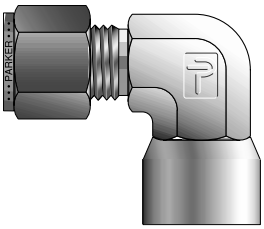
When welding Weld-lok fittings, best results will be obtained by the following arc polarities:

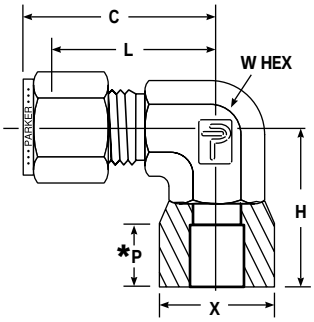
TIG – Direct Current, straight polarity
MIG – Direct Current, reverse polarity
STICK – Polarity dependent on rod used

For further information on Parker’s Welded Fittings refer to Parker’s Welded Fittings Catalog 4280 or contact Parker’s Instrumentation Connectors Division – Product Engineering at 256-881-2040.

ZEBW
Socket Weld Elbow
For fractional tube

• for CPI™ to tubing socket weld connection





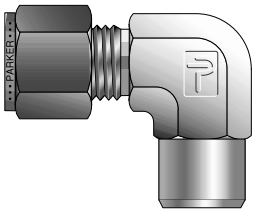
PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		TUBE O.D.	C	L	H	P*	X	W HEX
2-2 ZEBW	200-9-2 W	1/8	.92	.66	.63	.16	.38	5/16
3-3 ZEBW	300-9-3 W	3/16	.98	.72	.69	.20	.44	7/16
4-4 ZEBW	400-9-4 W	1/4	1.07	.78	.78	.25	.50	9/16
6-6 ZEBW	600-9-6 W	3/8	1.26	.97	.91	.34	.63	3/4
8-8 ZEBW	810-9-8 W	1/2	1.37	.97	1.03	.41	.76	3/4
10-10 ZEBW	1010-9-10 W	5/8	1.56	1.16	1.16	.49	.94	1-1/16
12-12 ZEBW	1210-9-12 W	3/4	1.56	1.16	1.31	.50	1.09	1-1/16
16-16 ZEBW	1610-9-16 W	1	1.94	1.45	1.47	.56	1.38	1-5/16

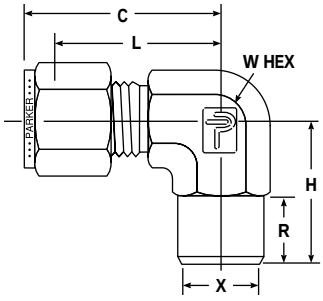
NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.

*Socket Depth

ZEBW2
Buttweld Elbow
For fractional pipe

• for CPI™ to pipe buttweld connection



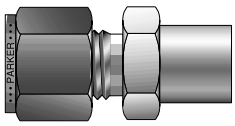


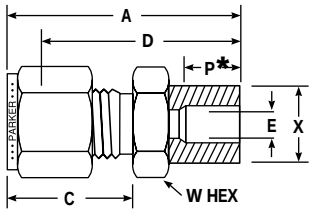
PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		TUBE O.D.	BUTTWELD PIPE SIZE	C	H	L	R	X BUTTWELD O.D.	W HEX
2-1/8 ZEBW2	200-2-2 W	1/8	1/8	.93	.70	.67	.38	.405	7/16
3-1/8 ZEBW2	300-2-2 W	3/16	1/8	1.01	.74	.74	.38	.405	1/2
4-1/8 ZEBW2	400-2-2 W	1/4	1/8	1.06	.74	.77	.38	.405	1/2
4-1/4 ZEBW2	400-2-4 W	1/4	1/4	1.10	.97	.81	.56	.540	9/16
6-1/4 ZEBW2	600-2-4 W	3/8	1/4	1.20	1.00	.91	.56	.540	9/16
8-3/8 ZEBW2	810-2-6 W	1/2	3/8	1.42	1.11	1.02	.56	.675	13/16
8-1/2 ZEBW2	810-2-8 W	1/2	1/2	1.42	1.30	1.02	.75	.840	7/8
10-1/2 ZEBW2	1010-2-8 W	5/8	1/2	1.41	1.39	1.01	.75	.840	15/16
12-3/4 ZEBW2	1210-2-12 W	3/4	3/4	1.57	1.45	1.17	.75	1.050	1-1/16
16-3/4 ZEBW2	1610-2-12 W	1	3/4	1.94	1.64	1.45	.75	1.050	1-3/8
16-1 ZEBW2	1610-2-16 W	1	1	1.94	1.83	1.45	.94	1.315	1-5/16

NOTE: C dimension is typical finger-tight. Dimensions for reference only, subject to change.
Pipe buttweld end will conform to Schedule 80 unless otherwise noted.

ZHBW
Socket Weld Connector
For fractional tube

• for CPI™ to tubing socket weld connection





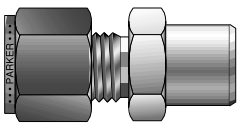
PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		TUBE O.D.	A	C	D	P*	X	E BORE	W HEX
2-2 ZHBW	200-6-2 W	1/8	1.14	.60	.88	.16	.38	.093	7/16
3-3 ZHBW	300-6-3 W	3/16	1.17	.64	.91	.20	.42	.125	7/16
4-4 ZHBW	400-6-4 W	1/4	1.32	.70	1.03	.25	.48	.187	1/2
6-6 ZHBW	600-6-6 W	3/8	1.48	.76	1.19	.34	.61	.281	5/8
8-8 ZHBW	810-6-8 W	1/2	1.62	.87	1.22	.41	.79	.406	13/16
10-10 ZHBW	1010-6-10 W	5/8	1.65	.87	1.25	.47	.92	.500	15/16
12-12 ZHBW	1210-6-12 W	3/4	1.71	.87	1.31	.50	1.11	.625	1-1/8
16-16 ZHBW	1610-6-16 W	1	2.08	1.05	1.59	.56	1.36	.875	1-3/8

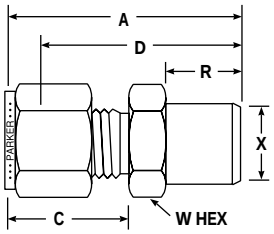
NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

*Socket Depth

ZHBW2
Buttweld Connector
For fractional pipe

• for CPI™ to pipe buttweld connection





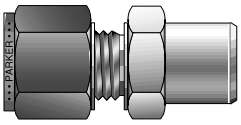
PARKER PART NO.	INTER-CHANGES WITH	INCHES							
		TUBE O.D.	BUTTWELD PIPE SIZE	A	C	D	R	X BUTTWELD O.D.	W HEX
ZHBW2 2-1/8	200-1-2 W	1/8	1/8	1.20	.60	.94	.38	.405	7/16
ZHBW2 3-1/8	300-1-2 W	3/16	1/8	1.24	.64	.97	.38	.405	7/16
ZHBW2 4-1/8	400-1-2 W	1/4	1/8	1.29	.70	1.00	.38	.405	1/2
ZHBW2 4-1/4	400-1-4 W	1/4	1/4	1.49	.70	1.20	.56	.540	9/16
ZHBW2 5-1/8	500-1-2 W	5/16	1/8	1.48	.73	1.22	.38	.405	1/2
ZHBW2 5-1/4	500-1-4-W	5/16	1/4	1.49	.73	1.23	.56	.540	9/16
ZHBW2 6-1/4	600-1-4 W	3/8	1/4	1.57	.76	1.28	.56	.540	5/8
ZHBW2 6-3/8	600-1-6 W	3/8	3/8	1.60	.76	1.31	.56	.675	3/4
ZHBW2 6-1/2	600-1-8 W	3/8	1/2	1.82	.76	1.53	.75	.840	7/8
ZHBW2 6-3/4	600-1-12 W	3/8	3/4	1.88	.76	1.59	.75	1.050	1-1/8
ZHBW2 8-3/8	810-1-6 W	1/2	3/8	1.71	.87	1.31	.56	.675	13/16
ZHBW2 8-1/2	810-1-8 W	1/2	1/2	1.93	.87	1.53	.75	.840	7/8
ZHBW2 8-3/4	810-1-12 W	1/2	3/4	1.99	.87	1.59	.75	1.050	1-1/8
ZHBW2 10-1/2	1010-1-8 W	5/8	1/2	1.93	.87	1.53	.75	.840	15/16
ZHBW2 12-3/4	1210-1-12 W	3/4	3/4	1.99	.87	1.59	.75	1.050	1-1/8
ZHBW2 16-1	1610-1-16 W	1	1	2.46	1.05	1.97	.94	1.310	1-3/8

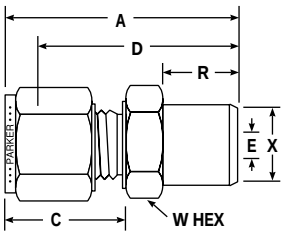
NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
Pipe Buttweld end will conform to Schedule 80 unless otherwise noted.

ZHBW2
Buttweld Connector

For metric tube

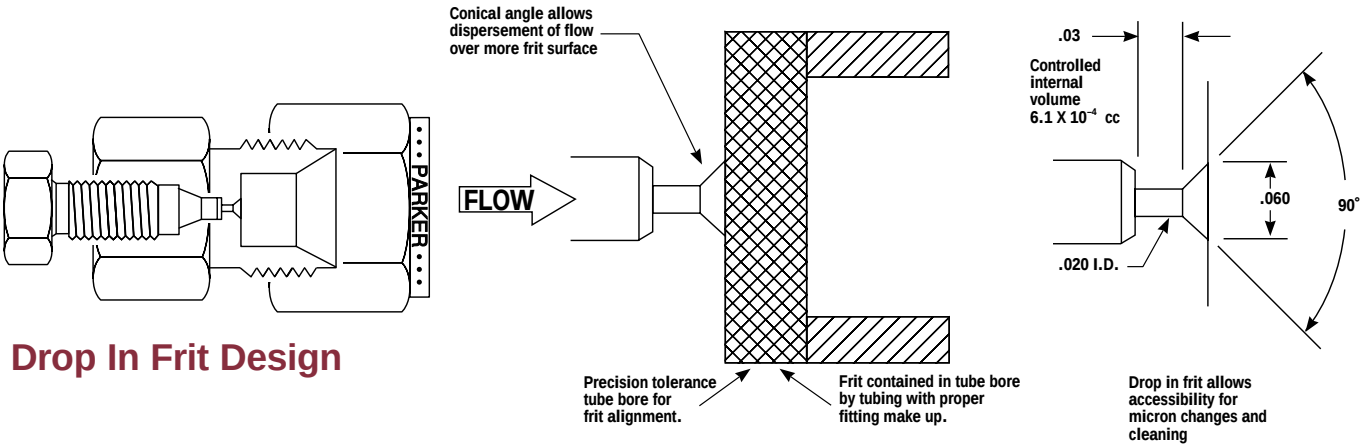
• for CPI™ metric to pipe buttweld connection



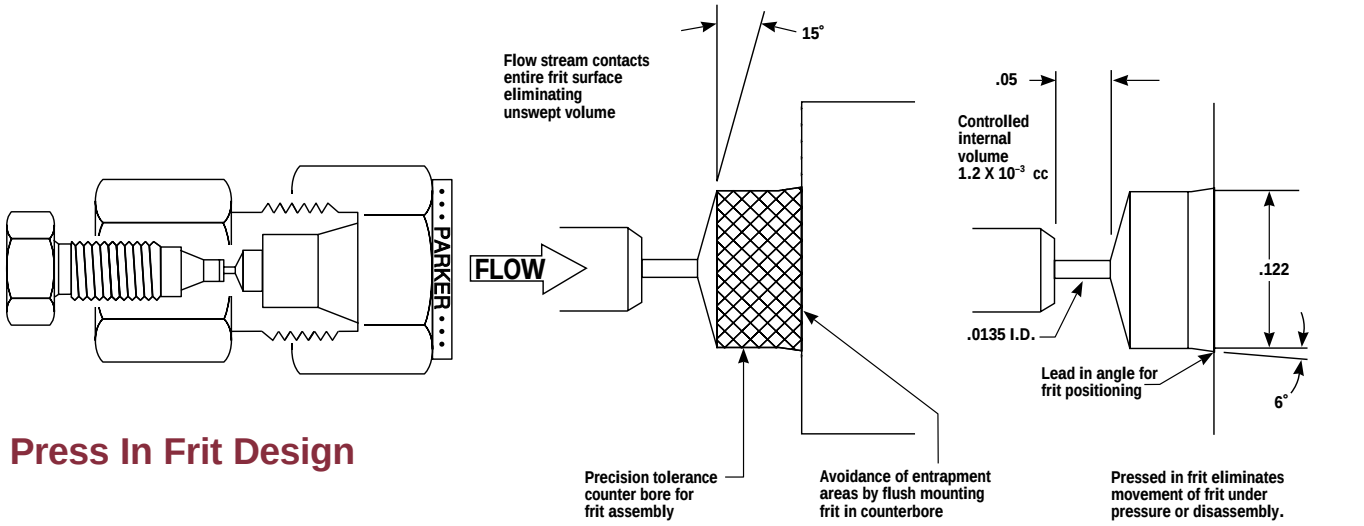


PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS								
		TUBE O.D.	BUTT-WELD PIPE N.B.	A	C	D	R	X	E BORE	W HEX
ZHBW2 3-1/8	3MO-1-2W	3	1/8	29,7	15,3	23,1	9,7	.405	2,4*	12,0
ZHBW2 4-1/8	4MO-1-2	4	1/8	30,7	16,1	24,1	9,7	.405	2,4*	12,0
ZHBW2 6-1/8	6MO-1-2	6	1/8	32,9	17,7	25,4	9,7	.405	4,8	14,0
ZHBW2 6-1/4	6MO-1-4W	6	1/4	37,7	17,7	30,2	14,2	.540	4,8*	14,0
ZHBW2 8-1/8	8MO-1-2	8	1/8	34,2	18,6	26,7	9,7	.405	5,1	15,0
ZHBW2 8-1/4	8MO-1-1/4	8	1/4	38,7	18,6	31,2	14,2	.540	6,4	15,0
ZHBW2 8-1/2	8MO-1-8	8	1/2	44,8	18,6	37,3	19,1	.840	6,4*	22,0
ZHBW2 10-1/4	–	10	1/4	40,9	19,5	33,3	14,2	.540	7,1	18,0
ZHBW2 10-3/8	10MO-1-6	10	3/8	40,1	19,5	32,5	14,2	.675	7,9*	18,0
ZHBW2 10-1/2	–	10	1/2	45,7	19,5	38,1	19,1	.840	7,9*	22,0
ZHBW2 12-1/4	–	12	1/4	43,4	22,0	33,3	14,2	.540	7,1	22,0
ZHBW2 12-3/8	–	12	3/8	43,4	22,0	33,3	14,2	.675	9,5	22,0
ZHBW2 12-1/2	12MO-1-8W	12	1/2	48,2	22,0	38,1	19,1	.840	9,5*	22,0
ZHBW2 15-1/2			1/2	48,2	22,0	38,9	19,1	.840	9.5*	24,0
ZHBW2 16-1/2	–	16	1/2	49,0	22,0	38,9	19,1	.840	12,7*	24,0
ZHBW2 18-1/2	–	18	1/2	50,5	22,0	40,4	19,1	.840	13,5	27,0

NOTE: *E dimension is minimum opening. Dimensions for reference only, subject to change.
A and C dimensions are typical finger-tight.
Pipe Buttweld end will conform to Schedule 80 unless otherwise noted.



Drop In Frit Design



Press In Frit Design

Parker Hannifin's Instrumentation Connectors Division offers a full line of analytical tube fittings. These fittings range from elbows, tees, and male connectors to low dead volume unions and column end fittings. Parker incorporates various features in the column end fittings to effectively address various industry concerns.

- Peak symmetry for critical analysis
- Internal volume reduction

As the observed media/substance migrates through the HPLC column, a "peak" or "band" is created that denotes the level of concentration. It is critical to maintain peak symmetry in order to get an accurate reading when processing the observed media/substance. Parker Hannifin, in the development of a line of column end fittings, has incorporated some key features that help to maintain this "peak symmetry" in HPLC columns.

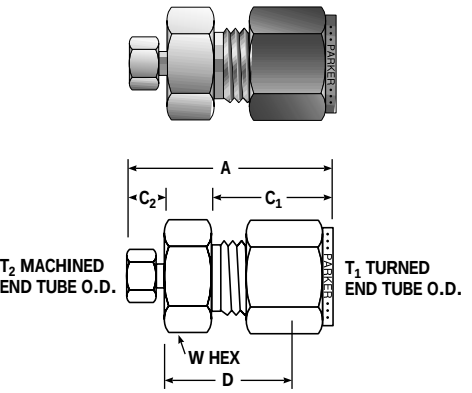
"Under most circumstances in liquid chromatography (LC), the flow through the tube is laminar, the so-called Poiseulle flow, and in this situation the velocity at all points is parallel to the tube axis."

Due to the importance of maintaining smooth laminar flow after injection of the sample into the HPLC column, Parker incorporated a small conical angle on the fitting body internals. This conical angle helps to equally disperse the sample into the column tube. One of the key requirements of an effective column end fitting is not to delay or disturb the flow of the sample through the instrument (HPLC column).

A second area to address is the minimizing of tube fitting internal "cavities". A cavity is a short section of the flow path where the flow-channel diameter increases. It can occur where tubes are connected to each other (low dead volume connector) or to injectors, columns (column end fittings), and detectors. Large cavities can seriously degrade the resolution of any chromatogram, but they can be easily avoided through awareness of the geometric design details of the fittings and connecting parts manufactured by various companies.

Parker Hannifin has incorporated those critical features in both a low dead volume union connector and the column end fitting bodies. First, the utilization of inverted 1/16" connections to greatly reduce internal volume or cavities.To eliminate any confusion or occurrence of incorrect effective tube make-up, the port depths (body bore dimensions) are identical by size throughout the entire Parker Hannifin instrumentation line. Second, Parker closely monitors the dimensions of the small through-hole utilized in these low dead volume connectors.

Z2HCZ7
Column End Fitting – Low Internal Volume with Frit
For fractional tube



PARKER PART NO.	INCHES							
	T_1 TUBE O.D.	T_2 TUBE O.D.	A	C	D	W HEX	INTERNAL OPENING	INTERNAL VOLUME
2-1 Z2HCZ7	1/8	1/16	1.25	.60	.78	7/16	.013	5.4 x 10^{-4}cc
4-1 Z2HCZ7	1/4	1/16	1.35	.70	.84	1/2	.013	1.2 x 10^{-3}cc
6-1 Z2HCZ7	3/8	1/16	1.43	.76	.92	5/8	.013	3.8 x 10^{-3}cc

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

FRIT DESIGNATOR	
* MICRON DASH NO.	MICRON SIZE
–1	0.5µ
–2	2 µ
–3	5 µ
–4	10 µ

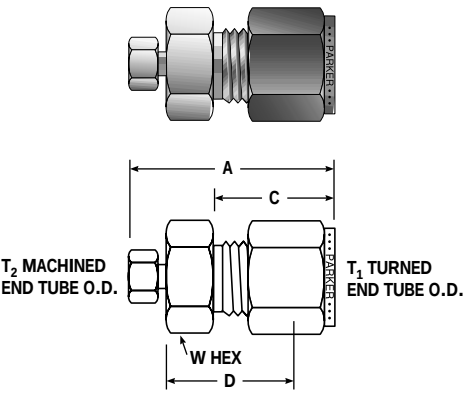
HOW TO ORDER

EXAMPLE: 4-1Z2HCZ7-2*-SS
To order with 2µ
frit for 1/4"
O.D. column

Features:

- Inverted 1/16" end substantially reduces internal volume
- Flow stream contacts entire frit surface reducing plugging and eliminating unswept volume
- Can be used as a low volume final filter

Z3HCZ7
Column End Fitting – Low Internal Volume
For fractional tube



PARKER PART NO.	INCHES							
	T_1 TUBE O.D.	T_2 TUBE O.D.	A	C	D	W HEX	INTERNAL OPENING	INTERNAL VOLUME
4-1 Z3HCZ7	1/4	1/16	1.28	.70	.77	1/2	.020	6.1 x 10^{-4}cc
6-1 Z3HCZ7	3/8	1/16	1.37	.76	.86	5/8	.020	8.1 x 10^{-4}cc
8-1 Z3HCZ7	1/2	1/16	1.62	.87	1.00	13/16	.030	2.8 x 10^{-3}cc
16-1 Z3HCZ7	1	1/16	2.00	1.05	1.31	1-3/8	.030	2 x 10^{-2}cc

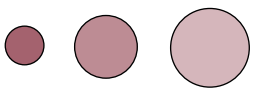
NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

Features:

- Inverted 1/16" end substantially reduces internal volume
- Drop in frit for use with L.C.* columns or G.C.* columns
- Conical angle below frit directs flow over more frit surface
- Available for up to 1" columns

*G.C. = Gas Chromatagraph
L.C. = Liquid Chromatagraph

Di-Frit (drop in)

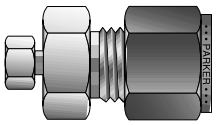


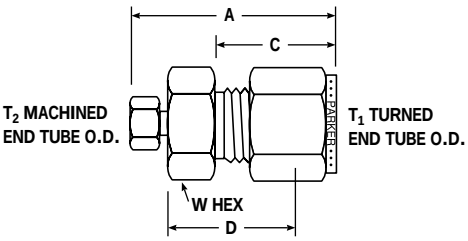
Replaceable frit for preparatory column end fitting Z3HCZ7. Frits are available in 2, 5 and 10 micron sizes.

PARKER PART NO.	MICRON SIZE	COLUMN O.D.
4DI FRIT-2MIC-SS	2	1/4"
4DI FRIT-5MIC-SS	5	1/4"
4DI FRIT-10MIC-SS	10	1/4"
6DI FRIT-2MIC-SS	2	3/8"
6DI FRIT-5MIC-SS	5	3/8"
6DI FRIT-10MIC-SS	10	3/8"

PARKER PART NO.	MICRON SIZE	COLUMN O.D.
8DI FRIT-2MIC-SS	2	1/2"
8DI FRIT-5MIC-SS	5	1/2"
8DI FRIT-10MIC-SS	10	1/2"
16DI FRIT-2MIC-SS	2	1"
16DI FRIT-5MIC-SS	5	1"
16DI FRIT-10MIC-SS	10	1"

ZHCZ7
Column End Fitting – Low Internal Volume (without Frit)
For fractional tube





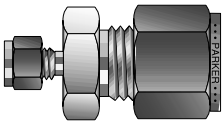
PARKER PART NO.	INTER-CHANGES WITH	INCHES							INTERNAL VOLUME
		T_1 TUBE O.D.	T_2 TUBE O.D.	A	C	D	W HEX	INTERNAL OPENING	
2-1 ZHCZ7	-200-6-1-FGC	1/8	1/16	1.16	.60	.70	7/16	.013	1.0 x 10^{-4}cc
4-1 ZHCZ7	-400-6-1-FGC	1/4	1/16	1.24	.70	.77	1/2	.013	1.1 x 10^{-4}cc
6-1 ZHCZ7	-600-6-1-FGC	3/8	1/16	1.35	.76	.86	5/8	.013	1.3 x 10^{-4}cc

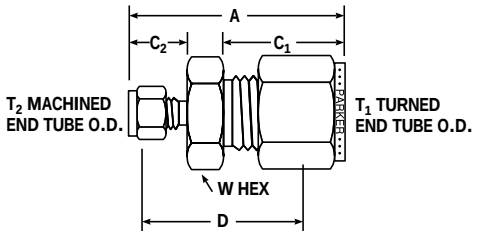
NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

Features:
- Inverted 1/16" end substantially
- No frit for use with G.C.* columns or L.C.* columns with screens
- Can be used as a low volume reducing union

*G.C. = Gas Chromatagraph
L.C. = Liquid Chromatagraph

Z2HCZ
Column End Fitting – with Frit
For fractional tube





PARKER PART NO.	INCHES								INTERNAL VOLUME
	T_1 TUBE O.D.	T_2 TUBE O.D.	A	C_1	C_2	D	W HEX	INTERNAL OPENING	
2-1 Z2HCZ	1/8	1/16	1.21	.60	.43	.81	7/16	.020	2.1 x 10^{-3}cc
4-1 Z2HCZ	1/4	1/16	1.35	.70	.43	.91	1/2	.020	1.8 x 10^{-3}cc
6-1 Z2HCZ	3/8	1/16	1.44	.76	.43	1.00	5/8	.020	5.4 x 10^{-3}cc

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.

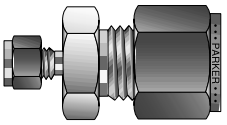
FRIT DESIGNATOR	
* MICRON DASH NO.	MICRON SIZE
–1	0.5µ
–2	2 µ
–3	5 µ
–4	10 µ

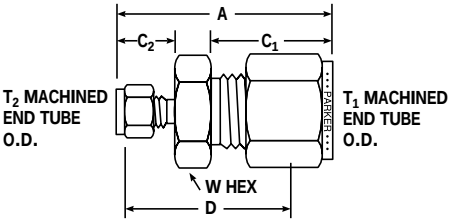
NOTE: Size 1 not silver-plated.

HOW TO ORDER
EXAMPLE: 4-1Z2HCZ-2*-SS To order with 2µ frit for 1/4" O.D. column

Features:
- Flow stream contacts entire frit surface reducing plugging and eliminating unswept volume
- Can be used as a low volume final filter with drop-in frit (page 62).

ZHCZ
Column End Fitting – (without Frit)
For fractional tube

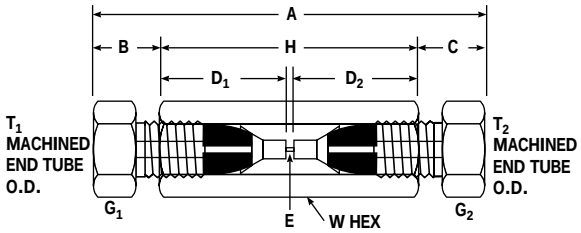




PARKER PART NO.	INCHES								INTERNAL VOLUME
	T_1 TUBE O.D.	T_2 TUBE O.D.	A	C_1	C_2	D	W HEX	INTERNAL OPENING	
2-1 ZHCZ	1/8	1/16	1.21	.60	.43	.81	7/16	.020	2.1 x 10^{-3}cc
4-1 ZHCZ	1/4	1/16	1.35	.70	.43	.91	1/2	.020	2.1 x 10^{-3}cc
6-1 ZHCZ	3/8	1/16	1.44	.76	.43	1.00	5/8	.020	2.3 x 10^{-3}cc

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change.
Size 1 Nut is not silver plated

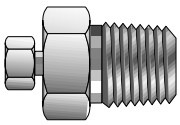
Z7HBZ7-SS
Union Connector – Low Dead Volume
For fractional tube

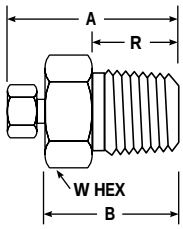


PARKER PART NO.	INTER-CHANGES WITH	INCHES												INTERNAL VOLUME
		T_1 TUBE O.D.	T_2 TUBE O.D.	†A	†B	†C	D_1	D_2	E INTERNAL OPENING	G_1	G_2	H	W HEX	
1-1 Z7HBZ7-SS	IFO-6GC	1/16	1/16	1.26	.21	.21	.41	.41	.013	.25	.25	.84	1/4	8.7 x 10^{-5}cc
2-1 Z7HBZ7-SS	–	1/8	1/16	1.53	.31	.21	.56	.41	.013	.38	.25	1.02	7/16	8.7 x 10^{-5}cc
2-2 Z7HBZ7-SS	–	1/8	1/8	1.81	.31	.31	.56	.56	.052	.38	.38	1.19	7/16	9.7 x 10^{-2}cc

†Average Value Dimensions for reference only, subject to change.

FBZ7
Male Connector – Low Dead Volume
For fractional tube



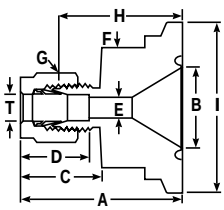


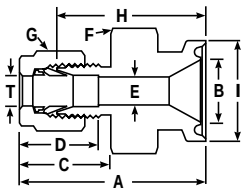
PARKER PART NO.	INCHES							INTERNAL VOLUME
	TUBE O.D.	NPT PIPE THREAD	†A	B	R	W HEX	INTERNAL OPENING	
1-1 FBZ7	1/16	1/16	.75	.55	.38	5/16	.013	3.1 x 10^{-4}cc
1-2 FBZ7	1/16	1/8	.79	.59	.38	7/16	.013	4.4 x 10^{-4}cc
1-4 FBZ7	1/16	1/4	1.01	.81	.56	5/8	.013	8.8 x 10^{-4}cc

†Average Value

Dimensions for reference only, subject to change.

ZHBS
Sanitary Flange Fitting
For fractional tube





PARKER PART NO.	INTER-CHANGES WITH	INCHES										
		TUBE OD	SANITARY FLANGE	A	B	C	D	E MIN. OPENING	F	G HEX FLAT	H	I
4-8 ZHBS	400-SC-8	1/4	1/2	1.57	.37	.70	.60	.19	1.00	9/16	1.34	.98
4-12 ZHBS	400-SC-12	1/4	3/4	1.57	.62	.70	.60	.19	1.00	9/16	1.34	.98
4-16 ZHBS	400-SC-16	1/4	1	1.57	.87	.70	.60	.19	1.38	9/16	1.34	1.98
4-24 ZHBS	400-SC-24	1/4	1 1/2	1.57	1.37	.70	.60	.19	1.38	9/16	1.28	1.98
6-8 ZHBS	600-SC-8	3/8	1/2	1.63	.37	.76	.66	.28	1.00	11/16	1.34	.98
6-12 ZHBS	600-SC-12	3/8	3/4	1.63	.62	.76	.66	.28	1.00	11/16	1.34	.98
6-16 ZHBS	600-SC-16	3/8	1	1.63	.87	.76	.66	.28	1.38	11/16	1.34	1.98
6-24 ZHBS	600-SC-24	3/8	1 1/2	1.63	1.37	.76	.66	.28	1.38	11/16	1.34	1.98
8-8 ZHBS	810-SC-8	1/2	1/2	1.74	.37	.90	.86	.37	1.00	7/8	1.40	.98
8-12 ZHBS	810-SC-12	1/2	3/4	1.74	.62	.90	.86	.41	1.00	7/8	1.34	.98
8-16 ZHBS	810-SC-16	1/2	1	1.74	.87	.90	.86	.41	1.38	7/8	1.34	1.98
8-24 ZHBS	810-SC-24	1/2	1 1/2	1.74	1.37	.90	.86	.41	1.38	7/8	1.34	1.98

NOTE: A, C, and D dimensions are typical finger tight.

Dimensions for reference only, subject to change.

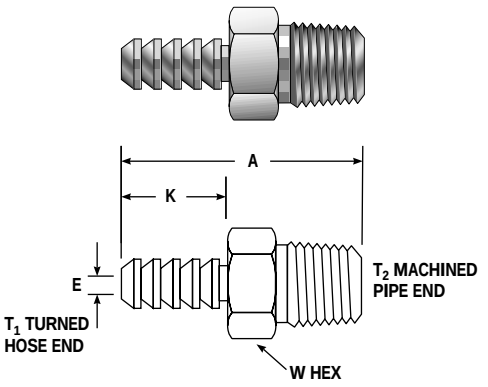
Sanitary flange fittings combine the reliability and versatility of Parker tube fittings with conventional sanitary flanges. The fittings permit direct downstream connections for hookups and sampling.

Flange sizes are 1/2, 3/4, 1, and 1-1/2 in.

Parker tube fitting ends are available in 1/4, 3/8, and 1/2 in. Parker tube fittings allow use of a variety of tubing materials including metal, hard plastic, and soft plastic.

For a Thermocouple/"Bored-Thru" version of the above Sanitary Adapter fittings, add a "4" to the part number. Example: A 4-12 ZHBS-SS becomes a 4-12 ZH4BS-SS for a 3/4" Sanitary Flange with a 1/4" diameter bored through on the CPI™ fitting end.

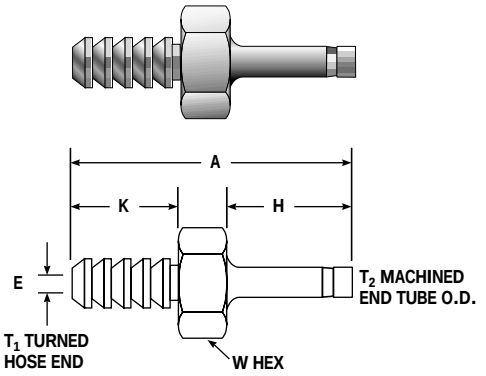
B2HF
Barbed Connector to Male Pipe
For fractional tube



PARKER PART NO.	INTER-CHANGES WITH	INCHES					
		T_1 HOSE I.D.	T_2 MALE PIPE SIZE	A	E BORE	K	W HEX
2-2 B2HF	2-HC-1-2	1/8	1/8	1.00	.078	.41	7/16
2-4 B2HF	2-HC-1-4	1/8	1/4	1.22	.078	.41	9/16
4-2 B2HF	4-HC-1-2	1/4	1/8	1.41	.188	.75	7/16
4-4 B2HF	4-HC-1-4	1/4	1/4	1.59	.188	.78	9/16
5-2 B2HF	5-HC-1-2	5/16	1/8	1.50	.188	.88	7/16
5-4 B2HF	5-HC-1-4	5/16	1/4	1.69	.250	.88	9/16
6-4 B2HF	6-HC-1-4	3/8	1/4	1.72	.281	.88	9/16
6-6 B2HF	6-HC-1-6	3/8	3/8	1.72	.297	.88	11/16
8-6 B2HF	8-HC-1-6	1/2	3/8	1.81	.375	.94	3/4
8-8 B2HF	8-HC-1-8	1/2	1/2	2.00	.375	.94	7/8
12-12 B2HF	12-HC-1-12	3/4	3/4	2.13	.625	1.03	1-1/16

Dimensions for reference only, subject to change.

B2HT2
Barbed Connector to Tube Adapter
For fractional tube

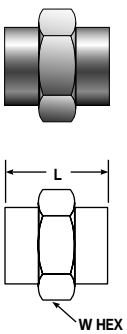


PARKER PART NO.	INTER-CHANGES WITH	INCHES						
		T_1 HOSE I.D.	T_2 TUBE O.D.	A	E BORE	H	K	W HEX
2-2 B2HT2	2-HC-A-201	1/8	1/8	1.16	.078	.53	.41	5/16
2-4 B2HT2	2-HC-A-401	1/8	1/4	1.26	.078	.64	.41	3/8
4-4 B2HT2	4-HC-A-401	1/4	1/4	1.64	.156	.64	.78	3/8
6-6 B2HT2	4-HC-A-601	1/4	3/8	1.75	.156	.72	.78	7/16

Dimensions for reference only, subject to change.

NOTE: Tube adapter end is designed for use with Parker fittings or valves. Simply insert the tube adapter end until it bottoms and tighten the Parker nut 3/4 turns for sizes 3 and below, for sizes 4 and above 1-1/4 turns from finger tight.
Add -Z6 for assembly of nuts and ferrules on the tube stub end.

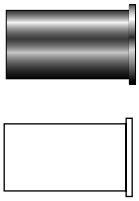
HCS
Hose Connector Sleeve
For fractional tube



PARKER PART NO.	INCHES			
	HOSE I.D.	HOSE O.D.	L	W HEX
2-4 HCS	1/8	1/4	.41	3/8
4-6 HCS	1/4	3/8	.78	9/16
4-7 HCS	1/4	7/16	.78	5/8
4-8 HCS	1/4	1/2	.78	11/16
4-9 HCS	1/4	9/16	.78	3/4
5-7 HCS	5/16	7/16	.88	5/8
6-8 HCS	3/8	1/2	.88	11/16
6-9 HCS	3/8	9/16	.88	3/4
8-11 HCS	1/2	11/16	.94	7/8
12-16 HCS	3/4	1	1.06	1-1/4

Dimensions for reference only, subject to change.

TIZ Insert
For fractional tube



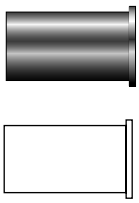
PARKER PART NO.	INTER-CHANGES WITH	INCHES		
		TUBE O.D.	TUBE I.D.	TUBE WALL
3 TIZ (.125)	305-2	3/16	.125	.031
4 TIZ (.125)	405-2	1/4	.125	.062
4 TIZ (.170)	405-170	1/4	.170	.040
4 TIZ (.188)	405-3	1/4	.188	.031
5 TIZ (.125)	505-2	5/16	.125	.094
5 TIZ (.188)	505-3	5/16	.188	.062
5 TIZ (.250)	505-4	5/16	.250	.031
6 TIZ (.188)	605-3	3/8	.188	.094
6 TIZ (.250)	605-4	3/8	.250	.062
8 TIZ (.250)	815-4	1/2	.250	.125
8 TIZ (.375)	815-6	1/2	.375	.062
10 TIZ (.375)	1015-6	5/8	.375	.125
10 TIZ (.500)	1015-8	5/8	.500	.062
12 TIZ (.500)	1215-8	3/4	.500	.125
12 TIZ (.625)	1215-10	3/4	.625	.062
16 TIZ (.750)	1615-12	1	.750	.125
16 TIZ (.875)	1615-14	1	.875	.062

Dimensions for reference only, subject to change.

NOTE: The TIZ insert is designed to be used with soft plastic tubing. Tubing wall thickness and corresponding minimum I.D. flow paths are listed so the system designer can properly match the insert to the tubing.

Example: 4 TIZ (.125) is used with tubing having a wall thickness of .062 and I.D. of .125.

TIZ Insert
For metric tube



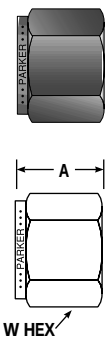
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS		
		TUBE O.D.	TUBE I.D.	TUBE WALL
TIZ 6(4)	6M5-4M	6	4	1,0
TIZ 8(6)	8M5-6M	8	6	1,0
TIZ 10(6)	10M5-6M	10	6	2,0
TIZ 10(8)	10M5-8M	10	8	1,0
TIZ 12(8)	12M5-8M	12	8	2,0
TIZ 12(10)	12M5-10M	12	10	1,0
TIZ 15(10)	15M5-10M	15	10	2,5

Dimensions for reference only, subject to change.

NOTE: The TIZ insert is designed to be used with soft plastic tubing. Tubing wall thickness and corresponding minimum I.D. flow paths are listed so the system designer can properly match the insert to the tubing.

Example: TIZ6(4) is used with tubing having a wall thickness of 1mm and I.D. of 4mm.

BZ Tube Nut



PARKER PART NO.	INTER-CHANGES WITH	INCHES		
		TUBE O.D.	A	W HEX
1BZ	102-1	1/16	.31	5/16
2 BZ	202-1	1/8	.47	7/16
3 BZ	302-1	3/16	.47	1/2
4 BZ	402-1	1/4	.50	9/16
5 BZ	502-1	5/16	.53	5/8
6 BZ	602-1	3/8	.56	11/16
8 BZ	812-1	1/2	.69	7/8
10 BZ	1012-1	5/8	.69	1
12 BZ	1212-1	3/4	.69	1-1/8
14 BZ	1412-1	7/8	.69	1-1/4
16 BZ	1612-1	1	.81	1-1/2
20 BZ	2012-1	1-1/4	1.25	1-7/8
24 BZ	2412-1	1-1/2	1.50	2-1/4
32 BZ	3212-1	2	2.062	3

Dimensions for reference only, subject to change.

NOTE: All size 20, 24 and 32 silver plated nuts should have a system compatible lube (Permatex Anti-seize – Parker Catalog 4290-INST) or equivalent applied to the fitting body threads and the inside back of nuts. This will minimize the effort required to assemble the fitting properly.

TZ Ferrules

PARKER PART NO.	TUBE O.D. (INCHES)
1 TZ	1/16
2 TZ	1/8
3 TZ	3/16
4 TZ	1/4
5 TZ	5/16
6 TZ	3/8
8 TZ	1/2
10 TZ	5/8
12 TZ	3/4
14 TZ	7/8
16 TZ	1
20 TZ	1-1/4
24 TZ	1-1/2
32 TZ	2

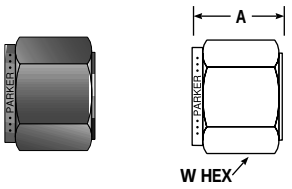
Dimensions for reference only, subject to change.

PARKER PART NO.	TUBE O.D. (INCHES)
TZ 3	
TZ 6	6
TZ 8	8
TZ 10	10
TZ 12	12
TZ 16	16
TZ 20	
TZ 25	

Dimensions for reference only, subject to change.

BZ Tube Nut

For metric tube

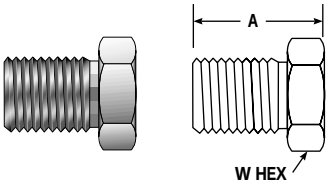


PARKER PART NO.	INTER-CHANGES WITH	UN THREAD	MILLIMETERS		
			TUBE O.D.	A	W HEX
BZ 2	2M2-1	2	5/16-20	11,9	12,0
BZ 3	3M2-1	3	5/16-20	11,9	12,0
BZ 4	4M2-1	4	3/8-20	11,9	12,0
BZ 6	6M2-1	6	7/16-20	12,7	14,0
BZ 8	8M2-1	8	1/2-20	13,5	16,0
BZ 10	10M2-1	10	5/8-20	15,1	19,0
BZ 12	12M2-1	12	3/4-20	17,5	22,0
BZ 14	14M2-1	14	7/8-20	17,5	25,0
BZ 15	15M2-1	15	7/8-20	17,5	25,0
BZ 16	16M2-1	16	7/8-20	17,5	25,0
BZ 18	18M2-1	18	1-20	17,5	30,0
BZ 20	20M2-1	20	1.1/8-20	17,5	32,0
BZ 22	22M2-1	22	1.1/8-20	17,5	32,0
BZ 25	25M2-1	25	1.5/16-20	20,6	38,0

Dimensions for reference only, subject to change.

BZI Inverted Tube Nut

For fractional tube

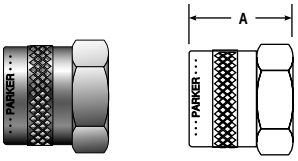


PARKER PART NO.	INTER-CHANGES WITH	INCHES		
		TUBE O.D.	A	W HEX
1 BZI	1F2-1GC	1/16	.39	1/4
2 BZI	2F2-1GC	1/8	.44	7/16

Dimensions for reference only, subject to change.

BZP Knurled Nut

For fractional tube



PARKER PART NO.	INTER-CHANGES WITH	INCHES	
		TUBE O.D.	A
1 BZP	102-1K	1/16	.32
2 BZP	202-1K	1/8	.47
3 BZP	302-1K	3/16	.47
4 BZP	402-1K	1/4	.51
5 BZP	502-1K	5/16	.54
6 BZP	812-1K	3/8	.57
8 BZP	602-1K	1/2	.69
10 BZP	1012-1K	5/8	.69

Dimensions for reference only, subject to change.

HOW TO ASSEMBLE BZP

1. Replace BZ nut with BZP nut on Parker CPI™ fitting body.
2. Insert plastic tubing until it bottoms in fitting body.
3. Tighten finger tight.

The knurled nut is designed for use with soft plastic tubing on low pressure applications where a finger tight assembly procedure is satisfactory.

Example: Laboratory test hook-ups. Nylon or Teflon® ferrules are frequently used instead of metal ferrules in this type of application.

Ferrule Holder

Package simplifies ordering, stocking, and assembling

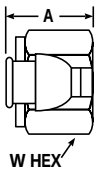
PARKER PART NO. 1 HOLDER	T TUBE O.D. (INCHES)
2CPI-*-SET	1/8
4CPI-*-SET	1/4
6CPI-*-SET	3/8
CPI-*-SET	1/2
12CPI-*-SET	3/4
16CPI-*-SET	1

*Material designator – 316-SS, B-Brass, S-Steel

FNZ Plug

For fractional tube

For plugging open ended CPI™ fitting ends



PARKER PART NO.	INTER-CHANGES WITH	INCHES			
		TUBE O.D.	THREAD	A	W HEX
1 FNZ	100-P	1/16	10-32	.31	5/16
2 FNZ	200-P	1/8	5/16-20	.47	7/16
3 FNZ	300-P	3/16	3/8-20	.47	1/2
4 FNZ	400-P	1/4	7/16-20	.50	9/16
5 FNZ	500-P	5/16	1/2-20	.53	5/8
6 FNZ	600-P	3/8	9/16-20	.56	11/16
8 FNZ	810-P	1/2	3/4-20	.69	7/8
10 FNZ	1010-P	5/8	7/8-20	.69	1
12 FNZ	1210-P	3/4	1-20	.69	1-1/8
14 FNZ	1410-P	7/8	1-1/8-20	.69	1-1/4
16 FNZ	1610-P	1	1-5/16-20	.81	1-1/2
20 FNZ	2010-P	1-1/4	1-5/8-20	1.35	1-7/8
24 FNZ	2410-P	1-1/2	1-15/16-20	1.72	2-1/4
32 FNZ	3210-P	2	2-5/8-20	2.27	3

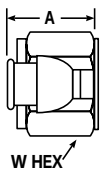
Dimensions for reference only, subject to change.

HOW TO ASSEMBLE
Wrench tighten only 1/4 turn from finger tight position.

FNZ Plug

For metric tube

For plugging open ended CPI™ fitting ends



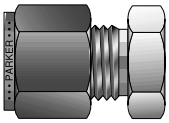
PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS			
		TUBE O.D.	THREAD	A	W HEX
FNZ 2	2MO-P	2	5/16-20	11,9	12,0
FNZ 3	3MO-P	3	5/16-20	11,9	12,0
FNZ 4	4MO-P	4	3/8-20	11,9	12,0
FNZ 6	6MO-P	6	7/16-20	12,7	14,0
FNZ 8	8MO-P	8	1/2-20	13,5	16,0
FNZ 10	10MO-P	10	5/8-20	15,1	19,0
FNZ 12	12MO-P	12	3/4-20	17,5	22,0
FNZ 14	14MO-P	14	7/8-20	17,5	25,0
FNZ 15	15MO-P	15	7/8-20	17,5	25,0
FNZ 16	16MO-P	16	7/8-20	17,5	25,0
FNZ 18	18MO-P	18	1-20	17,5	30,0
FNZ 20	20MO-P	20	1-1/8-20	17,5	32,0
FNZ 22	22MO-P	22	1-1/8-20	17,5	32,0
FNZ 25	25MO-P	25	1-5/16-20	20,6	38,0

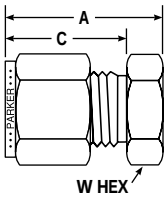
Dimensions for reference only, subject to change.

HOW TO ASSEMBLE
Wrench tighten only 1/4 turn from finger tight position.

PNBZ
Cap
For fractional tube

For capping open ended tubing





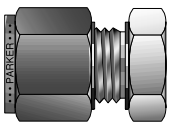
PARKER PART NO.	INTER-CHANGES WITH	INCHES			
		TUBE O.D.	A	C	W HEX
1 PNBZ	100-C	1/16	.56	.43	5/16
2 PNBZ	200-C	1/8	.79	.60	7/16
3 PNBZ	300-C	3/16	.84	.64	7/16
4 PNBZ	400-C	1/4	.92	.70	1/2
5 PNBZ	500-C	5/16	.96	.73	9/16
6 PNBZ	600-C	3/8	1.01	.76	5/8
8 PNBZ	810-C	1/2	1.15	.87	13/16
10 PNBZ	1010-C	5/8	1.18	.87	15/16
12 PNBZ	1210-C	3/4	1.25	.87	1-1/16
14 PNBZ	1410-C	7/8	1.31	.87	1-3/16
16 PNBZ	1610-C	1	1.52	1.05	1-3/8
20 PNBZ	2010-C	1-1/4	2.09	1.52	1-3/4
24 PNBZ	2410-C	1-1/2	2.53	1.77	2-1/8
32 PNBZ	3210-C	2	3.41	2.47	2-3/4

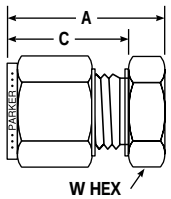
Dimensions for reference only, subject to change.

NOTE: For body only specify PNZ
A and C dimensions are typical finger-tight.

PNBZ
Cap
For metric tube

For capping open ended tubing

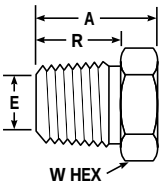




PARKER PART NO.	INTER-CHANGES WITH	MILLIMETERS			
		TUBE O.D.	A	C	W HEX
PNBZ 2	2MO-C	2	13,5	15,3	12,0
PNBZ 3	3MO-C	3	13,5	15,3	12,0
PNBZ 4	4MO-C	4	14,3	16,1	12,0
PNBZ 6	6MO-C	6	15,9	17,7	14,0
PNBZ 8	8MO-C	8	17,1	18,6	15,0
PNBZ 10	10MO-C	10	19,1	19,5	18,0
PNBZ 12	12MO-C	12	19,1	22,0	22,0
PNBZ 14	14MO-C	14	19,8	22,0	24,0
PNBZ 15	15MO-C	15	19,8	22,0	24,0
PNBZ 16	16MO-C	16	19,8	22,0	24,0
PNBZ 18	18MO-C	18	21,3	22,0	27,0
PNBZ 20	20MO-C	20	23,9	22,0	30,0
PNBZ 22	22MO-C	22	23,9	22,0	30,0
PNBZ 25	25MO-C	25	26,2	26,5	35,0

NOTE: For body only specify PNZ. Dimensions for reference only, subject to change.
A and C dimensions are typical finger-tight.

MDF
Vent Protector
NPT Male Pipe Thread
For fractional tube



PARKER PART NO.	INTER-CHANGES WITH	INCHES				
		THREAD SIZE	A	R	E MINIMUM OPENING	W HEX FLAT
2 MDF	-	1/8-27	.63	.38	.19	9/16
4 MDF	MS-MD-4M	1/4-18	.81	.56	.28	9/16
6 MDF	MS-MD-6M	3/8-18	.81	.56	.41	11/16
8 MDF	MS-MD-8M	1/2-14	1.06	.75	.50	7/8
12 MDF	MS-MD-12M	3/4-14	1.13	.75	.63	1-1/16
16 MDF	MS-MD-16M	1-11-1/2	1.31	.95	.94	1-3/8

Dimensions for reference only, subject to change.

Parker Instrumentation vent protectors (mud dauber fittings) protect open ends of instruments, tubing, outlet vents, etc.

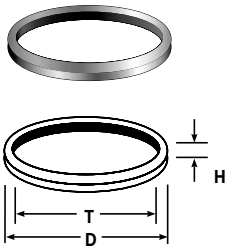
The mesh wire screen prevents foreign bodies such as insects or debris from entering and clogging various systems and causing damage.

- pipe plug, bored-thru design
- 40 x 40 mesh, .010 diameter wire screen
- designed to vent female pipe, straights, elbows or tees.

SEALING WASHERS

Bonded Seals

Consists of an outer stainless steel ring with a Viton® inner ring used to seal a male ISO parallel thread.



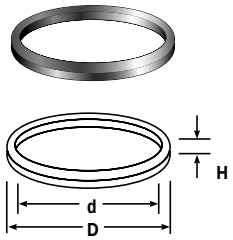
PART NO.	"T" BSPP THREAD	D	H
M30201-SS	1/8	.63	.08
M30202-SS	1/4	.81	.08
M30203-SS	3/8	.94	.08
M30204-SS	1/2	1.12	.10
M30206-SS	3/4	1.38	.10
M30208-SS	1	1.69	.10

These seals are also available in steel with a Nitrile inner ring.
Simply replace Suffix SS with S

PRESSURE RATINGS FOR SEALING WASHERS		
THREAD SIZE	PSI	BAR
1/8	5300	370
1/4	5500	380
3/8	4400	300
1/2	4000	280
3/4	3700	260
1	2800	190

Dimensions for reference only, subject to change.

Copper Washers



For BSPP male thread sealing

PART NO.	THREAD	D	d	H
M28329	1/8	.71	.39	.09
M28330	1/4	.87	.55	.09
M28331	3/8	.94	.67	.09
M28332	1/2	1.18	.87	.10
M28334	3/4	1.38	1.06	.09
M28336	1	1.65	1.34	.09

For BSPP female thread sealing

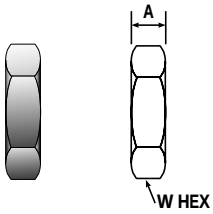
PART NO.	THREAD	D	d	H
M25179	1/8	.322	.218	.062
M25180	1/4	.436	.312	.062
M25181	3/8	.574	.437	.062
M25182	1/2	.719	.562	.062
M25184	3/4	.935	.812	.062
M25186	1	1.178	1	.093

Used to provide a seal with male or female parallel ISO threads.

Dimensions for reference only, subject to change.

Please note the pressure ratings are based on taper threaded ends. The pressure rating for the BSPP ends are dependent on the type of sealing washer used.

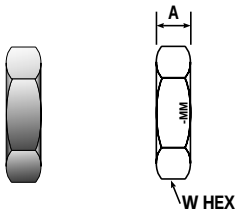
WLZ
Bulkhead Locknut
For fractional tube



PARKER PART NO.	INTER-CHANGES WITH	INCHES			
		CPI™ THREAD	TUBE O.D.	A	W HEX
1 WLZ	102-61	10-32	1/16	.13	5/16
2 WLZ	202-61	5/16-20	1/8	.19	1/2
3 WLZ	302-61	3/8-20	3/16	.22	9/16
4 WLZ	402-61	7/16-20	1/4	.22	5/8
5 WLZ	502-61	1/2-20	5/16	.23	11/16
6 WLZ	602-61	9/16-20	3/8	.25	3/4
8 WLZ	812-61	3/4-20	1/2	.28	15/16
10 WLZ	1012-61	7/8-20	5/8	.31	1-1/16
12 WLZ	1212-61	1"-20	3/4	.34	1-3/16
14 WLZ	1412-61	1-1/8-20	7/8	.38	1-3/8
16 WLZ	1612-61	1-5/16-20	1	.38	1-5/8

Dimensions for reference only, subject to change.

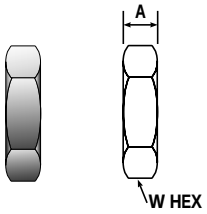
WLZ
Bulkhead Locknut
For metric tube



PARKER PART NO.	MILLIMETERS		
	THREAD	A	W
WLZ 3	5/16-20	5,6	14
WLZ 4	3/8-20	5,6	14
WLZ 6	7/16-20	5,6	16
WLZ 8	1/2-20	5,8	18
WLZ 10	5/8-20	6,4	22
WLZ 12	3/4-20	7,1	24
WLZ 14	7/8-20	7,9	27
WLZ 15	7/8-20	7,9	27
WLZ 16	7/8-20	7,9	27
WLZ 18	1-20	8,6	30
WLZ 20	1-1/8-20	9,7	35
WLZ 25	1-5/16-20	10,4	46

Dimensions for reference only, subject to change.

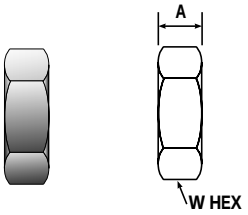
WLN
Bulkhead Locknut
For fractional tube



PARKER PART NO.	INCHES			
	SAE ADJ. STR. THREAD	TUBE O.D.	A	W HEX
4 WLN	7/16-20	1/4	.28	11/16
6 WLN	9/16-18	3/8	.27	13/16
8 WLN	3/4-16	1/2	.31	1
12 WLN	1-1/16-12	3/4	.41	1-3/8
16 WLN	1-5/16-12	1	.41	1-5/8

Dimensions for reference only, subject to change.

L5N
Accessory Locknut
For fractional tube

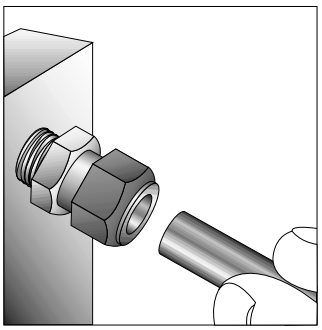


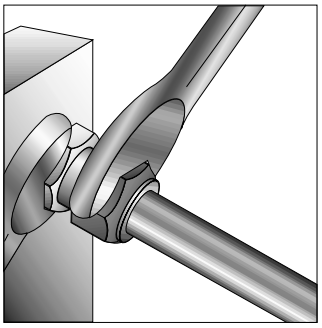
PARKER PART NO.	INCHES		
	STRAIGHT THREAD	A	W HEX
2 L5N	5/16-24	.22	7/16
3 L5N	3/8-24	.22	1/2
4 L5N	7/16-20	.28	9/16
5 L5N	1/2-20	.28	5/8
6 L5N	9/16-18	.28	11/16
8 L5N	3/4-16	.31	7/8
10 L5N	7/8-14	.36	1
12 L5N	1-1/16-12	.41	1-1/4
14 L5N	1-3/16-12	.41	1-3/8
16 L5N	1-5/16-12	.41	1-1/2

Dimensions for reference only, subject to change.

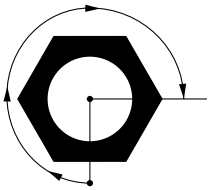
NOTE: For use with ZHBA5 and T2HOA5 fittings on pages 54 and 55.

Assembly and Remake Instructions



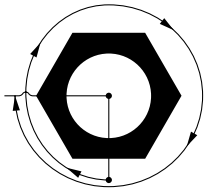


INCH SIZE 1 thru 3
(1/16" - 3/16")
METRIC SIZE 2 thru 4
(2-4mm)



Only 3/4 turn from finger tight is necessary to seal and will result in additional remakes of the fitting

INCH SIZE 4 thru 16
(1/4" - 1")
METRIC SIZE 6 thru 25
(6-25mm)



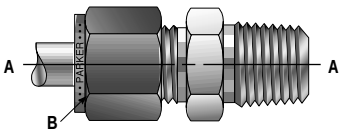
1-1/4 Turns from Finger Tight

1. Parker instrument tube fittings are sold completely assembled and ready for immediate use. Simply insert the tube as illustrated until it bottoms in the fitting body. (If the fitting is disassembled, note that the small tapered end of the ferrule(s) go into the fitting body.)

2. Tighten nut finger tight. Then tighten nut with wrench an additional 1-1/4 turns indicated below. Hold fitting body with a second wrench to prevent body from turning. It is helpful to mark the nut to facilitate counting the number of turns.

For maximum number of remakes, mark the fitting and nut before disassembly. Before retightening, make sure the assembly has been inserted into the fitting until the ferrule seats in the fitting. Retighten the nut by hand. Rotate the nut with a wrench to the original position as indicated by the previous marks lining up. (A noticeable increase in mechanical resistance will be felt indicating the ferrule is being re-sprung into sealing position.)

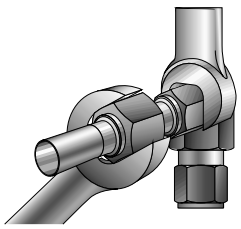
Only after several remakes will it become necessary to advance the nut slightly past the original position. This advance (indicated by B) need only be 10°-20° (less than 1/3 of a hex flat).



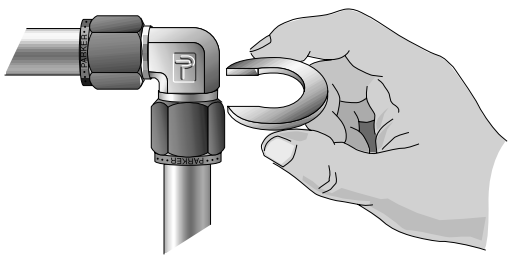
For Sizes above 16 (1"), the Parker ICD Hydraulic Presetting Tool or Rotary Wrench Tool should be used. Cat. 4290-INST.

For additional information please contact your local authorized Parker Instrumentation distributor or call Parker Instrumentation Connectors Division and ask for Bulletin 4230-B10.

Gaugeability Instructions



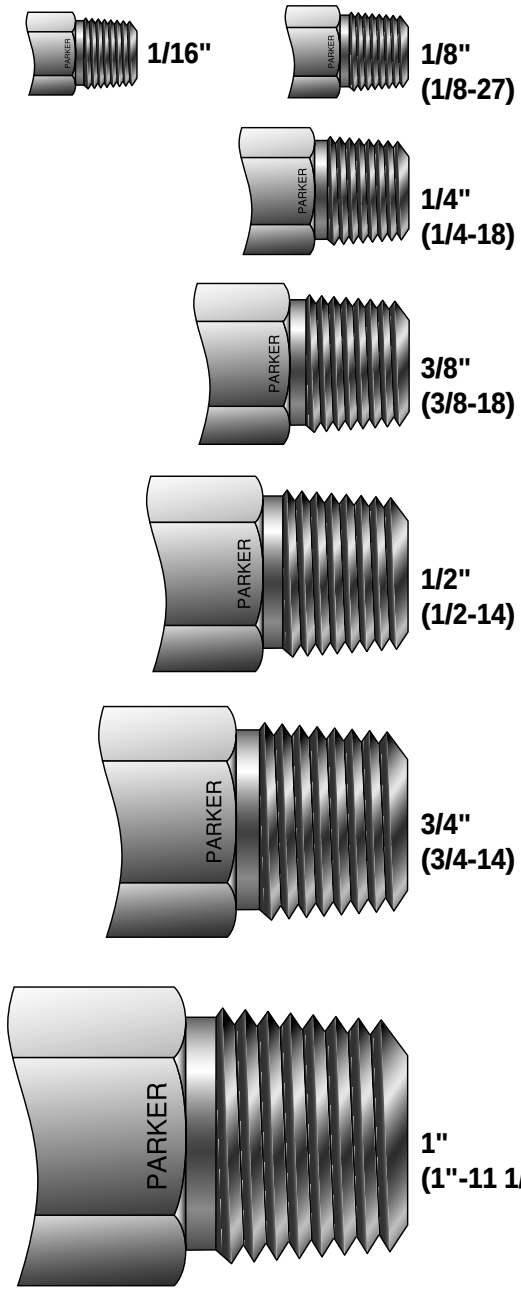
1. From “finger tight” position, wrench 1-1/4 turns for 1/4" to 1" size fittings (6mm to 25mm) (1/16", 1/8", 3/16", 2mm 3mm and 4mm size tube fittings only wrench 3/4 turn from finger tight position). Hold fitting body hex with second wrench to prevent body from turning as you tighten. It is a good idea to mark the nut (scribe or ink) to help you count the turns.



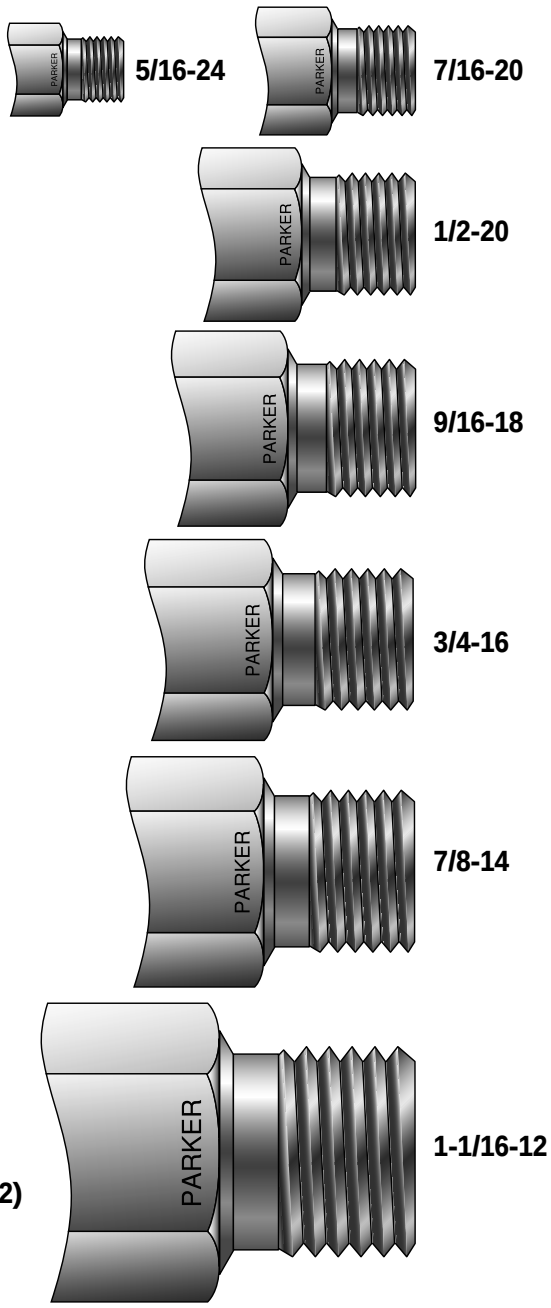
2. Now select the proper size inspection gauge and try to place it, as shown, between the nut and the body hex. If gauge **DOES NOT FIT AT ANY POINT** between them, you have correctly tightened the nut. If you can slip the gauge into the space, the fitting is <u>not</u> properly made up, and you must repeat the assembly procedure.

For additional information please contact your local authorized Parker Instrumentation distributor or call Parker Instrumentation Connectors Division and ask for Bulletin 4230-B15.2.

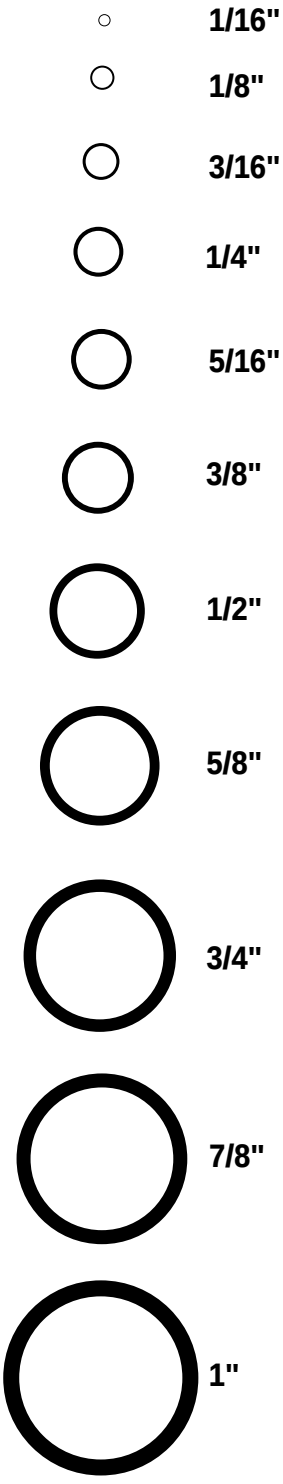
NPT Thread



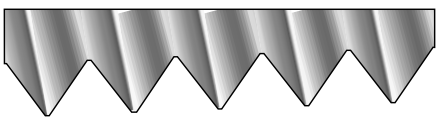
Straight Thread



Tubing O.D. Size

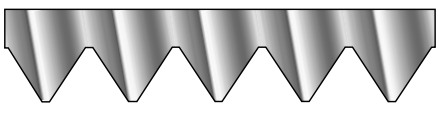


American Standard Pipe Thread (NPT)



60° thread angle • Pitch measured in inches
• Truncation of root and crest are flat
• Taper angle 1°47'

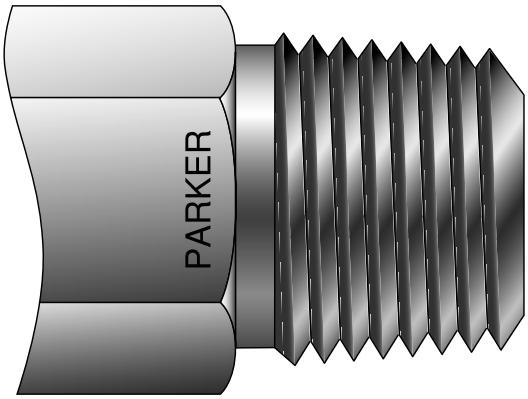
American Standard Unified Thread (Straight)



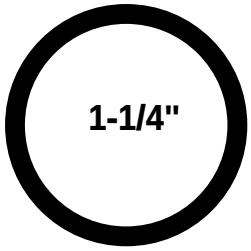
60° thread angle • Pitch measured in inches
• Truncation of root and crest are flat
• Diameter measured in inches

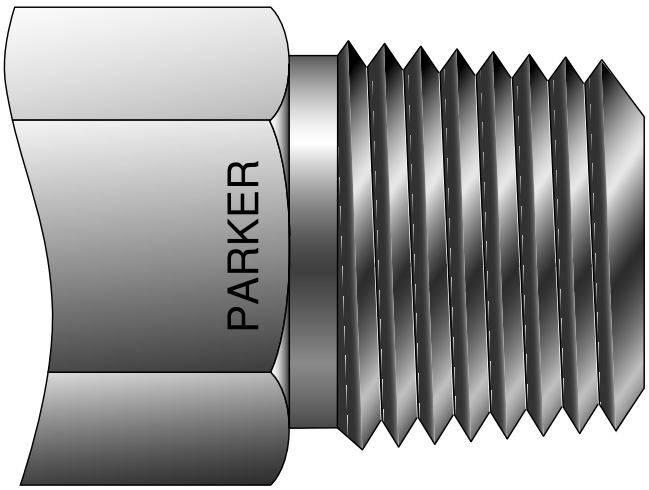
Pipe and Tube End Size Chart (U.S.A.)

NPT Thread **Tubing O.D. Size**

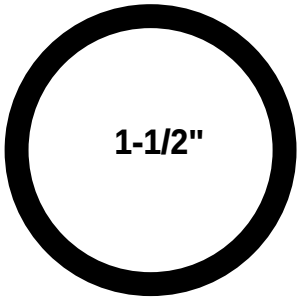


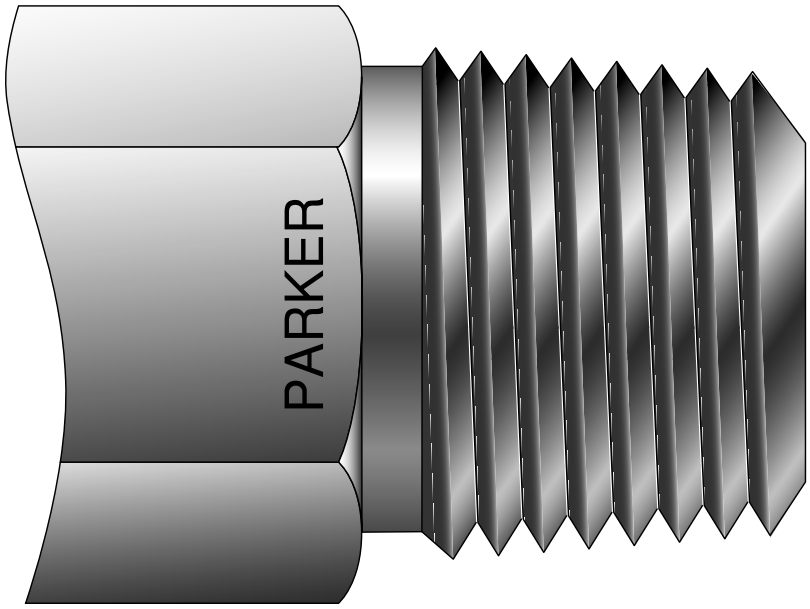
1-1/4"



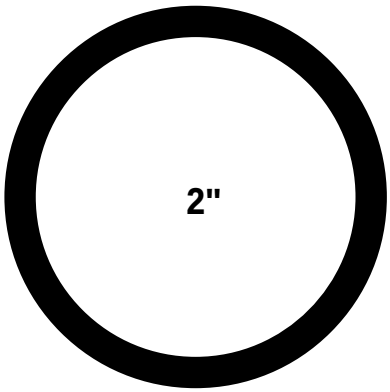


1-1/2"

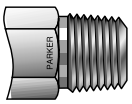




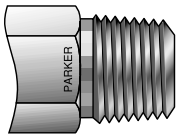
2"



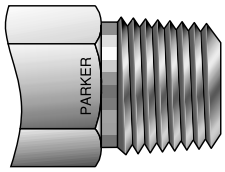
BSPT Tapered Thread



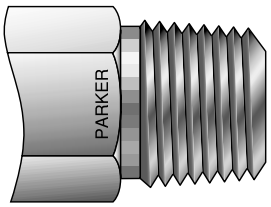
1/8" (1/8-28)



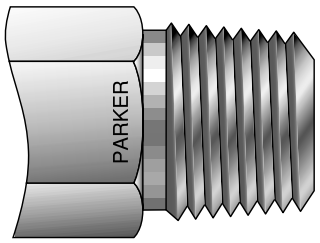
1/4" (1/4-19)



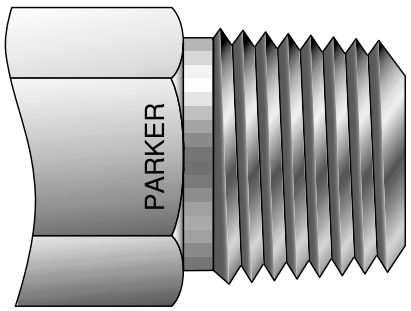
3/8" (3/8-19)



1/2" (1/2-14)

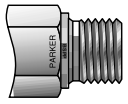


3/4" (3/4-14)

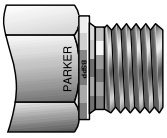


1" (1"-11)

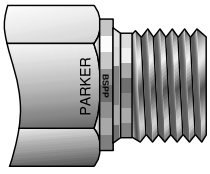
BSPP Parallel Thread



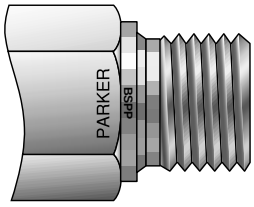
1/8" (1/8-28)



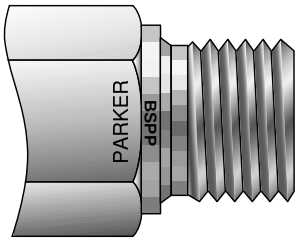
1/4" (1/4-19)



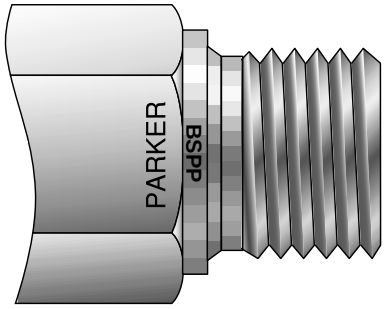
3/8" (3/8-19)



1/2" (1/2-14)

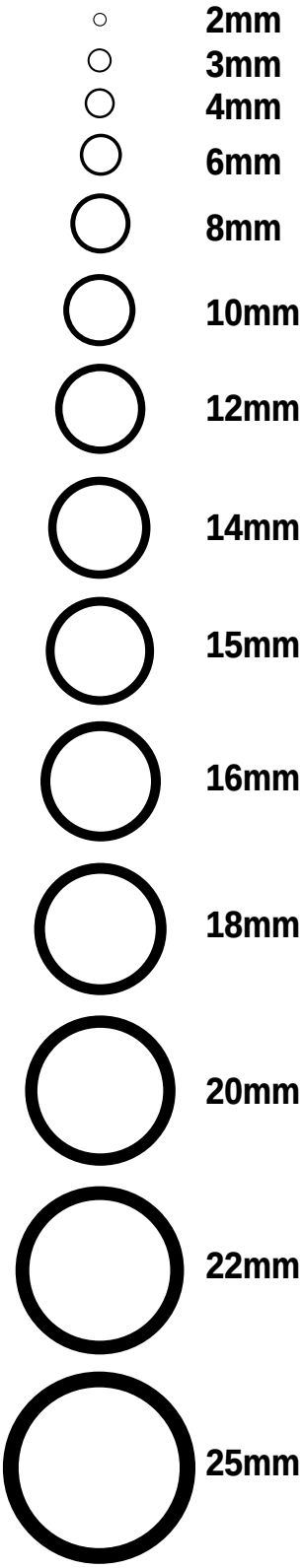


3/4" (3/4-14)



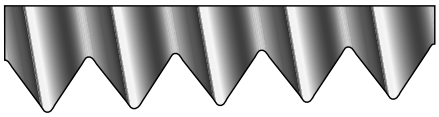
1" (1"-11)

Tubing O.D. Size



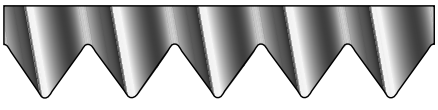
International Organization for Standards

(ISO 7/1)



55° thread angle • Pitch measured in inches
• Truncation of root and crest are round
• Taper angle 1°47'

(ISO 228/1)



55° thread angle • Pitch measured in inches
• Truncation of root and crest are round
• Diameter measured in inches

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