



# Fluid System Connectors

Quick reference guide

Bulletin 3500-QRG



ENGINEERING YOUR SUCCESS.



## INCREASING PERFORMANCE, STANDARDIZING INVENTORY IN FACTORY / PROCESS AUTOMATION

Connecting you to increased efficiency, improved  
throughput, and bottom line benefits



### MARKET APPLICATIONS

Processing | Transferring | Pneumatic Circuits | Cooling | Measuring

### PERFORMANCE EXPECTATIONS

- Compact design
- Weld spatter resistance
- Robustness
- Vacuum performance
- High reliability
- Mechanical resistance
- Installation flexibility







# FACTORY / PROCESS AUTOMATION

## FITTINGS

### Prestolok® PLP Metal Fittings

Compact push-to-connect nickel-plated brass fittings with excellent corrosion resistance. Nitrile seal; stainless steel grab ring. Compatible with a wide array of tubing.



### Prestolok® PLM Metal Fittings

High phosphorous, FDA-compliant, chemical-resistant, nickel-plated collet and body push-to-connect fittings. Corrosion- and abrasion-resistant. FKM seal.



### Prestolok® PLP Composite Fittings

Glass-reinforced nylon 6.6 push-to-connect fittings provide high corrosion and chemical resistance. Nitrile seal; stainless steel grab ring.



### Prestolok® PLS Stainless Steel Fittings

With FKM seals, offer excellent resistance to aggressive environments and fluids. Smooth surface design reduces retention zones for safe and easy cleaning.



## FLOW CONTROLS

### Compact Flow Control

Excellent flow. Small size for reduced spaces.



### Miniature Flow Control

For very small-sized pneumatic applications.



### Swivel Outlet Flow Control

Allows a vertical or angled tube exit where access is tight.



### Plug-in Flow Control

Mountable into existing fittings; allows very compact installations.



### In-line Flow Control

Splices into the existing cylinder port line.



### Compact Metal Flow Control

For severe conditions (temperatures, sparks, abrasion, etc.).



### Stainless Steel Flow Control

Regulates the speed of a cylinder rod; regulates flow in environments with high mechanical or chemical constraints.



## OTHER APPLICABLE PRODUCTS

### Threshold Sensor

Detects pressure absence and converts it to a high-pressure pneumatic output.



### Tubing

Flexible nylon or kink-resistant polyurethane in assorted colors and durometers.



### Cartridges

Guarantee the integrity of the sealing system before and after assembly in non-threaded cavities. Compact design of our one-piece cartridges enables automation and improves system reliability.

### 3100 Carstick® Cartridge

Available in brass or nickel-plated brass.



### PLMC Cartridge

Available in brass or nickel-plated brass.



### PLSC Cartridge

Available in metric sizing.



## VALVES

### Check Valve

Allows air to pass in one direction while blocking flow in the other.



### Stainless Steel Check Valve

Provides unidirectional flow. Ideally suited for harsh environments as well as conveying industrial fluids.



### Pilot Operated Check Valve

Designed to protect installations by locking the air supply to the cylinder to keep it in position if the compressed air supply is removed.



### Blocking Valve

Prevents equipment damage in the event of a pressure loss.



### Slow Start Valve

Controls the introduction of supply pressure after system has been vented.



### Pneumatic Slide Valve

Affects an immediate isolation of the air line by venting the system to atmosphere.



### Exhaust Valve

Increases the return speed of the cylinder rod by allowing the exhaust to pass directly to atmosphere.





## HOW TO ORDER

### PRESTOLOK® PLM, PLS, PLP Metal, and PLP Composite Fittings

#### INCHES PRESTOLOK® PLM, PLS, PLP, AND COMPOSITE FITTINGS

W	3	69	PLP	BJ	-4	-2
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>

#### METRIC PRESTOLOK® PLM, PLS, PLP, AND COMPOSITE FITTINGS

W	3	69	PLP	X	6M	2	R
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>G</b>

#### **A** Thread Sealant

W	White Acrylic
VS	Vibra Seal
Blank	No Sealant

#### **B** Body Material

1	Metal Forging
3	Composite

#### **D** Fitting Series

PLP	Prestolok Plus & Prestolok Composite
PLM	Prestolok All Metal
PLS	Prestolok Stainless Steel

#### **F** Tube Size

Inches		Metric	
2	1/8	4M	4mm
3	3/16	6M	6mm
5/32	5/32	8M	8mm
4	1/4	10M	10mm
5	5/16	12M	12mm
6	3/8	14M	14mm
8	1/2		

#### **C** Fitting Configuration

62	Union Y
66	Female Connector
68	Male Connector
70	Female Elbow
64	Union Tee
65	Union Elbow
69	Male Elbow
71	Male Run Tee
72	Male Branch Tee
47	Cross
79	45° Elbow
22	Barbed Connector
32	Union
24	Multiple Tee
67	Tube Reducer
639	Plug

#### **E** Fitting Description

X	Extended Male Elbow
SP	Standpipe
PD	Double Y
BJ	Banjo
TJ	Twin Banjo
DJ	Double Banjo
BH	Bulkhead Union
DSP	Plug-in Multiple Y
RC	Rail Connector
DRC	Double Rail Connector
BHP	Plug-in Bulkhead

#### **G** Thread Size

Inches		Metric	
0	10-32	2	1/8
1	1/16	4	1/4
2	1/8	6	3/8
4	1/4	8	1/2
6	3/8	M3	M3X0.5
8	1/2	M5	M5X0.8
		M7	M7X1
		M10	M10X1
		M12	M12X1.5

#### **H** Thread Type

Metric	
R	BSPT
G	BSPP



# FACTORY / PROCESS AUTOMATION

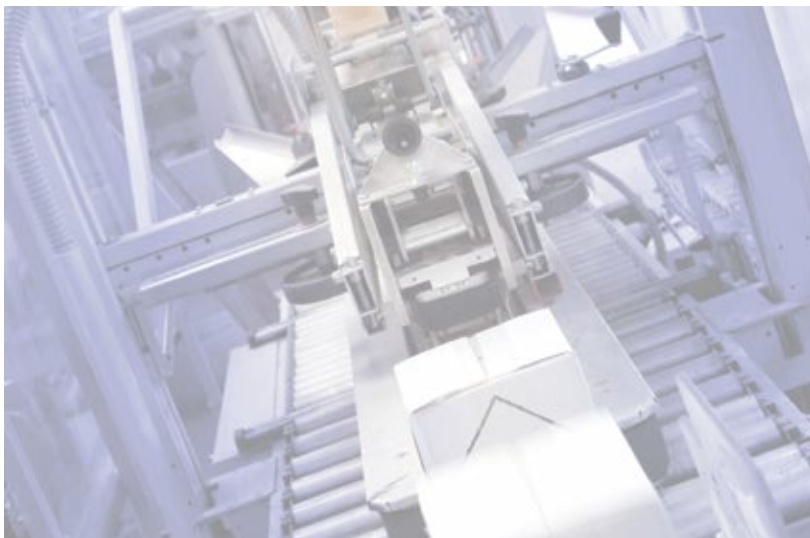
## PRODUCT SPECS

	Temperature	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	4mm	6mm	8mm	10mm	12mm	14mm	Type
Prestolok Brass	0°F to 200°F	300	300	300	300	300	300	300	—	—	—	300	300	300	300	300	300	Push-to-Connect
Prestolok Composite	-4°F to 175°F	290	290	260	290	290	290	290	—	—	—	290	290	290	290	290	290	
Prestolok PLM	-4°F to 250°F	—	290	—	290	290	290	290	—	—	—	290	290	290	290	290	290	
Prestolok PLS	-4°F to 245°F	—	290	290	290	290	290	290	290	290	290	290	290	290	290	290	—	
Flow Controls	30°F to 160°F	145	145	—	145	145	145	145	—	—	—	—	145	145	145	145	—	Function

Maximum working pressure (psi) by tube size at 73°F

## TUBING COMPATIBILITY

	Polyethylene E & EB	Polyethylene PEFR	Polyethylene HDPE	Nylon N	Nylon NR	Polypropylene PP & PPB	Polyurethane HU & HUM (>95 Shore A)	Polyurethane HUFR (Weld Tubing)	FEP
Prestolok Brass	X	X	X	X	X	X	X		
Prestolok Composite	X			X	X		X		X
Prestolok PLM	X			X	X		X	X	X
Prestolok PLS	X			X	X		X	X	X
Flow Controls	X			X	X		X		X







## IN WATER, FOOD AND BEVERAGE: KEEPING IT CLEAN, KEEPING IT SAFE

Connecting you to leak-free innovation, smaller footprints, and faster assembly

### MARKET APPLICATIONS

Filtration | Purification | Processing | Dispensing | Bottling | Treatment | Aeroponics

### PERFORMANCE EXPECTATIONS

- Manufactured from FDA-compliant materials
- Meet NSF-61 requirements for potable water contact
- Excellent chemical resistance
- Wide range of fluid compatibility
- Mechanical resistance
- Installation flexibility

### FITTINGS

#### LIQUIfit™ Fittings

An "eco-designed," innovative alternative; no fluid contamination occurs and environmental protection is guaranteed. Compact, push-to-connect, full-flow fittings offer high chemical resistance to such things as chlorine, cleaning agents, and UV. Also limits biofilm development. Suitable for water, potable liquids, and neutral gas applications.



#### TrueSeal™ Thermoplastic Fittings

Lightweight, field attachable, push-to-connect fittings manufactured from FDA compliant materials. Available in acetyl, polypropylene, and Kynar; TrueSeal fittings also offer NSF-51 compliance; NSF 61 compliance in gray acetyl. Widely used in water conditioning, filtration and reverse osmosis, as well as on water, soft drink, beer, wine, and condiment dispensing systems.



#### Low Lead Fittings

Cost-effective, low lead fittings for use on equipment that dispenses or conveys water for human consumption, including drinking and cooking. Meet California AB 1953 standards for potable water use. Suitable for high pressure beverage brewing and dispensing at temperatures up to 400°F without adversely affecting product flavor.



#### Fast & Tite® Fittings

A compression style fitting that installs in seconds without tools and provides a tight, sure, leak-proof seal without clamps or adjustments. Unique grab ring for tube retention, couples with a Nitrile O-ring, creates a positive seal and assures good tube retention with only hand tight assembly.



#### Par-Barb® Fittings

Multiple barb design generates the maximum gripping and sealing power when combined with a hose clamp. Fittings are injection molded from high strength, chemically inert thermoplastic materials.





# WATER, FOOD AND BEVERAGE

## VALVES

### LIQUIfit™ Polypropylene Ball Valves

With superior mechanical strength and chemical resistance, LIQUIfit ball valves meet all FDA and NSF-51 requirements for food contact. Built-in connection eliminates the need for a secondary fitting, reducing cost. Low profile design saves space. Full flow, self-cleaning ball maintains the cleanliness of the circuit.

### TrueSeal™ Ball Valves

These polypropylene ball valves offer proven leak-free performance, as well as excellent corrosion resistance. Bidirectional flow maximizes productivity. Full stainless steel gripping ring eliminates the need for locking clips. Full flow, self-cleaning ball adds quality and durability.

### Par-Barb Ball Valves

Injection molded from high strength, chemically inert, nylon thermoplastic. The multiple barb design generates the maximum gripping and sealing power when combined with a hose clamp. FDA and NSF 51 compliant.

### Check Valve

One-way directional valve of acetal permits gases and liquids to flow in only one direction while blocking flow reversal.

### Stainless Steel Check Valve

Provides unidirectional flow. Ideally suited for harsh environments as well as conveying industrial fluids.

## ANTIMICROBIAL TUBING

### Resists degradation from mildew, algae, fungi and biofilm

Parker's Series EA polyethylene tubing is 100% treated without using expensive silver additives. Fully compounded into the tubing to provide built-in hygiene without odors or discoloration for continuous cleanliness. FDA, NSF-51, REACH and RoHS compliant.



## OTHER APPLICABLE PRODUCTS

### TrueSeal™ Cartridges

Allow you to machine or mold a tube connection into your equipment or components, eliminating the need for threaded connections. Reduces material and assembly costs as well as potential leak paths. Withstands pressure up to 150 psi.



### LIQUIfit™ Cartridges

Guarantees the integrity of the sealing system before and after assembly in non-threaded cavities. Compact, one-piece cartridges are available in brass and nickel-plated brass. Self-centering design. Withstands pressure up to 230 psi.



### Tubing

Polyethylene for food contact and potable water applications. Kink-resistant polyurethane for food contact also exhibits excellent chemical resistance in chlorinated water applications. Assorted colors and durometers.



## HOW TO ORDER LIQUIFIT™ Fittings

### INCHES LIQUIFIT™

6505	56	11	W	P2
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>

### METRIC LIQUIFIT™

6509	06	13	W	P2
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>

<b>A Fitting Configuration</b>				
6505	Male Connector	6382	Plug-in Elbow	
6315	Female Connector	6383	Plug-in Run Tee	
6306	Union Connector	6326	Plug	
6404	Union Tee	6322	Stem to Hose Barb	
6316	Bulkhead Union	6503	Swivel Run Tee	
6579	Fixed Elbow	6548	Swivel Y Connector	
6353	Faucet Connector	6380	Plug-in 45° Elbow	
6302	Union Elbow			
6340	Union Y Connector	<b>B Tube/Stem Size</b>		
6366	Reducer	Inches	Metric	
6388	Plug-in Tee	11	1/8	04 4mm
6307	Cross	56	1/4	06 6mm
6351	End Stop	08	5/16	08 8mm
6521	Stem Adapter	60	3/8	10 10mm
6509	Swivel Elbow	62	1/2	12 12mm
6508	Swivel Branch Tee			

<b>C Thread or Tube O.D.</b>			
Inches		Metric Cont.	
00	Same Size as Tube	04	4mm
11	1/8	06	6mm
14	1/4	08	8mm
18	3/8	10	1/8
22	1/2	12	12mm
133	7/16-24	14	14mm
		13	1/4
		17	3/8
Metric		21	1/2
00	Same Size as Tube		
<b>D Color Code</b>		<b>E Packaging</b>	
W	White	P2	Standard Packaging
G	Gray		



## HOW TO ORDER

TRUESEAL™, Fast & Tite®, and Par-Barb® Fittings

### INCHES TRUESEAL™

A 4 ME 2 -MG  
A B C D E

#### A Fitting Material

A Acetal  
PP Polypropylene  
F Kynar

#### B Tube Size

4	1/4	6	3/8
5	5/16	8	1/2

#### C Fitting Configuration

MC Male Connector  
EU Elbow Union  
TU Tee Union  
WY "Y" Union  
MES Male Elbow Swivel  
MRS Male Run Swivel  
MTS Male Tee Swivel  
UC Union  
CU Cross  
FA Faucet Adapter  
FC Female Connector  
FF 45° Female Flare  
TMC Tube Stem Adapter  
BU Bulkhead Union  
TEU Tube Elbow Union  
RD Tube Reducer  
CAP Tube Cap  
FE Female Elbow  
ME Male Elbow  
ST Straight Thread  
TCB Tube-to-Barb Stem  
TEB Tube Elbow Barb  
Connector  
TPL Plug

#### D Thread Size

2	1/8	7	7/16-24
4	1/4	8	1/2
6	3/8	9	9/16-18

#### E Gripper Material

MG Metal Gripper  
Blank Plastic Gripper

### INCHES FAST & TITE®

W 4 MC 2  
A B C D

#### A Fitting Material

W White Polypropylene  
P Black Polypropylene  
N White Nylon

#### B Tube Size

4	1/4
5	5/16
6	3/8
8	1/2
10	5/8

#### C Fitting Configuration

MC Male Connector  
UC Union  
ME Male Elbow  
EU Union Elbow  
BU Bulkhead  
FE Female Elbow  
FC Female Connector  
MR Male Run Tee  
TU Union Tee  
MT Male Branch Tee

#### D Thread Size

2	1/8
4	1/4
6	3/8
8	1/2
12	3/4



### INCHES PAR-BARB FITTINGS®

325 HB -4 -2 PP  
A B C D E

#### A Fitting Configuration

322 Union  
364 Union Tee  
365 Union Elbow  
318 Hex Plug  
309 Reducer Bushing  
316 Hex Nipple  
326 Female Connector  
325 Male Connector  
372 Male Branch Tee  
370 Female Elbow  
329 Male Elbow  
362 Union Y  
328 Ball Nose Hose Barb Stem  
31 Nut  
316 Garden Hose Adapter  
325 GH Swivel Hose Barb Stem  
313 Garden Hose Cap

#### B Fitting Type

HB Hose Barb  
GH Garden Hose  
P Pipe  
GHSV Garden Hose Swivel

#### C Tube/Hose I.D.

3	3/16	10	5/8
4	1/4	12	3/4
5	5/16	16	1
6	3/8	20	1 1/4
8	1/2	24	1 1/2

#### D Thread Size

2	1/8	12	3/4
4	1/4	16	1
6	3/8	20	1 1/4
8	1/2	24	1 1/2

#### E Fitting Material

PP Black Polypropylene  
N White Nylon



# WATER, FOOD AND BEVERAGE

## PRODUCT SPECS

	Body Material	Working Pressure at 73°F (psi) (1/4 Burst Pressure)				Temperature Range (°F)
		1/4"	5/16"	3/8"	1/2"	
LIQUIfit Fractional Inch	High-Performance Nylon 11	230†	230†	190†	160†	+35° to +200°
LIQUIfit Metric	High-Performance Nylon 11	4mm-6mm 230†	8mm 230†	10mm 190†	12mm 160†	+35° to +200°
TrueSeal	Acetal	300†	300†	300†	250†	-20° to +180°
	Polypropylene	150†	N/A	150†	150†	0° to +225°
	Kynar	300†	300†	300†	250†	0° to +275°
Fast & Tite	Polypropylene	300†	300†	250†	200†	0° to +212°
	Nylon	300†	300†	250†	200†	-40° to +200°
Par-Barb	Polypropylene	125†	125†	125†	125†	-65° to +190°
	Nylon	125†	125†	125†	125†	-40° to +200°
TrueSeal Ball Valves	Polypropylene	150†	150†	150†	150†	+35° to +200°
LIQUIfit Ball Valves	Polypropylene	150†	150†	150†	150†	+35° to +200°
Par-Barb Ball Valves	Polypropylene	150†	NA	150†	150†	+35° to +200°
TrueSeal Check Valves	Acetal	150†	150†	150†	150†	+35° to +200°
Low Lead Brass	Low Lead Brass	†	†	†	†	0° to +200°

† Working pressure varies with application and temperature. Product specifications vary with fitting configurations.

## TUBING COMPATIBILITY

	Copper	Polyethylene E & EB	Polyethylene PEFR	Polyethylene HDPE	Nylon N	Nylon PAT	Nylon NR	Polypropylene PP & PPB	Polyurethane U & UM (90 - 95 Shore A)	Polyurethane HU & HUM (>95 Shore A)	Clear Vinyl	PFA	FEP	PTFE	PVDF	GPH General Purpose
LIQUIfit		X														
TrueSeal	X	X			X	X	X	X	X	X	X	X	X	X	X	
Fast & Tite	X	X	X	X	X	X	X	X	X	X	X					
Par-Barb									X		X					X





## IN TRANSPORTATION: GLOBAL LOGISTICS AND VENDOR PARTNERSHIPS

Connecting you to higher productivity, increased efficiencies, and improved inventory management

### MARKET APPLICATIONS

Air Brakes | Cab Controls | Fuel System | Engine | Transmission | Cooling | Air Tanks

### PERFORMANCE EXPECTATIONS

- Compact design
- Impact resistance
- Meets DOT and SAE requirements
- Robustness
- Vibration resistance
- High reliability
- High temperature resistance
- Installation flexibility





## FITTINGS

### Prestomatic Fittings

Robust, all-brass push-to-connect fittings meet SAE J2494 and DOT specifications. Designed for all DOT truck and trailer applications. Reduce assembly time versus compression style fittings by 90%. Ideal for tight applications with difficult wrench clearance. Use with Parflex SAE J844 type A and B tubing.



### PTC Fittings

Lightweight, composite push-to-connect fittings meet SAE J2494 and DOT specifications. Designed for all DOT truck and trailer applications. Reduce assembly time versus compression style fittings by 90%. Use with Parflex SAE J844 type A and B tubing.



### Air Brake Hose End Fittings

Parker's Air Brake Hose fittings are field attachable and engineered for use with Parker 271 Air Brake Hose. Easy to assemble and disassemble, the fittings utilize a slotted sleeve for compression and positive grip. They meet DOT FMVSS571.106 when used with SAE J1402 Air Brake Hose.



### Transmission Fittings

For pressure-protected pneumatic transmission applications. Offer a specially designed slotted sleeve to help eliminate notch stress related to over-torque. Electroless nickel-plated bodies work with bio-biesel. Use with SAE J844 type A nylon tubing.



### Vibra-Lok Fittings

Excellent for high vibration, high heat, mechanical shock, or tube movement applications. The sleeve cushions the tubing, permitting it to flex back and forth in the fitting. Seal design compensates for tube misalignment and tube surface defects. Use with seamed or seamless metal tubing: copper, aluminum, steel (Bundy), stainless steel, and glass.



### PMH Fittings

These push-to-connect hydraulic fittings are designed to speed up assembly, especially in difficult-to-reach areas such as hydraulic joystick ports. They feature excellent corrosion resistance, a compact envelope, fewer potential leak points, and light weight. When partnered with XDT Tubing from Parker's Parflex Division, Parker PMH Fittings are perfect for use with low-pressure hydraulics (<435 psi) in the industrial and mobile hydraulic markets.



### NTA Fittings

The most economical air brake solution, meeting DOT and SAE specifications. Also excellent for diesel fuel applications. Utilize a ribbed sleeve for compression and positive grip. Electroless nickel-plated bodies work with bio-diesel.



## VALVES

### Truck Valves

Brass valves with metal-to-metal seats and fine-thread screw-down for positive sealing up to the valve's capacity. Available with pipe, flare, NTA and hose barb end configurations.



### Lanyard Valve

Compact brass valve designed for releasing condensate from air tanks. Specially formulated low temperature seal remains elastic down to -40°F.



## OTHER APPLICABLE PRODUCTS

### Prestomatic Cartridges

SAE encapsulated cartridges guarantee the integrity of the sealing system before and after assembly in non-threaded cavities. Compact, one-piece cartridges are available in brass and nickel-plated brass. Self-centering design. Withstands pressure up to 250 psi.



### Manifolds

Provide multiple tube junction connections in truck air applications. Brass and glass filled nylon bodies. Contact us for custom designs.







## HOW TO ORDER

### NTA, Air Brake and Transmission

#### INCHES NTA, AB, TRANSMISSION FITTINGS

VS

2

69

NTA

-4

-2

A

B

C

D

E

F

A

#### Thread Sealant

VS

Vibra Seal

B

#### Body Material

1

Forged Brass

2

Extruded Brass

C

#### Fitting Configuration

60

Sleeve

61

Nut

62

Union

63

Tube Insert

64

Union Tee

65

Union Elbow

66

Female Connector

68

Male Connector

69

Male Elbow

70

Female Elbow

71

Male Run Tee

72

Male Branch Tee

79

45° Male Elbow

D

#### Product Series

NTA

NTA

AB

Air Brake

TF

Transmission

VL

Vibra-Lok

E

#### Tube Size

2

1/8

3

3/16

5/32

5/32

4

1/4

6

3/8

8

1/2

10

5/8

12

3/4

F

#### Thread Size

1

1/16

2

1/8

4

1/4

6

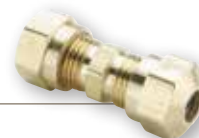
3/8

8

1/2

12

3/4



#### INCHES PTC, PRESTOMATIC, PMH, VIBRA-LOK FITTINGS

1

69

PMT

NS

-4

-2

A

B

C

D

E

F

A

#### Body Material

1

Brass

3

Composite

B

#### Fitting Configuration

32

Union

37

Adapter

62

Union

64

Union Tee

65

Union Elbow

66

Female Connector

68

Male Connector

69

Male Elbow

70

Female Elbow

71

Male Run Tee

72

Male Branch Tee

77

Female Branch Tee

79

45° Male Elbow

89

Dual Port Male Elbow

685

Male Connector Straight

695

Thread Male Elbow Straight Thread

715

Male Run Tee Straight

725

Thread Male Branch Tee Straight

725

Thread Male Branch Tee Straight

725

Thread Male Branch Tee Straight

725

Thread Male Branch Tee Straight

D

#### Fitting Description

SP

Plug-in

BHR

Retaining Ring

BH

Bulkhead

NS

Non-swivel

L

Long rigid

R

Positional

E

#### Tube Size

4

1/4

6

3/8

8

1/2

10

5/8

12

3/4

F

#### Thread Size

2

1/8

4

1/4

6

3/8

8

1/2

12

3/4



## PRODUCT SPECS

	Temperature	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	4mm	6mm	8mm	10mm	12mm	16mm	Type
PTC	-40°F to 200°F	—	—	—	250	—	250	250	250	250	—	—	—	—	—	—	—	Push-to-Connect
Prestomatic	-40°F to 200°F	—	250	—	250	—	250	250	250	250	—	—	250	250	250	250	250	
SAE Cartridges	-40°F to 200°F	—	250	—	250	—	250	250	250	250	—	—	—	—	—	—	—	
Manifolds	Pressure and temperature dependent upon manifold configuration																	Compression
NTA	-40°F to 200°F	—	—	150	150	—	150	150	150	150	—	—	—	—	—	—	—	
Air Brake	-65°F to 250°F	—	—	—	400	—	400	400	400	400	—	—	—	—	—	—	—	
Transmission Fittings	-40°F to 200°F	150	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Vibra-Lok	-30°F to 275°F	—	—	1,000	1,000	900	700	500	400	—	—	—	—	—	—	—	—	
Air Brake Hose	-65°F to 250°F	—	—	—	—	—	400	400	—	—	—	—	—	—	—	—	—	Valve
Truck Valves	-30°F to 250°F	—	—	—	—	—	150	150	150	150	—	—	—	—	—	—	—	
Lanyard Valve	-40°F to 200°F	—	—	—	150	—	—	—	—	—	—	—	—	—	—	—	—	
Drain Cocks	-65°F to 250°F	150	—	—	150	—	150	—	—	—	—	—	—	—	—	—	—	

Maximum working pressure (psi) by tube size at 73°F

## TUBING COMPATIBILITY

	Copper	Aluminum	Steel	Nylon N	Nylon PAT	PFT Air Brake (SAE J844) Inch	Air Brake DIN 74324 (Nylon 12)	PFT Diesel Fuel	HTFL Diesel Fuel	Parker 271Hose (SAE J1402)
PTC						X		X		
Prestomatic						X	X	X		
SAE Cartridges						X		X		
NTA				X	X	X		X	X	
Air Brake	X					X				
Transmission Fittings				X						
Vibra-Lok	X	X	X							
Air Brake Hose										X



## IN INDUSTRIAL: IMPROVING DURABILITY, LOWERING RISK

Connecting you to higher productivity, increased efficiency, and faster assembly



### MARKET APPLICATIONS

Processing | Transferring | Cooling | Measuring | Pneumatic Circuits

### PERFORMANCE EXPECTATIONS

- Quality traceability
- High chemical resistance
- Robust design
- Excellent chemical compatibility
- Wide temperature range







## COMPRESSION FITTINGS

### Compression Fittings

An economical choice that works with thermoplastic, copper, and aluminum tubing. Fittings require no tube flaring, soldering, or other tube prep before assembly.



### Compress-Align® Fittings

Pre-assembled with a captive sleeve, always oriented for a faster installation. Commonly used in pneumatic systems and plumbing applications, these fittings align to seal even out-of-round tubing.



### Brass Metric Compression

An economical, all-brass compression fitting with numerous connection options for a wide variety of tube materials. No need for flaring, soldering, or other tube preparation before assembly.



### Poly-Tite Fittings

Compact, pre-assembled compression style fittings designed for fast assembly. An exclusive acetal copolymer sleeve offers superior resilience to resist creeping and stress caused by compression.



### Hi-Duty Flareless Fittings

Preassembled with the sleeve machined into the nut. During assembly the sleeve breaks away from the nut to create a seal on the tubing. Rated to a much higher pressure rating than compression fittings, Hi-Duty will work with seamless steel tubing as well as copper, brass, and thermoplastic tubing.



## FLARED FITTINGS

### 45° Flared Fittings

An economical choice for a metal-to-metal seal that resists mechanical pullout; ideal for refrigerants, natural gas, propane, fuels, and other "hard to hold" liquids and gases. Common applications include flammable liquids and gases and hydraulic brakes. Meets functional requirements of SAE J512 and SAE J513.



### Inverted Flared Fittings

Offer similar performance to 45° flared fittings, except the metal-to-metal seal is internal to the fitting for tighter tube bends. Ideal for flammable liquids and gases and plumbing applications. These fittings are listed with UL and meet the functional requirements of SAE J512.



## BARBED FITTINGS

### Dubl-Barb® Fittings

An economical, one-piece, push-on brass barbed fitting that does not require any type of clamp. Applications include pneumatic systems and climate control. These compact fittings are a quick way to connect polyethylene tubing.



### Hose Barb Fittings

An economical choice for general-purpose fluid handling and pneumatics. Manufactured in both regular hose barb and beaded hose barb styles. Intended for use with 97HC hose clamps, similar type of clamps or a crimped ferrule.



## OTHER FITTINGS

### Pipe Fittings

These all-brass fittings meet all functional requirements of SAE J530 and SAE J531. Fitting threads are made to dryseal standards. Both forged and extruded fittings are available.



### Garden Hose Fittings

Connect garden hose to other garden hose, to pipe, or to tubing. Swivel connections allow hose to twist without kinking. All-brass construction; high flow.



### ISO Port Adapters

Parker's ISO Port Adapters are ideal for systems with high pressure and cycling, providing reliable, long-term sealing. Since a fluorocarbon O-ring is standard, no thread sealant is needed. This helps reduce maintenance and component replacement costs caused by contamination and damage from sealants. Our ISO port adapters meet dimensional requirements of ISO 6149-3 and SAE 2244-3.



### Metric Adapters

A comprehensive range of forged and extruded brass and nickel-plated adapters for NPT, BSPT, BSPP and metric pipe threads. Robust design is reusable.





## VALVES

### Axial Valves

Incorporate both the valve and actuation function. With pneumatic or electro-pneumatic control, these valves avoid many of the restrictions associated with traditional actuators.



### Access Valves

Designed to offer convenient, low cost access ports for refrigeration service. Access valves may be installed in any position on either the high or low side for quick testing, pressure checking, purging, or charging.



### Ball Valves

Available in brass, stainless steel, carbon steel and polypropylene in sizes from 1/8" to 3". Includes 90° valves, straight thread O-ring valves, solder ends, panel mount valves, 3-way and 4-way valves, miniature and micro valves. Options include tee, oval, padlocking wedge and lever handles, actuators, and stainless steel componentry.



### Ground Plug Shutoff Valves

Manufactured with cast or forged bodies for extra strength. Hand tightening provides a metal-to-metal seal. Available with pipe, flare and compression ends.



## ACCESSORIES

### Blow Guns and Nozzles

Wide range of assorted controlled pressure and full pressure blow guns with both thumb and pistol grip actuation. Vented nozzles in assorted styles and lengths prevent pressure buildup when dead ending occurs up to 150 psi.



### Silencers

Bronze, polyethylene, and stainless steel silencers are available in threaded, miniature, plug-in, and flow control styles in a range of working pressures and temperatures.



### Tubing

Polyethylene, flexible nylon or kink-resistant polyurethane in assorted colors and durometers; FEP or grooved stainless steel or copper.



## HOW TO ORDER

Compression, Compress-Align®, Poly-Tite, Hi-Duty,  
45° Flared, Inverted Flared, and Hose Barb Fittings

### INCHES

VS	1	69	CA	BH	-4	-2
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>

<b>A</b>	<b>Prefix</b>	<b>D</b>	<b>Fitting Series</b>	<b>F</b>	<b>Tube Size</b>
VS	Vibra Seal	C	Compression		<b>Inches</b>
W	White Acrylic	CA	Compress-Align	-2	1/8
NI	Nickel Plating	P	Poly-Tite	-3	3/16
ENI	Electroless Nickel Plating	HD	Hi-Duty	-4	1/4
OX	Oxygen Cleaned	F	45° Flare	-5	5/16
		IF	Inverted Flare	-6	3/8
		HB	Hose Barb	-7	7/16
				-8	1/2
				-10	5/8
				-12	3/4
				-14	7/8
				-16	1
<b>B</b>	<b>Body Material</b>				
1	Metal Forging				
2	Metal Extrusion				
3	Composite				
<b>C</b>	<b>Fitting Configuration</b>	<b>E</b>	<b>Suffix</b>	<b>G</b>	<b>Thread Size</b>
60	Sleeve	BH	Bulkhead		<b>Inches</b>
61/41	Nut/Nut & Sleeve	NS	Non-swivel	-1	1/16
62/42	Union	S	Swivel	-2	1/8
66/46	Female Connector	SS	Stainless Steel	-4	1/4
68/48	Male Connector			-6	3/8
64/44	Union Tee			-8	1/2
65/55	Union Elbow			-12	3/4
69/49	Male Elbow				
70/50	Female Elbow				
71/51	Male Run Tee				
72/45	Male Branch Tee				
76/56	Adapter Tee				
77	Female Branch Tee				
79/59	45° Elbow				
639	Plug				





## PRODUCT SPECS

Compression, Compress-Align®, Poly-Tite, Hi-Duty, 45° Flared, Inverted Flared, and Hose Barb Fittings

	Temperature	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	Metric (millimeter)												Type
													4	6	8	10	12	14	16	18	20	22			
Compress-Align*	-65°F to 250°F	2,800	—	1,900	1,400	1,200	1,000	750	650	550	450	—	—	—	—	—	—	—	—	—	—	—	Compression		
Compression	-65°F to 250°F	400	—	400	300	300	200	200	150	100	75	350	3,335	2,175	1,450	1,087	797	652	580	536	507	435			
Poly-Tite	0°F to 150°F	150	—	150	150	150	150	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Hi-Duty	-65°F to 250°F	4,300	—	2,850	2,100	1,800	1,500	1,150	1,000	—	—	—	—	—	—	—	—	—	—	—	—	—			
45 Degree Flare	-65°F to 250°F	2,800	—	1,900	1,400	1,200	1,000	750	650	550	450	—	—	—	—	—	—	—	—	—	—	—	Flare		
Inverted Flare	-65°F to 250°F	2,800	—	1,900	1,400	1,200	1,000	750	650	550	—	—	—	—	—	—	—	—	—	—	—	—			
Access Valves	-20°F to 220°F	500	—	500	500	500	500	500	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Dubl-Barb	-65°F to 90°F	—	150	—	150	—	150	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Barb		
Hose Barb <sup>1</sup>	-40°F to 160°F	—	—	150	150	150	150	150	150	150	—	—	—	—	—	—	—	—	—	—	—	—			
Pipe	-65°F to 250°F	1,000	—	—	1,000	—	1,000	1,000	—	1,000	—	—	—	—	—	—	—	—	—	—	—	—	Adapter		
Garden Hose <sup>1</sup>	35°F to 100°F	—	—	150	150	—	150	150	150	150	—	—	—	—	—	—	—	—	—	—	—	—			
Metric Adapters	-65°F to 250°F	1,000	—	—	1,000	—	1,000	1,000	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Ground Plug Shutoff	32°F to 125°F	30	—	—	30	—	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Valve		

Maximum working pressure (psi) by tube size at 73°F

\* Up to 1" tube size \*\* Up to 22 mm tube size <sup>1</sup> Hose size based on I.D.

## PRODUCT SPECS

Industrial Ball Valves

	Type	Body Material	Temperature		Maximum Pressure	
			MIN.	MAX.	PSI	BAR
500 Series	Female/Female	Brass	0°F (-18°C)	350°F (176°C)	600	41
501 Series	Female/Male	Brass	0°F (-18°C)	350°F (176°C)	600	41
502 Series	Panel Mounted	Brass	0°F (-18°C)	350°F (176°C)	600	41
506 Series	Straight Thread	Brass	0°F (-18°C)	350°F (176°C)	600	41
509 Series	Solder Ends	Brass	—	—	—	—
510 Series	Male/Female Straight Thread	Brass	0°F (-18°C)	350°F (176°C)	600	41
520 Series	Female/Female	Brass	0°F (-18°C)	350°F (176°C)	600	41
533 Series	3-Way Diversion	Brass	-20°F (-29°C)	350°F (176°C)	400	27
540 Series	4-Way	Brass	-20°F (-29°C)	350°F (176°C)	400	27
590/591 Series	Right Angle	Brass	-50°F (-45°C)	350°F (176°C)	250	17
500HB Series	Hose Barb	Brass	0°F (-18°C)	350°F (176°C)	150	10
600 Series	Six Port Diversion	Brass	0°F (-18°C)	250°F (121°C)	150	10
500CS/502CS Series	Female/Female	Carbon Steel	-20°F (-29°C)	425°F (218°C)	2,000 (1/4 - 1) 1,500 (1 1/4 - 2)	137 (1/4 - 1) 103 (1 1/4 - 2)

## PRODUCT SPECS CONT.

### Industrial Ball Valves (continued)

	Type	Body Material	Temperature		Maximum Pressure	
			MIN.	MAX.	PSI	BAR
506CS Series	Straight Thread	Carbon Steel	-20°F (-29°C)	425°F (218°C)	3,000	206
500HP/506HP Series	High Pressure	Carbon Steel	-10°F (-23°C)	210°F (99°C)	6,000	413
501SS	Male/Female	Stainless Steel	0°F (-18°C)	400°F (204°C)	2,000	137
502SS	Female/Female	Stainless Steel	0°F (-18°C)	400°F (204°C)	2,000 (1/4 - 1) 1,500 (1 1/4 - 2)	137 (1/4 - 1) 103 (1 1/4 - 2)
708 Series	Male/Female	Brass	-35°F (-37°C)	300°F (148°C)	500	34
709 Series	Female/Female	Brass	-35°F (-37°C)	300°F (148°C)	500	34
200 Series	Female/Female	Chrome Plated Brass	0°F (-18°C)	200°F (93°C)	200	13
608 Series	Male/Female	Brass	0°F (-18°C)	200°F (93°C)	450	31
609 Series	Female/Female	Brass	0°F (-18°C)	200°F (93°C)	450	31

### Plug Valves

	Type	Body Material	Temperature		Maximum Pressure	
			MIN.	MAX.	PSI	BAR
607 Series	Male/Male	Brass	-40°F (-40°C)	175°F (79°C)	250	17
608 Series	Male/Female	Brass	-40°F (-40°C)	175°F (79°C)	250	17
609 Series	Female/Female	Brass	-40°F (-40°C)	175°F (79°C)	250	17

## TUBING COMPATIBILITY

	Copper	Aluminum	Steel	Polyethylene E & EB	Polyethylene PERF	Polyethylene HPDE	Nylon N	Nylon PAT	Nylon NR	Polyethylene PP & PPB	Clear Vinyl	PFA	FEP	PTFE	PVDF	GPH General Purpose
Compress-Align	X	X		X	X	X	X	X	X	X		X	X	X	X	
Compression	X	X		X	X	X	X	X	X	X		X	X	X	X	
Poly-Tite	X			X			X			X	X					
Hi-Duty	X	X	X	X	X	X	X	X	X	X						
45 Degree Flare	X	X	X													
Inverted Flare	X	X	X													
Dubl-Barb				X	X											
Hose Barb											X					X
Garden Hose											X					X

# Parker Fluid Connectors Group

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### **Fittings:**

Available in inch and metric sizes covering SAE, BSP, DIN, GAZ, JIS and ISO thread configurations, manufactured from steel, stainless steel, brass, aluminum, nylon and thermoplastic.

### **Hose, Tubing and Bundles:**

Available in a wide variety of sizes and materials including rubber, wire-reinforced, thermoplastic, hybrid and custom compounds.

### **Worldwide Availability:**

Parker operates Fluid Connectors manufacturing locations and sales offices throughout North America, South America, Europe and Asia-Pacific.

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