

FLUID SYSTEM CONNECTORS

Quick Reference Guide 3500FSC-QRG | August 2024





MARKET APPLICATIONS

Processing | Transferring | Pneumatic Circuits | Cooling | Measuring | Robotic Welding

PERFORMANCE EXPECTATIONS

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







This product can expose you to chemicals including Lead and Lead Compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Fittings

PLP Metal Fittings

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



PLP Composite / LF3000 Fittings

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



PLM Metal / LF3600 Fittings

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



PLS Stainless Steel / LF3800 Fittings

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



Valves

Check Valve

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



Pneumatic Slide Valve

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



Stainless Steel Check Valve

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



Exhaust Valve

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



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.



Mini Ball Valves

Enables in-line opening and closing of a pneumatic circuit.



Blocking Valve

Prevents equipment damage in the event of a pressure loss.











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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, weld resistant, abrasion, etc.)





Other Applicable Products

Tubing

Flexible Nylon, Polyurethane, Weld Resistant in assorted colors and durometers.



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.



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 / LF3600 Cartridge

Available in electroless nickel-plated brass.



PLSC / LF3800 Cartridge

Available in 316L Stainless Steel.











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How to Order

PLM, PLS, PLP Metal, and PLP Composite Fittings

	Fractional Inch						Metric							
W	3	69	PLP	BJ	-4	-2	w	3	69	PLP	Х	6M	2	R
A	В	C	D	E	F	G	A	В	C	D	E	F	G	H
A	Thread S	ealant			D	Fitting Series	5			F	Tube Size			
W	White A	crylic			PLP	Composite	& Metal			Inches		M	etric	
Blank	No Seal	ant			PLM	All Metal				2	1/8	41	1	4mm
					PLS	Stainless S	Steel			3	3/16	6N	1	6mm
В	Body Mat	terial								5/32	5/32	18	1	8mm
1	Metal Fo	oraina			E	Fitting Descr	iption			4	1/4	10	M	10mm
3	Compos									5	5/16	12	2M	12mm
,	Compos	oite			Х	Extended M	ale Elbow			6	3/8	14	М	14mm
C	Fitting Co	onfiguratio	on		SP PD	Standpipe Double Y				8	1/2	16	М	16mm
52	Union Y				BJ	Banjo				G	Thread Siz	e		
66		Connector	r		TJ	Twin Banjo								
68		nnector			DJ	Double Ban	jo			Inches			etric	
70	Female	Elbow			BH	Bulkhead U	nion			0	10-32	2		1/8
64	Union T	ee			DSP	Plug-in Mul	tiple Y			1	1/16	4		1/4
65	Union E	lbow			RC	Rail Connec	ctor			2	1/8	6		3/8
69	Male Ell	bow			DRC	Double Rail				4	1/4	8		1/2
71	Male Ru	ın Tee			BHP	Plug-in Bull	khead			6	3/8	M:		M3X0.5
72	Male Br	anch Tee								8	1/2	M!		M5X0.8
47	Cross											M'		M7X1
79	45° Elbo	w										M		M10X1
22	Barbed	Connector	r									M	12	M12X1.5
32	Union									H	Thread Typ	0		
24	Multiple	Tee									Tilleau Typ	Je .		
67	Tube Re	ducer								Metric				
639	Plug									NPT				
										R	BSPT			
						1				G	BSPP			
			_				4	1						

ROHS

MARNING

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Product Specifications

			Tube Sizes/PSI												
Product Line	Temperature	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"	4mm	6mm	8mm	10mm	12mm	14mm	16mm
PLP Composite	-4° to 175° F	290	290	260	290	290	290	290	290	290	290	290	290	290	290
PLP Metal	0° to 200° F	300	300	300	300	300	300	300	300	300	300	300	300		
PLM	-13° to 302° F		435		435		435	435	435	435	435	435	435	435	
PLS	-13° to 302° F		435	435	435	435	435	435	435	435	435	435	435		
90° Flow Control	32° to 158° F	145	145		145	145	145	145	145	145	145	145	145	145	
Swivel Flow Control	32° to 158° F		145		145		145		145	145	145	145	145		
In-Line Flow Control	32° to 158° F		145		145	145	145	145	145	145	145	145	145		
Plug-In Flow Control	32° to 158° F	145	145		145				145	145	145	145	145		

Available

Tubing compatibilty

	Soft Metal Tubing		Thermoplastic Tubing				
Product Line	Copper	Stainless Steel	Polyethylene	Nylon	95 Shore A Polyurethane	FEP Fluoropolymer	
PLP Composite					TS		
PLP Metal							
PLM	G	G					
PLS	G	G					
90° Flow Control					TS		
Swivel Flow Control					TS		
In-Line Flow Control					TS		
Plug-In Flow Control					TS		

Compatible **G** Tubing must be Grooved **TS** Tube Support Needed

Flow Control Specifications

	Material		Size Type of Adjustment			Types of Threads						
Product	Nylon	Brass	Stainless	Compact	Miniature	External	Knobless	NPT	UNF	BSPT	BSPP	Metric
90° Flow Control												
Swivel Flow Control												
In-Line Flow Control												
Plug-In Flow Control												

Available









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MARKET APPLICATIONS

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

PERFORMANCE EXPECTATIONS

- Manufactured from FDA-compliant materials
- Meet NSF/ANSI/CAN 61 & NSF/ANSI-51 requirements for potable water contact
- Excellent chemical resistance
- Wide range of fluid compatibility
- Mechanical resistance
- Installation flexibility

















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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. Suitable for water, potable liquids, and neutral gas applications.



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.



TrueSeal[™] Thermoplastic Fittings

Lightweight, field attachable, pushto-connect fittings manufactured from FDA compliant materials. Available in acetyl, polypropylene, and black 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.



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.



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. Low profile design saves space. Full flow, self-cleaning ball maintains the cleanliness of the circuit.



Fast & Tite™ Ball Valves

This range of ball valves uses compression technology to create a sure and tight connection. Use Parker's Fast and Tite fittings for low pressure applications such as water filtration, beverage dispensing, or on vacuum lines. Manufactured from black polypropylene material, these valves meet FDA and NSF-51 requirements for food contact.



TrueSeal™ Ball Valves

These polypropylene ball valves offer proven leak-free performance, as well as excellent corrosion resistance. Bidirectional flow maximizes productivity. 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.















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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.







Tubing

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



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.



How to Order

LIQUIFIT™ Fittings

F	ra	cti	io	na	H	n	cŀ	า
г	ıα	Uυ	ı	Πa	ı	ш	U	ı

6505











Metric

6509



6505	Male Connector
6315	Female Connector
6306	Union Connector
6404	Union Tee
6316	Bulkhead Union
6579	Fixed Elbow
6353	Faucet Connector
6302	Union Elbow

В	Tube/Stem Size		
Inches		Metr	ic
11	1/8	04	4mm
56	1/4	06	6mm
80	5/16	80	8mm
60	3/8	10	10mm
62	1/2	12	12mm

6340	Union Y Connector
6366	Reducer
6388	Plug-in Tee
6307	Cross
6351	End Stop
6521	Stem Adapter
6509	Swivel Elbow
/=00	0 1 1 5 1 7

6508	Swivel Brand	ch Tee	
C	Thread or Tub	oe O.D.	
Inches		Metri	:
00	Same Size as	Tube (Inch	& Metric)
11	1/8	04	4mm
14	1/4	06	6mm
18	3/8	08	8mm
22	1/2	10	1/8

00	Same Size as	Tube (Inch	& Metric
11	1/8	04	4mm
14	1/4	06	6mm
18	3/8	80	8mm
22	1/2	10	1/8
133	7/16-24	12	12mm
		14	14mm
		13	1/4
		17	3/8
		21	1/2

ı	٧	ı	C	u	ı	U

6382	Plug-in Elbow
6383	Plug-in Run Tee

6326 Plug

6322 Stem to Hose Barb 6503 Swivel Run Tee 6548 Swivel Y Connector

6380 Plug-in 45° Elbow

D	Color Code

White W Gray

Packaging

Standard Packaging













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How to Order

TrueSeal[™] (Inches)

A 4 ME 2 -MG
A B C D E

A	Fitting Materi	al					
Α	Acetal						
PP	Polypropyle	ne					
PPB	Black Polypr	opylene					
FB	Black Kynar						
В	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	
	•	

	TI 1.0:		
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		



⚠ WARNING

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How to Order

Fast & Tite® Fittings (Inches)

P 4 MC 2

A B C D

A	Fitting Material
Р	Black Polypropylene
N	White Nylon
В	Tube Size
4	1/4
5	5/16
6	3/8
8	1/2
10	5/8

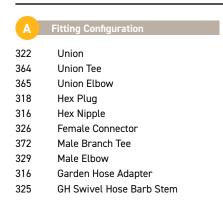
C	Fitting Configuration
MC	Male Connector
UC	Union
ME	Male Elbow
EU	Union Elbow
BU	Bulkhead
FE	Female Elbow
FC	Female Connector
MR	Male Run Tee
TU	Union Tee
MT	Male Branch Tee
GR	Grab Ring
NS	Nut and Spacer Sets
TS	Tube Support
OR	0-Ring

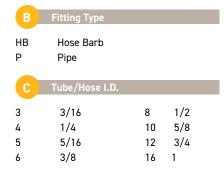
D	Thread Size	
2	1/8	
4	1/4	
6	3/8	
8	1/2	
12	3/4	

How to Order

Par-Barb® Fittings (Inches)

325	HB	-4	-2	PP
A				5





D	Thread Size			
2	1/8	8	1/2	
4	1/4	12	3/4	
6	3/8			
E	Fitting Mater	rial		
PP	Black Polyp	ropylene		
N	White Nylor	n		













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Product Specifications

		Tube Sizes/PSI											
Product Line	Temperature	1/8"	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"	4mm	6mm	8mm	10mm	12mm
LIQUIfit Inch	35° to 200° F		230		230	230	190	160					
LIQUIfit Metric	35° to 200° F								230	230	230	190	160
TrueSeal Acetal	-20° to 180° F				300	300	300	250					
TrueSeal Polypropylene	0° to 225° F				150	150	150	150					
TrueSeal Kynar	0° to 275° F				300	300	300	250					
Fast & Tite Polypropylene	0° to 212° F				300	300	250	200					
Fast & Tite Nylon	40° to 200° F				300	300	250	200					
Par-Barb Polypropylene	0° to 212° F				125	125	125	125					
Par-Barb Nylon	-40° to 200° F	125		125	125	125	125	125					
TrueSeal Ball Valves	35° to 225° F				150	150	150	150					
LIQUIfit Ball Valves	35° to 200° F				150	150	150	150		150	150	150	
Par-Barb Ball Valves	35° to 200°F				150	150	150	150					
Fast & Tite Ball Valves	35° to 200°F				150	150	150	150					
TrueSeal Check Valves	-34° to 150°F						300						

Tubing Compatibilty

	Soft Me	Soft Metal Tubing Thermoplastic Tubing			stic Tubing			
Product Line	Copper	Stainless Steel	Polyethylene	Nylon	95 Shore A Polyurethane	Polypropylene	Fluoropolymer	Vinyl
LIQUIfit								
TrueSeal	G	G		MG	TS	MG	MG	TS
Fast & Tite								
Par-Barb								

Compatible G Grooved TS Tube Support MG Metal Gripper













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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











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Fittings

Brass PTC 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 typ



Composite PTCR Fittings

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



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-diesel. 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.



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.



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.



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.



Drain Cocks / 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.



Lanyard Valve

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









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Other Applicable Products

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.



Compressed Biodiesel (CBD) Fittings

CBD fittings utilize a ribbed sleeve for compression and positive grip. The electroless nickel plating provides superior chemical compatibility for fuels containing greater than 20% biodiesel.



Manifolds

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



Straight Thread O-Ring (STO) Fittings

Straight Thread O-Ring (STO) Fittings are growing in popularity and replacing NPTF fittings on air brake applications. STO Fittings simplify installation and provide a tighter seal over traditional pipe threads.







How to Order

NTA, AB, Transmission Fittings (Inches)

A B

NTA

-4



A Thread Sealant
VS Vibra Seal
B Body Material

Forged Brass

2 Extruded Brass

D Product Series

NTA NTA

AB Air Brake

TF Transmission

VL Vibra-Lok

C Fitting Configuration

60 Sleeve 61 Nut

62 Union 63 Tube Insert

64 Union Tee

5/32

1/4

3

65 Union Elbow

66 Female Connector68 Male Connector

69 Male Elbow70 Female Elbow

71 Male Run Tee72 Male Branch Tee

79 45° Male Elbow

Tube Size F Thread Size

1/8 6 3/8 1 1/16
3/16 8 1/2 2 1/8

5/8

3/4



1/4

8

12



3/8

1/2

3/4



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10

12

How to Order

Composite PTCR, Brass PTC, Vibra-Lok Fittings (Inches)

VS 1 69 PTC NS -4 -2

A B C D E F G

Α	Thread Sealant

VS Vibra Seal

B Body Material

1 Forged Brass3 Composite

D Fitting Series

PTC PTC Brass
PTCR PTCR Composite
VL Vibra-Lok

E Fitting Description

SP Plug-in

BHR Retaining Ring Bulkhead

BH Bulkhead

NS Non-swivel

L Long rigid

R Positional

Fitting Configuration

32 Union37 Adapter62 Union64 Union Tee65 Union Elbow

66 Female Connector

88 Male Connector

69 Male Elbow

70 Female Elbow

71 Male Run Tee

72 Male Branch Tee77 Female Branch Tee

79 45° Male Elbow

89 Dual Port Male Elbow

685 Male Connector Straight Thread

695 Male Elbow Straight Thread

715 Male Run Tee Straight

725 Male Branch Tee Straight Thread

F Tube Size

4 1/4 6 3/8 8 1/2 10 5/8 12 3/4

G Thread Size

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









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Product Specifications

	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	Туре
PTCR	-40°F to 200°F				250		250	250	250	250								
Brass PTC	-40°F to 200°F		250		250		250	250	250	250			250	250	250	250	250	Push-to- Connect
SAE Cartridges	-40°F to 200°F		250		250		250	250	250	250								Push
Manifolds				Pressu	re and	temper	ature d	epende	ent upo	n manif	old cor	nfigurati	ion					
NTA	-40°F to 200°F			150	150		150	150	150	150								
Air Brake	-65°F to 250°F				400		400	400	400	400								uo
Transmission Fittings	-40°F to 200°F	150	150															Compression
Vibra-Lok	-30°F to 275°F			1,000	1,000	900	700	500	400									ŏ
Air Brake Hose	-65°F to 250°F						400	400										
Truck Valves	-30°F to 250°F						150	150	150	150								
Lanyard Valve	-40°F to 200°F				150													Valve
Drain Cocks	-65°F to 250°F	150			150		150											Va
Ground Plug Shutoff	32°F to 125°F	30			30		30											

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)	HTFL Diesel Fuel	Parker 271Hose (SAE J1402)
PTCR									
Brass PTC									
SAE Cartridges									
NTA									
Air Brake									
Transmission Fittings									
Vibra-Lok									
Air Brake Hose									

Compatible







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MARKET APPLICATIONS

Processing | Transferring | Cooling | Measuring | Pneumatic Circuits

PERFORMANCE EXPECTATIONS

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





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Compression Fittings

Compression Fittings

An economical, all brass compression fitting with numerous connection options. Available in both inch and metric sizes, these fittings are rated for use 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.



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 generalpurpose 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.





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Other Fittings

Pipe Fittings

These all-brass fittings meet the functional requirements for SAE J530 and SAE J531. Inch and metric fitting threads are made to dryseal standards. These reusable fittings are available with NPT, BSPT, BSPP, and metric pipe threads.



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.



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 0-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.



Drain Cocks / 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.



Needle Valves

All brass needle valves have metalto-metal seats with fine thread screwdown. The specially formulated low temperature seal remains elastic to temperatures as low as -40°F (-40° C).





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How to Order

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

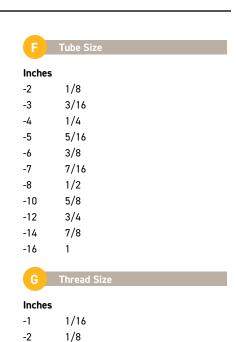
VS 1 69 CA BH -4 -2

A B C D E F G

A	Prefix
VS	Vibra Seal
NI	Nickel Plating
ENI	Electroless Nickel Plating
OX	Oxygen Cleaned
	, ,
В	Body Material
1	Metal Forging
C	Fitting Configuration
60	Sleeve
61/41	Nut/Nut & Sleeve
62/42	Union
66/46	Female Connector
68/48	Male Connector
64/44	Union Tee
65/55	Union Elbow
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
D	Fitting Series

CA	Compress-Align
Р	Poly-Tite
HD	Hi-Duty
F	45° Flare
IF	Inverted Flare
НВ	Hose Barb





-4

-6 -8

-12

1/4 3/8

1/2

3/4



⚠ WARNING

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Product Specifications Industrial Ball Valves

	Туре	Body Material	Tempe	erature	Maximum Pressure		
	.,,,,	Dody matorial	MIN.	MAX.	PSI	BAR	
500 Series	Female/Female	Brass	0°F (-18°C)	350°F (176°C)	600	41	
501 Series	Male/Female	Brass	0°F (-18°C)	350°F (176°C)	600	41	
502 Series	Panel Mount	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	0°F (-18°C)	470°F (243.3°C)	600	41	
510 Series	Male/Female Straight Thread	Brass	0°F (-18°C)	350°F (176°C)	600	41	
520 Series	Female/Female	Brass	-40°F (-40°C)	350°F (176°C)	600	41	
525 Series	Female/Female	Brass	-40°F (-40°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)	
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	

Product Specifications Plug Valves

	Туре	Body Material	Tempe	erature	Maximum Pressure		
	_ 1,50		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	



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Product Specifications Compression, Compress-Align, $^{\circ}$ Poly-Tite, Hi-Duty, 45 $^{\circ}$ 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"	Туре
Compress-Align*	-65°F to 200°F	2,800		1,900	1,400	1,200	1,000	750	650	550	450	350	
Compression (Metric Available)	-65°F to 200°F	2,800		1,900	1,400	1,200	1,000	750	650	550	450	350	Compression
Poly-Tite	0°F to 150°F				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 200°F	2,800		1,900	1,400	1,200	1,000	750	650	550			
Inverted Flare	-65°F to 250°F	2,800		1,900	1,400	1,200	1,000	750	650	550			Flare
Access Valves	-20°F to 220°F	500		500	500		500	500					
Dubl-Barb	-65°F to 90°F		150		150		150	100					Barb
Hose Barb ¹	-40°F to 160°F			150	150	150	150	150	150	150			Daib
Pipe (Metric Available)	-65°F to 250°F	1,000			1,000		1,000	1,000		1,000			Adapter
Garden Hose ¹	35°F to 100°F			150	150		150	150	150	150			
Drain Cocks	-65°F to 250°F	150			150		150						Valve
Ground Plug Shutoff	32°F to 125°F	30			30		30						vaive
Needle Valves	-40°F to 175°F	150			150	150	150						

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

Tubing Compatibility

	Soft Metal Tubing				Thermoplastic Tubing									
Product Line	Copper	Stainless steel	Polyethylene	Nylon	95 Shore A Polyurethane	Polypropylene	Fluoropolymer	Vinyl						
Compress-Align														
Compression														
Poly-Tite														
Hi-Duty														
45 Degree Flare														
Inverted Flare														
Dubl-Barb														
Hose Barb														

Compatible

MARNING

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^{*} Up to 1" tube size $\,\,$ ** Up to 22 mm tube size $\,\,$ ¹ Hose size based on I.D.



MARKET APPLICATIONS

Compressed Air | Inert Gases | Vacuum

PERFORMANCE EXPECTATIONS

- Energy Efficient
- Corrosion Resistant
- Quick Installation
- Modular Design
- Optimum flow rate
- 10 year warranty





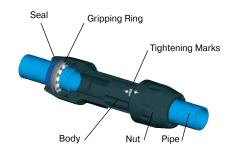
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ALUMINUM PIPING CONNECTION TECHNOLOGIES

Transair's innovative technology enables rapid and easy assembly with quick connection of components to the aluminum pipe. This technology takes into account the specific requirements of each diameter and provides the user with an optimum safety coefficient and easy connection.

1/2" (16.5mm) • 1" (25mm) • 1-1/2" (40mm)

In sizes 1/2" (16,5mm), 1" (25mm), and 1-1/2" (40mm), Transair aluminum pipe uses push to connect technology. Simply push the pipe into the connector until it meets the depth mark on the pipe. The gripping ring will then engage and prevent the pipe from sliding out of the connector.





Installation Video

2" (50mm) • 2-1/2" (63mm)

In sizes 2" (50mm) and 2-1/2" (63mm), Transair aluminum pipe uses snap ring technology. Place the snap ring in the two holes at the end of the pipe and slide the nut in-place. Next, hand tighten the nut into the connector body. Lastly, use a pare of spanner wrenches to fully tighten the connector.

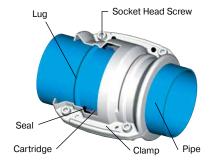




Installation Video

3" (76mm) • 4" (101mm) • 6" (168mm)

In sizes 3" (76mm), 4" (101mm), and 6" (168mm), Transair aluminum pipe uses clamshell technology. Place the cartridge on the pipe so it meets the lug. Then position the connector so the cartridge is in the middle. Lastly, close the connector and tighten with the provided bolts.





Installation Video

3" (76mm) • 4" (101mm) • 6" (168mm)

8" pipe to pipe connectors can be quickly connected to Transair pipe. Position the seal on one half of the pipe, then slide the 2nd pipe into position. Lastly, attach the connector over the seal and tighten.





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TECHNICAL

Suitable fluids

- compressed air (dry, wet, lubricated)
- vacuum
- inert gases
- Please consult us for other fluids

Resistant to

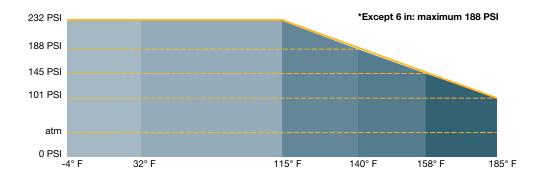
- corrosion
- mineral compressor oils
- thermal variations
- synthetic compressor oils
- ultraviolet (UV)
- mechanical shocks
- compressor oil carry over

Vacuum level

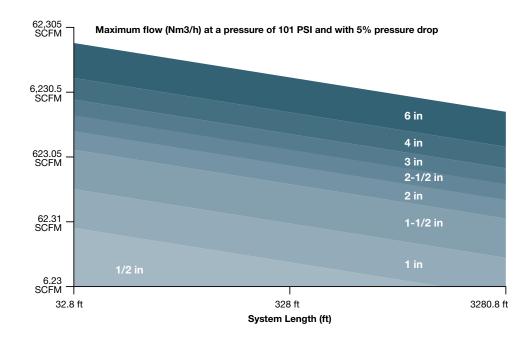
99.9% (0.03" Hg / 1mbar)

Working Pressure and Temperature

The maximum working pressure of the Transair® system versus the operating temperature can be seen in the diagram below.



Maximum Flow



A WARNING

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Sizing Chart

Select the Transair® diameter for your application based on required flow against pressure drop. Estimated values: Closed loop system at 100 PSI with 5% pressure drop.

Example

- Main system length (ring main): 1000 ft
- Compressor power: 40 hp
- Required flow rate: 150 SCFM
- Working pressure: 100 PSI

Result: The most suitable Transair® diameter is: 1-1/2".

Flow Rate			Main Ring	Length (ft)				
SCFM	500	1000	2000	3000	4000	5000	Compressor hp	
10	1/2"	1/2"	1/2"	1"	1"	1"		
25	1"	1"	1"	1"	1"	1"	<15	
50	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"		
75	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"		
100	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	15 to 40	
150	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"		
250	1 1/2"	1 1/2"	2"	2"	2 1/2"	2 1/2"		
350	2"	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	41 to 125	
500	2 1/2"	2 1/2"	2 1/2"	3"	3"	3"		
750	2 1/2"	2 1/2"	3"	3"	4"	4"	100 1 050	
1000	3"	3"	3"	4"	4"	4"	126 to 250	
1250	3"	3"	4"	4"	4"	4"		
1500	4"	4"	4"	4"	4"	4"	405 +- 500	
1750	4"	4"	4"	4"	4"	4"	125 to 500	
2000	4"	4"	4"	4"	4"	6"		
2250	4"	4"	4"	6"	6"	6"		
2500	6"	6"	6"	6"	6"	6"		
2750	6"	6"	6"	6"	6"	6"		
3000	6"	6"	6"	6"	6"	6"	501 to 1000	
3250	6"	6"	6"	6"	6"	6"		
3500	6"	6"	6"	6"	6"	6"		
4000	6"	6"	6"	6"	6"	6"		
4500	6"	6"	6"	6"	6"	6"		
5000	6"	6"	6"	6"	6"	6"	1001 to 1400	
5500	6"	6"	6"	6"	6"	6"		





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CUSTOM SOLUTIONS FOR TODAY'S PROBLEMS

Parker Fluid System Connectors Division is dedicated to helping you solve your fluid conveyance problems.

Due to the ever-changing and increasingly unique need of OEMs, our catalog offering of brass and composite fluid conveyance fittings may not always solve routing constraints. In these circumstances, OEMs may find themselves needing a custom configured component to achieve the desired routing.

In situations where a standard fitting or valve is not suitable, Parker can develop and manufacture a custom machined brass or molded composite fitting or valve.

Our team of highly skilled, US-based engineers can design a part based on your application's unique requirements. We work quickly to understand your pain points and requirements, before developing a custom solution to fit your application. Our engineers will develop a prototype and complete the testing outlined by the desginated criteria and/or specific required specifications. Our custom solution can be as simple as putting an electroless nickel plating on an existing brass part or as complex as designing and manufacturing a custom manifold.



Parker specializes in fluid conveyance fittings and valves produced from brass or composite materials. Our custom solutions can be produced from either of these materials.



Brass

For applications that require a small number of special shape or thread patterns, Parker can design and manufacture custom brass configurations. This option involves no up-front tooling costs and can be completed in just a few weeks.



Composite

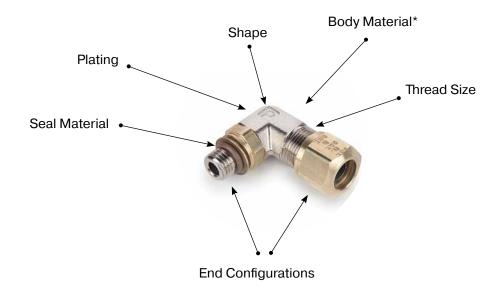
Custom composite parts can make sense for OEMs requiring high volumes of a specific configuration. This option requires additional lead time and up-front costs due to the need for a custom injection molds. The advantage is this option can lead to wide variety of shapes and configurations. Our composite customs are commonly manufactured in Nylon, Polyproplene, Acetal, and Kynar.



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CUSTOMIZATION OPTIONS

Parker's fittings and valves can be customized to fit your application. Below are just a few examples of what can be customized on our fittings.



*Fluid System Connectors Division offers Brass or Composite bodies

INTEGRATED FITTINGS & MANIFOLDS

Parker's engineering and manufacutring teams can produce a custom integrated fitting or manifold.



Manifolds are the ideal choice for reducing the number of ports and simplifying fluid conveyance lines. A custom manifold can reduce the footprint required to connect vital fluid conveyance lines. A manifold can also decreasing installation time. Parker can offer color coded manifold ports to keep line continunity and reduce installation complexity.



Integrated fittings combine one or more components into one footprint. For example, we can combine a check valve with an elbow. The resulting part would provide vital flow control in a reduced footprint. Integrated fittings can reduce your costs by eliminating SKUs and improving installation times.



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EXAMPLES OF FSC NON-STANDARDS







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IDENTIFYING REQUIREMENTS

When thinking about a custom product, it is important to throughly review and document the requirements of the application. To collect the requirements, our engineers use the STAMPED method.



SIZE: What inside or outside diameter do you require?



TEMPERATURE: What is the ambient temperature as well as the media temperature?



APPLICATION: Where will the fitting or valve be used?



MEDIA: What fluid or gas will be conveyed through the fitting or valve?



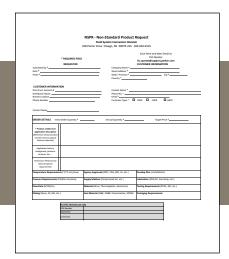
PRESSURE: What is the system's working pressure?



ENDS: How will the fitting or valve be connected? (i.e. threaded port, hose, or tube)



DELIVERY: When do you need the fitting? How many? What certifications do you require?



Interested in a custom product?

Download the Non-Standard Product Request form from our website and complete the required fields. When completed, please email the form to fsc.quotes@support.parker.com.





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