



Water & Beverage Connectors Products & Custom Solutions

Catalog 3525LQ1 | April 2015

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



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TIJUANA, MEXICO



ALBION, INDIANA



LAKEVIEW, MICHIGAN



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WARNING – USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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Offer of Sale

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Safe Drinking Water Act

In accordance with 42 USC § 300g-6, parts in this catalog are to be used exclusively for nonpotable services such as manufacturing, industrial processing, irrigation, outdoor watering, or any other uses where the water is not anticipated to be used for human consumption. The only exceptions are parts described explicitly as "low lead" or suitable for potable water.

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Parker Hannifin Corporation
Fluid Connectors Group
Otsego, Michigan

Directives and Regulations



European RoHS directives: 2011/65/EC

Relating to the limitation of the use of 6 hazardous substances in electrical and electronic equipment (mercury, lead, cadmium, hexavalent chromium, PBB and PBDE).

F6FC



CFR 21: Code of Federal Regulation Title 21: Food and Drugs

This code consists of lists of prohibited substances for materials intended to come into contact with foodstuffs.



Regulation 1935/2004

This framework regulation relates to materials and objects designed to come into contact with foodstuffs. It describes specific measures per product group (Art. 5).



NSF 51: NSF / ANSI-51

Fittings and tubes complying with this standard are tested and approved by NSF for contact with drinks and foodstuffs.



NSF 61: NSF / ANSI-61

Fittings and tubes complying with this standard are tested and approved by NSF for contact with drinking water.



Gold Seal Program

Fittings comply with the ANSI standards and approved by WQA for contact with drinks and foodstuffs.



REACH regulation: no. 1907/2006







As product manufacturer, we are subject to article 33 of the regulation which defines a duty to inform when a candidate substance is present at more than 0.1% weight for weight.

Product Selector

Product	Connection Technology	Body Material	Seal Material	Working Pressure at 73° (psi) (1/4 Burst Pressure)				Temperature Range (°F)
				1/4"	5/16"	3/8"	1/2"	
Water & Beverage								
LIQUIfit® Fractional Inch	Gripping Ring Push Button Release	High-Performance Nylon 11	EPDM	230†	230†	190†	160†	+35° to +200°
LIQUIfit® Metric	Gripping Ring Push Button Release	High-Performance Nylon 11	EPDM	4mm- 6mm	8mm	10mm	12mm	+35° to +200°
				230†	230†	190†	160†	
TrueSeal™	Collet Push Button Release	Acetal	EPDM	300†	300†	300†	250†	-20° to +180°
		Polypropylene	EPDM	150†	N/A	150†	150†	0° to +225°
		Kynar	Fluorocarbon	300†	300†	300†	250†	0° to +275°
Fast & Tite®	Gripping Ring Compression	Polypropylene	Nitrile	300†	300†	250†	200†	0° to +212°
		Nylon	Nitrile	300†	300†	250†	200†	-40° to +200°
Par-Barb®	Barb	Polypropylene	None	125†	125†	125†	125†	-65° to +190°
		Nylon	None	125†	125†	125†	125†	-40° to +200°
Quick Couplings	Quick Disconnect	Acetal	Nitrile	120†	120†	120†	N/A	-40° to +180°
TrueSeal™ Ball Valves	Collet Push Button Release	Polypropylene	Nitrile & EPDM	150†	150†	150†	150†	+35° to +200°
LIQUIfit® Ball Valves	Gripping Ring Push Button Release	Polypropylene	Nitrile & EPDM	150†	150†	150†	150†	+35° to +200°
Par-Barb® Ball Valves	Barb	Polypropylene	Nitrile & EPDM	150†	NA	150†	150†	+35° to +200°
TrueSeal™ Check Valves	Collet Push Button Release	Acetal	EPDM	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.

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	Polypropylene Tubing	PVDF Tubing
		Polyvinylidene Fluoride

LIQUIfit Fittings



Parker's LIQUIfit Fittings offers an "eco-designed" innovative alternative for water applications.

Product Features:

- Stainless steel grab ring
- EPDM D – seal
- FDA, NSF 51, NSF 61
- Silicone free
- 100% leak tested in production
- Date coding to guarantee quality and traceability

Markets:

- Water Filtration
- Beverage Dispensing
- Life Science
- Bottling
- Semi-Conductor

Applications:

- Water
- Beverages
- Food
- CO₂

Specifications:

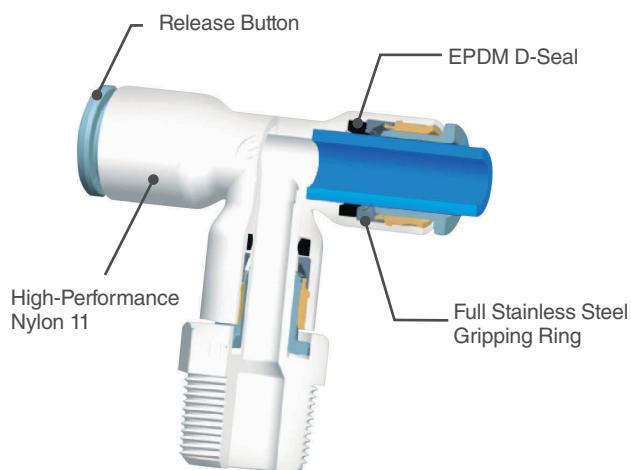
Pressure Range Up to 230 psi

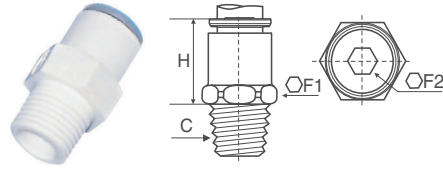
Temperature Range 35° to 200°F

Note: The working specification depends on the type and wall thickness of the tube, the type of fluid, fluid Temperature and ambient temperature

Compatible Tubing:

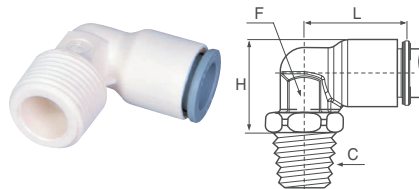
- Polyethylene





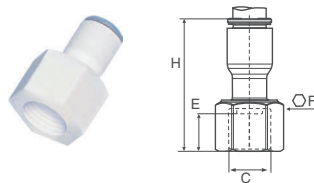
6505 Male Connector Inch Tube to NPTF

PART NO.	TUBE SIZE IN	C NPTF	F1	F2	H
6505 56 11WP2	1/4	1/8	1/2	5/32	.67
6505 56 14WP2	1/4	1/4	9/16	5/32	.67
6505 56 18WP2	1/4	3/8	3/4	1/4	.85
6505 60 11WP2	3/8	1/8	3/4	5/32	.87
6505 60 14WP2	3/8	1/4	3/4	1/4	.87
6505 60 18WP2	3/8	3/8	3/4	1/4	.87
6505 60 22WP2	3/8	1/2	15/16	1/4	1.06
6505 62 18WP2	1/2	3/8	15/16	3/8	1.10
6505 62 22WP2	1/2	1/2	15/16	3/8	1.10



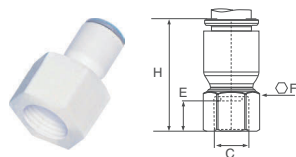
6579 Fixed Elbow Inch Tube to NPTF

PART NO.	TUBE SIZE IN	C NPTF	F	H	L
6579 56 11WP2	1/4	1/8	3/8	.87	.71
6579 56 14WP2	1/4	1/4	3/8	1.03	.71
6579 56 18WP2	1/4	3/8	3/8	1.04	.71
6579 60 14WP2	3/8	1/4	1/2	1.26	1.02
6579 60 18WP2	3/8	3/8	1/2	1.26	1.02



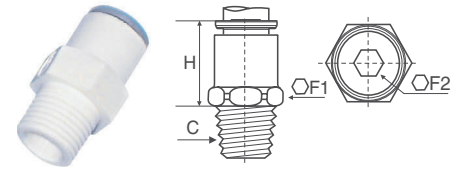
6315 Female Connector Inch Tube to NPTF

PART NO.	TUBE SIZE IN	C NPTF	E	F	H
6315 56 14WP2	1/4	1/4	14	11/16	1.18
6315 60 18WP2	3/8	3/8	14	3/16	1.42



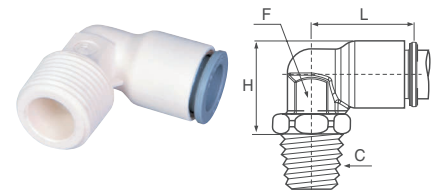
6325 Faucet Connector Inch Tube to UNS

PART NO.	TUBE SIZE IN	C UNS	E	F	H
6325 56 133WP2	1/4	7/16-24	27	9/16	1.22
6325 60 133WP2	3/8	7/16-24	27	9/16	1.26



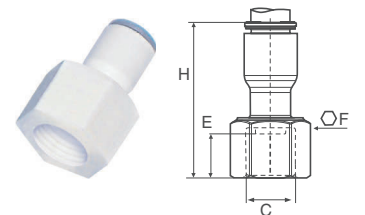
6505 Male Connector Metric Tube to BSPT

PART NO.	TUBE SIZE MM	C BSPT	F1	F2	H
6505 04 10WP2	4	1/8	11	3	18.00
6505 04 13WP2	4	1/4	14	3	18.00
6505 06 10WP2	6	1/8	11	4	18.00
6505 06 13WP2	6	1/4	14	4	18.00
6505 08 10WP2	8	1/8	17	6	20.00
6505 08 13WP2	8	1/4	17	6	20.00
6505 08 17WP2	8	3/8	17	6	20.00
6505 10 13WP2	10	1/4	17	7	21.50
6505 10 17WP2	10	3/8	19	7	21.50
6505 10 21WP2	10	1/2	22	7	21.50
6505 12 17WP2	12	3/8	19	9	24.50
6505 12 21WP2	12	1/2	22	9	24.50



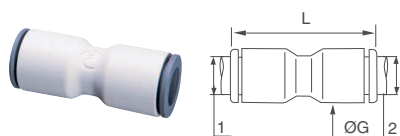
6579 Fixed Elbow Metric Tube to BSPT

PART NO.	TUBE SIZE MM	C BSPT	F	H	L
6579 06 10WP2	6	1/8	10	14	19
6579 06 13WP2	6	1/4	10	14	19
6579 06 17WP2	6	3/8	10	14	19



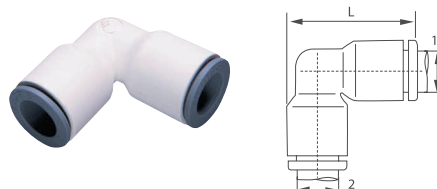
6315 Female Connector Metric Tube to BSPT

PART NO.	TUBE SIZE MM	C BSPT	E	F	H
6315 06 10WP2	6	1/8	11	13	32.00
6315 06 13WP2	6	1/4	14	16	33.00
6315 08 13WP2	8	1/4	14	16	33.50
6315 08 17WP2	8	3/8	14	20	36.00



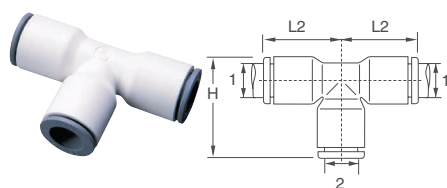
6306 Union Connector Inch Tube

PART NO.	TUBE 1 SIZE IN	TUBE 2 SIZE IN	G	L
6306 56 00WP2	1/4	1/4	.43	1.18
6306 08 00WP2	5/16	5/16	.53	1.46
6306 60 00WP2	3/8	3/8	.63	1.65
6306 62 00WP2	1/2	1/2	.87	2.24
6306 56 60WP2	1/4	3/8	.63	1.61
6306 56 08WP2	1/4	5/16	.53	1.46
6306 08 60WP2	5/16	3/8	.63	1.65
6306 08 62WP2	5/16	1/2	.87	2.16
6306 60 62WP2	3/8	1/2	.87	2.20



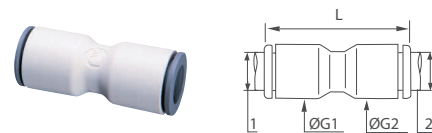
6302 Union Elbow Inch Tube

PART NO.	TUBE 1 SIZE IN	TUBE 2 SIZE IN	L
6302 04 00WP2	5/32	5/32	.75
6302 56 00WP2	1/4	1/4	.94
6302 08 00WP2	5/16	5/16	1.16
6302 60 00WP2	3/8	3/8	1.34
6302 62 00WP2	1/2	1/2	1.83
6302 56 08WP2	1/4	5/16	1.16
6302 08 60WP2	5/16	3/8	1.34
6302 56 60WP2	3/8	1/4	1.30
6302 60 62WP2	3/8	1/2	1.83



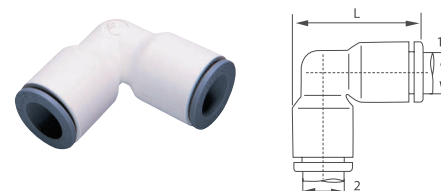
6304 Union Tee Inch Tube

PART NO.	TUBE 1 SIZE IN	TUBE 2 SIZE IN	H	L2
6304 04 00WP2	5/32	5/32	.79	.61
6304 56 00WP2	1/4	1/4	.94	.71
6304 08 00WP2	5/16	5/16	1.14	.89
6304 60 00WP2	3/8	3/8	1.34	1.02
6304 62 00WP2	1/2	1/2	1.85	1.42
6304 60 56WP2	3/8	1/4	1.34	1.02
6304 62 60WP2	1/2	3/8	1.85	1.42



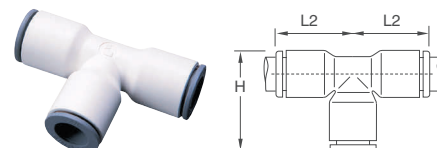
6306 Union Connector Metric Tube

PART NO.	TUBE 1 SIZE MM	TUBE 2 SIZE MM	G1	G2	L
6306 04 00WP2	4	4	8.50	8.50	26.50
6306 06 00WP2	6	6	10.50	10.50	30.00
6306 08 00WP2	8	8	13.50	13.50	37.00
6306 10 00WP2	10	10	16.00	16.00	42.00
6306 12 00WP2	12	12	19.00	19.00	50.50
6306 04 06WP2	4	6	8.50	10.50	29.00
6306 04 08WP2	4	8	13.50	13.50	37.00
6306 06 08WP2	6	8	13.50	13.50	37.00
6306 06 10WP2	6	10	16.00	16.00	42.00
6306 08 10WP2	8	10	16.00	16.00	42.00
6306 08 12WP2	8	12	19.00	19.00	50.00
6306 10 12WP2	10	12	19.00	19.00	50.00



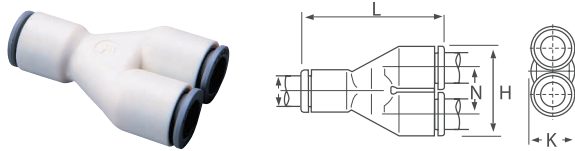
6302 Union Elbow Metric Tube

PART NO.	TUBE 1 SIZE MM	TUBE 2 SIZE MM	L
6302 04 00WP2	4	4	19.50
6302 06 00WP2	6	6	24.00
6302 08 00WP2	8	8	29.50
6302 10 00WP2	10	10	34.50
6302 12 00WP2	12	12	40.50
6302 04 06WP2	4	6	24.00
6302 06 08WP2	6	8	29.50
6302 08 10WP2	8	10	34.50
6302 10 12WP2	10	12	40.50



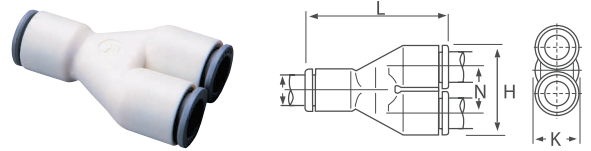
6304 Union Tee Metric Tube

PART NO.	TUBE SIZE MM	H	L2
6304 04 00WP2	4	20.00	15.50
6304 06 00WP2	6	23.00	18.00
6304 08 00WP2	8	29.00	22.50
6304 10 00WP2	10	34.50	26.50
6304 12 00WP2	12	40.00	31.00



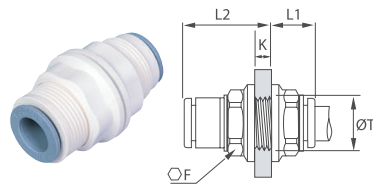
6340 Union Y Connector Inch Tube

PART NO.	TUBE SIZE IN	H	K	L	N
6340 04 00WP2	5/32	.69	.33	1.18	.35
6340 56 00WP2	1/4	.87	.43	1.42	.45
6340 08 00WP2	5/16	1.10	.53	1.75	.57
6340 60 00WP2	3/8	1.30	.63	2.08	.67
6340 62 00WP2	1/2	1.77	.87	2.64	.91



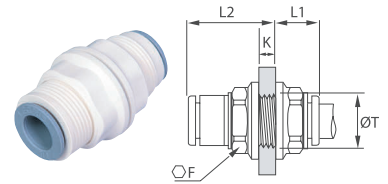
6340 Union Y Connector Metric Tube

PART NO.	TUBE SIZE MM	H	K	L	N
6340 04 00WP2	4	17.50	8.50	30.00	9.00
6340 06 00WP2	6	21.50	10.50	36.50	11.00
6340 08 00WP2	8	28.00	13.50	44.50	14.50
6340 10 00WP2	10	33.00	16.00	53.00	17.00
6340 12 00WP2	12	39.00	19.00	60.50	20.00



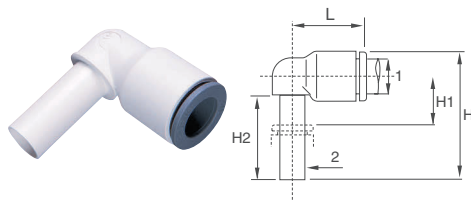
6316 Bulkhead Union Inch Tube

PART NO.	TUBE SIZE IN	F	K MAX	L1	L2	T MIN
6316 04 00WP2	5/32	.51	.22	.41	.61	.41
6316 56 00WP2	1/4	.59	.33	.39	.79	.49
6316 08 00WP2	5/16	.71	.57	.41	1.06	.61
6316 60 00WP2	3/8	.87	.57	.49	1.16	.73
6316 62 00WP2	1/2	1.41	.81	.67	1.59	1.00



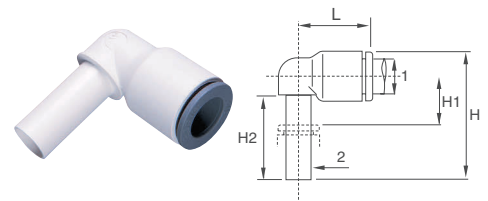
6316 Bulkhead Union Metric Tube

PART NO.	TUBE SIZE MM	F	K MAX	L1	L2	T MIN
6316 04 00WP2	4	13	5.50	10.50	15.50	10.50
6316 06 00WP2	6	15	8.50	10.00	20.00	12.50
6316 08 00WP2	8	18	14.50	10.50	27.00	15.50
6316 10 00WP2	10	22	14.50	13.00	30.00	18.50
6316 12 00WP2	12	26	18.50	15.50	35.00	22.50



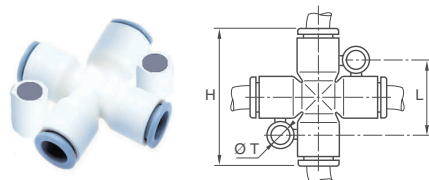
6382 Plug-In Elbow Inch Tube to Stem

PART NO.	TUBE 1 SIZE IN	TUBE 2 SIZE IN	H	H1	H2	L
6382 56 00WP2	1/4	1/4	1.20	.43	.71	.71
6382 08 00WP2	5/16	5/16	1.32	.31	.85	.88
6382 60 00WP2	3/8	3/8	1.53	.35	.96	1.04
6382 56 60WP2	1/4	3/8	1.93	.51	1.12	1.42
6382 60 56WP2	3/8	1/4	1.26	.43	.71	1.04



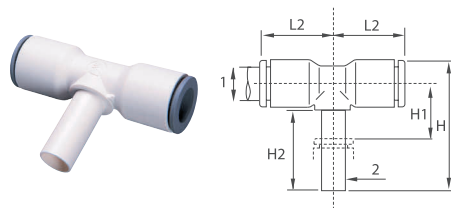
6382 Plug-In Elbow Metric Tube to Stem

PART NO.	TUBE 1 SIZE MM	TUBE 2 SIZE MM	H	H1	H2	L
6382 04 00WP2	4	4	23.00	6.00	15.50	15.00
6382 06 00WP2	6	6	26.50	7.00	17.00	17.00
6382 08 00WP2	8	8	33.00	8.00	21.50	22.50
6382 10 00WP2	10	10	39.00	9.50	24.50	26.50
6382 12 00WP2	12	12	44.50	10.00	27.00	31.00
6382 04 06WP2	4	6	26.50	7.00	17.00	16.50
6382 06 04WP2	6	4	25.00	7.00	15.50	17.00
6382 06 08WP2	6	8	33.50	8.00	21.50	22.50
6382 08 10WP2	8	10	39.00	9.50	24.50	26.00
6382 10 12WP2	10	12	44.50	10.00	27.00	30.00



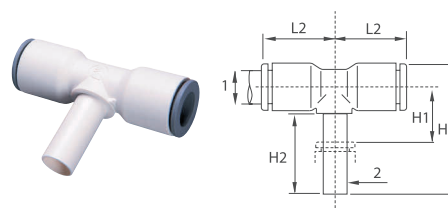
6307 Cross Metric

PART NUMBER	TUBE SIZE MM	H	L	T
6307 06 00WP2	6	46	22.5	4.2
6307 08 00WP2	8	46	22.5	4.2



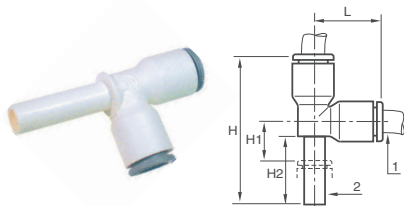
6388 Plug-In Tee Inch Tube to Stem

PART NO.	TUBE 1 SIZE IN	TUBE 2 SIZE IN	H	H1	H2	L2
6388 56 00WP2	1/4	1/4	1.20	.43	.79	.71
6388 08 00WP2	5/16	5/16	1.32	.31	.85	.90
6388 60 00WP2	3/8	3/8	1.65	.49	.98	.98
6388 62 00WP2	1/2	1/2	2.01	.51	1.14	1.26



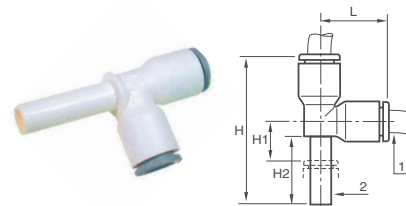
6388 Plug-In Tee Metric Tube to Stem

PART NO.	TUBE 1 SIZE MM	TUBE 2 SIZE MM	H	H1	H2	L2
6388 04 00WP2	4	4	25.00	6.00	15.50	15.00
6388 06 00WP2	6	6	28.50	7.00	17.00	16.00
6388 08 00WP2	8	8	33.50	8.00	21.50	23.00
6388 10 00WP2	10	10	41.00	9.50	24.50	26.50



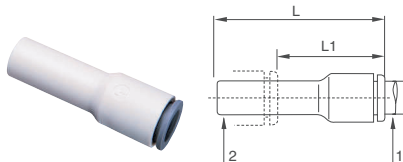
6383 Plug-In Run Tee Inch Tube to Stem

PART NO.	TUBE 1 SIZE IN	TUBE 2 SIZE IN	H	H1	H2	L
6383 56 00WP2	1/4	1/4	1.20	.43	.71	.71
6383 56 60WP2	1/4	3/8	1.55	.43	.96	1.00
6383 60 00WP2	3/8	3/8	1.55	.43	.96	1.04
6383 62 00WP2	1/2	1/2	1.93	.71	1.12	1.42



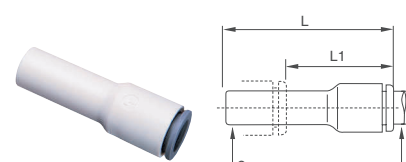
6383 Plug-In Run Tee Metric Tube to Stem

PART NO.	TUBE 1 SIZE MM	TUBE 2 SIZE MM	H	H1	H2	L
6383 04 00WP2	4	4	33.00	6.00	15.50	15.00
6383 06 00WP2	6	6	38.50	7.00	17.00	18.00
6383 08 00WP2	8	8	49.00	8.00	21.50	23.00
6383 10 00WP2	10	10	57.00	10.50	25.50	26.50



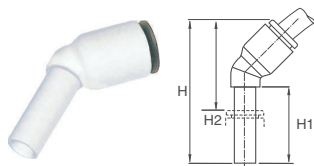
6366 Reducer Inch Tube to Stem

PART NO.	TUBE 1 SIZE IN	TUBE 2 SIZE IN	L	L1
6366 56 08WP2	1/4	5/16	1.61	.89
6366 56 60WP2	1/4	3/8	1.61	.81
6366 08 60WP2	5/16	3/8	1.91	1.14
6366 08 62WP2	5/16	1/2	1.91	.87
6366 60 62WP2	3/8	1/2	2.01	1.18



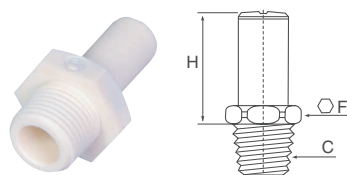
6366 Reducer Metric Tube to Stem

PART NO.	TUBE 1 SIZE MM	TUBE 2 SIZE MM	L	L1
6366 04 06WP2	4	6	38.00	23.50
6366 04 08WP2	4	8	38.00	19.00
6366 06 08WP2	6	8	38.00	20.00
6366 06 10WP2	6	10	39.00	17.50
6366 08 10WP2	8	10	48.50	28.50
6366 08 12WP2	8	12	48.50	24.50
6366 10 12WP2	10	12	52.00	33.50
6366 10 14WP2	10	14	53.00	33.50
6366 12 14WP2	12	14	55.50	33.50



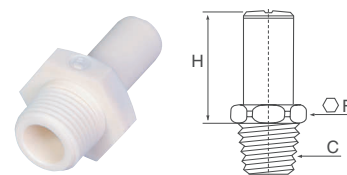
6380 Plug-in 45° Elbow Metric

PART NUMBER	TUBE SIZE MM	STEM SIZE MM	H	H1	H2
6380 04 00WP2	4	4	33.5	19.0	13.0
6380 06 00WP2	6	6	39.0	21.0	14.5
6380 08 00WP2	8	8	44.0	21.5	19.5
6380 10 00WP2	10	10	53.0	27.0	23.0
6380 12 00WP2	12	12	58.5	27.5	26.5



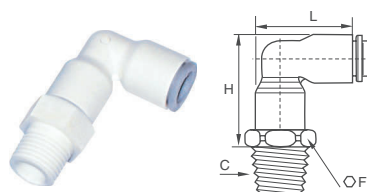
6521 Stem Adapter Inch Tube to NPTF

PART NO.	TUBE SIZE IN	C NPTF	F	H
6521 56 11WP2	1/4	1/8	1/2	.75
6521 56 14WP2	1/4	1/4	1/2	.75
6521 56 18WP2	1/4	3/8	3/4	.77
6521 60 14WP2	3/8	1/4	3/4	.98
6521 60 18WP2	3/8	3/8	3/4	.98
6521 62 18WP2	1/2	3/8	15/16	1.22
6521 62 22WP2	1/2	1/2	15/16	1.28



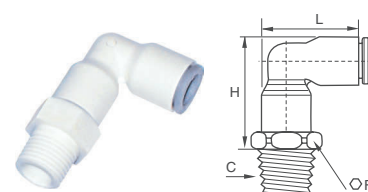
6521 Stem Adapter Metric Tube to BSPT

PART NO.	TUBE SIZE MM	C BSPT	F	H
6521 06 10WP2	6	1/8	13	19
6521 06 13WP2	6	1/4	14	19
6521 06 17WP2	6	3/8	17	19
6521 08 10WP2	8	1/8	19	23
6521 08 13WP2	8	1/4	19	23
6521 08 17WP2	8	3/8	19	23
6521 10 13WP2	10	1/4	19	25
6521 10 17WP2	10	3/8	19	25
6521 10 21WP2	10	1/2	22	25
6521 12 17WP2	12	3/8	22	28
6521 12 21WP2	12	1/2	22	28



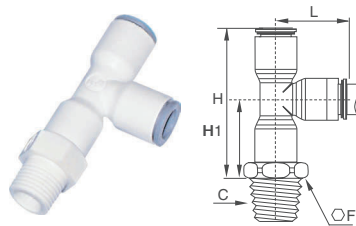
6509 Swivel Elbow Inch Tube to NPTF

PART NO.	TUBE SIZE IN	C NPTF	F	H	L
6509 56 11WP2	1/4	1/8	1/2	1.10	.93
6509 56 14WP2	1/4	1/4	9/16	1.10	.93
6509 56 18WP2	1/4	3/8	3/4	1.12	.93
6509 60 14WP2	3/8	1/4	3/4	1.50	1.34
6509 60 18WP2	3/8	3/8	3/4	1.50	1.34
6509 62 18WP2	1/2	3/8	15/16	1.99	1.83
6509 62 22WP2	1/2	1/2	15/16	1.99	1.83



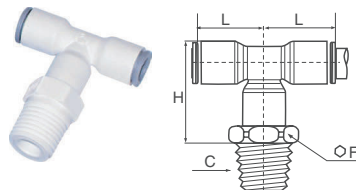
6509 Swivel Elbow Metric Tube to BSPT

PART NO.	TUBE SIZE MM	C BSPT	F	H	L
6509 06 10WP2	6	1/8	13	28	24.00
6509 06 13WP2	6	1/4	14	28	24.00
6509 06 17WP2	6	3/8	17	28	24.00
6509 08 10WP2	8	1/8	19	34	29.50
6509 08 13WP2	8	1/4	19	34	29.50
6509 08 17WP2	8	3/8	19	34	29.50
6509 10 13WP2	10	1/4	19	38	34.50
6509 10 17WP2	10	3/8	19	38	34.50
6509 10 21WP2	10	1/2	22	38	34.50
6509 12 17WP2	12	3/8	22	44	40.00
6509 12 21WP2	12	1/2	22	44	40.00



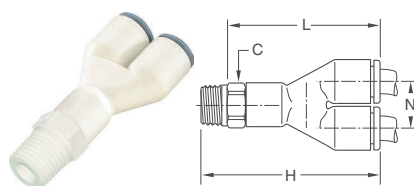
6503 Swivel Run Tee Inch Tube to NPTF

PART NO.	TUBE SIZE IN	C NPTF	F	H	H1	L
6503 56 11WP2	1/4	1/8	1/2	1.60	.88	.71
6503 56 14WP2	1/4	1/4	9/16	1.60	.88	.71
6503 56 18WP2	1/4	3/8	3/4	1.63	.90	.71
6503 60 14WP2	3/8	1/4	3/4	1.63	1.18	1.02
6503 60 18WP2	3/8	3/8	3/4	1.63	1.18	1.02
6503 62 18WP2	1/2	3/8	15/16	2.29	1.55	1.40
6503 62 22WP2	1/2	1/2	15/16	2.99	1.59	1.40



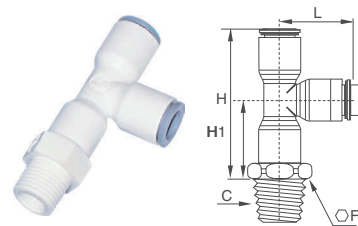
6508 Swivel Branch Tee Inch Tube to NPTF

PART NO.	TUBE SIZE IN	C NPTF	F	H	L
6508 56 11WP2	1/4	1/8	1/2	1.10	.71
6508 56 14WP2	1/4	1/4	9/16	1.10	.71
6508 56 18WP2	1/4	3/8	3/4	1.10	.71
6508 60 14WP2	3/8	1/4	3/4	1.50	1.02
6508 60 18WP2	3/8	3/8	3/4	1.50	1.02
6508 62 18WP2	1/2	3/8	15/16	1.97	1.40
6508 62 22WP2	1/2	1/2	15/16	2.00	1.40



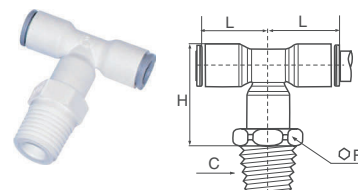
6548 Swivel Y Connector Inch Tube to NPTF

PART NUMBER	TUBE SIZE IN	NPTF	C HEX	L	H	N
6548 56 11WP2	1/4	1/8	1/2	1.59	.88	.45
6548 56 14WP2	1/4	1/4	1/2	1.59	.88	.45
6548 56 18WP2	1/4	3/8	3/4	1.62	.88	.45
6548 60 14WP2	3/8	1/4	3/4	2.24	1.30	.66
6548 60 18WP2	3/8	3/8	3/4	2.24	1.30	.66
6548 62 18WP2	1/2	3/8	15/16	2.80	1.78	.91
6548 62 22WP2	1/2	1/2	15/16	2.84	1.78	.91



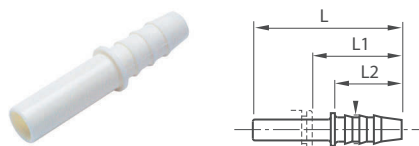
6503 Swivel Run Tee Metric Tube to BSPT

PART NO.	TUBE SIZE MM	C BSPT	F	H	H1	L
6503 06 10WP2	6	1/8	13	40.00	22.00	18.50
6503 06 13WP2	6	1/4	14	40.00	22.00	18.50
6503 06 17WP2	6	3/8	17	40.00	22.00	18.50
6503 08 10WP2	8	1/8	19	50.00	27.00	23.00
6503 08 13WP2	8	1/4	19	50.00	27.00	23.00
6503 08 17WP2	8	3/8	19	50.00	27.00	23.00
6503 10 13WP2	10	1/4	19	56.50	30.00	26.50
6503 10 17WP2	10	3/8	19	56.50	30.00	26.50
6503 10 21WP2	10	1/2	22	56.50	30.00	26.50
6503 12 17WP2	12	3/8	22	65.50	34.50	31.00
6503 12 21WP2	12	1/2	22	65.50	34.50	31.00



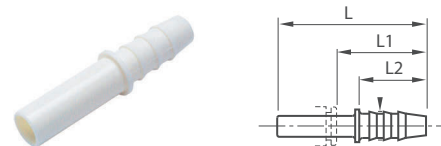
6508 Swivel Branch Tee Metric Tube to BSPT

PART NO.	TUBE SIZE MM	C BSPT	F	H	L
6508 06 10WP2	6	1/8	13	28.00	18.00
6508 06 13WP2	6	1/4	14	28.00	18.00
6508 06 17WP2	6	3/8	17	28.00	18.00
6508 08 10WP2	8	1/8	19	34.00	23.00
6508 08 13WP2	8	1/4	19	34.00	23.00
6508 08 17WP2	8	3/8	19	34.00	23.00
6508 10 13WP2	10	1/4	19	38.00	26.50
6508 10 17WP2	10	3/8	19	38.00	26.50
6508 10 21WP2	10	1/2	22	38.00	26.50
6508 12 17WP2	12	3/8	22	44.00	31.00
6508 12 21WP2	12	1/2	22	44.00	31.00



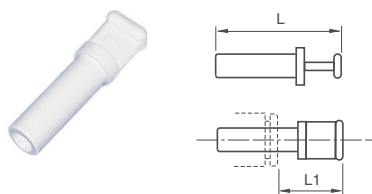
6322 Stem to Hose Barb Inch

PART NUMBER	STEM SIZE IN	HOSE BARB	L	L1	L2
6322 56 56WP2	1/4	1/4	1.65	1.00	.67
6322 60 56WP2	3/8	1/4	1.97	1.16	.87
6322 60 08WP2	3/8	5/16	1.97	1.16	.87
6322 60 60WP2	3/8	3/8	1.97	1.16	.87
6322 62 60WP2	1/2	3/8	2.05	1.30	1.07



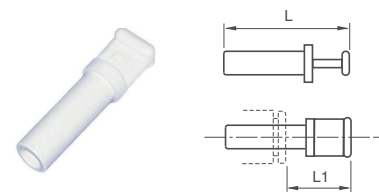
6322 Stem to Hose Barb Metric

PART NUMBER	STEM SIZE MM	HOSE BARB	L	L1	L2
6322 06 04WP2	6	4	37.0	25.0	17
6322 08 06WP2	8	6	39.5	21.0	17
6322 10 07WP2	10	7	50.0	29.5	22



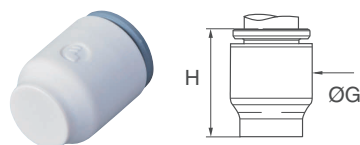
6326 Plug Inch

PART NUMBER	STEM SIZE IN	L	L1
6326 56 00WP2	1/4	1.44	.87
6326 08 00WP2	5/16	1.38	.69
6326 60 00WP2	3/8	1.67	.87
6326 62 00WP2	1/2	1.91	.85



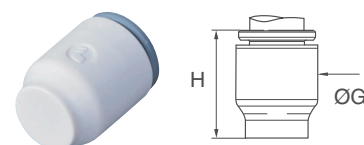
6326 Plug Metric

PART NUMBER	STEM SIZE MM	L	L1
6326 04 00WP2	4	30	15.5
6326 06 00WP2	6	33	16.5
6326 08 00WP2	8	33	17.5
6326 10 00WP2	10	42	21.0
6326 12 00WP2	12	45	22.0



6351 End Stop Inch Tube

PART NO.	TUBE SIZE IN	G	H
6351 04 00WP2	5/32	.33	.59
6351 56 00WP2	1/4	.43	.63
6351 08 00WP2	5/16	.53	.85
6351 60 00WP2	3/8	.63	.88



6351 End Stop Metric Tube

PART NO.	TUBE SIZE MM	G	H
6351 04 00WP2	4	8.50	15.00
6351 06 00WP2	6	10.50	17.00
6351 08 00WP2	8	13.50	21.50
6351 10 00WP2	10	16.00	22.00
6351 12 00WP2	12	19.00	27.50

TrueSeal™ Fittings



Parker's TrueSeal Fittings are lightweight, field attachable and connect to tubing without the use of tools. These all plastic push-to-connect fittings are manufactured from FDA compliant materials.

Product Features:

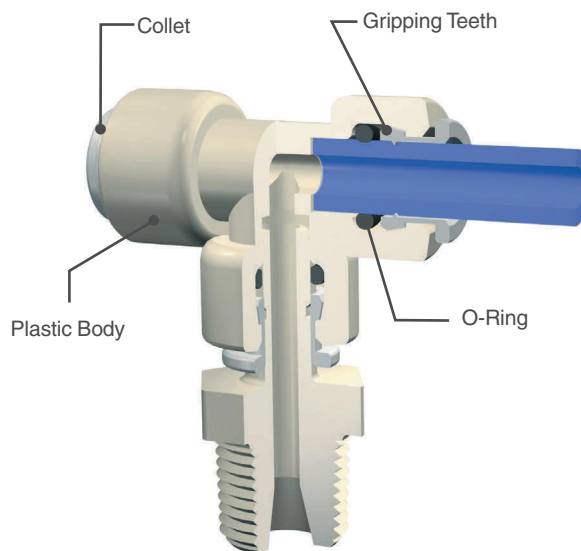
- Available in Acetal, Polypropylene and Kynar materials
- EPDM seal in acetal and polypropylene, Fluorocarbon in Kynar
- Gripping ring with stainless steel bite edge or with an engineered thermoplastic bite edge
- FDA compliant, NSF-51 and gray acetal fittings are NSF-61

Markets:

- Food
- Potable Water
- Chemical
- Filtration

Applications:

- Air
- Water
- Soft Drinks
- Beer
- Wine
- Dyes



Specifications:

Pressure Range Acetal and Kynar up to 300 psi
Polypropylene up to 150 psi

Temperature Range Acetal: -20° to +180°F
Polypropylene: 0° to +225°F
Kynar: 0° to +275°F

Compatible Tubing:

- Polyethylene
- Polypropylene
- Nylon
- Fluoropolymer*
- Polyurethane**
- Kynar®*

*Metal Gripper Required

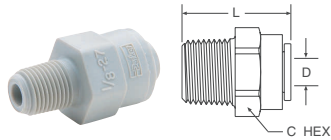
**Tube Support Required

Kynar is a registered trademark of The Arkema Group.



MC - Male Connector

Tube-to-Pipe

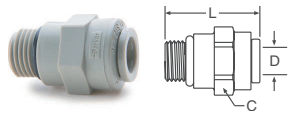


GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	NPTF THD SIZE	C HEX	L OVERALL LENGTH	D THRU HOLE MIN.
A4MC2-MG	PP4MC2	F4MC2	1/4	1/8	11/16	1.28	.175
A4MC4-MG	PP4MC4	F4MC4	1/4	1/4	11/16	1.14	.175
A4MC6-MG	PP4MC6	F4MC6	1/4	3/8	11/16	1.18	.175
A5MC2-MG		F5MC2	5/16	1/8	13/16	1.46	.175
A5MC4-MG		F5MC4	5/16	1/4	13/16	1.41	.188
A5MC6-MG			5/16	3/8	13/16	1.27	.188
A6MC2-MG		F6MC2	3/8	1/8	13/16	1.46	.175
A6MC4-MG	PP6MC4	F6MC4	3/8	1/4	13/16	1.41	.250
A6MC6-MG	PP6MC6	F6MC6	3/8	3/8	13/16	1.27	.250
A6MC8-MG		F6MC8	3/8	1/2	15/16	1.45	.250
A8MC6-MG	PP8MC6	F8MC6	1/2	3/8	15/16	1.65	.360
A8MC8-MG	PP8MC8	F8MC8	1/2	1/2	15/16	1.46	.375

For nonstandard plastic collet, remove -MG suffix.

ST - Straight Thread

Tube-to-Male O-Ring Boss

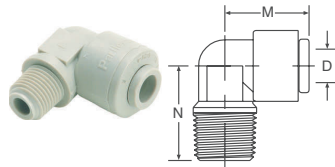


GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	UNF-2B THD SIZE	C HEX	L OVERALL LENGTH	D THRU HOLE MIN.
A6ST9-MG		F6ST9 (+)	3/8	9/16-18	13/16	1.39	.250

For nonstandard plastic collet, remove -MG suffix.

ME - Male Elbow

Tube-to-Pipe

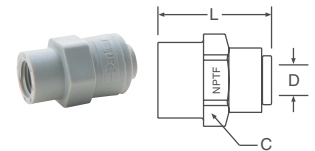


GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	NPTF THD SIZE	M	N	D THRU HOLE MIN.
A4ME2-MG	PP4ME2	F4ME2	1/4	1/8	.84	.94	.175
A4ME4-MG	PP4ME4	F4ME4	1/4	1/4	.84	.94	.175
A4ME6-MG	PP4ME6	F4ME6	1/4	3/8	.84	1.04	.175
A5ME4-MG		F5ME4	5/16	1/4	1.03	1.08	.175
A5ME6-MG			5/16	3/8	1.03	1.06	.188
A6ME4-MG	PP6ME4	F6ME4	3/8	1/4	1.03	1.08	.250
A6ME6-MG	PP6ME6	F6ME6	3/8	3/8	1.03	1.06	.250

For nonstandard plastic collet, remove -MG suffix.

FC - Female Connector

Tube-to-Pipe

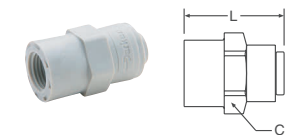


GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	NPTF THREAD SIZE	C HEX	L OVERALL LENGTH	D THRU HOLE MIN.
A4FC2-MG	PP4FC2	F4FC2	1/4	1/8	11/16	1.20	.175
A4FC4-MG	PP4FC4	F4FC4	1/4	1/4	23/32	1.32	.175
A5FC4-MG		F5FC4	5/16	1/4	13/16	1.41	.188
A5FC6-MG			5/16	3/8	1	1.50	.188
A6FC4-MG	PP6FC4	F6FC4	3/8	1/4	13/16	1.41	.250
A6FC6-MG	PP6FC6	F6FC6	3/8	3/8	1	1.50	.250
A6FC8-MG		F6FC8	3/8	1/2	1-1/8	1.52	.250
A8FC6-MG	PP8FC6	F8FC6	1/2	3/8	1-1/8	1.60	.375
A8FC8-MG	PP8FC8	F8FC8	1/2	1/2	1-1/8	1.75	.375

For nonstandard plastic collet, remove -MG suffix.

FA - Faucet Adapter

Tube-to-Faucet

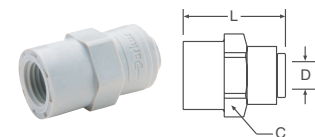


GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	UNS-2B THREAD SIZE	C HEX	L OVERALL LENGTH	D THRU HOLE MIN.
A4FA7-MG	PP4FA7	F4FA7	1/4	7/16-24	23/32	1.32	.190
A5FA7-MG			5/16	7/16-24	13/16	1.41	.190
A6FA7-MG	PP6FA7	F6FA7	3/8	7/16-24	13/16	1.41	.190

For nonstandard plastic collet, remove -MG suffix.

FF - 45° Female Flare

Tube-to-Flare

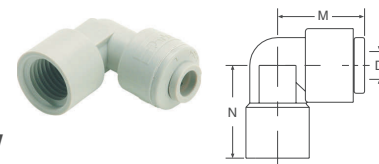


GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	UNF-2B THREAD SIZE	C HEX	L OVERALL LENGTH	D THRU HOLE MIN.
A4FF4-MG	PP4FF4	F4FF4	1/4	7/16-20	23/32	1.32	.190
A6FF4-MG		F6FF4	3/8	7/16-20	13/16	1.41	.190
A6FF6-MG	PP6FF6	F6FF6	3/8	5/8-18	1	1.50	.250

For nonstandard plastic collet, remove -MG suffix.

FE - Female Elbow

Tube-to-Pipe



GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	NPTF THREAD SIZE	M	N	D THRU HOLE MIN.
A4FE4-MG			1/4	1/4	0.84	1.00	.18
A6FE4-MG			3/8	1/4	1.03	1.00	.25
A6FE6-MG			3/8	3/8	1.03	1.00	.25

For nonstandard plastic collet, remove -MG suffix.

UC - Union Connector

Tube-to-Tube

GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	L OVERALL LENGTH	D THRU HOLE MIN.
A4UC4-MG	PP4UC4	F4UC4	1/4	1.49	.175
A5UC4-MG			5/16-1/4	1.70	.175
A5UC5-MG		F5UC5	5/16	1.70	.188
A6UC4-MG	PP6UC4	F6UC4	3/8-1/4	1.70	.175
A6UC5-MG			3/8-5/16	1.70	.188
A6UC6-MG	PP6UC6	F6UC6	3/8	1.70	.250
A8UC5-MG			1/2-5/16	1.90	.188
A8UC6-MG	PP8UC6		1/2-3/8	1.90	.250
A8UC8-MG	PP8UC8	F8UC8	1/2	1.91	.375

For nonstandard plastic collet, remove -MG suffix.

TU - Tee Union

Tube-to-Tube

GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.		M	N	D THRU HOLE MIN.
			TUBE A RUN	TUBE B STEM			
A4TU4-MG	PP4TU4	F4TU4	1/4	1/4	.81	0.85	.175
A5TU5-MG		F5TU5	5/16	5/16	1.02	1.02	.188
A6TU4-MG	PP6TU4	F6TU4	3/8	1/4	1.02	1.03	.175
A6TU6-MG	PP6TU6	F6TU6	3/8	3/8	1.02	1.02	.290
A8TU8-MG	PP8TU8	F8TU8	1/2	1/2	1.20	1.20	.375

For nonstandard plastic collet, remove -MG suffix.

BU - Bulkhead Union

Tube-to-Tube

GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	C1 HEX	C2 HEX	L OVERALL LENGTH	P MAX. WALL THK.	D THRU HOLE MIN.	BKHD HOLE DRILL SIZE
A4BU4-MG	PP4BU4	F4BU4	1/4	15/16	15/16	1.50	.50	.175	7/8
A5BU5-MG		F5BU5	5/16	1-1/16	1-1/16	1.75	.62	.188	1
A6BU4-MG	PP6BU4		3/8-1/4	1-1/16	1-1/16	1.75	.62	.175	1
A6BU6-MG	PP6BU6	F6BU6	3/8	1-1/16	1-1/16	1.75	.62	.250	1
A8BU8-MG		F8BU8	1/2	1-1/4	1-1/4	2.04	.70	.375	1-1/8

For nonstandard plastic collet, remove -MG suffix.

EU - Elbow Union

Tube-to-Tube

GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	M	N	D THRU HOLE MIN.
A4EU4-MG	PP4EU4	F4EU4	1/4	0.87	.87	.175
A5EU4-MG			5/16-1/4	1.052	.90	.175
A5EU5-MG		F5EU5	5/16	1.02	1.02	.188
A6EU4-MG	PP6EU4	F6EU4	3/8-1/4	1.02	.90	.212
A6EU5-MG			3/8-5/16	1.02	1.02	.175
A6EU6-MG	PP6EU6	F6EU6	3/8	1.02	1.02	.250
A8EU6-MG			1/2-3/8	1.20	1.20	.250
A8EU8-MG	PP8EU8	F8EU8	1/2	1.20	1.20	.375

For nonstandard plastic collet, remove -MG suffix.

WY - "Y" Union

Tube-to-Tube

GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.		L	W	D THRU HOLE MIN.
			INLET TUBE A RUN	OUTLET TUBE B STEM			
A5WY5-MG			5/16	5/16	2.250	1.75	0.190
A6WY4-MG			3/8	1/4	2.100	1.43	0.190
A6WY5-MG			3/8	5/16	2.200	1.75	0.190
A6WY6-MG			3/8	3/8	2.175	1.75	0.250

CU - Cross Union

Tube-to-Tube

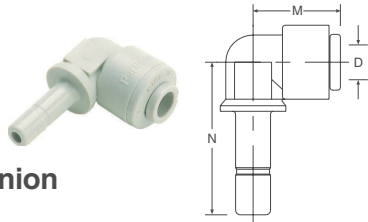
GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	M	D THRU HOLE MIN.
A4CU4-MG			1/4	.91	.175
A6CU6-MG			3/8	1.08	.250

For nonstandard plastic collet, remove -MG suffix.

CAP - Tube Cap

GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	L OVERALL LENGTH
A4CAP-MG	PP4CAP	F4CAP	1/4	.77
A6CAP-MG	PP6CAP		3/8	0.88

For nonstandard plastic collet, remove -MG suffix.

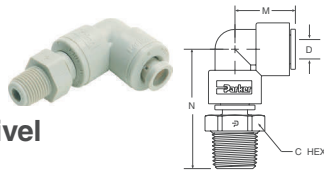


TEU - Tube Elbow Union

Tube-to-Tube Stem

GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	TUBE STEM O.D.	M	N	D THRU HOLE MIN.
A4TEU4-MG	PP4TEU4	F4TEU4	1/4	1/4	.84	1.21	.125
A4TEU6-MG		F4TEU6	1/4	3/8	.84	1.35	.125
A5TEU5-MG		F5TEU5	5/16	5/16	1.03	1.40	.188
A6TEU4-MG		F6TEU4	3/8	1/4	1.03	1.29	.125
A6TEU6-MG	PP6TEU6	F6TEU6	3/8	3/8	1.03	1.64	.250
A8TEU8-MG	PP8TEU8	F8TEU8	1/2	1/2	1.21	1.64	.380

For nonstandard plastic collet, remove -MG suffix.



MES - Male Elbow Swivel

Tube-to-Pipe

GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	NPTF THD SIZE	C HEX	M	N	D THRU HOLE MIN.
A4MES2-MG	PP4MES2	F4MES2	1/4	1/8	9/16	.87	1.60	.175
A4MES4-MG	PP4MES4	F4MES4	1/4	1/4	11/16	.87	1.71	.175
A4MES6-MG	PP4MES6	F4MES6	1/4	3/8	13/16	.90	1.91	.212
A5MES2-MG			5/16	1/8	9/16	1.02	1.78	.188
A5MES4-MG			5/16	1/4	11/16	1.02	1.90	.188
A5MES6-MG			5/16	3/8	13/16	1.02	1.90	.188
A6MES2-MG		F6MES2	3/8	1/8	9/16	1.02	1.65	.175
A6MES4-MG	PP6MES4	F6MES4	3/8	1/4	13/16	1.02	1.90	.250
A6MES6-MG	PP6MES6	F6MES6	3/8	3/8	13/16	1.02	1.90	.250
A8MES4-MG			1/2	1/4	13/16	1.20	2.10	.240
A8MES6-MG	PP8MES6		1/2	3/8	13/16	1.20	2.10	.375
A8MES8-MG	PP8MES8		1/2	1/2	1	1.20	2.32	.375

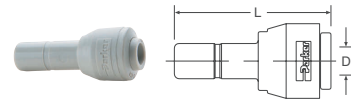
* Part consists of elbow union and tube stem adaptor.

Note: Assemblies with metal gripper collets are permanent.

Assemblies with plastic collets can be taken apart.

RD - Tube Reducer

Tube-to-Tube Stem

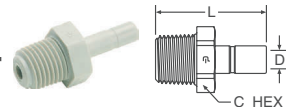


GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	TUBE STEM O.D.	L	D THRU HOLE MIN.
A4RD5-MG	PP4RD5		1/4	5/16	1.62	.18
A4RD6-MG	PP4RD6		1/4	3/8	1.62	.18
A5RD6-MG			5/16	3/8	1.78	.25
A5RD8-MG			5/16	1/2	1.90	.25
A6RD8-MG			3/8	1/2	1.90	.25

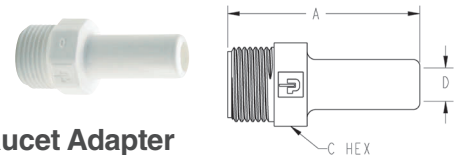
For nonstandard plastic collet, remove -MG suffix.

TMC - Tube Stem Adapter

Tube Stem-to-Pipe



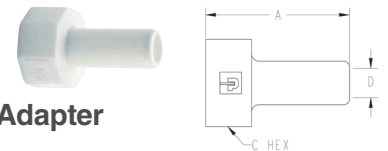
GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM. TUBE O.D.	NPTF THREAD SIZE	C HEX	L OVERALL LENGTH	D THRU HOLE MIN.
A4TMC2	PP4TMC2	F4TMC2	1/4	1/8	9/16	1.44	.175
A4TMC4	PP4TMC4	F4TMC4	1/4	1/4	11/16	1.56	.175
A5TMC2			5/16	1/8	9/16	1.5	.188
A5TMC4		F5TMC4	5/16	1/4	11/16	1.67	.188
A5TMC6			5/16	3/8	13/16	1.67	.188
A6TMC4	PP6TMC4	F6TMC4	3/8	1/4	13/16	1.70	.250
A6TMC6	PP6TMC6	F6TMC6	3/8	3/8	13/16	1.70	.250
A8TMC4			1/2	1/4	13/16	1.82	.240
A8TMC6	PP8TMC6		1/2	3/8	13/16	1.82	.375
A8TMC8	PP8TMC8		1/2	1/2	1	2.04	.375



TAF - Tube Faucet Adapter

(Male Thread)

WHITE ACETAL	TUBE STEM O.D.	THREAD SIZE	A	C HEX	D MIN.
AW6TAF7-MG	3/8	7/16-24	1.41	.50	.22
AW6TAF8-MG	3/8	1/2-14 NPSM	1.65	.88	.22
AW6TAF9-MG	3/8	9/16-24	1.45	.63	.22



TFA - Tube Faucet Adapter

(Female Thread)

WHITE ACETAL	TUBE STEM O.D.	THREAD SIZE	A	C HEX	D MIN.
AW6TFA7-MG	3/8	7/16-24	1.25	.69	.17
AW6TFA8-MG	3/8	1/2-14 NPSM	1.45	1.06	.22
AW6TFA9-MG	3/8	9/16-24	1.25	.75	.22

MRS - Male Run Tee Swivel

Tube-to-Pipe

GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM TUBE O.D.	NPTF THD SIZE	C HEX	L	M	N	D THRU HOLE MIN.
A4MRS2-MG	PP4MRS2	F4MRS2	1/4	1/8	9/16	1.55	0.81	0.85	.175
A4MRS4-MG	PP4MRS4	F4MRS4	1/4	1/4	11/16	1.67	0.81	0.85	.175
A5MRS2-MG			5/16	1/8	9/16	1.78	1.02	1.02	.188
A5MRS4-MG			5/16	1/4	11/16	1.90	1.02	1.02	.188
A5MRS6-MG			5/16	3/8	13/16	1.90	1.02	1.02	.188
A6MRS4-MG	PP6MRS4	F6MRS4	3/8	1/4	13/16	1.90	1.02	1.02	.250
A6MRS6-MG	PP6MRS6	F6MRS6	3/8	3/8	13/16	1.90	1.02	1.02	.250
A8MRS4-MG			1/2	1/4	13/16	2.10	1.20	1.20	.240
A8MRS6-MG	PP8MRS6		1/2	3/8	13/16	2.10	1.20	1.20	.375
A8MRS8-MG	PP8MRS8		1/2	1/2	1	2.32	1.20	1.20	.375

*Part consists of tee union and tube stem adaptor.

Note: Assemblies with metal gripper collets are permanent.
Assemblies with plastic collets can be taken apart.



TCB - Tube-to-Barb Connector

GRAY ACETAL	WHITE PPL	NATURAL KYNAR	TUBE STEM O.D.	TUBE I.D.	L OVERALL LENGTH	D THRU HOLE MIN.
A4TCB4	PP4TCB4	F4TCB4	1/4	1/4	1.67	.140
A6TCB4		F6TCB4	3/8	1/4	1.82	.140
A6TCB6	PP6TCB6	F6TCB6	3/8	3/8	1.98	.250
A8TCB6			1/2	3/8	2.10	.250
A8TCB8		F8TCB8	1/2	1/2	2.10	.375



TPL - Plug

GRAY ACETAL	WHITE PPL	NATURAL KYNAR	FITTING SIZE	L OVERALL LENGTH
A4TPL	PP4TPL	F4TPL	1/4	0.88
A6TPL	PP6TPL	F6TPL	3/8	1.45
A8TPL	PP8TPL		1/2	1.50

MTS - Male Tee Swivel

Tube-to-Pipe

GRAY ACETAL EPDM SEAL	WHITE PPL EPDM SEAL	NATURAL KYNAR FCB SEAL	NOM TUBE O.D.	NPTF THD SIZE	C HEX	M	N	D THRU HOLE MIN.
A4MTS2-MG	PP4MTS2	F4MTS2	1/4	1/8	9/16	.81	1.60	.175
A4MTS4-MG	PP4MTS4	F4MTS4	1/4	1/4	11/16	.81	1.71	.175
A5MTS2-MG			5/16	1/8	9/16	1.02	1.78	.188
A5MTS4-MG			5/16	1/4	11/16	1.02	1.90	.188
A5MTS6-MG			5/16	3/8	13/16	1.02	1.90	.188
A6MTS2-MG		F6MTS2	3/8	1/8	9/16	1.02	1.75	.175
A6MTS4-MG	PP6MTS4	F6MTS4	3/8	1/4	13/16	1.02	1.90	.250
A6MTS6-MG	PP6MTS6	F6MTS6	3/8	3/8	13/16	1.02	1.90	.250
A8MTS4-MG			1/2	1/4	13/16	1.20	2.10	.240
A8MTS6-MG	PP8MTS6		1/2	3/8	13/16	1.20	2.10	.375
A8MTS8-MG	PP8MTS8		1/2	1/2	1	1.20	2.32	.375

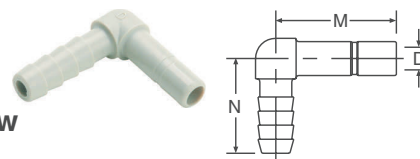
* Part consists of tee union and tube stem adaptor.

Note: Assemblies with metal gripper collets are permanent.
Assemblies with plastic collets can be taken apart.



TEB - Tube Elbow Barb Connector

GRAY ACETAL	WHITE PPL	NATURAL KYNAR	TUBE STEM O.D.	TUBE I.D.	M	N	D THRU HOLE MIN.
A4TEB4	PP4TEB4	F4TEB4	1/4	1/4	.89	1.00	.140
A6TEB4	PP6TEB4	F6TEB4	3/8	1/4	1.335	1.055	.375
A6TEB6	PP6TEB6	F6TEB6	3/8	3/8	1.34	1.21	.250
A8TEB8			1/2	1/2	1.30	1.30	.390

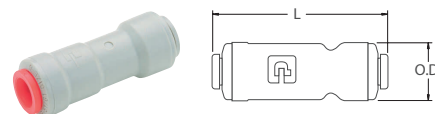


TrueSeal Check Valves

Push-to-Connect check valves that ensures protection against reversal of flow. The valves have an arrow molded into the body to indicate the direction of flow. Valves are designed for connection with either thermoplastic or soft metal tubing and are intended for use with liquids only.

Materials of Construction

Body	Acetal
O-ring	EPDM
Metal Grip Edge	300 Stainless
Working Pressure	Up to 150 PSI depending on tubing being used
Temperature Range	+34°F (1° C) to +150°F (65°C)
Cracking Pressure	1/3 PSI



VC – Check Valve

PART NO.	TUBE SIZE	L	O.D.
A4VC4-MG	1/4	2.00	.66
A5VC5-MG	5/16	2.10	.70
A6VC6-MG	3/8	2.15	.80
A8VC8-MG	1/2	2.68	.91

PVDF Check Valves

Materials of Construction

Body	Kynar®
O-ring	Fluorocarbon
Metal Grip Edge	Stainless Steel
Working Pressure	Up to 300 PSI
Temperature Range	0°F to 250°F



MCVC Kynar® Check Valves

PART NUMBER	TUBE O.D.	NPTF THREAD	L	C HEX	CRACKING PRESSURE PSI
FB6MCVC4-HBLK-05	3/8	1/4	1.40	13/16	0.5
FB6MCVC4-HBLU-15	3/8	1/4	1.40	13/16	1.5
FB6MCVC4-HRED-30	3/8	1/4	1.40	13/16	3.0
FB6MCVC4-HGRN-40	3/8	1/4	1.40	13/16	4.0

Note: For check valve to function properly tubing needs to be installed

NORYL® is a registered trademark of the General Electric Co.



Fast & Tite® Fittings



Parker's Fast & Tite Fittings are a compression style fitting that installs in seconds without tools and provides a tight, sure, leak proof seal without clamps or adjustments. A unique grab ring for tube retention, coupled with a Nitrile o-ring creates a positive seal and assures good tube retention with only hand tight assembly.

Product Features:

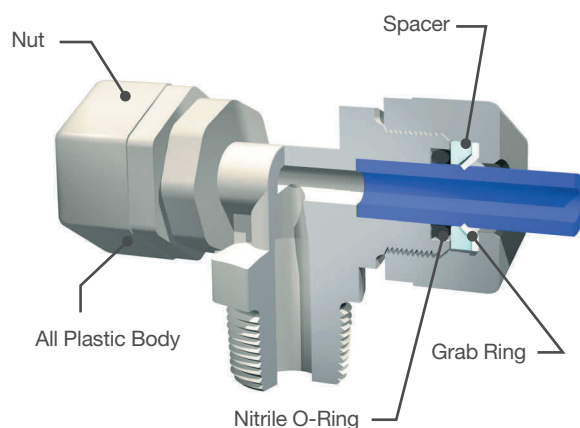
- Available in white polypropylene, black polypropylene and natural nylon
- 302 stainless steel grab ring
- Nitrile O-ring
- FDA compliant material
- NSF-51

Markets:

- Water Filtration
- Beverage Dispensing
- Life Science
- Bottling
- Semi-Conductor

Applications:

- Water
- Beverages
- Food
- Cooling Systems



Specifications:

Pressure Range Up to 300 psi

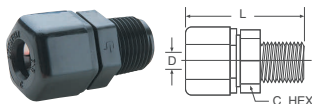
Temperature Range Nylon: -40° to +200°F
Polypropylene: 0° to +212°F

Compatible Tubing:

- Polyethylene
- Polypropylene
- Nylon
- Polyurethane**
- Soft Metal

MC - Male Connector

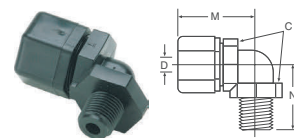
Tube to male pipe



WHITE PPL PART NUMBER	BLACK PPL PART NUMBER	NATURAL NYLON PART NUMBER	NOM TUBE O.D.	NPTF THREAD SIZE	C HEX	L OVERALL LENGTH	D THRU HOLE MIN.
W4MC2	P4MC2	N4MC2	1/4	1/8	11/16	1.28	.170
W4MC4	P4MC4	N4MC4	1/4	1/4	11/16	1.51	.170
W4MC6 (+)	P4MC6 (+)	N4MC6 (+)	1/4	3/8	11/16	.148	.170
W5MC2 (+)	P5MC2	N5MC2	5/16	1/8	11/16	1.38	.170
W5MC4 (+)	P5MC4	N5MC4	5/16	1/4	11/16	1.50	.250
W6MC2 (+)	P6MC2	N6MC2	3/8	1/8	13/16	1.50	.170
W6MC4	P6MC4	N6MC4	3/8	1/4	13/16	1.67	.250
W6MC6	P6MC6	N6MC6	3/8	3/8	13/16	1.67	.250
W6MC8 (+)	P6MC8	N6MC8	3/8	1/2	1	1.78	.250
W6MC12	P6MC12	N6MC12	3/8	3/4	1	1.84	.250
W8MC2 (+)	P8MC2	N8MC2	1/2	1/8	1	1.61	.170
W8MC4 (+)	P8MC4	N8MC4	1/2	1/4	1	1.74	.250
W8MC6	P8MC6	N8MC6	1/2	3/8	1	1.74	.375
W8MC8	P8MC8	N8MC8	1/2	1/2	1	1.87	.375
W8MC12 (+)	P8MC12	N8MC12	1/2	3/4	1	1.89	.375
W10MC2 (+)	P10MC2	N10MC2	5/8	1/8	1-1/8	1.75	.170
W10MC4 (+)	P10MC4	N10MC4	5/8	1/4	1-1/8	1.90	.250
W10MC6 (+)	P10MC6	N10MC6	5/8	3/8	1-1/8	1.90	.375
W10MC8 (+)	P10MC8	N10MC8	5/8	1/2	1-1/8	2.01	.500
W10MC12 (+)	P10MC12	N10MC12	5/8	3/4	1-1/8	2.04	.500

ME - Male Elbow

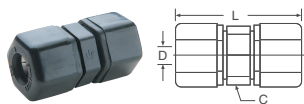
Tube to male pipe



WHITE PPL PART NUMBER	BLACK PPL PART NUMBER	NATURAL NYLON PART NUMBER	NOM TUBE O.D.	NPTF THD SIZE	C HEX	M	N	D THRU HOLE MIN.
W4ME2	P4ME2	N4ME2	1/4	1/8	3/4	1.06	0.81	.170
W4ME4	P4ME4	N4ME4	1/4	1/4	3/4	1.06	1.02	.170
W4ME6	P4ME6	N4ME6	1/4	3/8	3/4	1.06	1.02	.170
W5ME2 (+)	P5ME2	N5ME2	5/16	1/8	3/4	1.06	0.81	.193
W5ME4 (+)	P5ME4	N5ME4	5/16	1/4	3/4	1.06	1.02	.193
W5ME6 (+)	P5ME6	N5ME6	5/16	3/8	3/4	1.06	1.02	.193
W6ME4	P6ME4	N6ME4	3/8	1/4	7/8	1.28	1.12	.250
W6ME6	P6ME6	N6ME6	3/8	3/8	7/8	1.28	1.12	.250
W6ME8	P6ME8	N6ME8	3/8	1/2	1	1.28	1.34	.250
W6ME12 (+)	P6ME12	N6ME12	3/8	3/4	1-3/16	1.59	1.40	.250
W8ME4 (+)	P8ME4	N8ME4 (+)	1/2	1/4	1-1/16	1.48	1.22	.250
W8ME6	P8ME6	N8ME6	1/2	3/8	1-1/16	1.56	1.21	.375
W8ME8	P8ME8	N8ME8	1/2	1/2	1-1/16	1.56	1.34	.375
W8ME12 (+)	P8ME12 (+)	N8ME12 (+)	1/2	3/4	1-1/8	1.50	1.40	.375
W10ME8 (+)	P10ME8	N10ME8	5/8	1/2	1-3/16	1.72	1.40	.500

UC - Union Connector

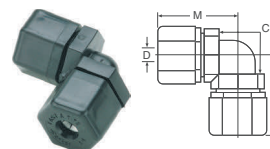
Tube to tube



WHITE PPL PART NUMBER	BLACK PPL PART NUMBER	NATURAL NYLON PART NUMBER	NOM. TUBE O.D.	C HEX	L OVERALL LENGTH	D THRU HOLE MIN.
W4UC4	P4UC4	N4UC4	1/4	11/16	1.62	.170
W5UC4 (+)	P5UC4	N5UC4	5/16-1/4	11/16	1.62	.170
W5UC5 (+)	P5UC5	N5UC5	5/16	11/16	1.62	.190
W6UC4	P6UC4	N6UC4	3/8-1/4	13/16	1.80	.170
W6UC5 (+)	P6UC5	N6UC5	3/8-5/16	13/16	1.80	.190
W6UC6	P6UC6	N6UC6	3/8	13/16	1.92	.250
W8UC6	P8UC6	N8UC6	1/2-3/8	1	1.95	.250
W8UC8	P8UC8	N8UC8	1/2	1	2.03	.375
W10UC6 (+)	P10UC6	N10UC6	5/8-3/8	1-1/8	2.19	.250
W10UC8 (+)	P10UC8	N10UC8	5/8-1/2	1-1/8	2.24	.375
W10UC10 (+)	P10UC10	N10UC10	5/8	1-1/8	2.40	.500

EU - Elbow Union

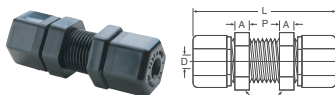
Tube to tube



WHITE PPL PART NUMBER	BLACK PPL PART NUMBER	NATURAL NYLON PART NUMBER	NOM. TUBE O.D.	C HEX	M	N	D THRU HOLE MIN.
W4EU4	P4EU4	N4EU4	1/4	3/4	1.06	1.06	.170
W5EU4 (+)	P5EU4	N5EU4	5/16-1/4	3/4	1.06	1.06	.170
W5EU5 (+)	P5EU5	N5EU5	5/16	3/4	1.06	1.06	.193
W6EU4	P6EU4	N6EU4	3/8-1/4	7/8	1.06	1.28	.170
W6EU5 (+)	P6EU5	N6EU5	3/8-5/16	7/8	1.06	1.28	.170
W6EU6	P6EU6	N6EU6	3/8	7/8	1.28	1.28	.250
W8EU6	P8EU6	N8EU6	1/2-3/8	1-1/16	1.37	1.56	.250
W8EU8	P8EU8	N8EU8	1/2	1-1/16	1.56	1.56	.375
W10EU10 (+)	P10EU10	N10EU10	5/8	1-3/16	1.72	1.72	.500

BU - Bulkhead Union

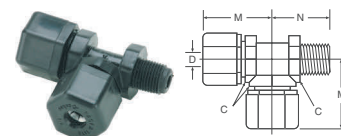
Tube to tube



WHITE PPL PART NUMBER	BLACK PPL PART NO.	NATURAL NYLON PART NO.	NOM TUBE O.D.	A REF.	C HEX	L OVERALL LENGTH	P MAX	D THRU HOLE MIN.	BLKHD HOLE DRILL SIZE
W4BU4	P4BU4	N4BU4	1/4	1/4	13/16	2-11/64	3/8	.170	21/32
W5BU5 (+)	P5BU5	N5BU5	5/16	1/4	13/16	2-11/64	3/8	.187	21/32
W6BU6	P6BU6	N6BU6	3/8	9/32	15/16	2-39/64	1/2	.250	25/32
W8BU8	P8BU8	N8BU8	1/2	5/16	1-5/32	2-3/4	1/2	.375	31/32

MR - Male Run Tee

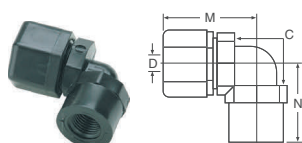
Tube to male pipe



WHITE PPL PART NUMBER	BLACK PPL PART NUMBER	NATURAL NYLON PART NUMBER	NOM TUBE O.D.	NPTF THD SIZE	C HEX	M	N	D THRU HOLE MIN.
W4MR2	P4MR2	N4MR2	1/4	1/8	11/16	1.09	0.89	.170
W6MR4	P6MR4	N6MR4	3/8	1/4	13/16	1.30	1.17	.250
W8MR6	P8MR6	N8MR6	1/2	3/8	1	1.46	1.28	.375
W10MR8 (+)	P10MR8	N10MR8	5/8	1/2	1-1/8	1.68	1.50	.500

FE - Female Elbow

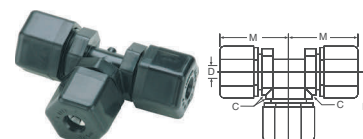
Tube to female pipe



WHITE PPL PART NUMBER	BLACK PPL PART NUMBER	NATURAL NYLON PART NUMBER	NOM TUBE O.D.	NPTF THD SIZE	C HEX	M	N	D THRU HOLE MIN.
W4FE2	P4FE2	N4FE2	1/4	1/8	11/16	1.10	0.84	.170
W4FE4	P4FE4	N4FE4	1/4	1/4	11/16	1.10	0.94	.170
W5FE2 (+)	P5FE2	N5FE2	5/16	1/8	11/16	1.10	0.84	.193
W6FE4	P6FE4	N6FE4	3/8	1/4	13/16	1.30	1.06	.250
W6FE6	P6FE6	N6FE6	3/8	3/8	13/16	1.30	1.03	.250
W8FE6 (+)	P8FE6	N8FE6	1/2	3/8	1	1.50	1.16	.375
W8FE8	P8FE8	N8FE8	1/2	1/2	1	1.50	1.27	.375
W10FE8 (+)	P10FE8	N10FE8	5/8	1/2	1-1/8	1.70	1.34	.500

TU - Tee Union

Tube to tube



WHITE PPL PART NUMBER	BLACK PPL PART NUMBER	NATURAL NYLON PART NUMBER	NOM. TUBE O.D.	C HEX	M	N	D THRU HOLE MIN.
W4TU4	P4TU4	N4TU4	1/4	11/16	1.09	1.09	.170
W5TU5 (+)	P5TU5	N5TU5	5/16	11/16	1.09	1.09	.187
W6TU6	P6TU6	N6TU6	3/8	13/16	1.30	1.30	.250
W8TU6 (+)	P8TU6	N8TU6	1/2-3/8	1	1.46	1.39	.250
W8TU8	P8TU8	N8TU8	1/2	1	1.46	1.46	.375
W10TU6 (+)	P10TU6	N10TU6	5/8-3/8	1-1/8	1.68	1.46	.250
W10TU10 (+)	P10TU10	N10TU10	5/8	1-3/16	1.68	1.68	.500

FC - Female Connector

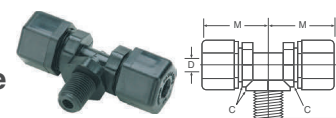
Tube to female pipe



WHITE PPL PART NUMBER	BLACK PPL PART NUMBER	NATURAL NYLON PART NUMBER	NOM TUBE O.D.	NPTF THREAD SIZE	C HEX	L	D THRU HOLE MIN.
W4FC2	P4FC2	N4FC2	1/4	1/8	11/16	1.31	.170
W4FC4	P4FC4	N4FC4	1/4	1/4	11/16	1.44	.170
W6FC4	P6FC4	N6FC4	3/8	1/4	13/16	1.61	.250
W6FC6	P6FC6	N6FC6	3/8	3/8	13/16	1.64	.250
W6FC8	P6FC8	N6FC8	3/8	1/2	13/16	1.75	.250
W8FC6 (+)	P8FC6	N8FC6	1/2	3/8	1	1.70	.375
W8FC8	P8FC8	N8FC8	1/2	1/2	1	1.85	.375
W10FC8 (+)	P10FC8	N10FC8	5/8	1/2	1-1/8	1.96	.500

MT - Male Branch Tee

Tube to male pipe



WHITE PPL PART NUMBER	BLACK PPL PART NUMBER	NATURAL NYLON PART NUMBER	NOM. TUBE O.D.	NPTF THD SIZE	C HEX	M	N	D THRU HOLE MIN.
W4MT2	P4MT2	N4MT2	1/4	1/8	11/16	1.09	0.89	.170
W4MT4	P4MT4	N4MT4	1/4	1/4	11/16	1.09	1.06	.170
W5MT2 (+)	P5MT2	N5MT2	5/16	1/8	11/16	1.09	0.89	.170
W5MT4 (+)	P5MT4	N5MT4	5/16	1/4	11/16	1.09	1.06	.187
W6MT4	P6MT4	N6MT4	3/8	1/4	13/16	1.30	1.12	.250
W6MT6	P6MT6	N6MT6	3/8	3/8	13/16	1.30	1.10	.250
W8MT6	P8MT6	N8MT6	1/2	3/8	1	1.46	1.22	.375
W8MT8	P8MT8	N8MT8	1/2	1/2	1	1.46	1.43	.375
W10MT8 (+)	P10MT8	N10MT8	5/8	1/2	1-1/8	1.68	1.41	.500

GR - Grab Ring

(Stainless or Plastic)



STAINLESS GRAB RING PART NUMBER	PLASTIC GRAB RING PART NUMBER	FOR NOM. TUBE O.D.
4GR	4GRP	1/4
5GR	5GRP	5/16
6GR	6GRP	3/8
8GR	8GRP	1/2
10GR	10GRP	5/8

NS - Nut and Spacer Sets



WHITE POLYPROPYLENE PART NUMBER	BLACK POLYPROPYLENE PART NUMBER	NATURAL NYLON PARTNUMBER	FOR NOM. TUBE O.D.
W4NS	P4NS	N4NS	1/4
W5NS	P5NS	N5NS	5/16
W6NS	P6NS	N6NS	3/8
W8NS	P8NS	N8NS	1/2
W10NS	P10NS	N10NS	5/8

TS - Tube Support



POLYPROPYLENE PART NUMBER	NYLON PART NUMBER	FOR TUBE PART NUMBER
P4TS3	N4TS3	PV43
P5TS3	N5TS3	PV53
P6TS4	N6TS3	PV64
P8TS6	N8TS6	PV86
P10TS8	N10TS8	PV108

OR - O-Ring



O-RING PART NUMBER	FOR NOM. TUBE O.D.
4OR	1/4
5OR	5/16
6OR	3/8
8OR	1/2
10OR	5/8

Par-Barb® Fittings



Parker's Par-Barb Fittings are injection molded from high strength chemically inert, thermoplastic materials. The multiple barb design generates the maximum gripping and sealing power when combined with a hose clamp.

Product Features:

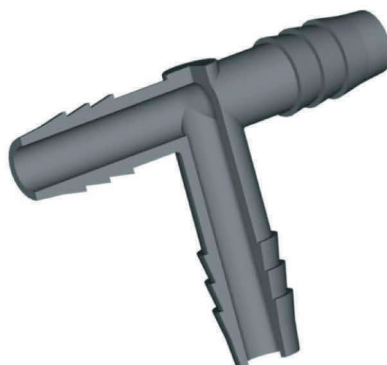
- Available in black polypropylene and white nylon
- FDA compliant material
- NSF-51
- Up to 1 1/2" sizes

Markets:

- Water
- Beverage Dispensing
- Bottling
- Semi-Conductor

Applications:

- Water
- Beverages
- Cooling Systems



Specifications:

Pressure Range Up to 125 psi

Temperature Range Nylon: -40° to +200°F
Polypropylene: 10° to +220°F

Compatible Tubing:

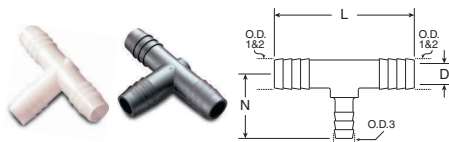
- Vinyl
- Polyurethane
- Rubber hose



Union Connector 322HB

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	TUBE OR HOSE I.D. 1	TUBE OR HOSE I.D. 2	O.D. 1	O.D. 2	L	FLOW DIA. D
322HB-2N*	322HB-2PP*	1/8	1/8	.18	.18	.66	.09
322HB-3N	322HB-3PP	3/16	3/16	.25	.25	1.61	.12
322HB-4-2N	322HB-4-2PP	1/4	1/8	.31	.21	1.61	.08
322HB-4-3N	322HB-4-3PP	1/4	3/16	.31	.25	1.61	.13
322HB-4N	322HB-4PP	1/4	1/4	.31	.31	1.61	.16
322HB-5N	322HB-5PP	5/16	5/16	.37	.37	1.61	.22
322HB-6-4N	322HB-6-4PP	3/8	1/4	.43	.31	1.61	.15
322HB-6-5N	322HB-6-5PP	3/8	5/16	.43	.37	1.62	.22
322HB-6N	322HB-6PP	3/8	3/8	.43	.43	1.61	.25
322HB-8-4N	322HB-8-4PP	1/2	1/4	.55	.31	1.73	.15
322HB-8-6N	322HB-8-6PP	1/2	3/8	.55	.43	1.73	.25
322HB-8N	322HB-8PP	1/2	1/2	.56	.56	1.74	.38
322HB-10-6N	322HB-10-6PP	5/8	3/8	.66	.43	1.73	.25
322HB-10-8N	322HB-10-8PP	5/8	1/2	.66	.55	1.73	.37
322HB-10N	322HB-10PP	5/8	5/8	.67	.67	1.73	.47
322HB-12-8N	322HB-12-8PP	3/4	1/2	.81	.55	2.99	.38
322HB-12N	322HB-12PP	3/4	3/4	.80	.80	2.97	.58
322HB-16N		1	1	1.08	1.08	3.12	.82
322HB-20N		1-1/4	1-1/4	1.26	1.26	3.58	1.00
322HB-24N		1-1/2	1-1/2	1.51	1.51	3.58	1.25

*Note: 1/8" tube connections contain one barb.



Union Tee 364HB

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	TUBE OR HOSE I.D. 1-2	TUBE OR HOSE I.D. 3	O.D. 1-2	O.D. 3	L	N	FLOW DIA. D
364HBM-2N*		1/8	1/8	.15	.15	1.19	.60	.08
364HB-3N	364HB-3PP	3/16	3/16	.25	.25	1.49	.75	.12
364HB-4N	364HB-4PP	1/4	1/4	.32	.32	1.92	.96	.16
364HB-4-6N		1/4	3/8	.32	.44	1.92	1.18	.16
364HB-5N	364HB-5PP	5/16	5/16	.36	.36	2.22	1.17	.22
364HB-6-3N	364HB-6-3PP	3/8	3/16	.43	.24	2.23	1.04	.09
364HB-6-4N	364HB-6-4PP	3/8	1/4	.44	.32	1.92	1.18	.16
364HB-6N	364HB-6PP	3/8	3/8	.43	.43	2.22	1.18	.25
364HB-6-8N	364HB-6-8PP	3/8	1/2	.43	.56	2.22	1.27	.25
364HB-8-6N	364HB-8-6PP	1/2	3/8	.55	.43	2.52	1.27	.25
364HB-8N	364HB-8PP	1/2	1/2	.56	.56	2.52	1.27	.37
364HB-10N	364HB-10PP	5/8	5/8	.66	.66	2.74	1.37	.46
364HB-12N		3/4	3/4	.81	.81	2.98	1.50	.58
364HB-16N		1	1	1.06	1.06	3.10	1.55	.81
364HB-20N		1-1/4	1-1/4	1.25	1.25	5.29	2.64	1.00
364HB-24N		1-1/2	1-1/2	1.51	1.51	5.48	2.74	1.25

*Note: 1/8" tube connections contain one barb.



Union Elbow 365HB

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	TUBE OR HOSE I.D. 1	TUBE OR HOSE I.D. 2	O.D. 1	O.D. 2	M	N	FLOW DIA. D
365HB-3N	365HB-3PP	3/16	3/16	.25	.25	.75	.75	.12
365HB-4N	365HB-4PP	1/4	1/4	.31	.31	1.13	1.13	.15
365HB-5N	365HB-5PP	5/16	5/16	.38	.37	1.19	1.19	.22
365HB-6N	365HB-6PP	3/8	3/8	.43	.43	1.26	1.26	.25
365HB-8-4N	365HB-8-4PP	1/2	1/4	.55	.31	1.26	1.24	.16
365HB-8-6N	365HB-8-6PP	1/2	3/8	.55	.43	1.26	1.27	.25
365HB-8N	365HB-8PP	1/2	1/2	.55	.55	1.26	1.26	.37
365HB-10N	365HB-10PP	5/8	5/8	.66	.66	1.37	1.37	.46
365HB-12N	365HB-12PP	3/4	3/4	.80	.80	1.48	1.48	.57
365HB-16N		1	1	1.07	1.07	1.50	1.50	.81
365HB-20N		1-1/4	1-1/4	1.25	1.25	2.63	2.63	1.00
365HB-24N		1-1/2	1-1/2	1.50	1.50	2.74	2.74	1.25



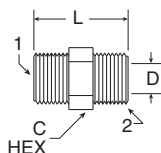
Hex Plug 318P

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	NPT PIPE THREAD	C HEX	L
318P-2N	318P-2PP	1/8	7/16	.62
318P-4N	318P-4PP	1/4	9/16	.75
318P-6N	318P-6PP	3/8	11/16	.74
318P-8N	318P-8PP	1/2	7/8	.87
318P-12N	318P-12PP	3/4	1-1/8	.86
318P-16N	318P-16PP	1	1-3/8	1.05
318P-20N	318P-20PP	1-1/4	1-1/2	1.44
318P-24N	318P-24PP	1-1/2	1-3/4	1.61



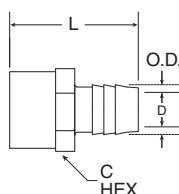
Reducer Bushing 309P

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	EXTERNAL NPT PIPE THREAD	INTERNAL NPT PIPE THREAD	C HEX	L
309P-4-2N	309P-4-2PP	1/4	1/8	9/16	.75
309P-6-2N	309P-6-2PP	3/8	1/8	11/16	.74
309P-6-4N	309P-6-4PP	3/8	1/4	11/16	.75
309P-8-2N	309P-8-2PP	1/2	1/8	7/8	.88
309P-8-4N	309P-8-4PP	1/2	1/4	7/8	.87
309P-8-6N	309P-8-6PP	1/2	3/8	7/8	.87
309P-12-2N	309P-12-2PP	3/4	1/8	1-1/8	.86
309P-12-4N	309P-12-4PP	3/4	1/4	1-1/8	.75
309P-12-6N	309P-12-6PP	3/4	3/8	1-1/8	.85
309P-12-8N	309P-12-8PP	3/4	1/2	1-1/8	.87



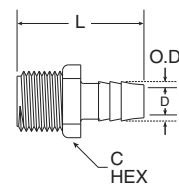
Hex Nipple 316P

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	NPT PIPE THREAD SIDE 1	NPT PIPE THREAD SIDE 2	C HEX	L	FLOW DIA. D
316P-2N	316P-2PP	1/8	1/8	7/16	.99	.22
316P-4-2N	316P-4-2PP	1/4	1/8	9/16	1.13	.22
316P-4N	316P-4PP	1/4	1/4	9/16	1.24	.31
316P-6-2N	316P-6-2PP	3/8	1/8	11/16	1.11	.22
316P-6-4N	316P-6-4PP	3/8	1/4	11/16	1.25	.31
316P-6N	316P-6PP	3/8	3/8	11/16	1.23	.43
316P-8-2N	316P-8-2PP	1/2	1/8	7/8	1.23	.22
316P-8-4N	316P-8-4PP	1/2	1/4	7/8	1.36	.31
316P-8-6N	316P-8-6PP	1/2	3/8	7/8	1.35	.43
316P-8N	316P-8PP	1/2	1/2	7/8	1.45	.59
316P-12-6N	316P-12-6PP	3/4	3/8	1- 1/8	1.36	.43
316P-12-8N	316P-12-8PP	3/4	1/2	1- 1/8	1.47	.59
316P-12N	316P-12PP	3/4	3/4	1- 1/8	1.48	.74
316P-16N	316P-16PP	1	1	1- 3/8	1.85	.98



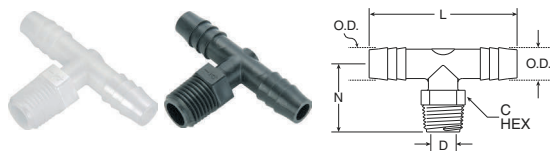
Female Connector 326HB

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	TUBE OR HOSE I.D.	NPT PIPE THREAD	O.D.	C HEX	L	FLOW DIA. D
326HB-3-2N	326HB-3-2PP	3/16	1/8	.25	5/8	1.29	.12
326HB-3-4N	326HB-3-4PP	3/16	1/4	.25	3/4	1.31	.13
326HB-4-2N	326HB-4-2PP	1/4	1/8	.31	5/8	1.51	.16
326HB-4-4N	326HB-4-4PP	1/4	1/4	.31	3/4	1.52	.15
326HB-4-6N	326HB-4-6PP	1/4	3/8	.31	1	1.73	.15
326HB-4-8N	326HB-4-8PP	1/4	1/2	.31	1-1/8	1.74	.15
326HB-6-2N	326HB-6-2PP	3/8	1/8	.44	5/8	1.51	.25
326HB-6-4N	326HB-6-4PP	3/8	1/4	.43	3/4	1.52	.25
326HB-6-6N	326HB-6-6PP	3/8	3/8	.43	1	1.73	.25
326HB-6-8N	326HB-6-8PP	3/8	1/2	.43	1-1/8	1.74	.25
326HB-8-4N	326HB-8-4PP	1/2	1/4	.55	3/4	1.52	.37
326HB-8-6N	326HB-8-6PP	1/2	3/8	.55	1	1.74	.37
326HB-8-8N	326HB-8-8PP	1/2	1/2	.56	1- 1/8	1.74	.37
326HB-10-6N	326HB-10-6PP	5/8	3/8	.66	1	1.61	.46
326HB-10-8N	326HB-10-8PP	5/8	1/2	.66	1- 1/8	1.73	.46
326HB-12-8N	326HB-12-8PP	3/4	1/2	.80	1- 1/8	1.86	.62
326HB-12-12N	326HB-12-12PP	3/4	3/4	.80	1- 1/8	1.85	.62



Male Connector 325HB

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	TUBE OR HOSE I.D.	NPT PIPE THD.	O.D.	C HEX	L	FLOW DIA. D
325HB-3-2N	325HB-3-2PP	3/16	1/8	.25	7/16	1.49	.12
325HB-3-4N	325HB-3-4PP	3/16	1/4	.25	9/16	1.61	.13
325HB-4-2N	325HB-4-2PP	1/4	1/8	.31	7/16	1.50	.15
325HB-4-4N	325HB-4-4PP	1/4	1/4	.31	9/16	1.60	.16
325HB-4-6N		1/4	3/8	.31	11/16	1.62	.16
325HB-4-8N	325HB-4-8PP	1/4	1/2	.31	7/8	1.73	.15
325HB-4-12N		1/4	3/4	.31	1- 1/8	1.74	.16
325HB-5-2N		5/16	1/8	.37	7/16	1.50	.22
325HB-5-4N		5/16	1/4	.37	9/16	1.62	.22
325HB-5-6N	325HB-5-6PP	5/16	3/8	.37	11/16	1.60	.21
325HB-6-2N	325HB-6-2PP	3/8	1/8	.43	7/16	1.49	.25
325HB-6-4N	325HB-6-4PP	3/8	1/4	.43	9/16	1.62	.25
325HB-6-6N	325HB-6-6PP	3/8	3/8	.43	11/16	1.61	.25
325HB-6-8N	325HB-6-8PP	3/8	1/2	.43	7/8	1.73	.25
325HB-6-12N	325HB-6-12PP	3/8	3/4	.43	1- 1/8	1.72	.25
325HB-8-4N	325HB-8-4PP	1/2	1/4	.55	9/16	1.61	.35
325HB-8-6N	325HB-8-6PP	1/2	3/8	.55	11/16	1.60	.37
325HB-8-8N	325HB-8-8PP	1/2	1/2	.55	7/8	1.73	.37
325HB-8-12N	325HB-8-12PP	1/2	3/4	.55	1- 1/8	1.72	.37
325HB-10-6N	325HB-10-6PP	5/8	3/8	.66	11/16	1.61	.46
325HB-10-8N	325HB-10-8PP	5/8	1/2	.66	7/8	1.73	.46
325HB-10-12N	325HB-10-12PP	5/8	3/4	.67	1- 1/8	1.82	.46
325HB-12-8N	325HB-12-8PP	3/4	1/2	.80	7/8	1.86	.62
325HB-12-12N	325HB-12-12PP	3/4	3/4	.80	1- 1/8	1.85	.62
325HB-12-16N		3/4	1	.82	1- 3/8	2.35	.59
325HB-12-20N		3/4	1- 1/4	.86	1- 1/2	3.47	.59
325HB-12-24N		3/4	1- 1/2	.86	1- 3/4	3.66	.59
325HB-16-8N		1	1/2	1.08	1- 1/8	2.49	.77
325HB-16-12N		1	3/4	1.07	1- 1/8	2.30	.81
325HB-16-16N		1	1	1.07	1- 3/8	2.35	.81
325HB-16-20N		1	1- 1/4	1.11	1- 1/2	3.45	.78
325HB-16-24N		1	1- 1/2	1.11	1- 3/4	3.63	.78
325HB-20-20N		1- 1/4	1- 1/4	1.36	1- 1/2	3.47	1.04
325HB-20-24N		1- 1/4	1- 1/2	1.36	1- 3/4	3.64	1.04
325HB-24-20N		1- 1/2	1- 1/4	1.60	1- 1/2	3.45	1.28
325HB-24-24N		1- 1/2	1- 1/2	1.61	1- 3/4	3.63	1.28



Male Branch Tee 372HB

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	TUBE OR HOSE I.D.	NPT PIPE THD.	O.D.	C HEX	L	N	FLOW DIA. D
372HB-3-2N		3/16	1/8	.25	7/16	1.94	1.06	.13
372HB-3-4N		3/16	1/4	.24	9/16	1.93	1.17	.13
372HB-4-2N	372HB-4-2PP	1/4	1/8	.32	7/16	1.92	1.06	.16
372HB-4-4N	372HB-4-4PP	1/4	1/4	.32	9/16	1.92	1.16	.16
372HB-4-6N	372HB-4-6PP	1/4	3/8	.32	11/16	1.92	1.18	.16
372HB-6-4N	372HB-6-4PP	3/8	1/4	.43	9/16	2.22	1.18	.25
372HB-6-6N	372HB-6-6PP	3/8	3/8	.43	11/16	2.22	1.17	.25
372HB-6-8N	372HB-6-8PP	3/8	1/2	.43	7/8	2.22	1.29	.25
372HB-8-4N	372HB-8-4PP	1/2	1/4	.55	9/16	2.52	1.17	.37
372HB-8-6N	372HB-8-6PP	1/2	3/8	.56	11/16	2.52	1.17	.37
372HB-8-8N	372HB-8-8PP	1/2	1/2	.55	7/8	2.52	1.30	.37
372HB-12-12N	372HB-12-12PP	3/4	3/4	.81	1-1/8	2.97	1.92	.58
372HB-16-8N		1	1/2	1.07	7/8	3.10	1.74	.81
372HB-16-12N		1	3/4	1.07	1-1/8	3.10	1.92	.81
372HB-16-16N		1	1	1.07	1-3/8	3.11	1.98	.81



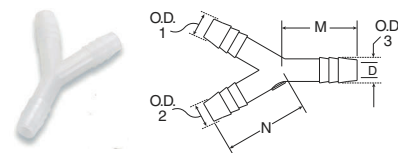
Female Elbow 370HB

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	TUBE OR HOSE I.D.	NPT PIPE THD.	O.D.	C HEX	M	N	FLOW DIA. D
370HB-4-2N	370HB-4-2PP	1/4	1/8	.31	5/8	1.19	1.07	.16
370HB-4-4N	370HB-4-4PP	1/4	1/4	.31	3/4	1.18	1.08	.16
370HB-4-6N	370HB-4-6PP	1/4	3/8	.31	1	1.16	1.30	.16
370HB-4-8N	370HB-4-8PP	1/4	1/2	.31	1-1/8	1.18	1.30	.15
370HB-6-2N	370HB-6-2PP	3/8	1/8	.43	5/8	1.18	1.06	.25
370HB-6-4N	370HB-6-4PP	3/8	1/4	.44	3/4	1.18	1.06	.25
370HB-6-6N	370HB-6-6PP	3/8	3/8	.43	1	1.18	1.29	.25
370HB-6-8N	370HB-6-8PP	3/8	1/2	.43	1-1/8	1.18	1.29	.25
370HB-8-4N	370HB-8-4PP	1/2	1/4	.55	3/4	1.25	1.22	.37
370HB-8-6N	370HB-8-6PP	1/2	3/8	.55	1	1.25	1.44	.37
370HB-8-8N	370HB-8-8PP	1/2	1/2	.55	1-1/8	1.25	1.45	.37
370HB-8-12N	370HB-8-12PP	1/2	3/4	.55	1-3/8	1.26	1.72	.37
370HB-12-12N	370HB-12-12PP	3/4	3/4	.80	1-3/8	1.38	1.84	.59



Male Elbow 329HB

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	TUBE OR HOSE I.D.	NPT PIPE THD.	O.D.	C HEX	M	N	FLOW DIA. D
329HB-3-2N	329HB-3-2PP	3/16	1/8	.25	7/16	.76	1.06	.12
329HB-3-4N		3/16	1/4	.25	9/16	.76	1.17	.13
329HB-4-2N	329HB-4-2PP	1/4	1/8	.31	7/16	1.18	1.04	.16
329HB-4-4N	329HB-4-4PP	1/4	1/4	.31	9/16	1.18	1.16	.22
329HB-4-6N	329HB-4-6PP	1/4	3/8	.31	11/16	1.18	1.17	.15
329HB-4-8N	329HB-4-8PP	1/4	1/2	.32	7/8	1.18	1.30	.15
329HB-5-2N		5/16	1/8	.37	7/16	1.18	1.06	.22
329HB-6-2N	329HB-6-2PP	3/8	1/8	.43	7/16	1.18	1.05	.25
329HB-6-4N	329HB-6-4PP	3/8	1/4	.43	9/16	1.18	1.16	.25
329HB-6-6N	329HB-6-6PP	3/8	3/8	.43	11/16	1.17	1.17	.25
329HB-6-8N	329HB-6-8PP	3/8	1/2	.43	7/8	1.18	1.28	.25
329HB-8-4N	329HB-8-4PP	1/2	1/4	.55	9/16	1.27	1.16	.37
329HB-8-6N	329HB-8-6PP	1/2	3/8	.56	11/16	1.26	1.16	.37
329HB-8-8N	329HB-8-8PP	1/2	1/2	.55	7/8	1.25	1.29	.37
329HB-8-12N	329HB-8-12PP	1/2	3/4	.55	1-1/8	1.30	1.89	.37
329HB-10-6N		5/8	3/8	.67	11/16	1.27	1.18	.47
329HB-10-8N	329HB-10-8PP	5/8	1/2	.68	7/8	1.30	1.73	.48
329HB-10-12N	329HB-10-12PP	5/8	3/4	.69	1-1/8	1.32	1.92	.49
329HB-12-8N	329HB-12-8PP	3/4	1/2	.81	7/8	1.51	1.74	.58
329HB-12-12N	329HB-12-12PP	3/4	3/4	.81	1-1/8	1.50	1.91	.58
329HB-12-16N		3/4	1	.82	1-3/8	1.49	1.98	.58
329HB-12-20N		3/4	1-1/4	.86	1-1/2	1.52	2.39	.59
329HB-12-24N		3/4	1-1/2	.85	1-1/2	2.26	3.09	.59
329HB-16-8N		1	1/2	1.12	7/8	1.58	1.78	.86
329HB-16-12N		1	3/4	1.11	1-1/8	1.58	1.93	.86
329HB-16-16N		1	1	1.08	1-3/8	1.55	1.98	.81
329HB-16-20N		1	1-1/4	1.12	1-1/2	2.28	2.93	.84
329HB-16-24N		1	1-1/2	1.12	1-1/2	2.27	3.11	.84
329HB-20-20N		1-1/4	1-1/4	1.25	1-1/2	2.63	2.94	1.00
329HB-20-24N		1-1/4	1-1/2	1.36	1-1/2	2.63	3.11	1.08
329HB-24-20N		1-1/2	1-1/4	1.60	1-1/2	2.77	2.93	1.30
329HB-24-24N		1-1/2	1-1/2	1.60	1-1/2	2.77	3.10	1.30



Union Y 362HB

WHITE NYLON PART NO.	TUBE OR HOSE I.D. 1 & 2	TUBE OR HOSE I.D. 3	O.D. 1 & 2	O.D. 3	M	N	FLOW DIA. D
362HB-4N	1/4	1/4	.31	.31	1.13	1.13	.16
362HB-6N	3/8	3/8	.43	.43	1.25	1.40	.25
362HB-8N	1/2	1/2	.55	.55	1.25	1.50	.38



Ball Nose Hose Barb Stem 328HB

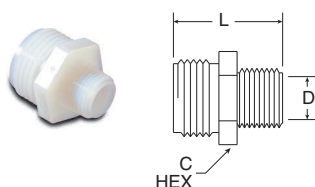
WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	TUBE OR HOSE I.D.	SWIVEL NUT NPT PIPE THREAD	O.D.	L	FLOW DIA. D
328HB-4BN	328HB-4BPP	1/4	1/4 *	.30	1.19	.19
328HB-4-8BN	328HB-4-8BPP	1/4	1/2 *	.30	1.29	.15
328HB-6BN	328HB-6BPP	3/8	3/8 *	.56	1.41	.25
328HB-8BN	328HB-8BPP	1/2	1/2 *	.67	1.30	.37

*Use with hose barb swivel nut (31HB-XX) for desired NPT thread.



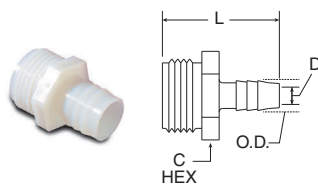
Hose Barb Swivel Nut 31HB

WHITE NYLON PART NO.	BLACK POLYPROPYLENE PART NO.	NPT PIPE THREAD	C HEX	L
31HB-4N	31HB-4PP	1/4	3/4	.62
31HB-6N	31HB-6PP	3/8	7/8	.63
31HB-8N	31HB-8PP	1/2	1- 1/16	.75



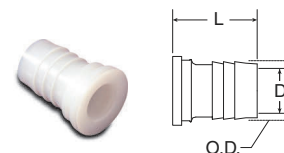
Male Garden Hose - Male Pipe Adapter 316GH

WHITE NYLON PART NO.	GARDEN HOSE THREAD	NPT PIPE THREAD	C HEX	L	FLOW DIA. D
316GH-12-6N	3/4	3/8	1- 1/8	1.33	.44
316GH-12-8N	3/4	1/2	1- 1/8	1.44	.59
316GH-12-12N	3/4	3/4	1- 1/8	1.48	.75



Male Garden Hose - Hose Barb 325GH

WHITE NYLON PART NO.	TUBE OR HOSE I.D.	GARDEN HOSE THREAD	O.D.	C HEX	L	FLOW DIA. D
325GH-4-12N	1/4	3/4	.31	1- 1/8	1.70	.16
325GH-6-12N	3/8	3/4	.44	1- 1/8	1.69	.25
325GH-8-12N	1/2	3/4	.55	1- 1/8	1.68	.38
325GH-10-12N	5/8	3/4	.64	1- 1/8	1.70	.47
325GH-12-12N	3/4	3/4	.81	1- 1/8	1.70	.62



Garden Hose Swivel Hose Barb Stem 325GHSV

WHITE NYLON PART NO.	TUBE OR HOSE I.D.	GARDEN HOSE THREAD	O.D.	L	FLOW DIA. D
325GHSV-4-12BN*	1/4	3/4	.31	1.16	.16
325GHSV-6-12BN*	3/8	3/4	.44	1.17	.25
325GHSV-8-12BN*	1/2	3/4	.56	1.17	.38
325GHSV-10-12BN*	5/8	3/4	.64	1.18	.47
325GHSV-12-12BN*	3/4	3/4	.81	1.18	.62

*Use with Garden Hose washer (30GH-12) and Garden Hose Nut (31GH-12N)



Garden Hose Nut 31GH

WHITE NYLON PART NO.	GARDEN HOSE THREAD	L	DIA. N
31GH-12N	3/4	.74	1.38



Garden Hose Cap 313GH

WHITE NYLON PART NO.	GARDEN HOSE THREAD	L	DIA. N
313GH-12N**	3/4	.74	1.38

**Use with Garden Hose Washer (30GH-12)



Garden Hose Washer 30GH

WHITE TPE PART NO.	GARDEN HOSE THREAD	L
30GH-12	3/4	.13



Polypropylene Ball Valves

Parker's Polypropylene Ball Valves offers a corrosion-resistant, all plastic design making them ideal for water filtration units, coffee and beverage machines and a wide variety of other fluid applications.

Product Features:

- Wide chemical acceptance range
- Bi-directional flow maximizes productivity
- Full flow reduces pressure drop across valve
- EPDM seals
- Push-in and barbed connections
- Meets FDA and NSF-51 requirements for food contact
- NSF/ANSI 61 & 372 certified by WQA

Advantages:

- Reduce costs – Built in LIQUIfit, TrueSeal and Par-Barb connections eliminates the need for a secondary fitting.
- Save Space – Low-profile design allows for easy assembly and access where space is at a premium.

Type:

- LFPP – LIQUIfit
- PP – TrueSeal
- PBPP – Par-Barb

Specifications:

Pressure Range:

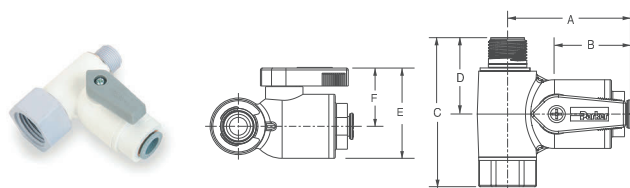
- Up to 150 psi

Temperature Range

- 35° to +200°F

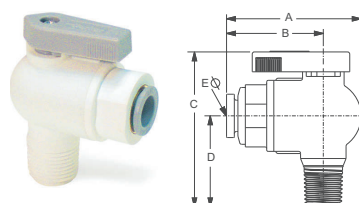


LIQUIfit Ball Valves



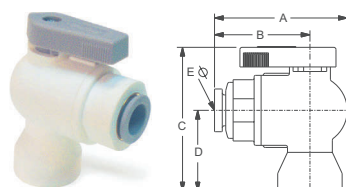
VAS - Valve Angle Stop

PART NO.	TUBE O.D.	MALE THD.	FEMALE THD.	A	B	C	D	E	F
LFPP4VAS6	1/4	3/8	3/8	1.95	1.24	2.17	1.11	1.41	.91
LFPP4VAS8	1/4	3/8	1/2	1.95	1.24	2.40	1.11	1.41	.91
LFPP6VAS6	3/8	3/8	3/8	2.06	1.35	2.17	1.11	1.41	.91
LFPP6VAS8	3/8	3/8	1/2	2.06	1.35	2.40	1.11	1.41	.91



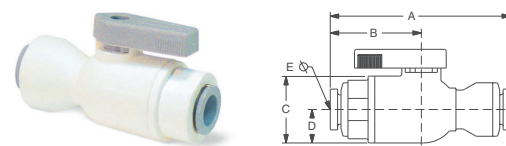
VME - Valve Male Elbow

PART NO.	NOM. TUBE O.D.	NPTF THREAD SIZE	A	B	C	D	ØE THRU HOLE MIN.
LFPP4VME2	1/4	1/8	1.74	1.21	2.00	1.10	.19
LFPP4VME4	1/4	1/4	1.74	1.21	2.18	1.28	.19
LFPP4VME6	1/4	3/8	1.74	1.21	2.18	1.28	.19
LFPP4VME8	1/4	1/2	1.74	1.21	2.37	1.47	.19
LFPP6VME2	3/8	1/8	1.85	1.32	2.00	1.10	.25
LFPP6VME4	3/8	1/4	1.85	1.32	2.18	1.28	.25
LFPP6VME6	3/8	3/8	1.85	1.32	2.18	1.28	.25
LFPP6VME8	3/8	1/2	1.85	1.32	2.37	1.47	.25
LFPP8VME8	1/2	1/2	2.73	1.74	2.38	1.47	.37



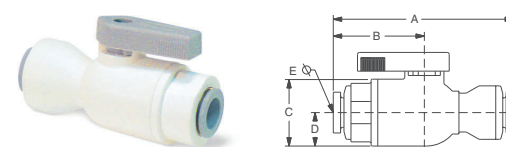
VFE - Valve Female Elbow

PART NO.	NOM. TUBE O.D.	NPTF THREAD SIZE	A	B	C	D	ØE THRU HOLE MIN.
LFPP4VFE2	1/4	1/8	1.74	1.21	1.82	.92	.19
LFPP4VFE4	1/4	1/4	1.74	1.21	2.05	1.15	.19
LFPP4VFE6	1/4	3/8	1.74	1.21	2.18	1.28	.19
LFPP6VFE2	3/8	1/8	1.85	1.32	1.82	.92	.25
LFPP6VFE4	3/8	1/4	1.85	1.32	2.05	1.15	.25
LFPP6VFE6	3/8	3/8	1.85	1.32	2.18	1.28	.25



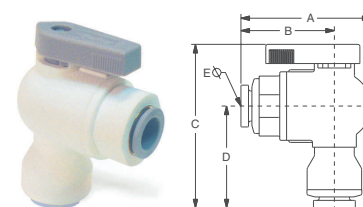
VUC - Valve Union Connector

PART NO.	1 TUBE SIZE	2 TUBE SIZE	A	B	C	D	ØE THRU HOLE MIN.
LFPP4VUC4	1/4	1/4	2.55	1.22	1.0	.5	.19
LFPP4VUC6	1/4	3/8	2.57	1.30	1.0	.5	.19
LFPP6VUC6	3/8	3/8	2.67	1.32	1.4	.5	.25
LFPP8VUC8	1/2	1/2	3.50	1.74	1.4	.5	.37



VUC - Metric Valve Union Connector

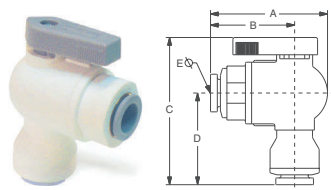
PART NUMBER	TUBE 1 SIZE	TUBE 2 SIZE	A	B	C	D	THRU HOLE MIN.
LFPP6MVUC6M	6MM	6MM	2.24	1.08	1.4	0.5	.19
LFPP8MVUC8M	8MM	8MM	2.35	1.09	1.4	0.5	.25
LFPP10MVUC10M	10MM	10MM	2.73	1.30	1.4	0.5	.33
LFPP12MVUC12M	12MM	12MM	3.46	1.72	1.4	0.5	.37



VEU - Valve Elbow Union

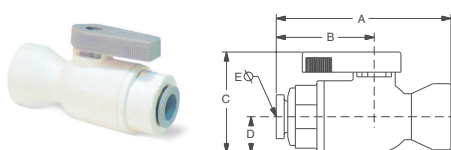
PART NO.	1 TUBE SIZE	2 TUBE SIZE	A	B	C	D	ØE THRU HOLE MIN.
LFPP4VEU4	1/4	1/4	1.75	1.22	2.33	1.42	.19
LFPP4VEU6	1/4	3/8	1.75	1.22	2.33	1.42	.11
LFPP6VEU4	3/8	1/4	1.83	1.30	2.32	1.40	.19
LFPP6VEU6	3/8	3/8	1.85	1.32	2.34	1.44	.25

NOTE: PPL refers to Polypropylene. FCB refers to Fluorocarbon.



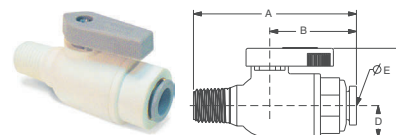
VEU - Metric Valve Elbow Union

PART NUMBER	TUBE 1 SIZE	TUBE 2 SIZE	A	B	C	D	THRU HOLE MIN.
LFPP6MVEU6M	6MM	6MM	1.61	1.08	2.15	1.24	.19
LFPP8MVEU8M	8MM	8MM	1.62	1.09	2.21	1.30	.25
LFPP10MVEU10M	10MM	10MM	1.84	1.30	2.42	1.51	.33
LFPP12MVEU12M	12MM	12MM	2.25	1.72	2.48	1.56	.37



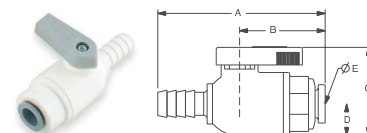
VFC - Valve Female Connector

PART NO.	NOM. TUBE O.D.	NPTF THREAD SIZE	A	B	C	D	ØE THRU HOLE MIN.
LFPP4VFC2	1/4	1/8	2.04	1.21	1.4	.5	.19
LFPP4VFC4	1/4	1/4	2.27	1.21	1.4	.5	.19
LFPP4VFC6	1/4	3/8	2.40	1.21	1.4	.5	.19
LFPP6VFC2	3/8	1/8	2.15	1.32	1.4	.5	.25
LFPP6VFC4	3/8	1/4	2.38	1.32	1.4	.5	.25
LFPP6VFC6	3/8	3/8	2.51	1.32	1.4	.5	.25



VMC - Valve Male Connector

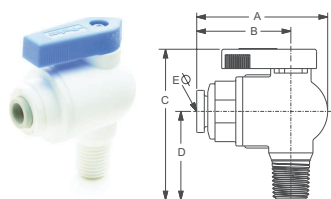
PART NO.	NOM. TUBE O.D.	NPTF THREAD SIZE	A	B	C	D	ØE THRU HOLE MIN.
LFPP4VMC2	1/4	1/8	2.22	1.21	1.4	.5	.19
LFPP4VMC4	1/4	1/4	2.40	1.21	1.4	.5	.19
LFPP4VMC6	1/4	3/8	2.40	1.21	1.4	.5	.19
LFPP4VMC8	1/4	1/2	2.59	1.21	1.4	.5	.19
LFPP6VMC2	3/8	1/8	2.33	1.32	1.4	.5	.25
LFPP6VMC4	3/8	1/4	2.51	1.32	1.4	.5	.25
LFPP6VMC6	3/8	3/8	2.51	1.32	1.4	.5	.25
LFPP6VMC8	3/8	1/2	2.70	1.32	1.4	.5	.25
LFPP8VMC8	1/2	1/2	3.14	1.74	1.4	.5	.37



VUCPB - Valve Union Connector Barbed x Tube

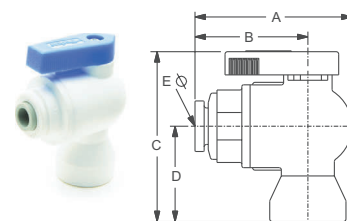
PART NO.	HOSE ID	TUBE OD	OD	A	B	C	D	ØE THRU HOLE MIN.
LFPP4VUCPB4	1/4	1/4	.31	2.40	1.08	1.42	.50	.15
LFPP6VUCPB6	3/8	3/8	.43	2.63	1.32	1.42	.50	.19

TrueSeal™ Ball Valves



VME - Valve Male Elbow

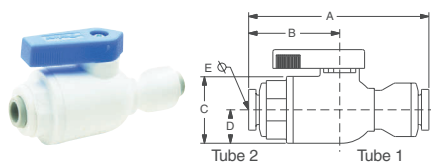
PART NUMBER	NOM. TUBE O.D.	NPTF THREAD SIZE	A	B	C	D	ØE THRU HOLE MIN.
PP4VME2-MG (+)	1/4	1/8	1.74	1.21	2.00	1.10	.19
PP4VME4-MG	1/4	1/4	1.74	1.21	2.18	1.28	.19
PP4VME6-MG	1/4	3/8	1.74	1.21	2.18	1.28	.19
PP4VME8-MG (+)	1/4	1/2	1.74	1.21	2.37	1.47	.19
PP6VME2-MG (+)	3/8	1/8	1.85	1.32	2.00	1.10	.25
PP6VME4-MG	3/8	1/4	1.85	1.32	2.18	1.28	.25
PP6VME6-MG	3/8	3/8	1.85	1.32	2.18	1.28	.25
PP6VME8-MG	3/8	1/2	1.85	1.32	2.37	1.47	.25



VFE - Valve Female Elbow

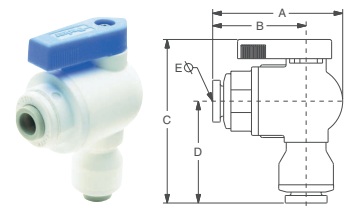
PART NUMBER	NOM. TUBE O.D.	NPTF THREAD SIZE	A	B	C	D	ØE THRU HOLE MIN.
PP4VFE2-MG (+)	1/4	1/8	1.74	1.21	1.82	.92	.19
PP4VFE4-MG	1/4	1/4	1.74	1.21	2.05	1.15	.19
PP4VFE6-MG	1/4	3/8	1.74	1.21	2.18	1.28	.19
PP6VFE2-MG (+)	3/8	1/8	1.85	1.32	1.82	.92	.25
PP6VFE4-MG	3/8	1/4	1.85	1.32	2.05	1.15	.25
PP6VFE6-MG	3/8	3/8	1.85	1.32	2.18	1.28	.25

(+) Non Standard.



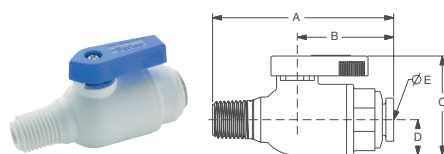
VUC - Valve Union Connector

PART NUMBER	1 TUBE SIZE	2 TUBE SIZE	A	B	C	D	ØE THRU HOLE MIN.
PP4VUC4-MG	1/4	1/4	2.55	1.22	1.0	.5	.19
PP4VUC6-MG	1/4	3/8	2.55	1.22	1.0	.5	.19
PP6VUC4-MG	3/8	1/4	2.57	1.30	1.0	.5	.19
PP6VUC6-MG	3/8	3/8	2.67	1.32	1.4	.5	.25



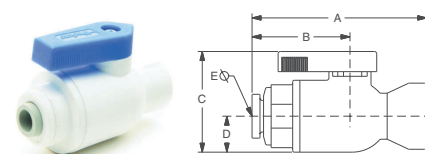
VEU - Valve Elbow Union

PART NUMBER	1 TUBE SIZE	2 TUBE SIZE	A	B	C	D	ØE THRU HOLE MIN.
PP4VEU4-MG	1/4	1/4	1.75	1.22	2.33	1.42	.19
PP4VEU6-MG	1/4	3/8	1.75	1.22	2.33	1.42	.11
PP6VEU4-MG	3/8	1/4	1.83	1.30	2.32	1.40	.19
PP6VEU6-MG	3/8	3/8	1.85	1.32	2.34	1.44	.25



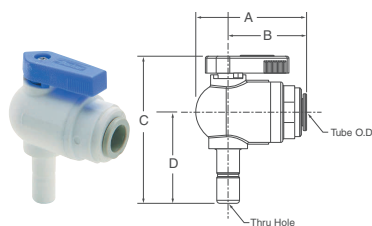
VMC - Valve Male Connector

PART NUMBER	NOM. TUBE O.D.	NPTF THREAD SIZE	A	B	C	D	ØE THRU HOLE MIN.
PP4VMC2-MG (+)	1/4	1/8	2.22	1.21	1.4	.5	.19
PP4VMC4-MG	1/4	1/4	2.40	1.21	1.4	.5	.19
PP4VMC6-MG	1/4	3/8	2.40	1.21	1.4	.5	.19
PP4VMC8-MG (+)	1/4	1/2	2.59	1.21	1.4	.5	.19
PP6VMC2-MG (+)	3/8	1/8	2.33	1.32	1.4	.5	.25
PP6VMC4-MG	3/8	1/4	2.51	1.32	1.4	.5	.25
PP6VMC6-MG	3/8	3/8	2.51	1.32	1.4	.5	.25
PP6VMC8-MG (+)	3/8	1/2	2.70	1.32	1.4	.5	.25



VFC - Valve Female Connector

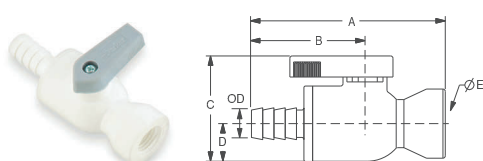
PART NUMBER	NOM. TUBE O.D.	NPTF THREAD SIZE	A	B	C	D	ØE THRU HOLE MIN.
PP4VFC2-MG	1/4	1/8	2.04	1.21	1.4	.5	.19
PP4VFC4-MG	1/4	1/4	2.27	1.21	1.4	.5	.19
PP4VFC6-MG	1/4	3/8	2.40	1.21	1.4	.5	.19
PP6VFC2-MG	3/8	1/8	2.15	1.32	1.4	.5	.25
PP6VFC4-MG	3/8	1/4	2.38	1.32	1.4	.5	.25
PP6VFC6-MG	3/8	3/8	2.51	1.32	1.4	.5	.25



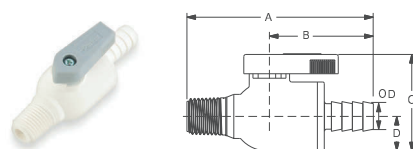
VTEU - Valve Tube Elbow Union

PART NUMBER	NOM. TUBE O.D.	STEM	A	B	C	D	ØE THRU HOLE MIN.
PP4VTEU6-MG	1/4	3/8	1.75	1.22	2.43	1.50	.17
PP6VTEU6-MG	3/8	3/8	1.83	1.30	2.43	1.50	.25

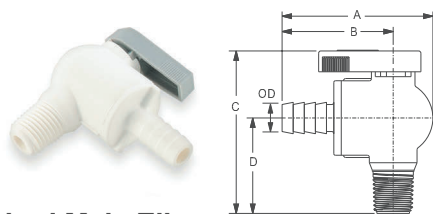
Par-Barb® Ball Valves


VFC - Valve Barbed Female Connector

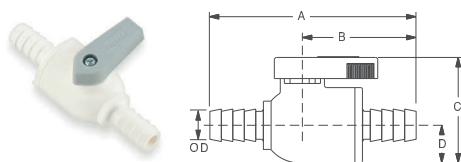
PART NO.	HOSE I.D.	NPTF THD.	O.D.	A	B	C	D	ØE THRU HOLE MIN.
PBPP4VFC4	1/4	1/4	.31	2.76	1.60	1.41	.50	.15
PBPP6VFC6	3/8	3/8	.43	2.79	1.60	1.41	.50	.19


VMC - Valve Barbed Male Connector

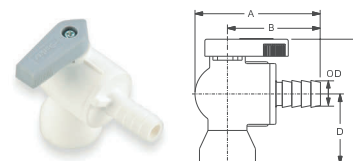
PART NO.	HOSE I.D.	NPTF THD.	O.D.	A	B	C	D	ØE THRU HOLE MIN.
PBPP4VMC4	1/4	1/4	.31	2.79	1.60	1.42	.50	.15
PBPP6VMC6	3/8	3/8	.43	2.79	1.60	1.42	.50	.19


VME - Valve Barbed Male Elbow

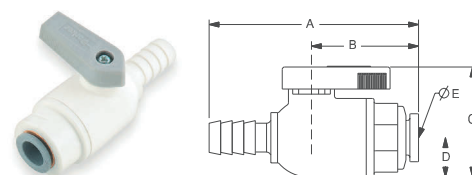
PART NO.	HOSE I.D.	NPTF THD.	O.D.	A	B	C	D	ØE THRU HOLE MIN.
PBPP4VME4	1/4	1/4	.31	2.13	1.60	2.18	1.28	.15
PBPP6VME6	3/8	3/8	.43	2.13	1.60	2.18	1.28	.19


VUC - Valve Barbed Union Connector

PART NO.	HOSE I.D.	O.D.	A	B	C	D	ØE THRU HOLE MIN.
PBPP4VUC4	1/4	.31	2.91	1.60	1.42	.50	.15
PBPP6VUC6	3/8	.43	2.91	1.60	1.42	.50	.19
PBPP8VUC8	1/2	.55	2.91	1.60	1.42	.50	.25


VFE - Valve Barbed Female Elbow

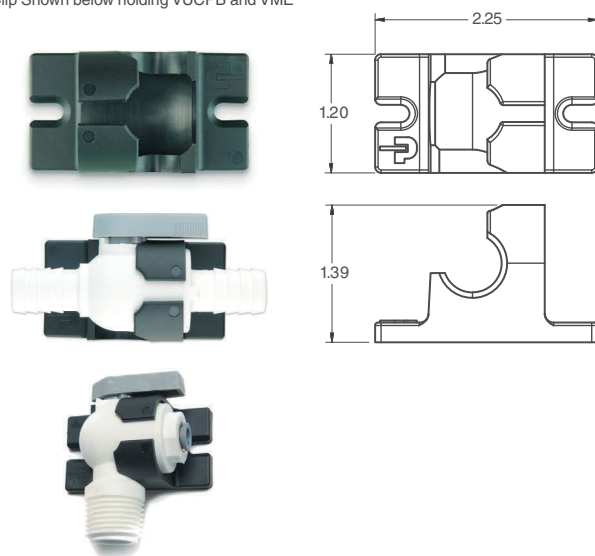
PART NO.	HOSE I.D.	NPTF THD.	O.D.	A	B	C	D	ØE THRU HOLE MIN.
PBPP4VFE4	1/4	1/4	.31	2.13	1.60	2.05	1.15	.15
PBPP6VFE4	3/8	1/4	.43	2.13	1.60	2.05	1.15	.15
PBPP6VFE6	3/8	3/8	.43	2.13	1.60	2.18	1.28	.19


VUCPB - Valve Union Connector Barbed x Tube

PART NO.	HOSE ID	TUBE OD	OD	A	B	C	D	ØE THRU HOLE MIN.
LFPP4VUCPB4	1/4	1/4	.31	2.40	1.08	1.42	.50	.15
LFPP6VUCPB6	3/8	3/8	.43	2.63	1.32	1.42	.50	.19

BVC Ball Valve Clip

BV-Clip Shown below holding VUCPB and VME



Cartridges



Parker has developed a range of cartridges guaranteeing the integrity of the sealing system before and after assembly in non-threaded cavities. The compact design of the one-piece cartridges enables automation of your manufacturing process and improves the reliability of your system.

Product Features:

- Self-centering of the cartridge in the cavity
- Push-in connection
- Designed for automation assembly process
- NSF cartridges available

Markets:

- Industrial
- Pneumatic
- Filtration
- Semi-Conductor
- Life Science
- Automation

Applications:

- Air
- Water
- Beverage Dispensing
- Packaging
- Labeling

Specifications:

	Pressure	Temperature
LIQUIfit	Up to 230 psi	35 °F to 200 °F
TrueSeal	Up to 150 psi	-20 °F to 180 °F

LIQUfit® Cartridges

6300 LIQUfit Cartridge Inch

PART NO.	OD	G	G1	H	L	KG
6300 56 00	1/4	10.5	14.5	12.5	600	0.002
6300 60 00	3/8	15.5	19	17	930	0.005
6300 62 00	1/2	22	25	23	1038	0.011

50 cartridges per Carstick®
5/32" (4mm) and 5/16" (8mm) also available

6300 LIQUfit Cartridge Metric

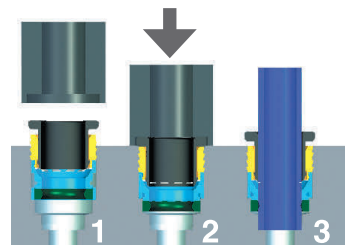
PART NO.	OD	G	G1	H	L	KG
6300 04 00	4	8	11	10	554	0.002
6300 06 00	6	10	14.5	11.5	629	0.002
6300 08 00	8	13	15	15	794	0.003
6300 10 00	10	15.5	19.5	17	930	0.005
6300 12 00	12	18.5	21	19.5	1038	0.010

50 cartridges per Carstick®

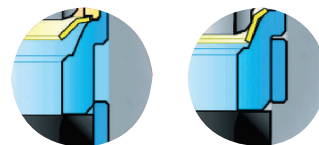


Installation

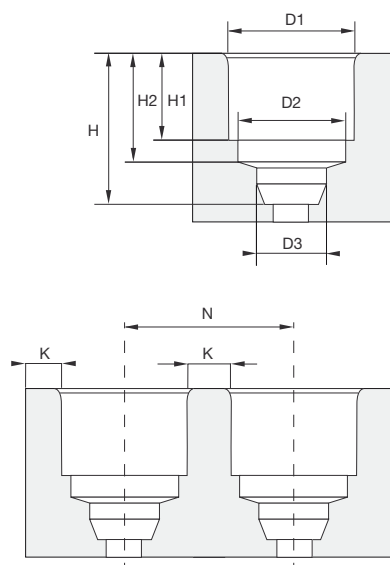
1. Self-centering of the cartridge in the cavity.
2. The seal protection is broken. The seal slides into the cavity. The cartridge is in place.
3. Tube connection.



Assembly Tool: For details on the assembly tool, please contact us.



LIQUfit® Carstick® Cavity Dimensions



Please consult us for detailed drawings of cavity dimensions and tolerances. All our dimensions are in millimeters.

LIQUfit® Carstick® Inch

CAVITY	OD3	H	H1	H2
1/8	3.25	7.45	5.3	9.5
5/32*	4.1	8.15	6	10
1/4	6.45	10.15	8	12.5
5/16*	8.15	12.45	9.9	15.5
3/8	9.65	14.35	11.7	19

LIQUfit® Carstick® Metric

CAVITY	OD3	H	H1	H2
4	4.1	10	6	8.15
6	6.1	12	7.5	9.65
8	8.15	15.5	9.9	12.45
10	10.25	19	11.7	14.35
12	12.17	22	13.9	16.75

Polyamide Cavity

CAVITY	OD1	OD2	N	K
1/8	7.05	6.02	8.6	1.5
5/32*	8.25	7.05	9.75	1.5
1/4	10.55	9.35	12.6	2
5/16*	12.15	10.85	14.2	2
3/8	14.8	13.1	16.8	2

CAVITY	OD1	OD2	N*	K
4	8.25	7.05	9.8	1.5
6	10.2	9.15	12.2	2
8	12.15	10.85	14.2	2
10	14.8	13.2	16.8	2
12	17.5	15.5	20	2.5

Aluminum Cavity

CAVITY	OD1	OD2	N	K
1/8	7.1	6.2	8.6	1.5
5/32*	8.25	7.05	11.25	3
1/4	10.6	9.35	12.65	2
5/16*	12.2	10.85	15.2	3
3/8	15.05	13.1	17.1	2

CAVITY	OD1	OD2	N*	K
4	8.25	7.5	11.5	3
6	10.3	9.15	13.5	3
8	12.2	10.85	15.2	3
10	15.05	13.2	17.1	2
12	17.5	15.5	20	2.5

Brass Cavity

CAVITY	OD1	OD2	N	K
1/8	7.1	6.2	8.6	1.5
5/32*	8.25	7.05	10.25	2
1/4	10.6	9.35	12.65	2
5/16*	12.2	10.85	14.25	2
3/8	10.05	13.1	17.1	2

CAVITY	OD1	OD2	N*	K
4	8.25	7.05	10.25	2
6	10.25	9.1	12.25	2
8	12.2	10.85	14.25	2
10	15.05	13.2	17.1	2
12	17.65	15.5	20	2.5

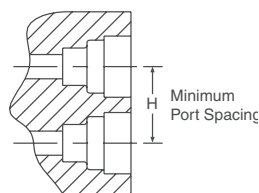
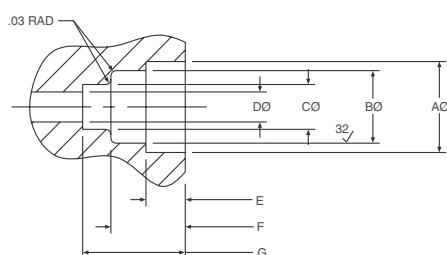
*5/32"=4mm and 5/16"=8mm

TrueSeal™ Cartridges



TSC - Cartridge Insert

PART NUMBER WITH EPDM SEAL	NOM. TUBE O.D.	A* DIAMETER ±.002	B DIAMETER ±.003	C DIAMETER ±.003	D DIAMETER MAXIMUM	E DEPTH ±.002	F DEPTH ±.002	G DEPTH ±.002	H* CENTERLINE OF PORTS MINIMUM
ATSC4-MG	1/4	.528	.421	.260	.19	.230	.435	.600	.670
ATSC6-MG	3/8	.632	.545	.385	.31	.280	.455	.705	.790
ATSC8-MG	1/2	.774	.668	.510	.41	.315	.510	.810	1.250



Parker TrueSeal™ Cartridge Inserts:

Allow you to machine or mold a tube connection into your equipment or components. By using cartridge inserts, you will reduce your material and assembly costs, reduce potential leak paths, and give your equipment a new, clean profile by eliminating the need for threaded connections. TSC Cartridge Inserts consist of 1 o-ring, 1 cartridge, and 1 collet.

*Cartridge inserts are rated at 150 psi in ports dimensioned as above and having Noryl as the receiving material. Other materials may have different ratings and require different port dimensions. Consult the Fluid System Connectors Division when using polypropylene, unfilled polypropylene, ABS or Nylon.

Assembly Instructions:

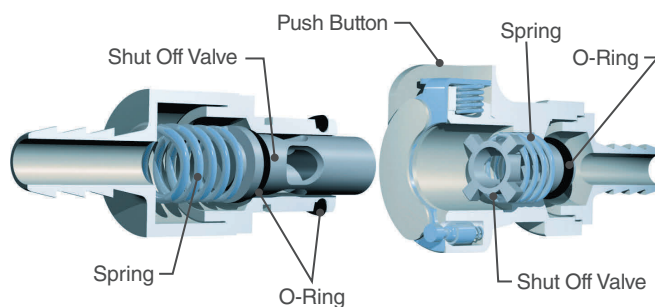
1. Machine or mold the receiving orifice as per the above dimensions.
2. Place the cartridge insert squarely onto the prepared port opening making sure that the barbs of the cartridge are going into the hole and the lettering on the face of the cartridge is visible.
3. Using a rubber mallet or press, insert the cartridge into the first gland orifice until its face is flush with the top surface of the port.
4. Insert the o-ring into the cartridge and seat it evenly into the second gland orifice.
5. Insert the collet into the cartridge opening.
6. Insert tubing.

Quick Couplings



Product Features:

- Easy-to-use Push-to-Connect design, with audible “CLICK” upon connection
- Push-button release to disconnect
- Valved and non-valved options
- Various port configurations available including NPT, BSPT, Hose Barb, and Bulkhead
- Compact and lightweight ergonomic design
- Resistant to many chemicals
- Suitable for gas handling applications
- FDA approved materials
- Vacuum to 120 psi working pressure on all sizes
- PPA Series has a plastic latch and does not interchange with PPL Series



Couplers - Male NPTF Thread

PART NUMBER	BODY SIZE	PORT END	VALVED OR NON-VALVED
PPM-121-2MP	1/8	1/8	VALVED
PPM-121-4MP	1/8	1/4	VALVED
PPM-123-2MP	1/8	1/8	NON
PPM-123-4MP	1/8	1/4	NON
PPL-251-4MP	1/4	1/4	VALVED
PPL-251-6MP	1/4	3/8	VALVED
PPL-253-4MP	1/4	1/4	NON
PPL-253-6MP	1/4	3/8	NON



Couplers - Bulkhead Hose Barb with Nut, In-line

PART NUMBER	BODY SIZE	HOSE BARB	VALVED OR NON-VALVED
PPM-121-H2HB	1/8	1/8	VALVED
PPM-121-H3HB	1/8	3/16	VALVED
PPM-121-H4HB	1/8	1/4	VALVED
PPL-251-H4HB	1/4	1/4	VALVED
PPL-251-H6HB	1/4	3/8	VALVED



Nipples - Male NPTF Thread

PART NUMBER	BODY SIZE	PORT END	VALVED OR NON-VALVED
PPM-122-2MP	1/8	1/8	VALVED
PPM-122-4MP	1/8	1/4	VALVED
PPM-124-2MP	1/8	1/8	NON
PPM-124-4MP	1/8	1/4	NON
PPL-252-4MP	1/4	1/4	VALVED
PPL-252-6MP	1/4	3/8	VALVED
PPL-254-4MP	1/4	1/4	NON
PPL-254-6MP	1/4	3/8	NON



Nipples - Hose Barb, 90°

PART NUMBER	BODY SIZE	HOSE BARB	VALVED OR NON-VALVED
PPM-122-C2HB	1/8	1/8	VALVED
PPM-122-C4HB	1/8	1/4	VALVED
PPM-124-C2HB	1/8	1/8	NON
PPM-124-C4HB	1/8	1/4	NON
PPL-252-C4HB	1/4	1/4	VALVED
PPL-252-C6HB	1/4	3/8	VALVED
PPL-254-C4HB	1/4	1/4	NON
PPL-254-C6HB	1/4	3/8	NON



Nipples - Panel Mount Hose Barb, In-line

PART NUMBER	BODY SIZE	HOSE BARB	VALVED OR NON-VALVED
PPM-122-H2HB	1/8	1/8	VALVED
PPM-122-H3HB	1/8	3/16	VALVED
PPM-122-H4HB	1/8	1/4	VALVED
PPM-124-H3HB	1/8	3/16	NON
PPL-252-H4HB	1/4	1/4	VALVED
PPL-252-H6HB	1/4	3/8	VALVED

Couplers - Hose Barb, In-line

PART NUMBER	BODY SIZE	HOSE BARB	VALVED OR NON-VALVED
PPM-121-2HB	1/8	1/8	VALVED
PPM-121-3HB	1/8	3/16	VALVED
PPM-121-4HB	1/8	1/4	VALVED
PPM-123-2HB	1/8	1/8	NON
PPM-123-3HB	1/8	3/16	NON
PPM-123-4HB	1/8	1/4	NON
PPL-251-4HB	1/4	1/4	VALVED
PPL-251-5HB	1/4	5/16	VALVED
PPL-251-6HB	1/4	3/8	VALVED
PPL-253-4HB	1/4	1/4	NON
PPL-253-5HB	1/4	5/16	NON
PPL-253-6HB	1/4	3/8	NON
PPA-251-4HB	1/4	1/4	VALVED
PPA-251-6HB	1/4	3/8	VALVED
PPA-253-4HBSB	1/4	1/4	NON
PPA-253-6HBSB	1/4	3/8	NON



PPM & PPL

PPA*



PPM & PPL

PPA*

Nipples - Hose Barb, In-line

PART NUMBER	BODY SIZE	HOSE BARB	VALVED OR NON-VALVED
PPM-122-2HB	1/8	1/8	VALVED
PPM-122-3HB	1/8	3/16	VALVED
PPM-122-4HB	1/8	1/4	VALVED
PPM-124-2HB	1/8	1/8	NON
PPM-124-3HB	1/8	3/16	NON
PPM-124-4HB	1/8	1/4	NON
PPL-252-4HB	1/4	1/4	VALVED
PPL-252-5HB	1/4	5/16	VALVED
PPL-252-6HB	1/4	3/8	VALVED
PPL-254-4HB	1/4	1/4	NON
PPL-254-5HB	1/4	5/16	NON
PPL-254-6HB	1/4	3/8	NON
PPA-252-4HB	1/4	1/4	VALVED
PPA-252-6HB	1/4	3/8	VALVED
PPA-254-4HB	1/4	1/4	NON
PPA-254-6HB	1/4	3/8	NON

*PPA couplers are not interchangeable with PPM and PPL couplers.

Low Lead Brass



Product Features:

- Seal materials: EPDM
- Meets <0.25% lead requirements
- Additional configurations available for each type shown
- Custom products available

Female Flare Connector



PART NUMBER	TUBE O.D.	THREAD
L66PLNF-4-4	1/4	7/16-20
L66PLNF-6-4	3/8	7/16-20
L66PLNF-6-6	3/8	5/8-18

Female Garden Hose Swivel



PART NUMBER	TUBE O.D.	THREAD
L66PLNGHSV-4-12	1/4	3/4
L66PLNGHSV-6-12	3/8	3/4

45° Flare-Male NPTF Connector



PART NUMBER	TUBE O.D.	THREAD
L48F-4-4	1/4	1/4
L48F-6-4	3/8	1/4
L48F-6-6	3/8	3/8
L48F-6-8	3/8	1/2
L48F-8-8	1/2	1/2
L48F-10-6	5/8	3/8
L48F-10-8	5/8	1/2
L48F-10-12	5/8	3/4

45° Flare-Male NPTF Elbow



PART NUMBER	TUBE O.D.	THREAD
L249F-6-4	3/8	1/4
L249F-6-6	3/8	3/8
L249F-6-8	3/8	1/2
L249F-8-4	1/2	1/4
L249F-8-6	1/2	3/8
L249F-10-6	5/8	3/8
L249F-10-8	5/8	1/2

SC - Safety Clip

(Patent No. 6,065,779)



PART NUMBER	PART NUMBER	FOR NOMINAL TUBE O.D.
SC-4	SC-4-B	1/4
SC-5	SC-5-B	5/16
SC-6	SC-6-B	3/8
SC-8	SC-8-B	1/2

TS - Tube Supports



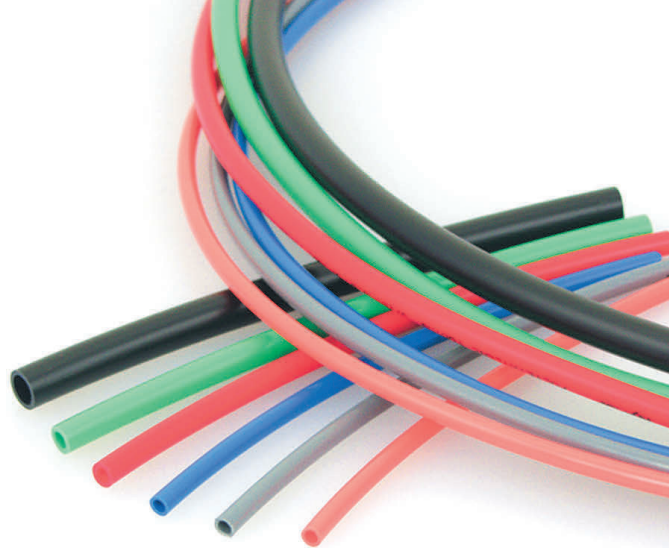
NYLON PART NUMBER	PPL PART NUMBER
N4TS3	P4TS3
N5TS3	P5TS3
N6TS4	P6TS4
N8TS6	P8TS6

To be used with soft durometer tubing.



AQRT - Quick Release Tool

Makes disconnection of tube adapters and tubing a breeze.



Polyethylene Tubing

Series E: Instrument Grade – FDA, NSF Listed

Series EB: Ultraviolet Light Resistant

Product Features:

- Made from 100% virgin resin material
- Chemically resistant and flexible
- High molecular weight resin provides increased dimensional stability, uniformity and long-term strength
- Economical system solution

Certifications

- FDA compliant for food contact
- ASTM D-1693 (10% IGEPAL) for stress crack resistance
- NSF – 51
- NSF – 61

Applications/Markets

- Potable water
- Chemical transfer
- Low-pressure pneumatics

FSC Product Families:

- | | |
|-------------------|-----------------------|
| ■ Compression | ■ Prestolok Composite |
| ■ Compress-Align® | ■ Liquifit |
| ■ Poly-Tite | ■ TrueSeal™ |
| ■ Hi-Duty | ■ Dubl-Barb® |
| ■ Fast & Tite | ■ Prestomatic |
| ■ Flow Control | ■ SAE Cartridge |
| ■ Prestolok Brass | |

A tube support should be used with this tubing for maximum holding power where end loading, vibration or pressure spikes may occur.

Notes

- FDA, NSF-51 and NSF-61 compliant black polyethylene tubing is also available. Add -NSF suffix to the EB part number (ie. EB-64-0500-NSF)
- E series natural and colored tubing meet FDA, NSF-51 requirements for food contact applications and NSF-61 for potable water
- Resistant to environmental stress cracking exceeding that of ordinary polyethylene tubing as measured by ASTM D-1693 (10% IGEPAL)
- Black (EB) tubing contains an ultraviolet inhibitor which is recommended for use in sunlit areas and in close proximity to high ultraviolet light sources
- All tubing conforms to ASTM D-1248, Type I, Class A, Category 4, Grade E5
- The recommended operating temperature range for service at rated pressures with compatible fluids is -80°F to +150°F (-62°C to +66°C)

Colors

- See Color Code Table

Polyethylene Tubing

PART NUMBER NATURAL	PART NUMBER BLACK	TUBE O.D.		TUBE I.D.		AVERAGE WALL THICKNESS		WORKING PRESSURE AT 73°F /23°C		MINIMUM BURST AT 73°F /23°C		PACKAGE QUANTITY	MINIMUM BEND RADIUS		WEIGHT	
		INCH	MM	INCH	MM	INCH	MM	PSI	BAR	PSI	BAR		INCH	MM	LBS./FT.	KG./MTR.
E-43-XXXX	EB-43-XXXX	1/4	6.4	.170	4.3	.040	1.0	120	8.3	480	33.1	0100, 0500, 1000	1.00	25.4	.011	.016
E-53-XXXX	EB-53-XXXX	5/16	7.9	.187	4.8	.062	1.6	145	10.0	580	40.0	0100, 0500	1.13	28.7	.020	.030
E-64-XXXX	EB-64-XXXX	3/8	9.5	.250	6.4	.062	1.6	125	8.6	500	34.5	0100, 0500	1.25	31.8	.025	.037
E-86-XXXX	EB-86-XXXX	1/2	12.7	.375	9.5	.062	1.6	90	6.2	360	24.8	0100, 0500	2.50	63.5	.034	.051
E-108-XXXX	EB-108-XXXX	5/8	15.9	.500	12.7	.062	1.6	70	4.8	280	19.3	0100	4.00	101.6	.044	.065
STANDARD BLACK IS NOT NSF APPROVED.																

Order Information

Example: E-64-Y-0500

E-64-Y-0500 – Polyethylene

E-64-Y-0500 – **Tube O.D.** in sixteenths of an inch (3/8")











E-64-Y-0500 – **Tube I.D.** in sixteenths of an inch (.250")

E-64-Y-0500 – **Color**, i.e. Yellow (Omit for Natural and Black)

E-64-0500 – **Natural** Polyethylene

EB-64-0500 – **Black** Polyethylene

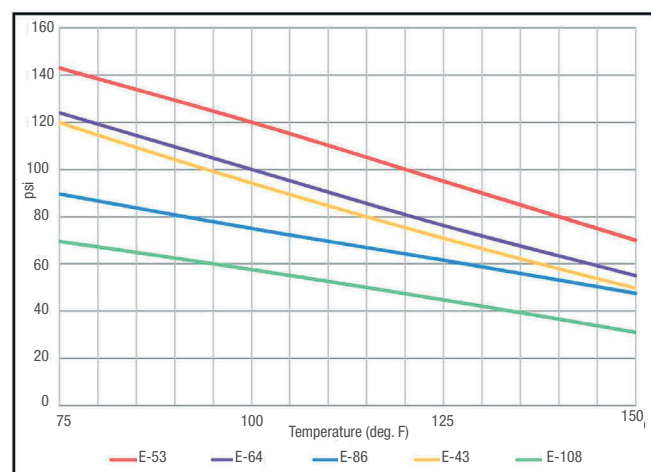
E-64-Y-0500 – **Package Quantity** in feet (500')

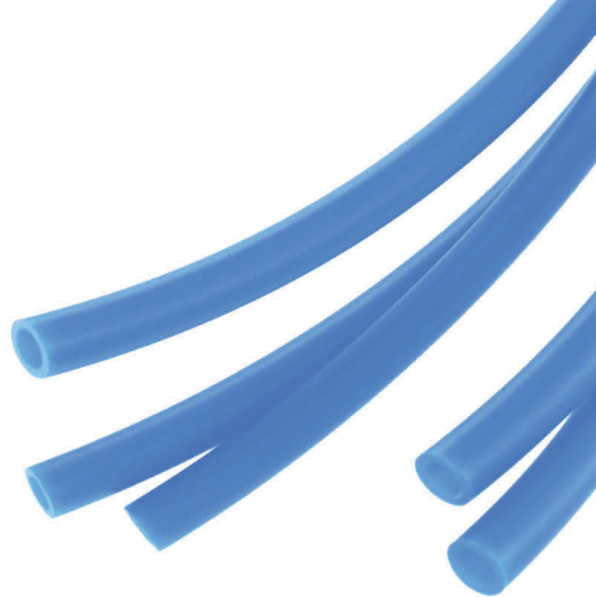
COLOR CODE		
	E	NATURAL
	EB	BLACK
	B	BLUE
	G	GREEN
	O	ORANGE
	P	PURPLE
	R	RED
	GRA	GRAY
	Y	YELLOW
	WHT	WHITE

Available in black as well as nine other colors, as recommended by the Instrument Society of America

Polyethylene Tubing (Series E)

Maximum Working Pressure (psig)





Antimicrobial Tubing

Series EA: Built-in hygiene for continuous cleanliness.

Parflex is pleased to announce the new, Series EA Polyethylene tubing. This tubing is specially formulated with Sanitized® to resist degradation from mildew, algae, fungi and biofilm that can accumulate on the inside or outside of tubing in filling and processing applications.

Parflex Series EA tubing is non-leaching and unlike similar products, is

100% treated without using expensive silver additives. The antimicrobial additive is fully compounded into the tubing to protect both the inner and outer surfaces from degradation, foul odors, microorganisms and discoloration. Retarding degradation can reduce system maintenance costs and keep production lines up and running longer.

Applications that may benefit from using Series EA include water systems, food and beverage or any applications where microbes can cause problems. Series EA tubing provides the same market leading performance of our Series E tubing and complies with FDA 21 CFR 177.1520 and NSF 51 requirements for food contact.

Product Features:

- Resist degradation from mildew, algae, fungi and biofilm
- No heavy metals
- BPA and phthalate free
- FDA, NSF 51, REACH and RoHS compliant
- Tested to ISO 22196:2007 and EN ISO 846
- Conforms to ASTM D-1248, Type I, Class A, Category 4, Grade E5
- Resistant to environmental stress cracking exceeding that of ordinary polyethylene tubing as measured per ASTM D-1693 (10% IGEPAL)
- Blue tube color allows quick identification
- Use with Parker antimicrobial filters to create a complete system
- Extensive range of compatible Parker fittings

Applications/Markets

- Food & Beverage
- Water systems
- Low pressure pneumatics

Certifications

- U.S. FDA 21 CFR 177.1520
- NSF 51
- ASTM D-1248, Type I, Class A, Category 4, Grade E5
- ASTM D-1693 (10% IGEPAL)
- REACH and RoHS compliant

Construction

- Tube: Polyethylene with Sanitized®

Operating Parameters

- Recommended Temperature Range: -80°F (-62°C) to +120°F (48°C)

Color

- Arctic blue

Notes

- Packaged 100 foot coils - sealed clear polyethylene bag Special lengths available, contact Parflex division
- A tube support should be used with this tubing for maximum holding power where end loading, vibration or pressure spikes may occur.

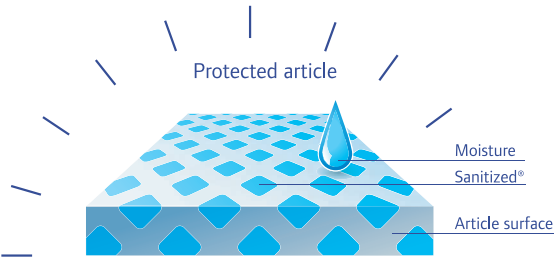
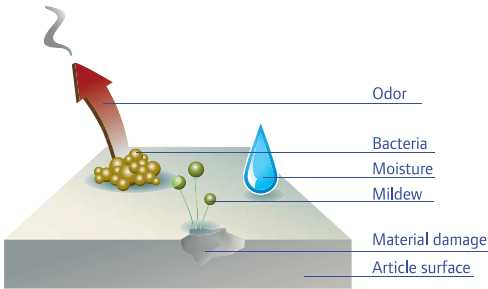




Series EA tubing is treated with Sanitized®, delivering the highest quality value polyethylene tubing.

Antimicrobial Tubing

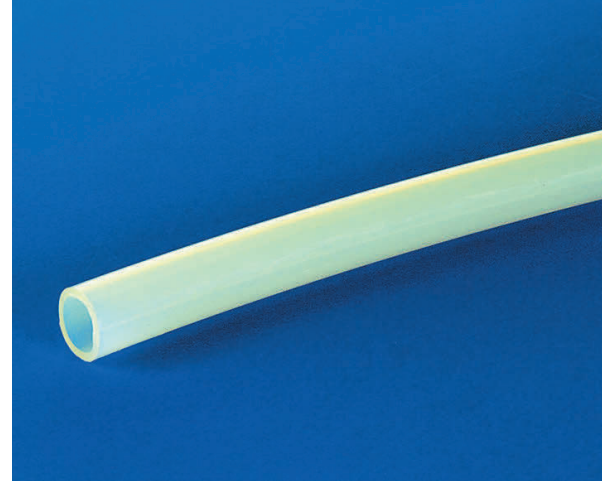
PART NUMBER	TUBE O.D.		TUBE I.D. (REF.)		WALL THICKNESS		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		WEIGHT PER 100 FEET	
	INCH	MM	INCH	MM	INCH	MM	PSI@73°F	BAR@23°C	PSI@73°F	BAR@23°C	INCH	MM	LBS.	KG.
EA-43	1/4	6.35	0.170	4.32	0.040	1.02	120	8.3	480	33	1	25	1.05	.476
EA-64	3/8	9.52	0.250	6.35	0.062	1.57	125	8.6	500	34	1-1/4	42	2.45	1.11
EA-86	1/2	12.70	0.375	9.52	0.062	1.57	90	6.2	360	25	2-1/2	64	3.36	1.52



FSC Product Families:

- Compression
 - Compress-Align®
 - Poly-Tite
 - Hi-Duty
 - Fast & Tite
 - Flow Control
 - Prestolok Brass
- Prestolok Composite
 - Liquifit
 - TrueSeal™
 - Dubl-Barb®
 - Prestomatic
 - SAE Cartridge





PVDF Tubing Polyvinylidene Fluoride

Series PVDF Flex™: 110, Series PVDF Super-Flex®: 111

Product Features:

- Low extractable levels
- High mechanical strength
- Good chemical resistance
- High abrasion resistance
- Exceptional thermal stability
- Low permeability
- Self extinguishing
- Weather resistant

Certifications

- ASTM D3222
- FDA Compliant
- RoHS
- VW-1, UL-83

Applications/Markets

- Applications with long cycle life
- Gas
- Food
- Thermal cycling
- Outdoor/extreme conditions
- Water systems
- Ground water monitoring
- Fluid and handling

FSC Product Families:

- Compression
- Compress-Align®
- TrueSeal™

Notes

- Working Temperature: -80°F to 265°F (-62°C to 130°C)
- Vacuum rating is 28 inHg at 73°F
- Working pressure calculated using a Design Factor of 4 at 73°F (23°C) (Actual performance may vary with different media and working conditions) Working pressure is reduced with rising temperature. This effect is more pronounced with 111 SuperFlex®
- Custom packaging and sizes are quoted upon request

Colors

- Natural

Order Information

Example: 110-0312062-NT-100
110-0312062-NT-100 – PVDF Flex

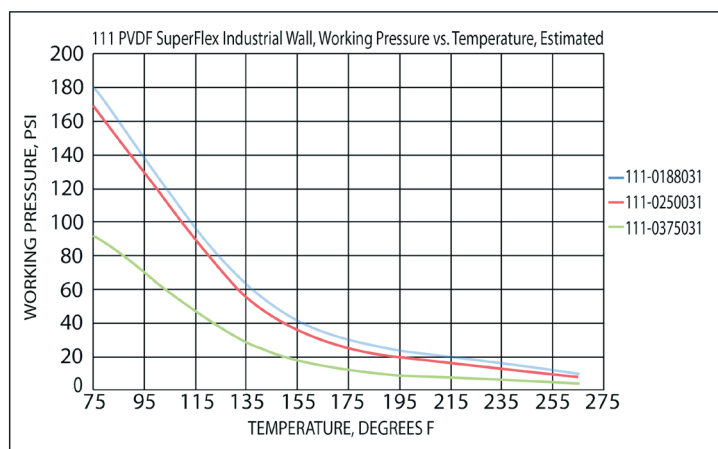
110-0312062-NT-100 – **Tube O.D.**
in inches (5/16")

110-0312062-NT-100 – **Tube Wall**
Thickness in inches (.062")

110-0312062-NT-100 – **Natural**

110-0312062-NT-100 – **Bulk Tubing**

110-0312062-NT-100 – **Package**
Quantity in feet (100')



110 PVDF Flex™ Industrial Wall Fractional Size Tubing

PART NUMBER	ORDER SIZE	NOMINAL O.D.				NOMINAL I.D.				REFERENCE WALL		WORKING PRESSURE		BURST PRESSURE		MIN. BEND RADIUS		VAC. RATING	WEIGHT	
	INCH	INCH	TOL.	MM	TOL.	INCH	TOL.	MM	TOL.	INCH	MM	PSI 73°F	BAR 23°C	PSI 73°F	BAR 23°C	INCH	MM	AT 73°F	LB. PER FT.	KG. PER M.
110-0125031	1/8	.125	± .005	3.18	± .13	.062	± .005	1.57	± .13	.031	.79	267	18.4	1068	73.6	.500	13	28	.007	.011
110-0188031	3/16	.188	± .005	4.78	± .13	.125	± .005	3.18	± .13	.031	.79	180	12.4	720	49.6	.750	19	28	.012	.018
110-0250031	1/4	.250	± .005	6.35	± .13	.188	± .005	4.78	± .13	.031	.79	170	11.7	680	46.8	1.000	25	28	.016	.025
110-0375031	3/8	.375	± .005	9.52	± .13	.312	± .005	7.92	± .13	.031	.79	92	6.3	459	31.6	2.500	64	28	.026	.039
110-0500031	1/2	.500	± .005	12.70	± .13	.438	± .005	11.13	± .13	.031	.79	83	5.7	332	22.9	4.000	102	28	.035	.053

110 PVDF Flex™ Heavy Wall Fractional Size Tubing

PART NUMBER	ORDER SIZE	NOMINAL O.D.				NOMINAL I.D.				REFERENCE WALL		WORKING PRESSURE		BURST PRESSURE		MIN. BEND RADIUS		VAC. RATING	WEIGHT	
	INCH	INCH	TOL.	MM	TOL.	INCH	TOL.	MM	TOL.	INCH	MM	PSI 73°F	BAR 23°C	PSI 73°F	BAR 23°C	INCH	MM	AT 73°F	LB. PER FT.	KG. PER M.
110-0250047	1/4	.250	± .005	6.35	± .13	.156	± .005	3.96	± .13	.047	1.19	208	14.3	832	57.4	.750	19	28	.023	.034
110-0250062	1/4	.250	± .005	6.35	± .13	.125	± .005	3.18	± .13	.062	1.57	330	22.8	1320	91.0	.500	13	28	.028	.042
110-0312062	5/16	.312	± .005	7.92	± .13	.188	± .005	4.78	± .13	.062	1.57	224	15.4	896	61.8	.875	22	28	.038	.056
110-0375062	3/8	.375	± .005	9.52	± .13	.250	± .005	6.35	± .13	.062	1.57	219	15.1	876	60.4	1.000	25	28	.047	.070
110-0500062	1/2	.500	± .005	12.70	± .13	.370	± .005	9.40	± .13	.062	1.57	169	11.7	676	46.6	2.000	51	28	.066	.098
110-0625062	5/8	.625	± .005	15.88	± .13	.500	± .005	12.70	± .13	.062	1.57	136	9.3	544	37.5	3.000	76	28	.085	.126
110-0750062	3/4	.750	± .006	19.05	± .15	.625	± .006	15.88	± .15	.062	1.57	114	7.9	456	31.4	6.000	152	28	.103	.154
110-1000062	1	1.000	± .010	25.40	± .25	.875	± .008	22.22	± .25	.062	1.57	86	5.9	344	23.7	8.000	203	28	.141	.210

111 PVDF Super-Flex® Industrial Wall Fractional Size Tubing

PART NUMBER	ORDER SIZE	NOMINAL O.D.				NOMINAL I.D.				REFERENCE WALL		WORKING PRESSURE		BURST PRESSURE		MIN. BEND RADIUS		VAC. RATING	WEIGHT	
	INCH	INCH	TOL.	MM	TOL.	INCH	TOL.	MM	TOL.	INCH	MM	PSI 73°F	BAR 23°C	PSI 73°F	BAR 23°C	INCH	MM	AT 73°F	LB. PER FT.	KG. PER M.
111-0188031	3/16	.188	± .005	4.78	± .13	.125	± .005	3.18	± .13	.031	.79	180	12.4	720	50	.750	19	28	.012	.018
111-0250031	1/4	.250	± .005	6.35	± .13	.188	± .005	4.78	± .13	.031	.79	170	11.7	680	47	.750	19	28	.016	.025
111-0375031	3/8	.375	± .005	9.53	± .13	.312	± .005	7.92	± .13	.031	.79	93	6.4	372	26	2.500	64	28	.026	.039

111 PVDF Super-Flex® Heavy Wall Fractional Size Tubing

PART NUMBER	ORDER SIZE	NOMINAL O.D.				NOMINAL I.D.				REFERENCE WALL		WORKING PRESSURE		BURST PRESSURE		MIN. BEND RADIUS		VAC. RATING	WEIGHT	
	INCH	INCH	TOL.	MM	TOL.	INCH	TOL.	MM	TOL.	INCH	MM	PSI 73°F	BAR 23°C	PSI 73°F	BAR 23°C	INCH	MM	AT 73°F	LB. PER FT.	KG. PER M.
111-0250062	1/4	.250	± .005	6.35	± .13	.125	± .005	3.18	± .13	.062	1.57	330	22.8	1320	91	.375	10	28	.028	.042
111-0375062	3/8	.375	± .005	9.52	± .13	.250	± .005	6.35	± .13	.062	1.57	224	15.4	896	62	.750	19	28	.047	.070
111-0500062	1/2	.500	± .005	12.7	± .13	.375	± .005	9.52	± .13	.062	1.57	169	11.7	676	47	1.500	38	28	.066	.098



Polypropylene Tubing

Series PP: Laboratory Grade – FDA, NSF Listed

Series PPB: Ultraviolet Light Resistant

Product Features:

- Acid and chemically resistant
- May be used in higher temperatures and working pressures than polyethylene tubing
- Excellent compatibility with high temperature water
- Low water absorption (less than .01%)
- Good compatibility with vegetable oils
- Excellent resistance to environmental stress cracking

FSC Product Families:

- Compression
- Compress-Align®
- Poly-Tite
- Hi-Duty
- Fast & Tite
- Prestolok Brass
- TrueSeal™

A tube support should be used with this tubing for maximum holding power where end loading, vibration or pressure spikes may occur.

Notes

- NSF black polypropylene tubing is available upon special request. Add -FDA suffix to PPB part number
- Suggested operating temperature range for service at rated pressures with compatible fluids is 0°F to +200°F (-18°C to +93°C)

Colors

- White
- Black

Certifications

- FDA
- NSF-51

(Both in white; NSF also in special black part numbers)

Applications/Markets

- Food contact - White only
- Chemical transfer
- Chlorinated water

Polypropylene Tubing

PART NUMBER WHITE	PART NUMBER BLACK	TUBE O.D.		TUBE I.D.		AVERAGE WALL THICKNESS		WORKING PRESSURE AT 73°F / 23°C		MINIMUM BURST AT 73°F / 23°C		REEL LENGTH	MINIMUM BEND RADIUS		WEIGHT	
		INCH	MM	INCH	MM	INCH	MM	PSI	BAR	PSI	BAR		INCH	MM	LBS./FT.	KG./MTR.
PP-21-1000	PPB-21-1000	1/8	3.2	.079	2.0	.023	0.58	350	24.1	1400	96.4	1000	.50	12.7	.003	.005
PP-32-0500	PPB-32-0500	3/16	4.8	.120	3.1	.034	0.86	350	24.1	1400	96.4	0500	.75	14.4	.006	.009
PP-43-0500	PPB-43-0500	1/4	6.4	.170	4.3	.040	1.0	300	20.7	1200	82.7	0500	1.00	25.4	.010	.019
PP-53-0500	PPB-53-0500	5/16	7.9	.188	4.8	.062	1.6	350	24.1	1400	96.4	0500	1.25	31.8	.019	.028
PP-64-0500	PPB-64-0500	3/8	9.5	.250	6.4	.062	1.6	300	20.7	1200	82.7	0500	1.25	31.8	.024	.036
PP-86-0250	PPB-86-0250	1/2	12.7	.375	9.5	.062	1.6	225	15.5	900	62.1	0250	2.50	63.5	.033	.049
PP-108-0100	PPB-108-0100	5/8	15.9	.500	12.7	.062	1.6	175	12.1	700	48.3	0100	4.00	101.6	.042	.062

Order Information

Example: PP-86-0250

PP-86-0250 – Polypropylene

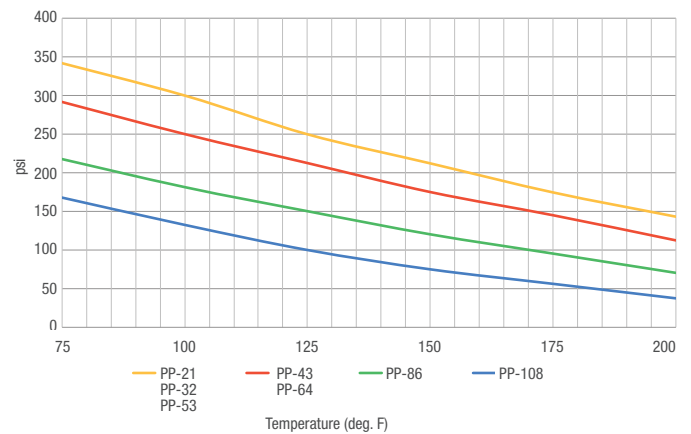
PP-86-0250 – **Tube O.D.** in sixteenths of an inch (1/2")

PP-86-0250 – **Tube I.D.** in sixteenths of an inch (.375")

PP-86-0250 – **Package Quantity** in feet (250')

Polypropylene Tubing (Series PP & PPB)

Maximum Working Pressure (psig)



Notes

[illegible]



Parker Safety Guide for Selecting and Using Hose, Tubing, Fittings and Related Accessories

Parker Publication No. 4400-B.1

Revised: May, 2002

WARNING: Failure or improper selection or improper use of hose, tubing, fittings, assemblies or related accessories ("Products") can cause death, personal injury and property damage. Possible consequences of failure or improper selection or improper use of these Products include but are not limited to:

- Fittings thrown off at high speed.
- High velocity fluid discharge.
- Explosion or burning of the conveyed fluid.
- Electrocution from high voltage electric powerlines.
- Contact with suddenly moving or falling objects that are controlled by the conveyed fluid.
- Injections by high-pressure fluid discharge.
- Dangerously whipping Hose.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion caused by static electricity buildup or other sources of electricity.
- Sparking or explosion while spraying paint or flammable liquids.
- Injuries resulting from inhalation, ingestion or exposure to fluids.

Before selecting or using any of these Products, it is important that you read and follow the instructions below. Only Hose from Parker's Stratoflex Products Division is approved for in flight aerospace applications, and no other Hose can be used for such in flight applications.

1.0 GENERAL INSTRUCTIONS

- 1.1 Scope:** This safety guide provides instructions for selecting and using (including assembling, installing, and maintaining) these Products. For convenience, all rubber and/or thermoplastic products commonly called "hose" or "tubing" are called "Hose" in this safety guide. All assemblies made with Hose are called "Hose Assemblies." All products commonly called "fittings" or "couplings" are called "Fittings." All related accessories (including crimping and swaging machines and tooling) are called "Related Accessories." This safety guide is a supplement to and is to be used with, the specific Parker publications for the specific Hose, Fittings and Related Accessories that are being considered for use.
- 1.2 Fail-Safe:** Hose, and Hose Assemblies and Fittings can and do fail without warning for many reasons. Design all systems and equipment in a fail-safe mode, so that failure of the Hose or Hose Assembly or Fitting will not endanger persons or property.
- 1.3 Distribution:** Provide a copy of this safety guide to each person that is responsible for selecting or using Hose and Fitting products. Do not select or use Parker Hose or Fittings without thoroughly reading and understanding this safety guide as well as the specific Parker publications for the products considered or selected.
- 1.4 User Responsibility:** Due to the wide variety of operating conditions and applications for Hose and Fittings, Parker and its distributors do not represent or warrant that any particular Hose or Fitting is suitable for any specific end use system. This safety guide does not analyze all technical parameters that must be considered in selecting a product. The user, through its own analysis and testing, is solely responsible for:
- Making the final selection of the Hose and Fitting.
 - Assuring that the user's requirements are met and that the application presents no health or safety hazards.
 - Providing all appropriate health and safety warnings on the equipment on which the Hose and Fittings are used.
 - Assuring compliance with all applicable government and industry standards.
- 1.5 Additional Questions:** Call the appropriate Parker technical service department if you have any questions or require any additional information. See the Parker publication for the product being considered or used, or call 1-800-CPARKER, or go to www.parker.com, for telephone numbers of the appropriate technical service department.

2.0 HOSE AND FITTING SELECTION INSTRUCTIONS

- 2.1 Electrical Conductivity:** Certain applications require that the Hose be nonconductive to prevent electrical current flow. Other applications require the Hose and the Fitting and the Hose/Fitting interface to be sufficiently conductive to drain off static electricity. Extreme care must be exercised when selecting Hose and Fittings for these or any other applications in which electrical conductivity or nonconductivity is a factor. The electrical conductivity or nonconductivity of Hose and Fittings is dependent upon many factors and may be susceptible to change. These factors include but are not limited to the various materials used to make the Hose and the Fittings, Fitting finish (some Fitting finishes are electrically conductive while others are nonconductive), manufacturing methods (including moisture control), how the Fittings contact the Hose, age and amount of deterioration or damage or other changes, moisture content of the Hose at any particular time, and other factors. The following are considerations for electrically nonconductive and conductive Hose. For other applications consult the individual catalog pages and the appropriate industry or regulatory standards for proper selection.
- 2.1.1 Electrically Nonconductive Hose:** Certain applications require that the Hose be nonconductive to prevent electrical current flow or to maintain electrical isolation. For these applications that require Hose to be electrically nonconductive, including but not limited to applications near high voltage electric lines, only special nonconductive Hose can be used. The manufacturer of the equipment in which the nonconductive Hose is to be used must be consulted to be certain that the Hose and Fittings that are selected are proper for the application. Do not use any Parker Hose or Fitting for any such application requiring nonconductive Hose, including but not limited to applications near high voltage electric lines, unless (i) the application is expressly approved in the Parker technical publication for the product, (ii) the Hose is marked "nonconductive", and (iii) the manufacturer of the equipment on which the Hose is to be used specifically approves the particular Parker Hose and Fitting for such use.
- 2.1.2 Electrically Conductive Hose:** Parker manufactures special Hose for certain applications that require electrically conductive Hose. Parker manufactures special Hose for conveying paint in airless paint spraying applications. This Hose is labeled "Electrically Conductive Airless Paint Spray Hose" on its layline and packaging. This Hose must be properly connected to the appropriate Parker Fittings and properly grounded in order to dissipate dangerous static charge buildup, which occurs in all airless paint spraying applications. Do not use any other Hose for airless paint spraying, even if electrically conductive. Use of any other Hose or failure to properly connect the Hose can cause a fire or an explosion resulting in death, personal injury, and property damage. Parker manufactures a special Hose for certain compressed natural gas ("CNG") applications where static electricity buildup may occur. Parker CNG Hose assemblies comply with AGA

Requirements 1-93, "Hoses for Natural Gas Vehicles and Fuel Dispensers." This Hose is labeled "Electrically Conductive for CNG Use" on its layline and packaging. This Hose must be properly connected to the appropriate Parker Fittings and properly grounded in order to dissipate dangerous static charge buildup, which occurs in, for example, high velocity CNG dispensing or transfer. Do not use any other Hose for CNG applications where static charge buildup may occur, even if electrically conductive. Use of other Hoses in CNG applications or failure to properly connect or ground this Hose can cause a fire or an explosion resulting in death, personal injury, and property damage. Care must also be taken to protect against CNG permeation through the Hose wall. See section 2.6, Permeation, for more information. Parker CNG Hose is intended for dispenser and vehicle use at a maximum temperature of 180°F. Parker CNG Hose should not be used in confined spaces or unventilated areas or areas exceeding 180°F. Final assemblies must be tested for leaks. CNG Hose Assemblies should be tested on a monthly basis for conductivity per AGA 1-93. Parker manufactures special Hose for aerospace in flight applications. Aerospace in flight applications employing Hose to transmit fuel, lubricating fluids and hydraulic fluids require a special Hose with a conductive inner tube. This Hose for in flight applications is available only from Parker's Stratoflex Products Division. Do not use any other Parker Hose for in flight applications, even if electrically conductive. Use of other Hoses for in flight applications or failure to properly connect or ground this Hose can cause a fire or an explosion resulting in death, personal injury, and property damage. These Hose assemblies for in flight applications must meet all applicable aerospace industry, aircraft engine, and aircraft requirements.

- 2.2 Pressure:** Hose selection must be made so that the published maximum recommended working pressure of the Hose is equal to or greater than the maximum system pressure. Surge pressures or peak transient pressures in the system must be below the published maximum working pressure for the Hose. Surge pressures and peak pressures can usually only be determined by sensitive electrical instrumentation that measures and indicates pressures at millisecond intervals. Mechanical pressure gauges indicate only average pressures and cannot be used to determine surge pressures or peak transient pressures. Published burst pressure ratings for Hose are for manufacturing test purposes only and is no indication that the Product can be used in applications at the burst pressure or otherwise above the published maximum recommended working pressure.
- 2.3 Suction:** Hoses used for suction applications must be selected to insure that the Hose will withstand the vacuum and pressure of the system. Improperly selected Hose may collapse in suction application.
- 2.4 Temperature:** Be certain that fluid and ambient temperatures, both steady and transient, do not exceed the limitations of the Hose. Temperatures below and above the recommended limit can degrade Hose to a point where a failure may occur and release fluid. Properly insulate and protect the Hose Assembly when routing near hot objects (e.g. manifolds). Do not use any Hose in any application where failure of the Hose could result in the conveyed fluids (or vapors or mist from the conveyed fluids) contacting any open flame, molten metal, or other potential fire ignition source that could cause burning or explosion of the conveyed fluids or vapors.
- 2.5 Fluid Compatibility:** Hose Assembly selection must assure compatibility of the Hose tube, cover, reinforcement, and Fittings with the fluid media used. See the fluid compatibility chart in the Parker publication for the product being considered or used. This information is offered only as a guide. Actual service life can only be determined by the end user by testing under all extreme conditions and other analysis. Hose that is chemically compatible with a particular fluid must be assembled using Fittings and adapters containing likewise compatible seals.
- 2.6 Permeation:** Permeation (that is, seepage through the Hose) will occur from inside the Hose to outside when Hose is used with gases, liquid and gas fuels, and refrigerants (including but not limited to such materials as helium, diesel fuel, gasoline, natural gas, or LPG). This permeation may result in high concentrations of vapors which are potentially flammable, explosive, or toxic, and in loss of fluid. Dangerous explosions, fires, and other hazards can result when using the wrong Hose for such applications. The system designer must take into account the fact that this permeation will take place and must not use Hose if this permeation could be hazardous. The system designer must take into account all legal, government, insurance, or any other special regulations which govern the use of fuels and refrigerants. Never use a Hose even though the fluid compatibility is acceptable without considering the potential hazardous effects that can result from permeation through the Hose Assembly. Permeation of moisture from outside the Hose to inside the Hose will also occur in Hose assemblies, regardless of internal pressure. If this moisture permeation would have detrimental effects (particularly, but not limited to refrigeration and air conditioning systems), incorporation of sufficient drying capacity in the system or other appropriate system safeguards should be selected and used.
- 2.7 Size:** Transmission of power by means of pressurized fluid varies with pressure and rate of flow. The size of the components must be adequate to keep pressure losses to a minimum and avoid damage due to heat generation or excessive fluid velocity.
- 2.8 Routing:** Attention must be given to optimum routing to minimize inherent problems (kinking or flow restriction due to Hose collapse, twisting of the Hose, proximity to hot objects or heat sources).



- 2.9 Environment:** Care must be taken to insure that the Hose and Fittings are either compatible with or protected from the environment (that is, surrounding conditions) to which they are exposed. Environmental conditions including but not limited to ultraviolet radiation, sunlight, heat, ozone, moisture, water, salt water, chemicals, and air pollutants can cause degradation and premature failure.
- 2.10 Mechanical Loads:** External forces can significantly reduce Hose life or cause failure. Mechanical loads which must be considered include excessive flexing, twist, kinking, tensile or side loads, bend radius, and vibration. Use of swivel type Fittings or adapters may be required to insure no twist is put into the Hose. Unusual applications may require special testing prior to Hose selection.
- 2.11 Physical Damage:** Care must be taken to protect Hose from wear, snagging, kinking, bending smaller than minimum bend radius, and cutting, any of which can cause premature Hose failure. Any Hose that has been kinked or bent to a radius smaller than the minimum bend radius, and any Hose that has been cut or is cracked or is otherwise damaged, should be removed and discarded.
- 2.12 Proper End Fitting:** See instructions 3.2 through 3.5. These recommendations may be substantiated by testing to industry standards such as SAE J517 for hydraulic applications, or MIL-A-5070, AS1339, or AS3517 for Hoses from Parker's Stratoflex Products Division for aerospace applications.
- 2.13 Length:** When establishing a proper Hose length, motion absorption, Hose length changes due to pressure, and Hose and machine tolerances and movement must be considered.
- 2.14 Specifications and Standards:** When selecting Hose and Fittings, government, industry, and Parker specifications and recommendations must be reviewed and followed as applicable.
- 2.15 Hose Cleanliness:** Hose components may vary in cleanliness levels. Care must be taken to insure that the Hose Assembly selected has an adequate level of cleanliness for the application.
- 2.16 Fire Resistant Fluids:** Some fire resistant fluids that are to be conveyed by Hose require use of the same type of Hose as used with petroleum base fluids. Some such fluids require a special Hose, while a few fluids will not work with any Hose at all. See instructions 2.5 and 1.5. The wrong Hose may fail after a very short service. In addition, all liquids but pure water may burn fiercely under certain conditions, and even pure water leakage may be hazardous.
- 2.17 Radiant Heat:** Hose can be heated to destruction without contact by such nearby items as hot manifolds or molten metal. The same heat source may then initiate a fire. This can occur despite the presence of cool air around the Hose.
- 2.18 Welding or Brazing:** When using a torch or arc-welder in close proximity to hydraulic lines, the hydraulic lines should be removed or shielded with appropriate fire resistant materials. Flame or weld spatter could burn through the Hose and possibly ignite escaping fluid resulting in a catastrophic failure. Heating of plated parts, including Hose Fittings and adapters, above 450°F (232°C) such as during welding, brazing, or soldering may emit deadly gases.
- 2.19 Atomic Radiation:** Atomic radiation affects all materials used in Hose assemblies. Since the long-term effects may be unknown, do not expose Hose assemblies to atomic radiation.
- 2.20 Aerospace Applications:** The only Hose and Fittings that may be used for in flight aerospace applications are those available from Parker's Stratoflex Products Division. Do not use any other Hose or Fittings for in flight applications. Do not use any Hose or Fittings from Parker's Stratoflex Products Division with any other Hose or Fittings, unless expressly approved in writing by the engineering manager or chief engineer of Stratoflex Products Division and verified by the user's own testing and inspection to aerospace industry standards.
- 2.21 Unlocking Couplings:** Ball locking couplings or other couplings with disconnect sleeves can unintentionally disconnect if they are dragged over obstructions or if the sleeve is bumped or moved enough to cause disconnect. Threaded couplings should be considered where there is a potential for accidental uncoupling.
- 3.0 HOSE AND FITTING ASSEMBLY AND INSTALLATION INSTRUCTIONS**
- 3.1 Component Inspection:** Prior to assembly, a careful examination of the Hose and Fittings must be performed. All components must be checked for correct style, size, catalog number, and length. The Hose must be examined for cleanliness, obstructions, blisters, cover looseness, kinks, cracks, cuts or any other visible defects. Inspect the Fitting and sealing surfaces for burrs, nicks, corrosion or other imperfections. Do NOT use any component that displays any signs of nonconformance.
- 3.2 Hose and Fitting Assembly:** Do not assemble a Parker Fitting on a Parker Hose that is not specifically listed by Parker for that Fitting, unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division. Do not assemble a Parker Fitting on another manufacturer's Hose or a Parker Hose on another manufacturer's Fitting unless (i) the engineering manager or chief engineer of the appropriate Parker division approves the Assembly in writing or that combination is expressly approved in the appropriate Parker literature for the specific Parker product, and (ii) the user verifies the Assembly and the application through analysis and testing. For Parker Hose that does not specify a Parker Fitting, the user is solely responsible for the selection of the proper Fitting and Hose Assembly procedures. See instruction 1.4. The Parker published instructions must be followed for assembling the Fittings on the Hose. These instructions are provided in the Parker Fitting catalog for the specific Parker Fitting being used, or by calling 1-800-CPARKER, or at www.parker.com.
- 3.3 Related Accessories:** Do not crimp or swage any Parker Hose or Fitting with anything but the listed swage or crimp machine and dies in accordance with Parker published instructions. Do not crimp or swage another manufacturer's Fitting with a Parker crimp or swage die unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division.
- 3.4 Parts:** Do not use any Parker Fitting part (including but not limited to socket, shell, nipple, or insert) except with the correct Parker mating parts, in accordance with Parker published instructions, unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division.
- 3.5 Reusable/Permanent:** Do not reuse any field attachable (reusable) Hose Fitting that has blown or pulled off a Hose. Do not reuse a Parker permanent Hose Fitting (crimped or swaged) or any part thereof. Complete Hose Assemblies may only be reused after proper inspection under section 4.0. Do not assemble Fittings to any previously used hydraulic Hose that was in service, for use in a fluid power application.
- 3.6 Pre-Installation Inspection:** Prior to installation, a careful examination of the Hose Assembly must be performed. Inspect the Hose Assembly for any damage or defects. Do NOT use any Hose Assembly that displays any signs of nonconformance.
- 3.7 Minimum Bend Radius:** Installation of a Hose at less than the minimum listed bend radius may significantly reduce the Hose life. Particular attention must be given to preclude sharp bending at the Hose to Fitting juncture. Any bending during installation at less than the minimum bend radius must be avoided. If any Hose is kinked during installation, the Hose must be discarded.
- 3.8 Twist Angle and Orientation:** Hose Assembly installation must be such that relative motion of machine components does not produce twisting.
- 3.9 Securement:** In many applications, it may be necessary to restrain, protect, or guide the Hose to protect it from damage by unnecessary flexing, pressure surges, and contact with other mechanical components. Care must be taken to insure such restraints do not introduce additional stress or wear points.
- 3.10 Proper Connection of Ports:** Proper physical installation of the Hose Assembly requires a correctly installed port connection insuring that no twist or torque is transferred to the Hose when the Fittings are being tightened or otherwise during use.
- 3.11 External Damage:** Proper installation is not complete without insuring that tensile loads, side loads, kinking, flattening, potential abrasion, thread damage, or damage to sealing surfaces are corrected or eliminated. See instruction 2.10.
- 3.12 System Checkout:** All air entrapment must be eliminated and the system pressurized to the maximum system pressure (at or below the Hose maximum working pressure) and checked for proper function and freedom from leaks. Personnel must stay out of potential hazardous areas while testing and using.
- 3.13 Routing:** The Hose Assembly should be routed in such a manner so if a failure does occur, the escaping media will not cause personal injury or property damage. In addition, if fluid media comes in contact with hot surfaces, open flame, or sparks, a fire or explosion may occur. See section 2.4.
- 4.0 HOSE AND FITTING MAINTENANCE AND REPLACEMENT INSTRUCTIONS**
- 4.1** Even with proper selection and installation, Hose life may be significantly reduced without a continuing maintenance program. The severity of the application, risk potential from a possible Hose failure, and experience with any Hose failures in the application or in similar applications should determine the frequency of the inspection and the replacement for the Products so that Products are replaced before any failure occurs. A maintenance program must be established and followed by the user and, at minimum, must include instructions 4.2 through 4.7.
- 4.2 Visual Inspection Hose/Fitting:** Any of the following conditions require immediate shut down and replacement of the Hose Assembly:
- Fitting slippage on Hose,
 - Damaged, cracked, cut or abraded cover (any reinforcement exposed);
 - Hard, stiff, heat cracked, or charred Hose;
 - Cracked, damaged, or badly corroded Fittings;
 - Leaks at Fitting or in Hose;
 - Kinked, crushed, flattened or twisted Hose; and
 - Blistered, soft, degraded, or loose cover.
- 4.3 Visual Inspection All Other:** The following items must be tightened, repaired, corrected or replaced as required:
- Leaking port conditions;
 - Excess dirt buildup;
 - Worn clamps, guards or shields; and
 - System fluid level, fluid type, and any air entrapment.
- 4.4 Functional Test:** Operate the system at maximum operating pressure and check for possible malfunctions and leaks. Personnel must avoid potential hazardous areas while testing and using the system. See section 2.2.
- 4.5 Replacement Intervals:** Hose assemblies and elastomeric seals used on Hose Fittings and adapters will eventually age, harden, wear and deteriorate under thermal cycling and compression set. Hose Assemblies and elastomeric seals should be inspected and replaced at specific replacement intervals, based on previous service life, government or industry recommendations, or when failures could result in unacceptable downtime, damage, or injury risk. See section 1.2.
- 4.6 Hose Inspection and Failure:** Hydraulic power is accomplished by utilizing high-pressure fluids to transfer energy and do work. Hoses, Fittings, and Hose Assemblies all contribute to this by transmitting fluids at high pressures. Fluids under pressure can be dangerous and potentially lethal and, therefore, extreme caution must be exercised when working with fluids under pressure and handling the Hoses transporting the fluids. From time to time, Hose Assemblies will fail if they are not replaced at proper time intervals. Usually these failures are the result of some form of misapplication, abuse, wear, or failure to perform proper maintenance. When Hoses fail, generally the high-pressure fluids inside escape in a stream which may or may not be visible to the user. Under no circumstances should the user attempt to locate the leak by "feeling" with their hands or any other part of their body. High-pressure fluids can and will penetrate the skin and cause severe tissue damage and possibly loss of limb. Even seemingly minor hydraulic fluid injection injuries must be treated immediately by a physician with knowledge of the tissue damaging properties of hydraulic fluid. If a Hose failure occurs, immediately shut down the equipment and leave the area until pressure has been completely released from the Hose Assembly. Simply shutting down the hydraulic pump may or may not eliminate the pressure in the Hose Assembly. Many times check valves, etc., are employed in a system and can cause pressure to remain in a Hose Assembly even when pumps or equipment are not operating. Tiny holes in the Hose, commonly known as pinholes, can eject small, dangerously powerful but hard to see streams of hydraulic fluid. It may take several minutes or even hours for the pressure to be relieved so that the Hose Assembly may be examined safely. Once the pressure has been reduced to zero, the Hose Assembly may be taken off the equipment and examined. It must always be replaced if a failure has occurred. Never attempt to patch or repair a Hose Assembly that has failed. Consult the nearest Parker distributor or the appropriate Parker division for Hose Assembly replacement information. Never touch or examine a failed Hose Assembly unless it is obvious that the Hose no longer contains fluid under pressure. The high-pressure fluid is extremely dangerous and can cause serious and potentially fatal injury.
- 4.7 Elastomeric seals:** Elastomeric seals will eventually age, harden, wear and deteriorate under thermal cycling and compression set. Elastomeric seals should be inspected and replaced.
- 4.8 Refrigerant gases:** Special care should be taken when working with refrigeration systems. Sudden escape of refrigerant gases can cause blindness if the escaping gases contact the eye and can cause freezing or other severe injuries if it contacts any other portion of the body.
- 4.9 Compressed natural gas (CNG):** Parker CNG Hose Assemblies should be tested after installation and before use, and at least on a monthly basis per AGA 1-93 Section 4.2 "Visual Inspection Hose/Fitting". The recommended procedure is to pressurize the Hose and check for leaks and to visually inspect the Hose for damage. Caution: Matches, candles, open flame or other sources of ignition shall not be used for Hose inspection. Leak check solutions should be rinsed off after use.

OFFER OF SALE

The items described in this document and other documents and descriptions provided by Parker Hannifin Corporation, its subsidiaries and its authorized distributors ("Seller") are hereby offered for sale at prices to be established by Seller. This offer and its acceptance by any customer ("Buyer") shall be governed by all of the following Terms and Conditions. Buyer's order for any item described in its document, when communicated to Seller verbally, or in writing, shall constitute acceptance of this offer. All goods or work described will be referred to as "Products."

1. **Terms and Conditions.** Seller's willingness to offer Products, or accept an order for Products, to or from Buyer is expressly conditioned on Buyer's assent to these Terms and Conditions and to the terms and conditions found on-line at www.parker.com/saleterms/. Seller objects to any contrary or additional term or condition of Buyer's order or any other document issued by Buyer.

2. **Price Adjustments; Payments.** Prices stated on the reverse side or preceding pages of this document are valid for 30 days. After 30 days, Seller may change prices to reflect any increase in its costs resulting from state, federal or local legislation, price increases from its suppliers, or any change in the rate, charge, or classification of any carrier. The prices stated on the reverse or preceding pages of this document do not include any sales, use, or other taxes unless so stated specifically. Unless otherwise specified by Seller, all prices are F.O.B. Seller's facility, and payment is due 30 days from the date of invoice. After 30 days, Buyer shall pay interest on any unpaid invoices at the rate of 1.5% per month or the maximum allowable rate under applicable law.

3. **Delivery Dates; Title and Risk; Shipment.** All delivery dates are approximate and Seller shall not be responsible for any damages resulting from any delay. Regardless of the manner of shipment, title to any products and risk of loss or damage shall pass to Buyer upon tender to the carrier at Seller's facility (i.e., when it's on the truck, it's yours). Unless otherwise stated, Seller may exercise its judgment in choosing the carrier and means of delivery. No deferment of shipment at Buyers' request beyond the respective dates indicated will be made except on terms that will indemnify, defend and hold Seller harmless against all loss and additional expense. Buyer shall be responsible for any additional shipping charges incurred by Seller due to Buyer's changes in shipping, product specifications or in accordance with Section 13, herein.

4. **Warranty.** Seller warrants that the Products sold hereunder shall be free from defects in material or workmanship for a period of twelve months from the date of delivery to Buyer or 2,000 hours of normal use, whichever occurs first. This warranty is made only to Buyer and does not extend to anyone to whom Products are sold after purchased from Seller. The prices charged for Seller's products are based upon the exclusive limited warranty stated above, and upon the following disclaimer: **DISCLAIMER OF WARRANTY: THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO PRODUCTS PROVIDED HEREUNDER. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

5. **Claims; Commencement of Actions.** Buyer shall promptly inspect all Products upon delivery. No claims for shortages will be allowed unless reported to the Seller within 10 days of

delivery. No other claims against Seller will be allowed unless asserted in writing within 60 days after delivery or, in the case of an alleged breach of warranty, within 30 days after the date within the warranty period on which the defect is or should have been discovered by Buyer. Any action based upon breach of this agreement or upon any other claim arising out of this sale (other than an action by Seller for any amount due to Seller from Buyer) must be commenced within thirteen months from the date of tender of delivery by Seller or, for a cause of action based upon an alleged breach of warranty, within thirteen months from the date within the warranty period on which the defect is or should have been discovered by Buyer.

6. **LIMITATION OF LIABILITY.** UPON NOTIFICATION, SELLER WILL, AT ITS OPTION, REPAIR OR REPLACE A DEFECTIVE PRODUCT, OR REFUND THE PURCHASE PRICE. IN NO EVENT SHALL SELLER BE LIABLE TO BUYER FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR AS THE RESULT OF, THE SALE, DELIVERY, NON-DELIVERY, SERVICING, USE OR LOSS OF USE OF THE PRODUCTS OR ANY PART THEREOF, OR FOR ANY CHARGES OR EXPENSES OF ANY NATURE INCURRED WITHOUT SELLER'S WRITTEN CONSENT, EVEN IF SELLER HAS BEEN NEGLIGENT, WHETHER IN CONTRACT, TORT OR OTHER LEGAL THEORY. IN NO EVENT SHALL SELLER'S LIABILITY UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE OF THE PRODUCTS.

7. **Contingencies.** Seller shall not be liable for any default or delay in performance if caused by circumstances beyond the reasonable control of Seller.

8. **User Responsibility.** The user, through its own analysis and testing, is solely responsible for making the final selection of the system and Product and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application and follow applicable industry standards and Product information. If Seller provides Product or system options, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products or systems.

9. **Loss to Buyer's Property.** Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

10. **Special Tooling.** A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture Products. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the Products, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

11. **Buyer's Obligation; Rights of Seller.** To secure payment of all sums due or otherwise, Seller shall retain a security interest in the goods delivered and this agreement shall be deemed a Security Agreement under the Uniform Commercial Code. Buyer authorizes Seller as its attorney to execute and file on Buyer's behalf all documents Seller deems necessary to perfect its security interest. Seller shall have a security interest in, and lien upon, any property of Buyer in Seller's possession as security for the payment of any amounts owed to Seller by Buyer.

12. **Improper use and Indemnity.** Buyer shall indemnify, defend, and hold Seller harmless from any claim, liability, damages, lawsuits, and costs (including attorney fees), whether for personal injury, property damage, patent, trademark or copyright infringement or any other claim, brought by or incurred by Buyer, Buyer's employees, or any other person, arising out of: (a) improper selection, improper application or other misuse of Products purchased by Buyer from Seller; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of patterns, plans, drawings, or specifications furnished by Buyer to manufacture Product; or (d) Buyer's failure to comply with these terms and conditions. Seller shall not indemnify Buyer under any circumstance except as otherwise provided.

13. **Cancellations and Changes.** Orders shall not be subject to cancellation or change by Buyer for any reason, except with Seller's written consent and upon terms that will indemnify, defend and hold Seller harmless against all direct, incidental and consequential loss or damage. Seller may change product features, specifications, designs and availability with notice to Buyer.

14. **Limitation on Assignment.** Buyer may not assign its rights or obligations under this agreement without the prior written consent of Seller.

15. **Entire Agreement.** This agreement contains the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of the agreement. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter are herein merged.

16. **Waiver and Severability.** Failure to enforce any provision of this agreement will not waive that provision nor will any such failure prejudice Seller's right to enforce that provision in the future. Invalidity of any provision of this agreement by legislation or other rule of law shall not invalidate any other provision herein. The remaining provisions of this agreement will remain in full force and effect.

17. **Termination.** This agreement may be terminated by Seller for any reason and at any time by giving Buyer thirty (30) days written notice of termination. In addition, Seller may by written notice immediately terminate this agreement for the following: (a) Buyer commits a breach of any provision of this agreement (b) the appointment of a trustee, receiver or custodian for all or any part of Buyer's property (c) the filing of a petition for relief in bankruptcy of the other Party on its own behalf, or by a third party (d) an assignment for the benefit of creditors, or (e) the dis-

solution or liquidation of the Buyer.

18. **Governing Law.** This agreement and the sale and delivery of all Products hereunder shall be deemed to have taken place in and shall be governed and construed in accordance with the laws of the State of Ohio, as applicable to contracts executed and wholly performed therein and without regard to conflicts of laws principles. Buyer irrevocably agrees and consents to the exclusive jurisdiction and venue of the courts of Cuyahoga County, Ohio with respect to any dispute, controversy or claim arising out of or relating to this agreement. Disputes between the parties shall not be settled by arbitration unless, after a dispute has arisen, both parties expressly agree in writing to arbitrate the dispute.

19. **Indemnity for Infringement of Intellectual Property Rights.** Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Section. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, U.S. trademarks, copyrights, trade dress and trade secrets ("Intellectual Property Rights"). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that a Product sold pursuant to this Agreement infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If a Product is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using the Product, replace or modify the Product so as to make it noninfringing, or offer to accept return of the Product and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to Products delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any Product sold hereunder. The foregoing provisions of this Section shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

20. **Taxes.** Unless otherwise indicated, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of Products.

21. **Equal Opportunity Clause.** For the performance of government contracts and where dollar value of the Products exceed \$10,000, the equal employment opportunity clauses in Executive Order 11246, VEVRAA, and 41 C.F.R. §§ 60-1.4(a), 60-741.5(a), and 60-250.4, are hereby incorporated.

Parker's Motion & Control Product Groups

At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further info call 1 800 C-Parker (1 800 272 7537).



Aerospace

Key Markets

Aftermarket services
Commercial transports
Engines
General & business aviation
Helicopters
Launch vehicles
Military aircraft
Missiles
Power generation
Regional transports
Unmanned aerial vehicles

Key Products

Control systems & actuation products
Engine systems & components
Fluid conveyance systems & components
Fluid metering, delivery & atomization devices
Fuel systems & components
Fuel tank inerting systems
Hydraulic systems & components
Thermal management
Wheels & brakes



Automation

Key Markets

Alternative energy
Conveyor & material handling
Factory automation
Food & beverage
Life sciences & medical
Machine tools
Packaging machinery
Paper machinery
Plastics machinery
Primary metals
Safety & security
Semiconductor & electronics
Transportation & automotive

Key Products

AC/DC drives & systems
Air preparation
Electric actuators, gantry robots & slides
Human machine interfaces
Inverters
Manifolds
Miniature fluidics
Pneumatic actuators & grippers
Pneumatic valves & controls
Rotary actuators
Stepper motors, servo motors, drives & controls
Structural extrusions
Vacuum generators, cups & sensors



Climate & Industrial Controls

Key Markets

Agriculture
Air conditioning
Construction Machinery
Food & beverage
Industrial machinery
Life sciences
Oil & gas
Precision cooling
Process
Refrigeration
Transportation

Key Products

Accumulators
Advanced actuators
CO₂ controls
Electronic controllers
Filter driers
Hand shut-off valves
Heat exchangers
Hose & fittings
Pressure regulating valves
Refrigerant distributors
Safety relief valves
Smart pumps
Solenoid valves
Thermostatic expansion valves



Filtration

Key Markets

Aerospace
Food & beverage
Industrial plant & equipment
Life sciences
Marine
Mobile equipment
Oil & gas
Power generation & renewable energy
Process
Transportation
Water Purification

Key Products

Analytical gas generators
Compressed air filters & dryers
Engine air, coolant, fuel & oil filtration systems
Fluid condition monitoring systems
Hydraulic & lubrication filters
Hydrogen, nitrogen & zero air generators
Instrumentation filters
Membrane & fiber filters
Microfiltration
Sterile air filtration
Water desalination & purification filters & systems



Fluid Connectors

Key Markets

Aerial lift
Agriculture
Bulk chemical handling
Construction machinery
Food & beverage
Fuel & gas delivery
Industrial machinery
Life sciences
Marine
Mining
Mobile
Oil & gas
Renewable energy
Transportation

Key Products

Check valves
Connectors for low pressure fluid conveyance
Deep sea umbilicals
Diagnostic equipment
Hose couplings
Industrial hose
Mooring systems & power cables
PTFE hose & tubing
Quick couplings
Rubber & thermoplastic hose
Tube fittings & adapters
Tubing & plastic fittings



Hydraulics

Key Markets

Aerial lift
Agriculture
Alternative energy
Construction machinery
Forestry
Industrial machinery
Machine tools
Marine
Material handling
Mining
Oil & gas
Power generation
Refuse vehicles
Renewable energy
Truck hydraulics
Turf equipment

Key Products

Accumulators
Cartridge valves
Electrohydraulic actuators
Human machine interfaces
Hybrid drives
Hydraulic cylinders
Hydraulic motors & pumps
Hydraulic systems
Hydraulic valves & controls
Hydrostatic steering
Integrated hydraulic circuits
Power take-offs
Power units
Rotary actuators
Sensors



Instrumentation

Key Markets

Alternative fuels
Biopharmaceuticals
Chemical & refining
Food & beverage
Marine & shipbuilding
Medical & dental
Microelectronics
Nuclear Power
Offshore oil exploration
Oil & gas
Pharmaceuticals
Power generation
Pulp & paper
Steel
Water/wastewater

Key Products

Analytical Instruments
Analytical sample conditioning products & systems
Chemical injection fittings & valves
Fluoropolymer chemical delivery fittings, valves & pumps
High purity gas delivery fittings, valves, regulators & digital flow controllers
Industrial mass flow meters/controllers
Permanent no-weld tube fittings
Precision industrial regulators & flow controllers
Process control double block & bleeds
Process control fittings, valves, regulators & manifold valves



Seal

Key Markets

Aerospace
Chemical processing
Consumer
Fluid power
General industrial
Information technology
Life sciences
Microelectronics
Military
Oil & gas
Power generation
Renewable energy
Telecommunications
Transportation

Key Products

Dynamic seals
Elastomeric o-rings
Electro-medical instrument design & assembly
EMI shielding
Extruded & precision-cut, fabricated elastomeric seals
High temperature metal seals
Homogeneous & inserted elastomeric shapes
Medical device fabrication & assembly
Metal & plastic retained composite seals
Shielded optical windows
Silicone tubing & extrusions
Thermal management
Vibration dampening



ENGINEERING YOUR SUCCESS.

Parker Fluid Connectors Group

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Your complete source for quality tube fittings, hose & hose fittings, brass & composite fittings, quick-disconnect couplings, valves and assembly tools, locally available from a worldwide network of authorized distributors.

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.

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fax 281 582 5271

Fluid System Connectors Division

Otsego, MI
phone 269 692 6555
fax 269 694 4614

Hose Products Division

Wickliffe, OH
phone 440 943 5700
fax 440 943 3129

Industrial Hose Division

Wickliffe, OH
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fax 440 833 2230

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fax 614 279 7685

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fax 770 929 0230

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fax 502 937 4180

Portland, OR

phone 503 283 1020
fax 503 283 2201

Toledo, OH

phone 419 878 7000
fax 419 878 7001
fax 419 878 7420
(FCG Kit Operations)

Canada

Grimsby, ONT

phone 905 945 2274
fax 905 945 3945
(Contact Grimsby for other Service Center locations.)

Mexico

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