50PP Series Couplings

50PP Series couplings offer 1/4" flow and are produced from medical grade gamma sterilizable polypropylene. The 50PP Series polypropylene couplings offer greater chemical resistance and they are available in both valved and non-valved configurations. All 50PP couplings interconnect with all other 50 Series couplings as well as other similar industry thumb-latch type couplings.

Performance Ratings:

- Operating Pressure: Vacuum to 100 psi; (7.2bar)
- Temperature: 32°F to 160°F (0°C to 71°C)

50PP Series Air Flow

• Flow Capacity: 1/4" Size

Materials & Construction:

- Bodies & Terminations: Medical Grade Polypropylene
- Internal Valves: Medical Grade Polypropylene
- Internal Valve Springs: 316 Stainless Steel

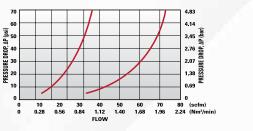
Tubing Size 1/4" - 3/8"

1/4" Flow Polypropylene

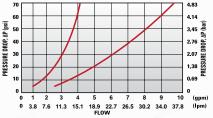
- External Springs & Pins: Stainless Steel
- O-rings: Peroxide-cured EPDM (others available)
- Thumb-latch: Medical Grade Polypropylene

50PP Series Temperature

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50PP Series Water Flow



125 8.42 5.89 100 ar) PRESSURE DROP, AP (psi) SURE DROP, AP 75 5.17 30 .45 RFC 25 160 (°F) 71.1 (°C) 120 48.9 20 -6.7 60 15.6 80 26.7 100 37.8 140 60.0 40 4.4 -17.8 TEMPERATURE

FLOW RATES

The data below shows liquid flow rates for LinkTech couplings. Each coupling combination was tested at $70^{\circ}F$ ($21^{\circ}C$).

Cv Values for 50PP Series Couplings

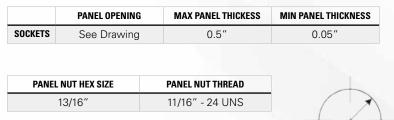
Specific coupling combination flow rates can be determined by using this formula:

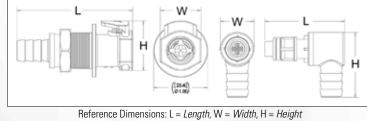
$Q = C_v \sqrt{\frac{\Delta P}{S}}$ Q = Flow rate in gallons per minute

 C_v = Average flow rates (see chart) ΔP = Pressure drop across coupling (psi) S = Specific gravity of liquid.

SOCKETS	50PPX- PE2-04	50PPV- PE2-04	50PPX- PE2-06	50PPV- PE2-06	50PPX- PE4-04	50PPV- PE4-04	50PPX- PE4-06	50PPV- PE4-06	50PPV- PE1-04	50PPV- PE1-06
50PPV-SE2-04	0.51	0.51	0.51	0.51	0.5	0.45	0.5	0.5	0.51	0.51
50PPV-SE2-06	0.61	0.51	1.13	0.72	0.5	0.45	0.81	0.69	0.51	0.72
50PPV-SE3-04	0.51	0.51	0.51	0.51	0.5	0.45	0.5	0.5	0.51	0.51
50PPV-SE3-06	0.61	0.51	1.13	0.72	0.5	0.45	0.81	0.69	0.51	0.72

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50PP Series Socket

Tubing Size 1/4"- 3/8" 1/4" Flow Polypropylene



IN-LINE HOSE BARB SOCKET					
Valved	Tube Size	Metric Tube	Length		
50PPV-SE2-04	1/4'' ID	6.4mm ID	2.01″	0.76″	0.94″
50PPV-SE2-06	3/8" ID	9.5mm ID	2.01″	0.76″	0.94″



PANEL MOUNT HOSE BARB SOCKET (GASKET SEAL INCLUDED)					
Valved	Tube Size		Length		
50PPV-SE3-04	1/4'' ID	6.4mm ID	2.14″	1.00″	0.94″
50PPV-SE3-06	3/8" ID	9.5mm ID	2.14″	1.00″	0.94″



PANEL MOUNT SOCKET SEALING GASKET				
Part No.	Material	Diameter	Thickness	
C11376	EPDM	1.00" OD	0.08″	

50PP Series Plug

Tubing Size 1/4" - 3/8" 1/4" Flow Polypropylene



MALE THREAD PLUG

Non-Valved		Thread Size	Length		
50PPX-PE1-04	50PPV-PE1-04	1/4" NPT	1.60"/1.75"	0.63″	0.63″
50PPX-PE1-06	50PPV-PE1-06	3/8" NPT	1.60"/1.75"	0.75″	0.75″



IN-LINE HOSE BARB PLUG						
		Tube Size	Metric Tube	L(nv/v)		
50PPX-PE2-04	50PPV-PE2-04	1/4" ID	6.4mm ID	1.89" / 2.04"	0.70″	0.70″
50PPX-PE2-06	50PPV-PE2-06	3/8" ID	9.5mm ID	1.76" / 1.91"	0.70″	0.70″



ELBOW HOSE BARB PLUG						
		Tube Size		L(nv/v)		Height
50PPX-PE4-04	50PPV-PE4-04	1/4" ID	6.4mm ID	1.29" / 1.44"	0.63″	1.23″
50PPX-PE4-06	50PPV-PE4-06	3/8" ID	9.5mm ID	1.33" / 1.48"	0.63″	1.23″

Accessories

EXTERNAL PLUG O-RINGS

Coupling Series	Buna-N Part No.	EPDM Part No.	Viton Part No.
20 SERIES	C115	1-00823711	1-0089746
40 SERIES	C116	1-01123711	1-0119746
50 SERIES	C116	1-01123711	1-0119746

PANEL MOUNT SEALING GASKET

Coupling Series	Buna-N Part No.	EPDM Part No.
20 SERIES	C11040	C11105
40 SERIES	C11027	C11073
50 SERIES	C11027	C11073
50PP SERIES	N/A	C11376
60 SERIES	N/A	C11416

PLASTIC PANEL MOUNT NUTS

Coupling Series	Material	Part No.
40/50 SERIES	Acetal	C11252
60PP SERIES	Polypropylene	C11372
60PS SERIES	Polysulfone	C11398

PANEL MOUNT NUTS

Coupling Series	Plated Brass Part No.	316 Stainless Steel Part No.
20 SERIES	C377	C11085
40 SERIES	C131	C11044
50 SERIES	C131	C11044

PLATED BRASS PTF NUTS (FERRULELESS POLYTUBE FITTING)

Tube Size	Metric Tube Size	Part No.
5/32" OD	4.0mm OD	C11031
1/4" OD	6.4mm OD	C176
3/8" OD	9.5mm OD	C187



PUSH-IN COLLET CLIP

Coupling Series	Description	Part No.				
40AC & 50AC SERIES	Red Collet Clip	PIL250R				

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PUSH-IN COLLET COVERS

PUSIT-IN CULLET COVERS								
Coupling Series	Description	Part No.						
40AC & 50AC SERIES	Red Collet Cover	PIC250R						
40AC & 50AC SERIES	Black Collet Cover	PIC250BL						
40AC & 50AC SERIES	Yellow Collet Cover	PIC250Y						
40AC & 50AC SERIES	Blue Collet Cover	PIC250B						
40AC & 50AC SERIES	Grey Collet Cover	PIC250GRY						
40AC & 50AC SERIES	Green Collet Cover	PIC250GN						

Custom Solutions

LinkTech is committed to our customers and helps them by offering custom designed and manufactured couplings. LinkTech has developed hundreds of custom connection solutions for challenging applications. Our engineering staff is ready to work with your designers to solve application problems beyond the scope of our standard product offering. Whether it is a simple o-ring, color change, or a completely new and unique design, LinkTech offers its customers the best possible solution at the lowest possible cost.



LinkTech Custom Designs Include:

- · Non-standard coupling materials
- Multi-port couplings
- Custom end terminations
- Application specific O-rings
- Molded color couplings
- Unique packaging

Technical

PART NUMBER GUIDE

Flow Size / Latch Type	Material	Valve	Config.	O-ring (std Buna-N)	Туре	Connection Size	Part Options
10 = 1/16" Flow (Twist Lock) $20 = 1/8" Flow$ (Metal Latch) $40 = 1/4" Flow$ (Metal Latch) $42 = 3/32" Flow$ (Dual Tube Metal Latch) $50 = 1/4" Flow$ (Plastic Latch) $50B = 1/4" Flow$ (Breakaway Latch) $60 = 3/8" Flow$ (Plastic Latch) $65 = 1/2" Free Flow$ (Plastic Latch)	AC = Acetal AL = Aluminum CB = Chrome Plated Brass NB = Nickel Plated Brass RB = Raw Brass GP = Glass Filled Polypro. PP = Polypropylene AB = ABS PS = Polysulfone RD = Radel	V = Valved (default is non-valved) X = No Valve (in Valved Body)	S = Socket P = Plug	B = Buna-N (NSF/Food Grade) V = Viton E = Peroxide Cured EPDM F = Food Grade EPDM S = Silicone K = Kalrez	 1 = In Line MNPT 2 = In Line Hose Barb 3 = Panel Mount H.B. 4 = Elbow H.B. 5 = Single Barb H.B. 6 = End Stop 7 = Elbow, Single H.B. 8 = Panel Mount PTF 9 = In Line PTF 10 = Elbow PTF 12 = Panel Mount Male Thread 13 = In Line Female Thread 16 = Elbow MNPT 17 = Push In Term In-line 18 = Pusel Mount Female Thread 20 = Anti Rotate PM Plug H.B. 21 = Anti Rotate PM Plug PTF 22 = Panel Mount H.B. Elbow 	01 = 1/16" 02 = 1/8" 03 = 3/16" 04 = 1/4" 05 = 5/16" 06 = 3/8" 08 = 1/2" 10 = 5/8" 12 = 3/4" 16 = 1"	NL = No Latch NN = No Nuts NLN = No Latch/Nuts XL = No O-ring Lube XX = No End Termination

STERILIZATION & DISINFECTANT COMPATIBILITY

Material	Formalin	Isopropyl Alcohol	Ethvl Alcohol	Ethylene Oxide	Autoclave	E-Beam (50 Kilograys)	Gamma 5 (50 Kilograys)	Dry Heat (250°F)
Acetal	Y	Y	Y	Y	Y	N	N	N
ABS	N	N/A	Y	Y	N	Y	Y	N
Polypropylene	Y	Y	Y	Y	N	Y	Y	N
Polysulfone	Y	Y	Y	Y	Y	Y	Y	Y
Glass Filled Polypro.	Y	Y	Y	Y	N	N	N	N
Chrome/Brass	N	Y	Y	Y	Y	Υ	Y	Y
Buna-N/Nitrile	Y	Y	Y	N	N	Υ	Y	Y
EPR/EPDM	Y	Y	Y	Y	Y	Υ	Y	Y
Viton/FKM	Y	Y	Y	N	N	N	N	Y
Silicon	Y	Y	Y	Y	Y	Υ	Y	Y
Kalrez	Y	Y	Y	Y	Y	N	Ν	Y

Key: Y = Excellent, recommended, N = Not recommened, N/A = Not applicable

Sterilization Methods:

- **Disinfectants:** Sterilized coupled or uncoupled at 70°F (20°C)
- Ethylene Oxide, EtO: Sterilized coupled or uncoupled, up to 5 repetitions, four hours max, 100% EtO at 110°F (43°C)
- Autoclave: Sterilize uncoupled only, 30 min. max, 10 repetitions max, 250°F (121°C) max.
- Electron Beam (E-Beam): Sterilize coupled or uncoupled, 50 kilograys max cumulative exposure.
- **GAMMA:** Sterilize coupled or uncoupled, 50 kilograys max cumulative exposure.
- **Dry Heat:** Sterilize uncoupled only, 250°F (121°C) 12 hours max.

Regulatory Approvals

The F.D.A. publishes, through the Code of Federal Regulations, standardized criteria which govern the acceptability of materials used in food contact. The U.S. Department of Agriculture publishes similar standards that mirror F.D.A. criteria. Neither agency approves or disapproves products.

With the exception of the 50GP and 65GP Series products, most LinkTech couplings comply with applicable F.D.A and U.S.D.A.

NSF Compliance

NSF International develops and publishes consensual criteria that govern the acceptability of materials and equipment used in food and beverage processing.

With the exception of the 50GP and 65GP Series products, most LinkTech couplings are produced from materials that comply with most NSF standards for potable water and food contact applications.

Questions?

If you have any questions at all concerning our products, compliance and specs, please feel free to call us at 805-339-0055 or visit our website.





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Technical

CHEMICAL COMPATIBILITY

Chemical Polyme		Polymers	Metals			Elastomers					
	Acetal	ABS	Polypropylene	Polysulfone	Chrome Plated Brass	Aluminum	Buna-N (Nitril)	EPR/EPDM	Fluorocarbon (Viton)	Silicon	KALREZ
Acetic Acid	D	С	В	Α	D	В	D	А	D	В	А
Acetone	А	D	А	Α	А	А	D	А	D	С	А
Air	Α	А	А	Α	А	А	А	А	А	А	А
Ammonia Anhydrous	D	В	А	С	А	А	В	А	D	С	А
Benzene	А	D	D	D	N/A	В	D	D	А	D	А
Carbon Dioxide	А	В	А	N/A	А	В	А	В	В	В	А
Chlorine Water	D	А	D	D	D	D	D	С	Α	D	N/A
Ethanol (Ethyl Alcohol)	А	А	А	А	А	В	А	А	А	А	А
Ethylene Glycol	В	А	А	А	А	А	А	А	А	А	А
Gasoline, Unleaded	А	D	С	А	А	А	В	D	А	D	А
Hydrochloric Acid	C	C	В	Α	D	D	D	С	А	D	А
Hydrofluric Acid	D	С	С	А	D	D	D	D	В	D	А
Isopropyl Alcohol	А	А	А	А	В	В	В	В	В	А	А
Methyl Ethyl Ketone (MEK)	C	D	В	D	А	В	D	А	D	D	А
Methanol	А	D	А	А	А	А	А	А	D	А	А
Oxygen	А	В	А	А	А	А	В	А	А	А	А
Ozone	C	В	В	А	N/A	В	D	А	А	А	А
Sodium Hypochlorite	D	N/A	В	А	D	D	С	В	А	В	А
Steam	C	N/A	N/A	N/A	А	В				С	А
Sulfuric Acid, Air Free	N/A	В	С	В	C	D	D	D	А	D	А
Toluene	C	D	С	C	A	А	D	D	C	D	А
Trichloroethylene	D	D	С	С	В	D	D	D	А	D	В
Water, Fresh	А	А	А	A	С	В	A	А	В	А	А

Key: A = Excellent - no effect, B = Good - little or no effect, C = Fair - some effect, D = Not recommended, N/A = Not available.

Chemical Compatibility Chemicals can affect the strength, appearance, color, dimensions, and weight of plastics. Because many factors affect the chemical resistance of a given material it is the customer's responsibility to test LinkTech's couplings in their own application conditions. Please Contact LinkTech for further assistance with your application needs.

COUPLING PERFORMANCE RATINGS							
Series	Coupling Material	O-ring Material	Pressure Rating	Temp. Rating			
10AC 1/16" Flow	Acetal	Buna-N	Vacuum to 100psi	-40°F to 180°F			
10PP 1/16" Flow	Polypropylene	EPDM	Vacuum to 100psi	32°F to 180°F			
20AC 1/8" Flow	Acetal	Buna-N	Vacuum to 120psi	-40°F to 180F			
20PP 1/8" Flow	Polypropylene	EPDM	Vacuum to 120psi	32°F to 160°F			
20CB 1/8" Flow	Chrome/Brass	Buna-N	Vacuum to 250psi	-40°F to 180°F			
40AC 1/4" Flow	Acetal	Buna-N	Vacuum to 120psi	-40°F to 180°F			
40PP 1/4" Flow	Polypropylene	EPDM	Vacuum to 120psi	32°F to 160°F			
40CB 1/4" Flow	Chrome/Brass	Buna-N	Vacuum to 250psi	-40°F to 180°F			
42AB 3/32" Flow	ABS	Buna-N	Vacuum to 120psi	-40°F to 180°F			
50AC 1/4" Flow	Acetal	Buna-N	Vacuum to 120psi	-40°F to 180°F			
50PP 1/4" Flow	Polypropylene	EPDM	Vacuum to 100psi	32°F to 160°F			
50BAC 1/4" Flow	Acetal	Buna-N	Opsi to 20psi	-40°F to 180°F			
50GP 1/4" Flow	Glass Filled Polypropylene	EPDM	Vacuum to 120psi	32°F to 180°F			
60PP 3/8" Flow	Polypropylene	EPDM	Vacuum to 60psi	32°F to 160°F			
60PS 3/8" Flow	Polysulfone	EPDM	Vacuum to 125psi	-40°F to 280°F			
65GP 1/2" Flow	Glass Filled Polypropylene	EPDM	Vacuum to 120psi	32°F to 180°F			