MANUFACTURERS OF PRECISION-MADE
FLEXIBLE TUBING & SPIRAL RECOIL HOSE

ATP
ADVANCED
TECHNOLOGY
PRODUCTS

Fluid Couplings and Plugs

www.atp4fluid.com

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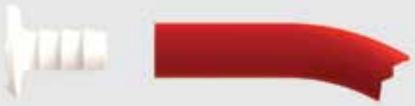
Internal Shut-off Valves

Xvalved Plug & Xvalved Socket

Shut-off valves automatically stop flow when couplings disengage. couplings are available with or without shut-off valves on either coupling half.

End Termination / Tubing Connections

Hose Barbs:



For use with lower durometer tubing such as PVC, Polyurethane, Silicone, rubber, etc.

Pipe Threads:

Available in male or female tapered and straight, NPT, BSPP, BSPT and SAE. Contact ATP for non-standard thread requirements.

PTF (Ferruless Polytube Fitting):

For use with semi-rigid tubing such as polyethylene, nylon, polyurethane, polypropylene, etc.

Push In:

For use with semi-rigid tubing such as polyethylene, nylon, polyurethane, polypropylene, etc. Simply push tube in for connection. No compression nut required.

Metal Latch Technology

1. Stainless Steel Thumb-Latch (all 20 & 40 Series couplings)
2. Available with or without internal shut-off valves on both Sockets and Plugs.
3. Standard FDA /NSF Grade Buna-N O-rings. (others available)
4. Latch groove for all 20 & 40 Series couplings is narrow accommodating interconnect with a stainless thumb-latch.
5. All internal springs are high grade 316 stainless steel.
6. Built-in end terminations reduce leak points. Standard hose barbs, pipe threads, and compression nuts are available. (Please contact ATP to inquire about custom termination solutions.)

10AC & 10PP Series Couplings

Tubing Size 1/16″- 1/8″
1/16″ Flow Acetal (POM) & Polypropylene

IMPROVED EASY GRIP BARREL

10AC couplings are produced in a durable natural Acetal thermoplastic and the 10PP couplings are produced from medical grade, gamma sterilizable polypropylene. The Acetal couplings are resistant to most mild chemicals and are manufactured to be trouble free for many years of service while the Polypropylene couplings offer greater chemical resistance. They are intuitive to use and make an audible click when coupled with their new and improved "Easy Grip Barrel." Both 10AC and 10PP Couplings interconnect with each other as well as other similar industry twist lock type couplings.

10AC Performance Ratings:

- Operating Pressure: Vacuum to 100psi; (6.9bar)
- Temperature: -40°F to 180°F; (-40°C to 82°C)
- Flow Capacity: 1/16″ Size

10AC Materials & Construction:

- Bodies & Terminations: Acetal (POM)
- Internal Valves: Acetal (POM)
- Internal Valve Springs: 316 Stainless Steel
- O-rings: FDA & NSF Grade Buna-N (others available)
- Lock Sleeve: Acetal (POM)

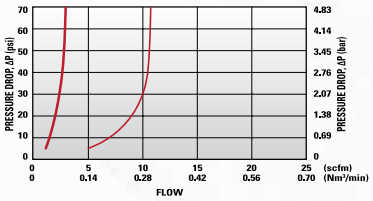
10PP Performance Ratings:

- Operating Pressure: Vacuum to 100psi; (6.9bar)
- Temperature: 32°F to 180°F; (0°C to 82°C)
- Flow Capacity: 1/16″ Size

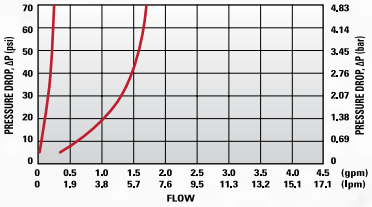
10PP Materials & Construction:

- Bodies & Terminations: medical grade Polypropylene
- Internal Valves: medical grade Polypropylene
- Internal Valve Springs: 316 Stainless Steel
- O-rings: Peroxide-cured EPDM (others available)
- Lock Sleeve: Acetal (POM)

10AC and 10PP Series Air Flow



10AC and 10PP Series Water Flow



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.

FLOW RATES
Each coupling combination was tested at 70 F (21°C).

Cv Values for 10AC Series Couplings

SOCKETS	10AC-PB2-01	10AC-PB2-02	10AC-PB3-01	10AC-PB3-02
10AC-S2-01	0.03	0.03	0.03	0.03
10ACV-SB2-01	0.03	0.03	0.03	0.03
10AC-S2-02	0.03	0.19	0.03	0.19
10ACV-SB2-02	0.03	0.08	0.03	0.08
10AC-S3-01	0.03	0.03	0.03	0.03
10ACV-SB3-01	0.03	0.03	0.03	0.03
10AC-S3-02	0.03	0.19	0.03	0.19
10ACV-SB3-02	0.03	0.08	0.03	0.08

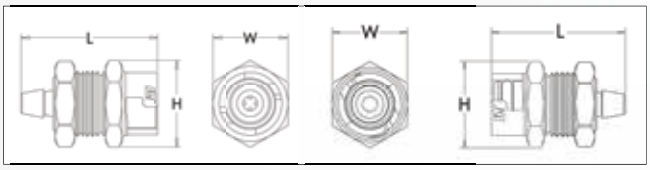
Cv Values for 10PP Series Couplings

SOCKETS	10PP-PB2-01	10PP-PB2-02	10PP-PB3-01	10PP-PB3-02
10PP-S2-01	0.03	0.03	0.03	0.03
10PP-S2-02	0.03	0.19	0.03	0.19
10PP-S3-01	0.03	0.03	0.03	0.03
10PP-S3-02	0.03	0.19	0.03	0.19

Panel Mount Dimensions

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	.438″	.21″	.03″
PLUGS	.438″	.21″	.03″

PANEL NUT HEX SIZE	PANEL NUT THREAD
1/2″	7/16″ - 24UNF



Reference Dimensions: L = Length, W = Width, H = Height

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10AC Series Sockets

IN-LINE HOSE BARB SOCKET						
Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
10AC-S2-01	10ACV-SB2-01	1/16″ ID	1.6mm ID	.90″	.48″	.48″
10AC-S2-01BLK	10ACV-SB2-01BLK	1/16″ ID	1.6mm ID	.90″	.48″	.48″
10AC-S2-02	10ACV-SB2-02	1/8″ ID	3.2mm ID	.90″	.48″	.48″
10AC-S2-02BLK	10ACV-SB2-02BLK	1/8″ ID	3.2mm ID	.90″	.48″	.48″

PANEL MOUNT HOSE BARB SOCKET						
Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
10AC-S3-01	10ACV-SB3-01	1/16″ ID	1.6mm ID	.90″	.50″	.58″
10AC-S3-01BLK	10ACV-SB3-01BLK	1/16″ ID	1.6mm ID	.90″	.50″	.58″
10AC-S3-02	10ACV-SB3-02	1/8″ ID	3.2mm ID	.90″	.50″	.58″
10AC-S3-02BLK	10ACV-SB3-02BLK	1/8″ ID	3.2mm ID	.90″	.50″	.58″

IN-LINE HOSE BARB SOCKET, NO SLEEVE						
Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
10AC-S2-01NS	10ACV-SB2-01NS	1/16″ ID	1.6mm ID	.90″	.32″	.32″
10AC-S2-01NSBLK	10ACV-SB2-01NSBLK	1/16″ ID	1.6mm ID	.90″	.32″	.32″
10AC-S2-02NS	10ACV-SB2-02NS	1/8″ ID	3.2mm ID	.90″	.32″	.32″
10AC-S2-02NSBLK	10ACV-SB2-02NSBLK	1/8″ ID	3.2mm ID	.90″	.32″	.32″

10AC Series Plugs

IN-LINE HOSE BARB PLUG					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
10AC-PB2-01	1/16″ ID	1.6mm ID	.75″	.48″	.48″
10AC-PB2-01BLK	1/16″ ID	1.6mm ID	.75″	.48″	.48″
10AC-PB2-02	1/8″ ID	3.2mm ID	.90″	.48″	.48″
10AC-PB2-02BLK	1/8″ ID	3.2mm ID	.90″	.48″	.48″

PANEL MOUNT HOSE BARB PLUG					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
10AC-PB3-01	1/16″ ID	1.6mm ID	.75″	.50″	.58″
10AC-PB3-01BLK	1/16″ ID	1.6mm ID	.75″	.50″	.58″
10AC-PB3-02	1/8″ ID	3.2mm ID	.90″	.50″	.58″
10AC-PB3-02BLK	1/8″ ID	3.2mm ID	.90″	.50″	.58″

IN-LINE HOSE BARB PLUG, NO SLEEVE					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
10AC-PB2-01NS	1/16″ ID	1.6mm ID	.75″	.32″	.32″
10AC-PB2-01NSBLK	1/16″ ID	1.6mm ID	.75″	.32″	.32″
10AC-PB2-02NS	1/8″ ID	3.2mm ID	.90″	.32″	.32″
10AC-PB2-02NSBLK	1/8″ ID	3.2mm ID	.90″	.32″	.32″

10AC In-Line Coupling

IN-LINE HOSE BARB COUPLING						
Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
10AC2-01	10ACV2-01	1/16″ ID	1.6mm ID	1.46″	.48″	.48″
10AC2-01BLK	10ACV2-01BLK	1/16″ ID	1.6mm ID	1.46″	.48″	.48″
10AC2-02	10ACV2-02	1/8″ ID	3.2mm ID	1.61″	.48″	.48″
10AC2-02BLK	10ACV2-02BLK	1/8″ ID	3.2mm ID	1.61″	.48″	.48″

*BLK denotes part available in Black.

ALL COMPLETE PARTS ALSO
AVAILABLE IN BLACK

10PP Series Sockets

IN-LINE HOSE BARB SOCKET					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
10PP-S2-01	1/16″ ID	1.6mm ID	.90″	.48″	.48″
10PP-S2-02	1/8″ ID	3.2mm ID	.90″	.48″	.48″

PANEL MOUNT HOSE BARB SOCKET					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
10PP-S3-01	1/16″ ID	1.6mm ID	.90″	.50″	.58″
10PP-S3-02	1/8″ ID	3.2mm ID	.90″	.50″	.58″

IN-LINE HOSE BARB SOCKET, NO SLEEVE					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
10PP-S2-01NS	1/16″ ID	1.6mm ID	.90″	.32″	.32″
10PP-S2-02NS	1/8″ ID	3.2mm ID	.90″	.32″	.32″

10PP Series Plugs

IN-LINE HOSE BARB PLUG					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
10PP-PE2-01	1/16″ ID	1.6mm ID	.75″	.48″	.48″
10PP-PE2-02	1/8″ ID	3.2mm ID	.90″	.48″	.48″

PANEL MOUNT HOSE BARB PLUG					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
10PP-PE3-01	1/16″ ID	1.6mm ID	.75″	.50″	.58″
10PP-PE3-02	1/8″ ID	3.2mm ID	.90″	.50″	.58″

IN-LINE HOSE BARB PLUG, NO SLEEVE					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
10PP-PE2-01NS	1/16″ ID	1.6mm ID	.75″	.32″	.32″
10PP-PE2-02NS	1/8″ ID	3.2mm ID	.90″	.32″	.32″

10PP In-Line Coupling

IN-LINE HOSE BARB COUPLING					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
10PP2-01	1/16″ ID	1.6mm ID	1.46″	.48″	.48″
10PP2-02	1/8″ ID	3.2mm ID	1.61″	.48″	.48″

Tubing Size 1/16″- 1/4″
1/8″ Flow Acetal (POM)

20AC Series Couplings

These 1/8″ flow size couplings are produced in a durable natural Acetal (POM) thermoplastic. They are resistant to most mild chemicals and are manufactured to be trouble free for many years of service. They are intuitive to use and make an audible click when coupled. 20AC couplings interconnect with all other 20PP and 20CB Series couplings as well as other similar industry thumb-latch type couplings.

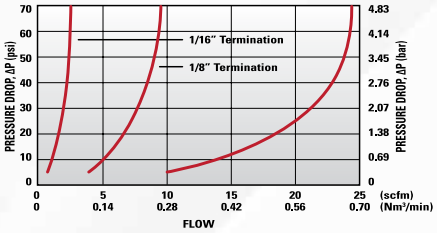
Performance Ratings:

- Operating Pressure: Vacuum to 120psi; (8.3bar)
- Temperature: -40°F to 180°F; (-40°C to 82°C)
- Flow Capacity: 1/8″ Size

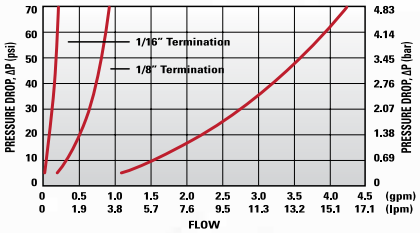
Materials & Construction:

- Bodies & Terminations: Acetal (POM)
- Internal Valves: Acetal (POM)
- Internal Valve Springs: 316 Stainless Steel
- O-rings: FDA & NSF Grade Buna-N (others available)
- Thumb-latch: Stainless Steel
- External Springs & Pins: Stainless Steel

20AC Series Air Flow



20AC Series Water Flow



FLOW RATES

The data below shows liquid flow rates for couplings.
Each coupling combination was tested at 70°F (21°C).

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.

C_v Values for 20AC Series Couplings

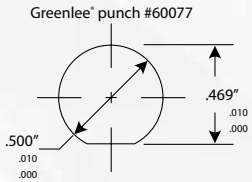
SOCKETS	20ACV-PB2-01	20AC PB2-01	20ACV-PB2-02	20AC-PB2-02	20ACV-PB2-03	20AC-PB2-03	20ACV-PB2-04	20AC-PB2-04	20ACV-PB9-04	20AC-PB9-04	20ACV-PB1-02	20AC-PB1-02	20ACV-PB1-04	20AC-PB1-04	20ACV-PB4-04	20AC-PB4-04
20ACV-SB2-01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
20AC-S2-01	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
20ACV-SB2-04	0.03	0.03	0.16	0.22	0.16	0.22	0.21	0.26	0.17	0.23	0.19	0.25	0.21	0.25	0.24	0.27
20AC-S2-04	0.03	0.03	0.18	0.24	0.19	0.26	0.23	0.45	0.24	0.33	0.2	0.45	0.24	0.38	0.27	0.45
20ACV-SB3-02	0.03	0.03	0.14	0.17	0.14	0.18	0.15	0.19	0.15	0.19	0.18	0.18	0.15	0.18	0.15	0.19
20AC-S3-02	0.03	0.03	0.14	0.19	0.14	0.2	0.15	0.27	0.15	0.24	0.15	0.27	0.18	0.28	0.16	0.27
20ACV-SB3-04	0.03	0.03	0.16	0.22	0.16	0.22	0.21	0.26	0.17	0.23	0.19	0.26	0.21	0.26	0.16	0.25
20AC-S3-04	0.03	0.03	0.18	0.25	0.19	0.27	0.23	0.45	0.23	0.34	0.2	0.45	0.25	0.45	0.26	0.45
20ACV-SB8-04	0.03	0.03	0.16	0.2	0.16	0.21	0.17	0.22	0.17	0.21	0.17	0.21	0.17	0.21	0.18	0.22
20AC-S8-04	0.03	0.03	0.16	0.25	0.17	0.3	0.18	0.4	0.18	0.4	0.16	0.4	0.18	0.36	0.21	0.4
20ACV-SB1-02	0.03	0.03	0.16	0.24	0.17	0.25	0.2	0.28	0.18	0.27	0.2	0.26	0.2	0.29	0.24	0.26
20AC-S1-02	0.03	0.03	0.16	0.25	0.17	0.3	0.19	0.5	0.18	0.4	0.2	0.5	0.2	0.5	0.24	0.5
20ACV-SB1-04	0.03	0.03	0.17	0.25	0.18	0.25	0.23	0.3	0.19	0.3	0.21	0.27	0.23	0.28	0.24	0.29
20AC-S1-04	0.03	0.03	0.18	0.26	0.19	0.3	0.24	0.5	0.21	0.4	0.2	0.5	0.25	0.51	0.26	0.5

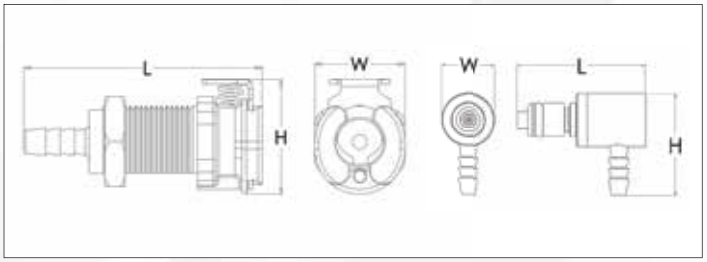
Panel Mount Dimensions

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	Per Drawing	0.5″	0.05″
PLUGS	0.5″	0.3″	0.05″

PANEL NUT HEX SIZE	PANEL NUT THREAD
5/8″	1/2″ - 24UNS

Greenlee® punch #60077





Reference Dimensions: L = Length, W = Width, H = Height

20AC Series Sockets

Tubing Size 1/16″- 1/4″
1/8″ Flow Acetal (POM)

MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
20AC-S1-02	20ACV-SB1-02	1/8″ NPT	1.00″	.62″	.80″
20AC-S1-02BSPT	20ACV-SB1-02BSPT	1/8″ BSPT	1.00″	.62″	.80″
20AC-S1-04	20ACV-SB1-04	1/4″ NPT	1.00″	.62″	.80″
20AC-S1-04BSPT	20ACV-SB1-04BSPT	1/4″ BSPT	1.00″	.62″	.80″
N/A	20ACV-SB1-02UT	1/8″ UT	.97″	.62″	.80″

IN-LINE HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20AC-S2-01	20ACV-SB2-01	1/16″ ID	1.6mm ID	1.42″	.62″	.80″
20AC-S2-02	20ACV-SB2-02	1/8″ ID	3.2mm ID	1.65″	.62″	.80″
20AC-S2-03	20ACV-SB2-03	3/16″ ID	4.8mm ID	1.80″	.62″	.80″
20AC-S2-04	20ACV-SB2-04	1/4″ ID	6.4mm ID	1.80″	.62″	.80″

IN-LINE PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20AC-S9-025	20ACV-SB9-025	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.65″	.62″	.80″
20AC-S9-04	20ACV-SB9-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.75″	.62″	.80″

PANEL MOUNT HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20AC-S3-01	20ACV-SB3-01	1/16″ ID	1.6mm ID	1.40″	.62″	.80″
20AC-S3-02	20ACV-SB3-02	1/8″ ID	3.2mm ID	1.65″	.62″	.80″
20AC-S3-03	20ACV-SB3-03	3/16″ ID	4.8mm ID	1.80″	.62″	.80″
20AC-S3-04	20ACV-SB3-04	1/4″ ID	6.4mm ID	1.80″	.62″	.80″

PANEL MOUNT H.B. GASKET SEAL SOCKET (GASKET SOLD SEPARATELY)

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20AC-S3-01GS	20ACV-SB3-01GS	1/16″ ID	1.6mm ID	1.40″	.62″	.80″
20AC-S3-02GS	20ACV-SB3-02GS	1/8″ ID	3.2mm ID	1.65″	.62″	.80″
20AC-S3-03GS	20ACV-SB3-03GS	3/16″ ID	4.8mm ID	1.80″	.62″	.80″
20AC-S3-04GS	20ACV-SB3-04GS	1/4″ ID	6.4mm ID	1.80″	.62″	.80″

PANEL MOUNT PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20AC-S8-025	20ACV-SB8-025	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.70″	.62″	.80″
20AC-S8-04	20ACV-SB8-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.72″	.62″	.80″

PANEL MOUNT PTF GASKET SEAL SOCKET (GASKET SOLD SEPARATELY)

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20AC-S8-025GS	20ACV-SB8-025GS	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.70″	.62″	.80″
20AC-S8-04GS	20ACV-SB8-04GS	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.72″	.62″	.80″

ELBOW HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20AC-S4-02	20ACV-SB4-02	1/8″ ID	3.2mm ID	1.3″	.63″	1.3″
20AC-S4-04	20ACV-SB4-04	1/4″ ID	6.4mm ID	1.3″	.63″	1.3″

ELBOW PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20AC-S10-04	20ACV-SB10-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.3″	.63″	1.2″

PANEL MOUNT SEALING GASKET

Part No.	Material	Diameter	Thickness
C11040	Buna-N	.70″ OD	.080″
C11105	EPDM	.70″ OD	.080″

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Tubing Size 1/16″- 1/4″
1/8″ Flow Acetal (POM)

20AC Series Plugs

MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
20AC-PB1-02	20ACV-PB1-02	1/8″ NPT	1.03″/1.36″	.50″	.50″
20AC-PB1-02BSPT	20ACV-PB1-02BSPT	1/8″ BSPT	1.03″/1.36″	.50″	.50″
20AC-PB1-04	20ACV-PB1-04	1/4″ NPT	1.13″/1.39″	.56″	.56″
20AC-PB1-04BSPT	20ACV-PB1-04BSPT	1/4″ BSPT	1.13″/1.39″	.56″	.56″

IN-LINE HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20AC-PB2-01	20ACV-PB2-01	1/16″ ID	1.6mm ID	.80″/1.48″	.55″	.55″
20AC-PB2-02	20ACV-PB2-02	1/8″ ID	3.2mm ID	.97″/1.65″	.55″	.55″
20AC-PB2-03	20ACV-PB2-03	3/16″ ID	4.8mm ID	1.12″/.80″	.55″	.55″
20AC-PB2-04	20ACV-PB2-04	1/4″ ID	6.4mm ID	1.12″/.80″	.55″	.55″

IN-LINE PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20AC-PB9-025	20ACV-PB9-025	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.15″/1.65″	.62″	.80″
20AC-PB9-04	20ACV-PB9-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.15″/1.57″	.62″	.80″

ELBOW HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20AC-PB4-02	20ACV-PB4-02	1/8″ ID	3.2mm ID	.86″/1.19″	.50″	.95″
20AC-PB4-04	20ACV-PB4-04	1/4″ ID	6.4mm ID	.98″/1.19″	.50″	1.10″

ELBOW PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20AC-PB10-025	20ACV-PB10-025	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.09″/1.20″	.50″	.99″
20AC-PB10-04	20ACV-PB10-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.09″/1.20″	.50″	1.02″

PANEL MOUNT HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20AC-PB3-01	20ACV-PB3-01	1/16″ ID	1.6mm ID	1.37″/1.47″	.62″	.62″
20AC-PB3-02	20ACV-PB3-02	1/8″ ID	3.2mm ID	1.60″/1.70″	.62″	.62″
20AC-PB3-03	20ACV-PB3-03	3/16″ ID	4.8mm ID	1.77″/1.87″	.62″	.62″
20AC-PB3-04	20ACV-PB3-04	1/4″ ID	6.4mm ID	1.76″/1.86″	.62″	.62″

PANEL MOUNT PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20AC-PB8-04	20ACV-PB8-04	1/4″ OD, .17″ ID	6.4mmOD,4.3mmID	1.69″/1.79″	.62″	.62″

20PP Series Couplings

Tubing Size 1/16″- 1/4″
1/8″ Flow Polypropylene

2 STANDARD COLORS

20PP Series couplings offer 1/8″ flow, are produced from medical grade, gamma sterilizable polypropylene, and offer greater chemical resistance. 20PP couplings interconnect with all other 20AC and 20CB Series couplings as well as other similar industry thumb-latch couplings. These couplings are available in Legacy Almond and Modern Cool Grey colors.

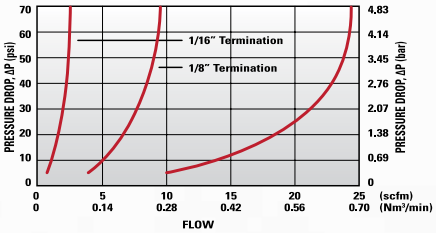
Performance Ratings:

- Operating Pressure: Vacuum to 120psi; (8.3bar)
- Temperature: 32˚F to 160˚F; (0˚C to 71˚C)
- Flow Capacity: 1/8″ Size
- Sterilization: Gamma; 50 kGy irradiation max (see technical section for more detail)

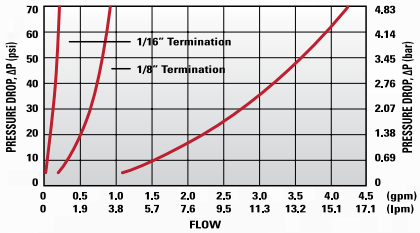
Materials & Construction:

- Bodies & Terminations: Medical Grade Polypropylene
- Internal Valves: Medical Grade Polypropylene
- Internal Valve Springs: 316 Stainless Steel
- O-rings: Peroxide-cured EPDM (others available)
- Thumb-latch: Stainless Steel
- External Springs & Pins: Stainless Steel

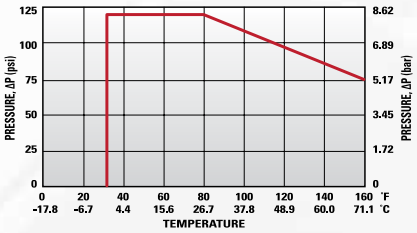
20PP Series Air Flow



20PP Series Water Flow



20PP Series Temperature



FLOW RATES

The data below shows liquid flow rates for couplings. Each coupling combination was tested at 70°F (21°C).

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

$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

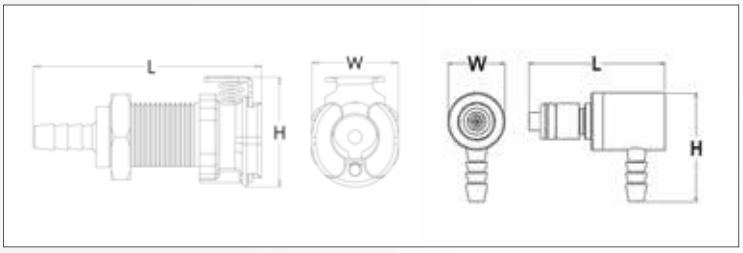
Q = Flow rate in gallons per minute
C_v = Average flow rates (see chart)
ΔP = Pressure drop across coupling (psi)
S = Specific gravity of liquid.

C_v Values for 20PP Series Couplings

SOCKETS	20PPV-PE2-01	20PP-PE2-01	20PPV-PE2-02	20PP-PE2-02	20PPV-PE2-04	20PP-PE2-04	20PPV-PE9-04	20PPX-PE9-04	20PPV-PE1-02	20PPX-PE1-02	20PPV-PE4-04	20PPX-PE4-04
20PPV-SE2-01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
20PP-S2-01	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
20PPV-SE2-04	0.03	0.03	0.16	0.22	0.21	0.26	0.17	0.23	0.19	0.25	0.24	0.27
20PP-S2-04	0.03	0.03	0.18	0.24	0.23	0.45	0.24	0.33	0.2	0.45	0.27	0.45
20PPV-SE3-02	0.03	0.03	0.14	0.17	0.15	0.19	0.15	0.19	0.18	0.18	0.15	0.19
20PP-S3-02	0.03	0.03	0.14	0.19	0.15	0.27	0.15	0.24	0.15	0.27	0.16	0.27
20PPV-SE3-04	0.03	0.03	0.16	0.22	0.21	0.26	0.17	0.23	0.19	0.26	0.16	0.25
20PP-S3-04	0.03	0.03	0.18	0.25	0.23	0.45	0.23	0.34	0.2	0.45	0.26	0.45
20PPV-SE8-04	0.03	0.03	0.16	0.2	0.17	0.22	0.17	0.21	0.17	0.21	0.18	0.22
20PP-S8-04	0.03	0.03	0.16	0.25	0.18	0.4	0.18	0.4	0.16	0.4	0.21	0.4
20PPV-SE1-02	0.03	0.03	0.16	0.24	0.2	0.28	0.18	0.27	0.2	0.26	0.24	0.26
20PP-S1-02	0.03	0.03	0.16	0.25	0.19	0.5	0.18	0.4	0.2	0.5	0.24	0.5
20PPV-SE1-04	0.03	0.03	0.17	0.25	0.23	0.3	0.19	0.3	0.21	0.27	0.24	0.29
20PP-S1-04	0.03	0.03	0.18	0.26	0.24	0.5	0.21	0.4	0.2	0.5	0.26	0.5

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	Per Drawing	0.5″	0.05″
PLUGS	0.5″	0.3″	0.05″

PANEL NUT HEX SIZE	PANEL NUT THREAD
5/8″	1/2″ - 24 UNS



Reference Dimensions: L = Length, W = Width, H = Height

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Tubing Size 1/16″- 1/4″
1/8″ Flow Polypropylene

20PP Series Sockets

MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
20PP-S1-02	20PPV-SE1-02	1/8″ NPT	1.10″	.64″	.82″
20PP-S1-02MALD	20PPV-SE1-02MALD	1/8″ NPT	1.10″	.64″	.82″
20PP-S1-04	20PPV-SE1-04	1/4″ NPT	1.10″	.64″	.82″
20PP-S1-04MALD	20PPV-SE1-04MALD	1/4″ NPT	1.10″	.64″	.82″

IN-LINE HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20PP-S2-01	20PPV-SE2-01	1/16″ ID	1.6mm ID	1.39″	.63″	.88″
20PP-S2-01MALD	20PPV-SE2-01MALD	1/16″ ID	1.6mm ID	1.39″	.63″	.88″
20PP-S2-02	20PPV-SE2-02	1/8″ ID	3.2mm ID	1.63″	.63″	.88″
20PP-S2-02MALD	20PPV-SE2-02MALD	1/8″ ID	3.2mm ID	1.63″	.63″	.88″
20PP-S2-04	20PPV-SE2-04	1/4″ ID	6.4mm ID	1.78″	.63″	.88″
20PP-S2-04MALD	20PPV-SE2-04MALD	1/4″ ID	6.4mm ID	1.78″	.63″	.88″

IN-LINE PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20PP-S9-025	20PPV-SE9-025	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.71″	.63″	.88″
20PP-S9-025MALD	20PPV-SE9-025MALD	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.71″	.63″	.88″
20PP-S9-04	20PPV-SE9-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.71″	.63″	.88″
20PP-S9-04MALD	20PPV-SE9-04MALD	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.71″	.63″	.88″

PANEL MOUNT HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20PP-S3-01	20PPV-SE3-01	1/16″ ID	1.6mm ID	1.40″	.63″	.88″
20PP-S3-01MALD	20PPV-SE3-01MALD	1/16″ ID	1.6mm ID	1.40″	.63″	.88″
20PP-S3-02	20PPV-SE3-02	1/8″ ID	3.2mm ID	1.65″	.63″	.88″
20PP-S3-02MALD	20PPV-SE3-02MALD	1/8″ ID	3.2mm ID	1.65″	.63″	.88″
20PP-S3-04	20PPV-SE3-04	1/4″ ID	6.4mm ID	1.80″	.63″	.88″
20PP-S3-04MALD	20PPV-SE3-04MALD	1/4″ ID	6.4mm ID	1.80″	.63″	.88″

PANEL MOUNT PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20PP-S8-025	20PPV-SE8-025	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.72″	.63″	.88″
20PP-S8-025MALD	20PPV-SE8-025MALD	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.72″	.63″	.88″
20PP-S8-04	20PPV-SE8-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.72″	.63″	.88″
20PP-S8-04MALD	20PPV-SE8-04MALD	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.72″	.63″	.88″

*MALD denotes Almond coupling color.

20PP Series Plugs

Tubing Size 1/16″- 1/4″
1/8″ Flow Polypropylene

MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L (nv/v)	Width	Height
20PPX-PE1-02	20PPV-PE1-02	1/8″ NPT	1.27″/1.39″	.50″	.50″
20PPX-PE1-02MALD	20PPV-PE1-02MALD	1/8″ NPT	1.27″/1.39″	.50″	.50″

IN-LINE HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L (nv/v)	Width	Height
20PP-PE2-01	20PPV-PE2-01	1/16″ ID	1.6mm ID	.80″/1.48″	.55″	.55″
20PP-PE2-01MALD	20PPV-PE2-01MALD	1/16″ ID	1.6mm ID	.80″/1.48″	.55″	.55″
20PP-PE2-02	20PPV-PE2-02	1/8″ ID	3.2mm ID	.97″/1.65″	.55″	.55″
20PP-PE2-02MALD	20PPV-PE2-02MALD	1/8″ ID	3.2mm ID	.97″/1.65″	.55″	.55″
20PP-PE2-04	20PPV-PE2-04	1/4″ ID	6.4mm ID	1.12″/1.80″	.55″	.55″
20PP-PE2-04MALD	20PPV-PE2-04MALD	1/4″ ID	6.4mm ID	1.12″/1.80″	.55″	.55″

IN-LINE PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L (nv/v)	Width	Height
20PPX-PE9-04	20PPV-PE9-04	1/4″ OD, .17 ID	6.4mm OD, 4.3mm ID	1.15″/1.57″	.55″	.55″
20PPX-PE9-04MALD	20PPV-PE9-04MALD	1/4″ OD, .17 ID	6.4mm OD, 4.3mm ID	1.15″/1.57″	.55″	.55″

ELBOW HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L (nv/v)	Width	Height
20PPX-PE4-02	20PPV-PE4-02	1/8″ ID	3.2mm ID	1.10″/1.21″	.50″	.95″
20PPX-PE4-02MALD	20PPV-PE4-02MALD	1/8″ ID	3.2mm ID	1.10″/1.21″	.50″	.95″
20PPX-PE4-04	20PPV-PE4-04	1/4″ ID	6.4mm ID	1.10″/1.21″	.50″	1.10″
20PPX-PE4-04MALD	20PPV-PE4-04MALD	1/4″ ID	6.4mm ID	1.10″/1.21″	.50″	1.10″

ELBOW PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L (nv/v)	Width	Height
20PPX-PE10-04	20PPV-PE10-04	1/4″ OD, .17 ID	6.4mm OD, 4.3mm ID	1.10″/1.21″	.62″	.80″
20PPX-PE10-04MALD	20PPV-PE10-04MALD	1/4″ OD, .17 ID	6.4mm OD, 4.3mm ID	1.10″/1.21″	.62″	.80″

*MALD denotes Almond coupling color.

Available in Modern Cool Grey
and Legacy Almond Color.

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Tubing Size 1/8″- 1/4″
1/8″ Flow Chrome Brass

20CB Series Couplings

Produced in food grade chrome plated brass, these 1/8″ flow size couplings are more durable and withstand higher pressures. They are available with internal shut-off valves or straight through. All 20CB couplings interconnect with all other 20AC and 20PP couplings as well as other similar industry thumb-latch type couplings.

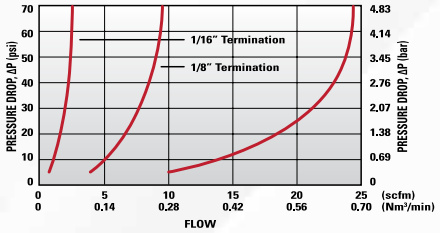
Performance Ratings:

- Operating Pressure: Vacuum to 250psi; (17.3bar)
- Temperature: -40°F to 180°F; (-40°C to 82°C)
- Flow Capacity: 1/8″ Size

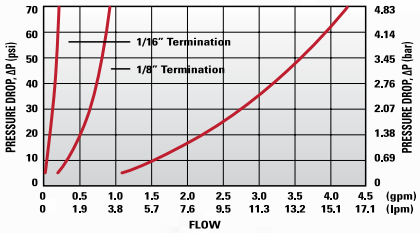
Materials & Construction:

- Bodies & Terminations: Food Grade Chrome/Brass
- Internal Valves: Acetal (POM)
- Internal Valve Springs: 316 Stainless Steel
- O-rings: FDA & NSF Grade Buna-N (others available)
- Thumb-latch: Stainless Steel
- External Springs & Pins: Stainless Steel

20CB Series Air Flow



20CB Series Water Flow



FLOW RATES

The data below shows liquid flow rates for couplings.
Each coupling combination was tested at 70°F (21°C).

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.

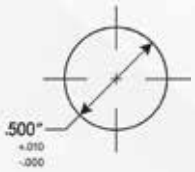
C_v Values for 20CB Series Couplings

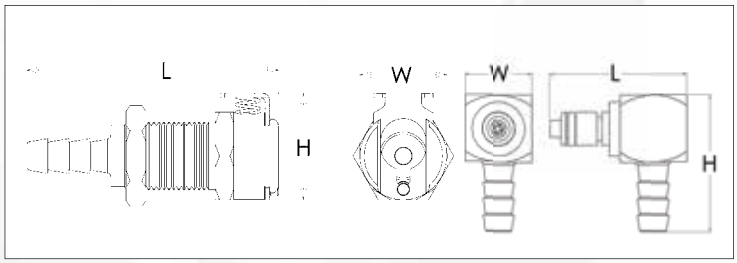
SOCKETS	20CBV-PB2-02	20CB-PB2-02	20CBV-PB2-03	20CB-PB2-03	20CBV-PB2-04	20CB-PB2-04	20CBV-PB9-04	20CB-PB9-04	20CBV-PB1-02	20CB-PB1-02	20CBV-PB1-04	20CB-PB1-04	20CBV-PB4-04	20CB-PB4-04
20CBV-SB2-04	0.16	0.22	0.16	0.22	0.21	0.26	0.17	0.23	0.19	0.25	0.21	0.25	0.24	0.27
20CB-S2-04	0.18	0.24	0.19	0.26	0.23	0.45	0.24	0.33	0.2	0.45	0.24	0.38	0.27	0.45
20CBV-SB3-02	0.14	0.17	0.14	0.18	0.15	0.19	0.15	0.19	0.18	0.18	0.15	0.18	0.15	0.19
20CB-S3-02	0.14	0.19	0.14	0.2	0.15	0.27	0.15	0.24	0.15	0.27	0.18	0.28	0.16	0.27
20CBV-SB3-04	0.16	0.22	0.16	0.22	0.21	0.26	0.17	0.23	0.19	0.26	0.21	0.26	0.16	0.25
20CB-S3-04	0.18	0.25	0.19	0.27	0.23	0.45	0.23	0.34	0.2	0.45	0.25	0.45	0.26	0.45
20CBV-SB8-04	0.16	0.2	0.16	0.21	0.17	0.22	0.17	0.21	0.17	0.21	0.17	0.21	0.18	0.22
20CB-S8-04	0.16	0.25	0.17	0.3	0.18	0.4	0.18	0.4	0.16	0.4	0.18	0.36	0.21	0.4
20CBV-SB1-02	0.16	0.24	0.17	0.25	0.2	0.28	0.18	0.27	0.2	0.26	0.2	0.29	0.24	0.26
20CB-S1-02	0.16	0.25	0.17	0.3	0.19	0.5	0.18	0.4	0.2	0.5	0.2	0.5	0.24	0.5
20CBV-SB1-04	0.17	0.25	0.18	0.25	0.23	0.3	0.19	0.3	0.21	0.27	0.23	0.28	0.24	0.29
20CB-S1-04	0.18	0.26	0.19	0.3	0.24	0.5	0.21	0.4	0.2	0.5	0.25	0.51	0.26	0.5

Panel Mount Dimensions

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	0.5″	0.5″	0.05″
PLUGS	0.5″	0.3″	0.05″

PANEL NUT HEX SIZE	PANEL NUT THREAD
5/8″	1/2″ - 24 UNS





Reference Dimensions: L = Length, W = Width, H = Height

20CB Series Sockets

Tubing Size 1/8"- 1/4"
1/8" Flow Chrome Brass

MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
20CB-S1-02	20CBV-SB1-02	1/8" NPT	1.00"	.62"	.80"
20CB-S1-02BSPT	20CBV-SB1-02BSPT	1/8" BSPT	1.00"	.62"	.80"
20CB-S1-04	20CBV-SB1-04	1/4" NPT	1.00"	.62"	.80"
20CB-S1-04BSPT	20CBV-SB1-04BSPT	1/4" BSPT	1.00"	.62"	.80"

IN-LINE HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20CB-S2-02	20CBV-SB2-02	1/8" ID	3.2mm ID	1.65"	.62"	.80"
20CB-S2-03	20CBV-SB2-03	3/16" ID	4.8mm ID	1.85"	.62"	.80"
20CB-S2-04	20CBV-SB2-04	1/4" ID	6.4mm ID	1.85"	.62"	.80"

IN-LINE PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20CB-S9-025	20CBV-SB9-025	5/32" OD, .10" ID	4.0mm OD, 2.5mm ID	1.68"	.63"	.80"
20CB-S9-04	20CBV-SB9-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.78"	.63"	.80"

PANEL MOUNT HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20CB-S3-02	20CBV-SB3-02	1/8" ID	3.2mm ID	1.68"	.62"	.80"
20CB-S3-03	20CBV-SB3-03	3/16" ID	4.8mm ID	1.89"	.62"	.80"
20CB-S3-04	20CBV-SB3-04	1/4" ID	6.4mm ID	1.89"	.62"	.80"

PANEL MOUNT PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
20CB-S8-025	20CBV-SB8-025	5/32" OD, .10" ID	4.0mm OD, 2.5mm ID	1.68"	.62"	.80"
20CB-S8-04	20CBV-SB8-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.78"	.62"	.80"

PANEL MOUNT MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
20CB-S12-02	20CBV-SB12-02	1/8" NPT	.62"	.80"	.80"

PANEL MOUNT FEMALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
20CB-S19-1032	20CBV-SB19-1032	10/32 UNF	.62"	.80"	.80"

20CB Series Plugs

Tubing Size 1/8"- 1/4"
1/8" Flow Chrome Brass

MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
20CB-PB1-02	20CBV-PB1-02	1/8" NPT	1.05"/1.45"	.50"	.50"
20CB-PB1-02BSPT	20CBV-PB1-02BSPT	1/8" BSPT	1.05"/1.45"	.50"	.50"
20CB-PB1-04	20CBV-PB1-04	1/4" NPT	1.05"/1.45"	.75"	.75"
20CB-PB1-04BSPT	20CBV-PB1-04BSPT	1/4" BSPT	1.05"/1.45"	.75"	.75"

FEMALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
20CB-PB13-1032	20CBV-PB13-1032	10/32 UNF	.63"/1.35"	.56"	.56"
20CB-PB13-02	N/A	1/8" NPT	.95"/n/a	.56"	.56"
20CB-PB13-02BSPT	N/A	1/8" BSPT	.95"/n/a	.56"	.56"
20CB-PB13-04	N/A	1/4" NPT	1.15"/n/a	.63"	.63"

Tubing Size 1/8″- 1/4″
1/8″ Flow Chrome Brass

20CB Series Plugs

IN-LINE HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20CB-PB2-02	20CBV-PB2-02	1/8″ ID	3.2mm ID	.98″/1.65″	.63″	.63″
20CB-PB2-03	20CBV-PB2-03	3/16″ ID	4.8mm ID	1.13″/1.80″	.63″	.63″
20CB-PB2-04	20CBV-PB2-04	1/4″ ID	6.4mm ID	1.13″/1.85″	.63″	.63″

IN-LINE PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20CB-PB9-025	20CBV-PB9-025	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.15″/1.55″	.63″	.63″
20CB-PB9-04	20CBV-PB9-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.15″/1.55″	.63″	.63″
20CB-PB9-06	20CBV-PB9-06	3/8″ OD, .25″ ID	9.5mm OD, 6.4mm ID	1.28″/1.70″	.55″	.55″

PANEL MOUNT HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20CB-PB3-02	20CBV-PB3-02	1/8″ ID	3.2mm ID	1.65″/1.75″	.62″	.62″
20CB-PB3-03	20CBV-PB3-03	3/16″ ID	4.8mm ID	1.82″/1.92″	.62″	.62″
20CB-PB3-04	20CBV-PB3-04	1/4″ ID	6.4mm ID	1.82″/1.92″	.62″	.62″

PANEL MOUNT PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20CB-PB8-025	20CBV-PB8-025	5/32″ OD, .10″ ID	4.0mm OD, 2.5mm ID	1.67″/1.77″	.62″	.62″
20CB-PB8-04	20CBV-PB8-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.69″/1.79″	.62″	.62″

ELBOW HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20CB-PB4-02	20CBV-PB4-02	1/8″ ID	3.2mm ID	1.20″/1.30″	.63″	.63″
20CB-PB4-04	20CBV-PB4-04	1/4″ ID	6.4mm ID	1.20″/1.30″	.63″	.63″

ELBOW PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20CB-PB10-04	20CBV-PB10-04	1/4″ OD, .17″ ID	6.4mmOD,4.3mmID	1.20″/1.30″	.63″	1.15″

*Patent Pending

PANEL MOUNT HOSE BARB PLUG, NON ROTATIONAL

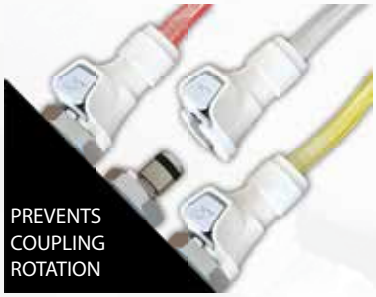
Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20CB-PB20-02	20CBV-PB20-02	1/8″ ID	3.2mm ID	1.65″/1.75″	.62″	.62″
20CB-PB20-03	20CBV-PB20-03	3/16″ ID	4.8mm ID	1.82″/1.92″	.62″	.62″
20CB-PB20-04	20CBV-PB20-04	1/4″ ID	6.4mm ID	1.82″/1.92″	.62″	.62″

*Patent Pending

PANEL MOUNT PTF PLUG, NON ROTATIONAL

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
20CB-PB21-04	20CBV-PB21-04	1/4″ OD, .17″ ID	6.4mmOD,4.3mmID	1.69″/1.79″	.62″	.62″

Works best with 20AC & 20PP Series Sockets.



40AC Series Couplings

Tubing Size 1/4"- 3/8"
1/4" Flow Acetal (POM)

These general purpose 1/4" flow size couplings are produced in a durable natural Acetal (POM) thermoplastic. They feature a thumb-latch release which provides a simple one hand operation. They are available in both valved and non-valved configurations. All 40AC couplings interconnect with all other 40PP and 40CB couplings as well as other similar industry thumb-latch type couplings.

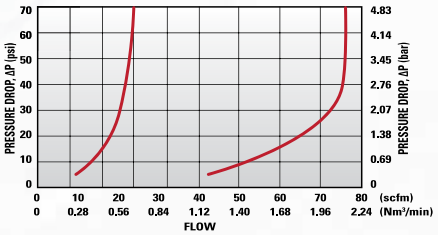
Performance Ratings:

- Operating Pressure: Vacuum to 120psi; (8.3bar)
- Temperature: -40˚F to 180˚F; (-40˚C to 82˚C)
- Flow Capacity: 1/4" Size

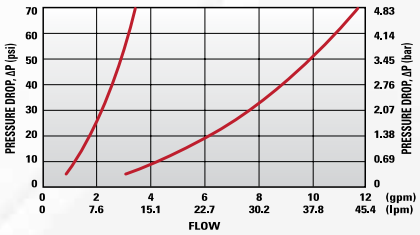
Materials & Construction:

- Bodies & Terminations: Acetal (POM)
- Internal Valves: Acetal (POM)
- Internal Valve Springs: 316 Stainless Steel
- O-rings: FDA & NSF Listed Grade Buna-N (others available)
- Thumb-latch: Stainless Steel
- External Springs & Pins: Stainless Steel

40AC Series Air Flow



40AC Series Water Flow



FLOW RATES

The data below shows liquid flow rates for couplings.
Each coupling combination was tested at 70°F (21°C).

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

$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

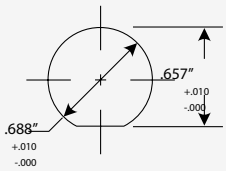
Q = Flow rate in gallons per minute
C_v = Average flow rates (see chart)
ΔP = Pressure drop across coupling (psi)
S = Specific gravity of liquid.

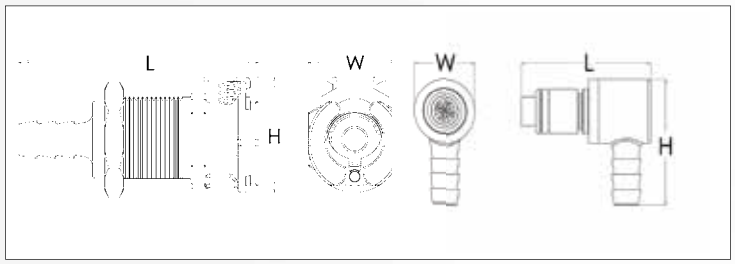
C_v Values for 40AC Series Couplings

SOCKETS	40ACV-PB2-04	40AC-PB2-04	40ACV-PB2-06	40AC-PB2-06	40ACV-PB9-04	40AC-PB9-04	40ACV-PB9-06	40AC-PB9-06	40ACV-PB1-04	40AC-PB1-04	40ACV-PB1-06	40AC-PB1-06
40ACV-SB2-04	0.42	0.58	0.45	0.78	0.31	0.38	0.45	0.6	0.43	0.79	0.45	0.75
40AC-S2-04	0.52	0.95	0.7	1	0.38	0.39	0.55	0.87	0.65	0.95	0.65	1
40ACV-SB2-06	0.43	0.63	0.5	0.89	0.33	0.39	0.62	0.5	0.45	0.95	0.5	0.92
40AC-S2-06	0.53	0.95	0.8	1.4	0.38	0.39	0.57	1	0.7	1.4	0.73	1.4
40ACV-SB3-04	0.42	0.58	0.45	0.78	0.31	0.38	0.45	0.6	0.43	0.79	0.45	0.75
40AC-S3-04	0.52	0.95	0.7	1	0.38	0.39	0.55	0.87	0.65	0.95	0.65	1
40ACV-SB3-06	0.43	0.63	0.5	0.89	0.33	0.39	0.62	0.5	0.45	0.95	0.5	0.92
40AC-S3-06	0.53	0.95	0.8	1.4	0.38	0.39	0.57	1	0.7	1.4	0.73	1.4
40ACV-SB1-04	0.41	0.65	0.5	0.81	0.31	0.35	0.48	0.74	0.45	0.8	0.45	0.8
40AC-S1-04	0.56	0.84	0.83	1.4	0.35	0.4	0.58	1.04	0.75	1.4	0.78	1.4
40ACV-SB1-06	0.43	0.7	0.5	1.03	0.3	0.36	0.7	0.48	0.45	0.97	0.48	1
40AC-S1-06	0.57	0.84	0.82	1.4	0.35	0.4	0.6	1.05	0.75	1.4	0.75	1.4

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	See Drawing	0.5"	0.05"
PLUGS	0.688"	0.3"	0.05"

PANEL NUT HEX SIZE	PANEL NUT THREAD
13/16"	11/16" - 24 UNS





Reference Dimensions: L = Length, W = Width, H = Height

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Tubing Size 1/4"- 3/8"
1/4" Flow Acetal (POM)

40AC Series Sockets

MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
40AC-S1-04	40ACV-SB1-04	1/4" NPT	1.15"	.75"	.93"
40AC-S1-04BSPT	40ACV-SB1-04BSPT	1/4" BSPT	1.15"	.75"	.93"
40AC-S1-06	40ACV-SB1-06	3/8" NPT	1.15"	.75"	.93"
40AC-S1-06BSPT	40ACV-SB1-06BSPT	3/8" BSPT	1.15"	.75"	.93"

IN-LINE HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40AC-S2-04	40ACV-SB2-04	1/4" ID	6.4mm ID	1.90"	.75"	.93"
40AC-S2-05	40ACV-SB2-05	5/16" ID	7.9mm ID	1.90"	.75"	.93"
40AC-S2-06	40ACV-SB2-06	3/8" ID	9.5mm ID	1.90"	.75"	.93"

IN-LINE PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40AC-S9-04	40ACV-SB9-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.85"	.75"	.93"
40AC-S9-06	40ACV-SB9-06	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	1.95"	.75"	.93"

PANEL MOUNT HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40AC-S3-04	40ACV-SB3-04	1/4" ID	6.4mm ID	1.90"	.75"	.93"
40AC-S3-05	40ACV-SB3-05	5/16" ID	7.9mm ID	1.90"	.75"	.93"
40AC-S3-06	40ACV-SB3-06	3/8" ID	9.5mm ID	1.90"	.75"	.93"

PANEL MOUNT PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40AC-S8-04	40ACV-SB8-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.87"	.75"	.93"
40AC-S8-06	40ACV-SB8-06	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	1.95"	.75"	.93"

IN-LINE PUSH-IN SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40AC-S17-04	40ACV-SB17-04	1/4" OD	6.4mm OD	1.93"	.75"	.93"

PANEL MOUNT PUSH-IN SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40AC-S18-04	40ACV-SB18-04	1/4" OD	6.4mm OD	1.93"	.75"	.94"

Tubing Size 1/4"- 3/8"
1/4" Flow Acetal (POM)

40AC Series Plugs

MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
40AC-PB1-04	40ACV-PB1-04	1/4" NPT	1.25"/1.65"	.63"	.63"
40AC-PB1-04BSPT	40ACV-PB1-04BSPT	1/4" BSPT	1.25"/1.65"	.63"	.63"
40AC-PB1-06	40ACV-PB1-06	3/8" NPT	1.25"/1.65"	.75"	.75"
40AC-PB1-06BSPT	40ACV-PB1-06BSPT	3/8" BSPT	1.25"/1.65"	.75"	.75"

40AC Series Plugs

Tubing Size 1/4″- 3/8″
1/4″ Flow Acetal (POM)

IN-LINE HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40AC-PB2-04	40ACV-PB2-04	1/4″ ID	6.4mm ID	1.25″/1.94″	.70″	.70″
40AC-PB2-05	40ACV-PB2-05	5/16″ ID	7.9mm ID	1.25″/1.94″	.70″	.70″
40AC-PB2-06	40ACV-PB2-06	3/8″ ID	9.5mm ID	1.25″/1.83″	.70″	.70″

IN-LINE PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40AC-PB9-04	40ACV-PB9-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.25″/1.89″	.63″	.63″
40AC-PB9-06	40ACV-PB9-06	3/8″ OD, .25″ ID	9.5mm OD, 6.4mm ID	1.40″/1.83″	.63″	.63″

PANEL MOUNT HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40AC-PB3-04	40ACV-PB3-04	1/4″ ID	6.4mm ID	1.86″/2.01″	.75″	.75″
40AC-PB3-05	40ACV-PB3-05	5/16″ ID	7.9mm ID	1.91″/2.05″	.75″	.75″
40AC-PB3-06	40ACV-PB3-06	3/8″ ID	9.5mm ID	1.86″/2.01″	.75″	.75″

PANEL MOUNT PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40AC-PB8-04	40ACV-PB8-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.77″/1.91″	.63″	.80″
40AC-PB8-06	40ACV-PB8-06	3/8″ OD, .25″ ID	9.5mm OD, 6.4mm ID	1.90″/2.04″	.63″	.80″

ELBOW HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40AC-PB4-04	40ACV-PB4-04	1/4″ ID	6.4mm ID	1.10″/1.35″	.63″	1.30″
40AC-PB4-06	40ACV-PB4-06	3/8″ ID	9.5mm ID	1.10″/1.35″	.63″	1.30″

ELBOW PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40ACX-PB10-04	40ACV-PB10-04	1/4″OD, .17″ ID	6.4mmOD, 4.3mmID	1.09″/1.19″	.63″	1.15″
40AC-PB10-06	40ACV-PB10-06	3/8″OD, .25″ ID	9.5mmOD, 6.4mmID	1.22″/1.37″	.63″	1.30″

ELBOW MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
40AC-PB16-04	40ACV-PB16-04	1/4″ NPT	1.20″/1.35″	.70″	1.47″

IN-LINE PUSH-IN PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40AC-PB17-04	40ACV-PB17-04	1/4″OD	6.4mm OD	1.81″/1.97″	.70″	.70″

PANEL MOUNT PUSH-IN PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40AC-PB18-04	40ACV-PB18-04	1/4″OD	6.4mm OD	1.88″/2.03″	.75″	.75″

END STOP PLUG

Non-Valved	Length	Width	Height
40AC-PB6	.93″	.63″	.63″

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

40PP Series Couplings

40PP Series couplings offer 1/4″ flow and are produced from medical grade gamma sterilizable polypropylene. The 40PP Series polypropylene couplings offer greater chemical resistance and they are available in both valved and non-valved configurations. These couplings are available in Legacy Almond and Modern Cool Grey colors. All 40PP couplings interconnect with all other 40AC and 40CB couplings as well as other similar industry thumb-latch type couplings.

2 STANDARD COLORS

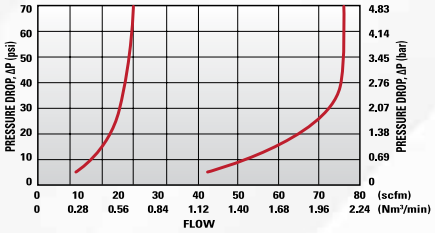
Performance Ratings:

- Operating Pressure: Vacuum to 120psi; (8.3bar)
- Temperature: 32˚F to 160˚F; (0˚C to 71˚C)
- Flow Capacity: 1/4″ Size
- Sterilization: Gamma; 50 kGy irradiation max (see technical section for more detail)

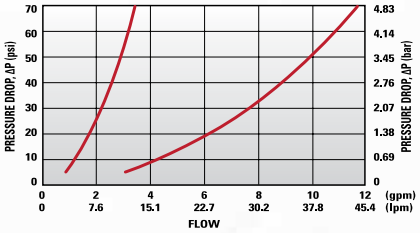
Materials & Construction:

- Bodies & Terminations: Medical Grade Polypropylene
- Internal Valves: Medical Grade Polypropylene
- Internal Valve Springs: 316 Stainless Steel
- O-rings: Peroxide-cured EPDM (others available)
- Thumb-latch: Stainless Steel
- External Springs & Pins: Stainless Steel

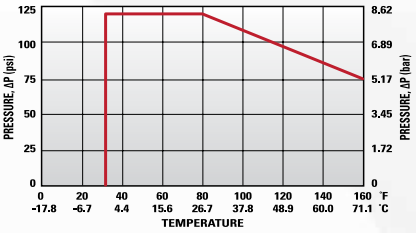
40PP Series Air Flow



40PP Series Water Flow



40PP Series Temperature



FLOW RATES

The data below shows liquid flow rates for couplings. Each coupling combination was tested at 70°F (21°C).

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

$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

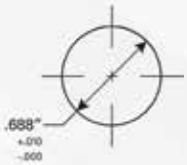
Q = Flow rate in gallons per minute
C_v = Average flow rates (see chart)
ΔP = Pressure drop across coupling (psi)
S = Specific gravity of liquid.

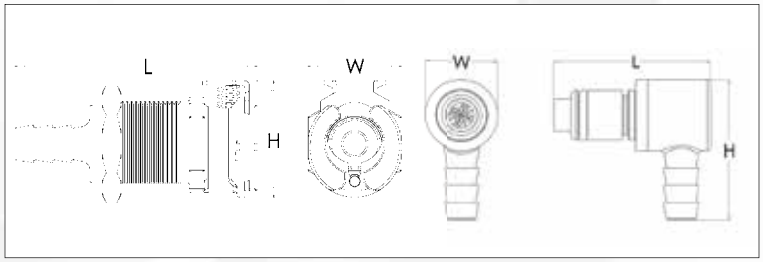
C_v Values for 40PP Series Couplings

SOCKETS	40PPV-PE2-04	40PP-PE2-04	40PPV-PE2-06	40PP-PE2-06	40PPV-PE9-06	40PPX-PE9-06	40PPV-PE1-04	40PPX-PE1-04	40PPV-PE3-04	40PP-PE3-04	40PPV-PE3-06	40PP-PE3-06
40PPV-SE2-04	0.42	0.58	0.45	0.78	0.45	0.6	0.43	0.79	0.42	0.58	0.45	0.78
40PP-S2-04	0.52	0.95	0.7	1	0.55	0.87	0.65	0.95	0.52	0.95	0.7	1
40PPV-SE2-06	0.43	0.63	0.5	0.89	0.62	0.5	0.45	0.95	0.43	0.63	0.5	0.89
40PP-S2-06	0.53	0.95	0.8	1.4	0.57	1	0.7	1.4	0.53	0.95	0.8	1.4
40PPV-SE3-04	0.42	0.58	0.45	0.78	0.45	0.6	0.43	0.79	0.42	0.58	0.45	0.78
40PP-S3-04	0.52	0.95	0.7	1	0.55	0.87	0.65	0.95	0.52	0.95	0.7	1
40PPV-SE3-06	0.43	0.63	0.5	0.89	0.62	0.5	0.45	0.95	0.43	0.63	0.5	0.89
40PP-S3-06	0.53	0.95	0.8	1.4	0.57	1	0.7	1.4	0.53	0.95	0.8	1.4
40PPV-SE1-04	0.41	0.65	0.5	0.81	0.48	0.74	0.45	0.8	0.41	0.65	0.5	0.81
40PP-S1-04	0.56	0.84	0.83	1.4	0.58	1.04	0.75	1.4	0.56	0.84	0.83	1.4
40PPV-SE1-06	0.43	0.7	0.5	1.03	0.7	0.48	0.45	0.97	0.43	0.7	0.5	1.03
40PP-S1-06	0.57	0.84	0.82	1.4	0.6	1.05	0.75	1.4	0.57	0.84	0.82	1.4

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	See Drawing	0.5″	0.05″
PLUGS	0.688″	0.3″	0.05″

PANEL NUT HEX SIZE	PANEL NUT THREAD
13/16″	11/16″ - 24 UNS





Reference Dimensions: L = Length, W = Width, H = Height

40PP Series Sockets

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

MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
40PP-S1-04	40PPV-SE1-04	1/4" NPT	1.16"	.76"	1.04"
40PP-S1-04MALD	40PPV-SE1-04MALD	1/4" NPT	1.16"	.76"	1.04"
40PP-S1-06	40PPV-SE1-06	3/8" NPT	1.16"	.76"	1.04"
40PP-S1-06MALD	40PPV-SE1-06MALD	3/8" NPT	1.16"	.76"	1.04"

IN-LINE HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40PP-S2-04	40PPV-SE2-04	1/4" ID	6.4mm ID	1.90"	.76"	1.04"
40PP-S2-04MALD	40PPV-SE2-04MALD	1/4" ID	6.4mm ID	1.90"	.76"	1.04"
40PP-S2-06	40PPV-SE2-06	3/8" ID	9.5mm ID	1.90"	.76"	1.04"
40PP-S2-06MALD	40PPV-SE2-06MALD	3/8" ID	9.5mm ID	1.90"	.76"	1.04"

IN-LINE PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40PP-S9-06	40PPV-SE9-06	3/8" OD, 1/4" ID	9.5mm OD, 6.4mm ID	1.95"	.76"	1.04"
40PP-S9-06MALD	40PPV-SE9-06MALD	3/8" OD, 1/4" ID	9.5mm OD, 6.4mm ID	1.95"	.76"	1.04"

PANEL MOUNT HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40PP-S3-04	40PPV-SE3-04	1/4" ID	6.4mm ID	1.90"	.86"	1.04"
40PP-S3-04MALD	40PPV-SE3-04MALD	1/4" ID	6.4mm ID	1.90"	.86"	1.04"
40PP-S3-06	40PPV-SE3-06	3/8" ID	9.5mm ID	1.90"	.86"	1.04"
40PP-S3-06MALD	40PPV-SE3-06MALD	3/8" ID	9.5mm ID	1.90"	.86"	1.04"

PANEL MOUNT PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40PP-S8-06	40PPV-SE8-06	3/8" OD, 1/4" ID	9.5mmOD,6.4mmID	1.95"	.86"	1.04"
40PP-S8-06MALD	40PPV-SE8-06MALD	3/8" OD, 1/4" ID	9.5mmOD,6.4mmID	1.95"	.86"	1.04"

*MALD denotes Almond coupling color.

Available in Modern Cool Grey
and Legacy Almond Color.

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937-349-4055

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

40PP Series Plugs

MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
40PPX-PE1-04	40PPV-PE1-04	1/4″ NPT	1.50″/1.65″	.63″	.63″
40PPX-PE1-04MALD	40PPV-PE1-04MALD	1/4″ NPT	1.50″/1.65″	.63″	.63″

IN-LINE HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40PP-PE2-04	40PPV-PE2-04	1/4″ ID	6.4mm ID	1.25″/1.94″	.70″	.70″
40PP-PE2-04MALD	40PPV-PE2-04MALD	1/4″ ID	6.4mm ID	1.25″/1.94″	.70″	.70″
40PP-PE2-06	40PPV-PE2-06	3/8″ ID	9.5mm ID	1.25″/1.83″	.70″	.70″
40PP-PE2-06MALD	40PPV-PE2-06MALD	3/8″ ID	9.5mm ID	1.25″/1.83″	.70″	.70″

IN-LINE PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40PPX-PE9-06	40PPV-PE9-06	3/8″ OD, 1/4″ ID	9.5mm OD, 6.4mm ID	1.68″/1.83″	.63″	.63″
40PPX-PE9-06MALD	40PPV-PE9-06MALD	3/8″ OD, 1/4″ ID	9.5mm OD, 6.4mm ID	1.68″/1.83″	.63″	.63″

PANEL MOUNT HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40PP-PE3-04	40PPV-PE3-04	1/4″ ID	6.4mm ID	1.85″/2.00″	.75″	.75″
40PP-PE3-04MALD	40PPV-PE3-04MALD	1/4″ ID	6.4mm ID	1.85″/2.00″	.75″	.75″
40PP-PE3-06	40PPV-PE3-06	3/8″ ID	9.5mm ID	1.85″/2.00″	.75″	.75″
40PP-PE3-06MALD	40PPV-PE3-06MALD	3/8″ ID	9.5mm ID	1.85″/2.00″	.75″	.75″

ELBOW HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40PPX-PE4-04	40PPV-PE4-04	1/4″ ID	6.4mm ID	1.20″/1.35″	.63″	1.30″
40PPX-PE4-04MALD	40PPV-PE4-04MALD	1/4″ ID	6.4mm ID	1.20″/1.35″	.63″	1.30″
40PPX-PE4-06	40PPV-PE4-06	3/8″ ID	9.5mm ID	1.20″/1.35″	.63″	1.30″
40PPX-PE4-06MALD	40PPV-PE4-06MALD	3/8″ ID	9.5mm ID	1.20″/1.35″	.63″	1.30″

ELBOW PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40PPX-PE10-06	40PPV-PE10-06	3/8″ OD, 1/4″ ID	9.5mmOD,6.4mmID	1.20″/1.35″	.63″	1.30″
40PPX-PE10-06MALD	40PPV-PE10-06MALD	3/8″ OD, 1/4″ ID	9.5mmOD,6.4mmID	1.20″/1.35″	.63″	1.30″

*MALD denotes Almond coupling color.

Available in Modern Cool Grey
and Legacy Almond Color.

40CB Series Couplings

Tubing Size 1/4"- 3/8"
1/4" Flow Chrome Brass

Produced in food grade chrome plated brass, these 1/4" flow size couplings are more durable and withstand higher pressures. They are available with internal shut-off valves or straight through. All 40CB couplings interconnect with all other 40AC and 40PP couplings as well as other similar industry thumb-latch type couplings.

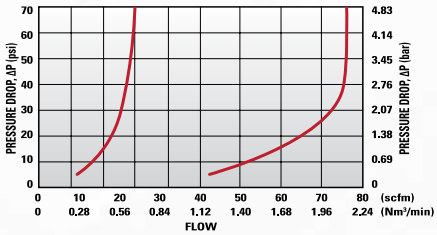
Performance Ratings:

- Operating Pressure: Vacuum to 250psi; (17.3bar)
- Temperature: -40˚F to 180˚F; (-40˚C to 82˚C)
- Flow Capacity: 1/4" Size

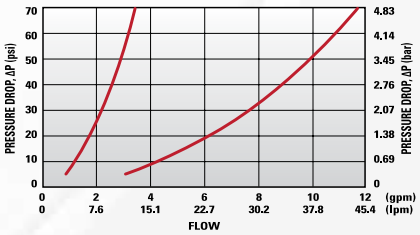
Materials & Construction:

- Bodies & Terminations: Food Grade Chrome/Brass
- Internal Valves: Acetal (POM)
- Internal Valve Springs: 316 Stainless Steel
- O-rings: FDA & NSF Grade Buna-N (others available)
- Thumb-latch: Stainless Steel
- External Springs & Pins: Stainless Steel

40CB Series Air Flow



40CB Series Water Flow



FLOW RATES

The data below shows liquid flow rates for couplings.
Each coupling combination was tested at 70F (21C).

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

$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

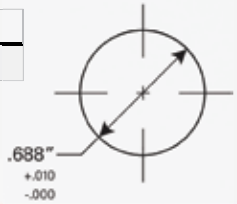
Q = Flow rate in gallons per minute
C_v = Average flow rates (see chart)
ΔP = Pressure drop across coupling (psi)
S = Specific gravity of liquid.

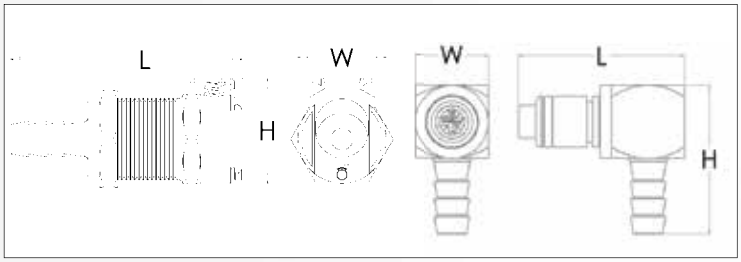
C_v Values for 40CB Series Couplings

SOCKETS	40CBV-PB2-04	40CB-PB2-04	40CBV-PB2-06	40CB-PB2-06	40CBV-PB9-04	40CB-PB9-04	40CBV-PB9-06	40CB-PB9-06	40CBV-PB1-04	40CB-PB1-04	40CBV-PB1-06	40CB-PB1-06
40CBV-SB2-04	0.42	0.58	0.45	0.78	0.31	0.38	0.45	0.6	0.43	0.79	0.45	0.75
40CB-S2-04	0.52	0.95	0.7	1	0.38	0.39	0.55	0.87	0.65	0.95	0.65	1
40CBV-SB2-06	0.43	0.63	0.5	0.89	0.33	0.39	0.62	0.5	0.45	0.95	0.5	0.92
40CB-S2-06	0.53	0.95	0.8	1.4	0.38	0.39	0.57	1	0.7	1.4	0.73	1.4
40CBV-SB3-04	0.42	0.58	0.45	0.78	0.31	0.38	0.45	0.6	0.43	0.79	0.45	0.75
40CB-S3-04	0.52	0.95	0.7	1	0.38	0.39	0.55	0.87	0.65	0.95	0.65	1
40CBV-SB3-06	0.43	0.63	0.5	0.89	0.33	0.39	0.62	0.5	0.45	0.95	0.5	0.92
40CB-S3-06	0.53	0.95	0.8	1.4	0.38	0.39	0.57	1	0.7	1.4	0.73	1.4
40CBV-SB1-04	0.41	0.65	0.5	0.81	0.31	0.35	0.48	0.74	0.45	0.8	0.45	0.8
40CB-S1-04	0.56	0.84	0.83	1.4	0.35	0.4	0.58	1.04	0.75	1.4	0.78	1.4
40CBV-SB1-06	0.43	0.7	0.5	1.03	0.3	0.36	0.7	0.48	0.45	0.97	0.48	1
40CB-S1-06	0.57	0.84	0.82	1.4	0.35	0.4	0.6	1.05	0.75	1.4	0.75	1.4

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	0.688"	0.5"	0.05"
PLUGS	0.688"	0.3"	0.05"

PANEL NUT HEX SIZE	PANEL NUT THREAD
13/16"	11/16" - 24 UNS





Reference Dimensions: L = Length, W = Width, H = Height

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Tubing Size 1/4″- 3/8″
1/4″ Flow Chrome Brass

40CB Series Sockets

MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
40CB-S1-04	40CBV-SB1-04	1/4″ NPT	1.15″	.86″	.90″
40CB-S1-04BSPT	40CBV-SB1-04BSPT	1/4″ BSPT	1.15″	.86″	.90″
40CB-S1-06	40CBV-SB1-06	3/8″ NPT	1.15″	.86″	.90″
40CB-S1-06BSPT	40CBV-SB1-06BSPT	3/8″ BSPT	1.15″	.86″	.90″

IN-LINE HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40CB-S2-04	40CBV-SB2-04	1/4″ ID	6.4mm ID	1.95″	.75″	.90″
40CB-S2-05	40CBV-SB2-05	5/16″ ID	7.9mm ID	2.00″	.75″	.90″
40CB-S2-06	40CBV-SB2-06	3/8″ ID	9.5mm ID	2.00″	.75″	.90″

IN-LINE PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40CB-S9-04	40CBV-SB9-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.87″	.75″	.90″
40CB-S9-06	40CBV-SB9-06	3/8″ OD, .25″ ID	9.5mm OD, 6.4mm ID	1.95″	.75″	.90″

PANEL MOUNT HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40CB-S3-04	40CBV-SB3-04	1/4″ ID	6.4mm ID	1.95″	.86″	.90″
40CB-S3-05	40CBV-SB3-05	5/16″ ID	7.9mm ID	2.00″	.86″	.90″
40CB-S3-06	40CBV-SB3-06	3/8″ ID	9.5mm ID	2.00″	.86″	.90″

PANEL MOUNT PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
40CB-S8-04	40CBV-SB8-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.87″	.86″	.90″
40CB-S8-06	40CBV-SB8-06	3/8″ OD, .25″ ID	9.5mm OD, 6.4mm ID	1.95″	.86″	.90″

PANEL MOUNT MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
40CB-S12-04	40CBV-SB12-04	1/4″ NPT	.87″	.90″	.80″

FEMALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
40CB-S13-04	40CBV-SB13-04	1/4″ NPT	1.15″/1.68″	.87″	.90″

MALE THREAD SOCKET (GASKET SEAL INCLUDED)

Non-Valved	Thread Size	Length	Width	Height
40CB-S3557	15/16-27	1.23″	.95″	.99″
40CB-S3562	M24 X 1	1.23″	.95″	.99″

FEMALE THREAD SOCKET (GASKET SEAL INCLUDED)

Non-Valved	Thread Size	Length	Width	Height
40CB-S3559	55/64-27	1.21″	.97″	1.01″
40CB-S3564	M22 X 1	1.21″	.97″	1.01″

40CB Series Plugs

Tubing Size 1/4"- 3/8"
1/4" Flow Chrome Brass

MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
40CB-PB1-04	40CBV-PB1-04	1/4" NPT	1.25"/1.55"	.63"	.63"
40CB-PB1-04BSPT	40CBV-PB1-04BSPT	1/4" BSPT	1.25"/1.55"	.63"	.63"
40CB-PB1-06	40CBV-PB1-06	3/8" NPT	1.25"/1.55"	.75"	.75"
40CB-PB1-06BSPT	40CBV-PB1-06BSPT	3/8" BSPT	1.25"/1.55"	.75"	.75"

FEMALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
40CB-PB13-04	40CBV-PB13-04	1/4" NPT	1.25"/1.90"	.63"	.63"

IN-LINE HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40CB-PB2-04	40CBV-PB2-04	1/4" ID	6.4mm ID	1.30"/1.85"	.63"	.63"
40CB-PB2-05	40CBV-PB2-05	5/16" ID	7.9mm ID	1.30"/1.85"	.63"	.63"
40CB-PB2-06	40CBV-PB2-06	3/8" ID	9.5mm ID	1.30"/1.85"	.63"	.63"

IN-LINE PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40CB-PB9-04	40CBV-PB9-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.21"/1.92"	.63"	.63"
40CB-PB9-06	40CBV-PB9-06	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	1.34"/2.05"	.63"	.63"

PANEL MOUNT HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40CB-PB3-04	40CBV-PB3-04	1/4" ID	6.4mm ID	1.92"/2.06"	.75"	.75"
40CB-PB3-05	40CBV-PB3-05	5/16" ID	7.9mm ID	1.96"/2.10"	.75"	.75"
40CB-PB3-06	40CBV-PB3-06	3/8" ID	9.5mm ID	1.94"/2.08"	.75"	.75"

PANEL MOUNT PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40CB-PB8-04	40CBV-PB8-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.82"/1.95"	.75"	.75"
40CB-PB8-06	40CBV-PB8-06	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	1.91"/2.05"	.75"	.75"

ELBOW HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40CB-PB4-04	40CBV-PB4-04	1/4" ID	6.4mm ID	1.28"/1.43"	.63"	1.28"
40CB-PB4-06	40CBV-PB4-06	3/8" ID	9.5mm ID	1.28"/1.43"	.63"	1.28"

ELBOW PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40CB-PB10-04	40CBV-PB10-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.29"/1.43"	.63"	1.28"
40CB-PB10-06	40CBV-PB10-06	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	1.29"/1.43"	.63"	1.28"

*Patent Pending

PANEL MOUNT HOSE BARB PLUG, NON ROTATIONAL

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40CB-PB20-04	40CBV-PB20-04	1/4" ID	6.4mm ID	1.92"/2.06"	.75"	.75"
40CB-PB20-05	40CBV-PB20-05	5/16" ID	7.9mm ID	1.96"/2.10"	.75"	.75"
40CB-PB20-06	40CBV-PB20-06	3/8" ID	9.5mm ID	1.94"/2.08"	.75"	.75"

*Patent Pending

PANEL MOUNT PTF PLUG, NON ROTATIONAL

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
40CB-PB21-04	40CBV-PB21-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.82"/1.95"	.75"	.75"
40CB-PB21-06	40CBV-PB21-06	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	1.91"/2.05"	.75"	.75"

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Tubing Size 1/8"
3/32" Flow ABS Material

42AB Series Couplings

42AB Series Dual Tube couplings offer 3/32" flow capacity and are manufactured from medical grade thermoplastic ABS material. The dual free flow path technology allows two separate fluid lines to run simultaneously all in one coupling. The thumb-latch release creates a simple one hand disconnection, for a quick disconnect, free rotating coupling. 42AB Dual Tube couplings interconnect with other similar industry Twin thumb-latch type couplings.

Performance Ratings:

- Operating Pressure: Vacuum to 120psi; (8.3bar)
- Temperature: -40°F to 180°F; (-40°C to 82°C)
- Flow Capacity: 3/32" Size

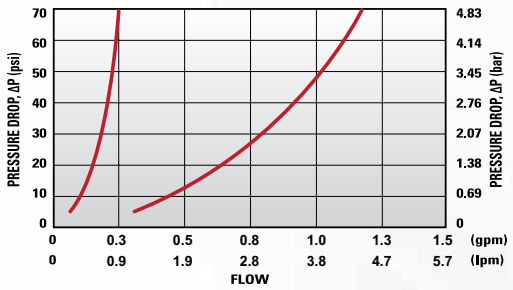
Materials & Construction:

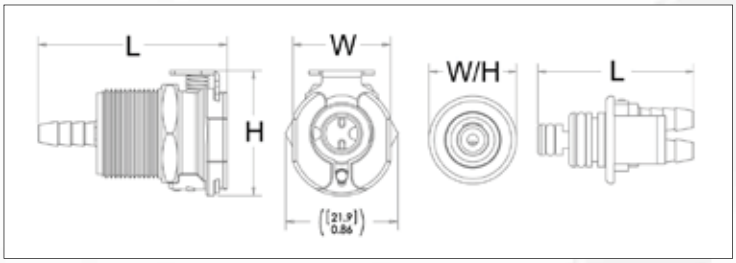
- Bodies & Terminations: Medical Grade ABS
- O-rings: Buna-N
- Thumb-latch: Stainless Steel
- External Springs & Pins: Stainless Steel

PANEL MOUNT HOSE BARB SOCKET					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
42AB-S3-02	1/8" ID	3.2mm ID	1.45"	0.75"	1.00"

IN-LINE HOSE BARB PLUG					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
42AB-PB2-02	1/8" ID	3.2mm ID	1.26"	0.70"	0.70"

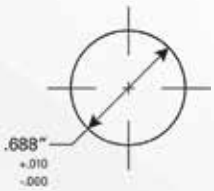
42AB Series Flow





Reference Dimensions: L = Length, W = Width, H = Height

PANEL NUT HEX SIZE	PANEL NUT THREAD
13/16"	11/16" - 24 UNS



50AC Series Couplings

Tubing Size 1/4″- 3/8″
1/4″ Flow Acetal (POM)

These 1/4″ flow size couplings are produced in a durable natural Acetal (POM) thermoplastic. They feature a more cost efficient plastic thumb-latch design. They are available in both valved and non-valved configurations. All 50AC couplings interconnect with all other 50PP and 50GP couplings as well as other similar industry thumb-latch type couplings.

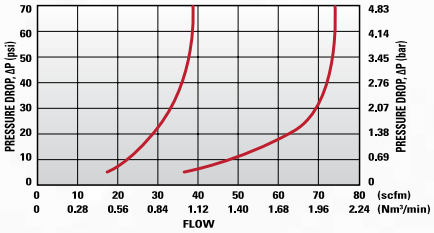
Performance Ratings:

- Operating Pressure: Vacuum to 120psi; (8.3bar)
- Temperature: -40˚F to 180˚F; (-40˚C to 82˚C)
- Flow Capacity: 1/4″ Size

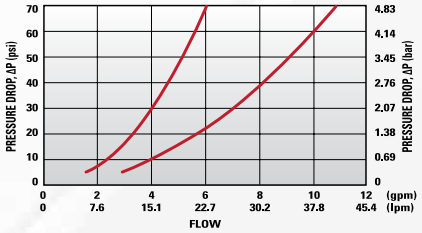
Materials & Construction:

- Bodies & Terminations: Acetal (POM)
- Internal Valves: Acetal (POM)
- Internal Valve Springs: 316 Stainless Steel
- O-rings: FDA & NSF Grade Buna-N (others available)
- Thumb-latch: Acetal (POM)

50AC Series Air Flow



50AC Series Water Flow



FLOW RATES

The data below shows liquid flow rates for couplings.
Each coupling combination was tested at 70°F (21°C).

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

$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

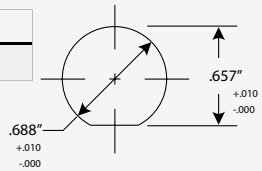
Q = Flow rate in gallons per minute
C_v = Average flow rates (see chart)
ΔP = Pressure drop across coupling (psi)
S = Specific gravity of liquid.

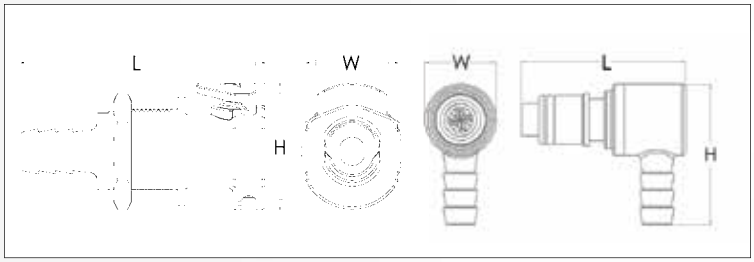
C_v Values for 50AC Series Couplings

SOCKETS	50ACV-PB2-04	50AC-PB2-04	50ACV-PB2-06	50AC-PB2-06	50ACV-PB9-04	50AC-PB9-04	50ACV-PB9-06	50AC-PB9-06	50ACV-PB1-04	50AC-PB1-04	50ACV-PB1-06	50AC-PB1-06
50ACV-SB2-04	0.42	0.58	0.45	0.78	0.31	0.38	0.45	0.6	0.43	0.79	0.45	0.75
50AC-S2-04	0.52	0.95	0.7	1	0.38	0.39	0.55	0.87	0.65	0.95	0.65	1
50ACV-SB2-06	0.43	0.63	0.5	0.89	0.33	0.39	0.62	0.5	0.45	0.95	0.5	0.92
50AC-S2-06	0.53	0.95	0.8	1.4	0.38	0.39	0.57	1	0.7	1.4	0.73	1.4
50ACV-SB3-04	0.42	0.58	0.45	0.78	0.31	0.38	0.45	0.6	0.43	0.79	0.45	0.75
50AC-S3-04	0.52	0.95	0.7	1	0.38	0.39	0.55	0.87	0.65	0.95	0.65	1
50ACV-SB3-06	0.43	0.63	0.5	0.89	0.33	0.39	0.62	0.5	0.45	0.95	0.5	0.92
50AC-S3-06	0.53	0.95	0.8	1.4	0.38	0.39	0.57	1	0.7	1.4	0.73	1.4
50ACV-SB1-04	0.41	0.65	0.5	0.81	0.31	0.35	0.48	0.74	0.45	0.8	0.45	0.8
50AC-S1-04	0.56	0.84	0.83	1.4	0.35	0.4	0.58	1.04	0.75	1.4	0.78	1.4
50ACV-SB1-06	0.43	0.7	0.5	1.03	0.3	0.36	0.7	0.48	0.45	0.97	0.48	1
50AC-S1-06	0.57	0.84	0.82	1.4	0.35	0.4	0.6	1.05	0.75	1.4	0.75	1.4

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	See Drawing	0.5″	0.05″
PLUGS	0.688″	0.3″	0.05″

PANEL NUT HEX SIZE	PANEL NUT THREAD
13/16″	11/16″ - 24 UNS





Reference Dimensions: L = Length, W = Width, H = Height

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Tubing Size 1/4"- 3/8"
1/4" Flow Acetal (POM)

50AC Series Sockets

MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
50AC-S1-04	50ACV-SB1-04	1/4" NPT	1.40"	.75"	.94"
50AC-S1-06	50ACV-SB1-06	3/8" NPT	1.40"	.75"	.94"

MALE THREAD SOCKET, WITH LATCH GUARD

Non-Valved	Valved	Thread Size	Length	Width	Height
50AC-S35107	50ACV-S35107	1/4" NPT	1.40"	.75"	.94"

IN-LINE HOSE BARB SOCKET, SHORT BODY

Non-Valved	Tube Size	Metric Tube	Length	Width	Height
50AC-S2-04	1/4" ID	6.4mm ID	1.35"	.75"	.94"
50AC-S2-06	3/8" ID	9.5mm ID	1.35"	.75"	.94"

IN-LINE HOSE BARB SOCKET, LONG BODY

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50AC-S2-04LB	50ACV-SB2-04	1/4" ID	6.4mm ID	2.02"	.75"	.94"
50AC-S2-05LB	50ACV-SB2-05	5/16"	7.9mm ID	2.02"	.75"	.94"
50AC-S2-06LB	50ACV-SB2-06	3/8" ID	9.5mm ID	2.02"	.75"	.94"

IN-LINE PTF SOCKET, LONG BODY

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50AC-S9-04LB	50ACV-SB9-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.95"	.75"	.93"
50AC-S9-06LB	50ACV-SB9-06	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	2.05"	.75"	.93"

PANEL MOUNT HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50AC-S3-04	50ACV-SB3-04	1/4" ID	6.4mm ID	2.10"	.90"	1.05"
50AC-S3-05	50ACV-SB3-05	5/16" ID	7.9mm ID	2.10"	.90"	1.05"
50AC-S3-06	50ACV-SB3-06	3/8" ID	9.5mm ID	2.10"	.90"	1.05"

PANEL MOUNT PTF SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50AC-S8-04	50ACV-SB8-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.97"	.90"	1.05"
50AC-S8-06	50ACV-SB8-06	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	2.10"	.90"	1.05"

IN-LINE PUSH-IN SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50AC-S17-04	50ACV-SB17-04	1/4" OD	6.4mm OD	2.06"	.76"	.94"

PANEL MOUNT PUSH-IN SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50AC-S18-04	50ACV-SB18-04	1/4" OD	6.4mm OD	2.09"	.87"	1.05"

50AC Series Plugs

Tubing Size 1/4"- 3/8"
1/4" Flow Acetal (POM)

MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
50AC-PB1-04	50ACV-PB1-04	1/4" NPT	1.40"/1.75"	.55"	.55"
50AC-PB1-06	50ACV-PB1-06	3/8" NPT	1.40"/1.60"	.75"	.75"

IN-LINE HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
50AC-PB2-04	50ACV-PB2-04	1/4" ID	6.4mm ID	1.35"/2.05"	.70"	.70"
50AC-PB2-05	50ACV-PB2-05	5/16" ID	7.9mm ID	1.93"/2.03"	.70"	.70"
50AC-PB2-06	50ACV-PB2-06	3/8" ID	9.5mm ID	1.35"/1.90"	.70"	.70"

IN-LINE PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
50AC-PB9-04	50ACV-PB9-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.80"/1.96"	.63"	.63"
50AC-PB9-06	50ACV-PB9-06	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	1.74"/1.89"	.63"	.63"

ELBOW HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
50AC-PB4-04	50ACV-PB4-04	1/4" ID	6.4mm ID	1.20"/1.45"	.63"	1.28"
50AC-PB4-06	50ACV-PB4-06	3/8" ID	9.5mm ID	1.20"/1.48"	.63"	1.28"

ELBOW PTF PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
50ACX-PB10-04	50ACV-PB10-04	1/4" OD, .17" ID	6.4mm OD, 4.3mm ID	1.33"/1.48"	.63"	1.15"
50AC-PB10-06	50ACV-PB10-06	3/8" OD, .25" ID	9.5mm OD, 6.4mm ID	1.34"/1.50"	.63"	1.30"

ELBOW MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L (nv/v)	Width	Height
50AC-PB16-04	50ACV-PB16-04	1/4" NPT	1.29"/1.45"	.70"	1.47"

IN LINE PUSH-IN PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L (nv/v)	Width	Height
50AC-PB17-04	50ACV-PB17-04	1/4" OD	6.4mm OD	1.91"/2.08"	.70"	.70"

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

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.

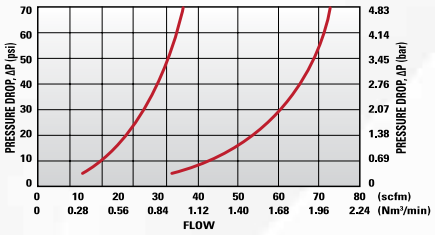
Performance Ratings:

- Operating Pressure: Vacuum to 100 psi; (7.2bar)
- Temperature: 32°F to 160°F (0°C to 71°C)
- Flow Capacity: 1/4" Size

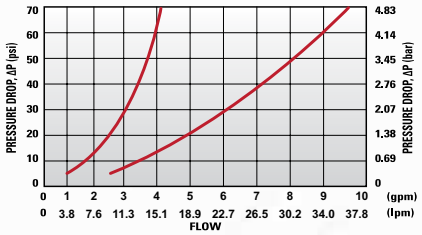
Materials & Construction:

- Bodies & Terminations: Medical Grade Polypropylene
- Internal Valves: Medical Grade Polypropylene
- Internal Valve Springs: 316 Stainless Steel
- External Springs & Pins: Stainless Steel
- O-rings: Peroxide-cured EPDM (others available)
- Thumb-latch: Medical Grade Polypropylene

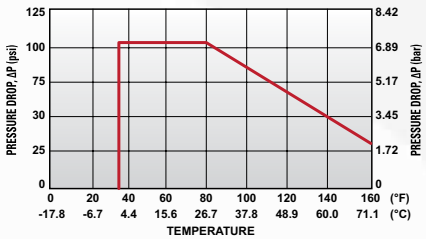
50PP Series Air Flow



50PP Series Water Flow



50PP Series Temperature



FLOW RATES

The data below shows liquid flow rates for couplings.
Each coupling combination was tested at 70°F (21°C).

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

$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

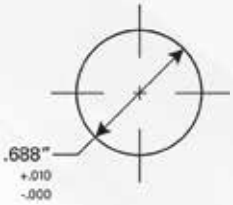
Q = Flow rate in gallons per minute
C_v = Average flow rates (see chart)
ΔP = Pressure drop across coupling (psi)
S = Specific gravity of liquid.

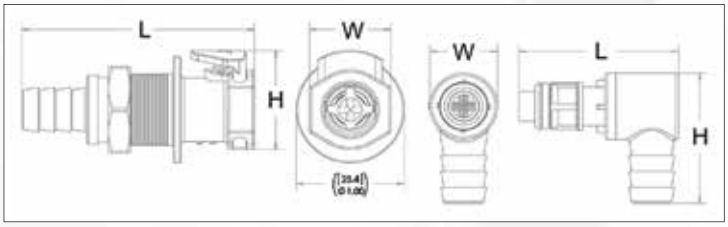
C_V Values for 50PP Series Couplings

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

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	See Drawing	0.5"	0.05"

PANEL NUT HEX SIZE	PANEL NUT THREAD
13/16"	11/16" - 24 UNS





Reference Dimensions: L = Length, W = Width, H = Height

50PP Series Socket

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

IN-LINE HOSE BARB SOCKET					
Valved	Tube Size	Metric Tube	Length	Width	Height
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	Metric Tube	Length	Width	Height
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	Valved	Thread Size	Length	Width	Height
50PPX-PE1-04	50PPV-PE1-04	1/4″ NPT	1.75″	0.63″	0.63″
50PPX-PE1-06	50PPV-PE1-06	3/8″ NPT	1.75″	0.75″	0.75″

IN-LINE HOSE BARB PLUG						
Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
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						
Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	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″

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Tubing Size 1/4″- 3/8″
1/4″ Flow Acetal (POM)

50BAC Series Breakaway Couplings

Patented breakaway connectors improve safety by allowing users to make a fast and leakfree disconnect with a simple pull of the coupling. The 50BAC Series couplings utilize a new patented design that facilitates two methods of disconnects. These innovative couplings are designed to disconnect when pull force is applied to the coupling or the user can simply depress the thumb-latch. 50BAC couplings interconnect with all standard 50AC and 50GP Plugs allowing for reverse field compatibility.

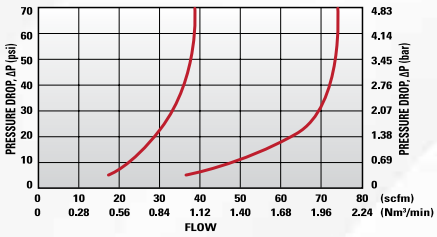
Performance Ratings:

- Operating Pressure: 0psi to 20psi
- Temperature: 0˚F to 180˚F; (-18˚C to 82˚C)
- Flow Capacity: 1/4″ Size

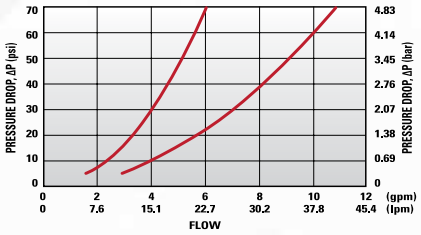
Materials & Construction:

- Bodies & Terminations: Acetal (POM)
- Internal Valves: Acetal (POM)
- Internal Valve Springs: 316 Stainless Steel
- O-rings: FDA & NSF Grade Buna-N (others available)
- Thumb-latch: Acetal (POM)

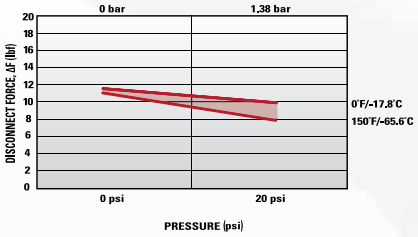
50BAC Series Air Flow



50BAC Series Water Flow



50BAC DISCONNECT FORCE



FLOW RATES

The data below shows liquid flow rates for couplings.
Each coupling combination was tested at 70°F (21°C).

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

$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

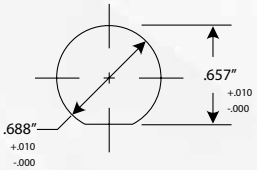
Q = Flow rate in gallons per minute
C_v = Average flow rates (see chart)
ΔP = Pressure drop across coupling (psi)
S = Specific gravity of liquid.

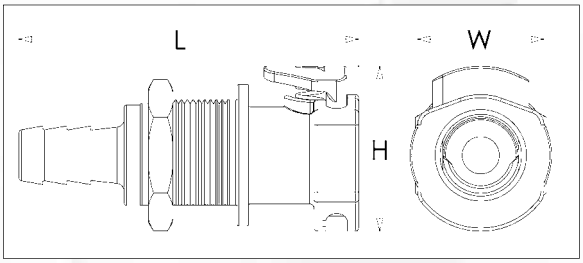
C_v Values for 50BAC Series Couplings

SOCKETS	50ACV-PB2-04	50AC-PB2-04	50ACV-PB2-06	50AC-PB2-06	50ACV-PB9-04	50AC-PB9-04	50ACV-PB9-06	50AC-PB9-06	50ACV-PB1-04	50AC-PB1-04	50ACV-PB1-06	50AC-PB1-06
50BACV-SB2-04	0.42	0.58	0.45	0.78	0.31	0.38	0.45	0.6	0.43	0.79	0.45	0.75
50BAC-S2-04	0.52	0.95	0.7	1	0.38	0.39	0.55	0.87	0.65	0.95	0.65	1
50BACV-SB2-06	0.43	0.63	0.5	0.89	0.33	0.39	0.62	0.5	0.45	0.95	0.5	0.92
50BAC-S2-06	0.53	0.95	0.8	1.4	0.38	0.39	0.57	1	0.7	1.4	0.73	1.4
50BACV-SB3-04	0.42	0.58	0.45	0.78	0.31	0.38	0.45	0.6	0.43	0.79	0.45	0.75
50BAC-S3-04	0.52	0.95	0.7	1	0.38	0.39	0.55	0.87	0.65	0.95	0.65	1
50BACV-SB3-06	0.43	0.63	0.5	0.89	0.33	0.39	0.62	0.5	0.45	0.95	0.5	0.92
50BAC-S3-06	0.53	0.95	0.8	1.4	0.38	0.39	0.57	1	0.7	1.4	0.73	1.4
50BACV-SB1-04	0.41	0.65	0.5	0.81	0.31	0.35	0.48	0.74	0.45	0.8	0.45	0.8
50BAC-S1-04	0.56	0.84	0.83	1.4	0.35	0.4	0.58	1.04	0.75	1.4	0.78	1.4
50BACV-SB1-06	0.43	0.7	0.5	1.03	0.3	0.36	0.7	0.48	0.45	0.97	0.48	1
50BAC-S1-06	0.57	0.84	0.82	1.4	0.35	0.4	0.6	1.05	0.75	1.4	0.75	1.4

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	See Drawing	0.5″	0.05″
PLUGS	0.688″	0.3″	0.05″

PANEL NUT HEX SIZE	PANEL NUT THREAD
13/16″	11/16″ - 24 UNS





Reference Dimensions: L = Length, W = Width, H = Height

50BAC Series Breakaway Sockets

Tubing Size 1/4″- 3/8″
1/4″ Flow Acetal (POM)

MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
50BAC-S1-04	50BACV-SB1-04	1/4″ NPT	1.40″	.75″	.94″
50BAC-S1-06	50BACV-SB1-06	3/8″ NPT	1.40″	.75″	.94″

IN-LINE HOSE BARB SOCKET, SHORT BODY

Non-Valved	Tube Size	Metric Tube	Length	Width	Height
50BAC-S2-04	1/4″ ID	6.4mm ID	1.35″	.75″	.94″
50BAC-S2-06	3/8″ ID	9.5mm ID	1.35″	.75″	.94″

IN-LINE HOSE BARB SOCKET, LONG BODY

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50BAC-S2-04LB	50BACV-SB2-04	1/4″ ID	6.4mm ID	2.02″	.75″	.94″
50BAC-S2-05LB	50BACV-SB2-05	5/16″ ID	7.9mm ID	2.02″	.75″	.94″
50BAC-S2-06LB	50BACV-SB2-06	3/8″ ID	9.5mm ID	2.02″	.75″	.94″

IN-LINE PTF SOCKET, LONG BODY

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50BAC-S9-04LB	50BACV-SB9-04	1/4″ OD, .17″ ID	6.4mm OD, 4.3mm ID	1.95″	.75″	.93″
50BAC-S9-06LB	50BACV-SB9-06	3/8″ OD, .25″ ID	9.5mm OD, 6.4mm ID	2.05″	.75″	.93″

PANEL MOUNT HOSE BARB SOCKET (GASKET SOLD SEPARATELY)

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50BAC-S3-04	50BACV-SB3-04	1/4″ ID	6.4mm ID	2.10″	.90″	1.05″
50BAC-S3-05	50BACV-SB3-05	5/16″ ID	7.9mm ID	2.10″	.90″	1.05″
50BAC-S3-06	50BACV-SB3-06	3/8″ ID	9.5mm ID	2.10″	.90″	1.05″

PANEL MOUNT PTF SOCKET (GASKET SOLD SEPARATELY)

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50BAC-S8-04	50BACV-SB8-04	1/4″ OD, .17″ ID	6.4mmOD,4.3mmID	1.97″	.90″	1.05″
50BAC-S8-06	50BACV-SB8-06	3/8″ OD, .25″ ID	9.5mmOD,6.4mmID	2.10″	.90″	1.05″

PANEL MOUNT SOCKET SEALING GASKET

Part No.	Material	Diameter	Thickness
C11027	Buna-N	0.88″ OD	0.050″
C11073	EPDM	0.88″ OD	0.050″

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Tubing Size 1/4″- 3/8″
1/4″ Flow Glass Filled Polypropylene

50GP Series Socket

50GP Series couplings are manufactured from a high performance glass filled polypropylene. With excellent chemical resistance properties, these couplings are well suited for applications in acid and chemical transfer. All 50GP couplings interconnect with the 50AC Series product range.

Performance Ratings:

- Operating Pressure: Vacuum to 120psi; (8.3bar)
- Temperature: -40°F to 180°F; (-40°C to 82°C)
- Flow Capacity: 1/4″ Size

Materials & Construction:

- Bodies & Terminations: Glass Filled Polypropylene
- Thumb-latch: Acetal (POM)
- Springs: Stainless Steel
- O-rings: EPDM (others available)
- Internal Valves: Acetal (POM)

MALE THREAD SOCKET

Non-Valved	Thread Size	Length	Width	Height
50GP-S1-04	1/4″ NPT	1.40″	.75″	.93″

IN-LINE HOSE BARB SOCKET, SHORT BODY

Non-Valved	Tube Size	Metric Tube	Length	Width	Height
50GP-S5-04	1/4″ ID	6.4mm ID	1.35″	.75″	.93″
50GP-S5-06	3/8″ ID	9.5mm ID	1.35″	.75″	.93″

IN-LINE HOSE BARB SOCKET, LONG BODY

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
50GP-S5-06LB	50GPV-SF5-06	3/8″ ID	9.5mm ID	2.00″	.83″	.94″

ELBOW HOSE BARB SOCKET

Non-Valved	Tube Size	Metric Tube	Length	Width	Height
50GP-S7-06	3/8″ ID	9.5mm ID	1.23″	.75″	1.50″

50GP Series Plug

Tubing Size 1/4″- 3/8″
1/4″ Flow Glass Filled Polypropylene

MALE THREAD PLUG				
Non-Valved	Thread Size	Length	Width	Height
50GP-PF1-04	1/4″ NPT	1.35″	.62″	.62″

IN-LINE HOSE BARB PLUG					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
50GP-PF5-04	1/4″ ID	6.4mm ID	1.35″	.62″	.62″
50GP-PF5-06	3/8″ ID	9.5mm ID	1.35″	.62″	.62″

ELBOW HOSE BARB PLUG					
Non-Valved	Tube Size	Metric Tube	Length	Width	Height
50GP-PF7-06	3/8″ ID	9.5mm ID	1.25″	.62″	1.26″

END STOP PLUG			
Non-Valved	Length	Width	Height
50GP-PF6	1.20″	.69″	.69″

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

60PP Series Couplings

These New 60PP Series couplings bring the highest available 3/8" flow with both valved and non-valved configurations. They are manufactured from medical grade, gamma sterilizable polypropylene. The cost efficient high flow couplings offer a larger, more robust thumb-latch and greater chemical resistance. The New and Improved Panel Mount couplings offer a stronger, more reliable design for thicker wall panels and other various applications. All 60PP couplings interconnect with all other 60 Series couplings as well as other similar industry thumb-latch type high flow couplings.

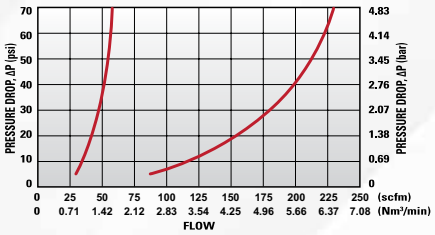
Performance Ratings:

- Operating Pressure: Vacuum to 60 psi; (4.2bar)
- Temperature: 32°F to 160°F (0°C to 71°C)
- Flow Capacity: 3/8" Size

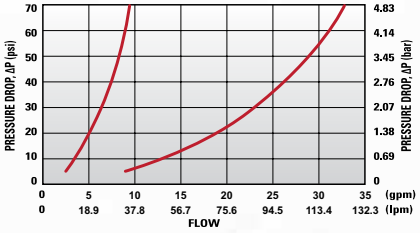
Materials & Construction:

- Bodies & Terminations: Medical Grade Polypropylene
- Internal Valves: Medical Grade Polypropylene
- Internal Valve Springs: 316 Stainless Steel
- External Springs & Pins: Stainless Steel
- O-rings: Peroxide-cured EPDM (others available)
- Thumb-latch: Medical Grade Polypropylene

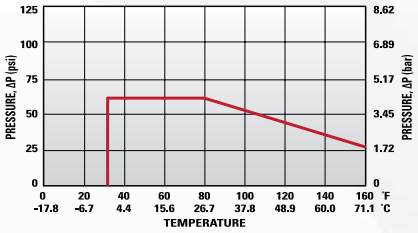
60PP Series Air Flow



60PP Series Water Flow



60PP Series Temperature



FLOW RATES

The data below shows liquid flow rates for couplings. Each coupling combination was tested at 70°F (21°C).

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

$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

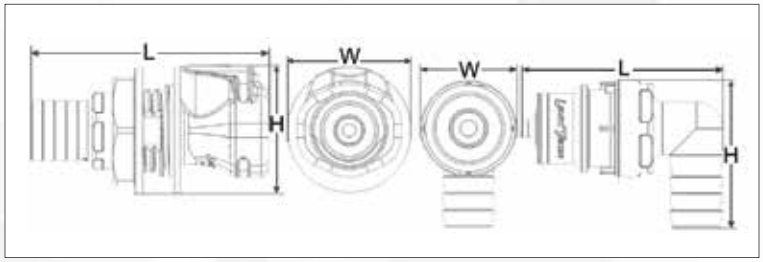
Q = Flow rate in gallons per minute
C_v = Average flow rates (see chart)
ΔP = Pressure drop across coupling (psi)
S = Specific gravity of liquid.

C_v Values for 60PS Series Couplings

SOCKETS	60PP-PE2-06	60PPV-PE2-06	60PP-PE2-08	60PPV-PE2-06	60PP-PE4-06	60PPV-PE4-06	60PP-PE4-08	60PPV-PE4-08	60PP-PE1-06	60PPV-PE1-06	60PP-PE1-08	60PPV-PE1-08	60PP-PE2-12	60PPV-PE2-12
60PPV-SE1-06	1.27	1.27	1.62	1.51	1.14	1.14	1.46	1.36	1.80	1.58	1.70	1.65	-	-
60PPV-SE1-08	1.28	1.34	1.62	1.51	1.15	1.24	1.46	1.36	1.81	1.54	1.72	1.56	-	-
60PPV-SE3-06	1.07	1.00	1.17	1.14	0.96	0.90	1.05	1.03	1.33	1.26	1.30	1.24	-	-
60PPV-SE3-08	1.25	1.23	1.61	1.52	1.13	1.11	1.45	1.37	1.79	1.60	1.68	1.56	-	-
60PPV-SE2-06	1.07	1.00	1.17	1.14	0.96	0.90	1.05	1.03	1.33	1.26	1.30	1.24	-	-
60PPV-SE2-08	1.25	1.23	1.61	1.52	1.13	1.11	1.45	1.37	1.79	1.60	1.68	1.56	-	-
60PP-S2-12	-	-	-	-	-	-	-	-	-	-	-	-	3.94	-
60PPV-SE2-12	-	-	-	-	-	-	-	-	-	-	-	-	-	2.04

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	See Drawing	0.3"	0.03"
PLUGS	1.21"	0.3"	0.03"

PANEL NUT HEX SIZE
1.375"



Reference Dimensions: L = Length, W = Width, H = Height

60PP Series Sockets

Tubing Size 3/8″-3/4″
3/8″ Flow Polypropylene

MALE THREAD SOCKET

Non-Valved	Valved	Thread Size	Length	Width	Height
60PP-S1-06	60PPV-SE1-06	3/8″ NPT	2.78″	1.36″	1.44″
60PP-S1-08	60PPV-SE1-08	1/2″ NPT	2.93″	1.36″	1.44″
60PP-S1-12	60PPV-SE1-12	3/4″ NPT	3.13	1.36″	1.44″

IN-LINE HOSE BARB SOCKET

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
60PP-S2-06	60PPV-SE2-06	3/8″ ID	9.5mm ID	2.78″	1.36″	1.44″
60PP-S2-08	60PPV-SE2-08	1/2″ ID	12.7mm ID	2.88″	1.36″	1.44″
60PP-S2-12	60PPV-SE2-12	3/4″ ID	19.0mm ID	2.93″	1.36″	1.44″

PANEL MOUNT HOSE BARB SOCKET (GASKET SEAL INCLUDED)

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
60PP-S3-06	60PPV-SE3-06	3/8″ ID	9.5mm ID	2.86″	1.62″	1.65″
60PP-S3-08	60PPV-SE3-08	1/2″ ID	12.7mm ID	3.03″	1.62″	1.65″
60PP-S3-12	60PPV-SE3-12	3/4″ ID	19.0mm ID	3.08″	1.62″	1.65″

PANEL MOUNT HOSE BARB ELBOW SOCKET (GASKET SEAL INCLUDED)

Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
60PP-S22-06	60PPV-SE22-06	3/8″ ID	9.5mm ID	2.96″	1.62″	1.73″
60PP-S22-08	60PPV-SE22-08	1/2″ ID	12.7mm ID	2.96″	1.62″	1.83″

PANEL MOUNT SEALING GASKET

Part No.	Material	Diameter	Thickness
C11416	EPDM	1.62″ OD	0.06″

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60PP Series Plugs

MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
60PP-PE1-06	60PPV-PE1-06	3/8″ NPT	1.87″/2.01″	1.14″	1.00″
60PP-PE1-08	60PPV-PE1-08	1/2″ NPT	2.02″/2.16″	1.14″	1.00″
60PP-PE1-12	60PPV-PE1-12	3/4″ NPT	2.22″/2.36″	1.21″	1.05″

IN-LINE HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
60PP-PE2-06	60PPV-PE2-06	3/8″ ID	9.5mm ID	1.87″/2.01″	1.00″	1.00″
60PP-PE2-08	60PPV-PE2-08	1/2″ ID	12.7mm ID	1.97″/2.11″	1.00″	1.00″
60PP-PE2-12	60PPV-PE2-12	3/4″ ID	19.0mm ID	2.02″/2.16″	1.00″	1.00″

PANEL MOUNT HOSE BARB PLUG (GASKET SEAL INCLUDED)

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
60PP-PE3-06	60PPV-PE3-06	3/8″ ID	9.5mm ID	2.74″/2.88″	1.62″	1.62″
60PP-PE3-08	60PPV-PE3-08	1/2″ ID	12.7mm ID	2.84″/2.98″	1.62″	1.62″
60PP-PE3-12	60PPV-PE3-12	3/4″ ID	19.0mm ID	2.89″/3.03″	1.62″	1.62″

PANEL MOUNT HOSE BARB ELBOW PLUG (GASKET SEAL INCLUDED)

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
60PP-PE22-06	60PPV-PE22-06	3/8″ ID	9.5mm ID	2.86″/3.00″	1.62″	1.73″
60PP-PE22-08	60PPV-PE22-08	1/2″ ID	12.7mm ID	2.86″/3.00″	1.62″	1.83″

ELBOW HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
60PP-PE4-06	60PPV-PE4-06	3/8″ ID	9.5mm ID	1.94″/2.08″	1.00″	1.40″
60PP-PE4-08	60PPV-PE4-08	1/2″ ID	12.7mm ID	1.94″/2.08″	1.00″	1.50″

60PS Series Couplings

Tubing Size 3/8"- 3/4"
3/8" Flow Polysulfone

Produced in high performance thermoplastic Udel® Polysulfone, these 3/8" flow size couplings are more durable and stable at higher temperatures. The 60PS Series couplings offer a new and improved Panel Mount design that has a more reliable, thumb-latch which makes it more durable, easier and faster to use. All 60PS couplings interconnect with all other 60 Series couplings as well as other similar industry thumb-latch type high flow couplings.

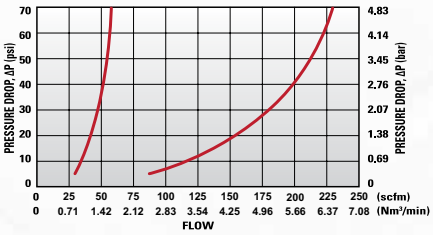
Performance Ratings:

- Operating Pressure: Vacuum to 125 psi; (8.6bar)
- Temperature: -40°F to 280°F (-40°C to 138°C)
- Flow Capacity: 3/8" Size

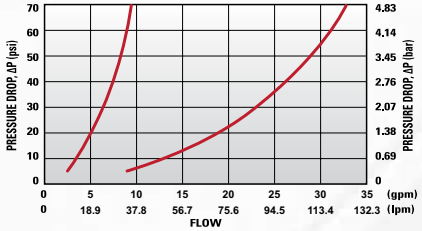
Materials & Construction:

- Bodies & Terminations: Udel® Polysulfone
- Internal Valves: Udel® Polysulfone
- Internal Valve Springs: 316 Stainless Steel
- External Springs & Pins: Stainless Steel
- O-rings: Peroxide-cured EPDM (others available)
- Thumb-latch: Udel® Polysulfone

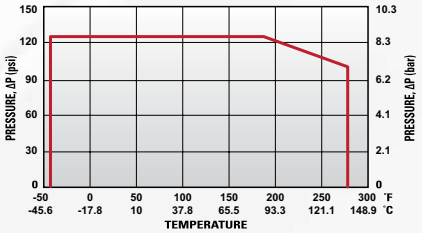
60PS Series Air Flow



60PS Series Water Flow



60PS Series Temperature



FLOW RATES

The data below shows liquid flow rates for couplings.
Each coupling combination was tested at 70°F (21°C).

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

$$Q = C_v \sqrt{\frac{\Delta P}{S}}$$

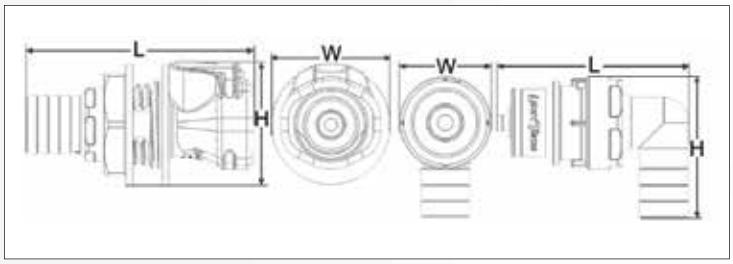
Q = Flow rate in gallons per minute
C_v = Average flow rates (see chart)
ΔP = Pressure drop across coupling (psi)
S = Specific gravity of liquid.

C_v Values for 60PS Series Couplings

SOCKETS	60PS-PE2-06	60PSV-PE2-06	60PS-PE2-08	60PSV-PE2-06	60PS-PE4-06	60PSV-PE4-06	60PS-PE4-08	60PSV-PE4-08	60PS-PE1-06	60PSV-PE1-06	60PS-PE1-08	60PSV-PE1-08	60PS-PE2-12	60PSV-PE2-12
60PSV-SE1-06	1.27	1.27	1.62	1.51	1.14	1.14	1.46	1.36	1.80	1.58	1.70	1.65	-	-
60PSV-SE1-08	1.28	1.34	1.62	1.51	1.15	1.24	1.46	1.36	1.81	1.54	1.72	1.56	-	-
60PSV-SE3-06	1.07	1.00	1.17	1.14	0.96	0.90	1.05	1.03	1.33	1.26	1.30	1.24	-	-
60PSV-SE3-08	1.25	1.23	1.61	1.52	1.13	1.11	1.45	1.37	1.79	1.60	1.68	1.56	-	-
60PSV-SE2-06	1.07	1.00	1.17	1.14	0.96	0.90	1.05	1.03	1.33	1.26	1.30	1.24	-	-
60PSV-SE2-08	1.25	1.23	1.61	1.52	1.13	1.11	1.45	1.37	1.79	1.60	1.68	1.56	-	-
60PS-S2-12	-	-	-	-	-	-	-	-	-	-	-	-	3.94	-
60PSV-SE2-12	-	-	-	-	-	-	-	-	-	-	-	-	-	2.04

	PANEL OPENING	MAX PANEL THICKESS	MIN PANEL THICKNESS
SOCKETS	See Drawing	0.3"	0.03"
PLUGS	1.21"	0.3"	0.03"

PANEL NUT HEX SIZE
1.375"



Reference Dimensions: L = Length, W = Width, H = Height

www.atp4fluid.com
937-349-4055

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

60PS Series Sockets

MALE THREAD SOCKET					
Non-Valved	Valved	Thread Size	Length	Width	Height
60PS-S1-06	60PSV-SE1-06	3/8" NPT	2.78"	1.36"	1.44"
60PS-S1-08	60PSV-SE1-08	1/2" NPT	2.93"	1.36"	1.44"

IN-LINE HOSE BARB SOCKET						
Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
60PS-S2-06	60PSV-SE2-06	3/8" ID	9.5mm ID	2.82"	1.36"	1.44"
60PS-S2-08	60PSV-SE2-08	1/2" ID	12.7mm ID	2.92"	1.36"	1.44"
60PS-S2-12	60PSV-SE2-12	3/4" ID	19.0mm ID	2.97"	1.36"	1.44"

PANEL MOUNT HOSE BARB SOCKET (GASKET SEAL INCLUDED)						
Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
60PS-S3-06	60PSV-SE3-06	3/8" ID	9.5mm ID	2.90"	1.62"	1.65"
60PS-S3-08	60PSV-SE3-08	1/2" ID	12.7mm ID	3.07"	1.62"	1.65"
60PS-S3-12	60PSV-SE3-12	3/4" ID	19.0mm ID	3.12"	1.62"	1.65"

PANEL MOUNT HOSE BARB ELBOW SOCKET (GASKET SEAL INCLUDED)						
Non-Valved	Valved	Tube Size	Metric Tube	Length	Width	Height
60PS-S22-06	60PSV-SE22-06	3/8" ID	9.5mm ID	2.96"	1.62"	1.73"
60PS-S22-08	60PSV-SE22-08	1/2" ID	12.7mm ID	2.96"	1.62"	1.83"

PANEL MOUNT SEALING GASKET			
Part No.	Material	Diameter	Thickness
C11416	EPDM	1.62" OD	0.06"

60PS Series Plugs

Tubing Size 1/4″- 3/8″
3/8″ Flow Polysulfone

MALE THREAD PLUG

Non-Valved	Valved	Thread Size	L(nv/v)	Width	Height
60PS-PE1-06	60PSV-PE1-06	3/8″ NPT	2.82″/2.92″	1.14″	1.00″
60PS-PE1-08	60PSV-PE1-08	1/2″ NPT	2.82″/2.92″	1.14″	1.00″

IN-LINE HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
60PS-PE2-06	60PSV-PE2-06	3/8″ ID	9.5mm ID	1.91″/2.05″	1.00″	1.00″
60PS-PE2-08	60PSV-PE2-08	1/2″ ID	12.7mm ID	2.01″/2.15″	1.00″	1.00″
60PS-PE2-12	60PSV-PE2-12	3/4″ ID	19.0mm ID	2.01″/2.20″	1.00″	1.00″

PANEL MOUNT HOSE BARB PLUG (GASKET SEAL INCLUDED)

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
60PS-PE3-06	60PSV-PE3-06	3/8″ ID	9.5mm ID	2.78″/2.92″	1.62″	1.62″
60PS-PE3-08	60PSV-PE3-08	1/2″ ID	12.7mm ID	2.88″/3.02″	1.62″	1.62″
60PS-PE3-12	60PSV-PE3-12	3/4″ ID	19.0mm ID	2.93″/3.07″	1.62″	1.62″

PANEL MOUNT HOSE BARB ELBOW PLUG (GASKET SEAL INCLUDED)

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
60PS-PE22-06	60PSV-PE22-06	3/8″ ID	9.5mm ID	2.86″/3.00″	1.62″	1.73″
60PS-PE22-08	60PSV-PE22-08	1/2″ ID	12.7mm ID	2.86″/3.00″	1.62″	1.83″

ELBOW HOSE BARB PLUG

Non-Valved	Valved	Tube Size	Metric Tube	L(nv/v)	Width	Height
60PS-PE4-06	60PSV-PE4-06	3/8″ ID	9.5mm ID	1.98″/2.12″	1.00″	1.43″
60PS-PE4-08	60PSV-PE4-08	1/2″ ID	12.7mm ID	1.98″/2.12″	1.00″	1.53″

Tubing Size 1/2"- 3/4"
1/2" Flow Glass Filled Polypropylene

65GP Series Socket

65GP Series couplings offer 1/2" flow capacity and are manufactured from a high performance glass filled polypropylene. 65GP couplings have a full flow, non-valved, smooth internal bore that allows for maximum flow with minimal turbulence. 65GP couplings are extremely durable and are well suited for applications that require chemical resistance. 65GP Series couplings interconnect with and are compatible with many other plastic latch type couplings.

Features:

- Audible "click" when connected
- Connects with other plastic latch type couplings
- Extremely durable
- Integral end terminations
- Small and compact
- One hand operation
- Resistant to acids and chemicals
- Latch guard eliminates accidental disconnects
- Stainless steel latch spring
- Large push button

Performance Ratings:

- Operating Pressure: Vacuum to 120psi; (8.3bar)
- Temperature: -40°F to 180°F; (-40C to 82C)
- Flow Capacity: 1/2" Size

Materials & Construction:

- Bodies & Terminations: Glass Filled Polypropylene
- Thumb-latch: Acetal copolymer
- Springs: Stainless Steel
- O-rings: EPDM (others available)

IN-LINE SOCKET				
Non-Valved	Tube Size	Length	Width	Height
65GP-S2-12	3/4" H.B.	2.93"	1.37"	1.45"

Tubing Size 1/2"- 3/4"
1/2" Flow Glass Filled Polypropylene

65GP Series Plug

MALE THREAD PLUG				
Non-Valved	Thread Size	Length	Width	Height
65GP-PF1-08	1/2" NPT	1.95"	1.00"	1.00"

IN-LINE PLUG				
Non-Valved	Tube Size	Length	Width	Height
65GP-PF2-08	1/2" H.B.	1.95"	1.00"	1.00"

PART NUMBER GUIDE

Flow Size / Latch Type	Material	Valve	Config.	O-ring (std Buna-N)	Type	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 = Push In Term Panel Mt. 19 = Panel 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	Ethyl 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	Y	Y	Y
Buna-N/Nitrile	Y	Y	Y	N	N	Y	Y	Y
EPR/EPDM	Y	Y	Y	Y	Y	Y	Y	Y
Viton/FKM	Y	Y	Y	N	N	N	N	Y
Silicon	Y	Y	Y	Y	Y	Y	Y	Y
Kalrez	Y	Y	Y	Y	Y	N	N	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 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 couplings are produced from materials that comply with most NSF standards for potable water and food stuff.

Questions?

If you have any questions at all concerning our products, compliance and specs, please feel free to call us at 937-349-4055 or visit our website.

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

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 the couplings in their own application conditions. Please Contact ATP 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	0psi 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

Applications for Products:

Surgical Devices

Patient Monitors

Medical Beds /
Air Support Surfaces

Temperature &
Compression Therapy

Analytical Equipment

Food & Beverage

Electronic Cooling

Fuel Cells

Ink Delivery & Printing

Semiconductor Process

p 937-349-4055 f 937-349-4155

Interchangeable with all other
thumb-latch couplings in the market place.