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Proud manufacturer of high purity flow control products

BECO manufacturing

TEQCOM

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Miniature Solenoid Valves

Our **IPS Miniature Solenoid Valves** offer precision performance under extreme conditions. Offered as 2-Way and 3-Way Valves with four internal body configurations and five seat sealing methods, our IPS Miniature Solenoid Valves are suitable for a wide range of ultra clean to highly corrosive media applications.

Our all virgin PTFE wetted surface design is ideally suited for semiconductor, pharmaceutical, bio-medical and chemical process applications. Configurable with a PTFE Hard Seat, FKM-Viton O-Ring Seat, FFKM-Kalrez O-Ring Seat, EPDM O-Ring Seat, or Aflas O-Ring Seat the IPS Miniature Series Solenoid Valve line provides unsurpassed chemical compatibility with a wide range of flow media. The all wetted PTFE body, valve stem and one piece diaphragm maintain a material inert boundary for ultra clean applications.

HIGHLIGHTS:

- PTFE design optimized for ultra clean and chemical compatibility.
- Configurations available for various DC & AC voltages.
- Continuous Duty Cycle Rated at controlled ambient temperatures and reduced pressures.
- Valve seat and diaphragm designed for positive flushing and bubble-tight shut off.
- Non porous diaphragm configured to completely isolate solenoid coil from media.
- 100% coil driven – does not require energizing pressure or vacuum to operate.
- O-ring seat configurations for vacuum and complex media applications.
- Designed for aggressive media and elevated temperature.

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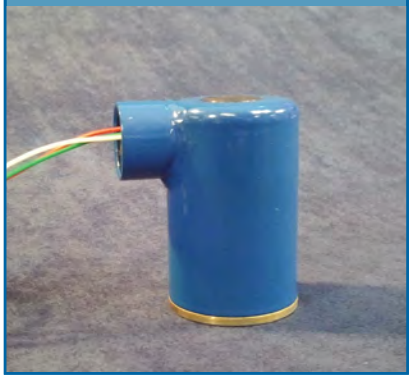
General Valve Parameters	
1/8 Orifice Cv (2-Way / 3-Way)	0.35 / 0.18
1/4 Orifice Cv (2-Way / 3-Way)	0.70 / 0.45
3/8 Orifice Cv (2-Way / 3-Way)	0.90 / 0.60
Common Port Vacuum in-Hg (max gauge)*	25 2-Way / 23 3-Way
Typical Response Time (msec)	20 - 30
Media Temperature (range)	0 - 100ºC / 32 - 212ºF
Ambient Temperature (range)	0 - 50ºC / 32 - 122ºF
Wattage Range (std)	11 -13 W
Voltage Tolerance	+/-10%
Coil Lead Length (3 Wire) (Red is Hot / White is Neutral / Green is Ground)	24” - 22 gauge

RoHS Compliant

Maximum Port Pressure Rating (psi)*	O-Ring Seat 3-Way	PTFE Seat 3-Way
Common Port	60	60
Normally Closed Port	35	30
Normally Open Port	60	60
	2-Way NC	**2-Way NC**
Inlet Port	60	60
Outlet Port	35	30
	2-Way NO	**2-Way NO**
Inlet Port	60	60
Outlet Port	60	60

Conduit Connector Coil available. *Call Customer Service.*



**Referenced values based on opposing ports open to atmosphere. Vacuum Rating assumes O-Ring Seal and opposing ports open to atmosphere.*

Other Options Available on Request:

- Valves with special port connections such as combinations of pipe, tube and flared ends.
- Extra long wire leads (36” or 48”).
- Valves without mounting studs or valves with 4 mounting studs (2 are standard).
- Manifolded valve assemblies.

Solenoid Valves: ORDERING FORMAT

M 6 6 2C 1A F S – H T – 123 – AP

Valve Series

See Porting chart below

Valve Configuration
2C = 2 Way Normally Closed
2O = 2 Way Normally Open
3W = 3 Way (See Port Arrangements)

Coil Voltage
1A = 115 VAC 1D = 12 VDC
2A = 230 VAC 2D = 24 VDC
3A = 24 VAC

Body Shape
S = Square

Port Selection
F = Female NPT
T = Tube Compression
FF = Flare Connection

Coil Wattage
H = Standard Coil

Valve Seat
E = EPDM
A = Aflas
V = Viton (FKM)
K = Kalrez eq. (FFKM)
T = PTFE (Hard Seat)

See Below 3-Way Valve Only

Auxiliary Plate (optional see below)

Consult Factory For Custom Configurations.

Porting w/ Max Orifice

PIPE	
22	1/8” FNPT & 0.125” Orifice
44	1/4” FNPT & 0.250” Orifice
66	3/8” FNPT & 0.375” Orifice
86	1/2” FNPT & 0.375” Orifice
TUBE	
21	1/8” TUBE & 0.063” Orifice
43	1/4” TUBE & 0.188” Orifice
65	3/8” TUBE & 0.313” Orifice
86	1/2” TUBE & 0.375” Orifice
FLARE	
42	1/4” FLARE & 0.125” Orifice
64	3/8” FLARE & 0.250” Orifice
86	1/2” FLARE & 0.375” Orifice

Port Arrangements

The port orientation can be arranged in four possible patterns on our 3-Way Solenoid Valves. Please select one of the four arrangements.

Looking Down at the Top of the Coil

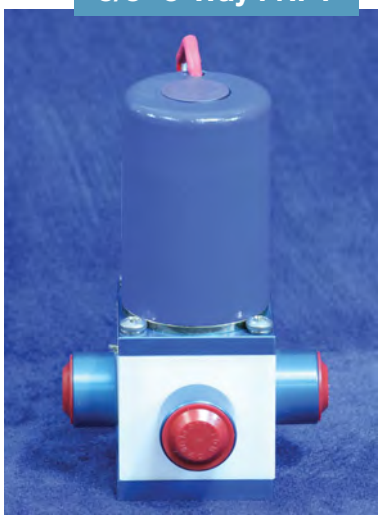
123	132	213	321
C / NC NO	C / NO NC	NO / NC C	NC / C NO
NC-C-NO	**NO-C-NC**	**NC-NO-C**	**C-NC-NO**

STD = 132 is our standard Port Arrangement.

Auxiliary Plate (“AP”): For highly corrosive or caustic gas applications, such as Chlorine Gas, our Auxiliary Plate Option (“-AP”) give an extra line of protection. The valve is configured with an auxiliary plate between the upper diaphragm and solenoid coil. The AP (Auxiliary Plate) is O-Ring sealed on the Stem of the diaphragm and supported at the outer body-to-coil interface.

Miniature Solenoid Valve

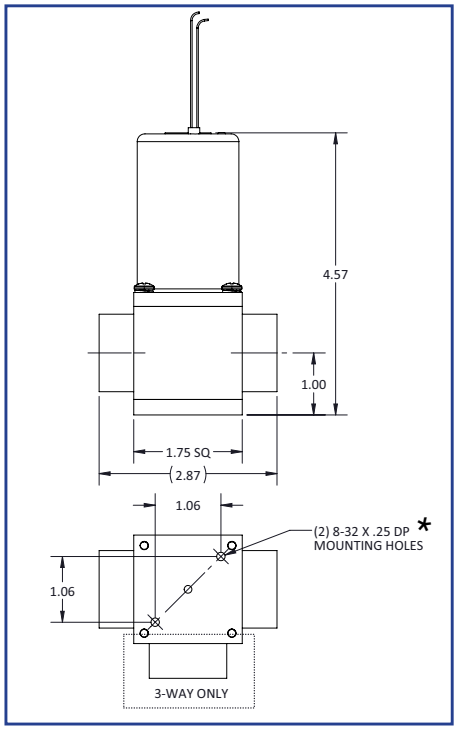
3/8” 3-Way FNPT



1/8” 2-Way FNPT
(Round Body)

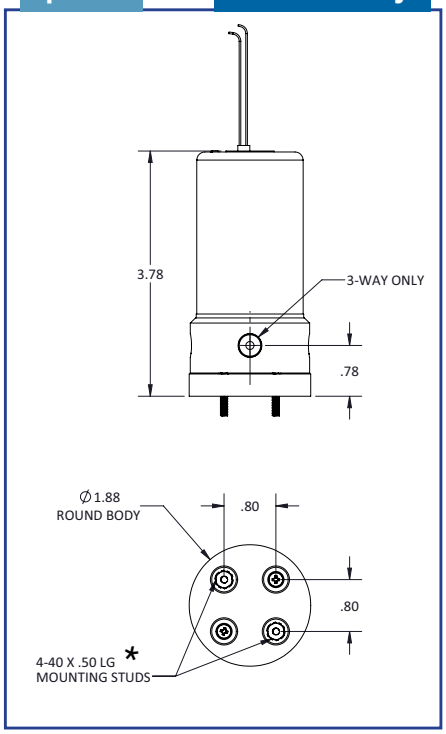
1/8” 2-Way FNPT

Typical for 3/8” and 1/2” Models

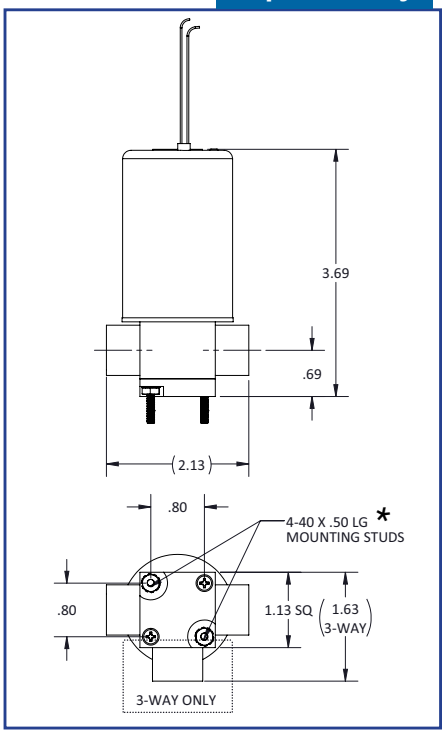


Typical for 1/8” and 1/4” Models

Special **Round Body**



Square Body



** Two Mounting Studs are supplied (standard). Call factory for alternate mounting options.*
Care must be taken to limit the applied torque on the Mounting Studs: 7 - 9 in-lbs max

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

140804

Sub-miniature Solenoid Valves

Our **IPS Sub-miniature Solenoid Valves** offer precision performance under extreme conditions. Offered as 2-Way and 3-Way Valves with four internal body configurations and three seat sealing methods, our IPS Sub-miniature Solenoid Valves are suitable for a wide range of ultra clean to highly corrosive media applications.

Our PTFE wetted surface design is ideally suited for semiconductor, pharmaceutical, bio-medical and chemical process applications. Configurable with a FKM-Viton Seat, FEPM-AFLAS Seat or FFKM-Kalrez Seat, the Sub-mini Series Solenoid Valve line provides unsurpassed chemical compatibility with a wide range of flow media. The PTFE body, valve stem and one piece diaphragm maintain a material inert boundary for ultra-clean and harsh-caustic applications.

HIGHLIGHTS:

- PTFE design optimized for ultra clean and chemical compatibility.
- Configurations available for various DC & AC voltages.
- Fast, accurate and repeatable coil response time from proven technology.
- Valve seat and diaphragm designed for positive flushing and bubble-tight shut off.
- Non-porous diaphragm configured to completely isolate solenoid coil from media.
- 100% coil driven – does not require energizing pressure or vacuum to operate.
- Maximum recommended Duty Cycle 62%.
- Designed for aggressive media and elevated temperature.

Maximum Port Pressure Rating (psi)	O-Ring Seat 3-Way
Common Port	80
Normally Closed Port	40
Normally Open Port	40
	2-Way NC
Inlet Port	80
Outlet Port	40
	2-Way NO
Inlet Port	80
Outlet Port	40

RoHS Compliant

General Valve Parameters	
0.063” Orifice Cv (2-Way / 3-Way)	0.06 / 0.05
0.094” Orifice Cv (2-Way / 3-Way)	0.12 / 0.11
Common Port Vacuum in-Hg (max)	20
Media Temperature (range)	0 - 100°C / 32 - 212°F
Ambient Temperature (range)	0 - 60°C / 32 - 140°F
Wattage Range	10 -12 W
Voltage Tolerance	+/-10%
Coil Lead Length (2 Wire)	24”

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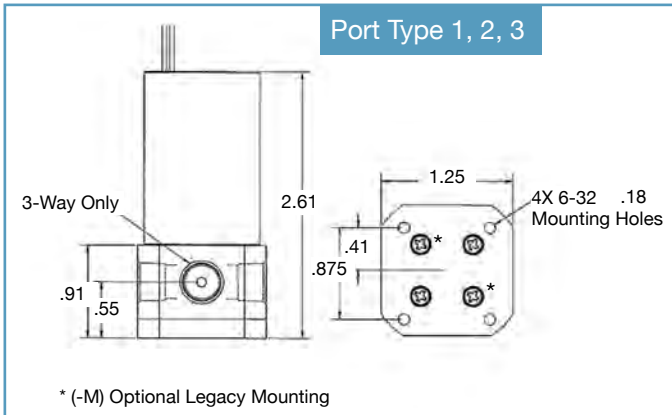
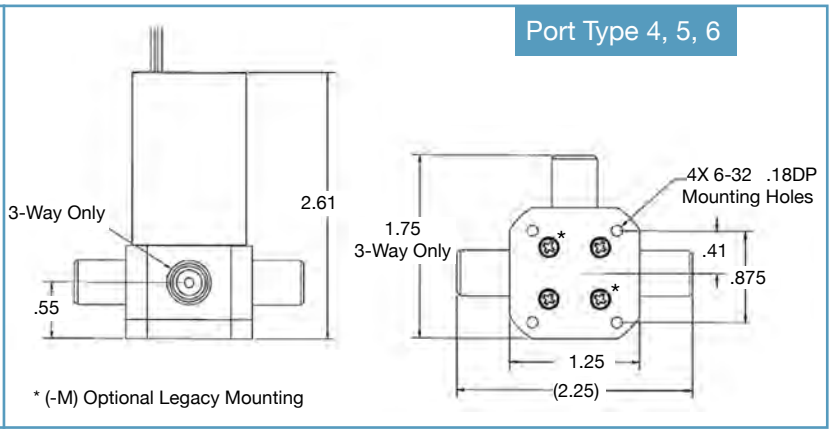
Port Type 1, 2, 3



Port Type 4, 5, 6



Solenoid Valves: ORDERING FORMAT

S 1 2C 1A 1B – V – 132 – LM

Valve Series

Porting w/Max Orifice
See chart below

Valve Configuration
2C = 2 Way Normally Closed
2O = 2 Way Normally Open
3W = 3 Way

Coil Voltage
1A = 115 VAC
3A = 24 VAC
1D = 12 VDC
2D = 24 VDC
4D = 20 VDC

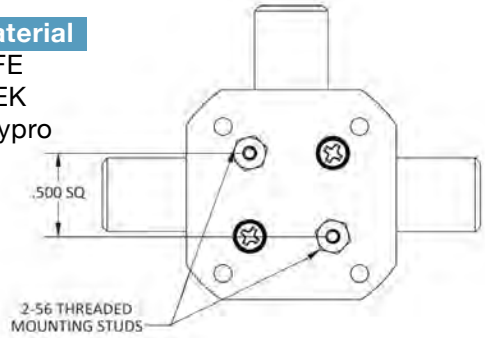
Body Material
1B = PTFE
2B = PEEK
3B = Polypro

Valve Seat
V = Viton
A = AFLAS
K = Kalrez

See Below 3-Way Valve Only

Optional
Legacy Mounting Configuration

-LM = at end of part number Optional Legacy Mounting Configuration



Consult Factory For Custom Configurations.

Porting w/ Max Orifice

Port Type/Size and Standard Orifice	
1	1/4”-28-UNF Female with 0.063” Orifice
2	1/8” FNPT with 0.094” Orifice
3	#10-32-UNF Female with 0.063” Orifice
4	1/4” FNPT with 0.094” Orifice
5	1/8” Tube with 0.094” Orifice
6	1/4” Tube with 0.094” Orifice
7	1/16” FNPT with 0.063” Orifice
8	1/16” Tube with 0.032” Orifice
9	1/4” Flare with 0.094” Orifice

Port Arrangements

The port orientation can be arranged in four possible patterns on our 3-Way Solenoid Valves.

Looking Down at the Top of the Coil			
STD			
NC NO	NO NC	C NC	NO C
132 C	123 C	213 NO	321 NC

STD = 132 is our standard Port Arrangement.

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com.
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

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Miniature Pneumatic Diaphragm Valves

Our **IPS Miniature Pneumatic Diaphragm Valves** offer precision performance under extreme conditions. Offered as 2-Way and 3-Way Valves with four internal body configurations and three valve seat sealing methods, our IPS Miniature Pneumatic Diaphragm Valves are suitable for a wide range of ultra clean to highly corrosive media applications. Our all virgin PTFE wetted surface design is ideally suited for semiconductor, pharmaceutical, bio-medical and chemical process applications. Configurable with a PTFE Hard Seat, FKM-Viton O-Ring Seat or FFKM-Kalrez O-Ring Seat the IPS MTV series valve line provides unsurpassed chemical compatibility with a wide range of flow media. The all wetted PTFE body, valve stem and one piece diaphragm maintain a material inert boundary for ultra clean applications.

HIGHLIGHTS:

- PTFE design optimized for ultra clean and chemical compatibility.
- Lightweight pneumatic actuator with compact valve design.
- Pneumatic Actuator available in standard Polypro or Hi Temp Configuration.
- The PTFE diaphragm completely isolates the media from the actuator.
- 100% pneumatic driven – does not require power only supply air.
- O-ring seat configurations for vacuum and complex media applications.
- Designed for aggressive media and elevated temperature.

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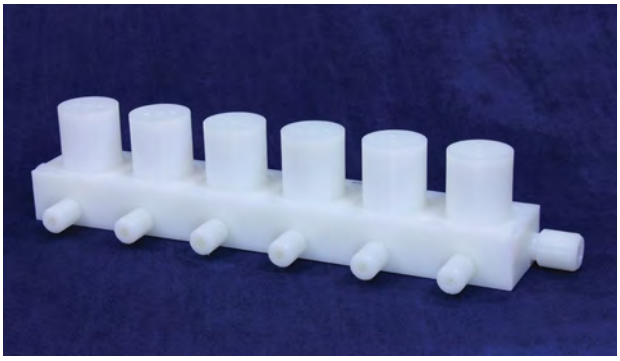
General Valve Parameters	
1/8” Orifice Cv (2-Way / 3-Way)	0.35 / 0.18
1/4” Orifice Cv (2-Way / 3-Way)	0.70 / 0.45
3/8” Orifice Cv (2-Way / 3-Way)	0.90 / 0.60
Common Port Vacuum in-Hg (max)	25
Actuator Pressure (range)	40 - 60 psi
Media Temperature (range)	0 - 100ºC / 32 – 212ºF
Ambient Temperature (range)	0 - 70ºC / 32 – 140ºF

Maximum Port Pressure Rating	3-Way
Common Port	60 psi
Normally Closed Port	30 psi
Normally Open Port	60 psi
	2-Way NC
Inlet Port	60 psi
Outlet Port	30 psi
	2-Way NO
Inlet Port	60 psi
Outlet Port	60 psi

Other Options Available on Request:

- Valves with special port connections such as combinations of pipe, tube and flared ends.
- Valves without mounting studs or valves with 4 mounting studs (2 are standard).
- Manifold valve assemblies.



Miniature Pneumatic Diaphragm Valves: ORDERING FORMAT

MTV - 2 2 2C F S - T - 123 - AP

Port & Orifice Size
See Chart Below

Valve Configuration
2C = 2-Way Normally Closed
2O = 2-Way Normally Open
3W = 3-Way

Port Selection
F = Female NPT
T = Tube Ends
FF = Flared Ends

Auxiliary Plate
(optional see below)

3-Way Valve Only
(see below)

Valve Seat
T = PTFE
V = Viton
K = Kalrez

Body Shape
S = Square

Consult Factory For Custom Configurations.

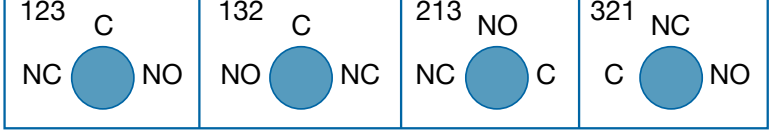
Porting w/ Max Orifice

PIPE	
22	1/8” FNPT & 0.125” Orifice
44	1/4” FNPT & 0.250” Orifice
66	3/8” FNPT & 0.375” Orifice
86	1/2” FNPT & 0.375” Orifice
TUBE	
21	1/8” TUBE & 0.063” Orifice
43	1/4” TUBE & 0.188” Orifice
65	3/8” TUBE & 0.313” Orifice
86	1/2” TUBE & 0.375” Orifice
FLARE	
42	1/4” FLARE & 0.125” Orifice
64	3/8” FLARE & 0.250” Orifice
86	1/2” FLARE & 0.375” Orifice

Port Arrangements

The port orientation can be arranged in four possible patterns on our 3-Way Solenoid Valves. Please select one of the four arrangements.

Looking Down at the Top of the Coil



NC-C-NO	NO-C-NC	NC-NO-C	C-NC-NO

STD = 132 is our standard Port Arrangement.

Auxiliary Plate (“AP”): For highly corrosive or caustic gas applications, such as Chlorine Gas, our Auxiliary Plate Option (“-AP”) give an extra line of protection. The valve is configured with an auxiliary plate between the upper diaphragm and pneumatic actuator. The AP (Auxiliary Plate) is O-Ring sealed on the Stem of the diaphragm and supported at the outer body-to-actuator interface.

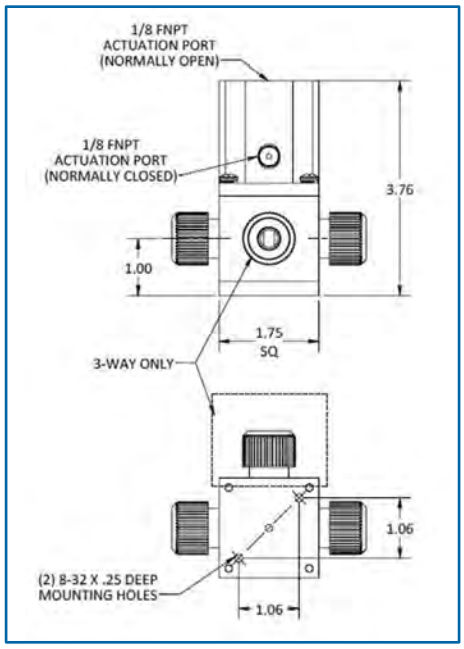
Miniature Pneumatic Diaphragm Valve

3/8” 3-Way FNPT

1/4” 3-Way Tube

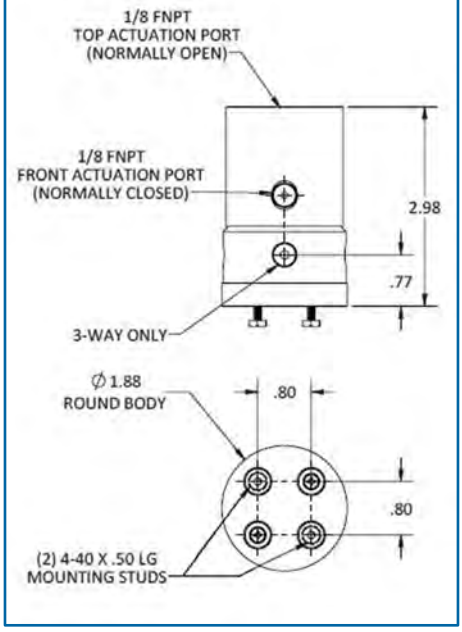
1/4” 2-Way FNPT

Typical for 3/8” and 1/2” Models

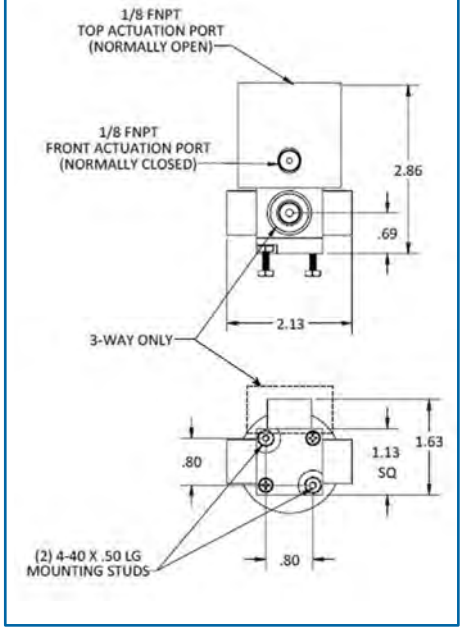


Typical for 1/8” and 1/4” Models

Special Round Body



Square Body



IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperaturet ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

140505

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PTFE HP Diaphragm Valve

Our **IPS PTFE HP Diaphragm Valve (HPV)** is designed for use in high purity water and aggressive chemical applications.

Designed with a 100% virgin PTFE wetted flow path, the unit is ideal for DI Water Systems and corrosive media found in solar, semiconductor, pharmaceutical and chemical process applications.

Offered in 2-Way and 3-Way port configurations, our all wetted PTFE HPV2 and HPV3 diaphragm valves are an excellent complement to our Mini and Submini pneumatic valve families.

The compact design of the IPS HP valve series makes it ideally suited for tight spaces in process cabinets and panels. Multiple HP units can be rack mounted on a common Polypro base for ease of installation.

The Actuator Housing options include: Polypropylene ("PP") Anodized Aluminum ("AA")

Other sizes and configurations are available on request.

Specifications:

Materials of Construction:

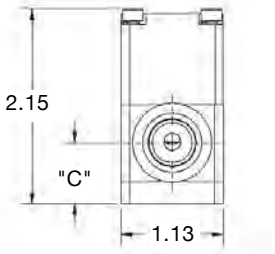
- Wetted Surfaces: Machined 100% Virgin PTFE & TFM
- Non Wetted Materials: PVDF, Polypro, SS, AA

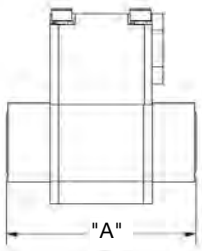
Temperature Ranges:

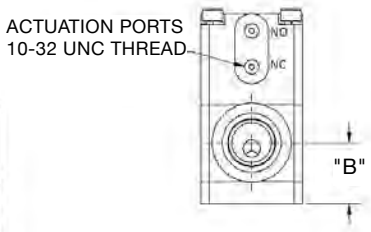
- 32°F - 140°F (0°C - 60°C) Ambient
- 32°F - 194°F (0°C - 90°C) Media

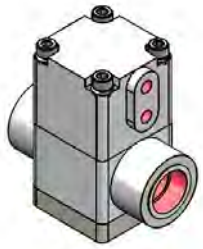
Pressure Ranges:

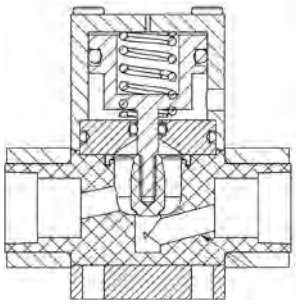
- Maximum Inlet Pressure: 80 psi (551 kPa | 5.51 bar)
- Maximum Vacuum: 27” Hg
- Consult factory when operating with pressure and/or vacuum applied on multiple ports.
- Pneumatic Actuation:
  - Pressure Range: 50 psi (3.45 bar) to 100 psi (6.89 bar) depending on media pressure conditions
  - Pressure Source: Conditioned Dry Air

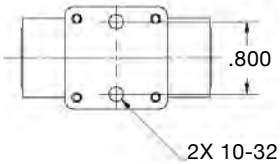












PORT TYPE	"A" O' ALL LENGTH	"B" INLET HEIGHT	"C" OUTLET HEIGHT
22P	2.10	.68	.68
21T	2.68	.54	.70
43P	2.10	.68	.68
43T	2.82	.50	.74
42F	3.40	.54	.70

PTFE High Pressure Valve: ORDERING FORMAT

HPV3 — 42F — 123 — PP

HP Valve Type
HPV3 = High Pressure Valve 3-Way

Porting w/ Max Orifice
22P = 1/8" FNPT & 0.125" Orifice
21T = 1/8" TUBE & 0.094" Orifice
43P = 1/4" FNPT & 0.188" Orifice
43T = 1/4" TUBE & 0.188" Orifice
42F = 1/4" FLARE & 0.125" Orifice

Port Orientation (3-Way Only)

Looking Down at the Top of the Coil			
123 C NC NO	132 C NO NC	213 NO NC C	321 NC C NO
NC-C-NO	NO-C-NC	NC-NO-C	C-NC-NO

Actuator Housing
AA = Anodized Aluminum
PP = Polypropylene

HPV2 — 42F — NC — PP

HP Valve Type
HPV2 = High Pressure Valve 2-Way

Porting w/ Max Orifice
22P = 1/8" FNPT & 0.125" Orifice
21T = 1/8" TUBE & 0.094" Orifice
43P = 1/4" FNPT & 0.188" Orifice
43T = 1/4" TUBE & 0.188" Orifice
42F = 1/4" FLARE & 0.125" Orifice

Valve Configuration
NC = Normally Closed
NO = Normally Opened

Actuator Housing
AA = Anodized Aluminum
PP = Polypropylene

• These valves are configured with their maximum available port orifice for the given port style and size. Call IPS for special constrained orifice & other custom solutions.

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

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Sub-miniature Pneumatic Valves

Our IPS Sub-miniature Pneumatic Valves offer precision performance under extreme conditions. Offered as 2-Way and 3-Way Valves with four body port configurations and four sealing methods, our IPS Sub-miniature Pneumatic Valves are suitable for a wide range of ultra clean to highly corrosive media applications.

Our PTFE wetted surface design is ideally suited for semiconductor, pharmaceutical, bio-medical and chemical process applications. The valves can also be configured with PEEK and Polypropylene bodies for other industrial applications.

The Sub-mini family has four O-Ring seat seal options: FKM-Viton, FEPM-AFLAS, FFKM-Kalrez, and EPDM. Providing unsurpassed chemical compatibility, with a wide range of flowing media, the PTFE valve stem and diaphragm design maintains an inert boundary for ultra-clean and harsh-caustic applications.

HIGHLIGHTS:

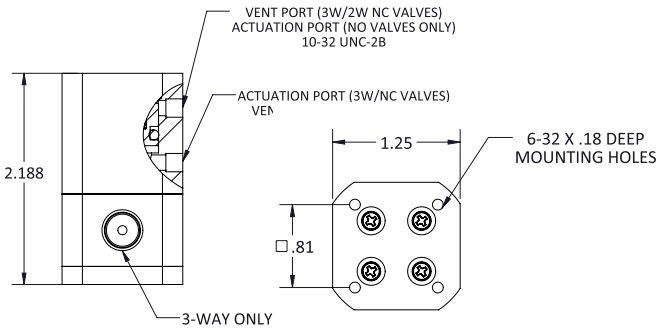
- PTFE design optimized for ultra clean and chemical compatibility.
- Configured with a reliable pneumatic actuator.
- Valve seat and diaphragm designed for positive flushing and tight shut off.
- Non-porous diaphragm isolates actuator from fluid media.
- 100% pneumatic driven – does not require electrical power.
- Designed for aggressive media and elevated temperature.

General Valve Parameters	
0.063” Orifice Cv (2-Way / 3-Way)	0.06 / 0.05
0.094” Orifice Cv (2-Way / 3-Way)	0.12 / 0.11
Common Port Vacuum in-Hg (max)	25
Media Temperature (range)	0 - 100ºC / 32 - 212ºF
Ambient Temperature (range)	0 - 60ºC / 32 - 140ºF
Pneumatic Actuator Pressure Range (psi)	40 to 60 psi

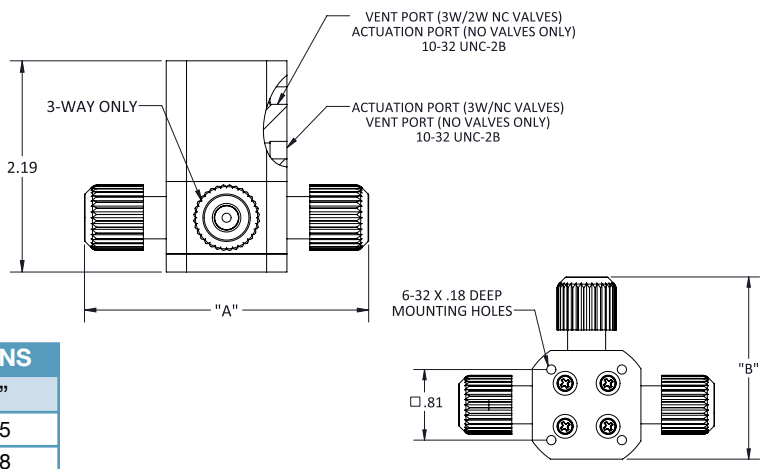
Maximum Port Pressure Rating (psi)	3-Way
Common Port	80
Normally Closed Port	40
Normally Open Port	40
	2-Way
Inlet Port	80
Outlet Port	40

BECO manufacturing TEQCOM

Port Type 1, 2, 3, 4, 7



Port Type 5, 6, 8, 9



TYPE 4, 5, 6 & AND PORT DIMENSIONS		
Port Type	"A"	"B"
4 (1/4 FNPT)	2.25	1.75
5 (1/8 TUBE)	2.71	1.98
6 (1/4 TUBE)	2.95	2.10
7 (1/4 FLARE)	3.45	2.35

Pneumatic Valves: ORDERING FORMAT

P 1 3W 1B – V – 132 – LM

Valve Series

Porting w/Max Orifice
See chart below

Valve Configuration
2C = 2 Way Normally Closed
2O = 2 Way Normally Open
3W = 3 Way

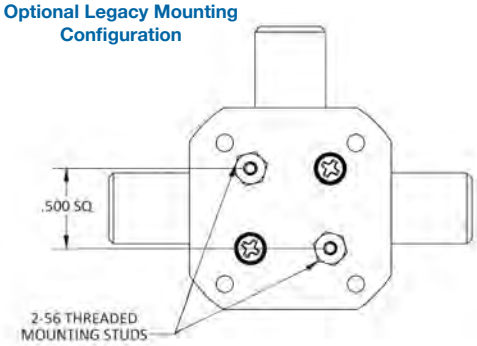
Body Material
1B = PTFE
2B = PEEK
3B = Polypro

See Below 3-Way Valve Only

Valve Seat
V = Viton
A = AFLAS
K = Kalrez
E = EPDM

Optional
Legacy Mounting Configuration

-LM = at end of part number
Optional Legacy Mounting Configuration



Consult Factory For Custom Configurations.

Porting w/ Max Orifice

Port Type/Size and Standard Orifice	
1	1/4"-28-UNF Female with 0.063" Orifice
2	1/8" FNPT with 0.094" Orifice
3	#10-32-UNF Female with 0.063" Orifice
4	1/4" FNPT with 0.094" Orifice
5	1/8" Tube with 0.094" Orifice
6	1/4" Tube with 0.094" Orifice
7	1/16" FNPT with 0.063" Orifice
8	1/16" Tube with 0.032" Orifice
9	1/4" Flare with 0.094" Orifice

Port Arrangements

The port orientation can be arranged in four possible patterns on our 3-Way Solenoid Valves. Please select one of the four arrangements.

Looking Down at the Top of the Coil			
123 C NC NO	132 C NO NC	213 NO NC C	321 NC C NO
NC-C-NO	**NO-C-NC**	**NC-NO-C**	**C-NC-NO**

STD = 132 is our standard Port Arrangement.

IPS Product Notes:

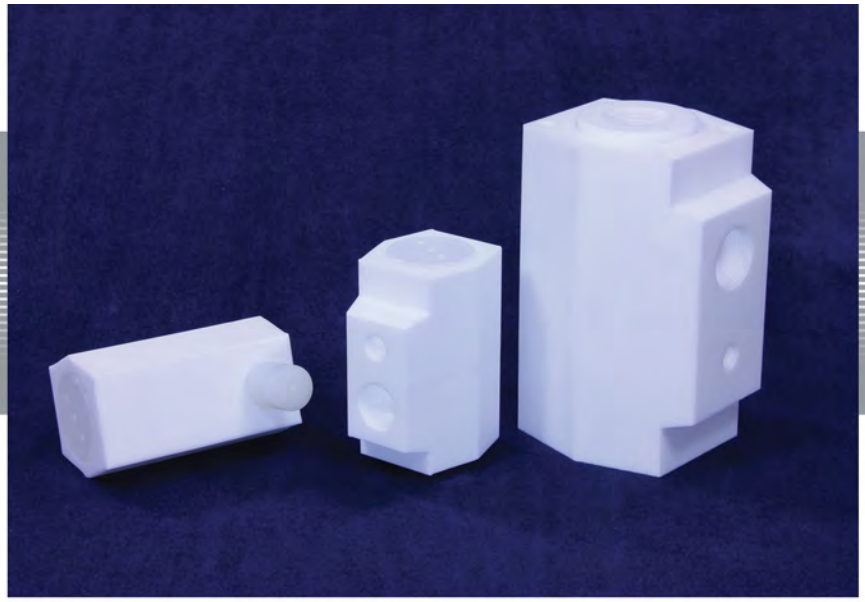
1. Please email Customer Service at info@ipolymer.com.
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

international polymer solutions

Teflon® Pneumatic Valves

Our **IPS Teflon® Pneumatic Valve** (TP Valve) features an all PTFE wetted surface design. The design is ideally suited for harsh chemical and corrosive media and environments.

Polytetrafluoroethylene (PTFE), commonly known by its popular E.I. DuPont trade name Teflon®, is well suited for clean room and deionized water applications.



Features

- One Piece PTFE Body
- Optimum Anti-Corrosion Design
- Ideal for Hi-Temp Applications
- Complete Media Isolation

Materials of Construction

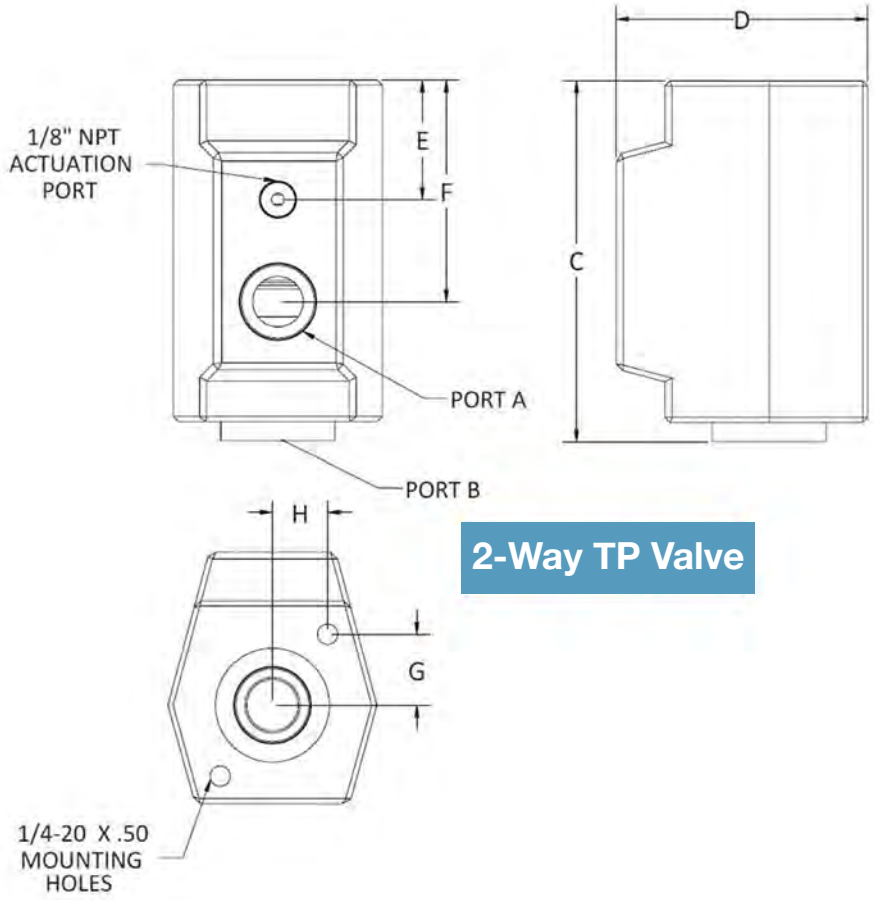
Body.....PTFE
Bellows/Poppet.....PTFE
Backing Plate.....PTFE
Piston.....PVDF
Cap.....Polypropylene
Spring.....Stainless Steel

Specifications

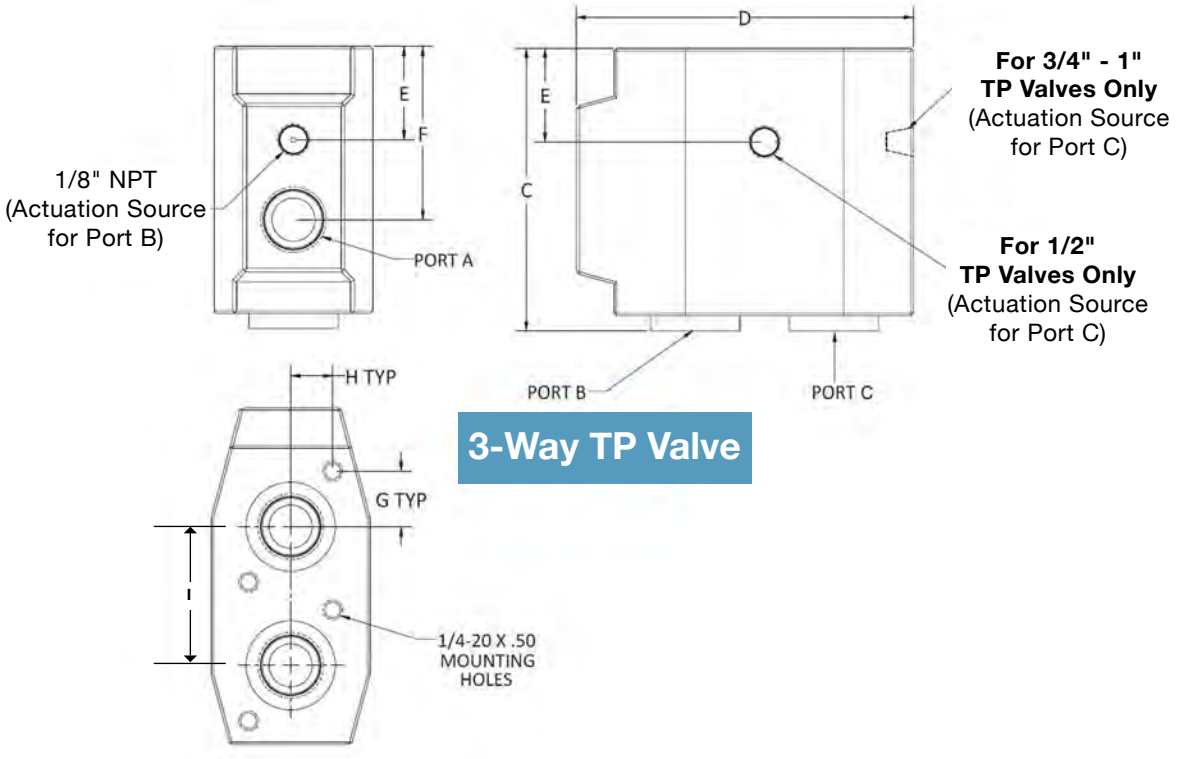
Size	1/2" Orfice	3/4" Orfice	1" Orfice
C_V	2.2	2.8	7.5
Max Pressure[2]			
Port A	75 psi	50 psi	50 psi
Port B & C	45 psi	10 psi	10 psi
Actuator Pressure-psi min/max	50 / 80	50 / 80	50 / 80
Max Media Temperature[2]	300° F	300° F	300° F

1. Specifications applicable for both normally open and normally closed configurations.
2. See Pressure vs. Temperature graph for full range.
3. Port C reference for 3-Way only.

BECO manufacturing TEQCOM



2-Way TP Valve

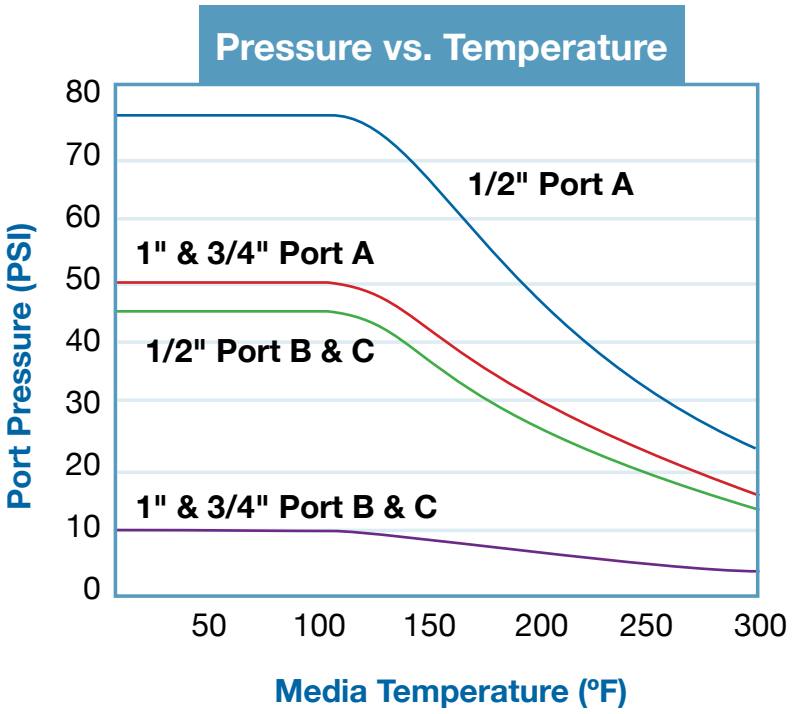


3-Way TP Valve

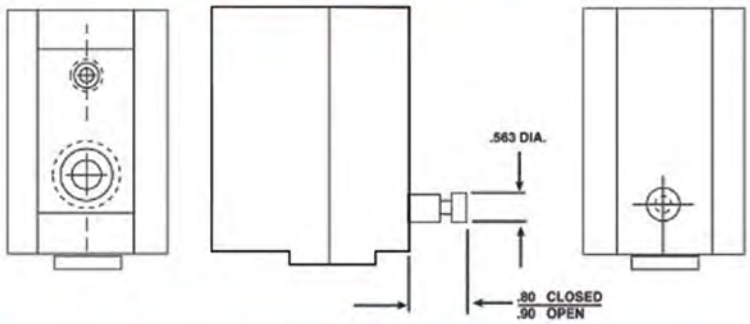
Style	Port A, B, C	C	D	E	F	G	H	I
2 Way	1/2"	3.56	2.48	1.18	2.19	0.70	0.53	n/a
	3/4"	5.61	3.56	1.94	3.65	1.21	0.85	n/a
	1.0"	5.61	3.56	1.94	3.65	1.21	0.85	n/a
3 Way	1/2"	3.56	4.25	1.18	2.19	0.70	0.53	1.75
	3/4"	5.61	6.00	1.93	3.64	1.21	0.85	2.50
	1.0"	5.61	6.00	1.93	3.64	1.21	0.85	2.50

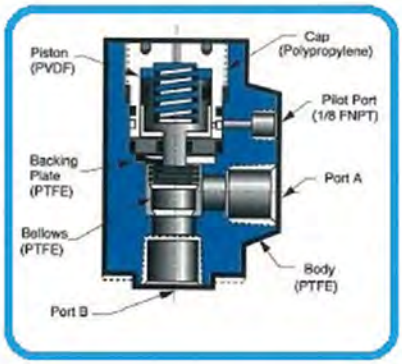
Application Uses:

- Chemical Neutralization
- Chemical Delivery
- DI Water Rinse
- Wafer Etching
- Acid Parts Cleaning
- Phosphoric Acid Nitride Removal
- Sulfuric Peroxide Stripping
- Potassium Hydroxide Etching



AB Option





This style TP Valve offer a continuous metered flow path to reduce the potential of chemical and bacteria build-up. Currently only offered in our 2-Way Normally Closed Port Configuration, the "AB" Option adds a metering screw and bleed bypass across the valve seat. This controlled flow rate maintains a continuous system flow which reduces chemistry and bacteria build-up in both the valve gallery and associated plumbing.

Teflon Pneumatic Valve: ORDERING FORMAT

TP — 2W 8 P — XX RC

Teflon Pneumatic

Ways
2W = 2-Way
3W = 3-Way

Port & Orifice Size
8 = 1/2"
12 = 3/4"
16 = 1"

Port Connection
P = Female Pipe (FNPT)

Flow Options
Restrictive Flow Options are only available for 2Way Normally Closed Valves
RC = Restricted Closure
RO = Restricted Open
RB = Restricted Both (RO + RC)
AB = Anti-Bacteria Feature (MAH)
MA = Micro Adjust Feature

Port Configuration
For 2-Way:
C = 2Way Normally Closed
O = 2Way Normally Open
For 3-Way:
CC = Port B Closed & Port C Closed
CO = Port B Closed & Port C Open
OO = Port B Open & Port C Open
OC = Port B Open & Port C Closed

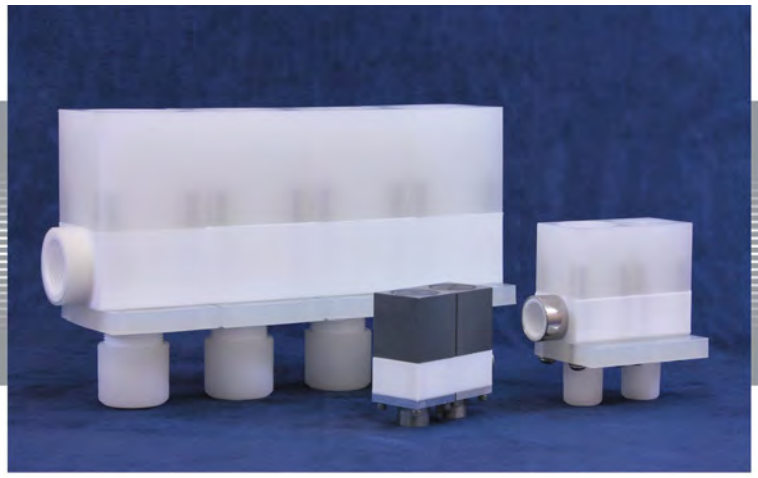
IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

international polymer solutions

Chemical Resistant Valves

Chemical Resistant (CR) Valves offer chemical and corrosion control through a complete fluoroplastic design and construction. All wetted surfaces are manufactured from virgin PTFE. Pneumatic Actuator, Base and Bands are constructed from PVC, Polypropylene or PVDF. The polymer components selected for our IPS CR Valve line are specifically suited for use with ultrapure water, deionized water, solvents, chemicals and liquid flowing bio-matter. Our PTFE Bellows-style valve stem and PTFE valve seat help ensure the valve self-flushes a wide variety of flowing media. Special custom configurations are available on request. These include: manifold valve assemblies with multiple ports and high ambient temperature pneumatic actuators.



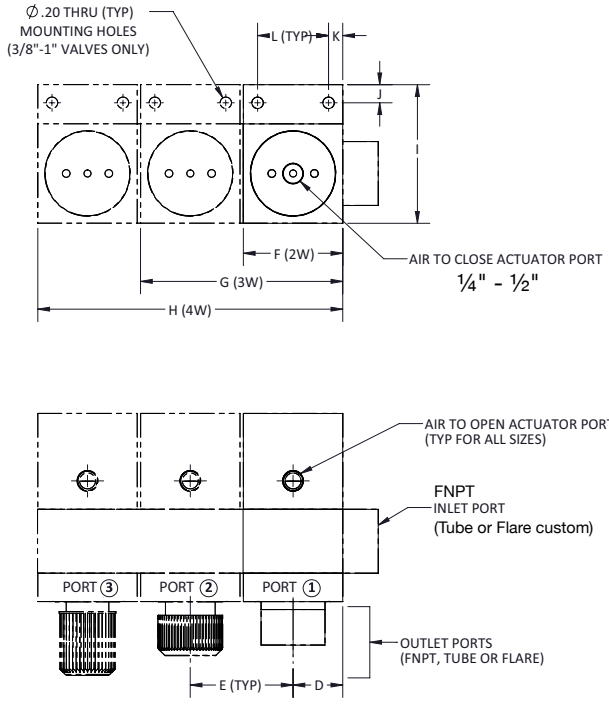
Flow for distribution *(One Inlet & Multiple Outlets)* **and flow for blending or selection** *(Multiple Inlets & One Outlet)* **available.**

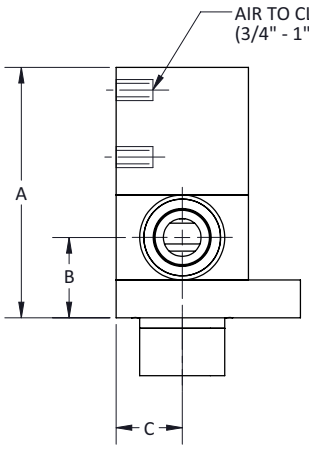
- Distribution flow is standard.
- Please specify at time of order.

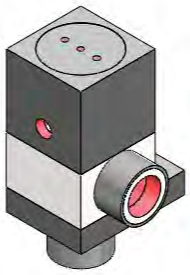
Size	¼"	3/8"	½"	¾"	1"
Cv	0.8	1.3	2.8	7.5	13.5
Flow Rate (GPM @ 60 psi)	4.6	6.3	10.7	23	42
Max Pressure (Distribution Flow)[1]					
Inlet Port-psi	60	60	60	60	60
Outlet Port-psi	60	50	50	30	20
Actuator Pressure (Min/Max)	40 / 60	40/60	40 / 60	50 / 70	50 / 70
Max Media Temperature	240°F	240°F	240°F	240°F	240°F
Max Ambient Temperature	140°F	140°F	140°F	140°F	140°F
Wetted Surfaces	PTFE	PTFE	PTFE	PTFE	PTFE
Actuator / Base / Bands *(see notes on page 2)*	PVC, POL, PVDF	PVC, POL PVDF	PVC, POL PVDF	PVC, POL PVDF	PVC, POL PVDF
Actuator Port ***(see sketch)***	10-32 UNF	1/8"FNPT	1/8"FNPT	1/8"FNPT	1/8"FNPT
Inlet Port (FNPT = Standard)	1/4"	3/8"	1/2"	3/4"	1"
Outlet Port (FNPT, Tube or Flare)	1/4"	3/8"	1/2"	3/4"	1"

1 Pressure listed for Distribution Flow Configuration.
Call IPS Factory for Selection Flow Configuration.

BECO manufacturing TEQCOM







The 1/4" CR Model come complete with Aluminum Baseplate.

The 3/8" through 1" CR Models come complete with Reinforcing Bands & Baseplates which match the selected Actuator Material (PVC, POL or PVDF).

IPS CR Valve is supplied standard (" CR ") with a single axial manifold FNPT style port. Custom solutions are available with this primary manifold port configured for Tube or Flared connections ("CRT" and "CRF"). Please call factory.

Flow Options Available for the IPS CR Valve: Flow for Distribution (one inlet / multiple outlets) and Reverse Flow for Blending or Selection (multiple inlets / one outlet).

Size	A	B	C	D	E	F	G	H	I	J	K	L	M
1/4"	2.19	0.69	0.69	0.69	1.40	1.38	2.78	4.18	1.38	N/A	N/A	N/A	N/A
3/8" - 1/2"	3.31	1.06	0.88	0.88	1.81	1.75	3.56	5.37	2.44	0.32	0.25	1.25	0.20
3/4" - 1"	5.13	1.44	1.38	1.38	2.81	2.75	5.56	8.37	3.44	0.33	0.33	2.03	0.20

Chemical Resistant Valves: ORDERING FORMAT

CR – POL – 4W 8 P O C C

Chemical Resistant

Actuator Material
PVC = Polyvinyl Chloride (ambient T = 140°F)
POL = Polypropylene (std) (ambient T = 160°F)
PVDF = Polyvinylidene Fluoride (ambient T = 230°F)

Size
4 = ¼"
6 = ⅜"
8 = ½"
12 = ¾"
16 = 1"

Valve Configuration
2W = 2 Way
3W = 3 Way
4W = 4 Way
+

Outlet Port Connection
P = FNPT
T = Tube
F = Flare

Port 3 { C = Normally Closed / O = Normally Open } 1
Port 2 { C = Normally Closed / O = Normally Open } 2
Port 1 { C = Normally Closed / O = Normally Open } 3

+ Call IPS Factory for 5-Way to 14-Way Design Configurations.

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call our IPS Factory for special applications. We can manufacture our CR Valves in multiple port distribution manifolds with a common inlet port and up to 14 outlet ports.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

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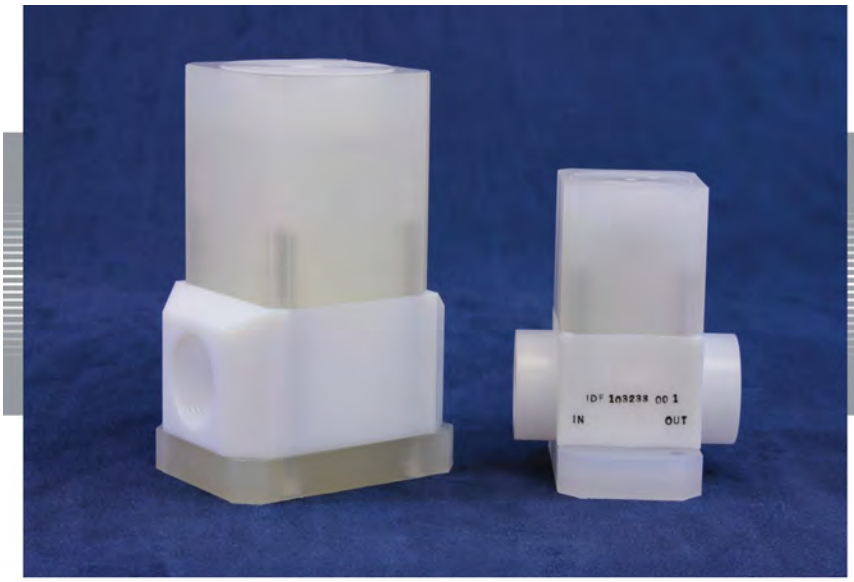
Inline Diaphragm Valves

Our Inline Diaphragm Valves (IDF) feature an all wetted PTFE flow path with a diaphragm design for ultra pure service. Common applications include DI Water, Acid Drain, and Source Chemistry flow shutoff.

- The IDF valve is offered in a two-way normally closed configuration.
- All PTFE wetted flow path.
- Long life diaphragm design.
- Inline flow path reducing cavity corners & dead spots.
- The anti-bacteria (AB) configuration is designated by adding -AB onto the suffix of the model number.



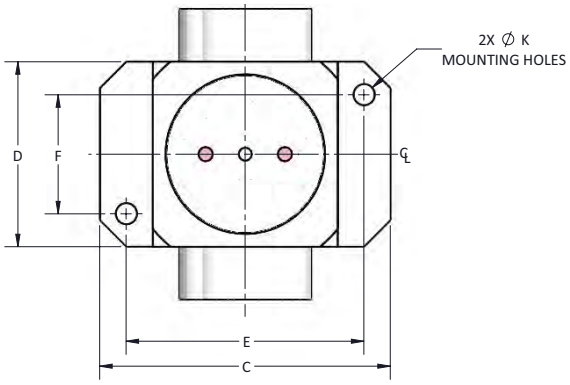
The AB Option (not shown) significantly reduces the potential of bacteria buildup and maintains a consistent flow via an independent mechanism. This control mechanism will allow for precise adjustments and a cleaner cavity.

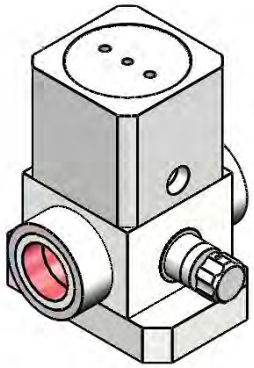
Custom porting & material configurations are available on request (such as, high ambient temperature actuators, sanitary connections and inline filters).

Specifications

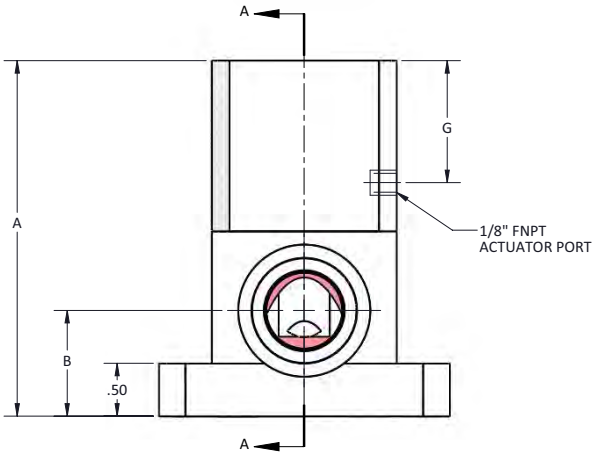
Size	1/2"	3/4"
Cv	2.8	7.5
Max Pressure		
Inlet Port	60 psi	60 psi
Outlet Port	40 psi	40 psi
Actuator Pressure (min./max.)	60 / 80 psi	60 / 80 psi
Max. Media Temperature	300°F	300°F
Max. Ambient Temperature	140°F	140°F
Wetted Surfaces	PTFE	PTFE
Pneumatic Surfaces	Polypropylene	Polypropylene
Inlet Port	1/2"	3/4"
Outlet Port	1/2"	3/4"
Actuator Port	1/8"	1/8"
AB Option: Anti-Bacteria Valve Stem	PVDF	PVDF
AB Option: Adjustment Bleed	0 - .75 GPM	0 - 2.5 GPM

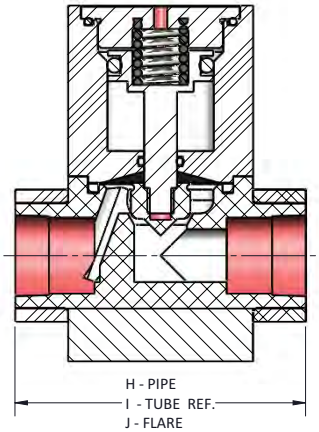
BECO manufacturing TEQCOM





ANTI-BACTERIAL CONFIGURATION
AB - OPTION





SECTION A-A
SCALE 1 : 1

Size	A	B	C	D	E	F	G	H	I	J	K
1/2"	3.37	1.00	2.75	1.75	2.25	1.13	1.28	2.75	2.87	3.95	.20
3/4"	4.58	1.20	3.25	2.30	2.80	1.50	1.87	3.25	3.54	4.80	.26

Inline Diaphragm Valves: ORDERING FORMAT

IDF – 103233 – 001 – AB

Inline Diaphragm Valve

Port Size
103233 = 1/2"
103188 = 3/4"

End Connection
001 = FNPT
002 = Tube
003 = Flare

Anti-Bacteria (option)

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

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Suckback Valves

Our IPS Suckback Valves are ideal for acid, solvent, photoresist solutions and other process dispensed chemistries. The IPS Suckback Valve will pull a vacuum and prevent excessive dripping from the dispensing nozzle.

The IPS Suckback Valve is constructed of an“all wetted” PTFE media flow path.

Our 104168 Suckback Valve incorporates the suckback feature in a Normally Closed pneumatic valve.

When air pressure is removed from the valve actuator, an internal diaphragm is pushed upward which forms a vacuum in the valve body.

While the valve is closing, the vacuum sucks back the final droplets of process media. Thereafter, the valve completely closes and seals the media flow path.

An additional unique feature of the 104168 Suckback Valve is a Vacuum Adjustment Knob which allows the user to set the vacuum level.

Specifications:	
Actuator Pressure (min/max)	45 / 60 psi
Maximum Media Pressure	30 psi
Maximum Media Temperature	185ºF / 85ºC
Maximum Ambient Temperature	140ºF / 60ºC
Suckback Amount	0.25 - 0.50 cc @ Room Temp & S.G. = 1.0

BECO manufacturing TEQCOM

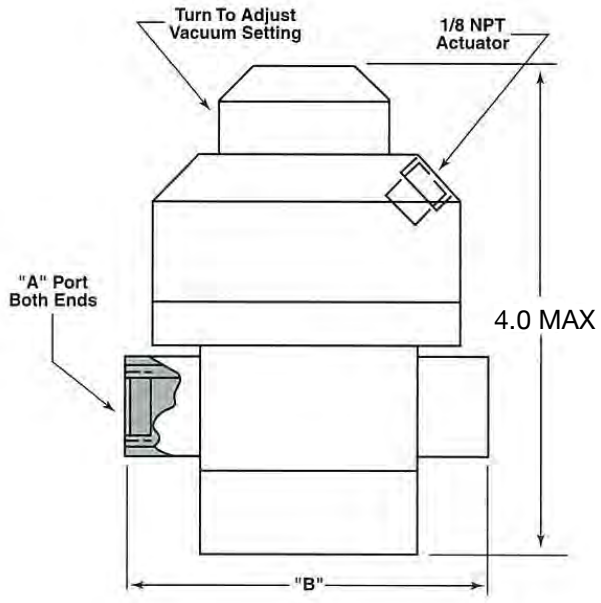
Suckback Valves: ORDERING FORMAT

SBV – 104168 – 2 – F

Suckback Valve

Port Style
F = FNPT
M = MNPT
T = Tube-Compression
FF = Fractional Flared

Port Size
2 = 1/8"
4 = 1/4"
6 = 3/8"



SBV Port Size & Style	104168 ("B")
1/8" FNPT	2.39
1/8" MNPT	2.39
1/8" Tube	2.39
1/4" FNPT	2.75
1/4" MNPT	2.75
1/4" Tube	2.63
1/4" Flared	3.63
3/8" FNPT	2.75
3/8" MNPT	2.75
3/8" Tube	2.63
3/8" Flared	3.63

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

141207

international polymer solutions

DI Water Valve

IPS DI Water Valves are perfect 2-Way Valves for wet benches and chemical process facilities where ultrapure water is required.

Wetted Path is free of...

- Lubricants
- Elastomers
- Springs

Our IPS DI Valve materials of construction include three options for the Body, Piston and Cap Assembly: PVC, Polypropylene or PVDF. For the highest level of chemical inertness and overall fluid handling performance all three configurations include 100% Virgin PTFE for the Bellows and Backing Plate construction.

O-Ring Seal options include EP or Viton. All DI Valve come standard with high performance Stainless Steel actuation springs.

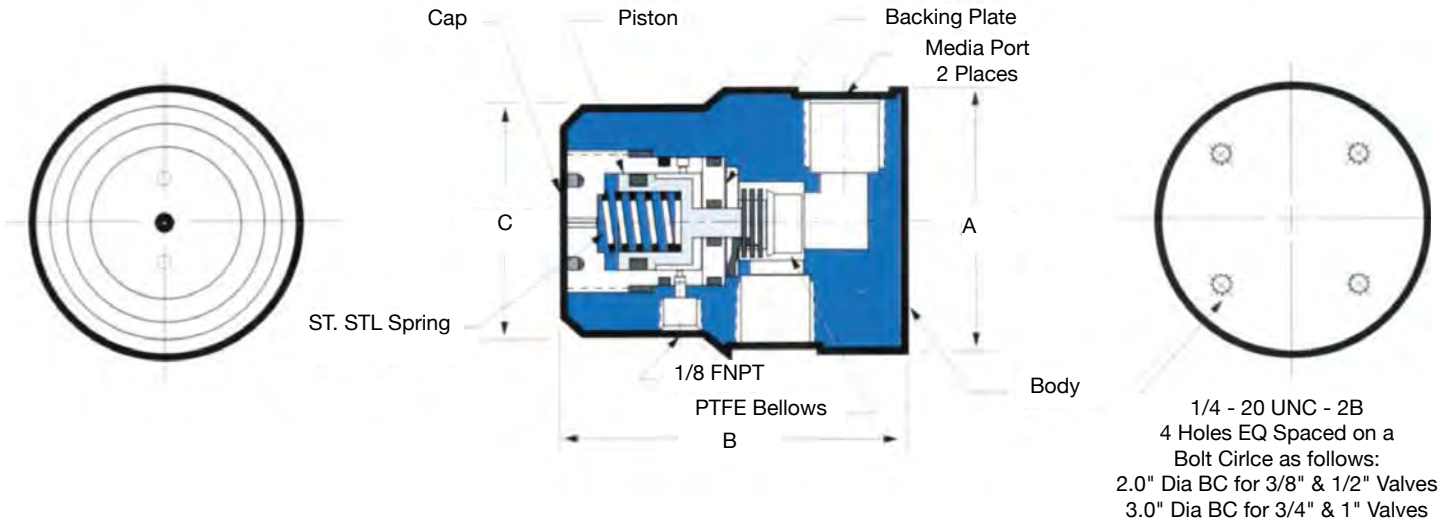
The DI Valve is formally known as the “MP” Multi - Purpose Valve.

Call IPS for special configurations.

The DI Valve is pneumatically actuated to open or close depending on the model selected.

DI Valve Specifications	PVC Model	Polypro Model	PVDF Model
Valve Type	2-Way NO or NC	2-Way NO or NC	2-Way NO or NC
Port & Orifices Available	3/8", 1/2", 3/4" & 1"	3/8", 1/2", 3/4" & 1"	3/8", 1/2", 3/4" & 1"
Fluid Max Pressure (psi) @ 70°F	75 psi	75 psi	75 psi
Media Backpressure (psi) @ 70°F	30 psi	30 psi	30 psi
Fluid Temperature Range	32°F to 140°F	32°F to 160°F	32°F to 212°F
Ambient Temperature Range	32°F to 120°F	32°F to 140°F	32°F to 175°F
Acuation Pressure (psi)	40 psi to 80 psi	40 psi to 80 psi	40 psi to 80 psi

BECO manufacturing TEQCOM



Port & Orifice	Cv Factor	Dim "A"	Dim "B"	Dim "C"
3/8"	2.1	2.75	3.56	2.38
1/2"	2.8	2.75	3.56	2.38
3/4"	7.5	4.00	5.91	3.25
1"	13.5	4.00	5.91	3.25

DI Water Valve: ORDERING FORMAT

DI — PVC — 66P — O — RC

DI Water Valve

Material of Construction
PVC = Polyvinyl Chloride
POL = Polypropylene
PVDF = Polyvinylidene Fluoride

Port & Orifice Size
66 = 3/8"
88 = 1/2"
1212 = 3/4"
1616 = 1"

Optional Flow Path
AB = Micro Adjust Knob/Hand turn adjust
RC = Restricted Closed
RB = Restricted Both
RO = Restricted Open
Only Available on NC Valves

Valve Configuration
O = Normally Open
C = Normally Closed

End Connection
P = FNPT
S = Socket Weld
FF = Flared

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

international polymer solutions

Water Valve

IPS Water Valve (WV) is manufactured in two material choices: Polypropylene or PVDF. The valve has a spring return and is pneumatically actuated to open or close depending upon the model.

The valve is compact and comes with four tapped holes on the base for ease of mounting.

Applications

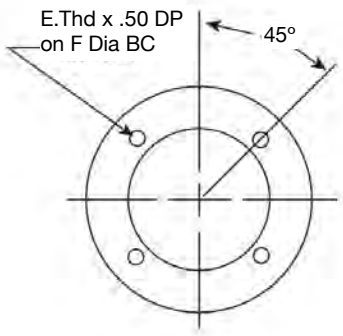
The IPS Water Valve is primarily used for purified water applications, DI water applications and controlled process tank applications. The Polypropylene and PVDF configurations of this valve can be used for numerous mild chemical applications. These include rinsing, blending, and other pneumatically controlled process applications.

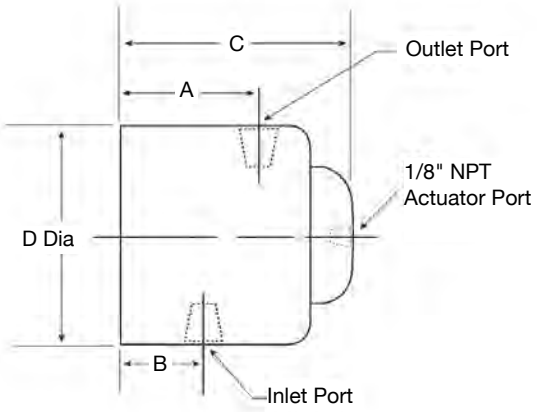
We offer a special Foot Operated Valve configuration for the ½" FNPT Ported design. This Foot Operated Valve (option "FV") is an excellent option for manual actuation, with hands free use, on Wet Benches. The technician depresses a foot actuated valve to energize the ½" FNPT Water Valve, leaving both hands free to manage other tasks on the Wet Bench. Call IPS for details on the FV Option.

Specifications

Size	1/4" Orifice	1/2" Orifice	3/4" Orifice	1" Orifice
Cv	0.8	2.8	7.5	13.5
Max Pressure Inlet	80 psi	80 psi	60 psi	60 psi
Max Media Temperature				
Poly		160ºF / 70ºC		
PVDF		212ºF / 100ºC		
Actuator Pressure (min/max)		35 / 70 psi		

BECO manufacturing TEQCOM





Size	A	B	C	D Dia	E Thd	F Dia
1/4"	1.52	1.00	2.44	2.25	1/4" - 20 UNC-2B	1.81
1/2"	1.69	.96	2.78	2.75	1/4" - 20 UNC-2B	2.00
1/2"	1.15	1.15	2.25	2.75	1/4" - 20 UNC-2B	2.00
3/4"	2.28	1.33	3.66	3.00	1/4" - 20 UNC-2B	2.50
1"	2.83	1.69	4.43	4.00	1/4" - 20 UNC-2B	3.44

= Low Profile (in line) water valve - see IWV ordering format information below.

Water Valve: ORDERING FORMAT

WV — POL — 44P — NC — EP — AST*

Water Valve

Material of Construction
POL = Polypropylene
PVDF = Polyvinylidene Fluoride

Port & Orifice Size
44 = 1/4" 1212 = 3/4"
88 = 1/2" 1616 = 1"

Port Type
P = FNPT
S = Socket
FF = Flared

Valve Configuration
NC = Normally Closed
NO = Normally Open

O-Ring Type
EP = Ethylene Propylene
VT = Viton
KA = Kalrez

IWV	POL	2C8	EP
INLINE (Low Profile) WATER VALVE	Materials of Construction POL = Polypropylene PVDF = Polyvinylidine Fluoride	Valve Configuration 1/2" 2 Way Normally Closed	O-Ring Type EP = Ethylene Propylene VT = Viton KA = Kalrez

***Optional Flow Path:**

AST = Reduce bacterial buildup with an Adjustment Screw Top-side. The adjustment screw, installed at the top of valve, prevents complete closure thereby allowing a controlled drip. Ideal for DI Water applications. Only available to "NO" configurations.

ASB = Create a metering effect with an Adjustment Screw Bottom-side. The adjustment screw, installed at the bottom of the valve, meters the orifice opening. Only available to "NC" configurations.

ATB = Combine both optional features into one valve (AST + ASB) with Adjustment Screws Top-side & Bottom-side for both controlled drip and orifice metering. Only available to "NC" configurations.

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

141203

Drain Valve

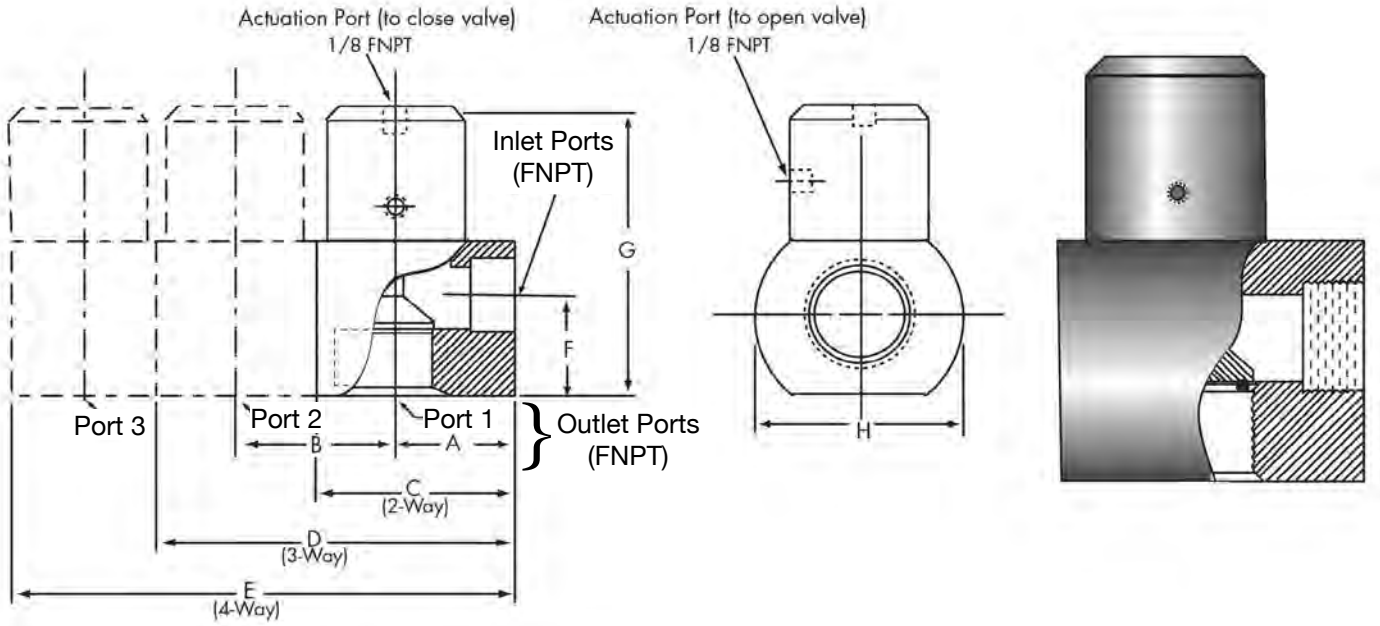
The IPS Drain Valve (DV) is a large orifice valve capable of handling large volumes of corrosive fluids via an all non-metallic wetted surface. For cost efficiency this valve is fabricated from PVC or Polypropylene. However, it is available in PVDF or PTFE, with Kalrez O-rings.

This valve is also available in 2, 3 and 4 way configurations with each port operating independently. The "DV" can be operated either by air to open/air to close or by spring return. Either operating method can be specified in the ordering format. Custom configurations available.

Applications

Primarily used for quick draining and filling of process tanks which contain mild solutions or DI water. For hard to handle media the "DV" valve, machined from PVDF or PTFE, is the perfect solution.

Specifications:	
Inlet Media Pressure	20 psi
Media Temperature	
PVC	140°F/60°C
Polypropylene	160°F/70°C
PVDF	212°F/100°C
PTFE	320°F/160°C
Actuation Pressure	45 - 60 psi
O-Ring Material	Ethylene Propylene (standard) Viton or Kalrez® FFKM equiv.



Port Size	A	B	C	D	E	F	G	H Dia
3/4"	2.16	2.56	3.50	6.07	8.63	1.88	5.43	4.00
1"	2.16	2.56	3.50	6.07	8.63	1.88	5.43	4.00
1.5"	2.31	3.07	3.88	6.88	9.88	1.97	5.97	4.00
2"	3.00	3.50	4.81	8.31	11.81	2.37	7.70	5.00

Drain Valve: ORDERING FORMAT

DV 2 – PVC – 16 – C – EP

Drain Valve

Valve Configuration
2 = 2 Way
3 = 3 Way
4 = 4 Way

Material of Construction
PVC = Polyvinyl Chloride
POL = Polypropylene
PVDF = Polyvinylidene Fluoride
PTFE = Polytetrafluoroethylene

Port & Orifice Size
12 = 3/4"
16 = 1"
24 = 1 1/2"
32 = 2"

O-Ring Type
EP = Ethylene Propylene
VT = Viton
KA = Kalrez® FFKM equiv.

Porting Configuration
C = Spring to Close, Air to Open
O = Spring to Open, Air to Close
A = Air to open, Air to Close

4-WAY example:
COA = (C=Port 1, O=Port 2, A=Port 3) shown upper left corner
3-WAY example:
CO = (C=Port 1, O=Port 2) shown upper left corner

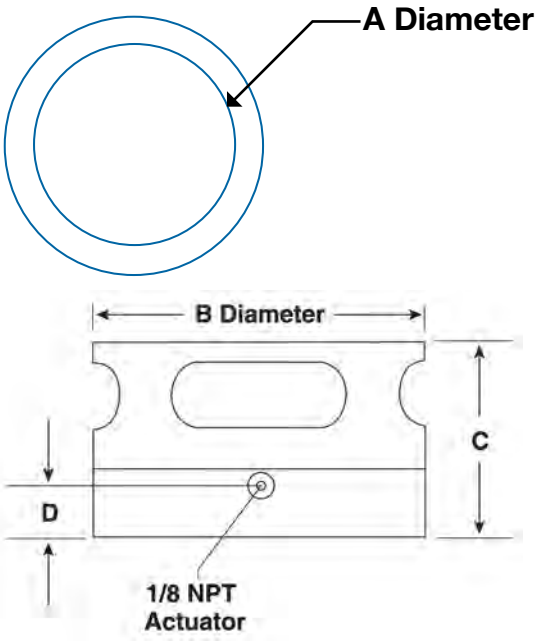
IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

Quick Dump Valves

Our Quick Dump ("QD") Valves are designed to rapidly drain process tanks. Constructed from high-purity polymers, which are selected to meet your application needs, our Quick Dump Valves are available in Polypropylene (POL) or Polyvinylidene Fluoride (PVDF). These valves are designed to be welded directly to the underside (bottom) of tanks. Our Quick Dump Valves are available configured with either O-Ring Seats or Domed Hard Seats. The Domed Hard Seat design prevents ponding/puddling of media on the valve piston and allows for a slight trickle of fluid. This plunger-style valve is very compact, while still configured with optional Air-to-Open/Spring-to-Close or Air-to-Open/Air-to-Close actuation.

Quick Dump Configuration	2"	4"
Actuation Pressure – PSI (Min / Max)	60 / 70	45 / 55
Media Temperature		
Polypropylene – °F (Min / Max)	30 / 160	30 / 160
PVDF – °F (Min / Max)	20 / 230	20 / 230
Approximate Dump Rate (GPM @ 1ft Head)	30	60



Size	Seat	Base	A	B	C	D
2"	O-Ring	104520	2"	3"	3.0"	.78"
2"	Hard	104521	2"	3"	3.0"	.78"
4"	O-Ring	103809	4"	5"	3.0"	.78"
4"	Hard	103952	4"	5"	3.0"	.78"
4" (high flow)	O-Ring	104602	4"	5"	4.0"	1.43"
4" (high flow)	Hard	104683	4"	5"	4.0"	1.43"

Quick Dump Valves: ORDERING FORMAT

O-Ring Seat

QD – 103809 – POL – E – 1

Quick Dump

Base Number
104520 = 2"
103809 = 4"
104602 = 4" *high flow*

Material of Construction
POL = Polypropylene
PVDF = Polyvinylidene Fluoride

Seat & Body O-Ring Type
E = Ethylene Propylene
V = ASTM D1418 FKM (Viton eq.)
K = ASTM D1418 FFKM (Kalrez eq.)

Configuration
1 = Air Open/Spring Close
2 = Air Open/Air Close

Hard Seat

QD – 103952 – POL – E – 1

Quick Dump

Base Number
104521 = 2"
103952 = 4"
104683 = 4" *high flow*

Material of Construction
POL = Polypropylene
PVDF = Polyvinylidene Fluoride

Body O-Ring Type
E = Ethylene Propylene
V = ASTM D1418 FKM (Viton eq.)
K = ASTM D1418 FFKM (Kalrez eq.)

Configuration
1 = Air Open/Spring Close
2 = Air Open/Air Close

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our QD Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

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PTFE PRESSURE REGULATOR

Our **IPS PTFE Pressure Regulator** is designed for use in high purity water and aggressive chemical applications.

Designed with a 100% virgin PTFE wetted flow path, the unit is ideal for DI Water Systems and corrosive media found in solar, semiconductor, pharmaceutical and chemical process applications.

All configurations are fitted for Panel Mounting with easy-to-grip Adjustment Knob.

The Teflon coated stainless steel adjustment screw is configured for low torque reliable manual operation.

Other sizes and configurations are available on request.

Specification:

Materials of Construction:	Temperature Ranges:
• Wetted Surfaces: Machined 100% Virgin PTFE & TFM • Non Wetted Materials: PVDF, Brass, Polypro, SS • Regulating Springs: Coated Steel	• 32°F - 140°F (0°C - 60°C) Ambient • 32°F - 266°F (0°C - 130°C) Media

Pressure Ranges:
• Maximum Inlet Pressure: 90 psi. • Two factory set pressure regulating options: LO = 0 to 40 psi and HI = 30 to 60 psi. • Referenced pressure ranges are listed for normal media temperature conditions. • Consult factory for pressure ranges when operating with media temperatures greater than 160°F.

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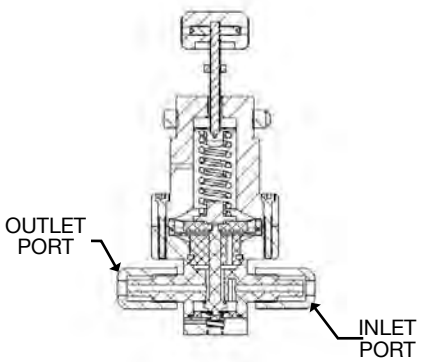

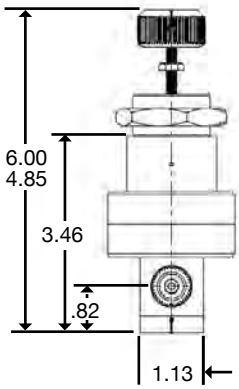

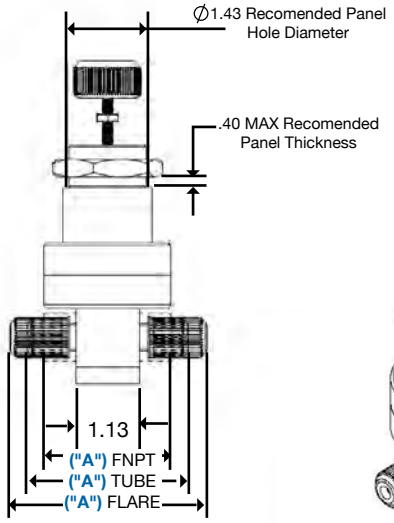

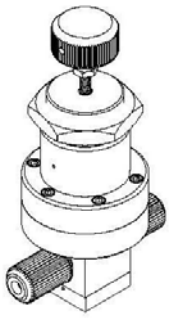

PTFE Pressure Regulator:
ORDERING FORMAT

PRG - 2 2 - P - HI

LO = Represents the factory set low pressure range of 0 psi to 40 psi.
HI = Represents the factory set high pressure range of 30 psi to 60 psi.

PORT SIZE & ORIFICE SIZE			PORT TYPE		"A" Dim
Callout	Port Size	Orifice Size	Callout	Port Type	Ref Inches
21	2 = (1/8")	1 = (1/16")	T	TUBE	2.85
43	4 = (1/4")	3 = (3/16")	T	TUBE	2.85
65	6 = (3/8")	5 = (5/16")	T	TUBE	2.95
22	2 = (1/8")	2 = (1/8")	P	FNPT	1.85
44	4 = (1/4")	4 = (1/4")	P	FNPT	2.25
64	6 = (3/8")	4 = (1/4")	P	FNPT	2.25
42	4 = (1/4")	2 = (1/8")	F	FLARE	3.45
64	6 = (3/8")	4 = (1/4")	F	FLARE	3.45

Turn the Adjustment Knob clockwise to increase the regulator outlet pressure.

Turn the Adjustment Knob counter- clockwise to decrease the regulator outlet pressure.

Do not over torque the Adjustment Knob against the travel stop.

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our regulators with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

141009

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Pressure Relief Valve

Our **IPS Pressure Relief Valve (PRV)** is constructed with a 100% pure PTFE Valve Body and Valve Plug. The single O-Ring design allows user selection of EP, Viton or Kalrez (FFKM eq.) depending on the flowing media.

The IPS PRV is factory configured for a 10 psi to 90 psi pressure range.

The relief valve is fully adjustable within this range by simply adjusting the upper Socket Hex Adjustment Screw and locking in place with the associated locking nut.

Our IPS Pressure Relief Valve is configured with three Upper Housing and Lower Base options: Polyvinylidene Fluoride (“PVDF”), Polypropylene (“PP”) or Anodized Aluminum (“AA”) as shown.

Applications

- Pump Pressure Relief
- Expansion Container Pressure Relief
- Flow Channel Pressure Relief
- Safety Relief from water hammer
- System protection for individual low pressure component in circuit

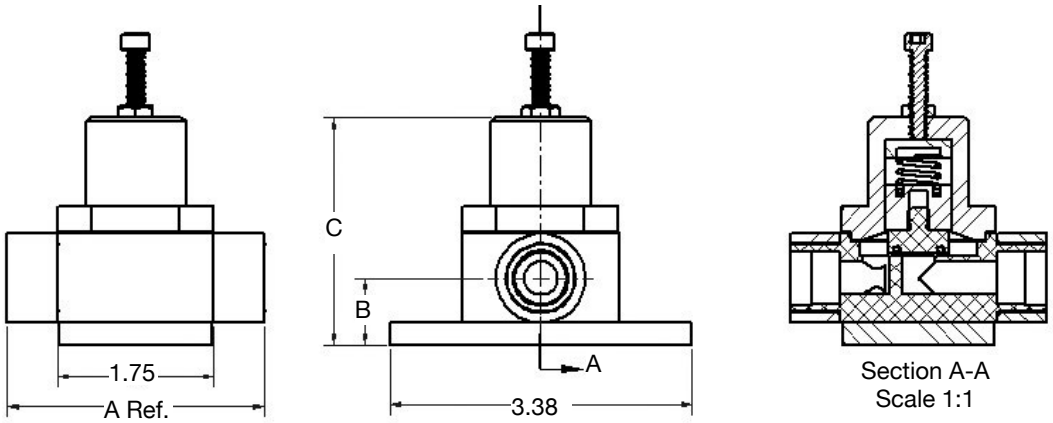
Features:

- All Wetted High-Purity Flow Path
- Ideal for Harsh Chemicals
- Fully Adjustable within an 80 psi selected range
- Teflon Coated Spring is isolated from media

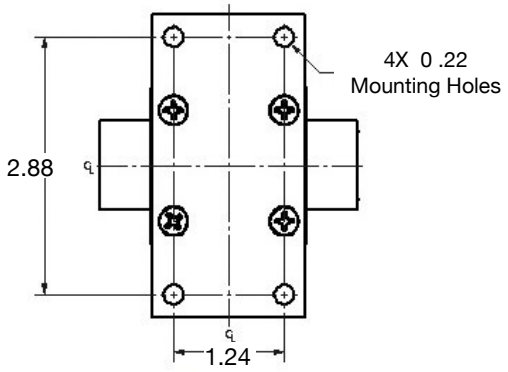
Call Factory with Special Requests

Temperature Range	
Ambient	
AA	0ºC - 150ºC
PVDF	0ºC - 120ºC
PP	0ºC - 60ºC
Media	
AA	0ºC - 150ºC
PVDF	0ºC - 120ºC
PP	0ºC - 60ºC

BECO manufacturing TEQCOM



PORT	A	B	C
1/4" Pipe	2.87	0.75	2.55
1/4" Tube	3.44	0.75	2.55
1/4" Flared	4.07	0.75	2.55
3/8" Pipe	2.87	0.75	2.55
3/8" Tube	3.44	0.75	2.55
3/8" Flared	4.09	0.75	2.55
1/2" Pipe	3.25	0.84	2.73
1/2" Tube	3.65	0.84	2.73
1/2" Flared	4.34	0.84	2.73



Pressure Relief Valve: ORDERING FORMAT

PRV – 4 4 P – EP – AA

Porting w/ Max Orifice

PIPE	
44	1/4" FNPT & 0.250" Orifice
66	3/8" FNPT & 0.375" Orifice
88	1/2" FNPT & 0.500" Orifice
TUBE	
43	1/4" TUBE & 0.188" Orifice
65	3/8" TUBE & 0.313" Orifice
87	1/2" TUBE & 0.436" Orifice
FLARE	
42	1/4" FLARE & 0.125" Orifice
64	3/8" FLARE & 0.250" Orifice
86	1/2" FLARE & 0.375" Orifice

Upper Housing & Base Plate
AA = Anodized Aluminum
PP = Polypropylene
PVDF = Polyvinylidene Fluoride

O-Ring Type
EP = Ethylene Propylene
KA = Kalrez (FFKM eq.)
VT = Viton

Port Connection
P = FNPT
T = Tube
FF = Flared

Sanitary End and Male NPT Connections are available as special orders

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

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Check Valves

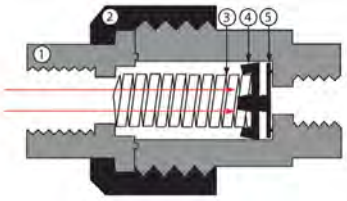
Our **IPS Check Valve** features all PTFE wetted surfaces for excellent performance in all high purity applications. Our PTFE design resists chemical corrosion and other elements within harsh process environments.

IPS Check Valves are commonly found as backflow preventers in clean processes. They are a simple and ideal device where directional flow control is a must.

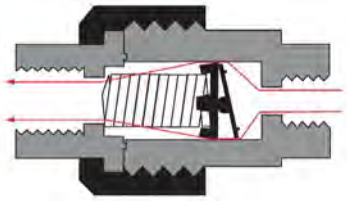
Depending on the check valve size selected and cracking pressure, some external non-wetted components may include Polypropylene or PVDF. The special internal control spring for 3 psi to 6 psi (nominal 5 psi) cracking pressure is machined virgin PTFE for the ⅛" to ½" units. Whereas, for higher cracking pressures the spring construction is doubled Teflon Coated 316 Stainless Steel precision ground.

Please contact us with your special application requirements. Special PEEK, PVDF and Polypro configurations are available upon request.

Stop Flow



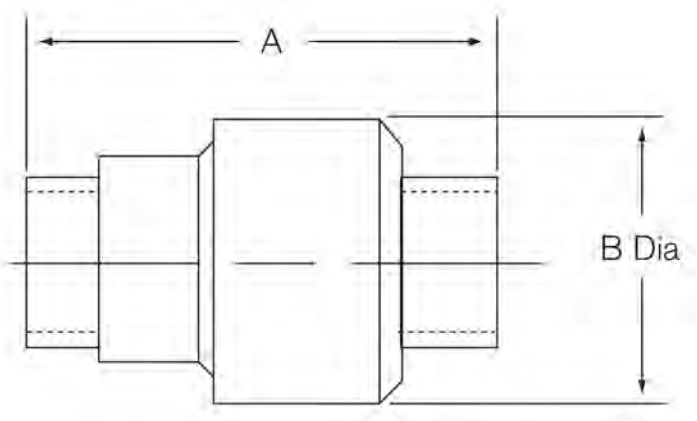
Through Flow



1. Body
2. Nut
3. Spring
4. Diffuser
5. Poppet

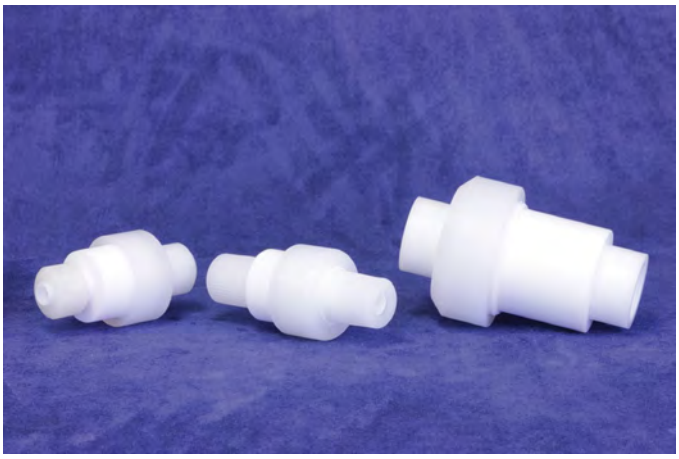
Specifications	- 5	- 10	- 20
Cracking Pressure	3 - 6 psi	7 - 13 psi	17- 23 psi
Max Operating Pressure	50 psi	50 psi	50 psi
Media Temperature	230° F / 110° C	230° F / 110° C	230° F / 110° C
Ambient Temperature	140° F / 60° C	140° F / 60° C	140° F / 60° C
Spring	⅛" – ½" PTFE ¾" – 1" 316 SS Teflon Coated	316 Stainless Steel Teflon Coated	316 Stainless Steel Teflon Coated

BECO manufacturing TEQCOM



Custom configurations are available

Inlet & Outlet Port Size	Dim A			B
	PIPE	TUBE	FLARE	
1/8"	2.08	2.86	-	1.25
1/4"	2.44	3.01	3.60	1.25
3/8"	2.74	3.34	4.02	1.75
1/2"	3.12	3.52	4.22	1.75
3/4"	4.57	5.31	6.07	2.76
1"	4.95	5.75	6.57	2.76



Check Valve: ORDERING FORMAT

CV – 2 – 2 – P – 05

Check Valve

	Orifice & Port Size		
	PIPE	TUBE	FLARE
2-2	.125" Orifice & 1/8" NPT	.063" Orifice & 1/8" Tube	-
4-4	.250" Orifice & 1/4" NPT	.188" Orifice & 1/4" Tube	.125" Orifice & 1/4" Flare
6-6	.375" Orifice & 3/8" NPT	.313" Orifice & 3/8" Tube	.250" Orifice & 3/8" Flare
8-8	.500" Orifice & 1/2" NPT	.436" Orifice & 1/2" Tube	.375" Orifice & 1/2" Flare
12-12	.750" Orifice & 3/4" NPT	.688" Orifice & 3/4" Tube	.592" Orifice & 3/4" Flare
16-16	1.00" Orifice & 1" NPT	.938" Orifice & 1" Tube	.875" Orifice & 1" Flare

Cracking Pressure
05 = 3 psi to 6 psi
10 = 7 psi to 13 psi
20 = 17 psi to 23 psi

End Connection
P = FNPT
T = Tube
F = Flared
M = MNPT

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

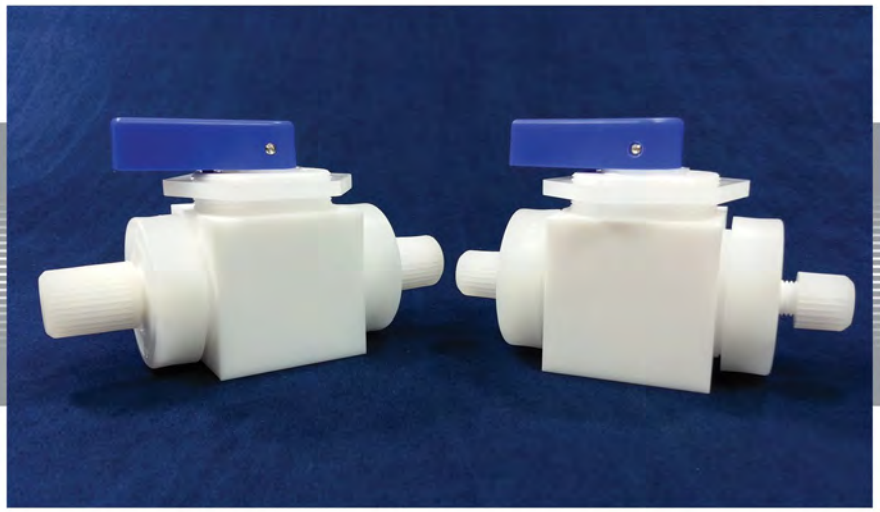
international polymer solutions

PTFE Ball Valve

Our **IPS Ball Valve** features an all PTFE wetted surface design. The design is ideally suited for harsh chemical and corrosive media applications.

Polytetrafluoroethylene (PTFE), commonly known by its popular E.I. DuPont trade name TEFLON®, is also well suited to clean room and deionized water applications.

The body, stem, ball and ports are constructed from PTFE. For standard applications, external non wetted components are constructed from Natural PVDF and Polypropylene.



Contact IPS for special applications, including high ambient temperatures and corrosive atmospheres.

Metric sizes are available upon request.

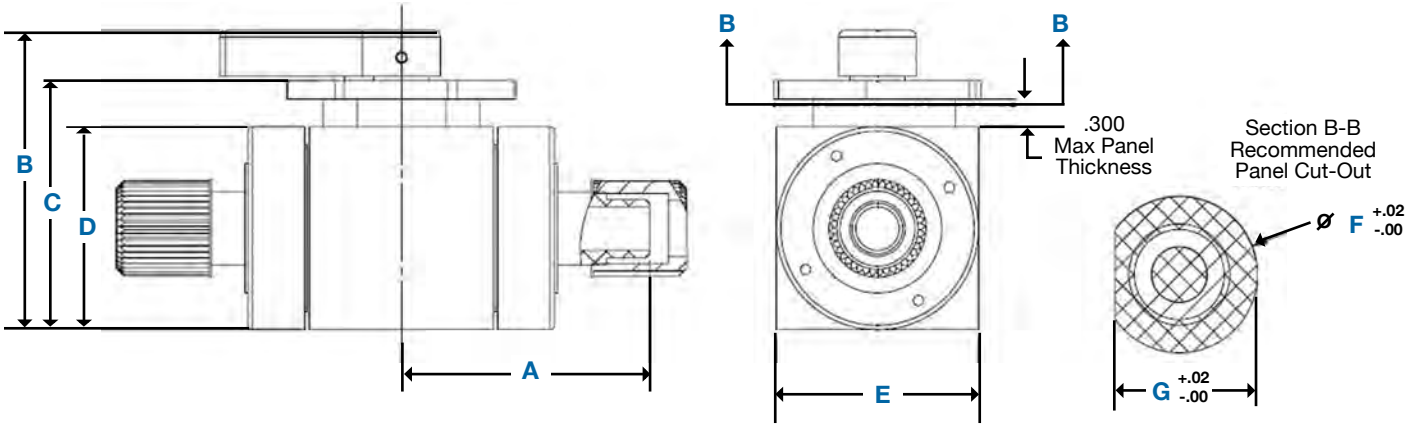
Features:

- PTFE construction for media wetted surfaces.
- Reliable low torque manual operation.
- Quarter Turn with Positive Stops.
- Design accommodates partial open position for metered flow.
- All models can be panel mounted.
- All models can be used in high ambient temperature environments.

Specification:

Standard Port Configurations	1/4 •	3/8" •	1/2" •	3/4" •	1"
Connection Types	Female NPT •	Tube •	Flared		
Media Operating Pressure	120 psi max •	25 in Hg vacuum			
Media Operating Temperature	320°F (160°C) max •	32°F (0°C) min			
Ambient Temperature	240°F (115°C) max •	32°F (0°C) min			

BECO manufacturing TEQCOM



PTFE Ball Valves:
ORDERING FORMAT

BV – x – x

Ball Valve

Port Size
44 = 1/4"
66 = 3/8"
88 = 1/2"
1212 = 3/4"
1616 = 1.0"

End Connections
P = FNPT
T = Tube
F = Flared

Product Configuration	A	B	C	D	E	F	G
1/4" FNPT	1.62	3.18	2.50	2.00	2.00	1.82	1.69
1/4" Tube	2.12	3.18	2.50	2.00	2.00	1.82	1.69
1/4" Flare	2.62	3.18	2.50	2.00	2.00	1.82	1.69
3/8" FNPT	1.62	3.18	2.50	2.00	2.00	1.82	1.69
3/8" Tube	2.12	3.18	2.50	2.00	2.00	1.82	1.69
3/8" Flare	2.62	3.18	2.50	2.00	2.00	1.82	1.69
1/2" FNPT	1.62	3.18	2.50	2.00	2.00	1.82	1.69
1/2" Tube	2.18	3.18	2.50	2.00	2.00	1.82	1.69
1/2" Flare	2.72	3.18	2.50	2.00	2.00	1.82	1.69
3/4" FNPT	2.13	4.06	3.38	2.75	2.75	2.13	1.94
3/4" Tube	2.75	4.06	3.38	2.75	2.75	2.13	1.94
3/4" Flare	3.38	4.06	3.38	2.75	2.75	2.13	1.94
1" FNPT	2.13	4.06	3.38	2.75	2.75	2.13	1.94
1" Flare	3.62	4.06	3.38	2.75	2.75	2.13	1.94

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

international polymer solutions

PTFE Stopcocks

Stopcock Valves are precision machined devices that function in much the same way as a ball valve. When the handle points in the direction of flow, the valve is fully open; when the handle points perpendicular to the direction of flow, the valve is fully closed; and at the 45° position the valve is halfway open and thereby has a metering effect on the media flow.

The IPS Stopcock features an all PTFE wetted surface design. The design is ideally suited for harsh chemical and corrosive media and environments. Polytetrafluoroethylene (PTFE), commonly known by its popular E.I. DuPont trade name TEFLON®, is also well suited to clean room and deionized water applications.

The body, stem and ports are constructed from PTFE. For standard applications, external non wetted components are constructed from Polypropylene. All configurations are optionally available as Panel Mounted and/or High Ambient Temperature models.

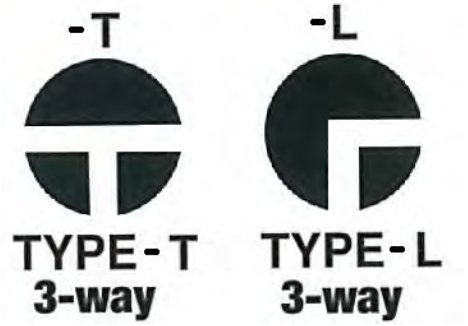
Call IPS for:

- Metric Tube End options
- Male Pipe End options
- Sanitary Connection options

Stopcock Specifications

Media Pressure	60 psi
Media temperature	110° C / 230° F
Ambient temperature	65° C / 150° F
All Wetted Surfaces	Virgin PTFE

Valve Stem Configuration



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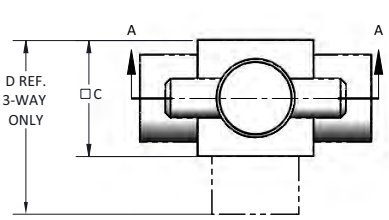
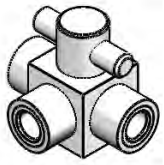
Stopcock Valve: ORDERING FORMAT

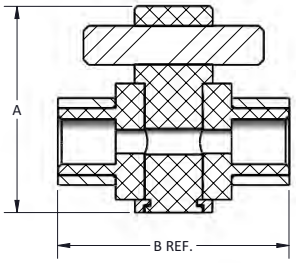
- 4-Way Stopcock Valves are available. Please call IPS to properly configure your selection.
- The valve flow orifice is governed by your port end connections (FNPT, Tube or Flared) unless requested otherwise. Please call IPS to configure a restrictive Valve Stem Orifice.
- Maximum torque to turn/actuate stop cock approximately 25 in-lbs. Torque varies based on valve size and other factors.

Port Size	Port Type	Orifice	Body Style	Part No.
1/8”	FNPT	0.11	2-WAY	SC-400
			3-WAY	SC-401
	TUBE	0.09	2-WAY	SC-403
			3-WAY	SC-404
1/4”	FNPT	0.23	2-WAY	SC-500
			3-WAY	SC-501
	TUBE	0.19	2-WAY	SC-503
			3-WAY	SC-504
	FLARE	0.13	2-WAY	SC-506
			3-WAY	SC-507
3/8”	FNPT	0.28	2-WAY	SC-600
			3-WAY	SC-601
	TUBE	0.27	2-WAY	SC-609
			3-WAY	SC-610
	FLARE	0.25	2-WAY	SC-612
			3-WAY	SC-613
1/2”	FNPT	0.44	2-WAY	SC-700
			3-WAY	SC-701
	TUBE	0.39	2-WAY	SC-709
			3-WAY	SC-710
	FLARE	0.38	2-WAY	SC-712
			3-WAY	SC-713
3/4”	FNPT	0.45	2-WAY	SC-800
			3-WAY	SC-801
	TUBE	0.45	2-WAY	SC-809
			3-WAY	SC-810
	FLARE	0.45	2-WAY	SC-812
			3-WAY	SC-813

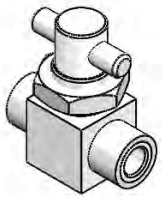




3-WAY SC VALVE



SECTION A-A



PANEL MOUNT OPTION

Basic Dimensions

Series	Dim A	Dim B	Dim C	Dim D	PM Hole Size	Max Panel Thicness
SC-400	1.63	1.76	1.00	1.38	0.70	0.30
SC-500	2.00	2.25	1.13	1.69	0.90	0.30
SC-600	2.13	2.62	1.50	2.06	1.03	0.43
SC-700	2.33	3.25	1.88	2.63	1.40	0.43
SC-800	3.25	3.75	2.25	3.00	1.78	0.43

- For Flared Connections add ~3/8” per port.

Options:

- Add “-P” to the end of the Part Number to specify a Panel Mount configuration.
- Add “-HT” to the end of the Part Number for high ambient temperature conditions. This is only required for room temperatures above 140ºF. The external non wetted components are changed to PVDF.

PTFE Stopcocks: ORDERING FORMAT

SC - 501 – X – P - HT

Stopcock Part No.

Stem Configuration (3W Only)
L - Type
T - Type

High Ambient Temp. Option
For Temperatures over 140ºF

Panel Mount Option
“A” DIM Increases by About 1”

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

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Metering Valve

IPS Metering Valves (MV) use a tapered plug-stem to give a fine adjustment to the flow in addition to a full, open, or positive shutoff position.

Our Metering Valves come in two configurations: Straight Flow Pattern (standard) and Angled Flow Pattern (special). IPS Metering Valves are considered low pressure valves.

The PTFE all-wetted surface design works equally well with ultra clean DI water and harsh chemical media. As with all Metering Valves, we recommend filtering the media prior to entering the valve.

Specifications:

Media Pressure	25 in HG to 60 psi maximum
Media Temperature	-30°C (-22°F) to 110°C (230°F)
Ambient Temperature	-18°C (0°F) to 80°C (176°F)

Metering Valve Flow Characteristics:

Metering Valve Orifice	Maximum Flow H2O (gpm)	Maximum Flow Air (scfm)	Turns Full Open Valve
0.094” Orifice	0.67	3.90	5 ±1
0.125” Orifice	1.37	8.10	5 ±1
0.188” Orifice	2.73	14.03	10 ±1
0.250” Orifice	2.90	15.19	10 ±1
0.313” Orifice	9.77	52.04	10 ± 1
0.375” Orifice	11.33	61.52	10 ±1
0.438” Orifice	20.33	106.88	10 ±1
0.500” Orifice	22.19	112.76	10 ±1

H2O & Air Flow based on nominal 70°F DI Water & Shop Air at 50 psi

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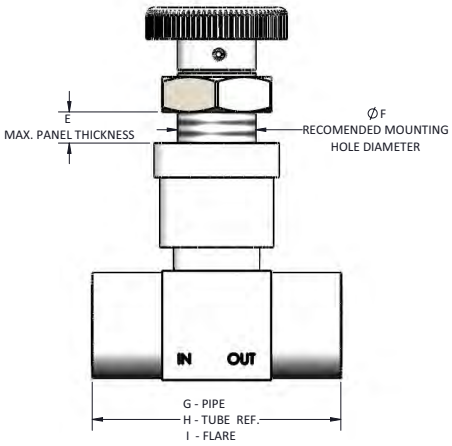

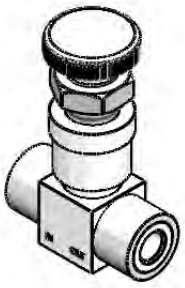

STRAIGHT FLOW PATH
(A = STANDARD)

ANGLED FLOW PATH
(B = SPECIAL)

Size	A	B	C	D	E	F	G	H	I
1/8"	2.92	1.77	0.38	0.75	0.25	0.64	1.50	1.50	n/a
1/4"	3.05	1.90	0.44	0.88	0.25	0.64	2.00	2.00	2.88
3/8"	4.56	2.61	0.60	1.62	0.69	1.13	2.75	2.75	3.63
1/2"	4.81	2.75	0.72	1.62	0.69	1.13	3.13	2.75	3.82

Metering Valve:
ORDERING FORMAT

MV — 22 P — A

Metering Valve

Port & Orifice Size

Orientation
A = Straight Flow Pattern
B = Angled Flow Pattern

Port Configuration
P = Pipe Female NPT
T = Tube
FF = Fractional Flared
M = Pipe Male NPT

Porting w/ Max Orifice

PIPE	
22	1/8" FNPT & 0.125" Orifice
44	1/4" FNPT & 0.250" Orifice
66	3/8" FNPT & 0.375" Orifice
88	1/2" FNPT & 0.500" Orifice
TUBE	
21	1/8" TUBE & 0.094" Orifice
43	1/4" TUBE & 0.188" Orifice
65	3/8" TUBE & 0.313" Orifice
87	1/2" TUBE & 0.436" Orifice
FLARE	
42	1/4" FLARE & 0.125" Orifice
64	3/8" FLARE & 0.250" Orifice
86	1/2" FLARE & 0.375" Orifice

If you do not find your configuration available please call the IPS factory

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

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Precision Plug Valve

The **IPS Precision Plug Valve (PPV)** is a precision machined manual valve manufactured from 100% virgin PTFE (all wetted surfaces) with PVDF Stem Nut. The PTFE body and stem perform equally well with harsh chemicals and ultra clean DI water.

The valve construction includes a tapered body which matches a tapered plug for improved positive shut-off.

Various orifice and port sizes are available as standard items. Other sizes and configurations are available on request.

Our Precision Plug Valve are supplied in two configurations:

- Straight Flow Pattern ("A" = standard)
- Angled Flow Pattern ("B" = special)

Specification:

Operating Pressure	0 – 60 psi	
Temperature Range	Line Media:	-55°C to + 100°C (-67°F to + 212°F)
	Ambient:	-55°C to + 71°C (-67°F to + 160°F)
Leak Rating	Bubble Tight	

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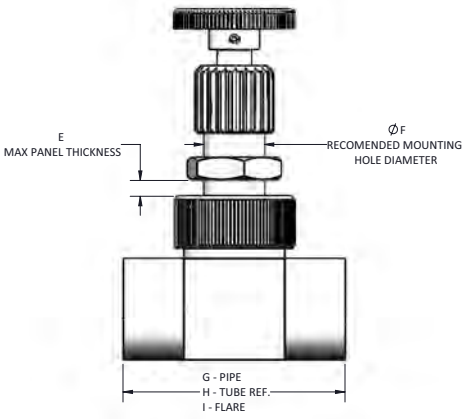
PPV DIMENSIONS

Size	A	B	C	D	E	F	G	H	I
1/8" - 1/4"	2.96	1.45	0.41	0.75	0.15	0.51	1.87	1.75	2.75
3/8" - 1/2"	4.40	2.03	0.63	1.25	0.45	0.76	2.75	2.37	3.45




STRAIGHT FLOW PATH
(A = STANDARD)


ANGLED FLOW PATH
(B = SPECIAL)

Precision Plug Valve: ORDERING FORMAT

PPV – X X X – X

Porting w/ Max Orifice

PIPE	
22	1/8" FNPT & 0.125" Orifice
44	1/4" FNPT & 0.250" Orifice
66	3/8" FNPT & 0.375" Orifice
88	1/2" FNPT & 0.500" Orifice
TUBE	
21	1/8" TUBE & 0.063" Orifice
43	1/4" TUBE & 0.188" Orifice
65	3/8" TUBE & 0.313" Orifice
87	1/2" TUBE & 0.436" Orifice
FLARE	
42	1/4" FLARE & 0.125" Orifice
64	3/8" FLARE & 0.250" Orifice
86	1/2" FLARE & 0.375" Orifice

Model Designation
A - Straight Pattern Valve
B - Angle Body Valve

End Connections
P = FNPT
T = Tube
FF = Fractional Flared

Orifice (in)	Max GPM H2O at 22°C	Max Air CFM at 20 psi
0.063	1.0	4.2
0.125	1.6	7.1
0.188	2.1	9.2
0.250	2.6	9.3
0.313	3.0	11.1
0.375	3.4	12.8
0.500	4.0	16.0

PPV valves have a 6 (+/-1) Manual Turn Range

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

international polymer solutions

Sampling Metered Valve

Our **IPS PTFE Sampling Metered Valve (SMV)** is designed for use in high purity water and aggressive chemical applications.

Designed with a 100% virgin PTFE wetted flow path, the unit is ideal for DI Water Systems and corrosive media found in solar, semiconductor, pharmaceutical and chemical process applications.

This Panel Mount unit functions with a manual push level to actuate a metered flow.

The metered flow ensures a controlled dispensing of fluid for manual sampling.

Commonly used for dispensing controlled amounts of media for element verification tests; for manual dispensing of DI Water into carboy and other transport containers; and for dispensing metered amounts of chemicals to blend and balance process chemistries.

Other sizes and configurations are available on request.

Specifications:

Materials of Construction:

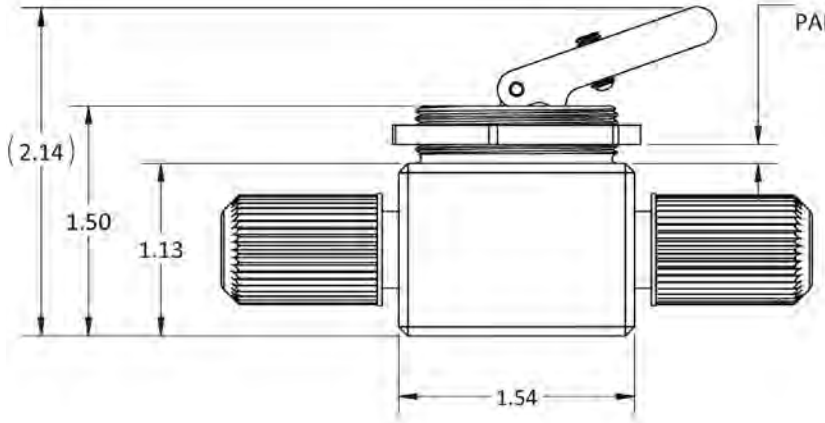
- Wetted Surfaces: Machined 100% Virgin PTFE & TFM
- Non Wetted Materials: Polypro, PVDF, SS

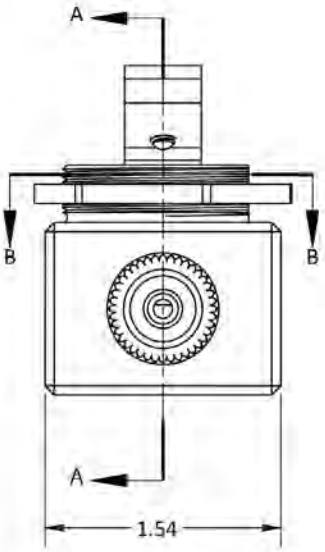
Temperature Ranges:

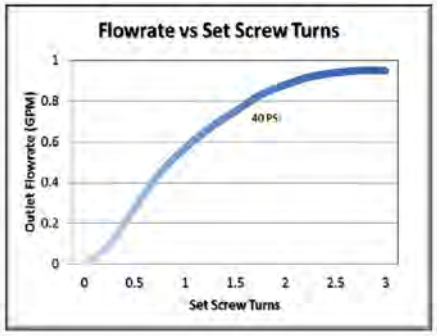
- 32°F - 140°F (0°C - 60°C) Ambient
- 32°F - 200°F (0°C - 93°C) Media

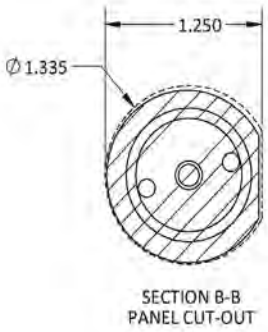
Pressure Ranges:

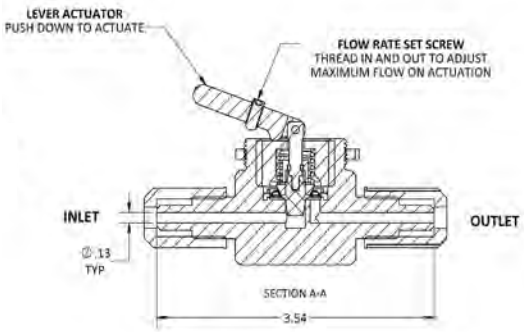
- Maximum Inlet Pressure: 60 psi (414 kPa | 4.14 bar)
- The unit is metered to reduce the Inlet Pressure. Depending on the media conditions (pressure, temperature, viscosity and specific gravity) the valve will produce a 25% to 50% pressure drop.











Sampling Metered Valve: ORDERING FORMAT

SMV — 42F — P

Porting w/ Max Orfice

22P = 1/8” FNPT & 0.125” Orifice

21T = 1/8” TUBE & 0.063” Orifice

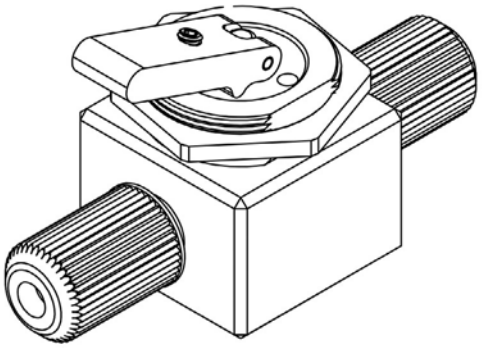
44P = 1/4” FNPT & 0.250” Orifice

43T = 1/4” TUBE & 0.188” Orifice

42F = 1/4” FLARE & 0.125” Orifice

Mounting

P = Panel Mount



• These valves are configured with their maximum available port orifice for the given port style and size. Call IPS for special constrained orifice & other custom solutions.

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.

141021

Dilution Drain Valves

The **Dilution Drain Valve** is ideal for cooling and diluting solutions while draining. The valve is designed to shut off the drain automatically if the water flow is interrupted. The DDV fits tanks with 3/8", 1/2" and 3/4" main drain ports.

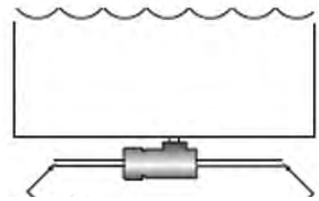
Features:

- With a focus on high purity applications, our PTFE and PVDF all wetted surface designs resist chemical corrosion and other harsh process environments.
- Configured for easy facility hookup which only requires water pressure. Dilution Water Pressure Range: 30 psi to 90 psi.
- The Fail Safe design will close the valve when dilution water is interrupted.
- The Main Drain Port is protected from chips and debris with a screened Baffle Plate.
- Media Operating Temperature Range is 32°F to 280°F (0°C to 140°C).

Note: High dilution rates will cause slow drain rates.

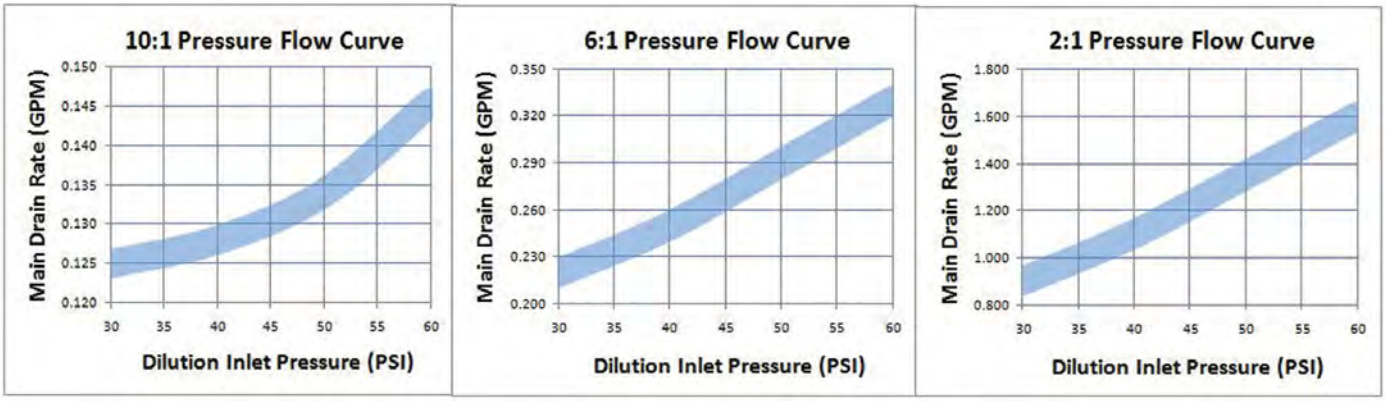
Application

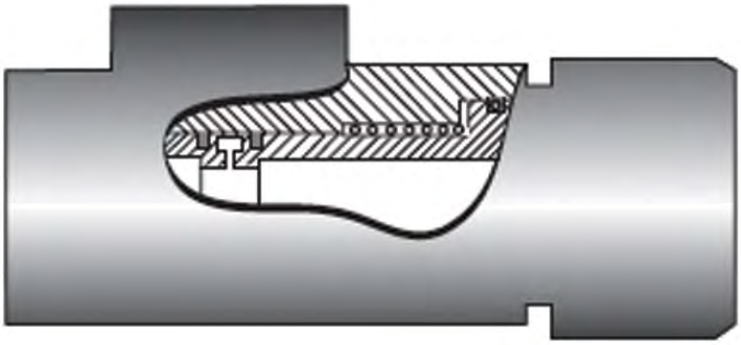
Used to drain a tank while diluting and cooling the media.



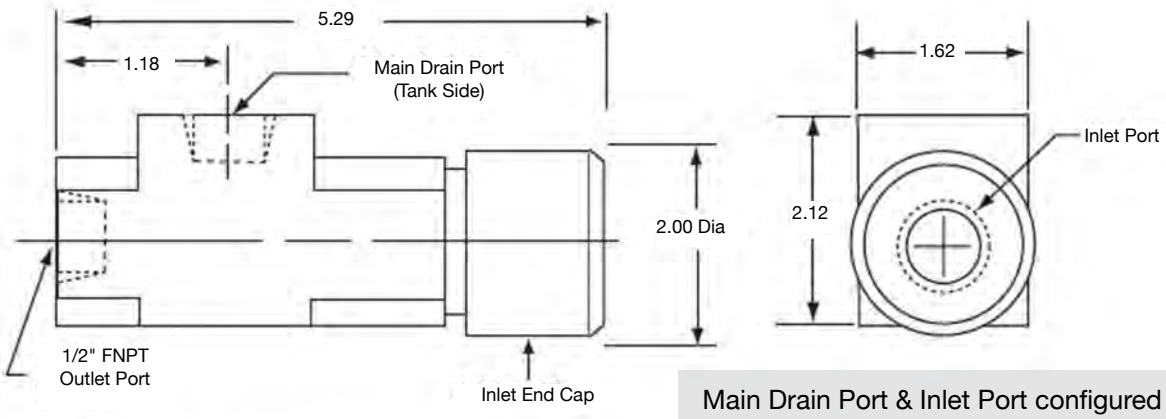
How does it work?

- When water pressure is activated, a unique spool valve design moves forward and aspirates the tank dry.
- When water pressure is deactivated, a PTFE coated isolated return spring automatically shuts off the valve.





Please contact us with your special application requirements. PEEK, PVDF & Polypro configurations are available on request.



Main Drain Port & Inlet Port configured to match (*see below*)

Dilution Drain Valves: ORDERING FORMAT

DDV – 02 – 06 – V – T

Dilution Drain Valve	**Dilution Ratio**	**Main Drain & Inlet Port**	**O-Ring Type**	**Body Material**
	02 = 2:1	06 = 3/8" FNPT	V = ASTM D1418 FKM (Viton eq.)	T = PTFE (std)
	06 = 6:1	08 = 1/2" FNPT	K = ASTM D1418 FFKM (Kalrez eq.)	P = PVDF
	10 = 10:1	12 = 3/4" FNPT		

IPS Product Notes:

1. Please email Customer Service at info@ipolymer.com
2. Call us for special applications. We can manufacture our DDV Valves with special mounting and interface dimensions.
3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.