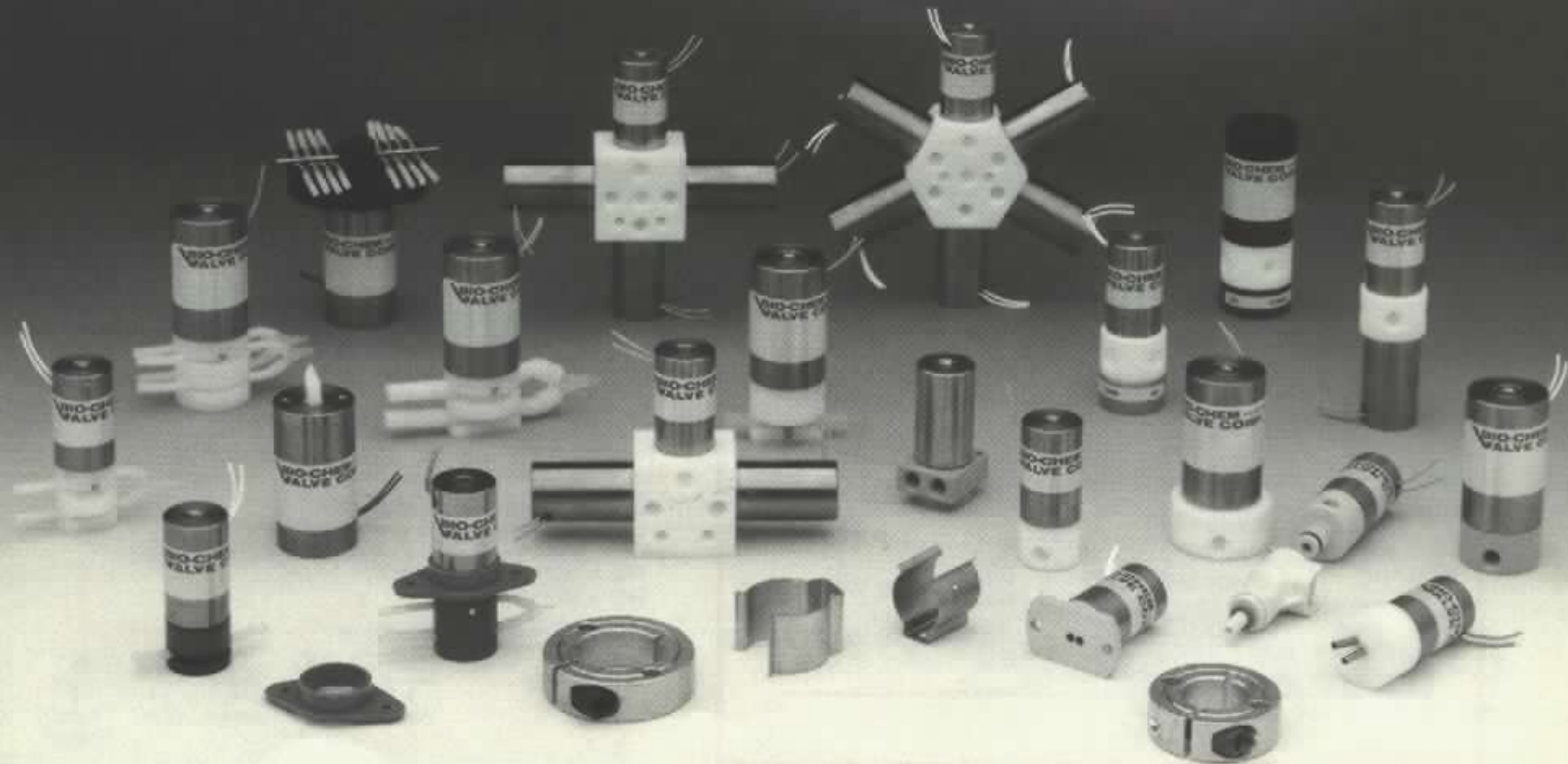


# BIO-CHEM VALVE™ CORP.

Distributed in Australia by  
Chromalytic Technology Pty Ltd

tel : 03 9762 2034 fax : 03 9761 1169 e-mail info@chromtech.net.au

## Miniature Solenoid Operated Valves



## SOLENOID OPERATED PINCH VALVES

FOR HIGHER FLOW REQUIREMENTS

### FEATURES

- High Cycle Life
- Fast Response Time
- High Flow
- Zero Dead Volume
- Long Stroke

### SPECIFICATIONS

Series	150P	
Voltage	12 VDC	24 VDC
Power Watts @ 70°F.	8.0	8.0
Current Amps @ 70°F.	.66	.33
Weight	16 oz.	
Lead Wires	15" 22 Gauge Teflon Coated	
Tube Material	Silicone (S) or Bio-Chem (B)	
Tube Length	12" Standard Length	

### TUBING SIZES

Dash No.	I.D.	O.D.	Wall	Maximum Pressure
-06	1/4" (6.35mm)	3/8"	1/16"	10 PSI
-07	5/16" (7.95mm)	7/16"	1/16"	10 PSI

### ORDERING INFORMATION

Series	Type	Tubing	Voltage
150P2NC	2 way NC	-06 or -07	Available in 12 VDC
150P2NO	2 way NO	-06 or -07	24 VDC 115 VAC
150P3MP	3 way MP	-06	220 VAC

These pinch valves handle large tube sizes 1/4" I.D. and 5/16" I.D. Tubing may be easily replaced without removing valve from your system. Available in 2-way normally closed, 2-way normally open, and 3-way which are ideal for fluid switching applications.

3-Way Pinch Valve

2-Way Pinch Valve



### DIMENSIONS:

us Patent No. 4,524,802

Series	Dia.	Height
150P2NC	1.5" (38.1mm)	3-3/4" (95.25mm)
150P2NO	1.5, (38.1mm)	4,5/16" (109.50mm)
150P3MP	1.5" (38.1mm)	3-3/4" (95.25mm)

### For Mounting Information

See Accessories and Options Sheet

NC = Normally Closed

NO = Normally Open

MP = Multi Purpose

Example: P/N **150P 2 NC 12 -07 B**  
Series    Type    Voltage    Tube    Tube Material

### SOLENOID OPERATED TEFLON® ISOLATION VALVES

#### FEATURES

- Low Power Consumption
- Isolated Solenoid
- High Cycle Life
- Minimal Dead Volume
- Fast Response Time
- Vacuum or Pressure Service
- Teflon®Wetted Parts

#### SPECIFICATIONS

Series	075T		100T	
Voltage	12 VDC	24 VDC	12 VDC	24 VDC
Power Watts @ 70°E	2.6	2.6	4.0	4.0
Current Amps @ 70°F.	.22	.10	.32	.16
Equiv. Orifice Dia.	.032 (0.81 mm)		.062 (1.55 mm)	
Internal Volume 2W	.013cc		.06cc	
Internal Volume 3W	.03cc		.09cc	
Weight	2 oz.		5 oz.	
<b>Ports**</b>	<b>1/4-28 Flat Bottom**</b>			
Operating Pressure 075T Series	Vacuum - 15 PSI NO & NC Port Vacuum - 30 PSI Common Port			
Operating Pressure 100T Series*	Vacuum - 30 PSI NO & NC Port Vacuum - 60 PSI Common Port			
Lead Wires	15" 26 Gauge Teflon Coated			

\* Pressure rating available to 100 PSI depending on application.

\*\*For M6 x 1.0 ports Consult factory.

Other body materials available Peek, PPS, Tefzel® and Kel-F-consult factory.  
®Teflon and Tefzel are registered trademarks of DuPont Co.

#### ORDERING INFORMATION

Series	Type	Orifice Dia.	Voltage
075T	2 way NC	- 32 or -62	Available in 12 VDC 24 VDC
	2 way NO	-32 or -62	
	3 way MP	- 32	
100T	2 way NC *	- 62	115 VAC 220 VAC
	2 way NO	- 62	
	3 way MP	-.32 or - 62	

\*Also available in .092 Orifice Diameter.

Our unique design concept of diaphragm retention, eliminates leakage problems due to temperature changes.

Available in

2-way normally closed

2-way normally open

3-way multi purpose

These small valves are excellent for use with corrosive and high purity fluids

**2-Way Teflon®Valve**

**3-Way Teflon®Valve**



#### DIMENSIONS:

Series	Dia.	NC Height	NO	Series	Dia.	Height
075T2	3/4 "	1-7/8"	2-3/16"	075T3	7/8 "	2-5/16"
100T2	1"	2-3/16"	2-1/2"	100T3	1"	2-11/16"

#### For Mounting Information

See Accessories and Options Sheet

NC = Normally Closed

NO = Normally Open

MP = Multi Purpose

#### Body Material

Tefzel - 2

Kel-F - 3

PPS - 4

Peek - 5

Example: P/N  $\frac{100T}{\text{Series}}$   $\frac{2 \text{ NC}}{\text{Type}}$   $\frac{12}{\text{Voltage}}$   $\frac{-62}{\text{Orifice Dia.}}$   $\frac{-5}{\text{Peek}}$

### SOLENOID OPERATED PINCH VALVES

#### FEATURES

- Low Power Consumption
- High Cycle Life
- Small Size
- Fast Response Time
- Zero Dead Volume
- Long Stroke

#### SPECIFICATIONS

Series	075P		100P	
Voltage	12 VDC	24 VDC	12 VDC	24 VDC
Power Watts @ 70°F.	2.6	2.6	4.0	4.0
Current Amps @ 70°F.	.22	.10	.32	.16
Weight	2 oz.		5 oz.	
Lead Wires	15" 26 Gauge Teflon Coated			
Tube Material	Silicone (S) or Bio-Chem (B)*			
TLroe Let~ll"v	12= Standard Length			

\*For other tubing materials consult factory.

#### TUBING SIZES

Dash No.	I.D.	O.D.	Wall	100 Series Maximum Pressure
-01	1/32 (0.81mm)	3/32	1/32	25 PSI
-02	1/16 (1.59mm)	1/8	1/32	25 PSI
-03	1/16 (1.59mm)	3/16	1/16	25 PSI
-04	3/16 (4.76mm)	1/4	1/32	10 PSI
-05	1/8 (3.17mm)	1/4	1/16	20 PSI
-06*	1/4 (6.35mm)	3/8	1/16	10 PSI

\*- 06 Tubing requires 8 watt coil.

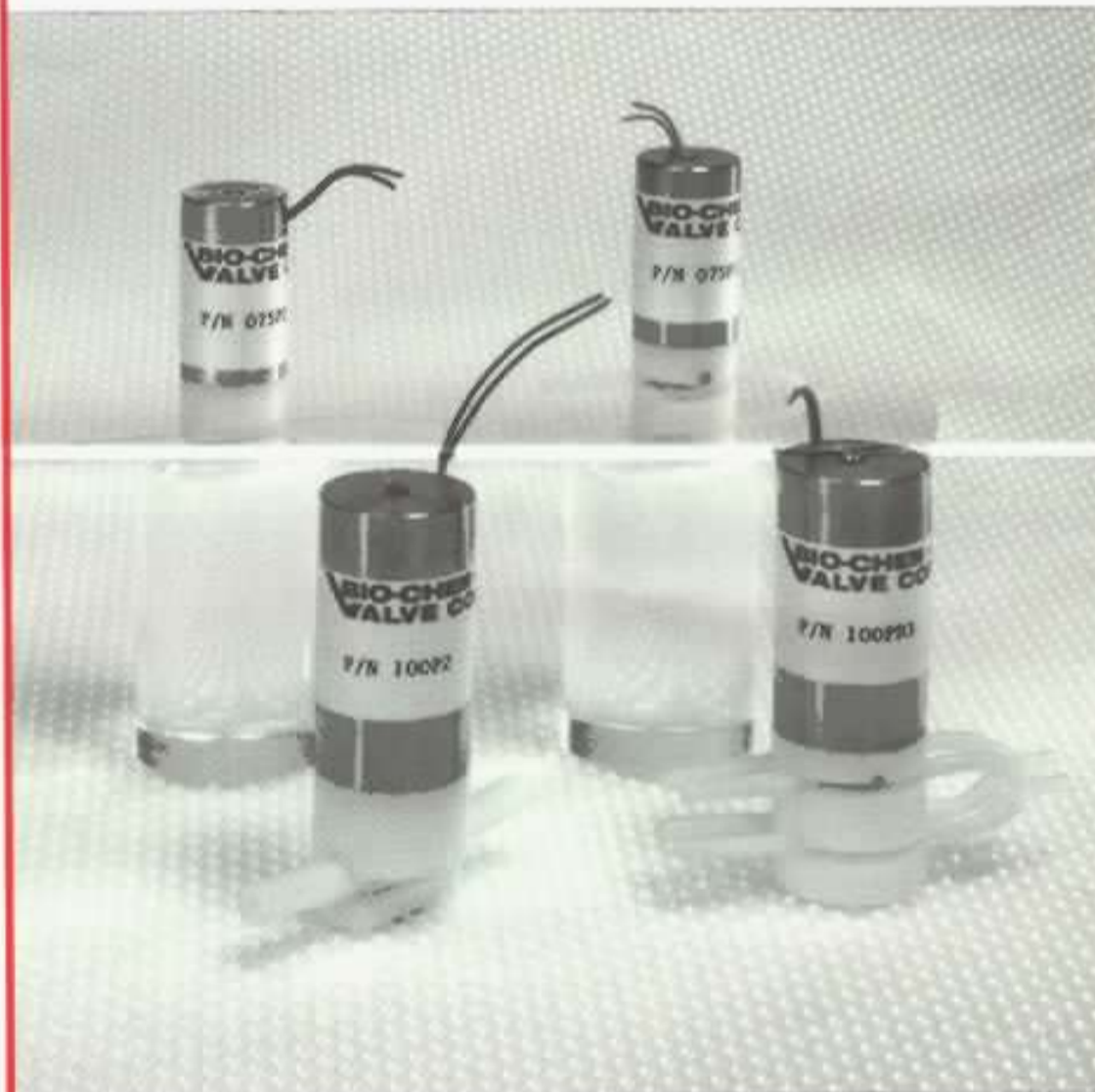
#### ORDERING INFORMATION

Series	Type	Tubing	Voltage
075P	2 way NC	- 01	Available in 12 VDC
	2 way NO	and -02	
	3 way MP	15 PSI	
100P	2 way NC	- 01	24 VDC
	2 way NO	thru - 06	
	3 way MP	- 01 thru - 05	
100PD	dual 2 way NC	-01	220 VAC
	dual 2 way NO	and	
	dual 3 way MP	-02	

These small pinch valves handle a range of tube sizes from 1/32 I.D. to 1/4 I.D. tubing. Tubing may be easily replaced without removing valve from your system. Available in 2-way and dual 2-way normally closed, 2-way and dual 2-way normally open, 3-way and dual 3-way multi purpose which are ideal for fluid switching applications.

#### 2-Way Pinch Valves

#### 3-Way Pinch Valves



#### DIMENSIONS:

os Patent NO 4,524.802

Series	Dia.	NC Height	NO	Series	Dia.	Height
075P2	3/4 "	1-7/8"	2-3/16"	075P3	3/4 "	2-1/8"
100P2	1"	2-1/2"	2-13/16"	100P3	1"	2-1/2"
100PD2	1"	2-1/2"	2-13/16"	100PD3	1"	2-1/2"

#### For Mounting Information

See Accessories and Options Sheet

NC = Normally Closed

NO = Normally Open

MP = Multi Purpose

Example: P/N 100P 2 NO 12 -03 B  
 Series Type Voltage Tube Tube Material

### SOLENOID OPERATED TEFLON® ISOLATION MIXING VALVES

#### FEATURES

- Low Power Consumption
- Isolated Solenoid
- High Cycle Life
- Minimal Dead Volume
- Fast Response Time
- Vacuum or Pressure Service
- Teflon®Wetted Parts
- **All solenoid operators are adjusted for equal flows**

#### MOUNTING

- Clip mounting for 2 inlets
- Body mounting for 3 and 4 inlets (Two .156 dia. holes .560 centers)
- Body Mounting for 5 and 6 inlets (Two. 156 dia. holes .625 centers)

#### SPECIFICATIONS

Series	080T	
Voltage	12 VDC	24 VDC
Power Watts @ 70°F.	2.6	2.6
Current Amps @ 70°F.	.22	.10
Equiv. Orifice Dia.**	.032" (0.8ram) or °062" (1.59mm)	
Ports	1/4-28 Flat Bottom***	
Operating Pressure	Common Port Vacuum to 35 psi Inlet Ports Vacuum to 20 psi	
Lead Wires	15" 26 Gauge Teflon Coated	

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\*Other body materials available, Peek and PPS, on special order consult factory.

\*\*For other orifice sizes consult factory.

\*\*\*For M6 x 1.0 Ports consult factory.

#### ORDERING INFORMATION

Series	No. of Inlets	Orifice Dia.	Voltage
080T	2		Available in
	3	-32	12 VDC
	4	or	24 VDC
	5	-62	115 VAC
	6		220 VAC

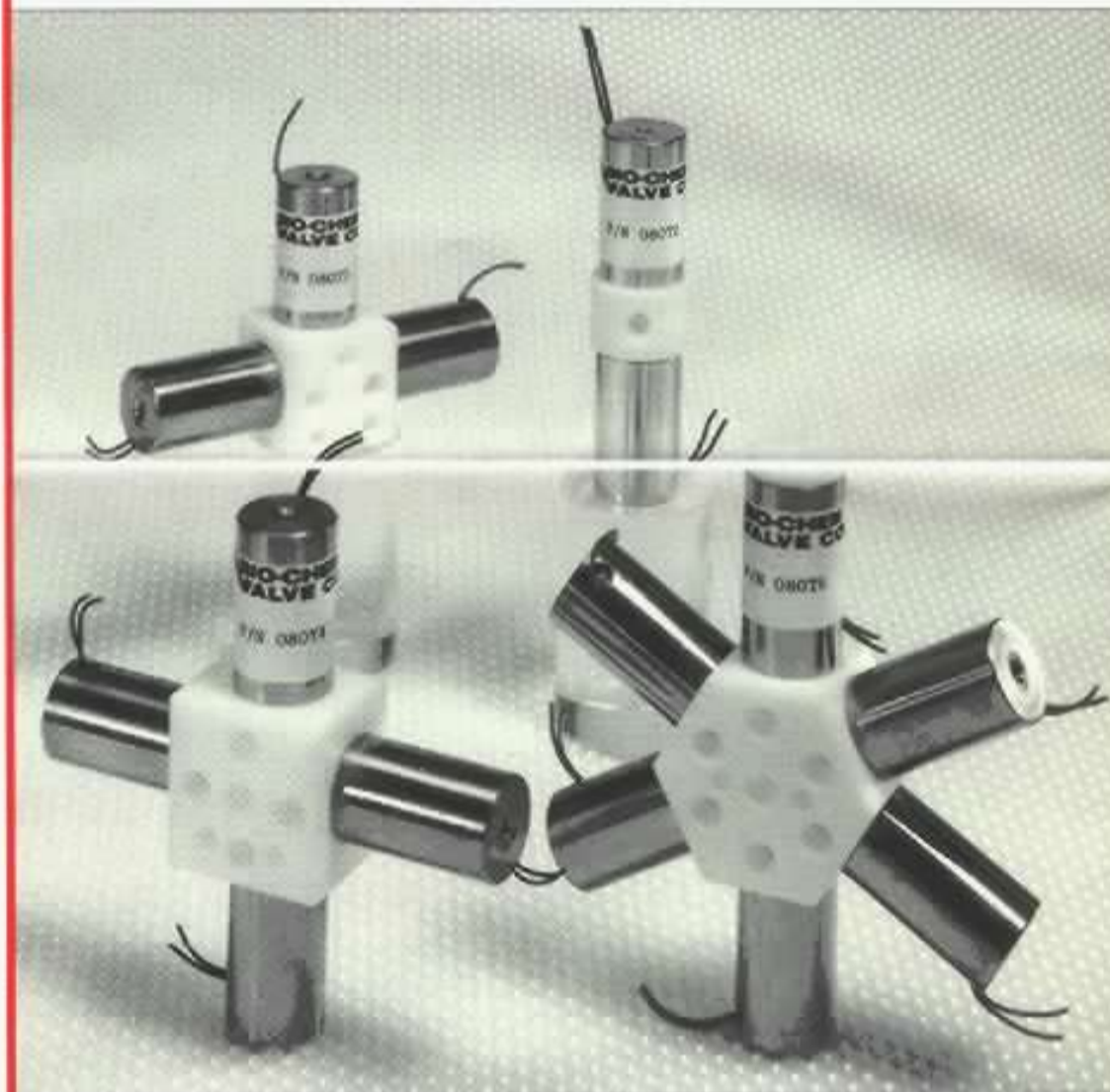
#### Series 0801, 2-way normally closed standard.

Normally open or combination of both available, consult factory.

Available with:

- 2 inlets
- 3 inlets      Common
- 4 inlets      outlet
- 5 inlets      port
- 6 inlets

These mixing valves are excellent for multi liquid or gas control systems, with corrosive and high purity fluids.



#### DIMENSIONS:

				Body Material*
2	7/8" Dia.	3/4" Dia.	3-1/8"	PPS - 4
3	1-1/4" Square	3/4" Dia.	3-3/4"	Peek - 5
4	1-1/4" Square	3/4" Dia.	3-3/4"	
5	1-1/2" Hex	3/4" Dia.	4-1/16"	
6	1-1/2" Hex	3/4" Dia.	4-1/16"	

#### For Mounting Information

See Accessories and Options Sheet

Example: P/N 080T 3 12 -32 -4  
 -T- -T- -T- T -F"  
 Series No. of Inlets Voltage Orifice Dia. PPS

### SOLENOID OPERATED TEFLON® MICRO PUMP

#### FEATURES

- The pump will handle a maximum of 50ul stroke against a 6"/8" (152mm/203mm) Head. Maximum number strokes per minute is approximately 400.
- The pump is factory set for "maximum flow". It can be supplied by special order, adjusted to dispense smaller volumes per stroke.
- Wetted parts are high density Teflon®, Tefzel® and Ruby.
- Low internal volume.
- Positive shut-off

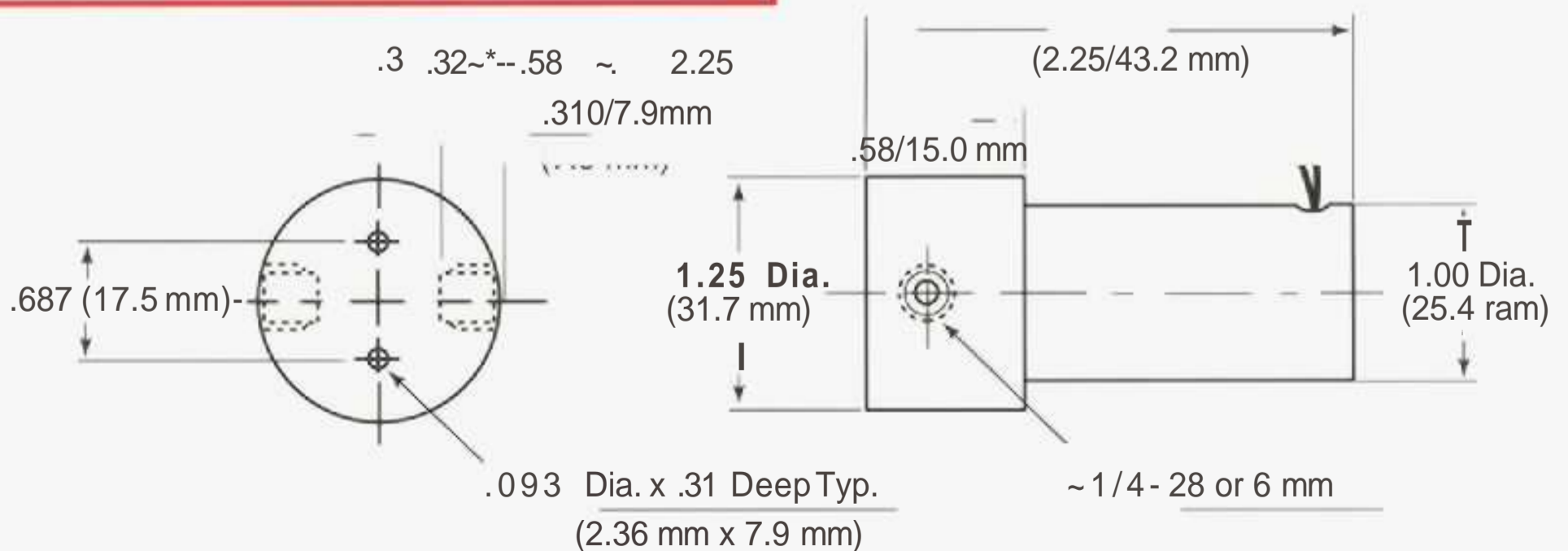
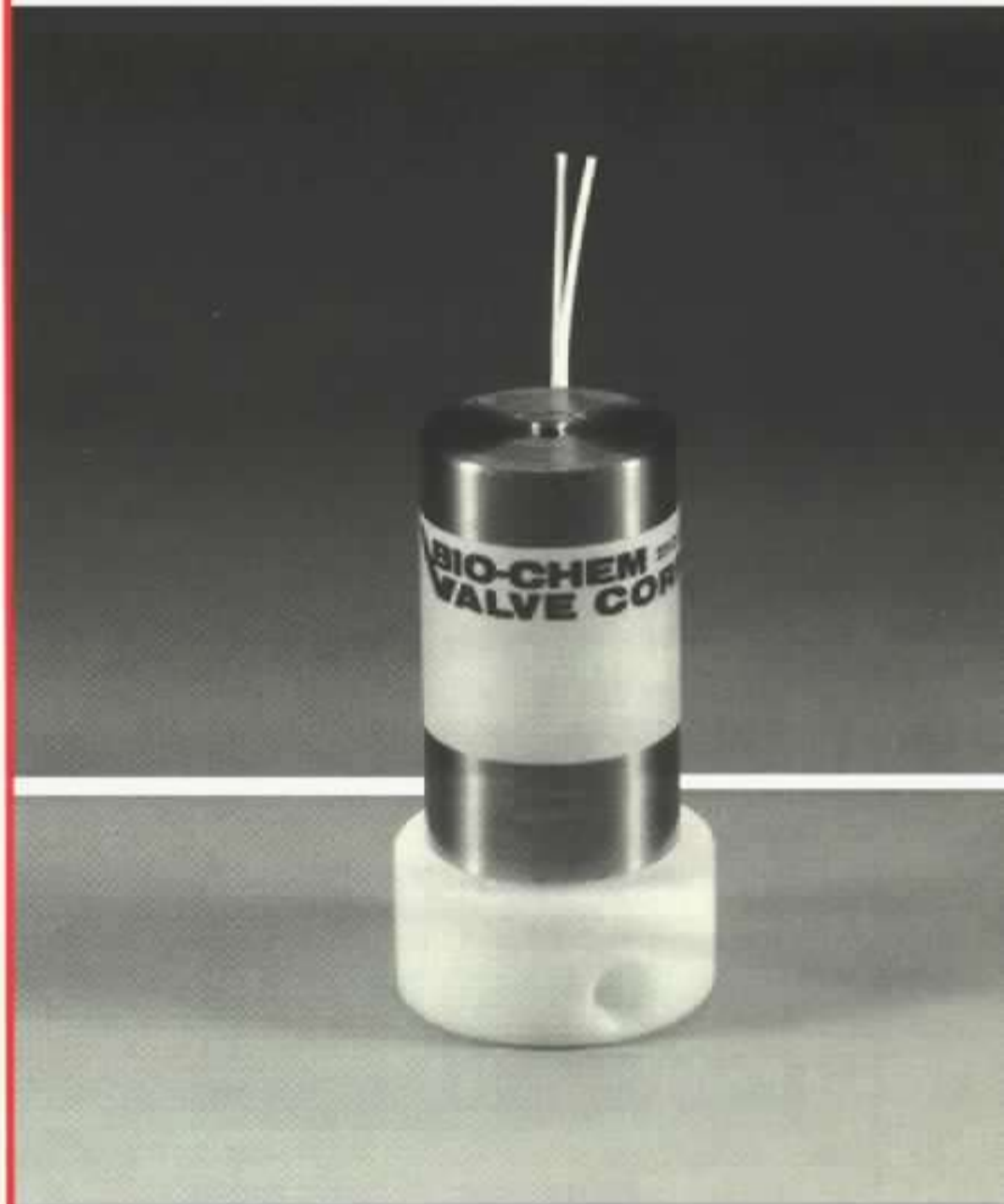
#### SPECIFICATIONS

Series	110TP
Ports	1/4-28 Flat Bottom*
Coil	4 Watts
Current	12 VDC .32 Amps
@70°	24 VDC .16Amps
Leadwires	1-5" 26 Gauge Teflon-teated

® Registered trademark of DuPont Co.  
 • For M6x1.0 Ports consult factory.

#### ORDERING INFORMATION

Part Number	Voltage
110TP12-50	(12 VDC)
110TP24-50	(24 VDC)
110TP115-50	(115 VAC)
110TP220-50	(220 VAC)



### SOLENOID OPERATED TEFLON® ISOLATION MIXING VALVES FOR HIGHER FLOW REQUIREMENTS

#### FEATURES

- Isolated Solenoid
- High Cycle Life
- Minimal dead volume
- Fast response time
- Vacuum or pressure service
- Teflon®Wetted parts
- **All solenoid operators are adjusted for equal flows**

#### MOUNTING

- Clip mounting for 2 inlets
- Body Mounting for 3 and 4 inlets (Two .156 dia. holes .560 centers)
- Body Mounting for 6 inlets (Two .156 dia. holes, 1.500 centers)

#### SPECIFICATIONS

Series	105T	
Voltage	12 VDC	24 VDC
Power Watts @ 70°F.	8.0	8.0
Current Amps @ 70°F.	.63	.33
<b>Equiv. Orifice Dia.</b>	<b>.125 (3.2mm)</b>	
Ports**	1/4-28 Flat Bottom	
Operating Pressure	10 psi	
Lead Wires	15" 26 Gauge Teflon Coated	

®Teflon is a registered trademark of DuPont Co.

\*Lower wattage coils can be furnished depending on customer's electronics and flow requirements

\*\*For other port configurations consult factory.  
Other body material consult factory.

#### ORDERING INFORMATION

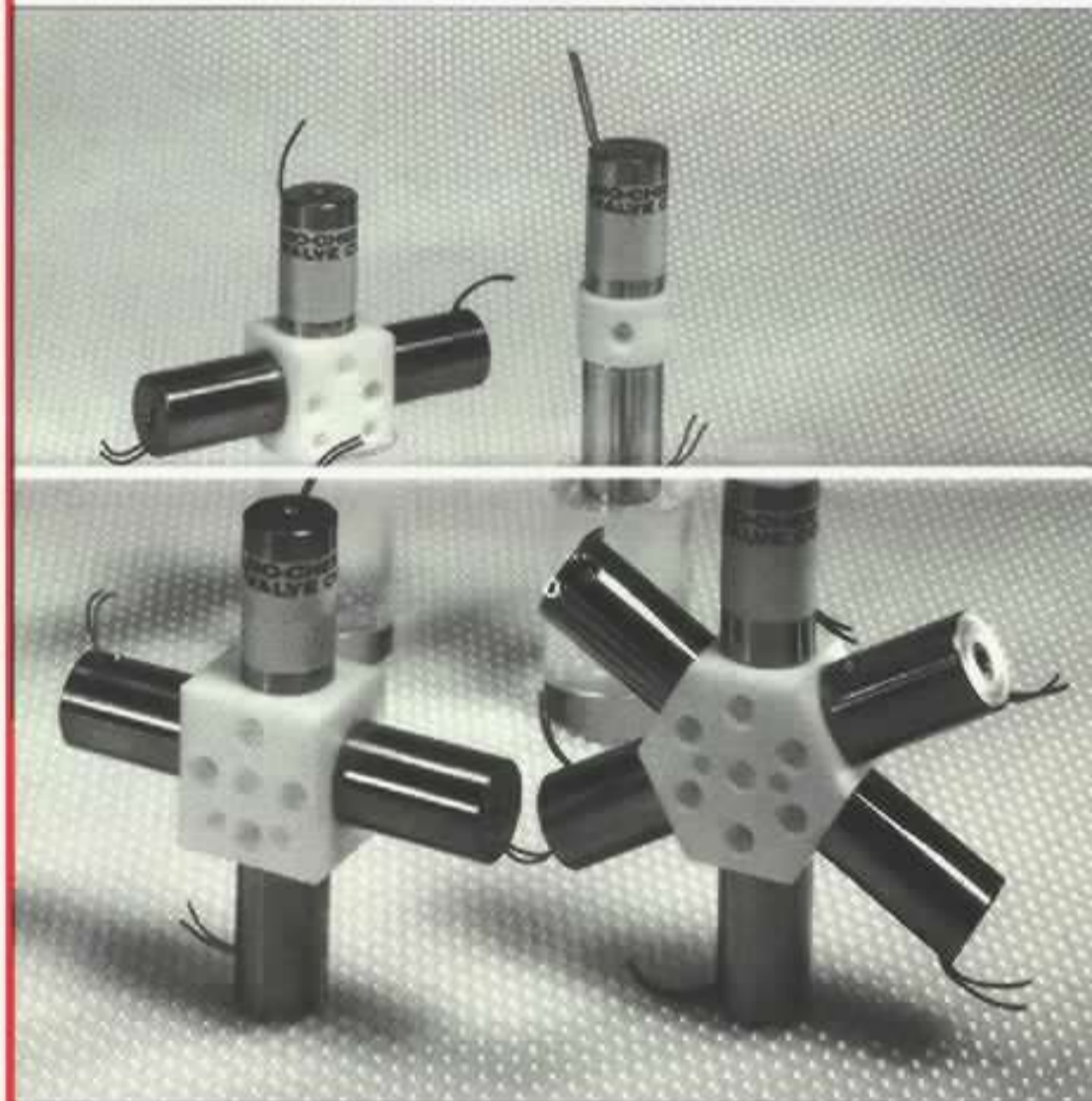
Series	No. of Inlets	Orifice Dia.	Voltage
105T	2	.092	Available in
	3		12 VDC
	4	or	24 VDC
	4	.125	115 VAC
	6		220 VAC

2-way normally closed

Available with:

- 2 inlets Common
- 3 inlets outlet
- 4 inlets port
- 6 inlets

These mixing valves are excellent for multi liquid or gas control systems, with corrosive and high purity fluids.

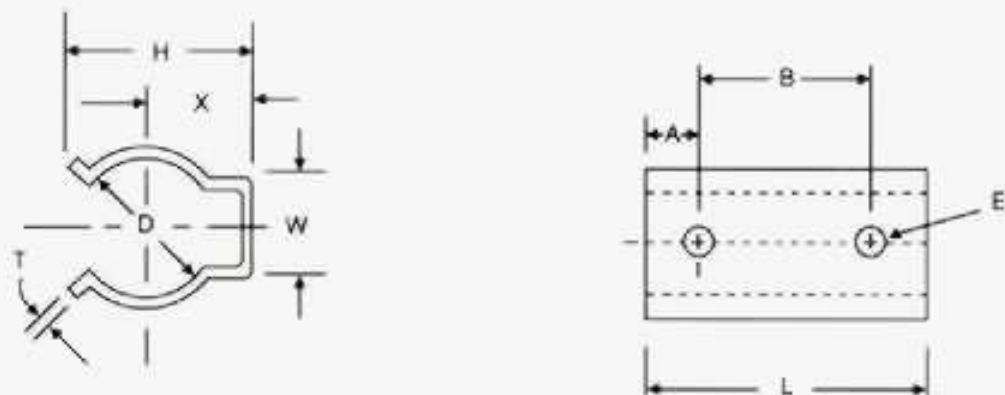


#### DIMENSIONS:

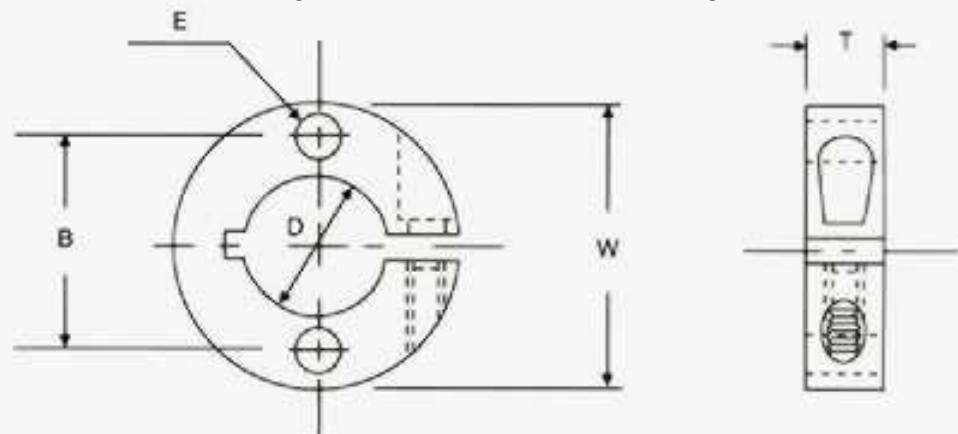
Number of inlets	Body	Solenoid	Length
2	1-1/4 dia.	1" Dia	4-1/8"
3	1-1/2" square	1" Dia	4-7/8"
4	1-1/2" square	1" Dia	4-7/8"
6	2" Hex	1" Dia.	5-5/16"

Example: P/N **105T** **3** **12** **-125**  
 Series No. of Inlets Voltage Orifice Dia.

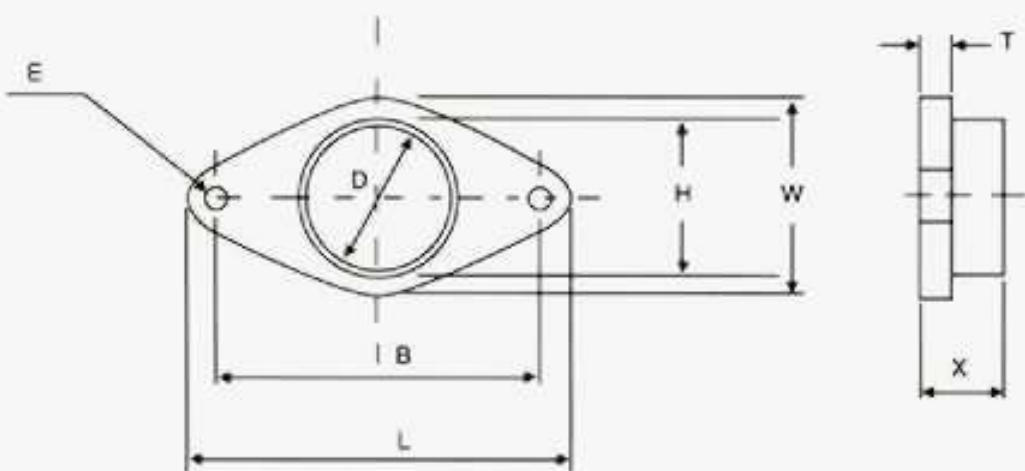
### MOUNTING CLIP (MC) (Material: Spring Steel)



### MOUNTING RING (MR) (Material: Aluminum)



### MOUNTING FLANGE (MF) (Material: Polyethylene)



P/N	A	B	D	E	H	L	T	W	X
MC-075	.187	.375	.750	.130	.800	.750	.020	.420	.440
.lac.loo	.137	.375 t.ooo	.144	1,133	.Tso	.o32	.510	.6es	
MF-075		1.250	.750	.125	.810	1.687	.110	1.000	.320
~F-100		1.625	1,000	.125	1.060	2.123	.12S	~.S12	.~
<b>MR-075</b>		<b>1.125</b>	<b>750</b>	<b>.1~</b>			<b>500</b>	<b>1500</b>	
MR-100		1.375	1.000	.196			.500	1 . 7 ~	
MR-150		1.875	1.500	.196			.565	2.250	

**TUBING** - Bio-Chem offers our customers medical grade silicone tubing or Bio-Chem's thermoplastic elastomer tubing. We recommend Bio-Chem Tubing as it is more chemically inert than silicone and has a much longer service life. Ask for our biocompatibility and chemical resistance chart for Bio-Chem tubing. When ordering pinch valves, please specify which tubing is desired BIO-CHEM (B) or SILICONE (S).

### BOTTOM MOUNTING (add "M" to the end of P/N)

#### TEFLON VALVES MOUNTING DIMENSIONS

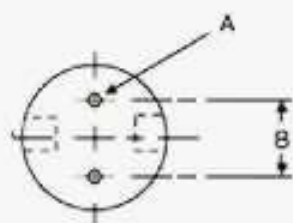
Series	"A" Thread	"B" Center
075T2	#4**	.500
075T3	#4-40	.687
100T2	#4**	.687
100T3	#4-40	.687

#### PINCH VALVES MOUNTING DIMENSIONS

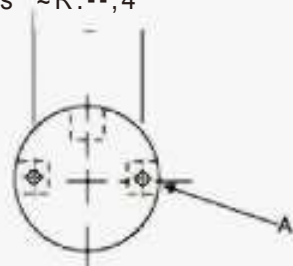
Series	"A" Thread	"B" Center	"C"
075P2	#2-56	.500	.125
.100P2	#4-40	.687	.218
150P2	#6-32	1.000	.375

For P3 Series consult factory

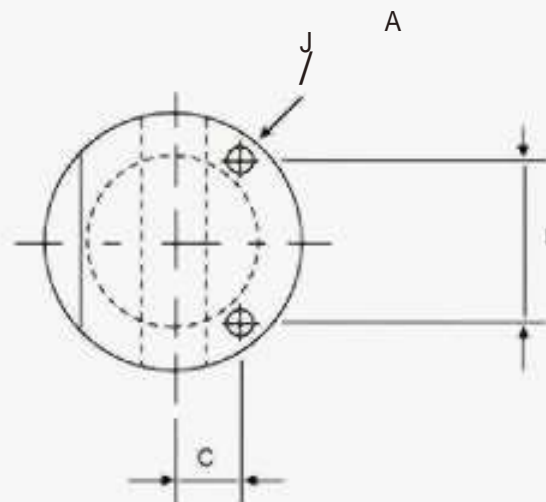
"Teflon Body: .093 x .300 dp holes for #4 self tapping screws  
All other body materials: 4-40 x .250 dp threaded holes ~R.--,4



075T2 & 100T2  
2 WAY



075T3 & 100T3  
3 WAY



### WARRANTY

Bio-Chem Valve Corporation products are warranted for a period of one year from date of shipment. Bio-Chem Valve Corp. is not responsible for damage to its products through improper installation, maintenance, use or attempts to operate them beyond their mechanical or electrical capacity, intentionally or otherwise, or for unauthorized repair.

Bio-Chem Valve Corp. shall not be liable for any indirect, special, incidental or consequential damages resulting from the use, failure or malfunction of any product and our liability is limited to the reimbursement of the cost of the product.