

# Type 23 Multi Port Ball Valves

The Chemline Type 23 Multi Port Ball Valve incorporates all the quality features of the Type 21 True Union type. One Multi Port valve eliminates the need for two standard ball valves and a tee in many cases.

A choice of several flow patterns is available. L-Port is supplied standard. X-Port offers flow straight through ports ① and ②. T-Port connects all three ports simultaneously.

## Choice of Flow Patterns

## Easy to Actuate in the Field

## NSF 61 Certified<sup>4</sup>

### Features

#### Integral Actuator Mounting Platform

- Actuation is easy. Electric or pneumatic actuators may be mounted in the field<sup>5</sup>

#### Fully Blocking

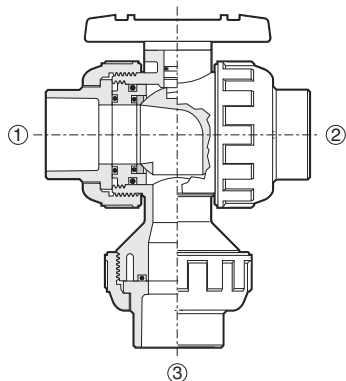
- Downstream union nut may be safely disassembled for piping maintenance while valve is closed off under full system pressure
- Handle works as a tool for accessing internal parts

#### Safety Shear Stem Design

- Stem has double o-rings
- Designed to hold full pressure even if stem breaks due to excessive torque

#### High Chemical Resistant Material

- PVC and CPVC compounds have an "A" chemical resistance rating as per ASTM D-1784.
- Bidirectional flow is permitted



#### Three Positions of L-Port Operation:

1. Port ① and ③ open, as illustrated
2. Shut-off – handle turned 90°
3. Port ② and ③ open – handle turned 180°

#### Two Positions of X-Port Operation:

- No Shut-off is possible with X-Port
  - Available 1/2" to 2" only
1. Port ① and ③ open, as illustrated
  2. Flow through ① and ② – handle turned 90°

#### Two Positions of 90° Operation:

- Required for pneumatic actuation
1. Port ① and ③ open, as illustrated
  2. Port ② and ③ open – handle turned 90°

#### Two Positions of T-Port Operation:

1. Port ①, ② and ③ open
2. Shut-off – handle turned 90°



**CHEMLINE**  
Plastics Limited

Your Pipeline To Quality

**PVC, PP, CPVC, PVDF**

**SERIES:** Type 23

**SIZES:** 1/2" – 4"

**ENDS:** Socket, Threaded, Flanged, Butt<sup>1</sup> or ChemFlare™<sup>2</sup>

**SEATS:** Teflon® PTFE

**SEALS:** EPDM, FKM (Viton®)<sup>3</sup>

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REGISTERED  
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<sup>1</sup> Butt ends for fusion to Chemline metric PP or PVDF piping.

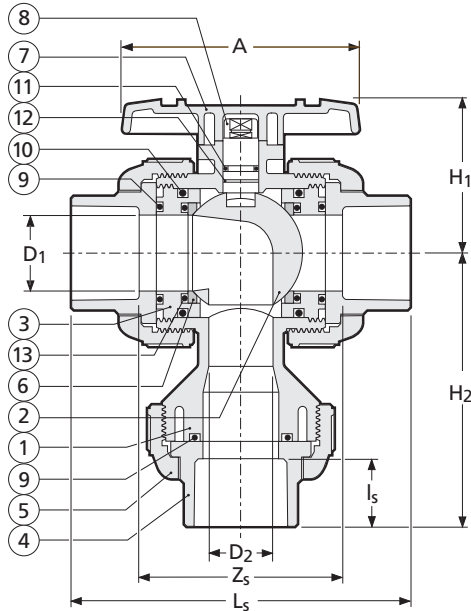
<sup>2</sup> For ChemFlare™ end connectors, consult Chemline.

<sup>3</sup> Other seal materials are available special order.

<sup>4</sup> PVC valves with EPDM or FKM (Viton®) seals are certified under NSF/ANSI Standard 61 for contact with drinking water.

<sup>5</sup> For operation with pneumatic actuators, 90° operating ball is recommended.

# Type 23 Multi Port Ball Valves



## PARTS

▲ Recommended Spare Parts

No.	Part	Pcs.	Materials
1	Body	1	PVC, PP, CPVC, PVDF
2	Ball	1	PVC, PP, CPVC, PVDF
3	Carrier	2	PVC, PP, CPVC, PVDF
4	End Connector	3	PVC, PP, CPVC, PVDF
5	Union Nut	3	PVC, PP, CPVC, PVDF
6▲	Ball Seat	2	Teflon® PTFE
7	Handle	1	ABS
8	Stem	1	PVC, PP, CPVC, PVDF
9▲	Face O-Ring	3	EPDM, FKM (Viton®)
10▲	Carrier O-Ring	2	EPDM, FKM (Viton®)
11▲	Upper Thicker Stem O-Ring	1	EPDM, FKM (Viton®)
12▲	Lower Thinner Stem O-Ring	1	EPDM, FKM (Viton®)
13▲	Seat Cushion	2	Stainless Steel

PVC, CPVC and PP valves are fitted with EPDM seals (parts 9 to 12) as standard, PVDF valves with FKM (Viton®).

## DIMENSIONS INCHES

## WEIGHT LB.

## C<sub>v</sub> VALUES

Size	End Connections												End Connections				USGPM Flow at 1 psi ΔP
	Socket				Threaded		Flanged*		Socket		Threaded		PVC	CPVC	PP	PVDF	
	L <sub>s</sub>	Z <sub>s</sub>	I <sub>s</sub>	H <sub>2</sub>	L <sub>T</sub>	H <sub>2</sub>	L <sub>F</sub>	H <sub>2</sub>	PVC	CPVC	PP	PVDF					
1/2"	3.6	0.59	0.59	2.03	4.45	2.70	0.88	3.08	4.02	2.89	5.63	3.70	0.4	0.4	0.4	0.9	7.4
3/4"	3.9	0.79	0.79	2.34	5.08	3.08	1.00	3.56	4.72	3.48	6.77	4.50	0.9	0.9	0.4	0.9	10.
1"	4.3	0.98	0.98	2.68	5.75	3.50	1.13	4.32	5.16	4.13	7.36	5.24	1.3	1.3	0.9	1.5	23.
1-1/2"	5.2	1.57	1.26	3.50	7.24	4.49	1.38	5.71	6.42	5.53	8.35	6.50	2.9	3.1	2.0	3.7	43.
2"	6.3	2.01	1.69	4.04	8.23	5.23	1.50	6.66	7.76	6.61	9.21	7.34	5.5	6.0	3.7	6.8	59.
3"	9.5	3.07	2.70	5.51	11.10	7.35	1.88	9.59	10.39	9.25	11.97	10.06	13.2	13.2	7.7	14.3	130.
4"	11.8	3.94	3.54	7.01	13.90	9.87	2.00	11.58	14.17	11.77	14.65	12.01	29.8	30.9	18.7	34.2	260.

\* Factory Flanged lengths.

## WORKING PRESSURES PSI

## VACUUM RATING • 29.9 inches mercury

Size	PVC	CPVC				PP				PVDF			
	0-50°C 32-122°F	0-50°C 32-122°F	60°C 140°F	80°C 176°F	90°C 194°F	-20-30°C -4-86°F	50°C 122°F	60°C 140°F	80°C 176°F	-20-60°C -4-140°F	80°C 176°F	90°C 194°F	100°C 212°F
1/2"–2"	150	150	120	90	60	150	90	90	60	150	125	110	90
3"–4"	150	150	90	60	45	150	75	75	45	150	105	90	75

Temperature Ranges: PVC 0 to 60°C (32 to 140°F), CPVC 0 to 95°C (32 to 203°F), PP -20 to 80°C (-4 to 176°F), PVDF -40 to 100°C (-40 to 212°F).

## ORDERING EXAMPLE

<b>Chemline Multi Port Ball Valves</b>	<b>23</b>	<b>A</b>	<b>015</b>	<b>E</b>	<b>S</b>	<b>-</b>
Body Material	A – PVC B – PP	C – CPVC K – PVDF				
Size	005 – 1/2"	007 – 3/4"	010 – 1"			
	015 – 1-1/2"	020 – 2"	030 – 3"	040 – 4"		
Seals	E – EPDM V – FKM (Viton®) C – CPE B – Nitrile A – Aflas					
Ends	S – Socket T – Threaded F – Flanged B – Butt <sup>1</sup> CF – ChemFlare™					
Ball Type	Blank – L-Port X – X-Port T – T-Port 90 – 90° Operation					

## OPTIONS & ACCESSORIES

- Alternate Flow Patterns – See front page
- Alternate O-Ring Seals
- Electrically or Pneumatically Actuated – Refer to separate data sheets
- Stem Extension made to any length
- Limit Switches – For open and/or closed position indication
- Handle Lockout – Field mountable
- Municipal Operating Nut
- Lubrication-free – Factory clean room assembled

Example: Chemline Type 23 Multi Port Ball valve, standard L-Port, PVC, 1-1/2", with EPDM seals, socket ends. <sup>1</sup> PP and PVDF metric butt fusion ends (1/2" to 4") connect to Chemline PP and PVDF piping systems.



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