## Type 23 Multiport Ball Valves











SERIES: Type 23

SIZES: 1/2" – 4"

ENDS: Socket, Threaded, Flanged, Butt¹ or ChemFlare™

SEATS: PTFE

SEALS2: EPDM, FKM (Viton®), CPE3





# Type 23 Multiport Ball Valve incorporates all the quality features of the Type 21 True Union type. One multiport 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.

#### features

#### **Choice of Flow Patterns**

#### **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

#### **CRN** Registration numbers by province

- Ontario: OC11045.5
- Newfoundland: OC11045.50
- · Saskatchewan/Manitoba/Quebec: OC11045.56
- New Brunswick: OC11045.57
- · Nova Scotia: OC11045.58
- P.E.I.: OC11045.59
- · British Columbia: not required
- Alberta: not required<sup>7</sup>

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

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

#### Three Positions of X-Port<sup>6</sup> Operation:

- No Shut-off is possible with X-Port
- 1. Port ① & ③ open, as illustrated
- 2. Flow through 1 & 2 handle turned 90°
- 3. Port ② & ③ open handle turned 180°

#### Two Positions of 90° Operation:

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

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

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

<sup>&</sup>lt;sup>1</sup> Butt ends for fusion to metric PP, PVDF or ECTFE (Halar®) piping.

CTFE (Halar®) piping. **2** Other seal materials are available special order.

<sup>3</sup> CPE=Chlorinated Polyethylene.

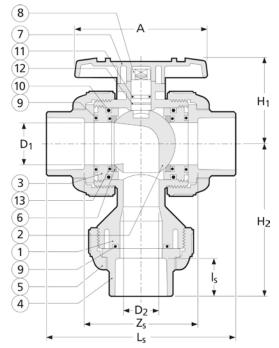
4 PVC valves with EPDM or FKM (Viton®) seals are certified under NSF/ANSI Standard 61 for contact with drinking water.

5 For operation with pneumatic actuators, 90° operating ball is recommended.

6 Available 1/2" to 2" only.

7 Not required for non-expandable fluids.

### Type 23 Multiport Ball Valves



<b>PART</b>	S		▲ Recommended Spare Parts					
No.	Part <sup>1</sup>	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	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	1	EPDM, FKM (Viton®)					
	Stem O-Ring	 	 					
12▲	Lower Thinner	1	EPDM, FKM (Viton®)					
	Stem O-Ring	 	 					
13▲	Seat Cushion	2	EPDM, FKM (Viton®)					



<sup>1</sup> PVC, CPVC and PP valves are fitted with EPDM seals (Parts 9 to 12) as standard, PVDF valves with FKM (Viton®) JJDOWNS.COM

Cv **DIMENSIONS INCHES** WEIGHT LB. **VALUES** 

	 				End Connections							End Connections				USGPM	
	 				Socket			Threaded Flanged <sup>1</sup>			Socket		Threaded		Flow at		
Size	Α	$D_1$	$D_2$	H₁	Ls	<b>Z</b> s	Is	H <sub>2</sub>	L <sub>T</sub>	H <sub>2</sub>	L <sub>F</sub>	H₂	PVC	CPVC	PP	PVDF	1 psi △P
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.

<sup>&</sup>lt;sup>1</sup> Factory Flanged lengths

#### **WORKING PRESSURES PSI**

150

150

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

75

75

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150 Temperature Ranges: PVC 0 to 50°C (32 to 122°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

3"-4"

Chemline Mu Ball Valves	23	A	015	<b>E</b>	S	_	
Body Material	<b>A</b> – PVC <b>B</b> – PP	C – CPVC K – PVDF	 		 	1 	 
Size	<b>005</b> – 1/2" <b>015</b> – 1-1/2"				 	 	 
Seals	E-EPDM V	– FKM (Vitor	n®) <b>C</b> − C	CPE <b>N</b> – Nitri	le <b>A</b> – Aflas®	 	 
Ends	<b>S</b> – Socket <b>T</b>	– Threaded	<b>F</b> – Flar	nged <b>B</b> -But	tt <b>² CF</b> – Cher	nFlare™	 
Ball Type	Blank – L-Por	t <b>X –</b> X-P	ort <b>T</b> –	-T-Port <b>90</b>	– 90° Operati	on	

90

60

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

#### **OPTIONS & ACCESSORIES**

• Alternate Flow Patterns – See front page

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**VACUUM RATING** • 29.9 inches mercury

· Alternate O-Ring Seals

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- 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