# Type 27 Compact Industrial Ball Valves

PVC





SERIES: Type 27

SIZES: 3/8"-2"

ENDS: Threaded, Socket

SEATS: PTFE

SEALS: EPDM, FKM (Viton®)



Type 27 Compact Industrial Ball Valves are manufactured to the same high quality standards to the Type 21 True Union ball valve. They are used on applications where union end valves are not necessary or desired such as drain valves for tanks. They are also lower cost and more compact.

## features

- ·Low Cost & Rugged
- · 2-Way Blocking

#### All PVC or all CPVC Construction

 Handles are colour coded red for PVC, blue for CPVC

#### **High Chemical Resistance**

• The PVC as well as CPVC compounds for these valves have an "A" chemical resistance rating <sup>2</sup> – superior to competition

#### Full Port

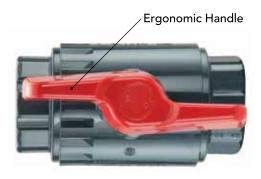
Low pressure loss

# Low Stem Torques

• Due to floating ball design and cushioned PTFE seats

#### Compact

- · Space saving, low profile
- · Unibody sealed carrier constuction
- · Short face-to-face dimension
- · Double stem O-rings
- · Ergonomic handle design
- · Full vacuum service rating
- · ISO top flange for actuation mounting



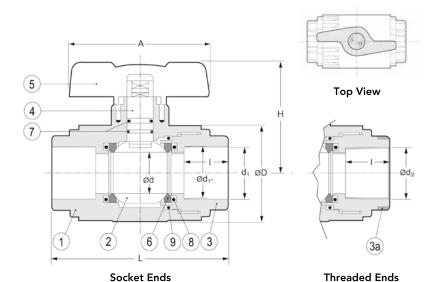
**Top View** 



<sup>2</sup> Designation for chemical resistance as per ASTM D-1784.

<sup>&</sup>lt;sup>1</sup> PVC valves with EPDM seal are certified under NSF/ANSI Standard 61 for contact with drinking water.

# Type 27 Compact Industrial Ball Valves



#### **PARTS**

	7 1110									
No.	Part <sup>1</sup>	Pcs.	Materials							
1	Body	1	PVC, CPVC							
2	Ball	1	PVC, CPVC							
3	End Connector	1	PVC, CPVC							
3a	End Connector Ring <sup>2</sup>	2	304 SS							
4	Stem	1	PVC, CPVC							
5	Handle	1	ABS							
6	Seat	2	PTFE							
7	Stem O-Ring	2	EPDM, FKM(Viton®)							
8	Seat Cushion	2	EPDM, FKM(Viton®)							
9	Carrier O-Ring	1	EPDM, FKM(Viton®)							

<sup>&</sup>lt;sup>1</sup> Parts for identification only and cannot be replaced

### **DIMENSIONS INCHES**

	Socket		Threaded		1					
Size	d₁	d₁∗	I	d <sub>2</sub>	I	L	d	Α	D	Н
3/8"	0.687	0.671	0.59	3/8-18 NPT	0.59	2.72	0.59	2.95	1.57	2.07
1/2"	0.848	0.836	0.69	1/2-14 NPT	0.59	3.11	0.59	2.95	1.57	2.07
3/4"	1.058	1.046	0.72	3/4-14 NPT	0.67	3.70	0.79	3.43	1.93	2.46
1"	1.325	1.310	0.87	1-11-1/2 NPT	0.79	4.25	0.98	3.43	2.28	2.74
1-1/4"	1.670	1.655	0.94	1-1/4-11-1/2	0.87	4.76	1.22	4.13	2.68	3.21
1-1/2"	1.912	1.894	1.09	1-1/2-11-1/2	0.98	5.75	1.57	5.31	3.25	3.78
2"	2.387	2.369	1.16	2-11-1/2	1.10	6.86	2.01	5.31	4.09	4.23

 $d_{1*}$  is the ID of the bottom of the socket connector

## WORKING PRESSURES PSI

WORKING PRESSURES PSI						NET WEIGHT:	Cv VALUES	
	PVC	 	CP'	vc			USGPM	
	0-50°C	0-50°C	60°C	80°C	90°C			Flow at
Size	68-122°F	68-122°F	140°F	176°F	194°F	PVC	CPVC	1 psi △P
3/8"	150	150	120	90	60	0.3	0.3	7.7
1/2"	150	150	120	90	60	0.3	0.3	14.0
3/4"	150	150	120	90	60	0.4	0.5	29.0
1"	150	150	120	90	60	0.7	0.8	47.0
1-1/4"	150	150	120	90	60	0.9	1.0	72.0
1-1/2"	150	150	120	90	60	1.2	1.3	155.0
2"	150	150	120	90	60	2.0	2.1	190.0

Temperature Ranges: PVC -0 to 60°C (32 to 140°F), CPVC -0 to 95°C (32 to 203°F)



<sup>&</sup>lt;sup>2</sup>Used for CPVC threaded valves 3/8" to 1"

 $d_1$  is the ID of the end of the socket connector

# Type 27 Compact Industrial Ball Valves

#### SAMPLE SPECIFICATION - PVC or CPVC

All Ball Valves (to 2") are to be Type 27 Compact or equal PVC or CPVC with EPDM double stem O-rings, PTFE seats with EPDM cushions, and free floating ball. PVC compound will have cell classification 12454-A and CPVC will have 23567A with minimum "A" suffix designation for chemical resistance as per ASTM D-1784.

Valves shall be one piece construction with 2-way blocking capability, and have elastomeric backing cushions behind the PTFE seats for low stem torque and to compensate for wear.

End connections shall be either socket or threaded.

Valves shall be certified under NSF/ANSI Standard 61 for contact for drinking water.

Valves shall accept the installation of a moulded ISO top mounting for actuation mounting.

#### **ORDERING EXAMPLE**

Ту	pe 27 Compa	27	Α	020	E	Т		
Valve	Material	A - PVC	C - CPVC			 	 	 
Size	<b>003</b> – 3/8" <b>012</b> – 1-1/4"	<b>005</b> – 1/2" <b>015</b> – 1-1/2"	<b>007</b> – 3/4" <b>020</b> – 2"	010 – 1"			 	 
Seals	E – EPDM	<b>V</b> – FKM (Viton	®)					! ! !
Ends	<b>S</b> – Socket	<b>T</b> – Threaded						

**Example:** Type 27 Compact Industrial Ball Valve, PVC, 2", EPDM seals, threaded ends.

#### **VACUUM RATING**

•29.9 inches mercury

#### **OPTIONS & ACCESSORIES**

Flanged Ends

