

REFERENCE MANUAL

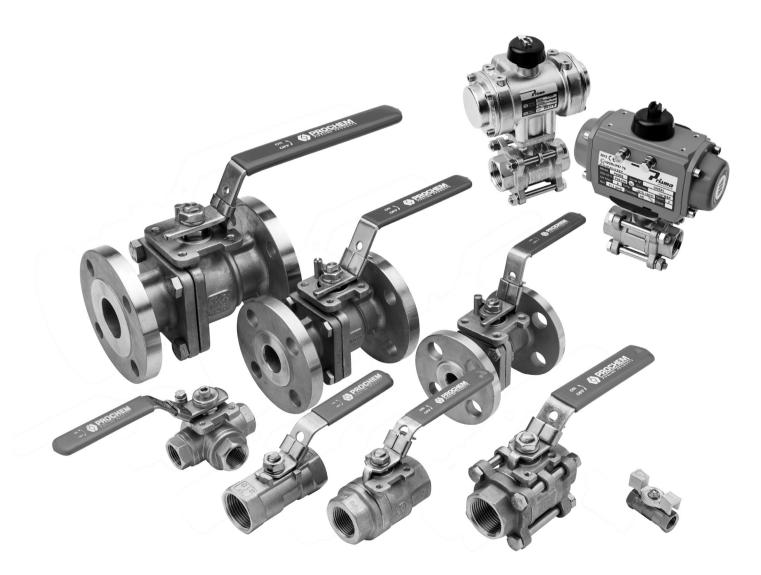






STAINLESS STEEL

Prochem offers a full range of high quality ball valves for a variety of general and specialty applications. Stocks are maintained at our branches Australia-wide, ensuring that our customers can rely on quick access to the most suitable style of ball valve for their needs.





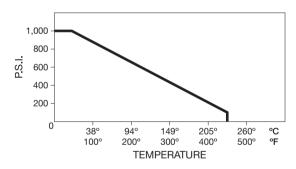
2-WAY REDUCED BORE 1-PIECE STAINLESS BSP 1000 W.O.G.

These simple, practical, 1-piece "bar-stock" type valves provide the most economic solution for manual control of air, water, and other clean and corrosive fluids in many environments.

Available in sizes 8 (1/4") to 50 mm (2").

- Reduced port
- 1-piece economy design
- Investment cast CF8M
- Anti-blowout stem
- Seat material Virgin PTFE

Pressure/Temperature Rating





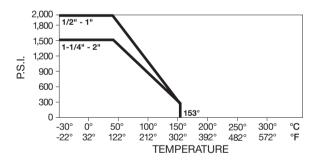
2-WAY REDUCED BORE 1-PIECE HIGH PRESSURE STAINLESS BSP 1500/2000 W.O.G.

This valve provides the user with a higher working pressure compared to the 800 W.O.G. 1-piece "bar-stock" valves.

Available in sizes 8 (1/4") to 50 mm (2").

- Reduced port
- 1-piece economy design
- Investment cast CF8M
- Anti-blowout stem
- Seat material Virgin PTFE

Pressure/Temperature Rating



PROCHEM PIPING PRODUCTS



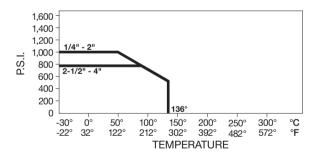
2-WAY FULL BORE 2-PIECE STAINLESS BSP 800/1000 W.O.G.

Full bore 2-piece threaded valves allowing straight-through flow. Virtually no head loss and a superior performer with mildly abrasive as well as corrosive fluids. Ideal for in-line control of process fluids.

Available in sizes 8 (1/4") to 80 mm (3").

- Full port
- 2-piece body
- Investment cast CF8M
- Anti-blowout stem
- Adjustable stem packing
- Actuator mounting pad to ISO 5211
- Seat material Virgin PTFE

Pressure/Temperature Rating



Si	ze	Tor	Weight		
mm	in	Nm	in/lbs	kgs	
8	1/4	5.8	50	.23	
10	3/8	5.8	50	.23	
15	1/2	8.5	75	.31	
20	3/4	11.3	100	.57	
25	1	20.5	180	.91	
32	1-1/4	27	235	1.5	
40	1-1/2	34	300	2.0	
50	2	37.3	330	3.5	



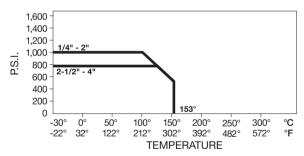
2-WAY FULL BORE 3-PIECE STAINLESS BSP AND NPT 800/1000 W.O.G.

3-piece construction allows end connections to be permanently fitted to the pipe, so the valve body can be removed enabling replacement of seals without disturbing pipework.

Available in sizes 8 (1/4") to 100 mm (4").

- Full port
- 3-piece swing out body
- Investment cast CF8M
- In-line repairable
- Anti-blowout stem
- Locking SS handle
- Adjustable stem packing
- Actuator mounting pad to ISO 5211
- Seat material Reinforced PTFE

Pressure/Temperature Rating



Si	ze	Tor	Weight		
mm	in	Nm	in/lbs	kgs	
8	1/4	5.8	50	.45	
10	3/8	5.8	50	.45	
15	1/2	7.5	65	.45	
20	3/4	10	80	.91	
25	1	17	150	1.4	
32	1-1/4	23	200	2.0	
40	1-1/2	25.5	225	2.4	
50	2	28.5	250	3.6	
65	2-1/2	96	850	9.1	
80	3	113	1000	12.7	
100	4	272	2400	20.4	

PROCHEM PIPING PRODUCTS

BALL VALVES



3-WAY REDUCED BORE STAINLESS BSP 800 W.O.G.

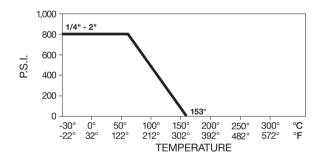
L-ported valves available to replace two normal valves, saving space, cost and weight.

Available in sizes 8 (1/4") to 50 mm (2").

"T" Ported valves available on request.

- Reduced port
- Investment cast CF8M
- Anti-blowout stem
- Actuator mounting pad
- Seat material Virgin PTFE

Pressure/Temperature Rating





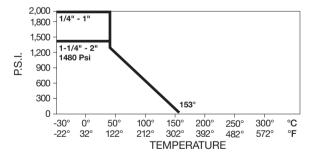
2-WAY FULL BORE 2-PIECE STAINLESS NPT 1500/2000 W.O.G.

Full Bore 2-piece threaded valves allowing straight-through flow. Virtually no head loss and a superior performer with mildly abrasive as well as corrosive fluids. Ideal for in-line control of process fluids.

Available in sizes 8 (1/4") to 50 mm (2").

- All 316 wetted and non wetted components
- Full Port
- 2-piece body
- Investment cast CF8M
- Anti-blowout stem
- Adjustable stem packing
- Actuator mounting pad to ISO 5211
- Seat material Virgin PTFE

Pressure/Temperature Rating



Flanged Ball Valves

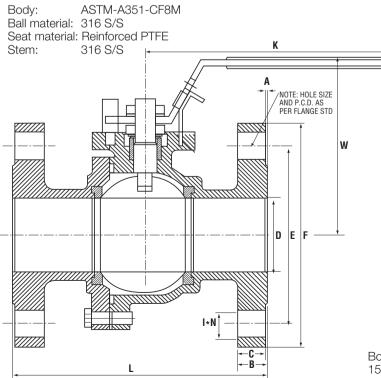
Split Body ANSI-ISO stainless steel flanged ball valves

- Full bore for minimum pressure drop
- In-line repairable split body design
- Investment cast through 100 mm (4") CF8M
- Anti-blowout stem
- Adjustable stem packing
- Locking handle
- Static grounding device
- Flange dimensions to ANSI B16.5 and AS 2129
- Face to face dimension to ANSI B16.10
- Design in accordance ANSI B16.34 and API60 Testing to API 598
- Actuator mounting pad to ISO 5211
- Vacuum service down to 20 microns
- Stocked in ANSI Class 150, Table D and E

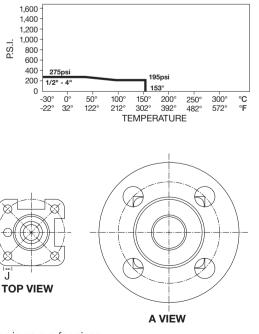
	CLASS 150* (all dimensions are in millimetres)													
Si	Size		в	с	D	Е	F			N	к	w	U	J
mm	inch	A	D	0		-	•	-			n		0	0
15	1/2"	1.6	11.2	9.6	15	60.5	88.9	108	16	4	120	91.0	50	M6
20	3/4"	1.6	12.7	11.1	20	69.9	98.6	117	16	4	120	94.5	50	M6
25	1"	1.6	14.3	12.7	25	79.3	108.0	127	16	4	158	96.5	50	M6
40	1-1/2"	1.6	17.6	16.0	38	98.6	127.0	165	16	4	228	113.0	70	M8
50	2"	1.6	19.1	17.5	50	120.7	152.4	178	19	4	228	122.5	70	M8
65	2-1/2"	1.6	22.4	20.8	65	139.8	178.0	190	19	4	349	-	102	M10
80	3"	1.6	23.9	22.3	80	152.5	190.0	203	19	4	349	-	102	M10
100	4"	1.6	23.9	22.3	100	190.5	229.0	228	19	8	349	-	102	M10

Valv	e Size	Breakaway	Weight kg		
mm	inch	Torque Nm			
15	1/2"	7-8	2.3		
20	3/4"	10-11	2.7		
25	1"	25-27	3.6		
40	1-1/2"	42-44	6.8		
50	2"	47-49	10.4		
65	2-1/2"	49-52	15.9		
80	3"	128-147	19.1		
100	4"	156-168	29.9		

* Refer to AS 2129 for table flange dimensions



CLASS 150



Both above views are for sizes 15 (1/2"), 20 (3/4"), 25 (1"), 40 (1-1/2") and 50 (2") values.

Actuated Ball Valves

Prochem offers a close-fitted range of Pneumatic Double Acting and Spring Return Actuators. Anodised/ epoxy coated Aluminium alloy compact double piston and rack design, and featuring NAMUR standard ports for flush mounting of solenoid valves. Also available on request – Stainless Steel Actuators.

Standard compact mounting kits are generally common for either double acting or spring return actuators on the same valve.

Suitable for the Prochem range of 2-piece full bore threaded valves – 3-piece full bore threaded valves – 2-piece full bore flanged valves.

Refer to the Matching Chart below to select the actuator to suit your valves.

GENERAL FEATURES

- Air supply: filtered, dry or lubricated, pressure minimum 1 bar (14 psi), pressure maximum 10 bar (142 psi).
- Lubrication: factory lubricated, guaranteed for 500,000 strokes minimum.
- Internal sliding surface lapped and anodized (Ra 0.8 1-2 μm on cut off 12.5 mm), for minimum friction and very long life to actuator.
- Guide bearings made by low friction material, to avoid metal to metal contact, easily replaceable for maintenance.
- Double bottom drilling, for actuator to valve assembling and centering as ISO 5211/DIN 3337 standard.
- Bottom shaft female key, as ISO 5211/DIN 3337 standard, double square hole for assembling on valves with square key stem in line or turned 45°.
- Air supply ports drilling as NAMUR standard or with interface plate as NAMUR standard.
- Top drilling for accessories assembling and shaft top end as NAMUR standard.
- Position indicator on request.

- Standard temperature range: -20 to 90°C (-4 to 194°F). Special (on request) range: -40 to 160°C (-40 to 320°F).
- External protection: corrosion as ASTM B 117-73.
- Each actuator is branded with a progressive serial number for easy identification and traceability.
- All actuators are cycle and pressure tested.

MANUFACTURING MATERIALS

- Body: Extruded Aluminium alloy ASTM 6063, anodised UNI 4522 (Epoxy coated).
- Caps: Die-cast Aluminium alloy UNI 5076, powder epoxy coated.
- Pistons: Die-cast Aluminium alloy UNI 5076
- Shaft: Steel AISI SAE 11L37, Electroless nickel plated ASTM B 656.
- Guides: Low friction acetalic resin.
- Bolts: Stainless steel AISI 304.
- Springs: Preloaded spring cartridges, patented all around the world since 1986, powder epoxy coated.
- Sealing: Nitrilic rubber BUNA N (on request VITON or EPDM).

DOUBLE ACTING ACTUATORS (TOP VIEW)



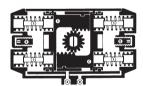


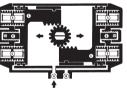
SPRING RETURN ACTUATORS (TOP VIEW)

CLOSED

CLOSED

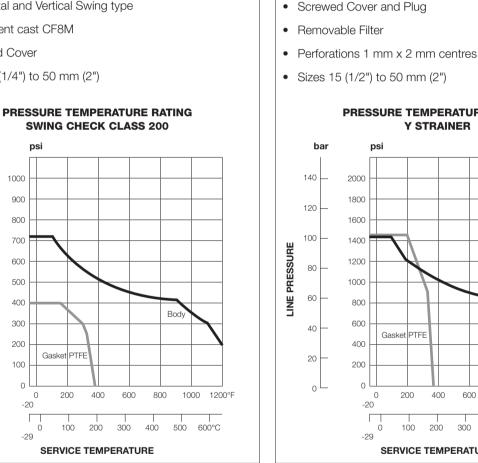
OPEN





MATCHING CHART: ACTUATOR TO VALVE SIZE AND TYPE (spring return actuators available on request)									
Prochem Two Piece Full Bore Stainless Ball Valve		Double Acting Actuator		ee Piece Full ss Ball Valve	Double Acting Actuator	Prochem Flanged Full E Ball	Double Acting Actuator		
metric	inches	model #	metric	inches	model #	metric inches		model #	
8	1/4	X 52	8	1/4	X 52	15	1/2	X 52	
10	3/8	X 52	10	3/8	X 52	20	3/4	X 52	
15	1/2	X 52	15	1/2	X 52	25	1	X 52	
20	3/4	X 52	20	3/4	X 63	40	1-1/2	X 63	
25	1	X 63	25	1	X 63	50	2	X 75	
32	1-1/4	X 75	32	1-1/4	X 63	65	2-1/2	X 75	
40	1-1/2	X 75	40	1-1/2	X 75	80	3	X 83	
50	2	X 75	50	2	X 110	100	4	X 110	
			65	2-1/2	X 110	150	6		
			80	3	X 160	200	8		
			100	4					





Spring Check Valve

Spring Check Valves - BSP, 1000 W.O.G.

3 Piece •

bar

70

60

50

40

30

20

10

0

LINE PRESSURE

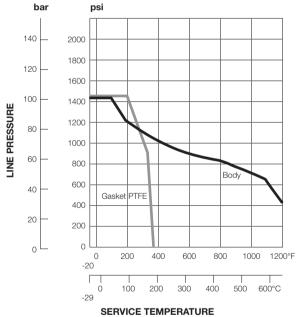
- Investment cast CF8M Body and End Cap •
- T-316 Disc
- Sizes 8 to 100 mm (4")



PRESSURE TEMPERATURE RATING **Y STRAINER**

Y-Type Strainers - BSP, Class 600 W.O.G.

Investment cast CF8M





A <u>pon</u> company

FOR FURTHER DETAILS PLEASE CONTACT YOUR LOCAL PROCHEM OFFICE

ADELAIDE & DARWIN

3A CB Fisher Drive Cavan, South Australia Australia 5094 **T 61-8-8241 7633** F 61-8-8241 7644 E sales@prochem.com.au

BRISBANE

1-5 Kingsbury Street Brendale, Queensland Australia 4500 **T 61-7-3265 2711** F 61-7-3265 7430 E sales@prochem.com.au

HOBART

96-98 Central Avenue Derwent Park, Tasmania Australia 7009 **T 61-3-6272 8828** F 61-3-6272 8688 E sales@prochem.com.au

MELBOURNE

5-15 Ventura Place Dandenong South, Victoria Australia 3175 **T 61-3-9799 2244** F 61-3-9799 2255 E sales@prochem.com.au

PERTH

6 Forge Street Welshpool, Western Australia Australia 6106 **T 61-8-9458 7777** F 61-8-9351 8170 E sales@prochem.com.au

SYDNEY

30 Enterprise Circuit Prestons, New South Wales, Australia 2170 **T 61-2-9727 0044** F 61-2-9728 6766 E sales@prochem.com.au

NEW ZEALAND

Prochem Group (NZ) PTY Ltd 560 Arthur Porter Drive Te Rapa Gateway Hamilton, New Zealand 3200 T 64-7-444 5458 F 64-7-444 5425 E nzlsales@prochemgroup.co.nz

www.prochem.com.au

1300 287 777

www.prochemgroup.co.nz