Rugged Construction

Hydroseal Canada's fortis series True Union Ball Valves are cost effective, yet rugged enough to stand up to demanding industrial and commercial applications. The valves are assembled without any use of a silicon based lubricant and may be used for most forms of process media.

True Union Design

This makes valves very easy to maintain by allowing for easy removal from a piping system without breaking down piping connections. Just unscrew the two assembly nuts and lift the valve body out of the line.

Advanced Design Features

Hydroseal Canada True Union Ball Valves are superior performers. They have an adjustable seat carrier that allows the seat to be calibrated while maintaining downstream pressure. These valves feature a dovetail ball and stem, and a thick double o-ring stem steal for twice the leakage protection.

Actuator Mounting Design

For actuator mounting, the valve incorporates a unique design for glued or clamped on mounting pads. This assures proper alignment of the actuator to the valve body without creating damaging side loads to cause premature stem seal failure. Incorporating this design, the valve may be easily reverted back to manual operation, should the need arise.

Corrosion-free

This is because of Fortis's all-plastic construction. Fortis will never rust or corrode, and can survive corrosive environments without the need for painting or epoxy coatings.

Features

- Rated at 150 PSI
- Full Port Design
- Reversible PTFE Seats
- Easy Maintenance
- EPDM Seals
- Easily Automated
- Double O-Ring Steam Seals
- Adjustable Seat Retainer

Options

- Pneumatic Actuators
- Electric Actuators
- Socket or Threaded Connectors
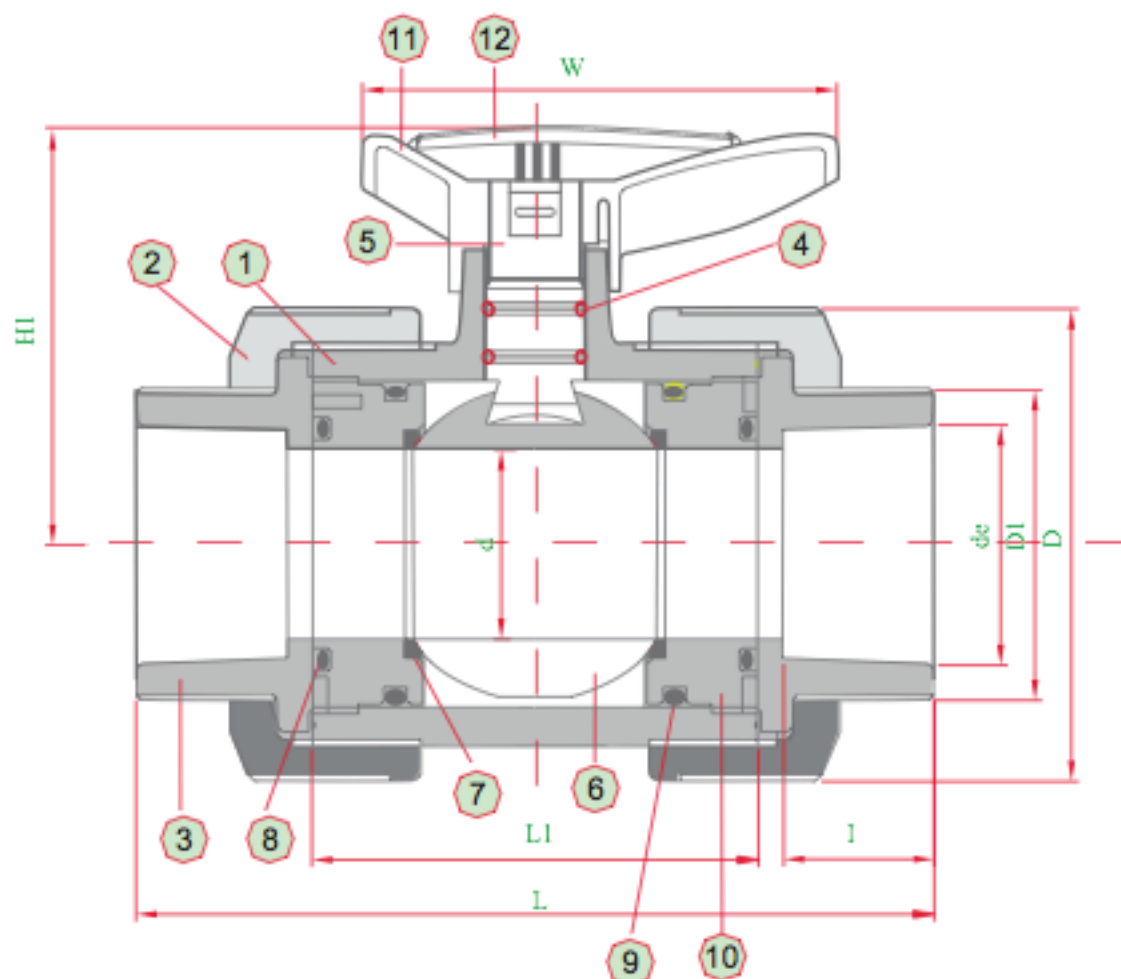- Suitable for ASTM, DIN, JIS Systems
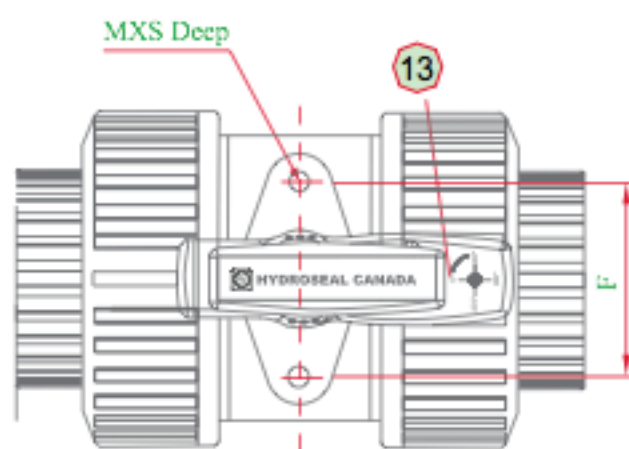
Technical Information

SIZE: 1/2" ~ 2 1/2"
JOINT END: THREADED (PT.NPT.BSPF)
SOCKET (ASTM.DIN.JIS)
WORKING PRESSURE: 150 PSI

CONSTRUCTION

NO.	PARTS	PCS	MATERIALS
1	BODY	1	PVC,CPVC, ABS
2	NUT	2	PVC,CPVC, ABS
3	END CONNECTOR	2	PVC,CPVC, ABS
4	STEM O-RING	2	EPDM, FPM
5	STEM	1	PVC,CPVC, ABS
6	BALL	1	PVC,CPVC, ABS
7	SEAT	2	PTFE
8	UNION O-RING	2	EPDM, FPM
9	CARRIER O-RING	1	EPDM, FPM
10	CARRIER	1	PVC,CPVC, ABS
11	HANDLE	1	ABS
12	HANDLE CAP	1	ABS
13	INSERTED NUT	2	C3602

PART	NOMINAL SIZE	SOCKET, THREAD TYPE							ASTM	DIN	JIS	ASTM	DIN	JIS	UNIT OF MEASURE: MM	
		DN	D	D1	d	H1	L	L1	I	I	I	de	de	de	F	MXS
60017	1/2"	DN 15	45.8	32.0	13.0	48.5	115.4	62.0	22.6	17.0	22.6	21.3	22.5	22.0	30	M5
60018	3/4"	DN 20	55.8	38.0	18.0	60.0	133.0	72.9	25.5	20.0	25.5	26.7	25.5	26.0	33	M6
60019	1"	DN 25	67.0	45.0	24.0	67.0	148.0	79.9	28.6	23.0	28.6	33.4	29.0	32.0	40	M6
60020	1 1/4"	DN 32	82.0	55.2	31.0	76.0	169.0	88.0	31.9	27.0	31.9	42.2	32.0	38.0	47	M8
60021	1 1/2"	DN 40	98.0	67.0	38.5	89.0	174.0	93.0	35.1	32.0	35.1	48.3	35.0	48.0	52	M8
60022	2"	DN 50	119.5	80.3	50.0	108.3	204.0	112.7	38.2	37.5	38.2	60.3	38.5	60.0	70	M8
60023	2 1/2"	DN 65	119.5	80.3	50.0	108.3	210.0	112.7	41.4	41.5	41.2	73.0	44.5	76.0	70	M8

SELECTION CHART

SIZE	MATERIAL	END CONN.	SEALS	PRESSURE RATING
1/2"~ 2 1/2"	CPVC	Socket or Threaded	Viton or EPDM	150 PSI @ 70F Non-Shock
1/2"~ 2 1/2"	PVC	Socket or Threaded		
1/2"~ 2 1/2"	PP	Socket or Threaded		

CV FACTORS

SIZE	FACTOR	SIZE	FACTOR
1/4"	-	1 1/2"	90.0
3/8"	-	2"	140.0
1/2"	8.0	2 1/2"	330.0
3/4"	15.0	3"	-
1"	29.0	4"	-
11/4"	75.0	6"	-

Pressure Loss Calculation Formula

$$\Delta P = \left[\frac{Q}{Cv} \right]^2$$

ΔP = Pressure Drop
Q = Flow in GPM
Cv = Flow Coefficient

OPERATING TEMPERATURE/PRESSURE