



### 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 tubing system without breaking down tubing connections. Just unscrew the two assembly nuts and lift the valve body out of the line.

### Advanced Design

Hydroseal Canada's **FORTIS** 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 seal 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
- Easy 1/4-Turn Operation
- Full Port Design
- True Union Functionality
- Reversible PTFE Seats
- Double O-Ring Stem Assembly
- Breakaway Failsafe Stem Assembly
- Suitable for ASTM, DIN, JIS and CNS systems
- NSF Compliant

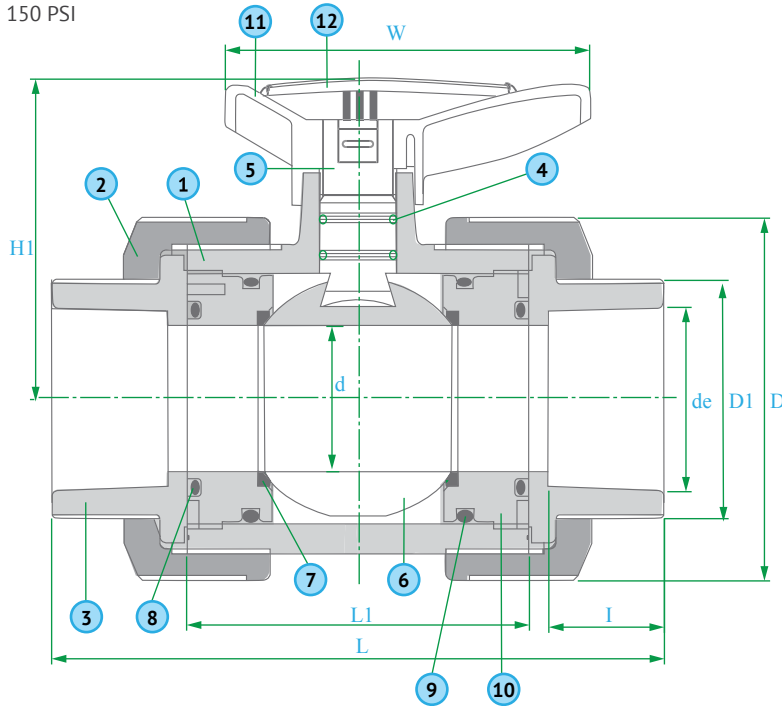
### Options

- Socket or Threaded Connectors
- Electric Actuators
- Pneumatic Actuators
- PVC, CPVC, PP and PVDF
- EPDM, Viton or Nitrile O-Rings

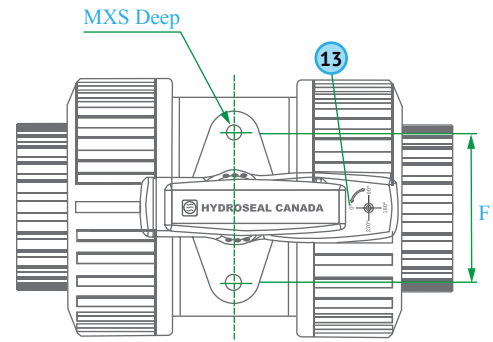
**SIZE: 1/2" ~ 2 1/2"**

**JOINT END:**  
SOCKET - ASTM, DIN, JIS  
THREAD - NPT, BSPT

**WORKING PRESSURE:**  
150 PSI



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



PART	NOMINAL SIZE	SOCKET THREAD TYPE	ASTM			DIN			JIS			UNIT OF MEASURE: MM				
			DN	D	D1	d	H1	L	L1	l	l	l	de	de	de	F
FTES.0050	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	30.0	M5
FTES.0075	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	33.0	M6
FTES.0100	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	40.0	M6
FTES.0125	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	47.0	M8
FTES.0150	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	52.0	M8
FTES.0200	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	70.0	M8
FTES.0250	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	70.0	M8

SELECTION CHART				
SIZE	MATERIAL	CONNECTION	SEALS	PRESSURE RATING
1/2" ~ 2 1/2"	PVC CPVC PP	SOCKET or THREAD	EPDM or VITON	150 PSI @ 73F Non-Shock

CV FACTORS			
SIZE	FACTOR	SIZE	FACTOR
1/4"	-	1 1/2"	90
3/8"	-	2"	140
1/2"	8	2 1/2"	330
3/4"	15	3"	-
1"	29	4"	-
1 1/4"	75	6"	-

**Pressure Loss Calculation Formula**

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

$\Delta P$  = Pressure Drop  
 $Q$  = Flow in GPM  
 $C_v$  = Flow Coefficient

