



### **Rugged, Compact Design**

Hydrosel Canada's rugged, compact all-plastic **QUARK** PVC Ball Valves incorporate many design features found only on higher cost ball valves. Features such as Teflon seats, full porting and a 150 PSI pressure rating are all standard on every size of Hydrosel Canada's range of Compact Ball Valves.

### **Cost-sensitive Applications**

The Compact Ball Valve is perfect for applications that require a reliable ball valve at an economical price. The Compact valve has been designed and tested to make certain it will perform year in and year out in the most demanding applications without leakage or failure. The internal components of a Compact valve are completely encapsulated within the valve body in a one-step manufacturing process. There is absolutely no danger of leakage through assembled parts. This also means that the valve never requires adjustment since all internal components are sealed

### **Features**

- Rated at 150 PSI
- Easy 1/4-Turn Operation
- Full Port Design
- PTFE Seats
- Unibody Design - no replacement parts
- Suitable for ASTM, DIN, JIS and CNS systems
- NSF Listed

inside the one-piece valve body. The Compact valve is ready to be put into service right out of the box.

### **Lightweight and Compact**

Hydrosel Canada Compact Ball Valves are designed to fit into space too small for other valves. They are about one-third the overall size of a plastic true union valve and they weigh an average of 50% less. This makes them ideal for skid-mounted and other applications where space and weight are critical considerations.

### **Can't Rust, Won't Corrode**

The all-plastic construction means they will never fail, stick, or jam because of rusted or corroded parts - they will work in places and environments where metal valves must be painted or coated just to survive.

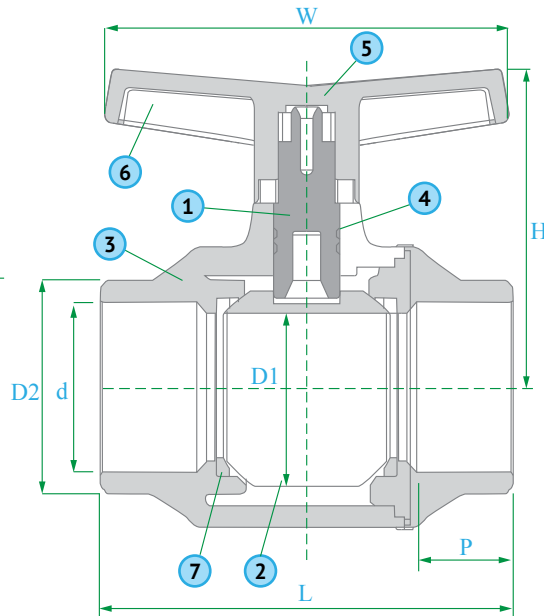
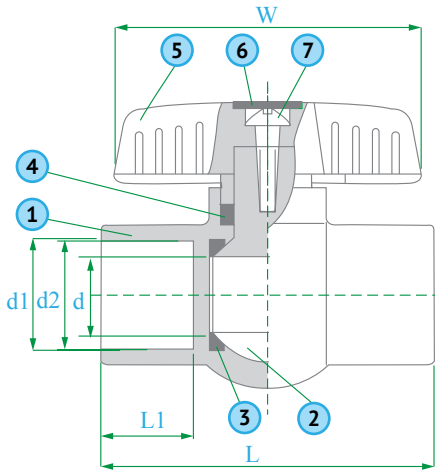
### **Options**

- PVC, CPVC, PP and PVDF
- EPDM, Viton or Nitrile O-Rings

### SIZE: 1/2" ~ 2"

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

**WORKING PRESSURE:**  
150 PSI



CONSTRUCTION			
NO	PARTS	PCS	MATERIALS
1	BODY	1	PVC, CPVC
2	STEM AND BALL	1	PVC, CPVC
3	SEAT	2	TEFLON
4	STEM O-RING	1	EPDM
5	HANDLE	1	ABS
6	CAP	1	ABS
7	BOLT	1	SUS304

### SIZE: 2 1/2" ~ 6"

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

**WORKING PRESSURE:**  
150 PSI

PART	NOMINAL SIZE	SOCKET THREAD TYPE		ASTM	DIN	JIS	ASTM	DIN	JIS	UNIT OF MEASURE: MM		
		DN	D							d1	d1	d1
QKES.0050	1/2"	DN15	29.0	21.5	20.3	22.3	22.2	16.0	22.2	79.0	70.0	47.0
QKES.0075	3/4"	DN20	37.0	26.9	25.3	26.3	25.4	18.5	25.4	91.0	77.0	57.0
QKES.0100	1"	DN25	43.0	33.7	32.3	32.3	28.6	22.0	28.6	107.0	89.0	61.0
QKES.0125	1 1/4"	DN32	53.0	42.4	40.3	38.4	31.8	26.0	31.8	123.0	89.0	66.0
QKES.0150	1 1/2"	DN40	61.0	48.6	50.3	48.5	34.9	31.0	34.9	129.0	111.0	74.0
QKES.0200	2"	DN50	73.0	60.6	63.3	60.6	38.1	37.5	38.1	151.0	139.0	80.0
QKES.0250	2 1/2"	DN65	96.0	73.8	75.3	76.6	44.5	43.5	44.5	194.0	190.0	141.0
QKES.0300	3"	DN80	110.0	89.3	90.3	89.6	47.6	51.0	47.6	233.0	230.0	154.0
QKES.0400	4"	DN100	136.0	114.8	110.3	114.7	57.2	61.0	57.6	280.0	274.0	170.0
QKES.0600	6"	DN150	196.0	168.9	160.3	148.0	89.9	90.0	90.0	376.0	323.0	182.0

SELECTION CHART				
SIZE	MATERIAL	CONNECTION	SEALS	PRESSURE RATING
1/2" ~ 6"	PVC CPVC	SOCKET or THREAD	EPDM or VITON	150 PSI @ 73F Non-Shock

CV FACTORS			
SIZE	FACTOR	SIZE	FACTOR
1/4"	-	1 1/2"	110
3/8"	-	2"	217
1/2"	13	2 1/2"	304
3/4"	24	3"	452
1"	49	4"	510
1 1/4"	70	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

