

## Specifications

### Capacities for High Resolution Control Valves

Needle Size (HRCV)		0	1	2	3	4	5	6
Max. Flow	cc/min. – Helium	95	220	450	1250	3600	12500	50000
	cc/min. – Water	2	6	15	30	100	200	900

### Capacities for Standard Cartridge Valves

Needle Size (SCV)		1	2	3
Max. Flow	cc/min. – Helium	25000	35000	55000
	cc/min. – Water	700	1000	1200

Note: Capacities are typically measured with water or helium at 10 psig supply pressure and atmospheric pressure downstream. Capacities vary for different fluids and operating conditions.

### Ratings: Maximum Operating

	Temperature °F	Pressure PSIG
Brass Model	160	250
Stainless Steel Model	250	250

### Connections: 1/8" Female NPT (integral)

### Materials of Construction

Model	Body	Valve Pin	Valve Pin Holder	O-Rings	Orifice
HRCV Brass	Nickel Plated Brass	316 SS	Brass	Buna N	Brass w/ Fluorosint® liner
HRCV Stainless Steel	316 SS	316 SS	316 SS	Viton	316 SS w/ Fluorosint® liner
SCV Brass	Nickel Plated Brass	316 SS	316 SS	Buna N	Brass
SCV Stainless Steel	316 SS	316 SS	316 SS	Viton	316 SS

Fluorosint® - DSM Engineering Plastic Products

### Torque Guard

Porter Standard Cartridge Valves are available with the exclusive *Torque Guard Stop Mechanism*. *Torque Guard* eliminates stem damage caused by over tightening of the valve at shut-off.

The *Torque Guard System* consists of a specially designed knob with a stop pin pressed into an aluminum knob insert and a machined detail on the packing nut that engages the stop pin and prevents clockwise rotation beyond a predetermined point. During final test, the knob is adjusted so that the stop pin and packing nut engage precisely at shut-off. This combination eliminates the possibility of over tightening and the resultant stem damage.

### Ordering Information

#### Model Number and Description

#### Control Valve

Example:



#### Basic Model

HRCV (High Resolution)  
SCV (Standard Cartridge)

#### Body Material

B - Brass  
S - Stainless Steel

#### Needle Size

0 thru 6 (HRCV only)  
1 thru 3 (SCV only)  
1 - TG (Torque Guard Taper 1)  
2 - TG (Torque Guard Taper 2)

#### Connection Configuration

A - Angle  
S - Straight

#### Valve Cartridge Only

Example:



#### Valve Configuration

HR (High Resolution)  
SC (Standard Cartridge)

#### Needle Size

0 thru 6 (HR only)  
1 thru 3 (SC only)  
1 - TG (Torque Guard Taper 1)  
2 - TG (Torque Guard Taper 2)

#### Material

A - Aluminum  
B - Brass  
S - Stainless Steel

#### To order, specify:

- Model Number
- Fluid
- Flow Rate
- Operating Pressure (inlet and outlet)
- Operating Temperature
- Materials of Construction