

**PORTER Flow Control Valves - HRCV/HR**

**Specifications**

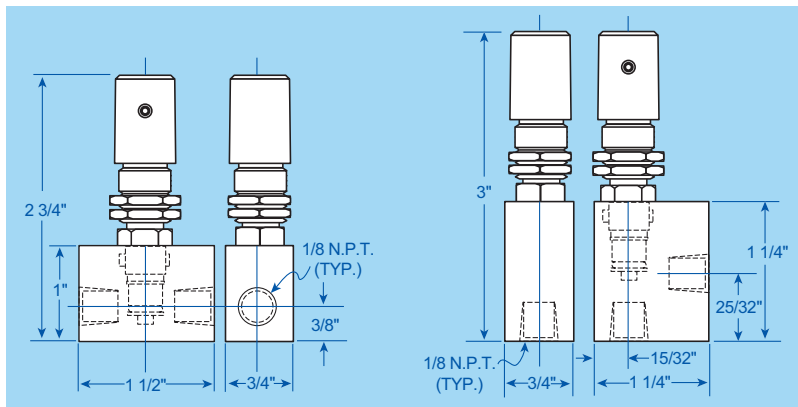
Porter Metering Valves are designed for extremely precise control in low flow gas and liquid applications. They are available as valve cartridges, integrally mounted in flowmeters and in-line valve assemblies with straight or angle patterned bodies. All in-line valves assemblies have 1/8" female NPT inlet and outlet ports.

**High Resolution Control Valves**

The HR Series High Resolution Control Valves contain unique design features that make them the ultimate choice for precise low flow control.

- Spring loaded, non rising adjustment stem with 56-pitch thread provides smooth, non-reversing flow characteristics and 15-turn resolution.

- Non-rotating stainless steel valve pin with precision ground flat gives exact control.
- Valve pin o-ring guarantees positive shut-off without stem damage.
- Self-lubricating orifice liner assures long life.
- Seven available needle tapers expand valve capacity.



HRCV - straight connection

HRCV - angle connection

**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

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

Fluorosint® - DSM Engineering Plastic Products

**Ordering Information**  
**Model Number and Description**

**Example:**  
Control Valve **HRCV B 1 S**

**Basic Model**  
HRCV (High Resolution)

**Body Material**  
B - Brass  
S - Stainless Steel

**Needle Size**  
0 thru 6

**Connection Configuration**  
A - Angle  
S - Straight

**Valve Cartridge Only**

**Example:**  
Valve Configuration **HR 3 B**

**Valve Configuration**  
HR (High Resolution)

**Needle Size**  
0 thru 6 (HR only)

**Material**  
B - Brass  
S - Stainless Steel

**To order, specify:**

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