

PORTER
INSTRUMENT COMPANY, INC.

PORTER Flow Control Valves - HRCV/HR

Specifications

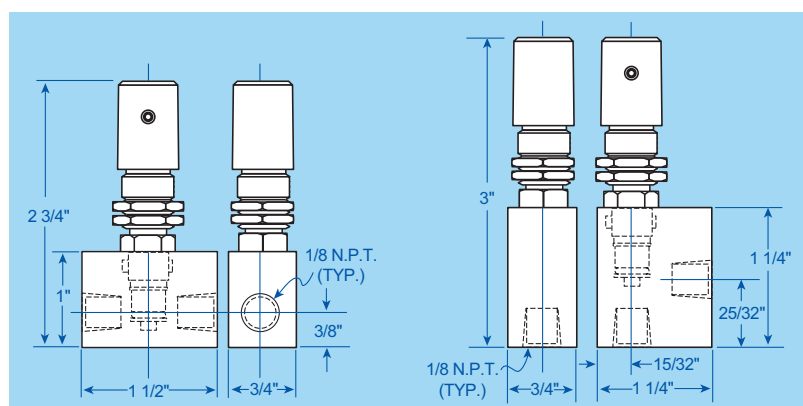
Porter Metering Valves are designed for extremely precise control in low flow gas and liquid applications. They are available as valve cartridges, integrally mounted in flowmeters and in-line valve assemblies with straight or angle patterned bodies. All in-line valves assemblies have 1/8" female NPT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

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

PORTER
INSTRUMENT COMPANY, INC.

UPDATED 8/19/05

245 TOWNSHIP LINE RD. P.O. BOX 907 HATFIELD, PA 19440-0907 USA [215] 723-4000 / FAX [215] 723-2199