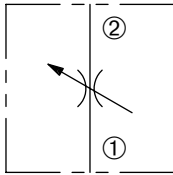


S-210, S-310 and S-410

Adjustable, High Pressure,
Needle Valve

SERIES S



DESCRIPTION

A cartridge valve designed as a shut-off. The optional SM needle provides fine metering characteristics.

OPERATION

The S-210, S-310, and S-410 series of valves will allow flow in either direction.

FEATURES and BENEFITS

- High pressure range.
- High flow capabilities.
- Fine metering option.
- Positive shut-off.
- Compact size.

SPECIFICATIONS

***Operating Pressure:** 5000 PSI (345 Bar)

Flow: See FLOW CHARACTERISTICS chart.

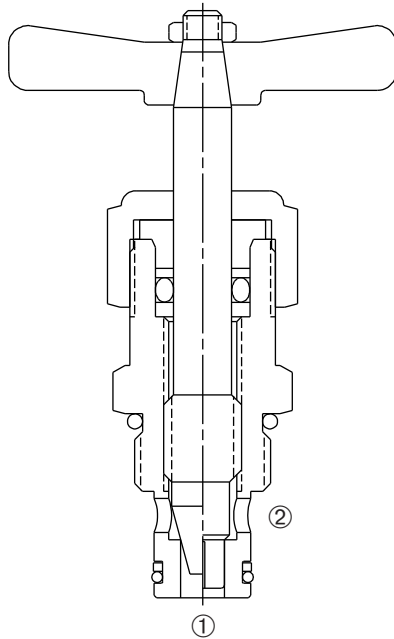
Temperature: -30°F to +250°F (-34°C to +121°C)

Recommended Filtration: ISO 20/18/14

Fluids: Mineral-based fluids. For other fluid compatibility, consult factory.

Cavities /Cavity Tools: [S*10, see page 11.22.1](#)

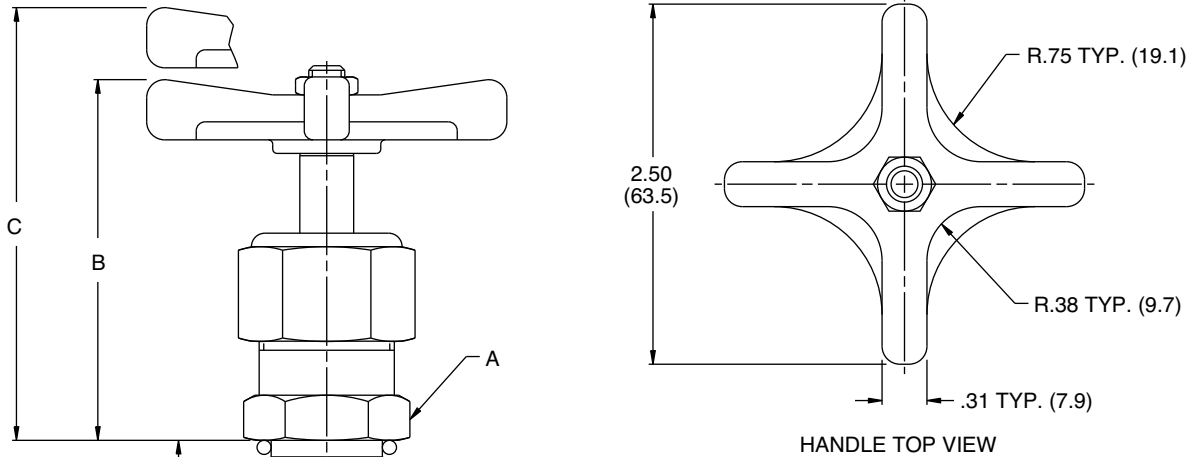
**Installed in body of adequate size and strength.*



FLOW CHARACTERISTICS

MODEL	FLOW MAX. RECOMMENDED GPM (L/min.)	CV FLOW FACTOR (FULL OPEN)
S-210-S*	13.5 (51.1)	.85
S-310-S*	25.0 (94.6)	1.67
S-410-S*	40.0 (151.4)	1.89
SM-210-S*	13.5 (51.1)	.85
SM-310-S*	25.0 (94.6)	1.67
SM-410-S*	40.0 (151.4)	1.89

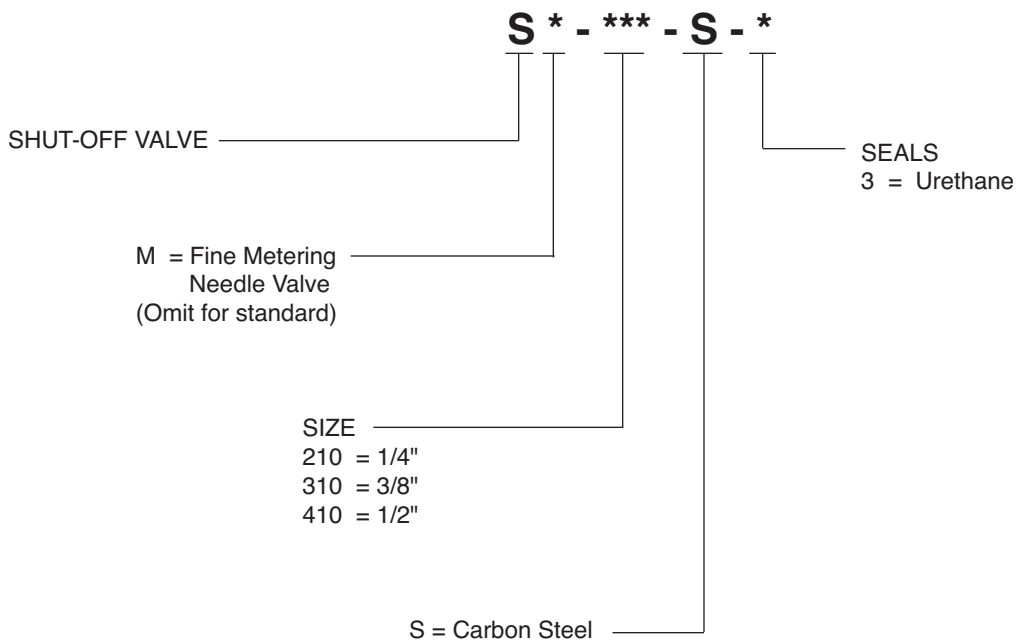
INSTALLATION DIMENSIONS



MODEL	A		B (CLOSED)	C (FULL OPEN)	D
	WIDTH ACROSS HEX. FLATS	MAX. TORQUE FT.-LBS. (Nm)			
S-210-S-*	.88 (22.4)	20 (27.1)	2.25 (57.2)	2.69 (68.3)	1.00 (25.4)
S-310-S-*	1.00 (25.4)	30 (40.7)	2.75 (69.9)	3.25 (82.6)	1.19 (30.2)
S-410-S-*	1.25 (31.8)	40 (54.2)	2.38 (60.5)	2.88 (73.2)	1.56 (39.6)
SM-210-S-*	.88 (22.4)	20 (27.1)	2.25 (57.2)	2.69 (68.3)	1.00 (25.4)
SM-310-S-*	1.00 (25.4)	30 (40.7)	2.75 (69.9)	3.25 (82.6)	1.19 (30.2)
SM-410-S-*	1.25 (31.8)	40 (54.2)	2.38 (60.5)	2.88 (73.2)	1.56 (39.6)

() Parentheses = Millimeters

HOW TO ORDER



SOLENOID
CHECK
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FLOW CONTROL
RELIEF
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ACCESSORIES
TECHNICAL DATA