

DESCRIPTION

The SCV-89 Research Control® Valves are compact control valves designed to meet the manufacturing standards established by the 3A Symbol Council. The standard investment cast body provides a unit that is not only lightweight but also economical.

APPLICATIONS

Valves of the SCV-89 type are well suited to automated control systems found in biotechnology, pharmaceutical and food processes.

- Pressure
- Temperature
- Product injection
- Flow control in fermentation reactors
- Control of gas blankets in closed vessels
- Catalyst, defoamer and additive initiation

MATERIALS OF CONSTRUCTION

Size	1 inch and 1 ½ inch
Body - Bonnet	
Body	316/316L Stainless Steel Cast
Bonnet	316 Stainless Steel Barstock
Innervalue	316 Stainless Steel Barstock Trims
Clamps	304 or 316 Stainless Steel
Gaskets	
Standard	Viton (FKM)
Optional	Silicone, EPDM or Kalrez
O-Rings	
Standard	Viton (FKM)
Optional	Silicone, EPDM or Kalrez
Actuator Housing	
Standard	Epoxy Coated Aluminum
Optional	316/316L Stainless Steel

STANDARD FEATURES

- Manufactured to 3A Symbol standards
- Self-draining design
- Quick disassembly with clamps
- Choice of ends: Tri-Clamp®
- Designed for STEAM-IN-PLACE and CLEAN-IN-PLACE
- Internal Finish: 16 Ra



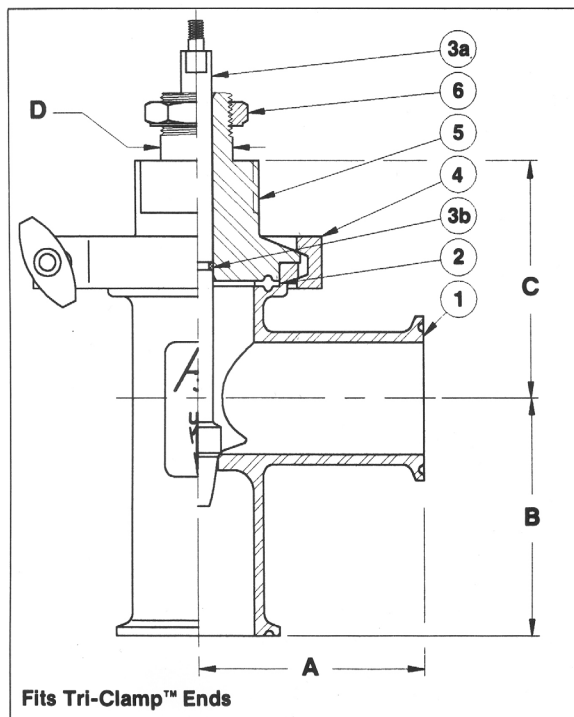
Image shown with optional stainless steel actuator

ACTUATOR CHOICES

Standard	Air-to-open, fail close Air-to-close, fail open
Optional	Stainless Steel Actuator
	ATO or ATC with integral top mounted positioner
	ATO or ATC with side mounted positioner
Signal Ranges	3-15#, 3-27#, 6-30# (3-9#, 9-15# with positioner)
Electronic Actuator	We offer a wide choice of electric actuators up to 200 pounds of thrust.

OTHER AVAILABLE VALVES

Research Control Valves manufactures many different models of both standard and specialty control valves, conventional as well as sanitary designs. If your needs for small control valves can be served with a custom designed valve, please contact your area representative for assistance.



Description of Items

1. Body
2. Body-Bonnet gasket
- 3a. Innervalue/stem (1 piece)
- 3b. "O" ring
4. Body-Bonnet clamp
5. Bonnet
6. Yoke locknut

Pressure/Temperature Rating

300 psi @ 75° F
150 psi @ 30° F

Consult the factory for maximum allowable flowing and shutoff pressures.

Finishes

Internal: 180 grit
External: As cast (electropolished)

Dimensions

PS	1"	1-1/2"
A	2.75"	2.75"
B	2.63"	2.87"
C	3.10"	2.86"
D	0.875"	0.875"
Stroke Length	0.562"	

Size	Type No.	Dwg. No.
1"	940	CD-950940
1-1/2"	935	CD-950935

INNERVALVE CHART

Valve Size	Trim Designation	CV	KV	Nom. Rangeability		Orifice Port Diameter	Port Area (in. ²)
		Coefficient		Linear	(=%)		
1-1/2"	20	20.00	17.24	40:1	60:1	1.00"	0.7854
	15	15.00	12.93	40:1	60:1	1.00"	0.7854
1", 1-1/2"	10	10.00	8.62	40:1	60:1	0.75"	0.4420
	8	8.00	6.90	40:1	60:1	0.75"	0.4420
	6	6.00	5.17	40:1	60:1	0.75"	0.4420
	5	5.00	4.31	40:1	60:1	0.50"	0.1964
	4	4.00	3.45	40:1	60:1	0.50"	0.1964
	A	3.00	2.59	40:1	60:1	0.50"	0.1964
	B	2.00	1.72	40:1	60:1	0.375"	0.1105
	C	1.25	1.08	40:1	60:1	0.375"	0.1105
	D	0.80	0.69	40:1	60:1	0.375"	0.1105
	E	0.50	0.43	40:1	60:1	0.375"	0.1105
	F	0.32	0.28	30:1	40:1	0.156"	0.0192
	G	0.20	0.17	30:1	40:1	0.156"	0.0192
	H	0.13	0.11	30:1	40:1	0.156"	0.0192
	I	0.08	0.07	30:1	40:1	0.156"	0.0192
	J	0.05	0.04	30:1	40:1	0.156"	0.0192

AVAILABLE OPTIONS

- ☐ MANUAL HANDWHEEL
 ☐ POSITIONERS
 ☐ ELECTRIC ACTUATOR
 ☐ LIMIT SWITCHES
- ☐ FILTERS
 ☐ CERTIFICATIONS
 ☐ I/P TRANSDUCERS
 ☐ REGULATORS

Custom bracketing is available with each option.

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