

DESCRIPTION

The series SCV85 Research Control Valves are compact, modulating valves designed to meet the manufacturing standards established by the 3A Symbol Council. They are available in four sizes: 1/2", 3/4", 1", and 1 1/2". Several innervalves are available in each size to cover medium and low flow rates.

APPLICATIONS

Valves of the SCV85 type are well suited to automated control systems found in biotechnology, pharmaceutical and food processes. Common uses are: pressure, temperature and flow control in fermentation reactors; control of gas blankets in closed vessels; and catalyst, defoamer, and additive initiation.

MATERIALS OF CONSTRUCTION

Body - Bonnet	316 S/S
Innervalve	316 S/S
Clamps	304 S/S or 316 S/S
Gaskets	Silicone or Viton
"O" Rings	Silicone or Viton
Actuator Housing	
Standard	Epoxy Coated Aluminum
Optional	316 S/S

Note: Some clamp sizes and gaskets may not be available in a choice of materials. Consult the factory for details.

ACTUATOR CHOICES

Standard	Air-to-open, fail close Air-to-close, fail open
Optional	ATO or ATC with integral top mounted positioner
Optional	ATO or ATC with side mounted positioner
Signal Ranges	3-15#, 3-27#, 6-30# (3-9#, 9-15# with positioner)
Electronic Actuator	110VAC Power, 4-20 made input
Accessories	See Tech Brief TB-EVA-1 Solenoids, limit switches, gauges, I/P converters, filter regulators.

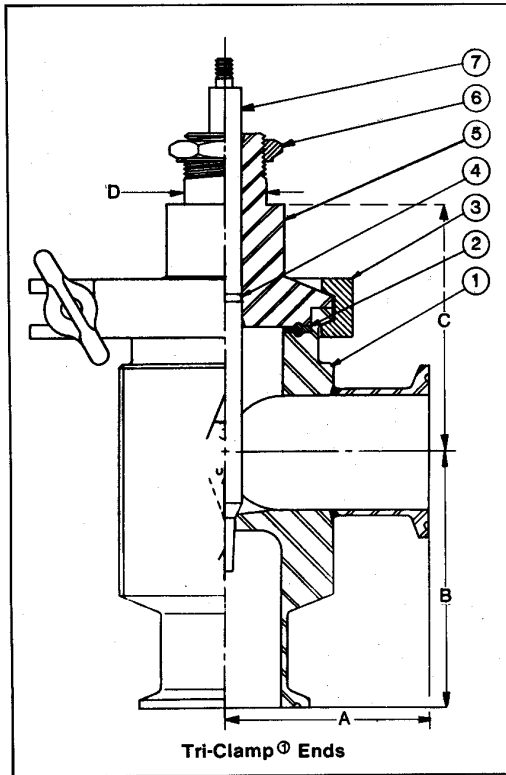


STANDARD FEATURES

- Manufactured in accordance with the 3A Symbol Council
- Quick disassembly with clamps
- Choice of ends: butt-weld, Tri-Clamp
- Choice of 17 innervalves
- Choice of innervalve characteristics: linear, equal percentage, quick-open

OTHER AVAILABLE VALVES

Badger Meter, Inc. 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 the factory or our area representative for assistance.



Description of Items

- 1. Body
- 2. Body-bonnet gasket
- 3. Body-bonnet clamp
- 4. "O" Ring
- 5. Bonnet
- 6. Yoke locknut
- 7. Innervalue

Dimensions

1/2" 3/4" 1" 1 1/2"

A: 1.56" 1.56" 2.75" 2.75"

B: 1.56" 1.69" 2.62" 2.87"

C: 2.75" 2.62" 3.12" 2.87"

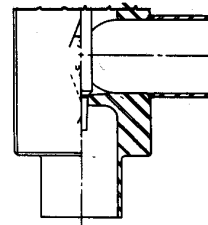
D: .875" All sizes

Stroke Length: .562" All sizes

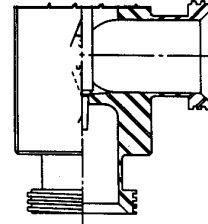
Press./Temp. Rating

300 PSI @ 75 Deg. F

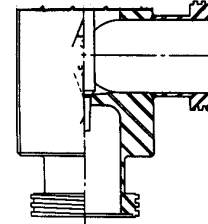
150 PSI @ 300 Deg. F



Butt-Weld



Ground Joint



Gasket Joint

Type Numbers

- 1/2" with 1/2" Tri-Clamp® 903
- 1/2" with butt-weld tube 904
- 3/4" with 3/4" Tri-Clamp® 907
- 3/4" with butt-weld tube 908
- 1" with 1" Tri-Clamp® 911
- 1" with butt-weld tube 912

- 1" with ground joint 913
- 1" with gasket joint 914
- 1-1/2" with 1-1/2" Tri-Clamp® 895
- 1-1/2" with butt-weld tube 896
- 1-1/2" with ground joint 897
- 1-1/2" with gasket joint 898

Innervalue Chart

Valve Size	Trim Designation	Cv Coefficient	Nom. Rangeability		Orifice Port Dia.	Port Area (in. 2)
			Linear	(=%)		
1-1/2"	20	20.0	40:1	60:1	1.00"	.7854
1-1/2"	15	15.0	40:1	60:1	1.00"	.7854
1", 1-1/2"	10	10.0	40:1	60:1	.75"	.4420
1", 1-1/2"	8	8.0	40:1	60:1	.75"	.4420
1", 1-1/2"	6	6.0	40:1	60:1	.75"	.4420
3/4", 1", 1-1/2"	5	5.0	40:1	60:1	.50"	.1964
3/4", 1", 1 1/2"	4	4.0	40:1	60:1	.50"	.1964
1/2", 3/4", 1", 1-1/2"	A	3.0	40:1	60:1	.50"	.1964
1/2", 3/4", 1", 1-1/2"	B	2.0	40:1	60:1	.375"	.1105
1/2", 3/4", 1", 1-1/2"	C	1.25	40:1	60:1	.375"	.1105
1/2", 3/4", 1", 1-1/2"	D	.80	40:1	60:1	.375"	.1105
1/2", 3/4", 1", 1-1/2"	E	.50	40:1	60:1	.375"	.1105
1/2", 3/4", 1", 1-1/2"	F	.32	30:1	40:1	.156"	.0192
1/2", 3/4", 1", 1-1/2"	G	.20	30:1	40:1	.156"	.0192
1/2", 3/4", 1", 1-1/2"	H	.13	30:1	40:1	.156"	.0192
1/2", 3/4", 1", 1-1/2"	I	.08	30:1	40:1	.156"	.0192
1/2", 3/4", 1", 1-1/2"	J	.05	30:1	40:1	.156"	.0192

Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding bid obligation exists.



Please see our website at www.badgermeter.com for specific regions and contacts.



BadgerMeter, Inc.

P.O. Box 581390, Tulsa, Oklahoma 74158
(918) 836-8411 / Fax: (918) 832-9962

www.badgermeter.com