



INDUSTRIAL PRODUCTS DIVISION

Sales Manual Section 170
PRODUCT SPECIFICATION "BC"
 (For CONTROL VALVE Service)

Valve Body Assembly
Style "BC"

FEATURES

- Sizes 1" thru 4" Direct Acting
 2-1/2" thru 4" Reverse Acting
- Single Seated
- Unbalanced
- Composition Seat Disc.

SPECIFICATIONS

Type Single seated, unbalanced
 Ends:

1" thru 2" Screwed, Female NPT
 2 1/2" thru 4" Cast Iron 125 lb. ANSI Flanges.

Flow Characteristic Equal Percent

Maximum Leakage (Factory Test)

1" thru 2" 0.1 % of rated valve capacity at 50 psi.
 2 1/2" thru 4" 0.1% of rated valve capacity at 20 psi.

Action:

Direct (Push down to close)
Reverse (Push down to open)

Stem Connections:

1" thru 2" Quick Disconnect Type
 2 1/2" thru 4" Split Block Clamp

Body Materials:

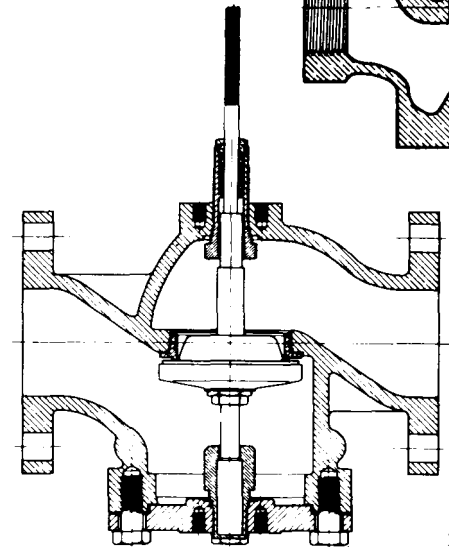
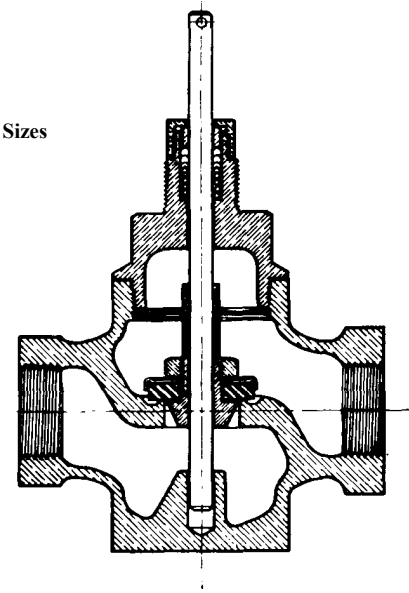
1" Brass ASTM B584
 1 1/4" thru 2" Brass ASTM B62
 2 1/2" thru 4" Iron ASTM A126 Class B

Trim Materials:

Stem 316 Stainless Steel
 Plug 1" thru 2", Brass ASTM B16
 2 1/2" thru 4" Brass ASTM B584
 Seat Ring 1" thru 2", Integral Brass Seat
 2 1/2" thru 4", Replaceable Brass
 ASTM B584

Seat Disc Buna-N Rubber Compound or Teflon
 Packing Spring loaded Chevrons (Teflon)
 Temperature Limit 300°F (149° C)
 Maximum Pressure Drop 40 psi.

1" Thru 2" Sizes



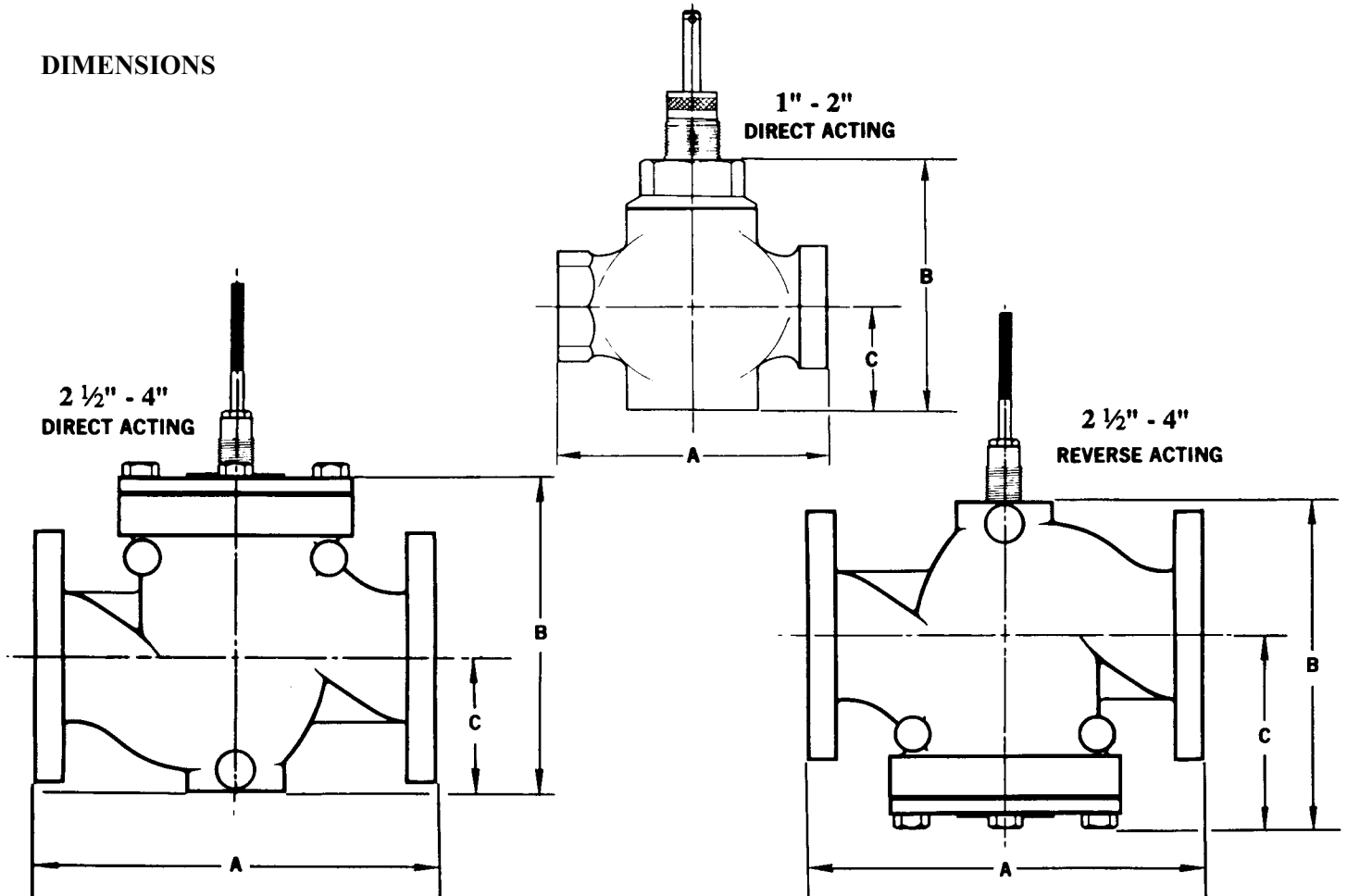
2 1/2" Thru 4" Sizes
 Reverse Acting Shown

Body Pressure Ratings:

Screwed Ends 300 psi at 100° F.
 250 psi at 300° F.
Flanged Ends 175 psi at 100° F.
 140 psi at 300° F.

Valve Size In.	1"	1-1/4"	1-1/2"	2"	2-1/2"	3	4
Cv	9.3	17	25	40	72	102	164
Valve Travel In. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	5/8 (15.9)	1 (25)	1 (25)	1 (25)
Unbalanced Area Sq. In. (cm ²)	.79 (5.10)	1.23 (7.94)	1.77 (11.4)	3.14 (20.3)	4.9 (31.6)	7.1 (45.8)	12.6 (81.3)
Direct Acting Actuators	VC-230A				VC-300A		
Reverse Acting Actuators	VC-231A				VC-301A		

DIMENSIONS



Valve Size	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Dim. A In. mm D.A.	5 (127)	5-1/8 (130)	5-1/8 (130)	6-3/4 (171)	10-7/8 (276)	11-3/4 (298)	13-7/8 (352)
Dim. B In. mm D.A.	4-3/4 (120)	4-3/4 (120)	4-5/8 (117)	5 (127)	8 (203)	9-3/4 (234)	10-1/2 (266)
Dim. C In. mm D.A.	1-7/8 (48)	1-7/8 (48)	1-7/8 (48)	2-1/8 (54)	3-5/8 (92)	4 (102)	4-3/4 (120)
Dim. A In. mm R.A.					10-7/8 (276)	11-3/4 (298)	13-7/8 (352)
Dim. B In. mm R.A.					8-1/4 (209)	9-3/4 (247)	11 (279)
Dim. C In. mm R.A.					4-5/8 (117)	5-3/4 (146)	6-3/4 (158)

Robertshaw

U.S.A. and CANADA

Robertshaw Industrial Products Division

1602 Mustang Drive

Maryville, TN 37801

Phone: (865) 981-3100 Fax: (865) 981-3168

<http://www.robertshawindustrial.com>

Exports

Invensys Appliance Controls

2809 Emerywood Parkway

P.O. Box 26544

Richmond, Virginia 23261-6544

Phone: (804) 756-6500 Fax: (804) 756-6561