



TYPE E5 MAIN VALVE

APPLICATION DATA

- Pressure Regulating for Steam Distribution
- High Pressure/Low Differential Pressure Regulating
- Fluid Regulation
- For use with Self-contained, Pneumatic or Electronic Pilots
- Slow Start-up or Shutdown

SIZING INFO
PAGE 108

VALVE RATINGS

Valve Ends ASME/ANSI	Pressure PSIG (bar)	Temperature °F (°C)
-------------------------	------------------------	------------------------

CAST IRON

Class 250 NPT	250 (17.2) @	450 (232)
B16.1 Class 125 Flanged	125 (8.6) @	450 (232)
B16.1 Class 250 Flanged	250 (17.2) @	450 (232)

CAST STEEL

B16.34 Class 300 NPT	300 (21.0) @	600 (315)
B16.34 Class 150 Flanged	150 (10.3) @	500 (260)
B16.34 Class 300 Flanged	300 (21.0) @	600 (315)

Other pressure/temperature ratings available; consult factory.

Maximum downstream pressure is 300 psi.

Canadian Registration # OC 0591.9C

Installation Tip: Add EZ Connections for ease of maintenance
SEE PAGE 42

TYPE E5 MAIN VALVE

HIGH PRESSURE-HIGH LIFT LOW DIFFERENTIAL

SIZES 3/4" – 12"
PRESSURES to 300 PSIG at 600°F

- Normally Closed
- Single Seat
- Balanced Hycar Diaphragm
- Protected Main Spring
- Long Main Spring Operates on 5 psi Minimum Differential
- Internal & External Condensation Chambers
- Fluid, Gas & Vapor Applications
- Accurate Regulation Unaffected by Service Conditions
- ANSI/FCI 70-2 Class IV Shutoff
- Virtually Frictionless for Long Service Life
- Packless Construction
- Easy In-line Maintenance
- Wide Variety of Pilots for Many Applications
- Lifetime Warranty against Wiredrawing of Seat & Disc *

OPTIONS *See page 42*

- Composition Disc for liquid, air or gas service
- Balanced Construction
- Integral Mount Pilot
- Secoweld
- EZ Connections

TYPICAL CONFIGURATIONS

PRESSURE REDUCING	TYPE E5D
AIR ADJUSTED	TYPE E5A
BACK PRESSURE	TYPE E5Q
PUMP GOVERNOR	TYPE E5P
LOAD ALLOCATING	TYPE E5FD
AIR CONTROLLED	TYPE E5AP60
ELECTRONIC SLOW START	TYPE E5D208D
SOLENOID CONTROLLED	TYPE E5MD
SOLENOID ACTUATED	TYPE E5M
DIFFERENTIAL	TYPE E5N
TEMPERATURE CONTROL	TYPE E5T

RATED FLOW COEFFICIENTS (Cv)

SEAT FACTOR	REGULATOR SIZE												
	3/4	1	1¼	1½	2	2½	3	4	5	6	8	10	12
Full	7.6	11.7	18.9	27.4	43	67	95	159	258	350	665	1018	1611
Normal	5.7	10.0	13.4	19.8	25	35	59	120	176	228	366	525	952

* When installed according to factory specifications.

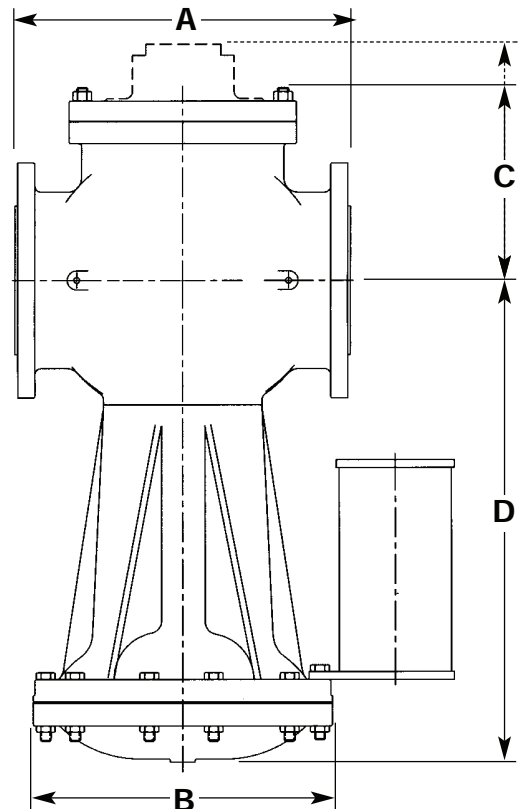
TYPE E5 MAIN VALVE

SPECIFICATION

The valve shall be self-operated, external pilot type, single seated, diaphragm actuated, normally closed design. The valve will function quickly and shut tight on dead end service. Internal parts including seats, discs and stems shall be of stainless steel. The diaphragm shall be a balanced Hycar material for high lift. There shall be an external condensation chamber supplied. The main valve spring shall operate on a 5 psi minimum differential. There shall be no springs in the steam flow path and no stuffing box. The valve shall be easy to maintain with all parts accessible without removal from the line.

MATERIALS OF CONSTRUCTION

Body, Cast IronASTM A126 Cl. B
 Body, Cast SteelASTM A216 WCB
 Stem303 St. Stl. ASTM A582
 Disc 3/4 - 5"420 St. Stl. ASTM A582 Cond A
 Disc 6 - 12"304 St. Stl. ASTM A167/A240
 Seat 3/4 - 5"420 St. Stl. ASTM A582 Cond A
 Seat 6 - 12"316 St. Stl. ASTM A743 CF-8M
 GasketNon-asbestos
 DiaphragmHycar
 SpringSteel



TYPE E5
MAIN VALVE

TYPE E5 MAIN VALVE

FITTINGS ON
PAGE 46

DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

SIZE	A			B	C			D*		APPROX.WT				
					Std. Mount	Integral Mount				Iron, Brz.	Iron		Steel	
	ANSI NPT	ANSI 125	ANSI 250			CI	Stl.	ANSI 125	SCR 250		Stl. ANSI NPT	ANSI 125	ANSI 250	ANSI 150
$\frac{3}{4}$ (19)	$4\frac{3}{4}$ (111)	— —	— —	$6\frac{7}{8}$ (175)	$2\frac{7}{8}$ (73)	$3\frac{5}{8}$ (92)	$3\frac{1}{2}$ (89)	$11\frac{1}{4}$ (286)	$11\frac{1}{4}$ (286)	23 (10)	— —	— —	— —	— —
1 (25)	$5\frac{3}{8}$ (137)	$5\frac{1}{2}$ (140)	6 (152)	$6\frac{7}{8}$ (175)	$3\frac{5}{8}$ (92)	$4\frac{3}{8}$ (111)	$4\frac{3}{8}$ (111)	$11\frac{5}{8}$ (295)	$11\frac{5}{8}$ (295)	24 (11)	30 (14)	33 (15)	35 (16)	39 (18)
$1\frac{1}{4}$ (32)	$6\frac{1}{2}$ (165)	$6\frac{3}{4}$ (171)	$7\frac{1}{4}$ (184)	$9\frac{1}{8}$ (232)	$4\frac{1}{8}$ (105)	4 (102)	$4\frac{5}{8}$ (117)	$13\frac{1}{2}$ (343)	$13\frac{1}{2}$ (343)	49 (22)	46 (21)	49 (22)	58 (26)	63 (29)
$1\frac{1}{2}$ (38)	$7\frac{1}{4}$ (184)	$6\frac{7}{8}$ (175)	$7\frac{3}{8}$ (187)	$9\frac{1}{8}$ (232)	$4\frac{3}{8}$ (111)	$4\frac{1}{2}$ (114)	5 (127)	$13\frac{5}{8}$ (346)	$13\frac{5}{8}$ (346)	53 (24)	58 (26)	68 (31)	67 (30)	74 (34)
2 (51)	$7\frac{1}{2}$ (191)	$8\frac{1}{2}$ (216)	9 (229)	$11\frac{1}{8}$ (283)	$5\frac{1}{4}$ (133)	5 (127)	$5\frac{5}{8}$ (143)	$16\frac{1}{4}$ (413)	$16\frac{1}{4}$ (413)	84 (38)	90 (41)	97 (44)	113 (51)	120 (55)
$2\frac{1}{2}$ (64)	— —	$9\frac{3}{8}$ (238)	10 (254)	$11\frac{1}{8}$ (283)	$5\frac{3}{4}$ (146)	$5\frac{3}{8}$ (137)	6 (152)	$16\frac{1}{2}$ (419)	$16\frac{1}{2}$ (419)	— —	97 (44)	112 (51)	130 (59)	135 (61)
3 (76)	— —	10 (254)	$10\frac{3}{4}$ (273)	$13\frac{1}{2}$ (343)	$6\frac{5}{8}$ (168)	$6\frac{3}{8}$ (162)	7 (178)	$19\frac{1}{4}$ (489)	$19\frac{1}{4}$ (489)	— —	148 (67)	170 (77)	210 (95)	226 (103)
4 (102)	— —	$11\frac{7}{8}$ (302)	$12\frac{1}{2}$ (318)	$13\frac{1}{2}$ (343)	$7\frac{5}{8}$ (194)	$6\frac{5}{8}$ (168)	8 (203)	$18\frac{3}{8}$ (467)	$23\frac{3}{8}$ (594)	— —	208 (95)	293 (133)	307 (139)	330 (150)
5 (127)	— —	$13\frac{3}{8}$ (346)	$14\frac{1}{2}$ (368)	$13\frac{1}{2}$ (343)	$8\frac{1}{2}$ (216)	$7\frac{3}{8}$ (187)	$8\frac{3}{4}$ (222)	$18\frac{3}{4}$ (476)	$23\frac{3}{4}$ (603)	— —	240 (109)	333 (151)	335 (152)	366 (166)
6 (152)	— —	$15\frac{1}{8}$ (384)	16 (406)	$16\frac{3}{4}$ (425)	10 (254)	7 (178)	— —	$23\frac{1}{2}$ (597)	$27\frac{3}{8}$ (695)	— —	348 (158)	616 (280)	560 (254)	503 (274)
8 (203)	— —	19 (483)	20 (508)	$16\frac{3}{4}$ (425)	$11\frac{1}{2}$ (292)	$9\frac{1}{4}$ (235)	— —	$23\frac{3}{4}$ (603)	$29\frac{5}{8}$ (752)	— —	650 (295)	814 (370)	795 (361)	862 (392)
10 (254)	— —	$23\frac{3}{8}$ (600)	25 (635)	20 (508)	$13\frac{3}{4}$ (349)	— —	— —	$30\frac{3}{4}$ (781)	$35\frac{3}{8}$ (899)	— —	910 (414)	1130 (513)	1345 (611)	1420 (645)
12 (305)	— —	$26\frac{1}{2}$ (673)	28 (711)	$24\frac{3}{4}$ (629)	$15\frac{7}{8}$ (403)	— —	— —	$39\frac{3}{4}$ (1010)	$39\frac{3}{4}$ (1010)	— —	1580 (718)	1920 (872)	1990 (904)	2160 (982)