

TYPE E2 MAIN VALVE

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## LOW PRESSURE LOW DIFFERENTIAL

SIZES 3/4" – 12"  
PRESSURES to 15 PSIG at 250°F

- Normally Closed
- Single Seat
- Hycar Diaphragm
- Protected Main Spring
- Gas & Steam 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
- Minimum Operating  $\Delta P$  3 psi (.2 bar)
- Lifetime Warranty against Wiredrawing of Seat & Disc \*

### APPLICATION DATA

- Pressure Regulating for Steam Distribution
- Regulating for Process Control (Temperature or Pressure)
- Maintain Back Pressure or Differential Pressure
- For use with Self-contained, Pneumatic or Electronic Pilots
- Single Point or Multiple Use Applications
- Slow Start-up or Shutdown

### VALVE RATINGS

Valve Ends ASME/ANSI	Pressure PSIG (bar)	Temperature °F (°C)
<b>CAST IRON</b>		
B16.4 Class 250 NPT	15 (1.03)	250°F (121°C)
B16.1 Class 125 Flanged	15 (1.03)	250°F (121°C)

Canadian Registration # OC 0591.9C

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

SIZING INFO  
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### OPTIONS *See page 42*

- Composition Disc for liquid, air or gas service
- Insulcap Insulating Jacket
- Integral Mount Pilot
- EZ Connections

### TYPICAL CONFIGURATIONS

- PRESSURE REDUCING .....TYPE E2D
- AIR ADJUSTED .....TYPE E2A SERIES
- BACK PRESSURE .....TYPE E2Q
- LOAD ALLOCATING .....TYPE E2FD
- AIR CONTROLLED .....TYPE E2AP60
- ELECTRONIC SLOW START .....TYPE E2D208D
- SOLENOID CONTROLLED .....TYPE E2MD
- SOLENOID ACTUATED .....TYPE E2M
- DIFFERENTIAL .....TYPE E2N
- TEMPERATURE CONTROL .....TYPE E2T14
- TEMP. & PRESSURE CONTROL .....TYPE E2T134

### RATED FLOW COEFFICIENTS (Cv)

SEAT FACTOR	REGULATOR SIZE												
	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12
Full	7.6	11.7	18.9	27.4	44	68	96	143	202	255	465	748	1118
70%-75%	—	8.8	13.2	19.2	30.8	47.6	67.2	100	141	178	—	—	—
45%	—	—	—	12.3	—	30.6	—	64.4	—	11.4	—	336	—

\* When installed according to factory specifications.

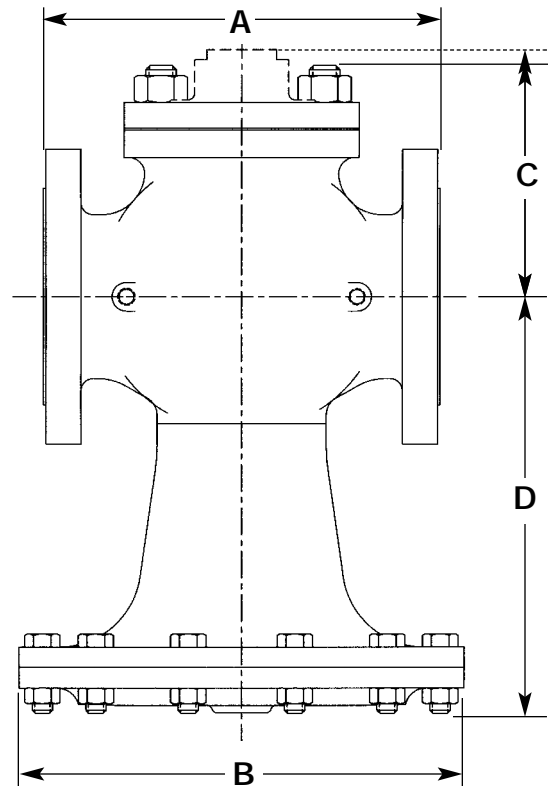
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## SPECIFICATION

The valve shall be self-operated, external pilot type, single seated, hycar 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. 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 Iron .....ASTM A126 Cl. B  
 Body, Cast Bronze .....ASTM B61-80 61UNSC 92200  
 Stem .....303 St. Stl. ASTM A582  
 Disc 3/4 - 2" .....420 St. Stl ASTM A743 CA-40  
 Disc 2-1/2 - 12" .....304 St. Stl. ASTM A167/A240  
 Seat .....420 St. Stl. ASTM A743 CA-40  
 Gasket .....Non-asbestos  
 Diaphragm .....Hycar  
 Spring .....Steel



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FITTINGS ON  
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TYPE E2  
MAIN VALVE

**DIMENSIONS** inches (mm), **WEIGHTS** pounds (kg)

SIZE	A		OTHER DIMENSIONS				APPROX. WT.	
	CI, BRZ ANSI NPT	CI ANSI 125	B	C		D*	CI, BRZ ANSI NPT	CI ANSI 125
				Std. Mount	Integral Mount			
3/4 (19)	4 3/4 (121)	—	8 (203)	2 7/8 (73)	3 5/8 (92)	7 3/4 (197)	18 (8)	—
1 (25)	5 3/8 (137)	5 1/2 (140)	8 (203)	3 3/8 (92)	4 3/8 (111)	8 1/8 (206)	19 (9)	21 (10)
1 1/4 (32)	6 1/2 (165)	6 3/4 (171)	9 (229)	4 1/8 (105)	4 (101)	8 1/4 (210)	30 (14)	33 (15)
1 1/2 (38)	7 1/4 (184)	6 7/8 (175)	9 3/4 (248)	4 3/8 (111)	4 1/2 (118)	8 3/4 (222)	36 (16)	40 (18)
2 (51)	7 1/2 (191)	8 1/2 (216)	10 1/2 (267)	5 1/4 (133)	5 (127)	10 (254)	50 (23)	57 (26)
2 1/2 (64)	—	9 3/8 (238)	10 1/2 (267)	5 3/4 (146)	5 3/8 (136)	11 1/2 (292)	—	70 (32)
3 (76)	—	10 (254)	11 1/4 (286)	6 5/8 (168)	6 3/8 (162)	12 3/4 (324)	—	98 (45)
4 (102)	—	11 7/8 (302)	13 1/2 (343)	6 3/4 (171)	6 5/8 (168)	13 5/8 (346)	—	135 (61)
5 (127)	—	13 5/8 (346)	14 1/4 (362)	7 1/2 (191)	7 3/8 (187)	15 (381)	—	185 (84)
6 (152)	—	15 1/8 (384)	16 (406)	7 7/8 (200)	7 (178)	16 5/8 (422)	—	250 (114)
8 (203)	—	19 (483)	20 (508)	9 1/2 (241)	9 1/4 (235)	19 7/8 (505)	—	1210 (550)
10 (254)	—	23 5/8 (600)	24 (610)	10 7/8 (276)	—	23 7/8 (606)	—	690 (314)
12 (305)	—	26 1/2 (673)	28 (711)	12 3/4 (324)	—	27 1/8 (689)	—	1060 (482)

\*Add 55% to D dimension for stem removal clearance.