



TYPE C34 MAIN VALVE

APPLICATION DATA

- Pressure Regulating for Liquid 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) |
|-------------------------|------------------------|------------------------|
|-------------------------|------------------------|------------------------|

CAST IRON

| | | |
|-------------------------|--------------|----------|
| B16.4 Class 250 NPT | 250 (13.8) @ | 200 (93) |
| B16.1 Class 125 Flanged | 125 (11.4) @ | 200 (93) |
| B16.1 Class 250 Flanged | 250 (13.8) @ | 200 (93) |

Canadian Registration # OC 0591.9C

Installation Tip: Add EZ Connections for ease of maintenance
SEE PAGE 40

SIZING INFO
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TYPE C34 MAIN VALVE

BALANCED SINGLE SEAT LIQUID SERVICE

SIZES 1" – 6"
PRESSURES to 250 PSIG at 200°F

- Normally Closed
- Single Seat
- Nitrile Diaphragm
- Balanced Composition Disc
- Protected Main Spring
- Balanced Piston Design without Dashpot
- Fluid Applications
- Accurate Regulation for Non-violent Load Fluctuations
- ANSI/FCI 70-2 Class VI Shutoff
- Virtually Frictionless for Long Service Life
- Packless Construction
- Wide Variety of Pilots for Many Applications

OPTIONS

- EZ Connections

TYPICAL CONFIGURATIONS

- PRESSURE REDUCINGTYPE C34D
- AIR ADJUSTEDTYPE C34A
- BACK PRESSURETYPE C34Q
- PUMP GOVERNORTYPE C34P
- LOAD ALLOCATINGTYPE C34FD
- AIR CONTROLLEDTYPE C34AP60
- ELECTRONIC SLOW STARTTYPE C34D208D
- SOLENOID CONTROLLEDTYPE C34MD
- SOLENOID ACTUATEDTYPE C34M
- DIFFERENTIALTYPE C34N
- COOLING CONTROLTYPE C34T

RATED FLOW COEFFICIENTS (Cv)

| REGULATOR SIZE | | | | | | | | |
|----------------|------|------|----|----|----|----|-----|-----|
| 1 | 1¼ | 1½ | 2 | 2½ | 3 | 4 | 5 | 6 |
| 5.5 | 12.5 | 17.3 | 24 | 36 | 53 | 86 | 139 | 196 |

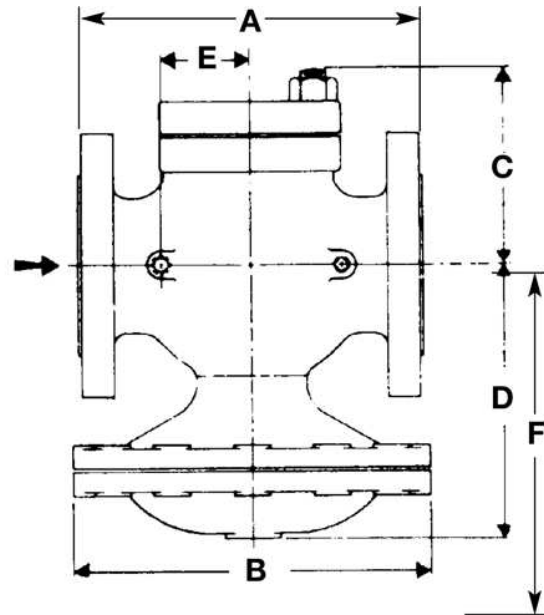
TYPE C34 MAIN VALVE

SPECIFICATION

The valve shall be self-operated, external pilot type, single seated, diaphragm actuated, normally closed design. The valve will shut tight on dead end service and shall maintain a discharge pressure which will not vary more than 10% (2 psi minimum) of set point from zero flow to rated flow regardless of inlet pressure variation. Valve shall be suitable for 200°F (93°C) service temperature. Bodies shall be cast iron. Sizes 2-1/2" and larger shall have flanged ends. Trim shall be stainless steel. Valves shall be equipped with a reversible composition disc. Diaphragms and discs shall be nitrile. There shall be no springs in the fluid space and no stuffing box.

MATERIALS OF CONSTRUCTION

Body, Cast IronASTM A126 Cl. B
 Stem303 St. St. ASTM A582
 DiscNitrile Comp
 Seat 1 - 2"303 St. St. ASTM A582
 Seat 2 1/2 - 6"304 St. St. ASTM A276 Cond A
 GasketNon-asbestos
 DiaphragmNitrile
 SpringSteel



TYPE C34 MAIN VALVE

FITTINGS ON PAGE 44

TYPE C34
MAIN VALVE

DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

| SIZE | FACE TO FACE | | | OTHER DIMENSIONS | | | | | | APPROX. WT. | | |
|---------------|----------------|-----------------|-----------------|------------------|----------------|-----------------|-----------------|-----------------|-----------------|-------------|--------------|--------------|
| | A | | | B | C | D | E | F | G | ANSI NPT | ANSI 125 | ANSI 250 |
| | ANSI NPT | ANSI 125 | ANSI 250 | | | | | | | | | |
| 1 (25) | 5 3/8 (137) | — | — | 6 7/8 (175) | 3 3/8 (86) | 7 (178) | 1 3/8 (35) | 6 (152) | 10 3/8 (264) | 19 (9) | — | — |
| 1 1/4 (32) | 6 1/2 (165) | — | — | 6 7/8 (175) | 3 7/8 (98) | 7 (178) | 1 13/16 (46) | 6 5/8 (168) | 11 1/4 (286) | 24 (11) | — | — |
| 1 1/2 (38) | 7 1/4 (184) | — | — | 6 7/8 (175) | 4 1/4 (108) | 7 (178) | 1 15/16 (49) | 6 3/8 (162) | 11 7/8 (302) | 29 (13) | — | — |
| 2 (51) | 7 1/2 (191) | 8 1/2 (216) | 9 (229) | 9 1/8 (232) | 4 1/2 (114) | 7 (178) | 2 1/16 (52) | 6 1/2 (165) | 12 1/2 (318) | 46 (21) | 51 (13) | 60 (27) |
| 2 1/2 (64) | — | 9 3/8 (238) | 10 (254) | 9 1/8 (232) | 5 1/2 (140) | 7 3/8 (187) | 2 3/8 (60) | 6 7/8 (175) | 14 1/2 (368) | — | 65 (30) | 74 (34) |
| 3 (76) | — | 10 (254) | 10 3/4 (273) | 11 1/8 (283) | 6 (152) | 8 3/4 (222) | 2 3/4 (70) | 7 1/4 (184) | 15 7/8 (403) | — | 94 (43) | 111 (50) |
| 4 (102) | — | 11 7/8 (302) | 12 1/2 (318) | 13 1/2 (343) | 6 5/8 (168) | 9 3/8 (238) | 3 (76) | 7 3/4 (197) | 17 3/4 (451) | — | 148 (67) | 172 (78) |
| 5 (127) | — | 13 5/8 (346) | 14 1/2 (368) | 13 1/2 (343) | 7 5/8 (194) | 10 7/8 (276) | 3 1/2 (89) | 8 5/8 (219) | 20 1/4 (514) | — | 194 (88) | 226 (103) |
| 6 (152) | — | 15 1/8 (384) | 16 (406) | 13 1/2 (343) | 9 1/8 (232) | 13 1/8 (333) | 4 1/4 (108) | 10 5/8 (270) | 25 1/8 (638) | — | 280 (127) | 325 (148) |