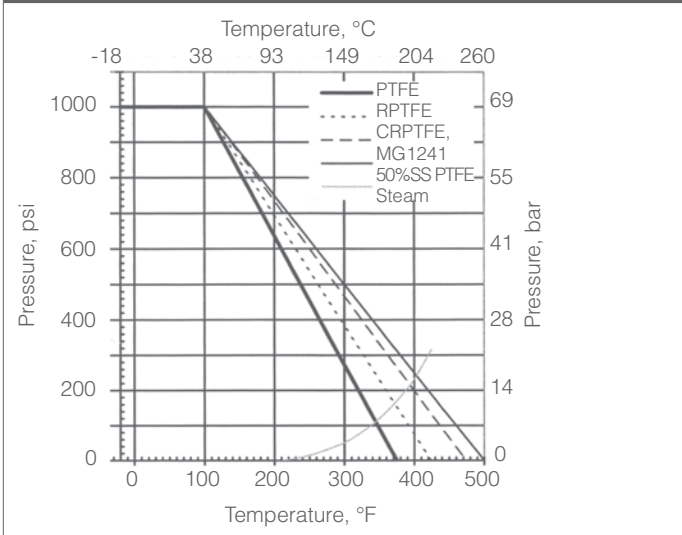




Features

- Investment cast body construction
- ISO 5211 actuator mounting pad
- Blow-out proof stem
- Reinforced PTFE seats
- Adjustable, live loaded PTFE stem packing
- API 598 inspection and testing
- Locking lever operator

Pressure-Temperature Ratings



Technical Specifications

| Valve Size Inches | Operating Torque, in-lb 250 - 1000 psi | Flow Coefficient, Cv |
|----------------------|---|-------------------------|
| 1/2" | 45 | 17 |
| 3/4" | 70 | 34 |
| 1" | 130 | 57 |
| 1-1/4" | 190 | 80 |
| 1-1/2" | 250 | 143 |
| 2" | 400 | 245 |

8700F-XXX-CS Series Full Port Valve

8700F-XXX-S6 Series Full Port Valve

| Quick Spec | |
|-------------------------|---|
| Product Scope | |
| Size Range | 1/2" – 2", Full Port |
| Body Type | 3-pc, non swing-out w/FNPT ends (weld optional) |
| Pressure Rating | 1000 psi WOG (69 bar) |
| Temperature Range / WSP | -20°F thru 450°F / 150 psi Steam -29°C thru 232°C / 10,3 bar Steam |
| Body | Stainless or Carbon Steel Body |
| Ball & Stem | Stainless Steel, Anti-Static Design |
| Ball Seats | RPTFE |
| Stem Packing & Seals | Adjustable, Live Loaded PTFE, w/Viton o-ring Stem & PTFE body |
| Operator/Mounting Pad | Manual Locking Lever / ISO 5211 |
| Design Standards | |
| Design | ASME B16.34, Class 600 |
| Thread Design | ASME B1.20.1 |
| Testing Standards | |
| Pressure Testing | API 598 |
| Approvals | |
| CRN0C5539.5 | |

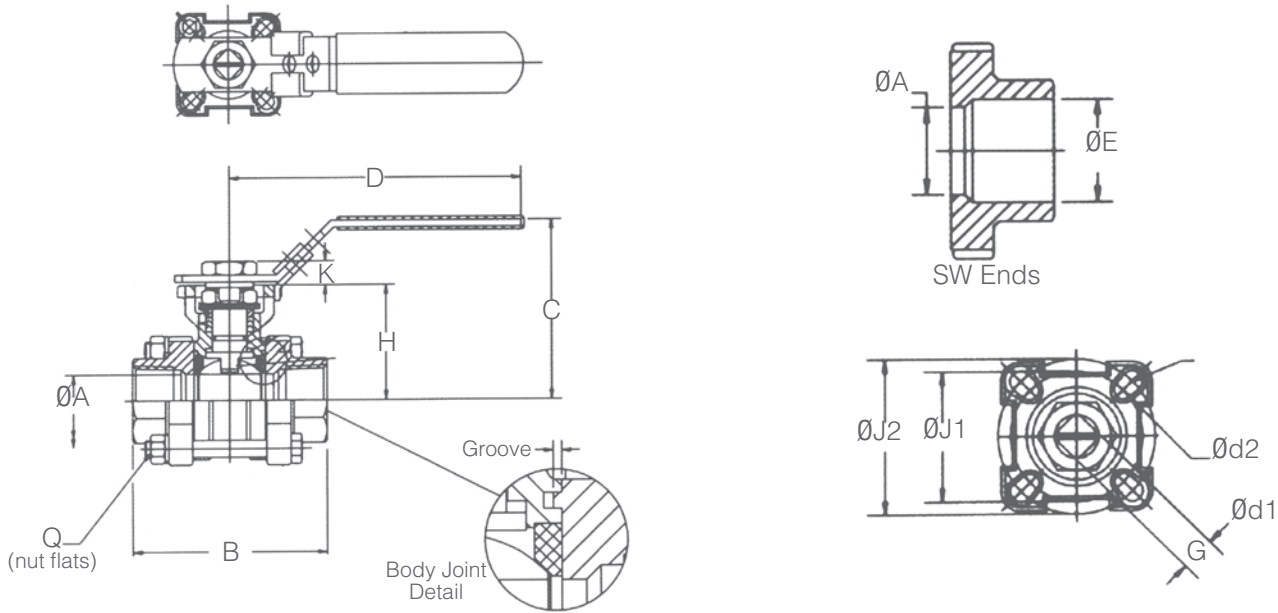
Standard Materials of Construction

| Part | Carbon Steel | Stainless Steel |
|--------------------------|---------------|-----------------|
| Body | WCB | CF8M |
| End Cap | | |
| Seat | PTFE + 15% GF | |
| Ball | CF8M/316 | |
| Stem | AISI 316 | |
| Seal, Body | PTFE | |
| Thrust Washer | PTFE + 15% GF | |
| Packing | PTFE | |
| Belleville Spring Washer | AISI 301 | |
| Galnd Ring | AISI 304 | |
| Handle, Locking | | |
| Nut, Stem | | |
| Stop Screw | | |
| Cover, Handle | Vinyl | |
| Bolt, Body | A2-70 | |
| Lockwasher, Body | AISI 304 | |
| Nut, Body | | |
| Locking Tab | | |
| O-Ring, Stem | Viton | |
| Antistatic Ball | AISI 316 | |
| Antistatic Spring | | |
| Name Plate | SS | |

Technical Specifications, metric

| Valve Size NPS | Operating Torque, N.m 17,2 - 68,9 bar | Flow Coefficient, Kv |
|-------------------|--|-------------------------|
| DN15 | 5,1 | 14,6 |
| DN20 | 7,9 | 29,2 |
| DN25 | 14,7 | 49,0 |
| DN32 | 21,5 | 68,8 |
| DN40 | 28 | 123 |
| DN50 | 45 | 211 |

Operating torques in table are for RPTFE seats. For PTFE seats, multiply by 0.87; for CRPTFE (15% Glass PTFE), MG1241 (5% Graphite, 20% Glass PTFE), and 50% SS PTFE, multiply by 1.09. Include an appropriate service factor for sizing actuators



| Dimensions, Inches | | | | | | | | | | | | | | | |
|--------------------|------|------|-----|-----|------|-------|------|----------|------|-------------|----------|------|-------------|------|-------------|
| Valve Size | ØA | B | C | D | ØE | G Sq. | H | ØJ1 (BC) | Ød1 | ISO Pattern | ØJ2 (BC) | Ød2 | ISO Pattern | K | Weight, lbs |
| 1/2" | 0.63 | 2.95 | 2.8 | 4.4 | 0.86 | 0.354 | 1.67 | 1.42 | 0.24 | F03 | 1.65 | 0.24 | F04 | 0.32 | 1.4 |
| 3/4" | 0.79 | 3.15 | 2.9 | 4.4 | 1.07 | 0.354 | 1.78 | 1.42 | 0.24 | F03 | 1.65 | 0.24 | F04 | 0.32 | 2.0 |
| 1" | 0.96 | 3.54 | 3.3 | 5.3 | 1.34 | 0.433 | 2.13 | 1.65 | 0.24 | F04 | 1.97 | 0.28 | F05 | 0.40 | 3.0 |
| 1-1/4" | 1.26 | 4.33 | 3.5 | 5.3 | 1.68 | 0.433 | 2.33 | 1.65 | 0.24 | F04 | 1.97 | 0.28 | F05 | 0.40 | 4.6 |
| 1-1/2" | 1.50 | 4.72 | 4.3 | 6.5 | 1.92 | 0.551 | 2.89 | 1.97 | 0.28 | F05 | 2.76 | 0.35 | F07 | 0.58 | 6.6 |
| 2" | 1.97 | 5.51 | 4.7 | 6.5 | 2.41 | 0.551 | 3.26 | 1.97 | 0.28 | F05 | 2.76 | 0.35 | F07 | 0.58 | 10.0 |

| Dimensions, mm | | | | | | | | | | | | | | | |
|----------------|------|------|-----|-----|------|-------|------|----------|-----|-------------|----------|-----|-------------|------|-------------|
| Valve Size | ØA | B | C | D | ØE | G Sq. | H | ØJ1 (BC) | Ød1 | ISO Pattern | ØJ2 (BC) | Ød2 | ISO Pattern | K | Weight, kgs |
| DN15 | 16,0 | 74,9 | 71 | 110 | 21,8 | 9 | 42,4 | 36,1 | 6,0 | F03 | 41,9 | 6,0 | F04 | 8,0 | 0,6 |
| DN20 | 20,1 | 80,0 | 74 | 110 | 27,2 | 9 | 44,7 | 36,1 | 6,0 | F03 | 41,9 | 6,0 | F04 | 8,0 | 0,9 |
| DN25 | 24,4 | 89,9 | 84 | 135 | 34,0 | 11 | 54,1 | 41,9 | 6,0 | F04 | 50,0 | 7,0 | F05 | 10,0 | 1,4 |
| DN32 | 32,0 | 110 | 90 | 135 | 42,7 | 11 | 59,2 | 41,9 | 6,0 | F04 | 50,0 | 7,0 | F05 | 10,0 | 2,1 |
| DN40 | 38,1 | 120 | 110 | 165 | 48,8 | 14 | 73,4 | 50,0 | 7,0 | F05 | 70,1 | 9,0 | F07 | 14,8 | 3,0 |
| DN50 | 50,0 | 140 | 119 | 135 | 61,2 | 14 | 82,8 | 50,0 | 7,0 | F05 | 70,1 | 9,0 | F07 | 14,8 | 4,6 |

| Model | Size | Body Mat'l | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------|------|------------|---|---|---|---|---|---|---|---|---|----|----|----|
| | | | | | | | | | | | | | | |

| Model Number | |
|--------------|--------------------|
| 8700F | 3 Piece Ball Valve |

| Size | |
|------|--------|
| 05A | 1/2" |
| 07A | 3/4" |
| 10A | 1" |
| 12A | 1-1/4" |
| 15A | 1-1/2" |
| 20A | 2" |

| | Body Material |
|----|-----------------|
| CS | Carbon Steel |
| S6 | Stainless Steel |

| 1 | Packing/Seat |
|---|-----------------------|
| B | PTFE/RPTFE (STANDARD) |
| A | PTFE/PTFE |
| C | PTFE/CRPTFE |
| D | PTFE/UHMWPE |
| E | Grafoil/PTFE |
| F | Grafoil/RPTFE |
| G | Grafoil/CRPTFE |
| H | Grafoil/UHMWPE |
| J | UHMWPE/UHMWPE |

| 2 | Ends |
|---|------|
| A | FNPT |
| B | FSW |

| 3&4 | Operation |
|-----|--------------------|
| HL | Lever |
| NN | None |
| P1 | UT-0A-DA STD |
| P2 | UT-0-DA STD |
| P3 | UT-1-DA STD |
| P4 | UT-2-DA STD |
| P5 | UT-2.5-DA STD |
| S1 | UT-0-SR STD |
| S2 | UT-1-SR STD |
| S3 | UT-2-SR STD |
| S4 | UT-2.5-SR STD |
| S5 | UT-3-SR STD |
| S6 | UT-3.5-SR STD |
| M1 | ER-1-2.5-4 110 VAC |
| M2 | ER-2-5-4 110 VAC |
| M3 | ER-3-5-4 110 VAC |
| M8 | ER-4-10-4 110 VAC |
| M4 | ER-6-15-4 110 VAC |

| 5&6 | Actuator Pressure |
|-----|-----------------------------|
| 60 | 60 psi |
| 80 | 80 psi |
| NN | N/A (no pneumatic actuator) |
| ZZ | Non-Standard |

| 7&8 | Solenoid Feature | Act. Type |
|-----|---------------------------------|-----------|
| 00 | None | |
| 3A | 3W 8551-120VAC N4 UT-0/5 | SR |
| 3C | 3W EF8551-120VAC N7 UT-0/5 | SR |
| 3J | 3W 8317G35-120VAC N4 UT-0/2.5 | SR |
| 3M | 3W 8321G1-120VAC N4 UT-3/5 | SR |
| 3Q | 3W EF8317G35-120VAC N7 UT-0/2.5 | SR |
| 3R | 3W EF8321G1-120VAC N7 UT-3/5 | SR |
| 4A | 4W 8551-120VAC N4 UT-0A | DA |
| 4B | 4W 8551-120VAC N4 UT-0/5 | DA |
| 4D | 4W EF8551-120VAC N7 UT-0A | DA |
| 4E | 4W EF8551-120VAC N7 UT0/5 | DA |
| ZZ | Non-Standard | |

| 9&10 | Limit Switch |
|------|-----------------------------|
| 00 | None |
| AA | LS FMYB-5120-N4 to UT-0/3 |
| AB | LS FMYB-5120-N4 to UT-3.5/7 |
| AC | LS AMYB-5120-N7 to UT-0/3 |
| AD | LS AMYB-5120-N7 to UT-3.5/7 |
| ZZ | Non-Standard |

| 11&12 | Fail Position |
|-------|--------------------------------------|
| NN | Fail Position N/A (No "SR" Actuator) |
| 01 | Fail Closed |
| 02 | Fail Open |

Marwin Valve

A Division of Richards Industries, 3170 Wasson Road, Cincinnati, OH 45209
 toll free. 800.543.7311, local. 513.533.5600, fax. 513.871.0105
www.marwinvalve.com