

## Order code information

F-□□□-□□-□-□□-□□-□□-□□-**N**

| Body Rating  | Shell Material                                   | Valve Design   | Trim Material For WCB/LCC  | Fire-Safe (Optional) API 607 | Other   |
|--|--|--|--|------------------------------|---|
| <b>150</b> Class 150<br><b>300</b> Class 300<br><b>600</b> Class 600 | <b>CS</b> WCB<br><b>LC</b> LCC<br><b>SS</b> CF8M | <b>R</b> Reduced bore, Uni-body (Class 150 & 300)<br><b>R</b> Reduced bore, two piece body (Class 600)<br><b>F</b> Full bore, two piece body | <b>SS</b> 316 Stainless Steel<br>(This suffix is not required if SS-CF8M shell material is selected) | <b>FS</b> Fire-Safe          | <b>N</b> Nace (MR-01-75-2002 & MR-01-03 compliance is standard on all models) |

The order code system lets you specify your pressure class, material, design (reduced or full port), trim materials and whether or not you require Fire-Safe materials to API 607 4th edition.

So for instance, a 150 pressure class in carbon steel with reduced port and stainless trims with fire-safe seals would be indicated as:

**F-150-CS-R-SS-FS-N**

Refer to the chart above for feature designations.

Please contact us for more information on:

- Special Trims
- Manual Operators
- Pneumatic Operators
- Electric Operators
- Control Packages

# F Series Flanged Carbon Steel Ball Valves

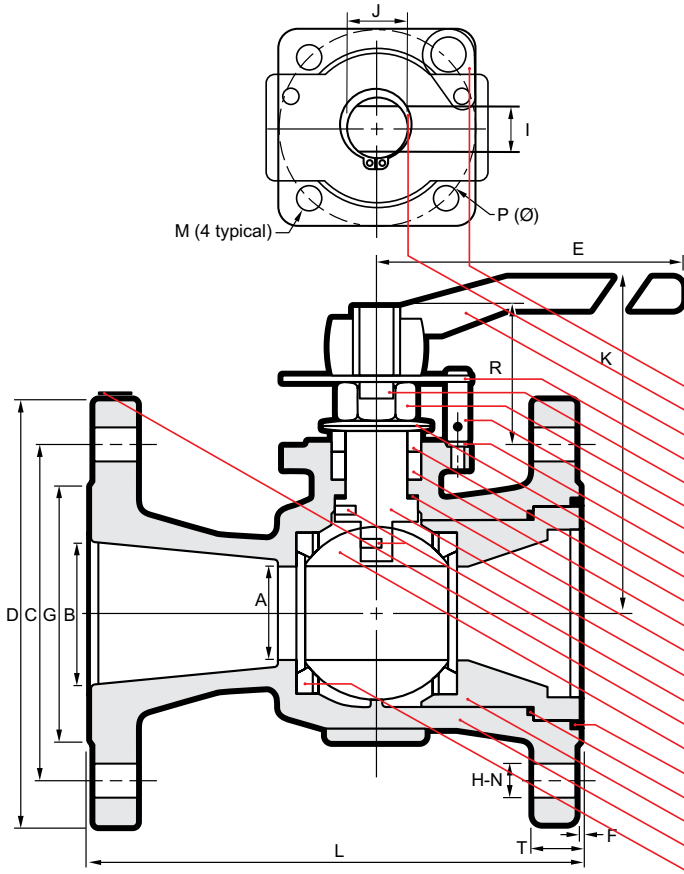
## F-150-CS-R-SS-N

Reduced port, One piece body  
ANSI B16.34 Class 150  
Blowout-proof stem  
ISO 5211 Mounting pad  
Floating Ball, Anti-static device  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



**Model F-150-LC-R-SS-N (LCC body) is available**

3.2



| NAME / MATERIAL  |    |                        |
|--|----|------------------------|
| Model Code; CS   | LC | *FS                    |
| 1. Lock Plate / Stainless Steel A276 Type 304            |    |                        |
| 2. Retaining Ring / Carbon Steel                         |    |                        |
| 3. Handle / Ductile Iron                                 |    |                        |
| 4. Stopper Plate / Stainless Steel A276 Type 304         |    |                        |
| 5. Lock Washer / Stainless Steel A276 Type 304           |    |                        |
| 6. Gland Nut / Carbon Steel                              |    |                        |
| 7. Stopper Pin / Stainless Steel A276 Type 304           |    |                        |
| 8. Lock Washer / Stainless Steel A276 Type 304           |    |                        |
| 9. Belleville Washer / Stainless Steel 301               |    |                        |
| 10. Gland / Stainless Steel A276 Type 304                |    |                        |
| 11. Packing / PTFE                                       |    | (Graphite)             |
| 12. Thrust Washer / R-PTFE 15% Glass-Filled              |    |                        |
| 13. Stem / Stainless Steel A276 Type 316                 |    |                        |
| 14. Anti-Static Device / Stainless Steel A276 Type 304   |    |                        |
| 15. Identification Plate / Stainless Steel A276 Type 304 |    |                        |
| 16. Ball / Stainless Steel A351 - CF8M (316)             |    |                        |
| 17. N/A  |    | (Body Seal / Graphite) |
| 18. Body Seal / PTFE                                     |    |                        |
| 19. Body Insert / Cast Steel A216-WCB                    |    | (A352 LCC)             |
| 20. Body / Cast Steel A216-WCB                           |    | (A352 LCC)             |
| 21. Seat / PTFE (TFM-1600)                               |    |                        |

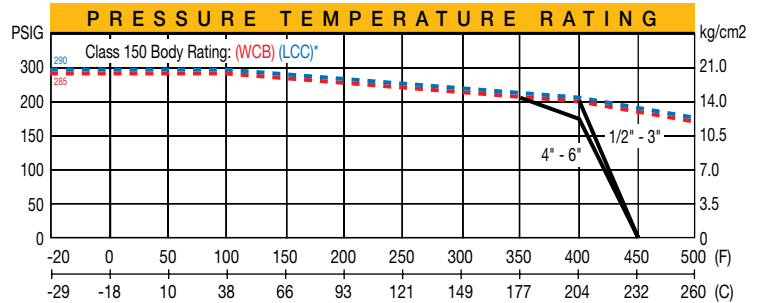
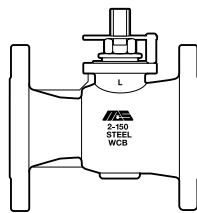
\*Fire Safe Certified to API-607

|        |  |       |     |      |     |        |
|--------|--|-------|-----|------|-----|--------|
| FIG.   | F-150-CS-R-SS-FS-N                     | CLASS | 150 | SIZE | 2   | B16.34 |
| SEAT   | PTFE                                   | BODY  | WCB | TRIM | 316 | NACE   |
| RATING | 285 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |

CS - IDENTIFICATION PLATE

|        |  |       |     |      |     |        |
|--------|--|-------|-----|------|-----|--------|
| FIG.   | F-150-LC-R-SS-N                        | CLASS | 150 | SIZE | 2   | B16.34 |
| SEAT   | PTFE                                   | BODY  | LCC | TRIM | 316 | NACE   |
| RATING | 290 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |

LC - IDENTIFICATION PLATE



\*LCC body rated to -50F/-46C

| size | D    |      | I     |       | M     |      | E    |      | N    |      | S    |       | I                                  |   | O    |      | N    |                      | S |        | Weight (kg/lb) |
|------|------|------|-------|-------|-------|------|------|------|------|------|------|-------|------------------------------------|---|------|------|------|----------------------|---|--------|----------------|
|      | A    | B    | C     | D     | E     | F    | G    | H    | I    | J    | K    | L     | M                                  | N | P    | T    | R    | ISO 5211 flange type |   |        |                |
| 2"   | 38   | 50   | 120.5 | 152   | 230   | 1.6  | 92   | 19   | 14   | 20   | 125  | 178   | <sup>5</sup> / <sub>16</sub> " UNC | 4 | 70   | 15.9 | 49   | F07                  |   | 8.00   |                |
|      | 1.50 | 1.97 | 4.75  | 5.98  | 9.06  | 0.06 | 3.62 | 0.75 | 0.55 | 0.79 | 4.92 | 7.00  |                                    |   | 2.76 | 0.63 | 1.93 |                      |   | 17.60  |                |
| 3"   | 58   | 76   | 152.5 | 190   | 400   | 1.6  | 127  | 19   | 17   | 25   | 168  | 203   | <sup>3</sup> / <sub>8</sub> " UNC  | 4 | 70   | 19.1 | 59   | F07                  |   | 15.70  |                |
|      | 2.28 | 3.00 | 6.00  | 7.48  | 15.75 | 0.06 | 5.00 | 0.75 | 0.67 | 0.98 | 6.61 | 8.00  |                                    |   | 2.76 | 0.75 | 2.32 |                      |   | 34.54  |                |
| 4"   | 76   | 102  | 190.5 | 229   | 400   | 1.6  | 157  | 19   | 17   | 25   | 183  | 229   | <sup>3</sup> / <sub>8</sub> " UNC  | 8 | 70   | 23.9 | 59   | F07                  |   | 24.60  |                |
|      | 3.00 | 4.02 | 7.50  | 9.02  | 15.75 | 0.06 | 6.18 | 0.75 | 0.67 | 0.98 | 7.20 | 9.02  |                                    |   | 2.76 | 0.94 | 2.32 |                      |   | 54.12  |                |
| 6"   | 114  | 152  | 241.5 | 279   | 750   | 1.6  | 216  | 22   | 23   | 34   | 245  | 267   | <sup>1</sup> / <sub>2</sub> " UNC  | 8 | 125  | 25.4 | 73   | F12                  |   | 49.50  |                |
|      | 4.49 | 5.98 | 9.50  | 10.98 | 29.53 | 0.06 | 8.50 | 0.88 | 0.91 | 1.34 | 9.65 | 10.51 |                                    |   | 4.92 | 1.00 | 2.87 |                      |   | 108.90 |                |

# F Series Flanged Carbon Steel Ball Valves

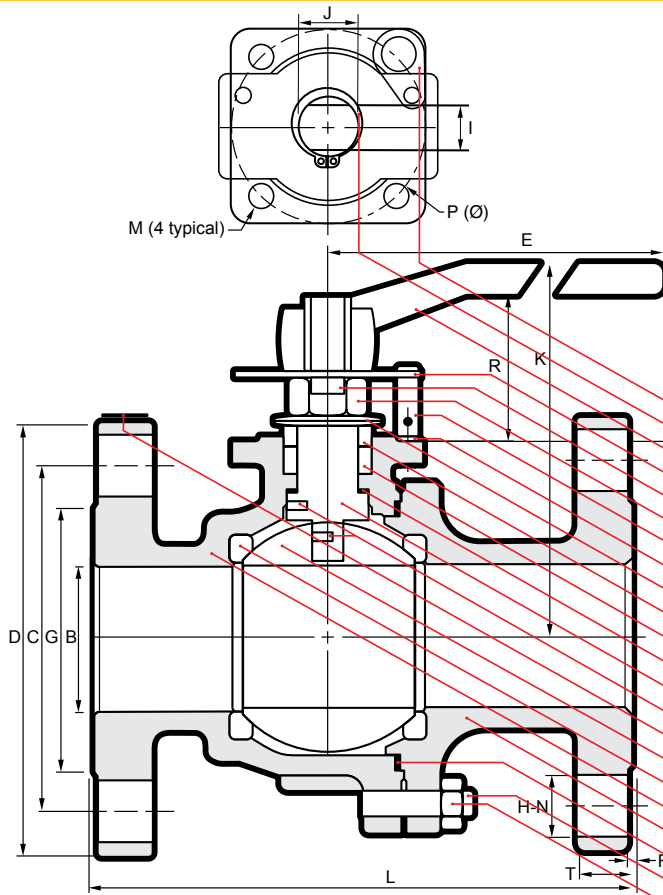
## F-150-CS-F-SS-N

Full port, Two piece body  
ANSI B16.34 Class 150  
Blowout-proof stem  
ISO 5211 Mounting pad  
Floating Ball, Anti-static device  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



3.3

**Model F-150-LC-F-SS-N (LCC body) is available**



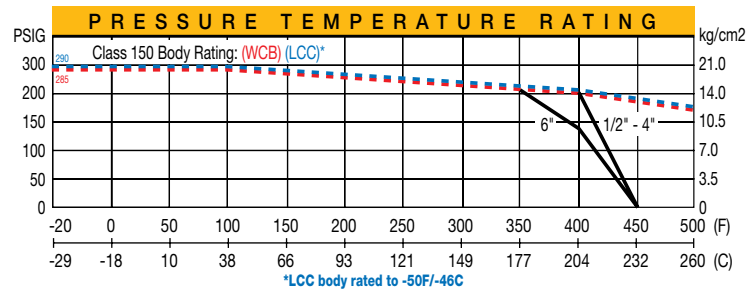
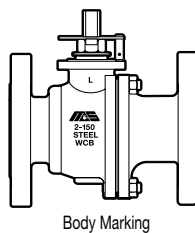
### NAME / MATERIAL

| Model Code:                | CS                            | LC                      | *FS        |
|----------------------------|-------------------------------|-------------------------|------------|
| 1. Lock Plate /            | Stainless Steel A276 Type 304 |                         |            |
| 2. Retaining Ring /        | Carbon Steel                  |                         |            |
| 3. Handle /                | Ductile Iron                  |                         |            |
| 4. Stopper Plate /         | Stainless Steel A276 Type 304 |                         |            |
| 5. Lock Washer /           | Stainless Steel A276 Type 304 |                         |            |
| 6. Gland Nut /             | Carbon Steel                  |                         |            |
| 7. Stopper Pin /           | Stainless Steel A276 Type 304 |                         |            |
| 8. Lock Washer /           | Stainless Steel A276 Type 304 |                         |            |
| 9. Belleville Washer /     | Stainless Steel 301           |                         |            |
| 10. Gland /                | Stainless Steel A276 Type 304 |                         |            |
| 11. Packing /              | PTFE                          |                         | (Graphite) |
| 12. Thrust Washer /        | R-PTFE 15% Glass-Filled       |                         |            |
| 13. Stem /                 | Stainless Steel A276 Type 316 |                         |            |
| 14. Anti-Static Device /   | Stainless Steel A276 Type 304 |                         |            |
| 15. Identification Plate / | Stainless Steel A276 Type 304 |                         |            |
| 16. Ball /                 | Stainless Steel A351 - CF8M   |                         |            |
| 17. Seat /                 | PTFE (TFM-1600)               |                         |            |
| 18. Body /                 | Cast Steel A216-WCB           | (LC: A352 LCC)          |            |
| 19. Cap /                  | Cast Steel A216-WCB           | (LC: A352 LCC)          |            |
| 20. Body Seal /            | PTFE                          |                         | (Graphite) |
| 21. Bolt Nut /             | A194 Grade 2HM                | (LC: A194 7M)           |            |
| 22. Stud Bolt /            | A193 Grade B7M                | (LC FS: A320 Grade L7M) |            |

\*Fire Safe Certified to API-607

|                           |  |       |     |      |     |        |
|---------------------------|--|-------|-----|------|-----|--------|
| FIG.                      | F-150-CS-F-SS-N                        | CLASS | 150 | SIZE | 2   | B16.34 |
| SEAT                      | PTFE-S                                 | BODY  | WCB | TRIM | 316 | NACE   |
| RATING                    | 285 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |
| CS - IDENTIFICATION PLATE |  |       |     |      |     |        |

|                           |  |       |     |      |     |        |
|---------------------------|--|-------|-----|------|-----|--------|
| FIG.                      | F-150-LC-F-SS-N                        | CLASS | 150 | SIZE | 2   | B16.34 |
| SEAT                      | PTFE-S                                 | BODY  | LCC | TRIM | 316 | NACE   |
| RATING                    | 290 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |
| LC - IDENTIFICATION PLATE |  |       |     |      |     |        |



| size (mm/in) | D    | B     | C     | I     | D    | E     | M    | F    | G    | H     | I     | J         | K | L    | S    | I    | O   | N      | S | ISO 5211 flange | kg/lb |
|--------------|------|-------|-------|-------|------|-------|------|------|------|-------|-------|-----------|---|------|------|------|-----|--------|---|-----------------|-------|
| 1/2          | 15   | 60.5  | 89    | 130   | 1.6  | 35    | 16   | 8    | 11   | 83    | 108   | 1/4" UNC  | 4 | 36   | 11.2 | 27   | F03 | 1.64   |   |                 |       |
|              | 0.59 | 2.38  | 3.50  | 5.12  | 0.06 | 1.38  | 0.62 | 0.31 | 0.43 | 3.27  | 4.25  |           |   | 1.42 | 0.44 | 1.06 |     | 3.60   |   |                 |       |
| 3/4          | 19   | 70.0  | 98.5  | 130   | 1.6  | 43    | 16   | 8    | 11   | 86    | 117   | 1/4" UNC  | 4 | 36   | 11.2 | 27   | F03 | 2.00   |   |                 |       |
|              | 0.75 | 2.75  | 3.88  | 5.12  | 0.06 | 1.69  | 0.62 | 0.31 | 0.43 | 3.39  | 4.62  |           |   | 1.42 | 0.44 | 1.06 |     | 4.40   |   |                 |       |
| 1"           | 24   | 79.0  | 108   | 160   | 1.6  | 51    | 16   | 10   | 14   | 104   | 127   | 1/4" UNC  | 4 | 50   | 11.2 | 35.5 | F05 | 3.15   |   |                 |       |
|              | 0.95 | 3.12  | 4.25  | 6.30  | 0.06 | 2.00  | 0.62 | 0.39 | 0.55 | 4.09  | 5.00  |           |   | 1.97 | 0.44 | 1.40 |     | 6.93   |   |                 |       |
| 1 1/2        | 38   | 98.5  | 127   | 230   | 1.6  | 73    | 16   | 14   | 20   | 125   | 165   | 5/16" UNC | 4 | 70   | 14.3 | 49   | F07 | 6.26   |   |                 |       |
|              | 1.50 | 3.88  | 5.00  | 9.06  | 0.06 | 2.88  | 0.62 | 0.55 | 0.79 | 4.92  | 6.50  |           |   | 2.76 | 0.56 | 1.93 |     | 13.77  |   |                 |       |
| 2"           | 50   | 120.5 | 152   | 230   | 1.6  | 92    | 19   | 14   | 20   | 134.5 | 178   | 5/16" UNC | 4 | 70   | 15.9 | 49   | F07 | 9.30   |   |                 |       |
|              | 1.97 | 4.75  | 5.98  | 9.06  | 0.06 | 3.62  | 0.75 | 0.55 | 0.79 | 5.30  | 7.00  |           |   | 2.76 | 0.63 | 1.93 |     | 20.46  |   |                 |       |
| 2 1/2        | 65   | 139.7 | 178   | 400   | 1.6  | 104.6 | 19   | 17   | 25   | 170.5 | 190.5 | 3/8" UNC  | 4 | 102  | 17.5 | 61   | F10 | 16.82  |   |                 |       |
|              | 2.56 | 5.50  | 7.00  | 15.75 | 0.06 | 4.12  | 0.75 | 0.67 | 0.98 | 6.71  | 7.50  |           |   | 4.02 | 0.69 | 2.40 |     | 37.00  |   |                 |       |
| 3"           | 76   | 152.5 | 190   | 400   | 1.6  | 127   | 19   | 17   | 25   | 181.5 | 203   | 3/8" UNC  | 4 | 102  | 19.1 | 61   | F10 | 22.00  |   |                 |       |
|              | 3.00 | 6.00  | 7.48  | 15.75 | 0.06 | 5.00  | 0.75 | 0.67 | 0.98 | 7.15  | 8.00  |           |   | 4.02 | 0.75 | 2.40 |     | 48.40  |   |                 |       |
| 4"           | 100  | 190.5 | 229   | 460   | 1.6  | 157   | 19   | 23   | 34   | 205.5 | 229   | 1/2" UNC  | 8 | 125  | 23.9 | 73   | F12 | 37.00  |   |                 |       |
|              | 3.94 | 7.50  | 9.02  | 18.11 | 0.06 | 6.18  | 0.75 | 0.91 | 1.34 | 8.09  | 9.02  |           |   | 4.92 | 0.94 | 2.87 |     | 81.40  |   |                 |       |
| 6"           | 150  | 241.5 | 279   | 1000  | 1.6  | 216   | 22   | 27   | 40   | 289.5 | 394   | 5/8" UNC  | 8 | 140  | 25.4 | 90   | F14 | 85.3   |   |                 |       |
|              | 5.91 | 9.50  | 10.98 | 39.37 | 0.06 | 8.50  | 0.88 | 1.06 | 1.57 | 11.40 | 15.51 |           |   | 5.51 | 1.00 | 3.54 |     | 187.66 |   |                 |       |

# F Series Flanged Carbon Steel Ball Valves

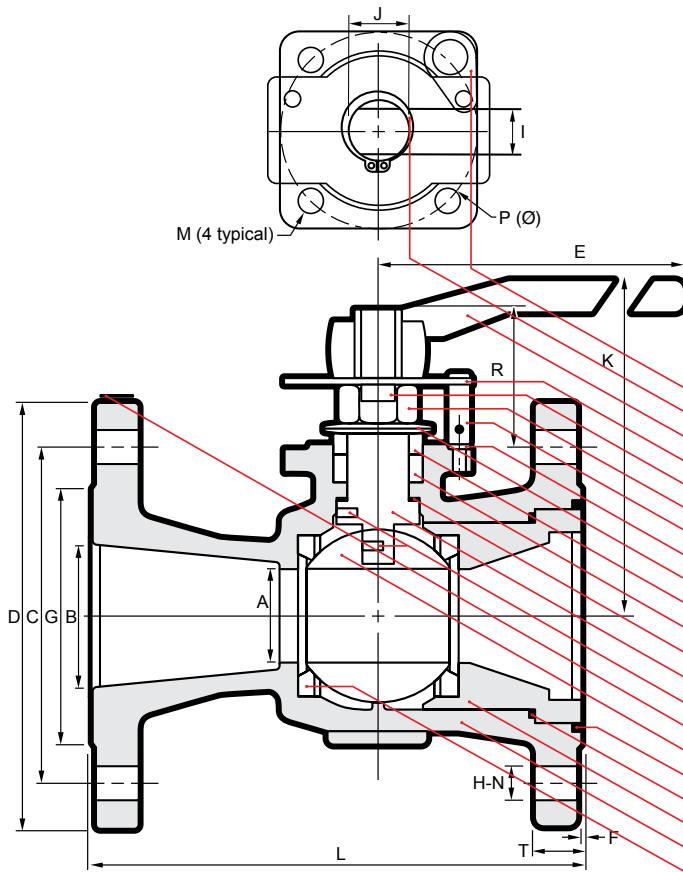
## F-300-CS-R-SS-N

Reduced port, One piece body  
ANSI B16.34 Class 300  
Blowout-proof stem  
ISO 5211 Mounting pad  
Floating Ball, Anti-static device  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



**Model F-300-LC-R-SS-N (LCC body) is available**

3.4

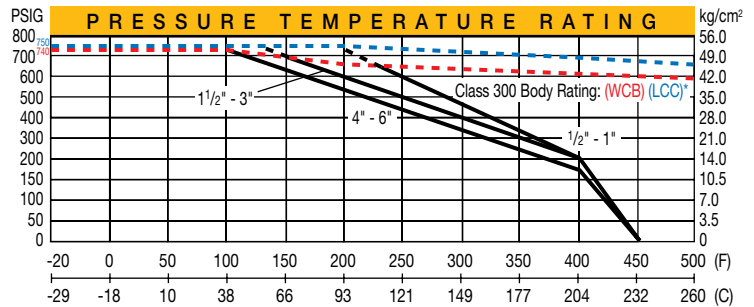
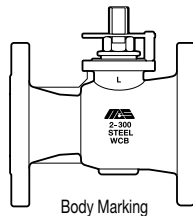


| NAME / MATERIAL  |            |                        |
|--|------------|------------------------|
| Model Code; CS   | LC         | *FS                    |
| 1. Lock Plate / Stainless Steel A276 Type 304            |            |                        |
| 2. Retaining Ring / Carbon Steel                         |            |                        |
| 3. Handle / Ductile Iron                                 |            |                        |
| 4. Stopper Plate / Stainless Steel A276 Type 304         |            |                        |
| 5. Lock Washer / Stainless Steel A276 Type 304           |            |                        |
| 6. Gland Nut / Carbon Steel                              |            |                        |
| 7. Stopper Pin / Stainless Steel A276 Type 304           |            |                        |
| 8. Lock Washer / Stainless Steel A276 Type 304           |            |                        |
| 9. Belleville Washer / Stainless Steel 301               |            |                        |
| 10. Gland / Stainless Steel A276 Type 304                |            |                        |
| 11. Packing / PTFE                                       |            | (Graphite)             |
| 12. Thrust Washer / R-PTFE 15% Glass-Filled              |            |                        |
| 13. Stem / Stainless Steel A276 Type 316                 |            |                        |
| 14. Anti-Static Device / Stainless Steel A276 Type 304   |            |                        |
| 15. Identification Plate / Stainless Steel A276 Type 304 |            |                        |
| 16. Ball / Stainless Steel A351 - CF8M (316)             |            |                        |
| 17. N/A  |            | (Body Seal / Graphite) |
| 18. Body Seal / PTFE                                     |            |                        |
| 19. Body Insert / Cast Steel A216-WCB                    | (A352 LCC) |                        |
| 20. Body / Cast Steel A216-WCB                           | (A352 LCC) |                        |
| 21. Seat / PTFE (TFM-1600)                               |            |                        |

\*Fire Safe Certified to API-607

|                           |  |       |     |      |     |        |
|---------------------------|--|-------|-----|------|-----|--------|
| FIG.                      | F-300-CS-R-SS-N                        | CLASS | 300 | SIZE | 2   | B16.34 |
| SEAT                      | PTFE                                   | BODY  | WCB | TRIM | 316 | NACE   |
| RATING                    | 740 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |
| CS - IDENTIFICATION PLATE |  |       |     |      |     |        |

|                           |  |       |     |      |     |        |
|---------------------------|--|-------|-----|------|-----|--------|
| FIG.                      | F-300-LC-R-SS-N                        | CLASS | 300 | SIZE | 2   | B16.34 |
| SEAT                      | PTFE                                   | BODY  | LCC | TRIM | 316 | NACE   |
| RATING                    | 750 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |
| LC - IDENTIFICATION PLATE |  |       |     |      |     |        |



\*LCC body rated to -50F/-46C

| size | D       |         | I       |         | M       |         | E       |         | N       |         | S       |         | I         |         | O       |         | N       |                      | S      |  | Weight (kg/lb) |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|---------|---------|---------|----------------------|--------|--|----------------|
|      | A mm/in | B mm/in | C mm/in | D mm/in | E mm/in | F mm/in | G mm/in | H mm/in | I mm/in | J mm/in | K mm/in | L mm/in | M in      | N mm/in | P mm/in | T mm/in | R mm/in | ISO 5211 flange type |        |  |                |
| 2"   | 38      | 50      | 127     | 165     | 230     | 1.6     | 92      | 19      | 14      | 20      | 125     | 216     | 5/16" UNC | 8       | 70      | 22.3    | 49      | F07                  | 11.19  |  |                |
|      | 1.50    | 1.97    | 5.00    | 6.50    | 9.06    | 0.06    | 3.62    | 0.75    | 0.55    | 0.79    | 4.92    | 8.50    |           |         | 2.76    | 0.88    | 1.93    |                      | 24.62  |  |                |
| 3"   | 58      | 76      | 168     | 210     | 400     | 1.6     | 127     | 22      | 17      | 25      | 168     | 283     | 3/8" UNC  | 8       | 70      | 28.5    | 59      | F07                  | 23.47  |  |                |
|      | 2.28    | 3.00    | 6.61    | 8.27    | 15.75   | 0.06    | 5.00    | 0.88    | 0.67    | 0.98    | 6.61    | 11.14   |           |         | 2.76    | 1.12    | 2.32    |                      | 51.63  |  |                |
| 4"   | 76      | 102     | 200     | 254     | 400     | 1.6     | 157     | 22      | 17      | 25      | 183     | 305     | 3/8" UNC  | 8       | 70      | 31.8    | 59      | F07                  | 35.72  |  |                |
|      | 3.00    | 4.02    | 7.87    | 10.00   | 15.75   | 0.06    | 6.18    | 0.88    | 0.67    | 0.98    | 7.20    | 12.00   |           |         | 2.76    | 1.25    | 2.32    |                      | 78.58  |  |                |
| 6"   | 114     | 152     | 270     | 318     | 750     | 1.6     | 216     | 22      | 23      | 34      | 245     | 403     | 1/2" UNC  | 12      | 125     | 36.6    | 73      | F12                  | 79.21  |  |                |
|      | 4.49    | 5.98    | 10.63   | 12.52   | 29.53   | 0.06    | 8.50    | 0.88    | 0.91    | 1.34    | 9.65    | 15.87   |           |         | 4.92    | 1.44    | 2.87    |                      | 174.26 |  |                |

# F Series Flanged Carbon Steel Ball Valves

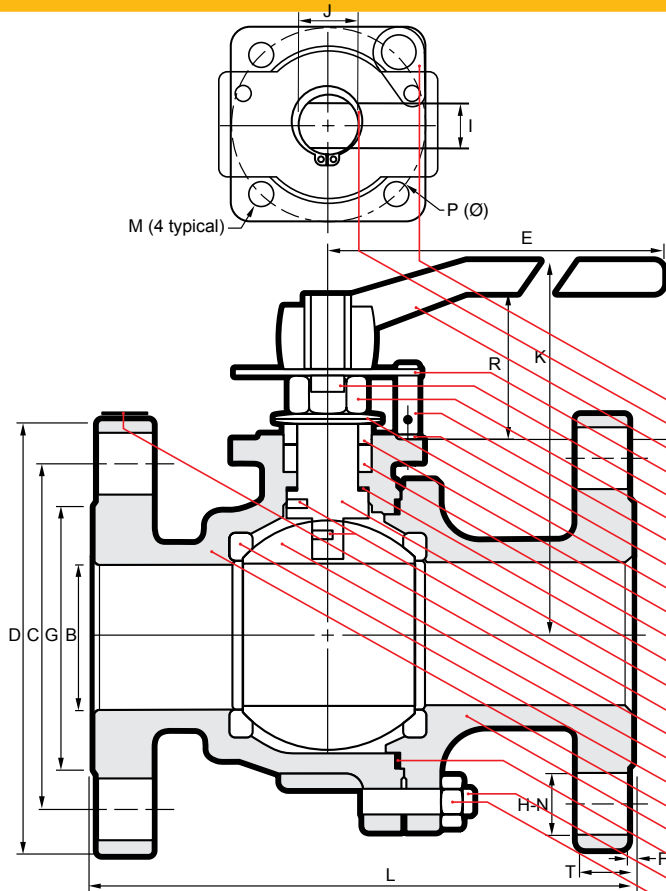
## F-300-CS-F-SS-N

Full port, Two piece body  
ANSI B16.34 Class 300  
Blowout-proof stem  
ISO 5211 Mounting pad  
Floating Ball, Anti-static device  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



3.5

**Model F-300-LC-F-SS-N (LCC body) is available**



| NAME / MATERIAL  |                      |            |
|--|----------------------|------------|
| Model Code; CS   | LC                   | *FS        |
| 1. Lock Plate / Stainless Steel A276 Type 304            |                      |            |
| 2. Retaining Ring / Carbon Steel                         |                      |            |
| 3. Handle / Ductile Iron                                 |                      |            |
| 4. Stopper Plate / Stainless Steel A276 Type 304         |                      |            |
| 5. Lock Washer / Stainless Steel A276 Type 304           |                      |            |
| 6. Gland Nut / Carbon Steel                              |                      |            |
| 7. Stopper Pin / Stainless Steel A276 Type 304           |                      |            |
| 8. Lock Washer / Stainless Steel A276 Type 304           |                      |            |
| 9. Belleville Washer / Stainless Steel 301               |                      |            |
| 10. Gland / Stainless Steel A276 Type 304                |                      |            |
| 11. Packing / PTFE                                       |                      | (Graphite) |
| 12. Thrust Washer / R-PTFE 15% Glass-Filled              |                      |            |
| 13. Stem / Stainless Steel A276 Type 316                 |                      |            |
| 14. Anti-Static Device / Stainless Steel A276 Type 304   |                      |            |
| 15. Identification Plate / Stainless Steel A276 Type 304 |                      |            |
| 16. Ball / Stainless Steel A351 - CF8M (316)             |                      |            |
| 17. Seat / PTFE (TFM-1600)                               |                      |            |
| 18. Body / Cast Steel A216-WCB                           | (LC: A352 LCC)       |            |
| 19. Cap / Cast Steel A216-WCB                            | (LC: A352 LCC)       |            |
| 20. Body Seal / PTFE                                     |                      | (Graphite) |
| 21. Bolt Nut / A194 Grade 2HM                            | (LC: A194 Grade 7M)  |            |
| 22. Stud Bolt / A193 Grade B7M                           | (LC: A320 Grade L7M) |            |

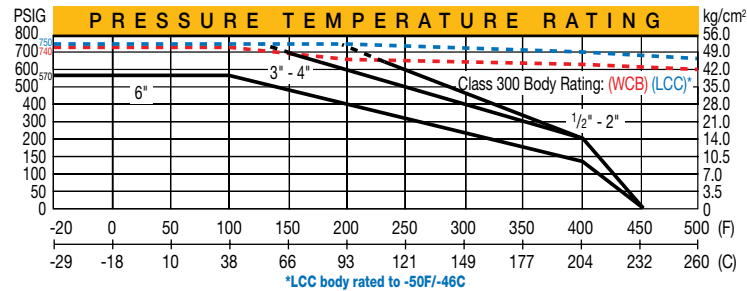
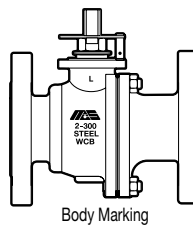
\*Fire Safe Certified to API-607

|        |  |       |     |      |     |        |
|--------|--|-------|-----|------|-----|--------|
| FIG.   | F-300-CS-F-SS-N                        | CLASS | 300 | SIZE | 2   | B16.34 |
| SEAT   | PTFE                                   | BODY  | WCB | TRIM | 316 | NACE   |
| RATING | 740 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |

CS - IDENTIFICATION PLATE

|        |  |       |     |      |     |        |
|--------|--|-------|-----|------|-----|--------|
| FIG.   | F-300-LC-F-SS-N                        | CLASS | 300 | SIZE | 2   | B16.34 |
| SEAT   | PTFE                                   | BODY  | LCC | TRIM | 316 | NACE   |
| RATING | 750 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |

LC - IDENTIFICATION PLATE



|              | D    | B     | C     | I     | D    | E     | M    | F    | G    | H     | I     | N         | J  | S    | L    | I    | O   | P | T | N | R | ISO 5211 flange | kg/lb           |
|--------------|------|-------|-------|-------|------|-------|------|------|------|-------|-------|-----------|----|------|------|------|-----|---|---|---|---|-----------------|-----------------|
| size (mm/in) | 15   | 66.5  | 95    | 130   | 1.6  | 35    | 16   | 8    | 11   | 83    | 140   | 1/4" UNC  | 4  | 36   | 14.2 | 27   | F03 |   |   |   |   |                 |                 |
| 1/2          | 0.59 | 2.62  | 3.75  | 5.12  | 0.06 | 1.38  | 0.62 | 0.31 | 0.43 | 3.27  | 5.50  | 1/4" UNC  | 4  | 36   | 15.8 | 27   | F03 |   |   |   |   |                 | 2.20<br>4.84    |
| 3/4          | 19   | 82.5  | 117   | 130   | 1.6  | 43    | 19   | 8    | 11   | 86    | 152.5 | 1/4" UNC  | 4  | 36   | 15.8 | 27   | F03 |   |   |   |   |                 | 3.29<br>7.23    |
| 1"           | 24   | 89.0  | 124   | 160   | 1.6  | 51    | 19   | 10   | 14   | 104   | 165   | 1/4" UNC  | 4  | 50   | 17.5 | 35.5 | F05 |   |   |   |   |                 | 4.76<br>10.47   |
| 1 1/2        | 38   | 114.5 | 156   | 230   | 1.6  | 73    | 22   | 14   | 20   | 125   | 190.5 | 5/16" UNC | 4  | 70   | 20.6 | 49   | F07 |   |   |   |   |                 | 9.14<br>20.10   |
| 2"           | 50   | 127.0 | 165   | 230   | 1.6  | 92    | 19   | 14   | 20   | 134.5 | 216   | 5/16" UNC | 8  | 70   | 22.3 | 49   | F07 |   |   |   |   |                 | 12.80<br>28.16  |
| 2 1/2        | 65   | 149.4 | 190.5 | 400   | 1.6  | 104.6 | 22   | 17   | 25   | 170.5 | 241.3 | 3/8" UNC  | 8  | 102  | 25.4 | 61   | F10 |   |   |   |   |                 | 22.73<br>50.00  |
| 3"           | 76   | 168   | 210   | 400   | 1.6  | 127   | 22   | 17   | 25   | 181.5 | 283   | 3/8" UNC  | 8  | 102  | 28.5 | 61   | F10 |   |   |   |   |                 | 29.60<br>65.12  |
| 4"           | 100  | 200   | 254   | 750   | 1.6  | 157   | 22   | 23   | 34   | 205.5 | 305   | 1/2" UNC  | 8  | 125  | 31.8 | 73   | F12 |   |   |   |   |                 | 50.40<br>110.88 |
| 6"           | 150  | 270   | 318   | 1000  | 1.6  | 216   | 22   | 27   | 40   | 289.5 | 403   | 5/8" UNC  | 12 | 140  | 36.6 | 90   | F14 |   |   |   |   |                 | 107.3<br>236.06 |
|              | 5.91 | 10.63 | 12.52 | 39.37 | 0.06 | 8.50  | 0.88 | 1.06 | 1.57 | 11.40 | 15.87 |           |    | 5.51 | 1.44 | 3.54 |     |   |   |   |   |                 |                 |

# F Series Flanged Carbon Steel Ball Valves

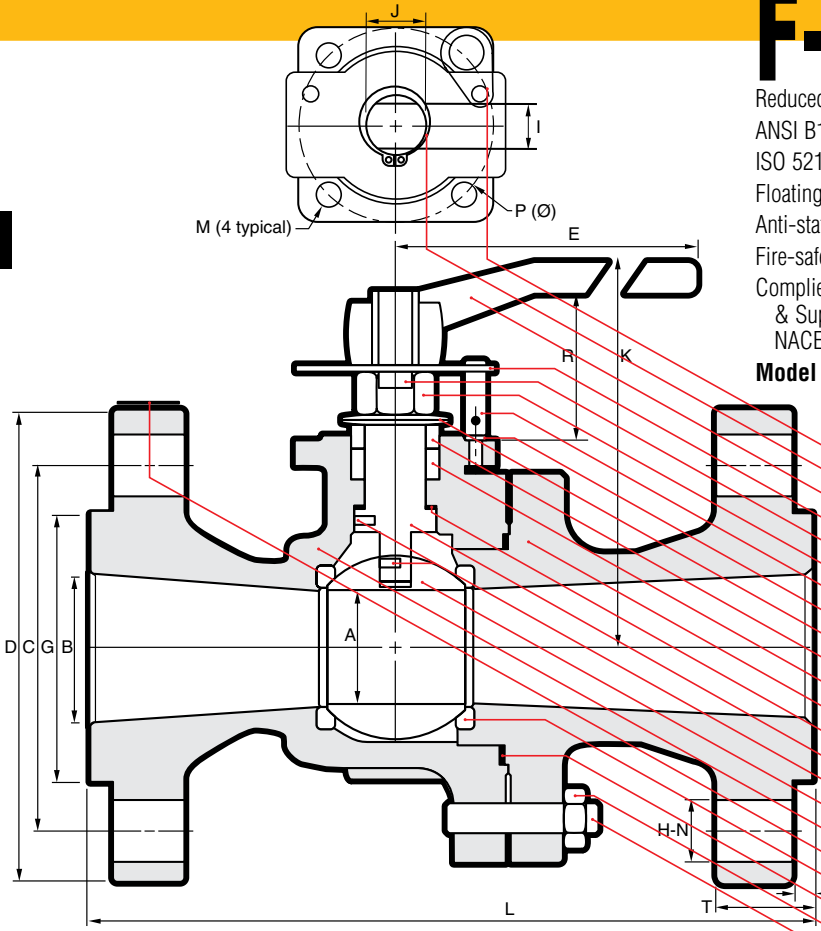
## F-600-CS-R-SS-N

Reduced port, Two piece body  
ANSI B16.34 Class 600  
ISO 5211 Mounting pad  
Floating Ball  
Anti-static device  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



Model F-600-LC-R-SS-N (LCC body) is available

3.6



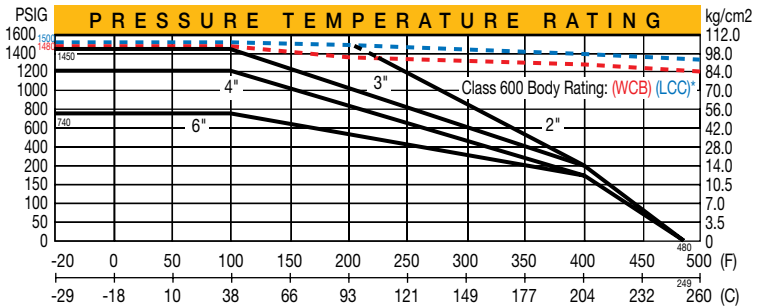
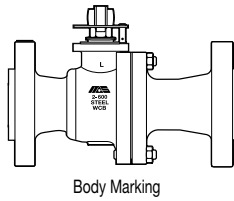
### NAME / MATERIAL

| Model Code;                | CS                                | LC                   | *FS        |
|----------------------------|-----------------------------------|----------------------|------------|
| 1. Lock Plate /            | Stainless Steel A276 Type 304     |                      |            |
| 2. Retaining Ring /        | Carbon Steel                      |                      |            |
| 3. Handle /                | Ductile Iron                      |                      |            |
| 4. Stopper Plate /         | Stainless Steel A276 Type 304     |                      |            |
| 5. Lock Washer /           | Stainless Steel A276 Type 304     |                      |            |
| 6. Gland Nut /             | Carbon Steel                      |                      |            |
| 7. Stopper Pin /           | Stainless Steel A276 Type 304     |                      |            |
| 8. Lock Washer /           | Stainless Steel A276 Type 304     |                      |            |
| 9. Belleville Washer /     | Stainless Steel 301               |                      |            |
| 10. Gland /                | Stainless Steel A276 Type 304     |                      |            |
| 11. Packing /              | PTFE                              |                      | (Graphite) |
| 12. Cap /                  | Cast Steel A216 WCB               | (LC: A352 LCC)       |            |
| 13. Thrust Washer /        | R-PTFE 15% Glass-Filled           |                      |            |
| 14. Stem /                 | Stainless Steel A276 Type 316     |                      |            |
| 15. Anti-Static Device /   | A276 Type 304                     |                      |            |
| 16. Ball /                 | Stainless Steel A351 - CF8M (316) |                      |            |
| 17. Body /                 | Cast Steel A216 WCB               | (LC: A352 LCC)       |            |
| 18. Identification Plate / | A276 Type 304                     |                      |            |
| 19. Seat /                 | R-PTFE 25% Carbon-Filled          |                      |            |
| 20. Body Seal /            | 304 + Graphite                    |                      |            |
| 21. Bolt Nut /             | A194 Grade 2HM                    | (LC: A194 Grade 7M)  |            |
| 22. Stud Bolt /            | A193 Grade B7M                    | (LC: A320 Grade L7M) |            |

\*Fire Safe Certified to API-607

|        |   |       |     |      |     |        |
|--------|---|-------|-----|------|-----|--------|
| FIG.   | F-600-CS-R-SS-N                         | CLASS | 600 | SIZE | 2   | B16.34 |
| SEAT   | C-PTFE                                  | BODY  | WCB | TRIM | 316 | NACE   |
| RATING | 1480 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |
|        | CS - IDENTIFICATION PLATE               |       |     |      |     |        |

|        |   |       |     |      |     |        |
|--------|---|-------|-----|------|-----|--------|
| FIG.   | F-600-LC-R-SS-N                         | CLASS | 600 | SIZE | 2   | B16.34 |
| SEAT   | C-PTFE                                  | BODY  | LCC | TRIM | 316 | NACE   |
| RATING | 1500 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |
|        | LC - IDENTIFICATION PLATE               |       |     |      |     |        |



| size | D    |      | I     |       | M     |      | E    |      | N    |      | S     |       | I         |    | O    |      | N    |     | ISO 5211 flange type | Weight (kg/lb) |
|------|------|------|-------|-------|-------|------|------|------|------|------|-------|-------|-----------|----|------|------|------|-----|----------------------|----------------|
|      | A    | B    | C     | D     | E     | F    | G    | H    | I    | J    | K     | L     | M         | N  | P    | T    | R    |     |                      |                |
| 2"   | 38   | 50   | 127   | 165   | 230   | 6.35 | 92   | 19   | 14   | 20   | 144.5 | 292   | 5/16" UNC | 8  | 70   | 31.8 | 49   | F07 | 15.72                |                |
|      | 1.50 | 1.97 | 5.00  | 6.50  | 9.06  | 0.25 | 3.62 | 0.75 | 0.55 | 0.79 | 5.69  | 11.50 |           |    | 2.76 | 1.25 | 1.93 |     |                      | 34.58          |
| 3"   | 58   | 76   | 168   | 210   | 400   | 6.35 | 127  | 22.3 | 17   | 25   | 180   | 356   | 3/8" UNC  | 8  | 70   | 38.1 | 59   | F07 | 33.05                |                |
|      | 2.28 | 3.00 | 6.61  | 8.27  | 15.75 | 0.25 | 5.00 | 0.88 | 0.67 | 0.98 | 7.09  | 14.02 |           |    | 2.76 | 1.5  | 2.32 |     |                      | 72.71          |
| 4"   | 76   | 102  | 216   | 273   | 400   | 6.35 | 157  | 25.4 | 17   | 25   | 194   | 432   | 3/8" UNC  | 8  | 70   | 44.5 | 59   | F07 | 61.64                |                |
|      | 3.00 | 4.02 | 8.50  | 10.75 | 15.75 | 0.25 | 6.18 | 1.00 | 0.67 | 0.98 | 7.64  | 17.00 |           |    | 2.76 | 1.75 | 2.32 |     |                      | 135.61         |
| 6"   | 114  | 152  | 292   | 356   | 750   | 6.35 | 216  | 28.5 | 23   | 34   | 256   | 559   | 1/2" UNC  | 12 | 125  | 54.1 | 73   | F12 | 131.83               |                |
|      | 4.49 | 5.98 | 11.50 | 14.02 | 29.53 | 0.25 | 8.50 | 1.12 | 0.91 | 1.34 | 10.08 | 22.00 |           |    | 4.92 | 2.13 | 2.87 |     |                      | 290.03         |



M. A. Stewart & Sons Ltd.  
VALVES AND FITTINGS

# F Series Flanged Carbon Steel Ball Valves

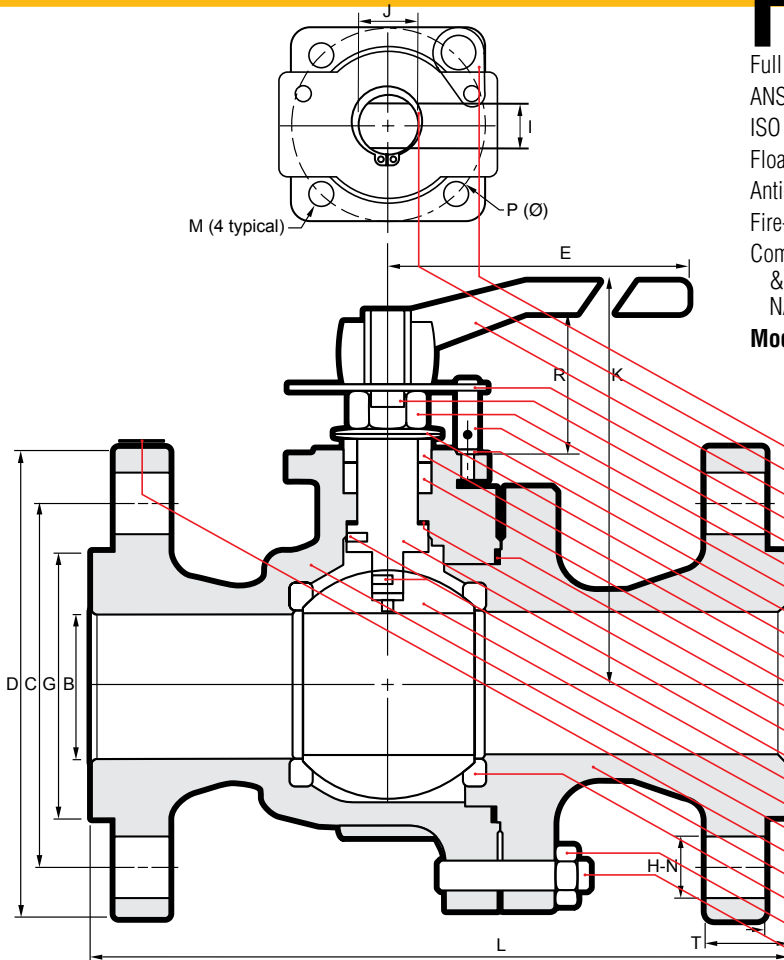
## F-600-CS-F-SS-N

Full port, Two piece body  
ANSI B16.34 Class 600  
ISO 5211 Mounting pad  
Floating Ball  
Anti-static device  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



3.7

Model F-600-LC-F-SS-N (LCC body) is available



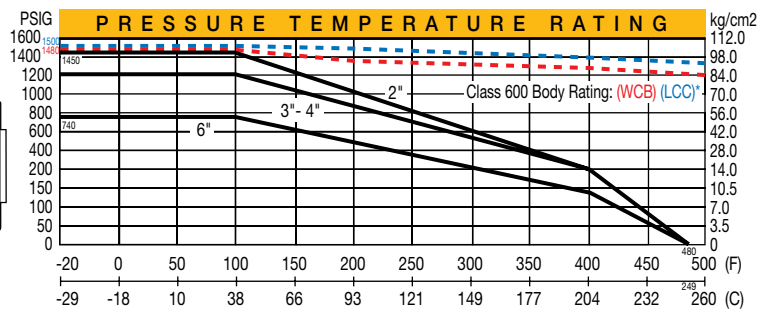
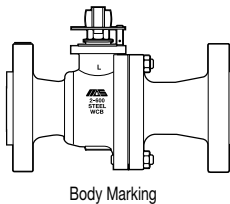
### NAME / MATERIAL

| Model Code:                | CS                                | LC                   | *FS        |
|----------------------------|-----------------------------------|----------------------|------------|
| 1. Lock Plate /            | Stainless Steel A276 Type 304     |                      |            |
| 2. Retaining Ring /        | Carbon Steel                      |                      |            |
| 3. Handle /                | Ductile Iron                      |                      |            |
| 4. Stopper Plate /         | Stainless Steel A276 Type 304     |                      |            |
| 5. Lock Washer /           | Stainless Steel A276 Type 304     |                      |            |
| 6. Gland Nut /             | Carbon Steel                      |                      |            |
| 7. Stopper Pin /           | Stainless Steel A276 Type 304     |                      |            |
| 8. Lock Washer /           | Stainless Steel A276 Type 304     |                      |            |
| 9. Belleville Washer /     | Stainless Steel 301               |                      |            |
| 10. Gland /                | Stainless Steel A276 Type 304     |                      |            |
| 11. Packing /              | PTFE                              |                      | (Graphite) |
| 12. Body Seal /            | 304 + Graphite                    |                      |            |
| 13. Thrust Washer /        | R-PTFE 15% Glass-Filled           |                      |            |
| 14. Stem /                 | Stainless Steel A276 Type 316     |                      |            |
| 15. Anti-Static Device /   | Stainless Steel A276 Type 304     |                      |            |
| 16. Ball /                 | Stainless Steel A351 - CF8M (316) |                      |            |
| 17. Body /                 | Cast Steel A216 WCB               | (LC: A352 LCC)       |            |
| 18. Identification Plate / | Stainless Steel A276 Type 304     |                      |            |
| 19. Cap /                  | Cast Steel A216 WCB               | (LC: A352 LCC)       |            |
| 20. Seat /                 | R-PTFE 25% Carbon-Filled          |                      |            |
| 21. Bolt Nut /             | A194 Grade 2HM                    | (LC: A194 Grade 7M)  |            |
| 22. Stud Bolt /            | A193 Grade B7M                    | (LC: A320 Grade L7M) |            |

\*Fire Safe Certified to API-607

|                           |   |       |     |      |     |        |
|---------------------------|---|-------|-----|------|-----|--------|
| FIG.                      | F-600-CS-F-SS-N                         | CLASS | 600 | SIZE | 2   | B16.34 |
| SEAT                      | C-PTFE-S                                | BODY  | WCB | TRIM | 316 | NACE   |
| RATING                    | 1450 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |
| CS - IDENTIFICATION PLATE |   |       |     |      |     |        |

|                           |   |       |     |      |     |        |
|---------------------------|---|-------|-----|------|-----|--------|
| FIG.                      | F-600-LC-F-SS-N                         | CLASS | 600 | SIZE | 2   | B16.34 |
| SEAT                      | C-PTFE-S                                | BODY  | LCC | TRIM | 316 | NACE   |
| RATING                    | 1450 PSIG AT 100°F/200 PSIG AT 400° MAX |       |     |      |     |        |
| LC - IDENTIFICATION PLATE |   |       |     |      |     |        |



| size | D I M E N S I O N S |       |       |       |      |      |      |      |      |       |       |           |    |      |      |      |     | ISO 5211 flange type | Weight (kg/lb) |
|------|---------------------|-------|-------|-------|------|------|------|------|------|-------|-------|-----------|----|------|------|------|-----|----------------------|----------------|
|      | B                   | C     | D     | E     | F    | G    | H    | I    | J    | K     | L     | M         | N  | P    | T    | R    |     |                      |                |
| 2"   | 50                  | 127   | 165   | 230   | 6.35 | 92   | 19   | 14   | 20   | 158   | 292   | 5/16" UNC | 8  | 70   | 31.8 | 49   | F07 | 17.26                |                |
|      | 1.97                | 5.00  | 6.50  | 9.06  | 0.25 | 3.62 | 0.75 | 0.55 | 0.79 | 6.22  | 11.50 |           |    | 2.76 | 1.25 | 1.93 |     | 37.97                |                |
| 3"   | 76                  | 168   | 210   | 400   | 6.35 | 127  | 22.3 | 17   | 25   | 194   | 356   | 3/8" UNC  | 8  | 102  | 38.1 | 61   | F10 | 39.25                |                |
|      | 3.00                | 6.61  | 8.27  | 15.75 | 0.25 | 5.00 | 0.88 | 0.67 | 0.98 | 7.64  | 14.02 |           |    | 4.02 | 1.50 | 2.40 |     | 86.35                |                |
| 4"   | 100                 | 216   | 273   | 460   | 6.35 | 157  | 25.4 | 23   | 34   | 215.5 | 432   | 1/2" UNC  | 8  | 125  | 44.5 | 73   | F12 | 71.74                |                |
|      | 3.94                | 8.50  | 10.75 | 18.11 | 0.25 | 6.18 | 1.00 | 0.91 | 1.34 | 8.48  | 17.00 |           |    | 4.92 | 1.75 | 2.87 |     | 157.83               |                |
| 6"   | 150                 | 292   | 356   | 1000  | 6.35 | 216  | 28.5 | 27   | 40   | 301.5 | 559   | 5/8" UNC  | 12 | 140  | 54.1 | 90   | F14 | 161.62               |                |
|      | 5.91                | 11.50 | 14.02 | 39.37 | 0.25 | 8.50 | 1.12 | 1.06 | 1.57 | 11.87 | 22.00 |           |    | 5.51 | 2.13 | 3.54 |     | 355.56               |                |

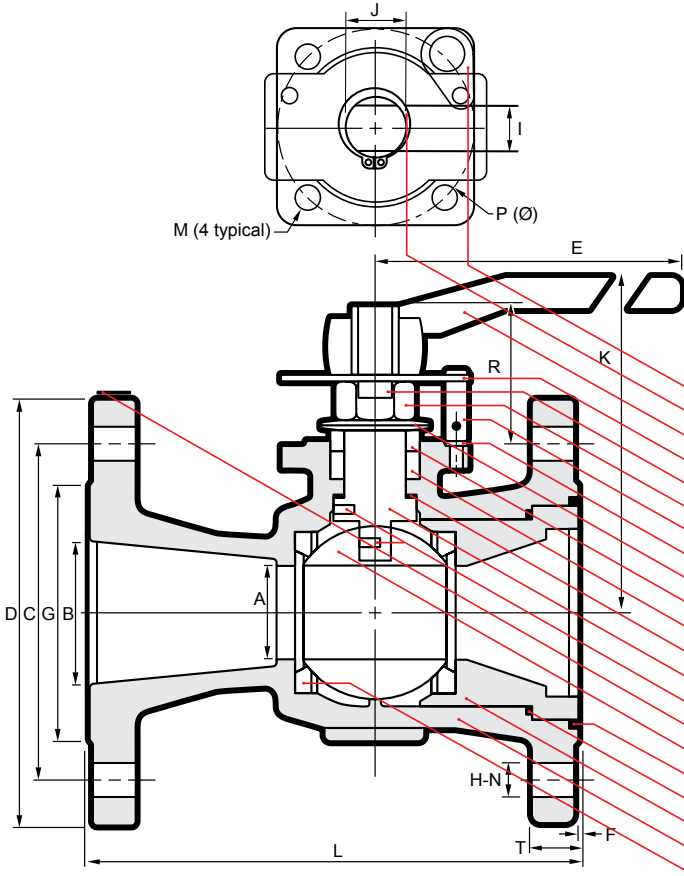
# F Series Flanged Stainless Steel Ball Valves

## F-150-SS-R-N

Reduced port, One piece body  
ANSI B16.34 Class 150  
Blowout-proof stem  
ISO 5211 Mounting pad  
Floating Ball, Anti-static device  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



3.8



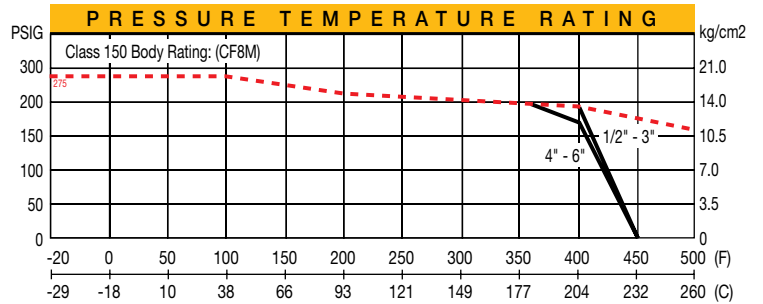
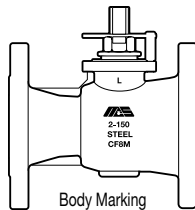
### NAME / MATERIAL

| Model Code;  | *FS                    |
|--|------------------------|
| 1. Lock Plate / Stainless Steel A276 Type 304            |                        |
| 2. Retaining Ring / Carbon Steel                         |                        |
| 3. Handle / Ductile Iron                                 |                        |
| 4. Stopper Plate / Stainless Steel A276 Type 304         |                        |
| 5. Lock Washer / Stainless Steel A276 Type 304           |                        |
| 6. Gland Nut / Stainless Steel A276 Type 304             |                        |
| 7. Stopper Pin / Stainless Steel A276 Type 304           |                        |
| 8. Lock Washer / Stainless Steel A276 Type 304           |                        |
| 9. Belleville Washer / Stainless Steel 301               |                        |
| 10. Gland / Stainless Steel A276 Type 304                |                        |
| 11. Packing / PTFE                                       | (Graphite)             |
| 12. Thrust Washer / R-PTFE 15% Glass-Filled              |                        |
| 13. Stem / Stainless Steel A276 Type 316                 |                        |
| 14. Anti-Static Device / Stainless Steel A276 Type 304   |                        |
| 15. Identification Plate / Stainless Steel A276 Type 304 |                        |
| 16. Ball / Stainless Steel A351 - CF8M (316)             |                        |
| 17. N/A  | (Body Seal / Graphite) |
| 18. Body Seal / PTFE                                     |                        |
| 19. Body Insert / Stainless Steel A351 - CF8M (316)      |                        |
| 20. Body / Stainless Steel A351 - CF8M (316)             |                        |
| 21. Seat / PTFE (TFM-1600)                               |                        |

\*Fire Safe Certified to API-607

|                           |  |       |      |      |     |        |
|---------------------------|--|-------|------|------|-----|--------|
| FIG.                      | F-150-SS-R-N                           | CLASS | 150  | SIZE | 2   | B16.34 |
| SEAT                      | PTFE                                   | BODY  | CF8M | TRIM | 316 | NACE   |
| RATING                    | 275 PSIG AT 100°F/195 PSIG AT 400° MAX |       |      |      |     |        |
| SS - IDENTIFICATION PLATE |  |       |      |      |     |        |

|                              |  |       |      |      |     |        |
|------------------------------|--|-------|------|------|-----|--------|
| FIG.                         | F-150-SS-R-FS-N                        | CLASS | 150  | SIZE | 2   | B16.34 |
| SEAT                         | PTFE                                   | BODY  | CF8M | TRIM | 316 | NACE   |
| RATING                       | 275 PSIG AT 100°F/195 PSIG AT 400° MAX |       |      |      |     |        |
| SS-FS - IDENTIFICATION PLATE |  |       |      |      |     |        |



| size | D    |      | I     |       | M     |      | E    |      | N    |      | S    |       | I        |   | O    |      | N    |     | ISO 5211<br>flange type | Weight<br>(kg/lb) |
|------|------|------|-------|-------|-------|------|------|------|------|------|------|-------|----------|---|------|------|------|-----|-------------------------|-------------------|
|      | A    | B    | C     | D     | E     | F    | G    | H    | I    | J    | K    | L     | M        | N | P    | T    | R    |     |                         |                   |
| 2"   | 38   | 50   | 120.5 | 152   | 230   | 1.6  | 92   | 19   | 14   | 20   | 125  | 178   | 5/16 UNC | 4 | 70   | 15.9 | 49   | F07 | 8.00                    |                   |
|      | 1.50 | 1.97 | 4.75  | 5.98  | 9.06  | 0.06 | 3.62 | 0.75 | 0.55 | 0.79 | 4.92 | 7.00  |          |   | 2.76 | 0.63 | 1.93 |     | 17.60                   |                   |
| 3"   | 58   | 76   | 152.5 | 190   | 400   | 1.6  | 127  | 19   | 17   | 25   | 168  | 203   | 3/8" UNC | 4 | 70   | 19.1 | 59   | F07 | 15.70                   |                   |
|      | 2.28 | 3.00 | 6.00  | 7.48  | 15.75 | 0.06 | 5.00 | 0.75 | 0.67 | 0.98 | 6.61 | 8.00  |          |   | 2.76 | 0.75 | 2.32 |     | 34.54                   |                   |
| 4"   | 76   | 102  | 190.5 | 229   | 400   | 1.6  | 157  | 19   | 17   | 25   | 183  | 229   | 3/8" UNC | 8 | 70   | 23.9 | 59   | F07 | 24.60                   |                   |
|      | 3.00 | 4.02 | 7.50  | 9.02  | 15.75 | 0.06 | 6.18 | 0.75 | 0.67 | 0.98 | 7.20 | 9.02  |          |   | 2.76 | 0.94 | 2.32 |     | 54.12                   |                   |
| 6"   | 114  | 152  | 241.5 | 279   | 750   | 1.6  | 216  | 22   | 23   | 34   | 245  | 267   | 1/2" UNC | 8 | 125  | 25.4 | 73   | F12 | 49.50                   |                   |
|      | 4.49 | 5.98 | 9.50  | 10.98 | 29.53 | 0.06 | 8.50 | 0.88 | 0.91 | 1.34 | 9.65 | 10.51 |          |   | 4.92 | 1.00 | 2.87 |     | 108.90                  |                   |



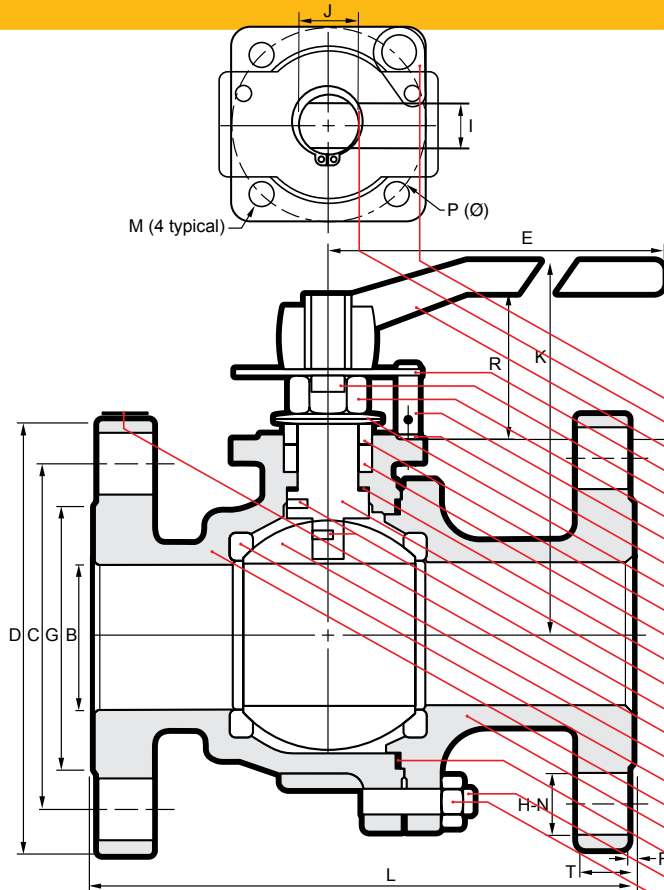
# F Series Flanged Stainless Steel Ball Valves

## F-150-SS-F-N

Full port, Two piece body  
ANSI B16.34 Class 150  
Blowout-proof stem  
ISO 5211 Mounting pad  
Floating Ball, Anti-static device  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



3.9



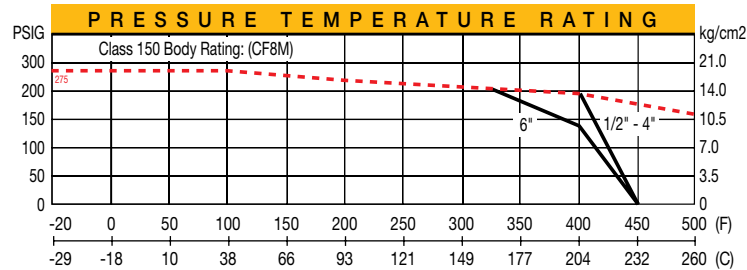
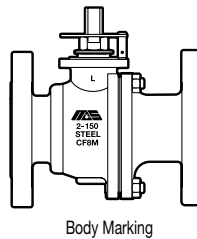
### NAME / MATERIAL

| Model Code;                | SS                                | *FS        |
|----------------------------|-----------------------------------|------------|
| 1. Lock Plate /            | Stainless Steel A276 Type 304     |            |
| 2. Retaining Ring /        | Carbon Steel                      |            |
| 3. Handle /                | Ductile Iron                      |            |
| 4. Stopper Plate /         | Stainless Steel A276 Type 304     |            |
| 5. Lock Washer /           | Stainless Steel A276 Type 304     |            |
| 6. Gland Nut /             | Stainless Steel A276 Type 304     |            |
| 7. Stopper Pin /           | Stainless Steel A276 Type 304     |            |
| 8. Lock Washer /           | Stainless Steel A276 Type 304     |            |
| 9. Belleville Washer /     | Stainless Steel 301               |            |
| 10. Gland /                | Stainless Steel A276 Type 304     |            |
| 11. Packing /              | PTFE                              | (Graphite) |
| 12. Thrust Washer /        | R-PTFE 15% Glass-Filled           |            |
| 13. Stem /                 | Stainless Steel A276 Type 316     |            |
| 14. Anti-Static Device /   | Stainless Steel A276 Type 304     |            |
| 15. Identification Plate / | Stainless Steel A276 Type 304     |            |
| 16. Ball /                 | Stainless Steel A351 - CF8M (316) |            |
| 17. Seat /                 | PTFE (TFM-1600)                   |            |
| 18. Body /                 | Stainless Steel A351 - CF8M (316) |            |
| 19. Cap /                  | Stainless Steel A351 - CF8M (316) |            |
| 20. Body Seal /            | PTFE                              | (Graphite) |
| 21. Bolt Nut /             | A194 Grade 8MA                    |            |
| 22. Stud Bolt /            | A193 Grade B8M                    |            |

\*Fire Safe Certified to API-607

|        |  |       |      |      |     |        |
|--------|--|-------|------|------|-----|--------|
| FIG.   | F-150-SS-F-N                           | CLASS | 150  | SIZE | 2   | B16.34 |
| SEAT   | PTFE                                   | BODY  | CF8M | TRIM | 316 | NACE   |
| RATING | 275 PSIG AT 100°F/195 PSIG AT 400° MAX |       |      |      |     |        |

SS - IDENTIFICATION PLATE



|              | D    | I     | M     | E     | N    | S     | I    | O    | N    | S     |       |           |   |      |      |      |                 |        |
|--------------|------|-------|-------|-------|------|-------|------|------|------|-------|-------|-----------|---|------|------|------|-----------------|--------|
| size (mm/in) | B    | C     | D     | E     | F    | G     | H    | I    | J    | K     | L     | M         | N | P    | T    | R    | ISO 5211 flange | kg/lb  |
| 1/2          | 15   | 60.5  | 89    | 130   | 1.6  | 35    | 16   | 8    | 11   | 83    | 108   | 1/4" UNC  | 4 | 36   | 11.2 | 27   | F03             | 1.64   |
|              | 0.59 | 2.38  | 3.50  | 5.12  | 0.06 | 1.38  | 0.62 | 0.31 | 0.43 | 3.27  | 4.25  |           |   | 1.42 | 0.44 | 1.06 |                 | 3.60   |
| 3/4          | 19   | 70.0  | 98.5  | 130   | 1.6  | 43    | 16   | 8    | 11   | 86    | 117   | 1/4" UNC  | 4 | 36   | 11.2 | 27   | F03             | 2.00   |
|              | 0.75 | 2.75  | 3.88  | 5.12  | 0.06 | 1.69  | 0.62 | 0.31 | 0.43 | 3.39  | 4.62  |           |   | 1.42 | 0.44 | 1.06 |                 | 4.40   |
| 1"           | 24   | 79.0  | 108   | 160   | 1.6  | 51    | 16   | 10   | 14   | 104   | 127   | 1/4" UNC  | 4 | 50   | 11.2 | 35.5 | F05             | 3.15   |
|              | 0.95 | 3.12  | 4.25  | 6.30  | 0.06 | 2.00  | 0.62 | 0.39 | 0.55 | 4.09  | 5.00  |           |   | 1.97 | 0.44 | 1.40 |                 | 6.93   |
| 1 1/2        | 38   | 98.5  | 127   | 230   | 1.6  | 73    | 16   | 14   | 20   | 125   | 165   | 5/16" UNC | 4 | 70   | 14.3 | 49   | F07             | 6.26   |
|              | 1.50 | 3.88  | 5.00  | 9.06  | 0.06 | 2.88  | 0.62 | 0.55 | 0.79 | 4.92  | 6.50  |           |   | 2.76 | 0.56 | 1.93 |                 | 13.77  |
| 2"           | 50   | 120.5 | 152   | 230   | 1.6  | 92    | 19   | 14   | 20   | 134.5 | 178   | 5/16" UNC | 4 | 70   | 15.9 | 49   | F07             | 9.30   |
|              | 1.97 | 4.75  | 5.98  | 9.06  | 0.06 | 3.62  | 0.75 | 0.55 | 0.79 | 5.30  | 7.00  |           |   | 2.76 | 0.63 | 1.93 |                 | 20.46  |
| 2 1/2        | 65   | 139.7 | 178   | 400   | 1.6  | 104.6 | 19   | 17   | 25   | 170.5 | 190.5 | 3/8" UNC  | 4 | 102  | 17.5 | 61   | F10             | 16.82  |
|              | 2.56 | 5.50  | 7.00  | 15.75 | 0.06 | 4.12  | 0.75 | 0.67 | 0.98 | 6.71  | 7.50  |           |   | 4.02 | 0.69 | 2.40 |                 | 37.00  |
| 3"           | 76   | 152.5 | 190   | 400   | 1.6  | 127   | 19   | 17   | 25   | 181.5 | 203   | 3/8" UNC  | 4 | 102  | 19.1 | 61   | F10             | 22.00  |
|              | 3.00 | 6.00  | 7.48  | 15.75 | 0.06 | 5.00  | 0.75 | 0.67 | 0.98 | 7.15  | 8.00  |           |   | 4.02 | 0.75 | 2.40 |                 | 48.40  |
| 4"           | 100  | 190.5 | 229   | 460   | 1.6  | 157   | 19   | 23   | 34   | 205.5 | 229   | 1/2" UNC  | 8 | 125  | 23.9 | 73   | F12             | 37.00  |
|              | 3.94 | 7.50  | 9.02  | 18.11 | 0.06 | 6.18  | 0.75 | 0.91 | 1.34 | 8.09  | 9.02  |           |   | 4.92 | 0.94 | 2.87 |                 | 81.40  |
| 6"           | 150  | 241.5 | 279   | 1000  | 1.6  | 216   | 22   | 27   | 40   | 289.5 | 394   | 5/8" UNC  | 8 | 140  | 25.4 | 90   | F14             | 85.3   |
|              | 5.91 | 9.50  | 10.98 | 39.37 | 0.06 | 8.50  | 0.88 | 1.06 | 1.57 | 11.40 | 15.51 |           |   | 5.51 | 1.00 | 3.54 |                 | 187.66 |

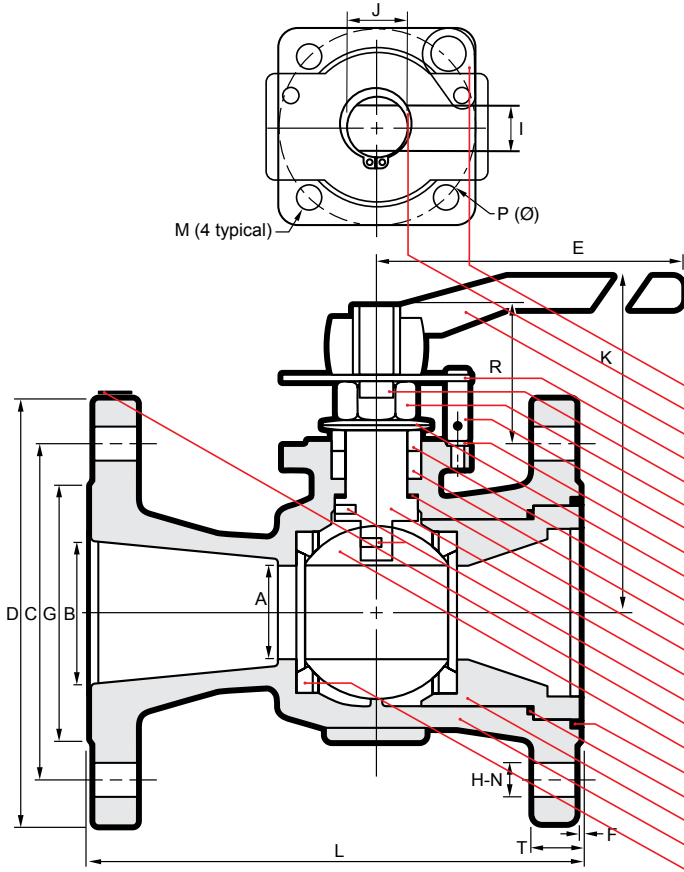
# F Series Flanged Stainless Steel Ball Valves

## F-300-SS-R-N

Reduced port, One piece body  
ANSI B16.34 Class 300  
Blowout-proof stem  
ISO 5211 Mounting pad  
Floating Ball, Anti-static device  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



3.10



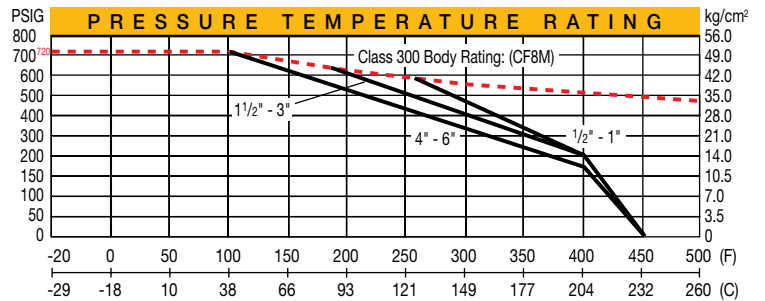
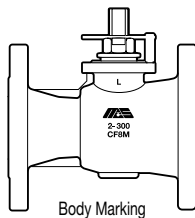
### NAME / MATERIAL

| Model Code;  | *FS                    |
|--|------------------------|
| 1. Lock Plate / Stainless Steel A276 Type 304            |                        |
| 2. Retaining Ring / Carbon Steel                         |                        |
| 3. Handle / Ductile Iron                                 |                        |
| 4. Stopper Plate / Stainless Steel A276 Type 304         |                        |
| 5. Lock Washer / Stainless Steel A276 Type 304           |                        |
| 6. Gland Nut / Stainless Steel A276 Type 304             |                        |
| 7. Stopper Pin / Stainless Steel A276 Type 304           |                        |
| 8. Lock Washer / Stainless Steel A276 Type 304           |                        |
| 9. Belleville Washer / Stainless Steel 301               |                        |
| 10. Gland / Stainless Steel A276 Type 304                |                        |
| 11. Packing / PTFE                                       | (Graphite)             |
| 12. Thrust Washer / R-PTFE 15% Glass-Filled              |                        |
| 13. Stem / Stainless Steel A276 Type 316                 |                        |
| 14. Anti-Static Device / Stainless Steel A276 Type 304   |                        |
| 15. Identification Plate / Stainless Steel A276 Type 304 |                        |
| 16. Ball / Stainless Steel A351 - CF8M (316)             |                        |
| 17. N/A  | (Body Seal / Graphite) |
| 18. Body Seal / PTFE                                     |                        |
| 19. Body Insert / Stainless Steel A351 - CF8M (316)      |                        |
| 20. Body / Stainless Steel A351 - CF8M (316)             |                        |
| 21. Seat / PTFE (TFM-1600)                               |                        |

\*Fire Safe Certified to API-607

|                           |  |       |      |      |     |        |
|---------------------------|--|-------|------|------|-----|--------|
| FIG.                      | F-300-SS-R-N                           | CLASS | 300  | SIZE | 2   | B16.34 |
| SEAT                      | PTFE                                   | BODY  | CF8M | TRIM | 316 | NACE   |
| RATING                    | 720 PSIG AT 100°F/195 PSIG AT 400° MAX |       |      |      |     |        |
| SS - IDENTIFICATION PLATE |  |       |      |      |     |        |

|                              |  |       |      |      |     |        |
|------------------------------|--|-------|------|------|-----|--------|
| FIG.                         | F-300-SS-R-FS-N                        | CLASS | 300  | SIZE | 2   | B16.34 |
| SEAT                         | PTFE                                   | BODY  | CF8M | TRIM | 316 | NACE   |
| RATING                       | 720 PSIG AT 100°F/195 PSIG AT 400° MAX |       |      |      |     |        |
| SS-FS - IDENTIFICATION PLATE |  |       |      |      |     |        |



| size | D    |      | I     |       | M     |      | E    |      | N    |      | S    |       | I        |    | O    |      | N    |     | ISO 5211 flange type | Weight (kg/lb) |
|------|------|------|-------|-------|-------|------|------|------|------|------|------|-------|----------|----|------|------|------|-----|----------------------|----------------|
|      | A    | B    | C     | D     | E     | F    | G    | H    | I    | J    | K    | L     | M        | N  | P    | T    | R    |     |                      |                |
| 2"   | 38   | 50   | 127   | 165   | 230   | 1.6  | 92   | 19   | 14   | 20   | 125  | 216   | 5/16 UNC | 8  | 70   | 22.3 | 49   | F07 | 11.19                |                |
|      | 1.50 | 1.97 | 5.00  | 6.50  | 9.06  | 0.06 | 3.62 | 0.75 | 0.55 | 0.79 | 4.92 | 8.50  |          |    | 2.76 | 0.88 | 1.93 |     | 24.62                |                |
| 3"   | 58   | 76   | 168   | 210   | 400   | 1.6  | 127  | 22   | 17   | 25   | 168  | 283   | 3/8" UNC | 8  | 70   | 28.5 | 59   | F07 | 23.47                |                |
|      | 2.28 | 3.00 | 6.61  | 8.27  | 15.75 | 0.06 | 5.00 | 0.88 | 0.67 | 0.98 | 6.61 | 11.14 |          |    | 2.76 | 1.12 | 2.32 |     | 51.63                |                |
| 4"   | 76   | 102  | 200   | 254   | 400   | 1.6  | 157  | 22   | 17   | 25   | 183  | 305   | 3/8" UNC | 8  | 70   | 31.8 | 59   | F07 | 35.72                |                |
|      | 3.00 | 4.02 | 7.87  | 10.00 | 15.75 | 0.06 | 6.18 | 0.88 | 0.67 | 0.98 | 7.20 | 12.00 |          |    | 2.76 | 1.25 | 2.32 |     | 78.58                |                |
| 6    | 114  | 152  | 270   | 318   | 750   | 1.6  | 216  | 22   | 23   | 34   | 245  | 403   | 1/2" UNC | 12 | 125  | 36.6 | 73   | F12 | 79.21                |                |
|      | 4.49 | 5.98 | 10.63 | 12.52 | 29.53 | 0.06 | 8.50 | 0.88 | 0.91 | 1.34 | 9.65 | 15.87 |          |    | 4.92 | 1.44 | 2.87 |     | 174.26               |                |

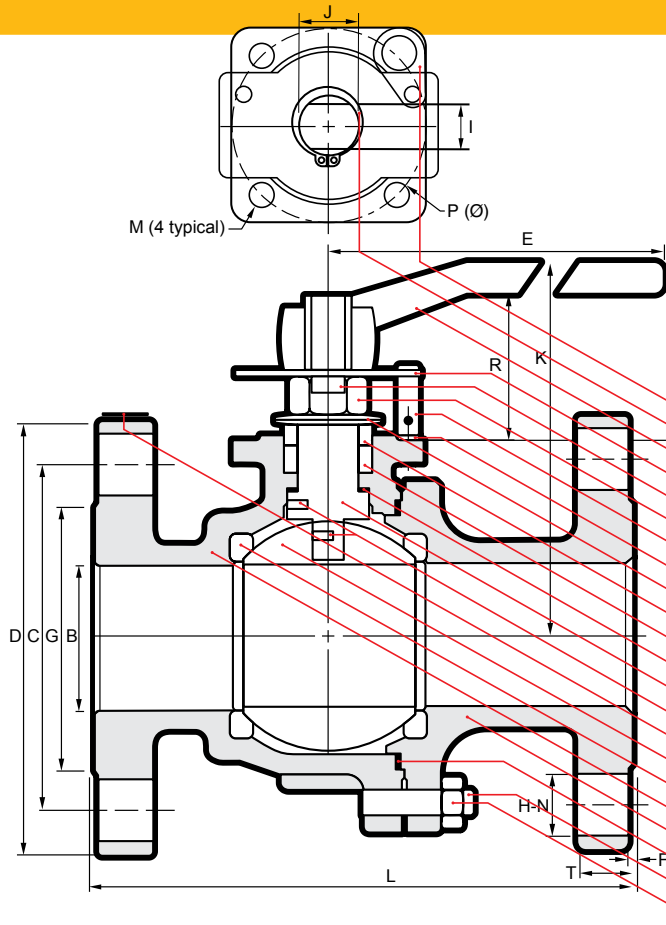
# F Series Flanged Stainless Steel Ball Valves

## F-300-SS-F-N

Full port, Two piece body  
ANSI B16.34 Class 300  
Blowout-proof stem  
ISO 5211 Mounting pad  
Floating Ball, Anti-static device  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



3.11

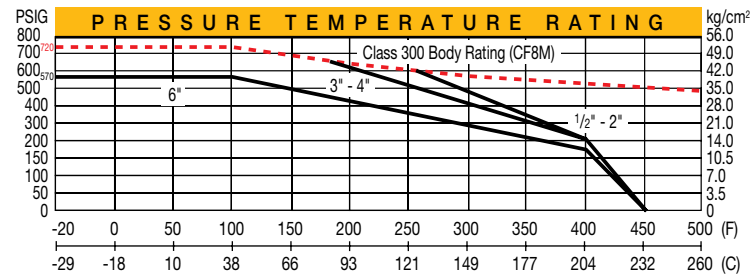
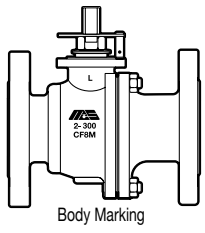


### NAME / MATERIAL

| Model Code:                | SS                                | *FS        |
|----------------------------|-----------------------------------|------------|
| 1. Lock Plate /            | Stainless Steel A276 Type 304     |            |
| 2. Retaining Ring /        | Carbon Steel                      |            |
| 3. Handle /                | Ductile Iron                      |            |
| 4. Stopper Plate /         | Stainless Steel A276 Type 304     |            |
| 5. Lock Washer /           | Stainless Steel A276 Type 304     |            |
| 6. Gland Nut /             | Stainless Steel A276 Type 304     |            |
| 7. Stopper Pin /           | Stainless Steel A276 Type 304     |            |
| 8. Lock Washer /           | Stainless Steel A276 Type 304     |            |
| 9. Belleville Washer /     | Stainless Steel 301               |            |
| 10. Gland /                | Stainless Steel A276 Type 304     |            |
| 11. Packing /              | PTFE                              | (Graphite) |
| 12. Thrust Washer /        | R-PTFE 15% Glass-Filled           |            |
| 13. Stem /                 | Stainless Steel A276 Type 316     |            |
| 14. Anti-Static Device /   | Stainless Steel A276 Type 304     |            |
| 15. Identification Plate / | Stainless Steel A276 Type 304     |            |
| 16. Ball /                 | Stainless Steel A351 - CF8M (316) |            |
| 17. Seat /                 | PTFE (TFM-1600)                   |            |
| 18. Body /                 | Stainless Steel A351 - CF8M (316) |            |
| 19. Cap /                  | Stainless Steel A351 - CF8M (316) |            |
| 20. Body Seal /            | PTFE                              | (Graphite) |
| 21. Bolt Nut /             | A194 Grade 8MA                    |            |
| 22. Stud Bolt /            | A193 Grade B8M                    |            |

\*Fire Safe Certified to API-607

|        |  |       |      |      |     |        |
|--------|--|-------|------|------|-----|--------|
| FIG.   | F-300-SS-F-N                           | CLASS | 300  | SIZE | 2   | B16.34 |
| SEAT   | PTFE                                   | BODY  | CF8M | TRIM | 316 | NACE   |
| RATING | 720 PSIG AT 100°F/195 PSIG AT 400° MAX |       |      |      |     |        |
|        | SS - IDENTIFICATION PLATE              |       |      |      |     |        |

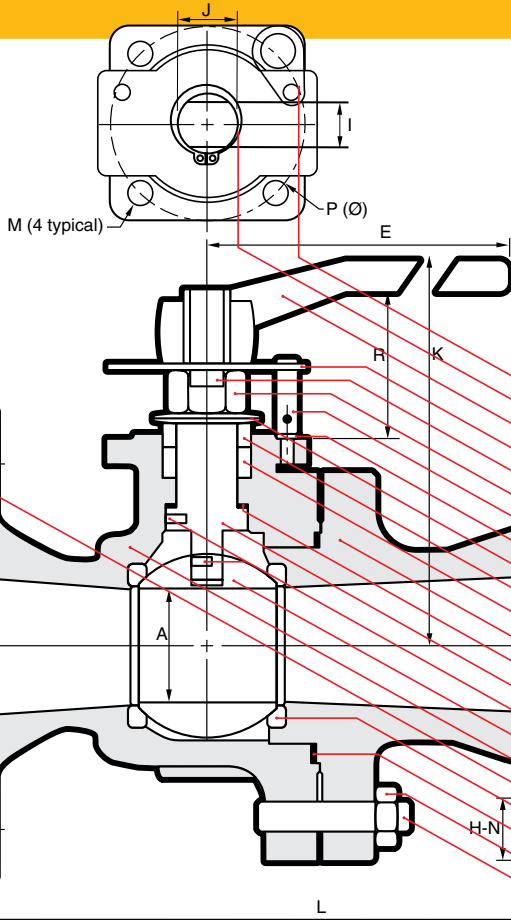
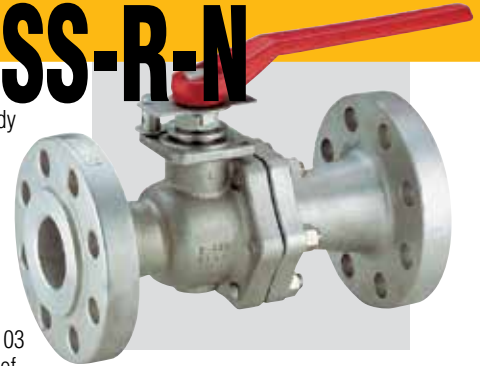


| size (mm/in) | D    | I     | M     | E     | N    | S     | I    | O    | N    | S     | ISO 5211 flange | kg/lb     |    |      |      |      |     |        |
|--------------|------|-------|-------|-------|------|-------|------|------|------|-------|-----------------|-----------|----|------|------|------|-----|--------|
| 1/2          | 15   | 66.5  | 95    | 130   | 1.6  | 35    | 16   | 8    | 11   | 83    | 140             | 1/4" UNC  | 4  | 36   | 14.2 | 27   | F03 | 2.20   |
|              | 0.59 | 2.62  | 3.75  | 5.12  | 0.06 | 1.38  | 0.62 | 0.31 | 0.43 | 3.27  | 5.50            | 1/4" UNC  | 4  | 1.42 | 0.56 | 1.06 | F03 | 4.84   |
| 3/4          | 19   | 82.5  | 117   | 130   | 1.6  | 43    | 19   | 8    | 11   | 86    | 152.5           | 1/4" UNC  | 4  | 36   | 15.8 | 27   | F03 | 3.29   |
|              | 0.75 | 3.25  | 4.62  | 5.12  | 0.06 | 1.69  | 0.75 | 0.31 | 0.43 | 3.39  | 6.00            | 1/4" UNC  | 4  | 1.42 | 0.62 | 1.06 | F03 | 7.23   |
| 1"           | 24   | 89.0  | 124   | 160   | 1.6  | 51    | 19   | 10   | 14   | 104   | 165             | 1/4" UNC  | 4  | 50   | 17.5 | 35.5 | F05 | 4.76   |
|              | 0.95 | 3.50  | 4.88  | 6.30  | 0.06 | 2.00  | 0.75 | 0.39 | 0.55 | 4.09  | 6.50            | 1/4" UNC  | 4  | 1.97 | 0.69 | 1.40 | F05 | 10.47  |
| 1 1/2        | 38   | 114.5 | 156   | 230   | 1.6  | 73    | 22   | 14   | 20   | 125   | 190.5           | 5/16" UNC | 4  | 70   | 20.6 | 49   | F07 | 9.14   |
|              | 1.50 | 4.50  | 6.14  | 9.06  | 0.06 | 2.88  | 0.88 | 0.55 | 0.79 | 4.92  | 7.50            | 5/16" UNC | 4  | 2.76 | 0.81 | 1.93 | F07 | 20.10  |
| 2"           | 50   | 127.0 | 165   | 230   | 1.6  | 92    | 19   | 14   | 20   | 134.5 | 216             | 5/16" UNC | 8  | 70   | 22.3 | 49   | F07 | 12.80  |
|              | 1.97 | 5.00  | 6.50  | 9.06  | 0.06 | 3.62  | 0.75 | 0.55 | 0.79 | 5.30  | 8.50            | 5/16" UNC | 8  | 2.76 | 0.88 | 1.93 | F07 | 28.16  |
| 2 1/2        | 65   | 149.4 | 190.5 | 400   | 1.6  | 104.6 | 22   | 17   | 25   | 170.5 | 241.3           | 3/8" UNC  | 8  | 102  | 25.4 | 61   | F10 | 22.73  |
|              | 2.56 | 5.88  | 7.50  | 15.75 | 0.06 | 4.12  | 0.88 | 0.67 | 0.98 | 6.71  | 9.50            | 3/8" UNC  | 8  | 4.02 | 1.00 | 2.40 | F10 | 50.00  |
| 3"           | 76   | 168   | 210   | 400   | 1.6  | 127   | 22   | 17   | 25   | 181.5 | 283             | 3/8" UNC  | 8  | 102  | 28.5 | 61   | F10 | 29.60  |
|              | 3.00 | 6.62  | 8.27  | 15.75 | 0.06 | 5.00  | 0.88 | 0.67 | 0.98 | 7.15  | 11.14           | 3/8" UNC  | 8  | 4.02 | 1.12 | 2.40 | F10 | 65.12  |
| 4"           | 100  | 200   | 254   | 750   | 1.6  | 157   | 22   | 23   | 34   | 205.5 | 305             | 1/2" UNC  | 8  | 125  | 31.8 | 73   | F12 | 50.40  |
|              | 3.94 | 7.87  | 10.00 | 29.53 | 0.06 | 6.18  | 0.88 | 0.91 | 1.34 | 8.09  | 12.00           | 1/2" UNC  | 8  | 4.92 | 1.25 | 2.87 | F12 | 110.88 |
| 6"           | 150  | 270   | 318   | 1000  | 1.6  | 216   | 22   | 27   | 40   | 289.5 | 403             | 5/8" UNC  | 12 | 140  | 36.6 | 90   | F14 | 107.3  |
|              | 5.91 | 10.63 | 12.52 | 39.37 | 0.06 | 8.50  | 0.88 | 1.06 | 1.57 | 11.40 | 15.87           | 5/8" UNC  | 12 | 5.51 | 1.44 | 3.54 | F14 | 236.06 |

# F Series Flanged Stainless Steel Ball Valves

## F-600-SS-R-N

Reduced port, Two piece body  
ANSI B16.34 Class 600  
ISO 5211 Mounting pad  
Blowout-proof stem  
Anti-static device  
Floating Ball  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156

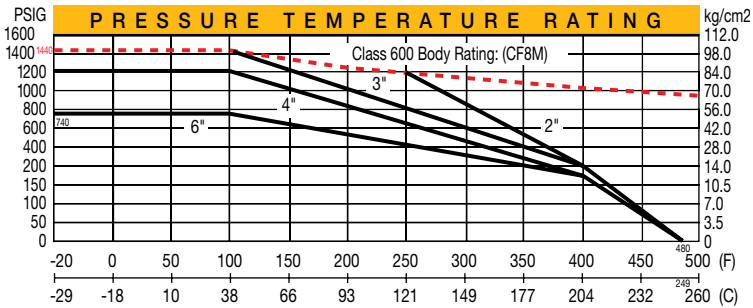
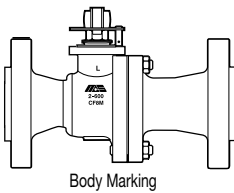


3.12

### NAME / MATERIAL

| Model Code;                | SS                                | *FS        |
|----------------------------|-----------------------------------|------------|
| 1. Lock Plate /            | Stainless Steel A276 Type 304     |            |
| 2. Retaining Ring /        | Carbon Steel                      |            |
| 3. Handle /                | Ductile Iron                      |            |
| 4. Stopper Plate /         | Stainless Steel A276 Type 304     |            |
| 5. Lock Washer /           | Stainless Steel A276 Type 304     |            |
| 6. Gland Nut /             | Stainless Steel A276 Type 304     |            |
| 7. Stopper Pin /           | Stainless Steel A276 Type 304     |            |
| 8. Lock Washer /           | Stainless Steel A276 Type 304     |            |
| 9. Belleville Washer /     | Stainless Steel 301               |            |
| 10. Gland /                | Stainless Steel A276 Type 304     |            |
| 11. Packing /              | PTFE                              | (Graphite) |
| 12. Cap /                  | Stainless Steel A351 - CF8M (316) |            |
| 13. Thrust Washer /        | R-PTFE 15% Glass-Filled           |            |
| 14. Stem /                 | Stainless Steel A276 Type 316     |            |
| 15. Anti-Static Device /   | Stainless Steel A276 Type 304     |            |
| 16. Ball /                 | Stainless Steel A351 - CF8M (316) |            |
| 17. Body /                 | Stainless Steel A351 - CF8M (316) |            |
| 18. Identification Plate / | Stainless Steel A276 Type 304     |            |
| 19. Seat /                 | R-PTFE 25% Carbon-Filled          |            |
| 20. Body Seal /            | 304 + Graphite                    |            |
| 21. Bolt Nut /             | A194 Grade 8MA                    |            |
| 22. Stud Bolt /            | A193 Grade B8M                    |            |

|                           |   |       |      |      |     |        |
|---------------------------|---|-------|------|------|-----|--------|
| FIG.                      | F-600-SS-R-N                            | CLASS | 600  | SIZE | 2   | B16.34 |
| SEAT                      | C-PTFE                                  | BODY  | CF8M | TRIM | 316 | NACE   |
| RATING                    | 1440 PSIG AT 100°F/195 PSIG AT 400° MAX |       |      |      |     |        |
| SS - IDENTIFICATION PLATE |   |       |      |      |     |        |



\*Fire Safe Certified to API-607

| size | D I M E N S I O N S |      |       |       |       |      |      |      |      |      |       |       |          |    |      |      |      |                      |        | Weight (kg/lb) |
|------|---------------------|------|-------|-------|-------|------|------|------|------|------|-------|-------|----------|----|------|------|------|----------------------|--------|----------------|
|      | A                   | B    | C     | D     | E     | F    | G    | H    | I    | J    | K     | L     | M        | N  | P    | T    | R    | ISO 5211 flange type |        |                |
| 2"   | 38                  | 50   | 127   | 165   | 230   | 6.35 | 92   | 19   | 14   | 20   | 144.5 | 292   | 5/16 UNC | 8  | 70   | 31.8 | 49   | F07                  | 15.72  |                |
|      | 1.50                | 1.97 | 5.00  | 6.50  | 9.06  | 0.25 | 3.62 | 0.75 | 0.55 | 0.79 | 5.69  | 11.50 |          |    | 2.76 | 1.25 | 1.93 |                      | 34.58  |                |
| 3"   | 58                  | 76   | 168   | 210   | 400   | 6.35 | 127  | 22.3 | 17   | 25   | 180   | 356   | 3/8 UNC  | 8  | 70   | 38.1 | 59   | F07                  | 33.05  |                |
|      | 2.28                | 3.00 | 6.61  | 8.27  | 15.75 | 0.25 | 5.00 | 0.88 | 0.67 | 0.98 | 7.09  | 14.02 |          |    | 2.76 | 1.5  | 2.32 |                      | 72.71  |                |
| 4"   | 76                  | 102  | 216   | 273   | 400   | 6.35 | 157  | 25.4 | 17   | 25   | 194   | 432   | 3/8 UNC  | 8  | 70   | 44.5 | 59   | F07                  | 61.64  |                |
|      | 3.00                | 4.02 | 8.50  | 10.75 | 15.75 | 0.25 | 6.18 | 1.00 | 0.67 | 0.98 | 7.64  | 17.00 |          |    | 2.76 | 1.75 | 2.32 |                      | 135.61 |                |
| 6"   | 114                 | 152  | 292   | 356   | 750   | 6.35 | 216  | 28.5 | 23   | 34   | 256   | 559   | 1/2 UNC  | 12 | 125  | 54.1 | 73   | F12                  | 131.83 |                |
|      | 4.49                | 5.98 | 11.50 | 14.02 | 29.53 | 0.25 | 8.50 | 1.12 | 0.91 | 1.34 | 10.08 | 22.00 |          |    | 4.92 | 2.13 | 2.87 |                      | 290.03 |                |

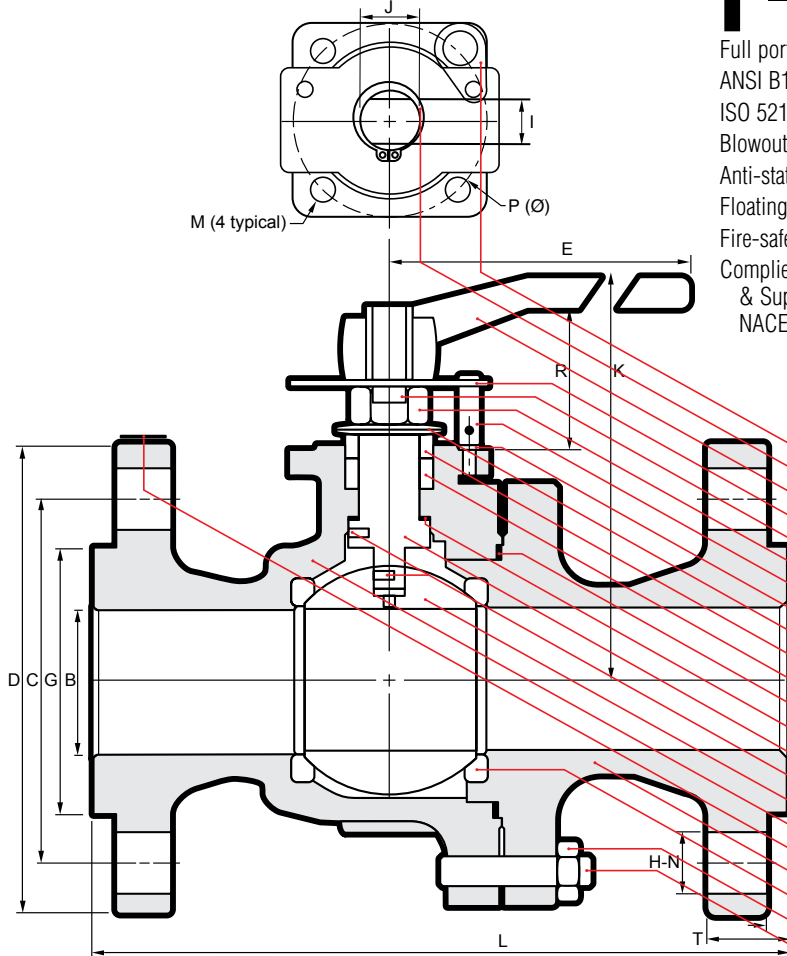
# F Series Flanged Stainless Steel Ball Valves

## F-600-SS-F-N

Full port, Two piece body  
ANSI B16.34 Class 600  
ISO 5211 Mounting pad  
Blowout-proof stem  
Anti-static device  
Floating Ball  
Fire-safe design  
Complies with NACE MR-0103  
& Supplier Requirements of  
NACE MR-0175/ISO 15156



3.13



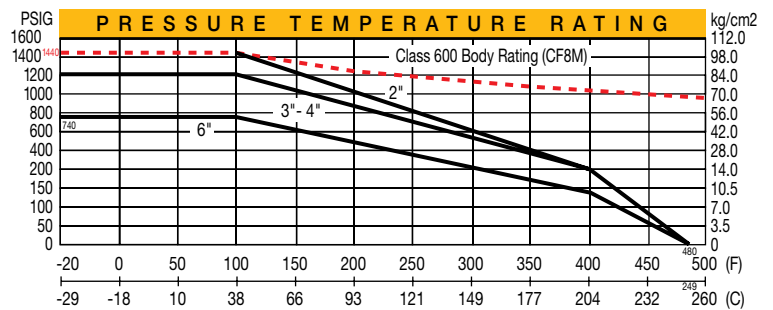
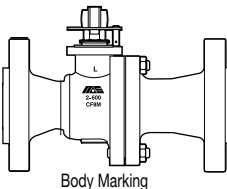
### NAME / MATERIAL

| Model Code; | SS   | *FS        |
|-------------|--|------------|
| 1.          | Lock Plate / Stainless Steel A276 Type 304           |            |
| 2.          | Retaining Ring / Carbon Steel                        |            |
| 3.          | Handle / Ductile Iron                                |            |
| 4.          | Stopper Plate / Stainless Steel A276 Type 304        |            |
| 5.          | Lock Washer / Stainless Steel A276 Type 304          |            |
| 6.          | Gland Nut / Stainless Steel A276 Type 304            |            |
| 7.          | Stopper Pin / Stainless Steel A276 Type 304          |            |
| 8.          | Lock Washer / Stainless Steel A276 Type 304          |            |
| 9.          | Belleville Washer / Stainless Steel 301              |            |
| 10.         | Gland / Stainless Steel A276 Type 304                |            |
| 11.         | Packing / PTFE                                       | (Graphite) |
| 12.         | Body Seal / 304 + Graphite                           |            |
| 13.         | Thrust Washer / R-PTFE 15% Glass-Filled              |            |
| 14.         | Stem / Stainless Steel 316 - A276 Type 316           |            |
| 15.         | Anti-Static Device / Stainless Steel A276 Type 304   |            |
| 16.         | Ball / Stainless Steel A351 - CF8M (316)             |            |
| 17.         | Body / Stainless Steel A351 - CF8M (316)             |            |
| 18.         | Identification Plate / Stainless Steel A276 Type 304 |            |
| 19.         | Cap / Stainless Steel A351 - CF8M (316)              |            |
| 20.         | Seat / R-PTFE 25% Carbon-Filled                      |            |
| 21.         | Bolt Nut / A194 Grade BMA                            |            |
| 22.         | Stud Bolt / A193 Grade B8M                           |            |

\*Fire Safe Certified to API-607

|        |   |       |      |      |     |        |
|--------|---|-------|------|------|-----|--------|
| FIG.   | F-600-SS-F-N                            | CLASS | 600  | SIZE | 2   | B16.34 |
| SEAT   | C-PTFE-S                                | BODY  | CF8M | TRIM | 316 | NACE   |
| RATING | 1440 PSIG AT 100°F/195 PSIG AT 400° MAX |       |      |      |     |        |

SS-FS - IDENTIFICATION PLATE



| size | D    |       | I     |       | M    |      | E    |      | N    |       | S     |          | I  |      | O    |      | N   |        | ISO 5211<br>flange type | Weight<br>(kg/lb) |
|------|------|-------|-------|-------|------|------|------|------|------|-------|-------|----------|----|------|------|------|-----|--------|-------------------------|-------------------|
|      | B    | C     | D     | E     | F    | G    | H    | I    | J    | K     | L     | M        | N  | P    | T    | R    |     |        |                         |                   |
| 2"   | 50   | 127   | 165   | 230   | 6.35 | 92   | 19   | 14   | 20   | 158   | 292   | 5/16 UNC | 8  | 70   | 31.8 | 49   | F07 | 17.26  |                         |                   |
|      | 1.97 | 5.00  | 6.50  | 9.06  | 0.25 | 3.62 | 0.75 | 0.55 | 0.79 | 6.22  | 11.50 |          |    | 2.76 | 1.25 | 1.93 |     | 37.97  |                         |                   |
| 3"   | 76   | 168   | 210   | 400   | 6.35 | 127  | 22.3 | 17   | 25   | 194   | 356   | 3/8 UNC  | 8  | 102  | 38.1 | 61   | F10 | 39.25  |                         |                   |
|      | 3.00 | 6.61  | 8.27  | 15.75 | 0.25 | 5.00 | 0.88 | 0.67 | 0.98 | 7.64  | 14.02 |          |    | 4.02 | 1.50 | 2.40 |     | 86.35  |                         |                   |
| 4"   | 100  | 216   | 273   | 460   | 6.35 | 157  | 25.4 | 23   | 34   | 215.5 | 432   | 1/2 UNC  | 8  | 125  | 44.5 | 73   | F12 | 71.74  |                         |                   |
|      | 3.94 | 8.50  | 10.75 | 18.11 | 0.25 | 6.18 | 1.00 | 0.91 | 1.34 | 8.48  | 17.00 |          |    | 4.92 | 1.75 | 2.87 |     | 157.83 |                         |                   |
| 6"   | 150  | 292   | 356   | 1000  | 6.35 | 216  | 28.5 | 27   | 40   | 301.5 | 559   | 5/8 UNC  | 12 | 140  | 54.1 | 90   | F14 | 161.62 |                         |                   |
|      | 5.91 | 11.50 | 14.02 | 39.37 | 0.25 | 8.50 | 1.12 | 1.06 | 1.57 | 11.87 | 22.00 |          |    | 5.51 | 2.13 | 3.54 |     | 355.56 |                         |                   |

