

# Series B42D Ball Valve

ANSI Class 300 Flanged, Fire-Safe Ball Valve  
Sizes 1/2" ~ 6"



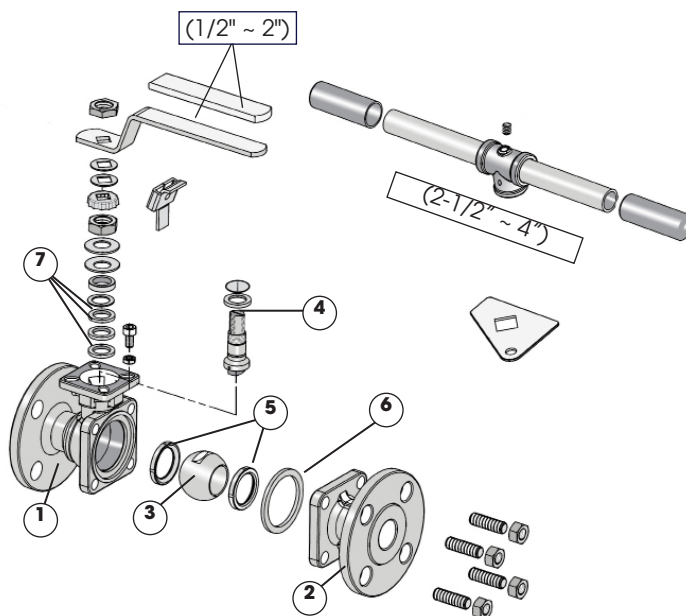
The SVF Series B42D Flanged Ball Valves are high performance, full ported valves certified to API-607 fire-safe standard (with GRAFOIL body seals), API-608 and feature an ISO 5211 mounting pad for easy actuation. The B42D Series is certified API 641 low fugitive emissions with SLADE stem packing.

## SERIES B42D DESIGN FEATURES

- ✓ Fire-Safe certification to API-607 (with GRAFOIL® body seals only)
- ✓ Certified to API-608 to meet the additional design, operation and performance requirements of the Petroleum Refining, Petrochemical Processing and Chemical Processing Industries
- ✓ API-641 Certified stem packing for low fugitive emissions (with SLADE packing)
- ✓ Live-loaded stem packing ensures seal-tight pressure containment even under thermal cycling
- ✓ NACE MR0175 Option
- ✓ ISO 5211 mounting pad for direct mount automation
- ✓ Standard seat material is TFM1600™
- ✓ Blowout proof stem adds safety & reliability
- ✓ Standard Anti-Static stem
- ✓ Latch lock handle fully compatible with OSHA

## MATERIALS OF CONSTRUCTION

| ITEM | DESCRIPTION   | MATERIALS SPECIFICATIONS                                             |
|------|---------------|----------------------------------------------------------------------|
| 1    | Body          | 316 Stainless Steel (ASTM A351 CF8M)<br>Carbon Steel (ASTM A216 WCB) |
| 2    | End Connector | 316 Stainless Steel (ASTM A351 CF8M)<br>Carbon Steel (ASTM A216 WCB) |
| 3    | Ball          | 316 Stainless Steel (ASTM A182 F316)                                 |
| 4    | Stem          | 316 STAINLESS STEEL (ASTM A276)                                      |
| 5    | Seat          | TFM1600™, SupraLon™                                                  |
| 6    | Body Seal     | GRAFOIL® + 316 Stainless Steel, PTFE                                 |
| 7    | Stem Seal     | GRAFOIL®, PTFE or Slade                                              |



## SPECIFICATION STANDARDS OF COMPLIANCE

- Design - ASME B16.34, NACE MR 0175
- Face to Face: ASME B16.10
- End Flange: ASME B16.5
- Wall Thickness: ASME B16.34
- Inspection & Testing: API 598,
- Fire Safe: API 607, ISO 10497
- Fugitive Emissions: API 641



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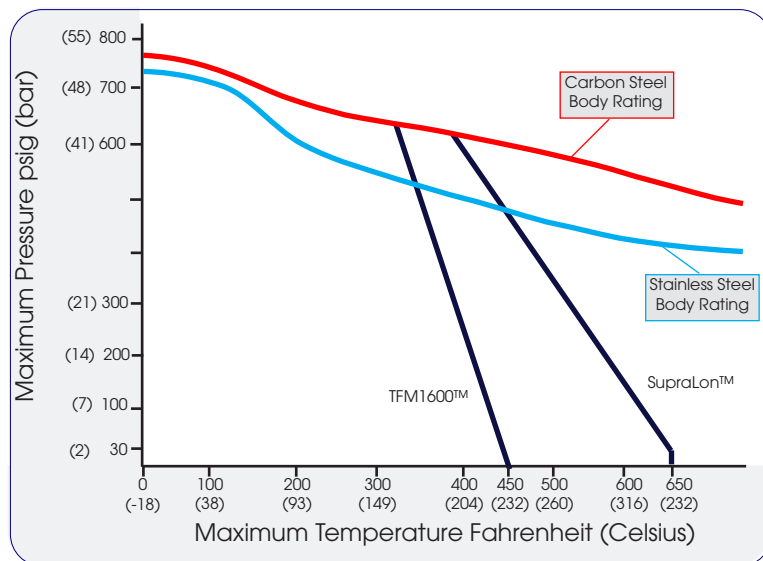
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## DIMENSIONS, WEIGHT, CV, TORQUE

| Size   | A    |     | B    |     | D    |     | L    |     | Weight |      | Cv   | Torque*<br>TFM1600™ |       | Torque*<br>SupraLon™ |       |
|--------|------|-----|------|-----|------|-----|------|-----|--------|------|------|---------------------|-------|----------------------|-------|
|        | in.  | mm  | in.  | mm  | in.  | mm  | in.  | mm  | lbs    | kg   |      | in-lbf              | Nm    | in-lbf               | Nm    |
| 1/2"   | 5.5  | 140 | 0.59 | 15  | 4.72 | 120 | 3.38 | 86  | 4.2    | 1.91 | 38   | 62                  | 7     | 87                   | 9.8   |
| 3/4"   | 6.0  | 152 | 0.79 | 20  | 4.72 | 120 | 3.74 | 95  | 6.2    | 2.81 | 69   | 89                  | 10    | 125                  | 14.1  |
| 1"     | 6.5  | 165 | 0.98 | 25  | 5.70 | 145 | 3.97 | 101 | 10     | 4.54 | 113  | 106                 | 12    | 148                  | 16.8  |
| 1-1/2" | 7.5  | 190 | 1.50 | 38  | 7.48 | 190 | 4.92 | 125 | 20     | 9.07 | 273  | 279                 | 31.5  | 390                  | 44.1  |
| 2"     | 8.5  | 216 | 1.97 | 50  | 7.48 | 190 | 5.19 | 132 | 23     | 10.4 | 485  | 285                 | 32.2  | 399                  | 45.1  |
| 2-1/2" | 9.5  | 241 | 2.55 | 65  | 17.7 | 450 | 6.41 | 163 | 34     | 15.4 | 816  | 443                 | 50    | 620                  | 70    |
| 3"     | 11.1 | 282 | 3.07 | 76  | 17.7 | 450 | 6.73 | 171 | 59     | 26.8 | 1185 | 708                 | 80    | 991                  | 112   |
| 4"     | 12.0 | 305 | 3.94 | 100 | 17.7 | 450 | 7.83 | 199 | 94     | 42.6 | 2115 | 1110                | 125.4 | 1554                 | 175.6 |
| 6"     | 15.8 | 403 | 5.90 | 150 | 31.4 | 800 | 11.8 | 300 | 192    | 87.1 | 3900 | 2655                | 300   | 3717                 | 420   |

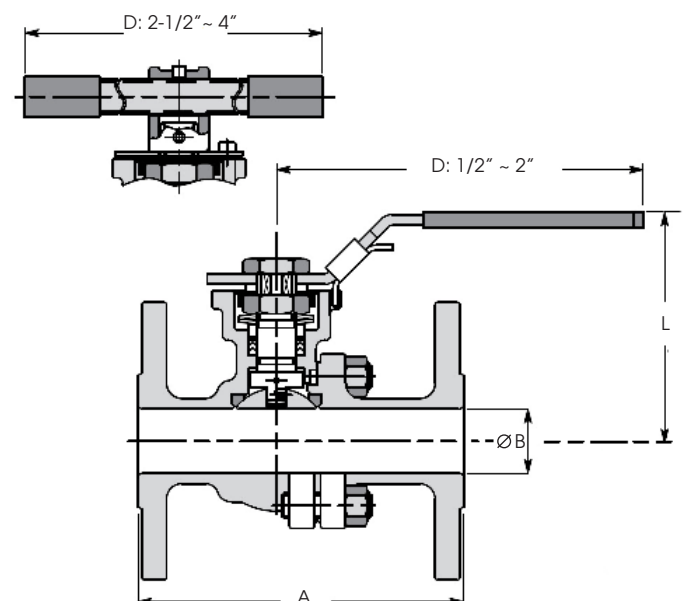
## B42D - PRESSURE/TEMPERATURE CHART



### Class 300

Note: Maximum pressure & temperature is limited to the seat material rating

\* At full differential pressure for clean fluids



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How To Order Guide (Columns 1 thru 11)

| 1<br>SERIES | 2<br>BODY                                                                          | 3<br>ENDS                                                                           | 4<br>BALL                                 | 5<br>STEM                                | 6<br>SEAT MATERIAL           |
|-------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------|
| B42D        | 4 = Carbon Steel<br>ASTM A216 WCB<br><br>6 = 316 Stainless Steel<br>ASTM A351 CF8M | 4 = Carbon Steel<br>ASTM A216 WCB<br><br>6 = 316L Stainless Steel<br>ASTM A351 CF8M | 6 = 316 Stainless Steel<br>ASTM A351 CF8M | 6 = 316 Stainless Steel<br>ASTM A276 316 | A = TFM1600™<br>S = SupraLon |

| 7<br>BODY SEAL          | 8<br>END CONNECTIONS                     | 9<br>VALVE SIZE                                                                                                                  | 10<br>OPTIONS*                            | 11<br>SPECIAL SERVICES*                                                                                                               |
|-------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| G = Grafoil<br>T = PTFE | RF2 = 300# Flanged<br>Ends (Raised Face) | 005 = 1/2"<br><br>007 = 3/4"<br><br>010 = 1"<br><br>015 = 1-1/2"<br><br>020 = 2"<br><br>030 = 3"<br><br>040 = 4"<br><br>060 = 6" | 00 = None<br>SX = ISO Cast Stem Extension | 00 = None<br>XC = Oxygen Cleaned<br>SF = Degreased<br>(Silicone Free)<br>UH = Vent/Relief Hole¹<br>FE = Fugitive Emissions<br>Packing |

Order Example: (B42D6666AGRF20150000) The Part Number will contain 20 digits.

Ordering Code Sequence >>

Sample Part Number >>

| 1            | 2             | 3            | 4    | 5    | 6             | 7             | 8               | 9          | 10       | 11                |
|--------------|---------------|--------------|------|------|---------------|---------------|-----------------|------------|----------|-------------------|
| B42D         | 6             | 6            | 6    | 6    | A             | G             | RF2             | 005        | 00       | 00                |
| Valve Series | Body Material | End Material | Ball | Stem | Seat Material | Seal Material | End Connections | Valve Size | Options* | Special Services* |

¹ Vent Hole is on the Upstream Side

\*Not all Options or Special Services available on all ball valves. Consult SVF for additional information.