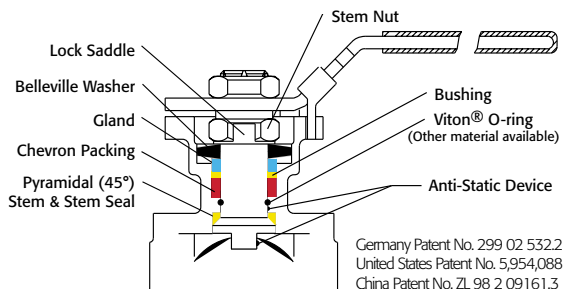




Triac Series 22 Ball Valves feature a high quality investment cast body and end. They are available in sizes from 1/4" to 3". Superior leak protection is accomplished by using our patented "Pyramidal" stem seal system shown in the graphic below. This advanced system protects against wear and leakage experienced by other ordinary ball valves.



| VALVE SIZE | VALVE Cv |
|------------|----------|
| 1/4" | 7 |
| 3/8" | 8 |
| 1/2" | 15 |
| 3/4" | 40 |
| 1" | 70 |
| 1-1/4" | 110 |
| 1-1/2" | 250 |
| 2" | 350 |
| 2-1/2" | 600 |
| 3" | 900 |



Easy to Automate!

See automated data sheets for pre-sized assemblies



Pneumatic



Electric



Series 22

DIRECT MOUNT 2-Piece Design

Sizes 1/4" - 3"

Available in 316SS

Full Port Valve

Threaded Ends

1000 psi WOG

NACE MR-0175

2-piece High Cycle Design

ISO 5211 Direct Actuator Mount

Blowout Proof Stem w/ Dual
Anti-Static Devices

RTFE Seats Standard

Pyramidal Stem Seal Packing
System

Lockable Manual Handle

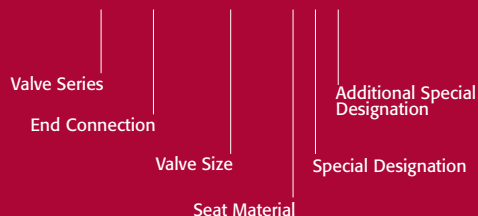
STANDARDS

| | |
|---------------------------|-----------------------|
| DESIGN | ANSI/ASME B16.34 |
| END CONNECTIONS | ASME B1.20.1 |
| SULFIDE STRESS PROTECTION | NACE MR0175 |
| MOUNTING | ISO 5211 |
| MARKING SYSTEM FOR VALVES | MSS SP-25, MSS SP-55 |
| SAFETY INTEGRITY | IEC 61508:2010; SIL 3 |
| MATERIAL CERTIFICATION | EN 10204-3.1 MTR |
| QUALITY ASSURANCE | ISO 9001:2008 |

HOW TO ORDER MANUAL VALVES

SAMPLE PART #

22-TH-0200-XXX

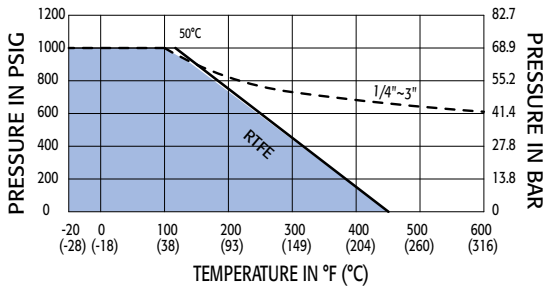


See part number matrix for itemized options

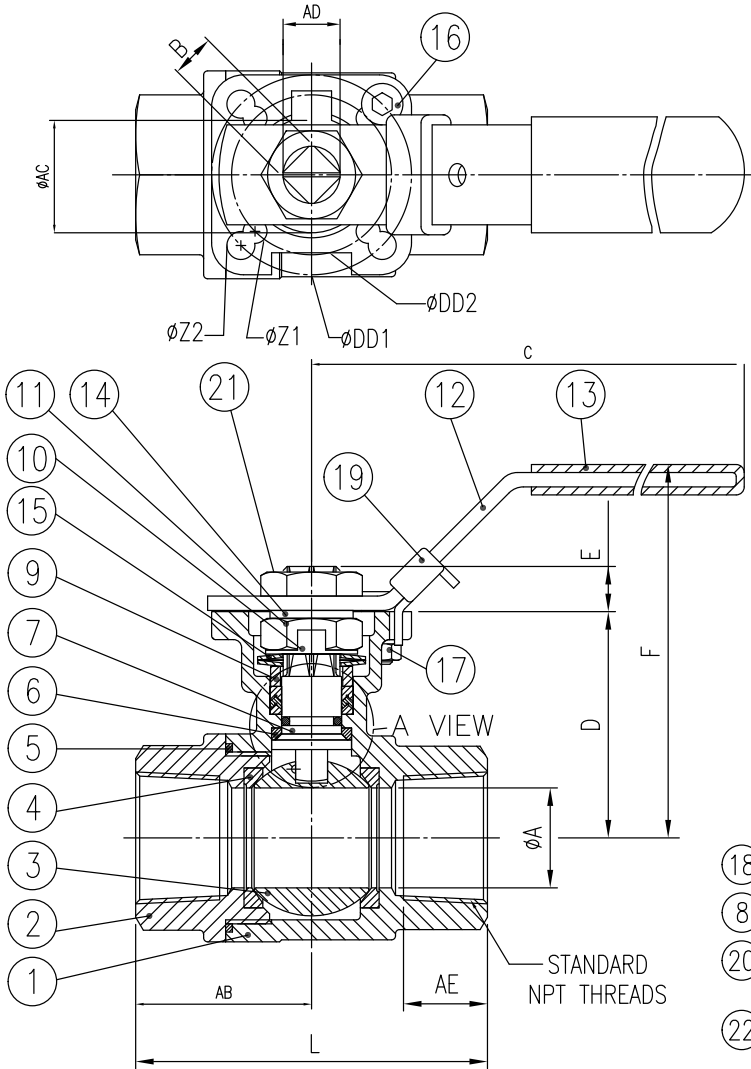
Series 22

Direct Mount High Cycle Full Port Ball Valve

Pressure vs. Temperature Chart



NOTE: Dotted line shows the rating for valve body. Solid line shows the rating for valve seat. Both ratings need to be considered when determining the limitation of the valve for specific application. Consult factory for other seat materials.



MATERIALS LIST

| NO. | PART NAME | QTY | MATERIAL |
|-----|--------------------|-----|-----------------------------------|
| 1 | BODY | 1 | ASTM A351 GRADE CF8M |
| 2 | END CAP | 1 | ASTM A351 GRADE CF8M |
| 3 | BALL | 1 | 1/4" THRU 3/8" ASTM A276 SS316 |
| 3 | BALL | 1 | 1/2" THRU 3" ASTM A351 GRADE CF8M |
| 4 | SEAT | 2 | RTFE |
| 5 | JOINT GASKET | 1 | PTFE |
| 6 | STEM SEAL | 1 | RTFE |
| 7 | STEM | 1 | ASTM A276 SS316 |
| 8 | GLAND PACKING | 1 | PTFE |
| 9 | GLAND BUSHING | 1 | AISI 304 |
| 10 | LOCK SADDLE | 1 | AISI 304 |
| 11 | STEM NUT | 1 | AISI 304 |
| 12 | HANDLE | 1 | AISI 304 |
| 13 | HANDLE SLEEVE | 1 | VINYL |
| 14 | STEM WASHER | 1 | AISI 304 |
| 15 | BELLEVILLE WASHER | 2 | AISI 301 |
| 16 | STOP BOLT | 1 | AISI 304 |
| 17 | BOLT NUT | 1 | AISI 304 |
| 18 | GLAND PACKING | 1 | RTFE |
| 19 | HANDLE LOCK | 1 | AISI 304 |
| 20 | O-RING | 1 | VITON® |
| 21 | HANDLE NUT | 1 | AISI 304 |
| 22 | ANTI-STATIC DEVICE | 2 | AISI 316 |

Break Away Torque for RTFE Seats

| SIZE | IN-LBS. |
|--------|---------|
| 1/4" | 62 |
| 3/8" | 62 |
| 1/2" | 62 |
| 3/4" | 71 |
| 1" | 124 |
| 1-1/4" | 159 |
| 1-1/2" | 230 |
| 2" | 319 |
| 2-1/2" | 487 |
| 3" | 770 |

NOTE: For other seat material, consult factory

DIMENSIONS (IN)

| SIZE | A | B | C | D | E | F | L | Z1 | Z2 | AB | AC | AD | AE | DD1 | DD2 | LBS | ISO 5211 |
|--------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------------|
| 1/4" | 0.45 | 0.354 | 5.88 | 1.53 | 0.26 | 2.99 | 2.56 | 0.26 | 0.28 | 1.28 | 0.92 | 0.43 | 0.55 | 1.417 | 1.969 | 1.23 | F03/F04/F05 |
| 3/8" | 0.49 | 0.354 | 6.12 | 1.52 | 0.26 | 2.99 | 2.56 | 0.26 | 0.28 | 1.28 | 0.92 | 0.43 | 0.53 | 1.471 | 1.969 | 1.23 | F03/F04/F05 |
| 1/2" | 0.59 | 0.354 | 5.83 | 1.60 | 0.26 | 3.05 | 2.56 | 0.26 | 0.28 | 1.28 | 0.92 | 0.43 | 0.53 | 1.417 | 1.969 | 1.23 | F03/F04/F05 |
| 3/4" | 0.79 | 0.354 | 5.88 | 1.82 | 0.28 | 3.23 | 2.94 | 0.26 | 0.28 | 1.47 | 0.91 | 0.43 | 0.61 | 1.417 | 1.969 | 1.32 | F03/F04/F05 |
| 1" | 0.98 | 0.433 | 6.77 | 2.24 | 0.43 | 3.74 | 3.46 | 0.26 | 0.28 | 1.73 | 1.26 | 0.56 | 0.72 | 1.654 | 1.969 | 2.40 | F04/F05 |
| 1-1/4" | 1.26 | 0.433 | 6.77 | 2.40 | 0.43 | 3.92 | 4.02 | 0.24 | 0.27 | 2.01 | 1.26 | 0.56 | 0.81 | 1.654 | 1.969 | 3.31 | F04/F05 |
| 1-1/2" | 1.50 | 0.551 | 8.51 | 3.06 | 0.55 | 4.00 | 4.33 | 0.29 | 0.35 | 2.17 | 1.53 | 0.75 | 0.76 | 1.969 | 2.756 | 5.62 | F05/F07 |
| 2" | 1.97 | 0.551 | 8.51 | 3.35 | 0.56 | 5.16 | 4.92 | 0.29 | 0.35 | 2.46 | 1.53 | 0.75 | 0.89 | 1.969 | 2.756 | 7.93 | F05/F07 |
| 2-1/2" | 2.56 | 0.669 | 10.53 | 4.31 | 0.67 | 6.18 | 6.32 | 0.39 | 0.48 | 3.16 | 2.07 | 0.88 | 1.09 | 2.756 | 4.016 | 16.38 | F07/F10 |
| 3" | 3.15 | 0.669 | 11.88 | 4.63 | 0.71 | 6.80 | 7.01 | 0.39 | 0.48 | 3.51 | 2.08 | 0.88 | 1.19 | 2.756 | 4.016 | 22.81 | F07/F10 |

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