

Series 10



- **One piece unibody design**
- **Available in stainless steel only**
- **Reduced port 2000/1500 psi (by size)**
- **Threaded ends only**
- **See back for dimensions and pressure/temperature chart**



Series 10, 20 and 21C

For general industrial and
chemical applications

Investment cast

Economical compact design

Blowout proof stem

Primarily for manual use

Series 10/20/21C

Series 20



- **Two piece design**
- **Available in stainless steel only**
- **Full port 1000 psi**
- **Threaded ends only**
- **See back for dimensions and pressure/temperature chart**

SAMPLE PART #

20-TH-0100-XXX

Valve Series

Threaded ends

Valve Size

Seat Material

Special Designation

Additional
Special Designation

Series 21C



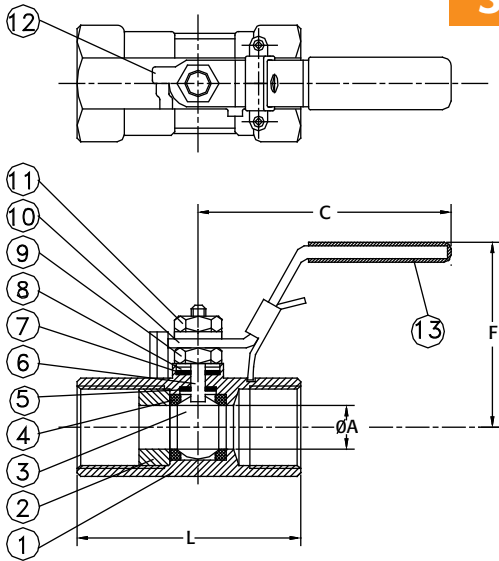
- **Two piece design**
- **Available in carbon steel only**
- **Reduced port 2000/1500 psi**
- **Threaded ends only**
- **See back for dimensions and pressure/temperature chart**



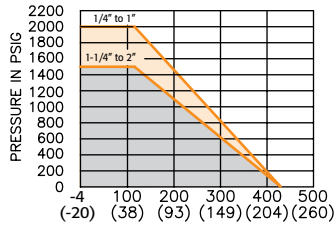
Triac Division
11363 Deerfield Rd.
Cincinnati, Ohio 45242

PHONE (513) 247-5465
FAX (513) 247-5462
e-mail: sales@a-tcontrols.com
www.a-tcontrols.com

Series 10



TEMPERATURE FOR RTFE SEATS °F (°C)



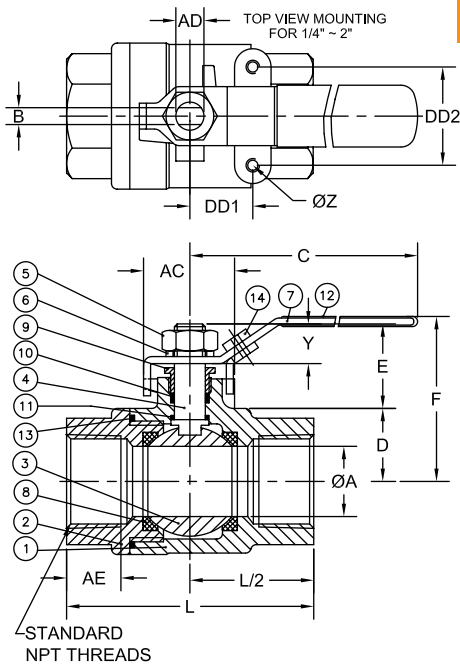
DIMENSIONS (IN)

| SIZE | A | C | F | L |
|--------|------|------|------|------|
| 1/4" | 0.36 | 4.29 | 1.85 | 2.30 |
| 3/8" | 0.36 | 4.29 | 1.85 | 2.30 |
| 1/2" | 0.36 | 3.86 | 2.28 | 2.60 |
| 3/4" | 0.49 | 3.86 | 2.40 | 2.76 |
| 1" | 0.59 | 4.12 | 2.51 | 3.15 |
| 1-1/4" | 0.79 | 4.12 | 2.77 | 3.74 |
| 1-1/2" | 0.98 | 6.15 | 2.85 | 3.98 |
| 2" | 1.26 | 6.15 | 3.08 | 4.49 |

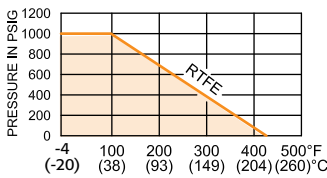
MATERIALS LIST

| NO. | PART NAME | MATERIAL | QTY. |
|-----|---------------|----------|------|
| 1 | Body | CF8M | 1 |
| 2 | Insert | SS316 | 1 |
| 3 | Ball | SS316 | 1 |
| 4 | Seat | RTFE | 2 |
| 5 | Seat Seal | PTFE | 1 |
| 6 | Stem | SS316 | 1 |
| 7 | Packing | PTFE | 1 |
| 8 | Gland Washer | SS304 | 1 |
| 9 | Stem Nut | SS304 | 1 |
| 10 | Spring Washer | SS304 | 1 |
| 11 | Handle Nut | SS304 | 1 |
| 12 | Lever Handle | SS304 | 1 |
| 13 | Handle Sleeve | Vinyl | 1 |

Series 20



PRESSURE VS. TEMPERATURE FOR 1/4" TO 3"



DIMENSIONS (IN)

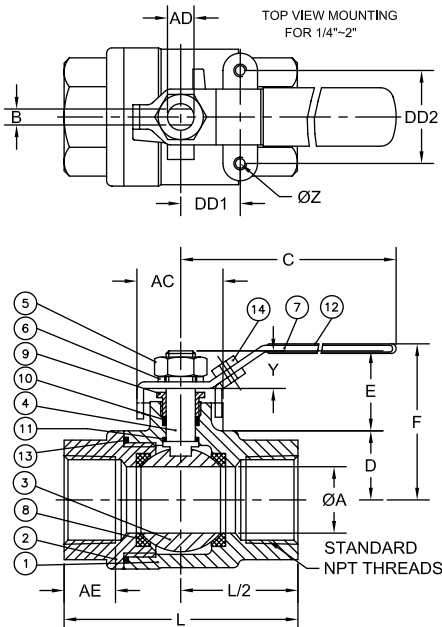
| SIZE | A | B | C | D | E | F | L | Y | Z | AC | AD | AE | DD1 | DD2 | W3 | W4 | LBS |
|--------|------|-------|------|------|------|------|------|------|------------|------|------|------|-------|-------|-------|-------|-------|
| 1/4" | 0.45 | 0.197 | 3.94 | 0.59 | 0.88 | 1.97 | 2.17 | 0.39 | 10-24UNC | 1.03 | 0.31 | 0.59 | 0.500 | 1.122 | N/A | N/A | 0.51 |
| 3/8" | 0.49 | 0.197 | 3.94 | 0.60 | 0.88 | 1.97 | 2.17 | 0.39 | 10-24UNC | 1.02 | 0.31 | 0.59 | 0.500 | 1.122 | N/A | N/A | 0.51 |
| 1/2" | 0.59 | 0.256 | 5.12 | 0.71 | 1.01 | 2.36 | 2.56 | 0.43 | 10-24UNC | 1.18 | 0.37 | 0.63 | 0.500 | 1.122 | N/A | N/A | 0.84 |
| 3/4" | 0.79 | 0.256 | 5.12 | 0.81 | 1.01 | 2.52 | 2.94 | 0.43 | 10-24UNC | 1.18 | 0.37 | 0.67 | 0.882 | 1.378 | N/A | N/A | 1.15 |
| 1" | 0.98 | 0.315 | 6.50 | 0.99 | 1.24 | 2.80 | 3.46 | 0.53 | 10-24UNC | 1.38 | 0.43 | 0.80 | 0.882 | 1.378 | N/A | N/A | 2.03 |
| 1-1/4" | 1.26 | 0.315 | 6.50 | 1.20 | 1.24 | 3.07 | 4.02 | 0.53 | 1/4"-20UNC | 1.38 | 0.43 | 0.87 | 1.000 | 1.500 | N/A | N/A | 2.91 |
| 1-1/2" | 1.50 | 0.382 | 7.48 | 1.58 | 1.38 | 3.39 | 4.33 | 0.61 | 1/4"-20UNC | 1.64 | 0.55 | 0.89 | 1.000 | 1.500 | N/A | N/A | 4.19 |
| 2" | 1.97 | 0.382 | 7.48 | 1.85 | 1.20 | 3.74 | 4.92 | 0.61 | 1/4"-20UNC | 1.58 | 0.55 | 1.02 | 1.000 | 1.500 | N/A | N/A | 6.88 |
| 2-1/2" | 2.56 | 0.472 | 9.84 | 2.41 | 2.13 | 5.12 | 6.32 | 0.96 | 1/4"-20UNC | 2.09 | 0.75 | 1.22 | N/A | N/A | 2.323 | 2.402 | 14.33 |
| 3" | 3.15 | 0.472 | 9.84 | 2.92 | 2.17 | 5.83 | 7.01 | 0.96 | 1/4"-20UNC | 2.09 | 0.75 | 1.34 | N/A | N/A | 2.756 | 2.795 | 20.50 |

MATERIALS LIST

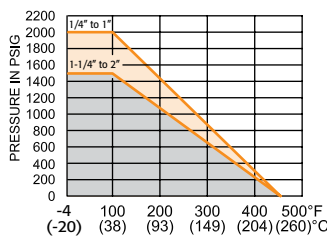
| NO. | PART NAME | MATERIAL | QTY. |
|-----|----------------|----------|------|
| 1 | Body | CF8M | 1 |
| 2 | End Cap | CF8M | 1 |
| 3 | Ball | SS316 | 1 |
| 4 | Stem | SS316 | 1 |
| 5 | Stem Nut | SS304 | 1 |
| 6 | Lockwasher | SS304 | 1 |
| 7 | Handle | SS304 | 1 |
| 8 | Seat | RTFE | 2 |
| 9 | Gland Nut | SS304 | 1 |
| 10 | V-Ring Packing | PTFE | § |
| 11 | Thrust Washer | PTFE | 1 |
| 12 | Handle Sleeve | Vinyl | 1 |
| 13 | Joint Gasket | PTFE | 1 |
| 14 | Locking Device | SS304 | 1 |

§ Regular 1 pc. stem packing is used for 1/4" and 3/8"
1 set of v-ring packing consists of 2 pcs. of v-ring for 1/2" - 3"

Series 21C



PRESSURE VS. TEMPERATURE FOR RTFE SEATS



DIMENSIONS (IN)

| SIZE | A | B | C | D | E | F | L | Y | Z | AC | AD | AE | DD1 | DD2 | (LBS) |
|--------|------|-------|------|------|------|------|------|------|--------|------|------|------|------|------|-------|
| 1/4" | 0.37 | 0.197 | 4.16 | 0.59 | 0.71 | 1.99 | 2.01 | 0.39 | 10-24 | 1.03 | 0.31 | 0.38 | 0.51 | 1.12 | 0.48 |
| 3/8" | 0.46 | 0.196 | 4.11 | 0.59 | 0.68 | 1.94 | 2.00 | 0.31 | 10-24 | 1.03 | 0.30 | 0.41 | 0.51 | 1.12 | 0.48 |
| 1/2" | 0.49 | 0.194 | 4.02 | 0.60 | 0.84 | 2.13 | 2.37 | 0.36 | 10-24 | 1.03 | 0.30 | 0.50 | 0.51 | 1.12 | 0.62 |
| 3/4" | 0.59 | 0.255 | 5.15 | 0.71 | 0.99 | 2.37 | 2.74 | 0.42 | 10-24 | 1.19 | 0.37 | 0.54 | 0.87 | 1.37 | 0.99 |
| 1" | 0.79 | 0.256 | 5.29 | 0.86 | 0.97 | 2.19 | 3.29 | 0.46 | 10-24 | 1.18 | 0.37 | 0.71 | 0.86 | 1.37 | 1.46 |
| 1-1/4" | 0.98 | 0.314 | 6.67 | 0.99 | 1.25 | 2.84 | 3.54 | 0.55 | 10-24 | 1.33 | 0.43 | 0.68 | 0.87 | 1.37 | 2.38 |
| 1-1/2" | 1.26 | 0.313 | 6.64 | 1.23 | 1.18 | 2.53 | 4.11 | 0.56 | 1/4-20 | 1.34 | 0.43 | 0.81 | 0.98 | 1.49 | 3.28 |
| 2" | 1.50 | 0.381 | 7.51 | 1.56 | 1.20 | 3.43 | 4.63 | 0.60 | 1/4-20 | 1.50 | 0.55 | 0.81 | 1.01 | 1.49 | 5.11 |

MATERIALS LIST

| NO. | PART NAME | MATERIAL | QTY. |
|-----|-----------------|----------|------|
| 1 | Body | WCB | 1 |
| 2 | EndCap | WCB | 1 |
| 3 | Ball | SS316 | 1 |
| 4 | Stem | SS316 | 1 |
| 5 | Stem Nut | SS304 | 1 |
| 6 | *Lockwasher | SS304 | 1 |
| 7 | Handle | SS304 | 1 |
| 8 | Seat | RTFE | 2 |
| 9 | Gland Nut | SS304 | 1 |
| 10 | V-Ring Packing | PTFE | § |
| 11 | Thrust Washer | PTFE | 1 |
| 12 | Handle Sleeve | Vinyl | 1 |
| 13 | Joint Gasket | PTFE | 1 |
| 14 | *Locking Device | SS304 | 1 |

§ Regular 1 pc. stem packing is used for 1/4" and 3/8"
1 set of v-ring packing consists of 2 pcs. of v-ring for 1/2" and 2"
*Lockwasher on valves except of 1/4" and 3/8"

