

Z91

Z92

Z93

Z94

Z95

Z96



High Temperature Trunnion Ball 3 Piece - Ordering Code System

"Mandatory option" options are marked with **green background** | "Standard offer" options are marked with **light green background**

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|----------|---|---|--------|---|--------|----------------------|----|----|---------------|---------------|--------------|-----------|------------|------------|----------------|----|----|------------------|----|----|----|-----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | ... | 30 |
| 4 | 0 | | | Z | B | 9 | 4 | P | - | 6 | M | 6 | D | I | V | G | / | 9 | 0 | 0 | | 0 | | | |
| Size | | Features | | | Series | | Design | Body & ends material | | | Stem material | Ball material | Seat feature | Hardening | Inner Seal | Outer Seal | End Connection | | | Special features | | | | | |

| Size (1-2) | | |
|------------|------|-----|
| Code | inch | mm |
| 20* | 2" | 50 |
| 30 | 3" | 80 |
| 40 | 4" | 100 |
| 60 | 6" | 150 |
| 80 | 8" | 200 |
| A0 | 10" | 250 |
| A2 | 12" | 300 |

* Full port only

| Features (3-6) | |
|----------------|-------------|
| Z | Metal seats |
| B | Full port |

| Series - 3 Piece (7-8) | |
|------------------------|------------------|
| 91 | ASME B16.5 #150 |
| 92 | ASME B16.5 #300 |
| 93 | ASME B16.5 #600 |
| 94 | ASME B16.5 #900 |
| 95 | ASME B16.5 #1500 |
| 96 | ASME B16.5 #2500 |

| Design (9) | |
|------------|-------------------------------------|
| W | -46°C to 200°C (-50°F to 400°F) |
| P | -46°C to 327°C (-40°F to 620°F) |
| T | -60°C to 538°C (-76°F to 1000°F) |

| Body & ends (11) | |
|------------------|-------------------|
| 4* | C. Steel A105 |
| 6 | S. Steel A479 316 |
| J** | F22 |

* -29°C to 425°C
(-20°F to 800°F)

** For T design only

| Stem (12) | |
|-----------|------------------------|
| M | High Strength S. Steel |
| Z | Inconel 718 |

| Ball material(13) | |
|-------------------|-----------------------------|
| 6 | S. Steel A182 316 |
| Q | ASTM A182 F6A (S.Steel 410) |

| Seat feature (14) | |
|-------------------|--|
| D | Double Piston Effect (DPE) (API 6D DIB-1) |
| S | Single Piston Effect (SPE) (API 6D DBB) |

| Hardening (15) | |
|----------------|--|
| I | Cr3C2- Chromium Carbide with Nickel Chrome binder - HVOF technique |
| O | WC-Co- Tungsten Carbide with Cobalt binder HVO technique |

| Inner Seal material (16) | |
|--------------------------|--|
| V | Viton (-20°C to 200°C [-4°F to 400°F]) |
| H | HNBR (-46°C to 150°C [-50°F to 300°F]) |
| K | Kalrez (-20°C to 327°C [-4°F to 620°F]) |
| G | Graphite |

| Outer Seal material (17) | |
|--------------------------|----------|
| G | Graphite |

| End connections (19-22) | |
|-------------------------|---------------------|
| Flanged | |
| 150 | ASME B16.5 #150 |
| 300 | ASME B16.5 #300 |
| 600 | ASME B16.5 #600 |
| 900 | ASME B16.5 #900 |
| 1500 | ASME B16.5 #1500 |
| 2500 | ASME B16.5 #2500 |
| PN16 | DIN EN 1092-1 PN16 |
| PN40 | DIN EN 1092-1 PN40 |
| PN63 | DIN EN 1092-1 PN63 |
| PN100 | DIN EN 1092-1 PN100 |
| PN160 | DIN EN 1092-1 PN160 |
| PN250 | DIN EN 1092-1 PN250 |
| PN320 | DIN EN 1092-1 PN320 |
| PN400 | DIN EN 1092-1 PN400 |

| Flanged RTJ | |
|-------------|----------------------|
| 600RTJ | ASME B16.5 #600 RTJ |
| 900RTJ | ASME B16.5 #900 RTJ |
| 1500RTJ | ASME B16.5 #1500 RTJ |
| 2500RTJ | ASME B16.5 #2500 RTJ |

| Welded | |
|--------|----------------------------|
| XBW | Extended butt weld sch 40 |
| XBW80 | Extended butt weld sch 80 |
| XBW160 | Extended butt weld sch 160 |

| Special features (23-30) | |
|--------------------------|--|
| L* | Seat greasing point |
| D** | Drain & Vent |
| Blank | Drain & vent is capped |
| H** | Drain ball valve & vent |
| PT*** | Basic paint system |
| P1 | Offshore, Temp Ambient up to 93°C (200°F) |
| P2 | Offshore, up to 537°C (998°F) |

* for 6" up not for -T design

** for 6" up

*** colors RAL 1018 or 7036
(other colors upon request)