

Z91W

Z92W

Z91P

Z92P

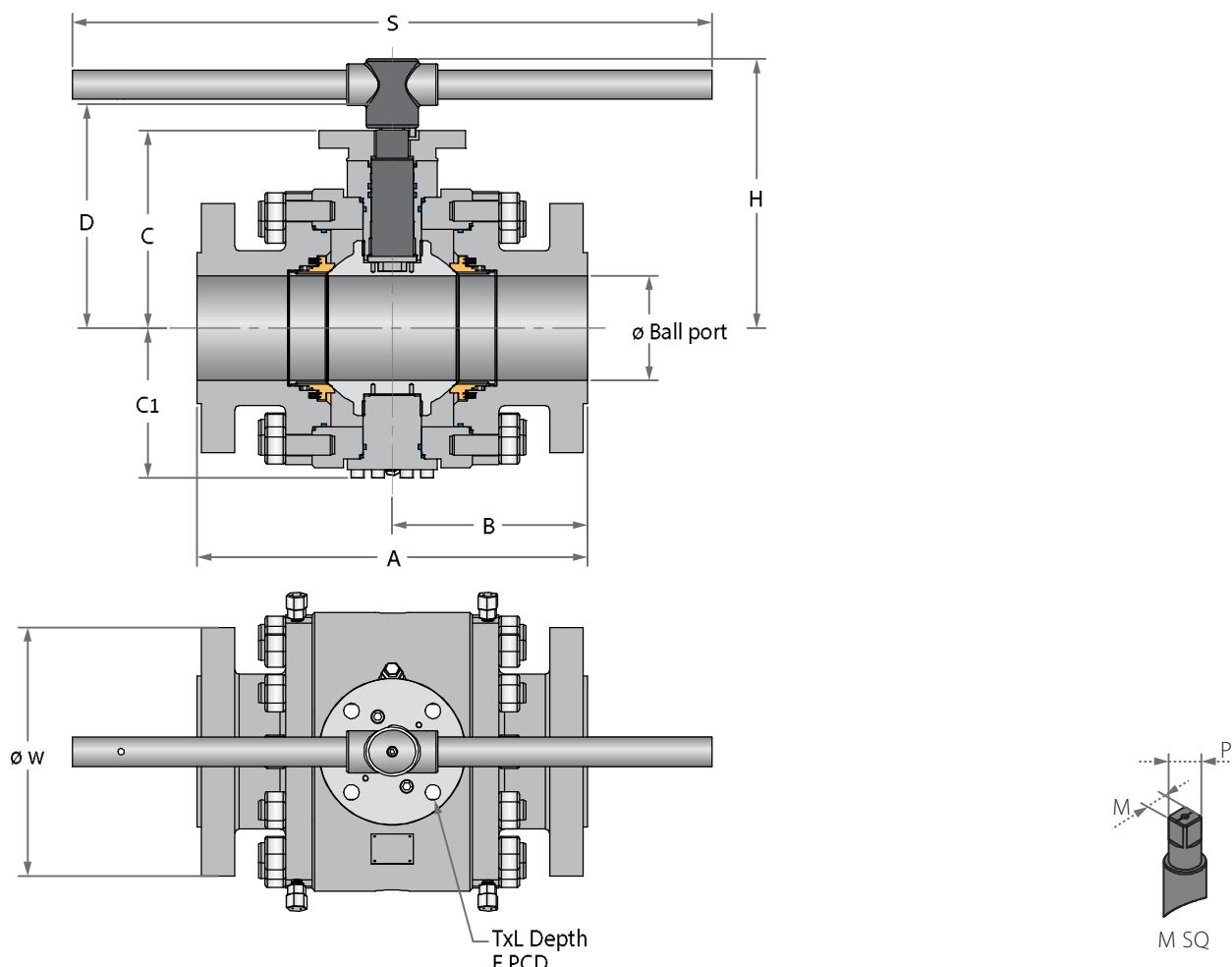
2"-6" | DN150-DN300

CLASS 150/300

High Temperature Trunnion Ball 3 Piece Up to

W 200°C (400°F) | P 327°C (620°F)

Valve dimensions



| Full port | Unit | Ball port | A | | B | | C | C1 | D | W | | M SQ | P SQ | H | S | F | TxL | Weight kg/ib | | Kv/Cv | | |
|-----------|------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|-----------|--------|--------------|-----|-------|------|------|
| | | | 150 | 300 | 150 | 300 | | | | 150 | 300 | | | | | | | 150 | 300 | 150 | 300 | |
| DN50 | mm | 49.00 | 178.00 | 216.00 | 89.00 | 108.00 | 127.00 | 91.50 | 144.50 | 150.00 | 165.00 | 17.00 | 22.00 | 196.00 | 401.00 | (F10) | 102.00 | 11X15 | 27 | 31 | 400 | 363 |
| 2" | inch | 1.93 | 7.01 | 8.50 | 3.50 | 4.25 | 5.00 | 3.60 | 5.69 | 5.91 | 6.50 | 0.67 | 0.87 | 7.72 | 15.79 | (4 holes) | 4.02 | (4 holes) | 60 | 68 | 463 | 420 |
| DN80 | mm | 74.00 | 203.00 | 283.00 | 101.50 | 128.00 | 148.00 | 117.00 | 172.00 | 190.00 | 210.00 | 22.00 | 32.00 | 223.00 | 610.00 | (F12) | 125.00 | 13X15 | 44 | 61 | 1125 | 952 |
| 3" | inch | 2.91 | 7.99 | 11.14 | 4.00 | 5.04 | 5.83 | 4.61 | 6.77 | 7.48 | 8.27 | 0.87 | 1.26 | 8.78 | 24.02 | (4 holes) | 4.92 | (4 holes) | 97 | 134 | 1300 | 1100 |
| DN100 | mm | 100.00 | 229.00 | 305.00 | 114.50 | 140.50 | 171.00 | 139.00 | 198.50 | 230.00 | 255.00 | 27.00 | 35.00 | 247.50 | 610.00 | (F14) | 140.00 | 18X15 | 66 | 100 | 2154 | 1860 |
| 4" | inch | 3.94 | 9.02 | 12.00 | 4.51 | 5.53 | 6.73 | 5.47 | 7.81 | 9.06 | 10.04 | 1.06 | 1.38 | 9.74 | 24.02 | (4 holes) | 5.51 | (4 holes) | 146 | 220 | 2490 | 2150 |
| DN150 | mm | 150.00 | 394.00 | 403.00 | 185.00 | 230.40 | 254.00 | 191.00 | 290.50 | 280.00 | 320.00 | 36.00 | 46.20 | 356.50 | 916.00 | (F16) | 165.00 | 22X25 | 180 | 216 | 4723 | 4628 |
| 6" | inch | 5.91 | 15.51 | 15.87 | 7.28 | 9.07 | 10.00 | 7.52 | 11.44 | 11.02 | 12.60 | 1.42 | 1.82 | 14.04 | 36.06 | (4 holes) | 6.50 | (4 holes) | 397 | 476 | 5460 | 5350 |

Z91W

Z92W

Z91P

Z92P

8"-12" | DN200-DN300

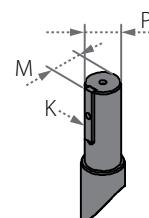
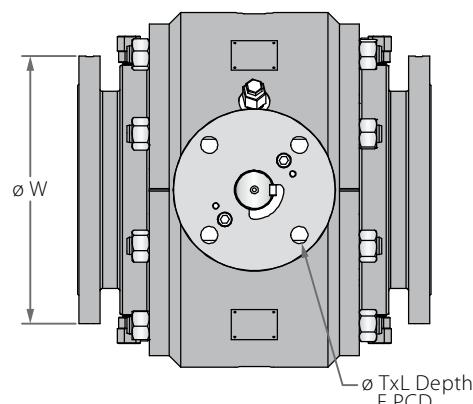
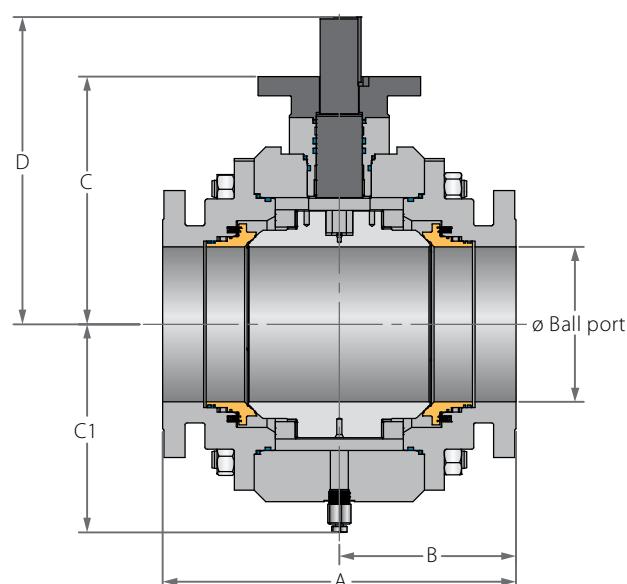
CLASS 150/300



High Temperature Trunnion Ball 3 Piece Up to

W 200°C (400°F) | **P** 327°C (620°F)

Valve dimensions



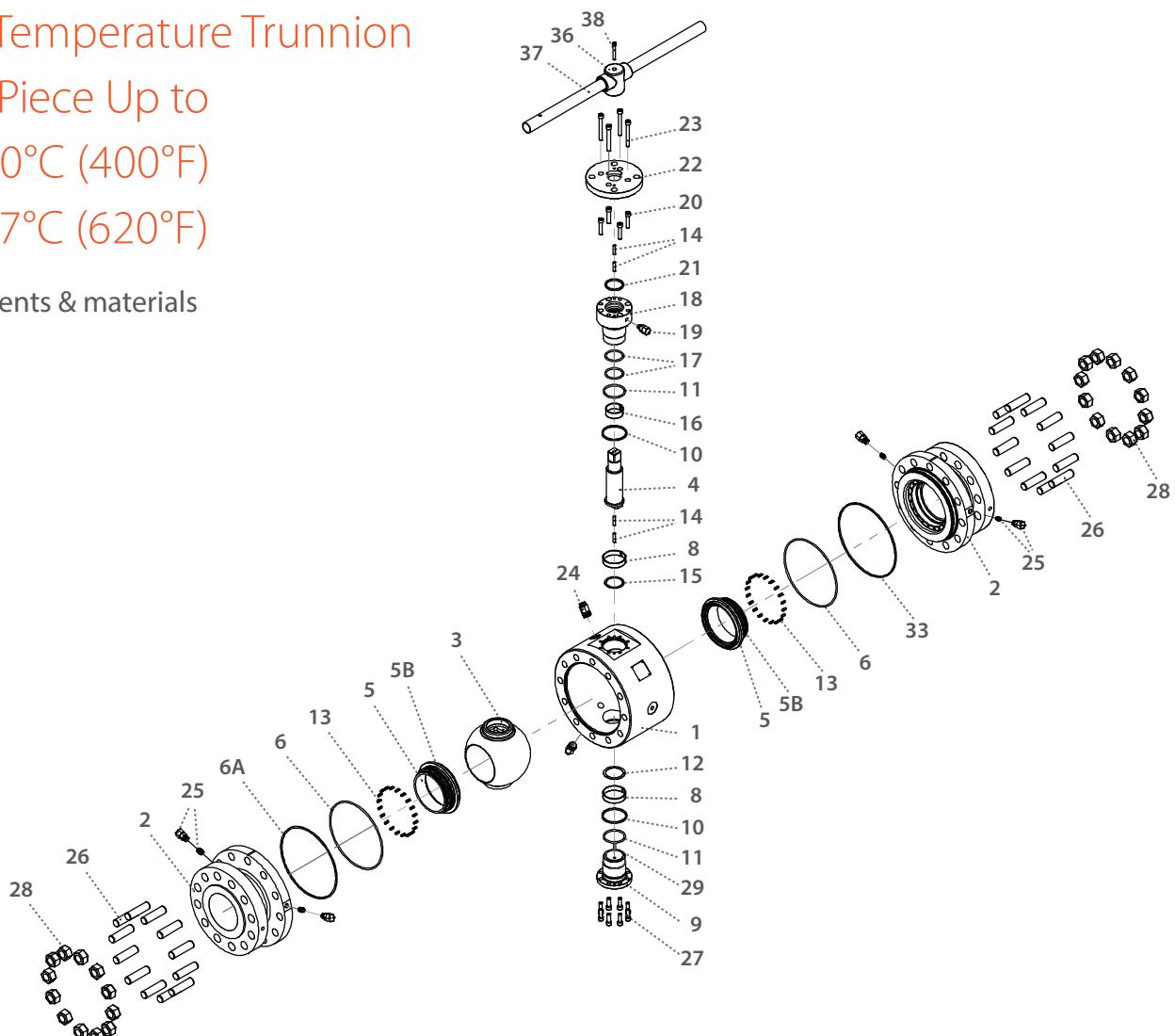
| Full port | Unit | Ball port | A | | B | | C | C1 | D | W | P | M | K | F | | TxL | Weight kg/ib | | Kv/Cv | |
|-----------|------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|-----------|--------------|------|-------|-------|
| | | | 150 | 300 | 150 | 300 | | | | | | | | 150 | 300 | 150 | 300 | | | |
| DN200 | mm | 201.00 | 457.00 | 502.00 | 228.50 | 251.00 | 325.00 | 305.00 | 247.00 | 232.00 | 405.50 | 379.50 | 345.00 | (F16) | 165.00 | 22x25 | 346 | 378 | 9273 | 8737 |
| 8" | inch | 7.91 | 17.99 | 19.76 | 9.00 | 9.88 | 12.80 | 12.01 | 9.72 | 9.13 | 15.96 | 14.94 | 13.58 | (4 holes) | 6.50 | (4 holes) | 763 | 833 | 10720 | 10100 |
| DN250 | mm | 252.00 | 533.00 | 568.00 | 270.00 | 287.50 | 353.00 | 359.00 | 297.00 | 299.00 | 430.00 | 454 | 405.00 | (F25) | 254.00 | 18x25 | 473 | 594 | 15224 | 14792 |
| 10" | inch | 9.92 | 20.98 | 22.36 | 10.63 | 11.32 | 13.90 | 14.13 | 11.69 | 11.77 | 16.93 | 17.87 | 15.94 | (8 holes) | 10.00 | (8 holes) | 1043 | 1310 | 17600 | 17100 |
| DN300 | mm | 303.00 | 610.00 | 648.00 | 298.00 | 313.00 | 388.00 | 368.00 | 324.00 | 305.00 | 468.50 | 464 | 485.00 | (F25) | 254.00 | 18x25 | 723 | 833 | 23096 | 22404 |
| 12" | inch | 11.93 | 24.02 | 25.51 | 11.73 | 12.32 | 15.28 | 14.49 | 12.76 | 12.01 | 18.44 | 18.27 | 19.09 | (8 holes) | 10.00 | (8 holes) | 1594 | 1836 | 26700 | 25900 |

Z91W**Z92W****Z93W****Z94W****Z95W****Z96W****Z91P****Z92P****Z93P****Z94P****Z95P****Z96P**

2"-6"

High Temperature Trunnion Ball 3 Piece Up to
W 200°C (400°F)
P 327°C (620°F)

Components & materials



| Item | Description | Material Spec. ASTM | Qty. |
|------|--|---------------------|-------|
| 1 | Body | Acc. Ordering code | 1 |
| 2 | Ends | Acc. Ordering code | 2 |
| 3 | Ball | Acc. Ordering code | 1 |
| 4 | Stem | Acc. Ordering code | 1 |
| 5* | Seat | Acc. Ordering code | 2 |
| 5B* | Seat seal | Viton / HNBR | 2-4 |
| 6* | Body inner seal | Viton / HNBR | 2 |
| 6A* | Body outer seal | Graphite | 2 |
| 8* | Ball Bearing | S.steel 316 + PTFE | 2 |
| 9 | External Trunnion | S.steel / C.steel | 1 |
| 10* | Gland Plate & External trunnion Fire Safe Seal | Graphite | 2 |
| 11* | Gland Plate & External trunnion Seal | Viton / HNBR | 2 |
| 12* | Lower thrust washer | S.steel 316 + PTFE | 1 |
| 13 | Seat Spring | Inconel X750 | 28-40 |
| 14 | Gland pin | S.steel / C.steel | 4 |
| 15* | Stem Thrust Washer | S.steel 316 + PTFE | 1 |
| 16* | Gland plate bearing | S.steel 316 + PTFE | 1 |

| Item | Description | Material Spec. ASTM | Qty. |
|------|-----------------------------------|------------------------------|-------|
| 17* | Stem seal | Viton / HNBR | 2 |
| 18 | Gland Plate | S.steel / C.steel | 1 |
| 19 | Stem grease fitting | S.steel | 1 |
| 20 | Lower gland bolts | A193-B8M / A320 L7 | 4 |
| 21* | Stem fire safe seal | Graphite | 1 |
| 22 | Iso plate | S.steel / C.steel | 1 |
| 23 | Upper gland bolts | A193-B8M / A320 L7 | 4 |
| 24 | Plug valve | S.steel | 2 |
| 25** | Seat grease fitting + check valve | S.steel | 4 |
| 26 | Body studs | A193-B8M / A320 L7 | 16-24 |
| 27 | External trunnion bolts | A193-B8M / A320 L7 | 4 |
| 28 | Body nuts | A194-8M / A194 L7 | 16-24 |
| 29 | Antistatic spring | Inconel X750 | 1 |
| 30 | Wrench head | S.steel / C.steel | 1 |
| 31 | Wrench bolt | S.steel / C.steel | 1 |
| 32 | Pipe handle | S.steel / C.steel Zink plate | 1 |

* Repair kit components

** Available from 6" size only

Z91W

Z92W

Z93W

Z94W

Z95W

Z96W



Z91P

Z92P

Z93P

Z94P

Z95P

Z96P

2"-6"

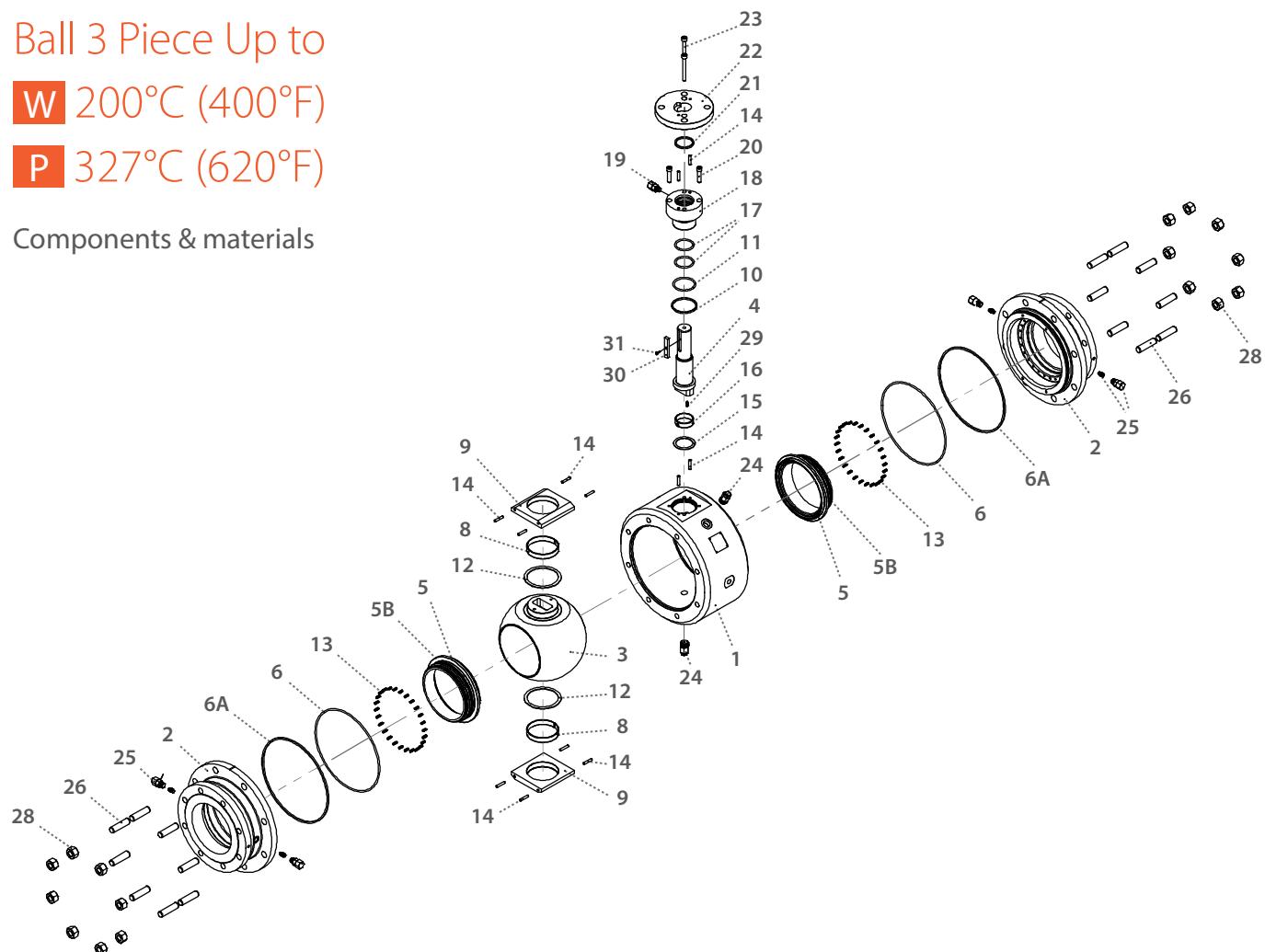
High Temperature Trunnion

Ball 3 Piece Up to

W 200°C (400°F)

P 327°C (620°F)

Components & materials



| Item | Description | Material Spec. ASTM | Qty. |
|------|--|---------------------|-------|
| 1 | Body | Acc. Ordering code | 1 |
| 2 | Ends | Acc. Ordering code | 2 |
| 3 | Ball | Acc. Ordering code | 1 |
| 4 | Stem | Acc. Ordering code | 1 |
| 5* | Seat | Acc. Ordering code | 2 |
| 5B* | Seat seal | Viton, HNBR | 2-4 |
| 6* | Body inner seal | Viton, HNBR | 2 |
| 6A* | Body outer seal | Graphite | 2 |
| 8* | Ball bearing | S.steel 316 + PTFE | 2 |
| 9 | Trunnion plate | S.steel / C.steel | 2 |
| 10* | Gland plate & External Trunnion Fire Safe Seal | Graphite | 1 |
| 11* | Gland Plate & External Trunnion Seal | Viton, HNBR | 1 |
| 12* | Ball thrust washer | S.steel 316 + PTFE | 2 |
| 13 | Seat Spring | Inconel X750 | 52-60 |
| 14 | Gland pin | S.steel / C.steel | 12 |
| 15* | Stem Thrust Washer | S.steel 316 + PTFE | 1 |
| 16* | Stem Bearing | S.steel 316 + PTFE | 1 |

| Item | Description | Material Spec. ASTM | Qty. |
|------|-----------------------------------|---------------------|-------|
| 17* | Stem seal | Viton, HNBR | 2 |
| 18 | Gland Plate | S.steel / C.steel | 1 |
| 19 | Stem grease fitting | S.steel | 1 |
| 20 | Lower gland bolts | A193-B8M / A320 L7 | 2-6 |
| 21* | Stem fire safe seal | Graphite | 1 |
| 22 | Iso plate | S.steel / C.steel | 1 |
| 23 | Upper gland bolts | A193-B8M / A320 L7 | 2-6 |
| 24 | Plug valve | S.steel | 2 |
| 25** | Seat grease fitting + check valve | S.steel | 4 |
| 26 | Body studs | A193-B8M / A320 L7 | 16-32 |
| 28 | Body nuts | A194-8M / A194 L7 | 16-32 |
| 29 | Antistatic spring | Inconel X750 | 1 |
| 30 | Stem key | S.steel / C.steel | 1 |
| 31 | Stem key bolt | S.steel / C.steel | 1 |

* Repair kit components