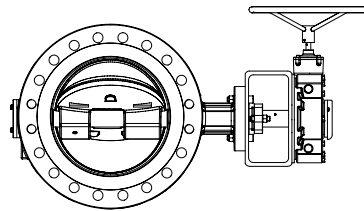


ARI-ZETRIX® - Fig. 016 - Double flanged process valve with metallic sealing - Triple offset
 ARI-ZETRIX® - Fig. 018 - Fully lugged process valve with metallic sealing - Triple offset
 ARI-ZETRIX® - Fig. 019 - Butt weld ended process valve with metallic sealing - Triple offset

ARI-ZETRIX®
with worm gear

- Self-locking
- With variable adjustment



Gear alignment A (standard)

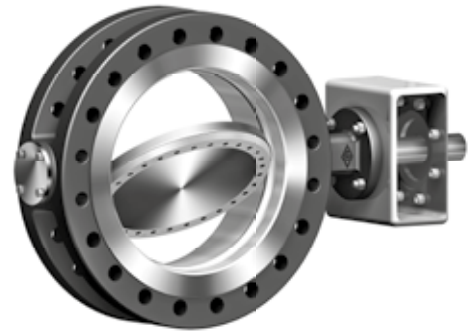
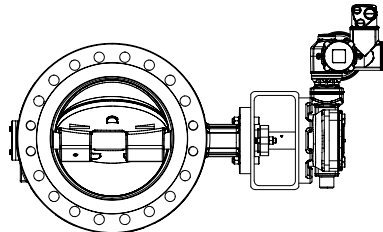


Fig. 016 -
ARI-ZETRIX® double flange

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ARI-ZETRIX®
with electric rotary actuator
Auma or PS Automation

- For temporary service S2-15 min.
(or control: Auma S4 25%,
Schiebel S4 40%)
- 400V 50Hz (optional: 230V 50Hz)
- Enclosure IP 67



Actuator alignment A (standard)

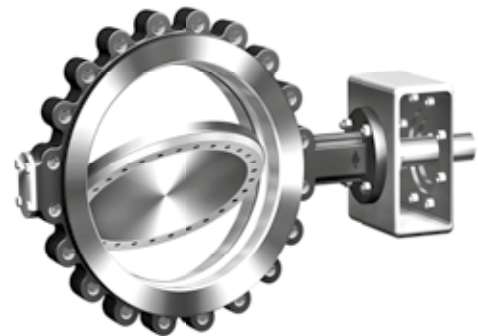
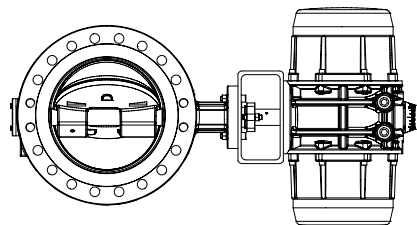


Fig. 018 -
ARI-ZETRIX® threaded flanged

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ARI-ZETRIX®
with pneumatic actuator



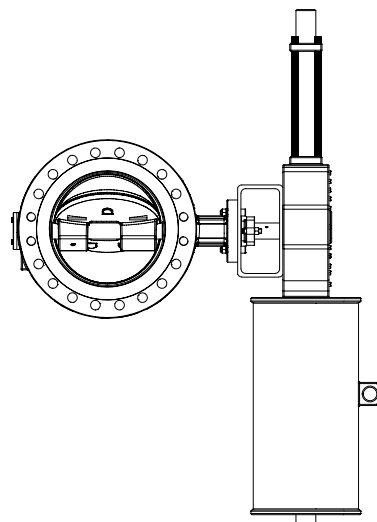
Actuator alignment A (standard)



Fig. 019 -
ARI-ZETRIX® butt weld ends

on request

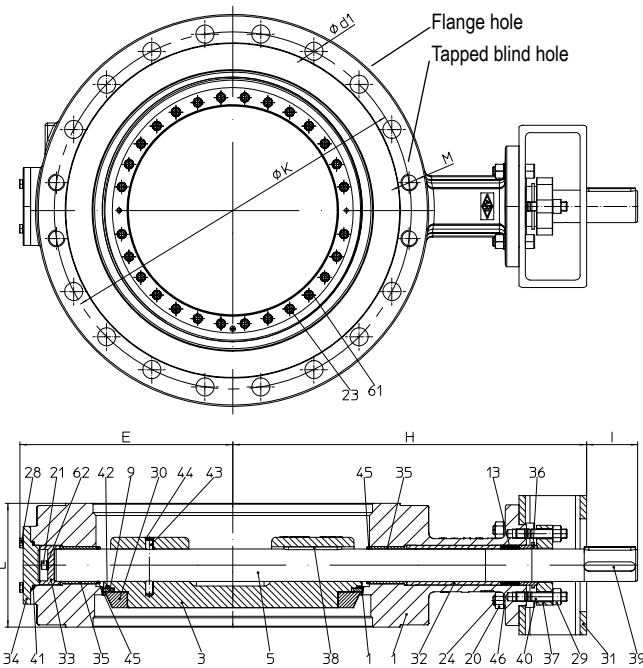
ARI-ZETRIX®
with hydraulic actuator



Actuator alignment A (standard) on request

Features:

- Double flange, threaded flange and butt weld ends design
- Cast steel / stainless steel body, one-piece
- Triple offset construction:
Rotary movement (90°) without wear or friction
- Metallic sealing
- Stellite® seat (Stellite® 21)
- Continuous stem, hardened bearings
with Graphite protector ring
- Blow-out protected stem (optional: acc. to API 609)
- Vacuum-tight
- Firesafe acc. to ISO 10497 / API 607
- SIL
- Bidirektional
- ATEX
- NACE (optional)
- Packing acc. to EN ISO 15848-1/ TA-Luft (optional)

Double flanged process valve - Triple offset (Cast steel, Stainless steel)


| Figure | Nominal pressure | Material | Nominal diameter | Disc | Stem |
|--------|------------------|----------|------------------|----------|-----------|
| 30.016 | PN 6 | 1.0619+N | DN 80-1200 | 1.0619+N | 1.4021+QT |
| 31.016 | PN10 | 1.0619+N | DN 80-1200 | 1.0619+N | 1.4021+QT |
| 32.016 | PN16 | 1.0619+N | DN 80-1200 | 1.0619+N | 1.4021+QT |
| 34.016 | PN25 | 1.0619+N | DN 80-1200 | 1.0619+N | 1.4021+QT |
| 35.016 | PN40 | 1.0619+N | DN 80-1200 | 1.0619+N | 1.4021+QT |
| 50.016 | PN 6 | 1.4408 | DN 80-1200 | 1.4408 | 1.4542 |
| 51.016 | PN10 | 1.4408 | DN 80-1200 | 1.4408 | 1.4542 |
| 52.016 | PN16 | 1.4408 | DN 80-1200 | 1.4408 | 1.4542 |
| 54.016 | PN25 | 1.4408 | DN 80-1200 | 1.4408 | 1.4542 |
| 55.016 | PN40 | 1.4408 | DN 80-1200 | 1.4408 | 1.4542 |

Face-to-face dimension series 13 acc. to DIN EN 558 / ISO 5752 / API 609 Cat. B (short pattern)

Face-to-face dimension series 14 and 15 in cast steel in temperature range -10°C to +350°C on request

| Sealing element: | |
|--------------------------------------|-------------------|
| • Graphite / X2CrNiMoN22-5-3, 1.4462 | -60°C up to 400°C |
| • Graphite / X8CrNi25-21, 1.4845 | 400°C up to 450°C |
| Max. differential pressure: | |
| • = Nominal pressure | |

| Actuation arrangement: | |
|------------------------|---------------------------------|
| • Worm gear | • Pneumatic actuator |
| • Electric actuator | • Hydraulic actuator |
| Test: | |
| Sealing leakage test: | • DIN EN 12266-1 Leakage rate A |

Options on request (refer to page 16)

| Parts | | | | | |
|---------------|-------|-----------------------|--|--|--|
| Pos. | Sp.p. | Description | Fig. 30./31./32./34./35.016 | Fig. 50./51./52./54./55.016 | |
| 1 | | Body | GP240GH+N, 1.0619+N | GX5CrNiMo19-11-2, 1.4408 | |
| 1.2 | | Seat | Stellit 21 | | |
| 3 | | Disc | GP240GH+N, 1.0619+N | GX5CrNiMo19-11-2, 1.4408 | |
| 5 | | Stem | X20Cr13+QT, 1.4021+QT / > 400°C: X6CrNiTiMoVB25-15-2, 1.4980 | X5CrNiCuNb16-4, 1.4542 / > 300°C: X6CrNiTiMoVB25-15-2, 1.4980 | |
| 9 | x | Lamellar seal ring | Graphite / X2CrNiMoN22-5-3, 1.4462 / > 400°C: Graphite / X8CrNi25-21, 1.4845 | Graphite / X2CrNiMoN22-5-3, 1.4462 | |
| 13 | x | Packing unit | Graphite | | |
| 20 | | Hexagon nut | 8 - A2B | | |
| 21 | | Hexagon socket screw | A4-70 / >400°C: SA193-B8M2 | A4-70 | |
| 23 | | Hexagon socket screw | A4-70 / >400°C: SA193-B8M2 | A4-70 | |
| 24 | | Hexagon screw | 8.8-A2B | | |
| 28 | | Hexagon screw | A2-70 / >400°C: SA193-B8M2 | A2-70 | |
| 29 | | Hexagon nut | A4-70 / >400°C: SA194-8M | | |
| 30 | | Retaining ring | P265 GH, 1.0425 (nickel plated) | X5CrNi18-10, 1.4301 | |
| 31 | | Mounting bracket | S355J2H, 1.0576 (galvanized) | | |
| 32 | | Distance bushing | X5CrNi18-10, 1.4301 | | |
| 33 | | Axial bearing | X20Cr13+QT, 1.4021+QT (hardened) | X5CrNi18-10, 1.4301 (hardened) | |
| 34 | | Bottom flange | P250 GH, 1.0460 (hardened) | X5CrNi18-10, 1.4301 (hardened) | |
| 35 | | Bushing | X20Cr13+QT, 1.4021+QT (hardened) | X5CrNi18-10, 1.4301 (hardened) | |
| 36 | | Packing bushing | X5CrNi18-10, 1.4301 | | |
| 37 | | Packing box flange | ≤ DN 600, PN6-40 und DN700-800, PN6-10: GX5CrNiMo19-11-2, 1.4408 / > DN 600 (except DN700-800, PN6-10): X5CrNi18-10, 1.4301 | | |
| 38 / 39 | | Parallel key | A4 | | |
| 40 | | Stud | A4-70 / >400°C: SA193-B8M2 | | |
| 41 | x | Spiral wounded gasket | Graphite / X6CrNiTi18-10, 1.4541 | | |
| 42 | x | Spiral wounded gasket | Graphite / Hastelloy C276, 2.4819 | | |
| 43 | | Parallel pin | A4-70 | | |
| 44 | | Retaining ring | X39CrMo17-1+QT, 1.4122+QT | | |
| 45 | | Packing ring | Graphite webbing | | |
| 46 | | Spring ring | FST-A2B | | |
| 46 | | Wedge-lock Washers | A4 | | |
| 61 / 62 | | Wedge-lock Washers | A4 | | |
| L Spare parts | | | | | |

Information / restriction of technical rules need to be observed!

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview).

| DN | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|

Face-to-face dimension series 13 acc. to DIN EN 558 / ISO 5752 / API 609 Cat. B (short pattern)

| | | | | | | | | | | | | | | | | | | |
|---|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L | (mm) | 114 | 127 | 140 | 140 | 152 | 165 | 178 | 190 | 216 | 222 | 229 | 267 | 292 | 318 | 330 | 410 | 470 |
|---|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

Face-to-face dimension series 14 and 15 acc. to DIN EN 558 / ISO 5752 on request

| Dimensions | | | | | | | | | | | | | | | | | | | |
|------------|---|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| PN6 / PN10 | H | (mm) | 292 | 288 | 344 | 344 | 371 | 498 | 552 | 588 | 662 | 661 | 712 | 763 | 839 | 940 | 1043 | 1051 | 1190 |
| | E | (mm) | 127 | 150 | 184 | 185 | 204 | 239 | 267 | 305 | 337 | 380 | 392 | 460 | 539 | 616 | 666 | 728 | 867 |
| | I | (mm) | 45 | 45 | 55 | 55 | 55 | 55 | 55 | 65 | 65 | 80 | 80 | 110 | 110 | 120 | 120 | 120 | 162 |
| PN16 | H | (mm) | 292 | 288 | 344 | 344 | 371 | 498 | 552 | 588 | 662 | 661 | 712 | 763 | 838 | 941 | 1043 | 1064 | 1244 |
| | E | (mm) | 127 | 150 | 184 | 185 | 204 | 239 | 267 | 305 | 337 | 380 | 392 | 460 | 538 | 618 | 671 | 732 | 875 |
| | I | (mm) | 45 | 45 | 55 | 55 | 55 | 55 | 65 | 65 | 80 | 80 | 110 | 110 | 120 | 120 | 120 | 165 | 200 |
| PN25 | H | (mm) | 292 | 288 | 344 | 344 | 371 | 498 | 552 | 588 | 662 | 661 | 712 | 763 | 838 | 896 | 998 | 1064 | 1244 |
| | E | (mm) | 127 | 150 | 184 | 185 | 204 | 239 | 267 | 305 | 337 | 380 | 392 | 460 | 538 | 618 | 673 | 732 | 875 |
| | I | (mm) | 45 | 45 | 55 | 55 | 55 | 55 | 65 | 65 | 80 | 80 | 110 | 110 | 120 | 165 | 165 | 165 | 200 |
| PN40 | H | (mm) | 292 | 288 | 344 | 344 | 400 | 575 | 601 | 636 | 661 | 681 | 762 | 819 | 868 | 997 | 1093 | 1155 | 1284 |
| | E | (mm) | 127 | 150 | 184 | 185 | 215 | 251 | 285 | 317 | 361 | 406 | 416 | 496 | 575 | 649 | 713 | 793 | 949 |
| | I | (mm) | 45 | 45 | 55 | 55 | 65 | 80 | 80 | 110 | 110 | 110 | 130 | 130 | 165 | 200 | 200 | 200 | 280 |

| DN | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|

Standard-flange dimensions / Hexagon screw (Quantity, Thread, Length) per side

| | | | | | | | | | | | | | | | | | | | | |
|------|----------------------|------------------------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| PN6 | Flange hole | ØK | (mm) | 150 | 170 | 200 | 225 | 280 | 335 | 395 | 445 | 495 | 550 | 600 | 705 | 810 | 920 | 1020 | 1120 | 1340 |
| | | n x Ød1 | (mm) | -- | -- | 4x18 | 4x18 | 4x18 | 8x18 | 8x22 | 8x22 | 12x22 | 16x22 | 16x22 | 16x26 | 20x26 | 20x30 | 20x30 | 24x30 | 28x33 |
| | | Number of threads (M) | (n) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | Screw | Thread ¹⁾²⁾ | (mm) | M16 | M16 | M16 | M16 | M16 | M16 | M20 | M20 | M20 | M20 | M20 | M24 | M24 | M27 | M27 | M27 | M30 |
| | | Number ¹⁾ | (n) | -- | -- | 4 | 4 | 4 | 8 | 8 | 8 | 12 | 16 | 16 | 16 | 20 | 20 | 20 | 24 | 28 |
| | | Length ¹⁾ | (mm) | -- | -- | 90 | 90 | 90 | 100 | 100 | 100 | 100 | 110 | 110 | 120 | * | * | * | * | * |
| | | Number ²⁾ | (n) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | Length ²⁾ | (mm) | 40 | 40 | 40 | 50 | 50 | 50 | 50 | 50 | 50 | 60 | 60 | 70 | * | * | * | * | * | |
| PN10 | Flange hole | ØK | (mm) | 160 | 180 | 210 | 240 | 295 | 350 | 400 | 460 | 515 | 565 | 620 | 725 | 840 | 950 | 1050 | 1160 | 1380 |
| | | n x Ød1 | (mm) | 4x18 | 4x18 | 4x18 | 4x22 | 4x22 | 8x22 | 8x22 | 12x22 | 12x26 | 16x26 | 16x26 | 16x30 | 20x30 | 20x33 | 24x33 | 24x36 | 28x39 |
| | | Number of threads (M) | (n) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | Screw | Thread ¹⁾²⁾ | (mm) | M16 | M16 | M16 | M20 | M20 | M20 | M20 | M20 | M24 | M24 | M24 | M27 | M27 | M30 | M30 | M33 | M36 |
| | | Number ¹⁾ | (n) | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 12 | 12 | 16 | 16 | 16 | 20 | 20 | 24 | 24 | 28 |
| | | Length ¹⁾ | (mm) | 80 | 80 | 90 | 90 | 90 | 100 | 100 | 100 | 100 | 110 | 110 | 120 | * | * | * | * | * |
| | | Number ²⁾ | (n) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | Length ²⁾ | (mm) | 40 | 40 | 40 | 50 | 50 | 50 | 50 | 50 | 50 | 60 | 60 | 70 | * | * | * | * | * | |
| PN16 | Flange hole | ØK | (mm) | 160 | 180 | 210 | 240 | 295 | 355 | 410 | 470 | 525 | 585 | 650 | 770 | 840 | 950 | 1050 | 1170 | 1390 |
| | | n x Ød1 | (mm) | 4x18 | 4x18 | 4x18 | 4x22 | 8x22 | 8x26 | 8x26 | 12x26 | 12x30 | 16x30 | 16x33 | 16x36 | 20x36 | 20x39 | 24x39 | 24x42 | 28x48 |
| | | Number of threads (M) | (n) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | Screw | Thread ¹⁾²⁾ | (mm) | M16 | M16 | M16 | M20 | M20 | M24 | M24 | M24 | M27 | M27 | M30 | M33 | M33 | M36 | M36 | M39 | M45 |
| | | Number ¹⁾ | (n) | 4 | 4 | 4 | 4 | 8 | 8 | 12 | 12 | 16 | 16 | 16 | 16 | 20 | 20 | 24 | 24 | 28 |
| | | Length ¹⁾ | (mm) | 80 | 80 | 90 | 90 | 90 | 100 | 100 | 110 | 110 | 120 | 130 | 150 | * | * | * | * | * |
| | | Number ²⁾ | (n) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | Length ²⁾ | (mm) | 40 | 40 | 40 | 50 | 50 | 50 | 60 | 60 | 60 | 70 | 80 | 90 | * | * | * | * | * | |
| PN25 | Flange hole | ØK | (mm) | 160 | 190 | 220 | 250 | 310 | 370 | 430 | 490 | 550 | 600 | 660 | 770 | 875 | 990 | 1090 | 1210 | 1420 |
| | | n x Ød1 | (mm) | 4x18 | 4x22 | 4x26 | 4x26 | 8x26 | 8x30 | 12x30 | 12x33 | 12x36 | 16x36 | 16x36 | 16x39 | 20x42 | 20x48 | 24x48 | 24x56 | 28x56 |
| | | Number of threads (M) | (n) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | Screw | Thread ¹⁾²⁾ | (mm) | M16 | M20 | M24 | M24 | M24 | M27 | M27 | M30 | M33 | M33 | M33 | M36 | M39 | M45 | M45 | M52 | M52 |
| | | Number ¹⁾ | (n) | 4 | 4 | 4 | 4 | 8 | 8 | 12 | 12 | 12 | 16 | 16 | 16 | 20 | 20 | 24 | 24 | 28 |
| | | Length ¹⁾ | (mm) | 90 | 95 | 95 | 95 | 100 | 110 | 110 | 120 | 130 | 130 | 140 | 180 | * | * | * | * | * |
| | | Number ²⁾ | (n) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | Length ²⁾ | (mm) | 50 | 50 | 60 | 60 | 60 | 60 | 60 | 70 | 80 | 80 | 90 | 100 | * | * | * | * | * | |
| PN40 | Flange hole | ØK | (mm) | 160 | 190 | 220 | 250 | 320 | 385 | 450 | 510 | 585 | 610 | 670 | 795 | 900 | 1030 | 1140 | 1250 | 1460 |
| | | n x Ød1 | (mm) | 4x18 | 4x22 | 4x26 | 4x26 | 8x30 | 8x33 | 12x33 | 12x36 | 12x39 | 16x39 | 16x42 | 16x48 | 20x48 | 20x56 | 24x56 | 24x56 | 28x62 |
| | | Number of threads (M) | (n) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | Screw | Thread ¹⁾²⁾ | (mm) | M16 | M20 | M24 | M24 | M27 | M30 | M30 | M33 | M36 | M36 | M39 | M45 | M45 | M52 | M52 | M52 | M56 |
| | | Number ¹⁾ | (n) | 4 | 4 | 4 | 4 | 8 | 8 | 12 | 12 | 12 | 16 | 16 | 16 | 20 | 20 | 24 | 24 | 28 |
| | | Length ¹⁾ | (mm) | 90 | 95 | 95 | 95 | 105 | 120 | 130 | 140 | 150 | 160 | 170 | 200 | * | * | * | * | * |
| | | Number ²⁾ | (n) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | Length ²⁾ | (mm) | 50 | 50 | 60 | 60 | 70 | 70 | 80 | 80 | 90 | 100 | 100 | 120 | * | * | * | * | * | |

¹⁾ Hexagon screws ²⁾ Hexagon screws for tapped blind hole ^{*)} To be checked / determined by the customer
 Thread pitch of blind holes acc. to DIN 13-1:1999-11

| DN | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|

| Weights for double flanged process valve (series 13) | | | | | | | | | | | | | | | | | | | | |
|--|--------|-----------------|------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| 1.0619+N | PN6/10 | Fig. 30./31.016 | (kg) | 33 | 44 | 65 | 65 | 80 | 98 | 131 | 175 | 236 | 281 | 454 | 530 | 718 | 949 | 1169 | 1692 | 2430 |
| | PN16 | Fig. 32.016 | (kg) | 33 | 44 | 65 | 65 | 80 | 98 | 131 | 175 | 236 | 281 | 454 | 530 | 779 | 1039 | 1250 | 1889 | 2958 |
| | PN25 | Fig. 34.016 | (kg) | 33 | 44 | 65 | 65 | 80 | 98 | 131 | 175 | 236 | 281 | 454 | 530 | 875 | 1192 | 1517 | 2110 | 3277 |
| | PN40 | Fig. 35.016 | (kg) | 33 | 44 | 65 | 65 | 90 | 105 | 182 | 260 | 345 | 365 | 523 | 832 | 1181 | 1668 | 2033 | 2853 | 4241 |
| 1.4408 | PN6/10 | Fig. 50./51.016 | (kg) | 35 | 46 | 68 | 68 | 84 | 103 | 136 | 180 | 242 | 309 | 460 | 537 | 725 | 958 | 1181 | 1709 | 2454 |
| | PN16 | Fig. 52.016 | (kg) | 35 | 46 | 68 | 68 | 84 | 103 | 136 | 180 | 242 | 309 | 460 | 537 | 786 | 1049 | 1262 | 1907 | 2987 |
| | PN25 | Fig. 54.016 | (kg) | 35 | 46 | 68 | 68 | 84 | 103 | 136 | 180 | 242 | 309 | 460 | 537 | 883 | 1204 | 1532 | 2131 | 3309 |
| | PN40 | Fig. 55.016 | (kg) | 35 | 46 | 68 | 68 | 96 | 110 | 187 | 265 | 352 | 402 | 529 | 841 | 1192 | 1684 | 2053 | 2881 | 4283 |

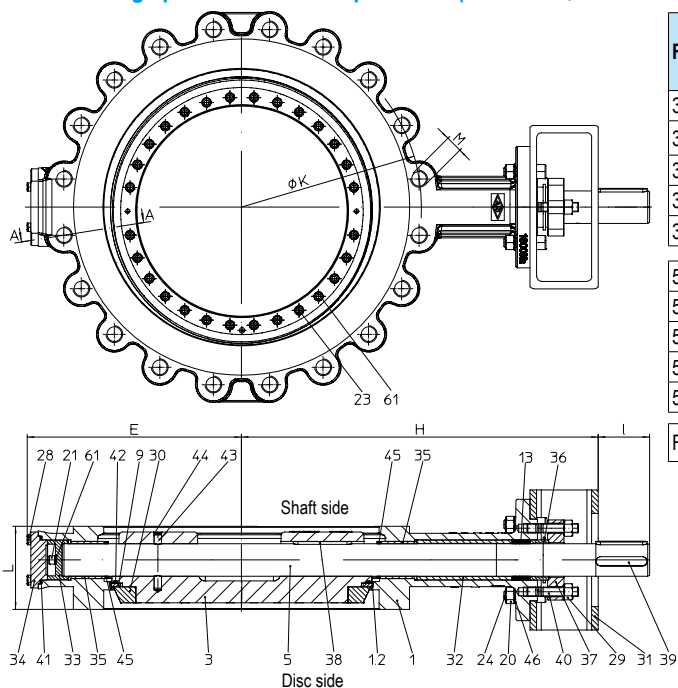
| | |
|-------------------------------------|--|
| Pressure-temperature-ratings | Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart. |
|-------------------------------------|--|

| acc. to manuf. standard | PN | | -60°C to <-10°C | -10°C to 50 °C | 120 °C | 150 °C | 200 °C | 250 °C | 300 °C | 350 °C | 400°C | 450°C ¹⁾ |
|-------------------------|----|-------|-----------------|----------------|--------|--------|--------|--------|--------|--------|-------|---------------------|
| 1.0619+N | 6 | (bar) | on request | 6 | 5,38 | 5,2 | 5 | 4,5 | 4,1 | 3,8 | 3,5 | 1,9 |
| 1.0619+N | 10 | (bar) | on request | 10 | 9,2 | 8,8 | 8,3 | 7,6 | 6,9 | 6,4 | 5,9 | 3,2 |
| 1.0619+N | 16 | (bar) | 12 | 16 | 15,3 | 14 | 13 | 11 | 10,2 | 9,5 | 5,2 | |
| 1.0619+N | 25 | (bar) | 18,7 | 25 | 23,9 | 22 | 20 | 17,2 | 16 | 14,8 | 8,2 | |
| 1.0619+N | 40 | (bar) | 30 | 40 | 38,1 | 35 | 32 | 28 | 25,7 | 23,8 | 13,1 | |

¹⁾ see parts list

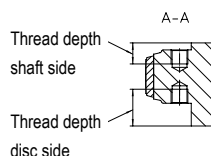
| acc. to DIN EN 1092-1 | PN | | -60°C to <-10°C | -10°C to 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 400°C | |
|-----------------------|----|-------|-----------------|----------------|-------|-------|-------|-------|-------|-------|--|
| 1.4408 | 6 | (bar) | on request | 6 | 5,4 | 5 | 4,7 | 4,4 | 4,2 | 4,1 | |
| 1.4408 | 10 | (bar) | on request | 10 | 9 | 8,4 | 7,9 | 7,4 | 7,1 | 6,8 | |
| 1.4408 | 16 | (bar) | 16 | 16 | 14,5 | 13,4 | 12,7 | 11,8 | 11,4 | 10,9 | |
| 1.4408 | 25 | (bar) | 25 | 25 | 22,7 | 21 | 19,8 | 18,5 | 17,8 | 17,1 | |
| 1.4408 | 40 | (bar) | 40 | 40 | 36,3 | 33,7 | 31,8 | 29,7 | 28,5 | 27,4 | |

Threaded flange process valve - Triple offset (Cast steel, Stainless steel)



| Figure | Nominal pressure | Material | Nominal diameter | Disc | Stem |
|--------|------------------|------------|------------------|----------|-----------|
| 30.018 | PN 6 | on request | | | |
| 31.018 | PN10 | 1.0619+N | DN 80-600 | 1.0619+N | 1.4021+QT |
| 32.018 | PN16 | 1.0619+N | DN 80-600 | 1.0619+N | 1.4021+QT |
| 34.018 | PN25 | 1.0619+N | DN 80-600 | 1.0619+N | 1.4021+QT |
| 35.018 | PN40 | 1.0619+N | DN 80-600 | 1.0619+N | 1.4021+QT |
| 50.018 | PN 6 | on request | | | |
| 51.018 | PN10 | 1.4408 | DN 80-600 | 1.4408 | 1.4542 |
| 52.018 | PN16 | 1.4408 | DN 80-600 | 1.4408 | 1.4542 |
| 54.018 | PN25 | 1.4408 | DN 80-600 | 1.4408 | 1.4542 |
| 55.018 | PN40 | 1.4408 | DN 80-600 | 1.4408 | 1.4542 |

Face-to-face dimension series 16 acc. to DIN EN 558 / ISO 5752



| Sealing element: | | |
|--------------------------------------|----------------|--|
| • Graphite / X2CrNiMoN22-5-3, 1.4462 | -60°C to 400°C | |
| • Graphite / X8CrNi25-21, 1.4845 | 400°C to 450°C | |
| Max. differential pressure: | | |
| • = Nominal pressure | | |

| Actuation arrangement: | | |
|------------------------|---------------------------------|--|
| • Worm gear | • Pneumatic actuator | |
| • Electric actuator | • Hydraulic actuator | |
| Test: | | |
| Sealing leakage test: | • DIN EN 12266-1 Leakage rate A | |

Options on request (refer to page 16)

| Parts | | | | | |
|---------------|-------|----------------------------------|---|--|--|
| Pos. | Sp.p. | Description | Fig. 31./32./34./35.018 | Fig. 51./52./54./55.018 | |
| 1 | | Body | GP240GH+N, 1.0619+N | GX5CrNiMo19-11-2, 1.4408 | |
| 1.2 | | Seat | Stellit 21 | | |
| 3 | | Disc | GP240GH+N, 1.0619+N | GX5CrNiMo19-11-2, 1.4408 | |
| 5 | | Stem | X20Cr13+QT, 1.4021+QT / > 400°C: X6CrNiTiMoVB25-15-2, 1.4980 | X5CrNiCuNb16-4, 1.4542 / > 300°C: X6CrNiTiMoVB25-15-2, 1.4980 | |
| 9 | x | Lamellar seal ring | Graphite / X2CrNiMoN22-5-3, 1.4462 / > 400°C: Graphite / X8CrNi25-21, 1.4845 | | |
| 13 | x | Packing unit | Graphite | | |
| 20 | | Hexagon nut | 8 - A2B | | |
| 21 | | Hexagon socket screw | A4-70 / >400°C: SA193-B8M2 | | |
| 23 | | Hexagon socket screw | A4-70 / >400°C: SA193-B8M2 | | |
| 24 | | Hexagon screw | 8.8-A2B | | |
| 28 | | Hexagon screw | A2-70 / >400°C: SA193-B8M2 | | |
| 29 | | Hexagon nut | A4-70 / >400°C: SA194-8M | | |
| 30 | | Retaining ring | P265 GH, 1.0425 (nickel plated) | X5CrNi18-10, 1.4301 | |
| 31 | | Mounting bracket | S355J2H, 1.0576 (galvanized) | | |
| 32 | | Distance bushing | X5CrNi18-10, 1.4301 | | |
| 33 | | Axial bearing | X20Cr13+QT, 1.4021+QT (hardened) | X5CrNi18-10, 1.4301 (hardened) | |
| 34 | | Bottom flange | < DN 250: P265 GH, 1.0425 (hardened) ≥ DN 250: P250 GH, 1.0460 (hardened) | X5CrNi18-10, 1.4301 (hardened) | |
| 35 | | Bushing | X20Cr13+QT, 1.4021+QT (hardened) | X5CrNi18-10, 1.4301 (hardened) | |
| 36 | | Packing bushing | X5CrNi18-10, 1.4301 | | |
| 37 | | Packing box flange | GX5CrNiMo19-11-2, 1.4408 | | |
| 38 / 39 | | Parallel key | A4 | | |
| 40 | | Stud | A4-70 / >400°C: SA193-B8M2 | | |
| 41 | x | Spiral wounded gasket (≥ DN 250) | Graphite / X6CrNiTi18-10, 1.4541 | | |
| 42 | x | Spiral wounded gasket | Graphite / Hastelloy C276, 2.4819 | | |
| 43 | | Parallel pin | A4-70 | | |
| 44 | | Retaining ring | X39CrMo17-1+QT, 1.4122+QT | | |
| 45 | | Packing ring | Graphite webbing | | |
| 46 | | Spring ring | FST-A2B | | |
| 46 | | Wedge-lock Washers | A4 | | |
| 61 / 62 | | Wedge-lock Washers | A4 | | |
| L Spare parts | | | | | |

Information / restriction of technical rules need to be observed!
The engineer, designing a system or a plant, is responsible for the selection of the correct valve.
Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview).

| DN | | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | | |
|--|-------------|---------------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Face-to-face dimension series 16 acc. to DIN EN 558 / ISO 5752 | | | | | | | | | | | | | | | |
| L | | (mm) | 64 | 64 | 71 | 76 | 89 | 114 | 114 | 127 | 140 | 152 | 152 | 178 | |
| Dimensions | | | | | | | | | | | | | | | |
| PN10 / PN16 / PN25 | H | (mm) | 292 | 288 | 334 | 344 | 371 | 498 | 552 | 588 | 662 | 661 | 712 | 763 | |
| | E | (mm) | 131 | 154 | 189 | 188 | 211 | 240 | 268 | 306 | 338 | 380 | 393 | 460 | |
| | I | (mm) | 45 | 45 | 55 | 55 | 55 | 55 | 65 | 65 | 80 | 80 | 110 | 110 | |
| PN40 | H | (mm) | 292 | 288 | 334 | 344 | 400 | 575 | 601 | 636 | 661 | 681 | 762 | 819 | |
| | E | (mm) | 131 | 154 | 189 | 188 | 226 | 252 | 285 | 317 | 361 | 406 | 417 | 496 | |
| | I | (mm) | 45 | 45 | 55 | 55 | 65 | 80 | 80 | 110 | 110 | 110 | 130 | 130 | |
| Standard-flange dimensions / Threads (Dimensions, Quantity, Screw depth) per side | | | | | | | | | | | | | | | |
| PN10 | Flange hole | ØK | (mm) | 160 | 180 | 210 | 240 | 295 | 350 | 400 | 460 | 515 | 565 | 620 | 725 |
| | | Total number of threads (M) | (n) | 8 | 8 | 8 | 8 | 8 | 12 | 12 | 16 | 16 | 20 | 20 | 20 |
| | | Thread ¹⁾²⁾ | (mm) | M16 | M16 | M16 | M20 | M20 | M20 | M20 | M20 | M24 | M24 | M24 | M27 |
| | Screw | Number ¹⁾ | (n) | 8 | 8 | 8 | 8 | 4 | 12 | 12 | 16 | 16 | 16 | 16 | 16 |
| | | Thread depth disc side ¹⁾ | (mm) | 30 | 30 | 30 | 35 | 40 | 50 | 50 | 60 | 65 | 70 | 70 | 85 |
| | | Thread depth shaft side ¹⁾ | (mm) | 30 | 30 | 30 | 35 | 40 | 50 | 50 | 60 | 65 | 70 | 70 | 85 |
| | | Number ²⁾ | (n) | - | - | - | - | 4 | - | - | - | - | 4 | 4 | 4 |
| | | Thread depth disc side ²⁾ | (mm) | - | - | - | - | 35 | - | - | - | - | 56 | 52 | 79 |
| Thread depth shaft side ²⁾ | (mm) | - | - | - | - | 24 | - | - | - | - | 56 | 37 | 45 | | |
| PN16 | Flange hole | ØK | (mm) | 160 | 180 | 210 | 240 | 295 | 355 | 410 | 470 | 525 | 585 | 650 | 770 |
| | | Total number of threads (M) | (n) | 8 | 8 | 8 | 8 | 12 | 12 | 12 | 16 | 16 | 20 | 20 | 20 |
| | | Thread ¹⁾²⁾ | (mm) | M16 | M16 | M16 | M20 | M20 | M24 | M24 | M24 | M27 | M27 | M30 | M33 |
| | Screw | Number ¹⁾ | (n) | 8 | 8 | 8 | 8 | 8 | 12 | 12 | 16 | 16 | 16 | 16 | 16 |
| | | Thread depth disc side ¹⁾ | (mm) | 30 | 30 | 30 | 35 | 40 | 50 | 50 | 60 | 65 | 70 | 67 | 103 |
| | | Thread depth shaft side ¹⁾ | (mm) | 30 | 30 | 30 | 35 | 40 | 50 | 50 | 60 | 65 | 70 | 52 | 65 |
| | | Number ²⁾ | (n) | - | - | - | - | 4 | - | - | - | - | 4 | 4 | 4 |
| | | Thread depth disc side ²⁾ | (mm) | - | - | - | - | 34 | - | - | - | - | 50 | 52 | 79 |
| Thread depth shaft side ²⁾ | (mm) | - | - | - | - | 24 | - | - | - | - | 50 | 37 | 45 | | |
| PN25 | Flange hole | ØK | (mm) | 160 | 190 | 220 | 250 | 310 | 370 | 430 | 490 | 550 | 600 | 660 | 770 |
| | | Total number of threads (M) | (n) | 8 | 8 | 8 | 8 | 12 | 12 | 16 | 16 | 16 | 20 | 20 | 20 |
| | | Thread ¹⁾²⁾ | (mm) | M16 | M20 | M24 | M24 | M24 | M27 | M27 | M30 | M33 | M33 | M33 | M36 |
| | Screw | Number ¹⁾ | (n) | 8 | 8 | 8 | 8 | 8 | 12 | 12 | 12 | 16 | 16 | 16 | 16 |
| | | Thread depth disc side ¹⁾ | (mm) | 30 | 30 | 30 | 35 | 40 | 50 | 50 | 58 | 68 | 73 | 72 | 103 |
| | | Thread depth shaft side ¹⁾ | (mm) | 30 | 30 | 30 | 35 | 40 | 50 | 50 | 58 | 68 | 73 | 57 | 69 |
| | | Number ²⁾ | (n) | - | - | - | - | 4 | - | 4 | 4 | - | 4 | 4 | 4 |
| | | Thread depth disc side ²⁾ | (mm) | - | - | - | - | 33 | - | 37 | 43 | - | 51 | 52 | 79 |
| Thread depth shaft side ²⁾ | (mm) | - | - | - | - | 22 | - | 29 | 43 | - | 51 | 37 | 45 | | |
| PN40 | Flange hole | ØK | (mm) | 160 | 190 | 220 | 250 | 320 | 385 | 450 | 510 | 585 | 610 | 670 | 795 |
| | | Total number of threads (M) | (n) | 8 | 8 | 8 | 8 | 12 | 12 | 16 | 16 | 16 | 20 | 20 | 20 |
| | | Thread ¹⁾²⁾ | (mm) | M16 | M20 | M24 | M24 | M27 | M30 | M30 | M33 | M36 | M36 | M39 | M45 |
| | Screw | Number ¹⁾ | (n) | 8 | 8 | 8 | 8 | 8 | 12 | 12 | 12 | 12 | 16 | 16 | 16 |
| | | Thread depth disc side ¹⁾ | (mm) | 30 | 30 | 30 | 35 | 40 | 57 | 56 | 55 | 69 | 60 | 70 | 88 |
| | | Thread depth shaft side ¹⁾ | (mm) | 30 | 30 | 30 | 35 | 40 | 51 | 50 | 54 | 61 | 60 | 64 | 79 |
| | | Number ²⁾ | (n) | - | - | - | - | 4 | - | 4 | 4 | 4 | 4 | 4 | 4 |
| | | Thread depth disc side ²⁾ | (mm) | - | - | - | - | 29 | - | 32 | 33 | 48 | 39 | 40 | 53 |
| Thread depth shaft side ²⁾ | (mm) | - | - | - | - | 22 | - | 26 | 32 | 40 | 39 | 34 | 44 | | |

¹⁾ Tapped through hole ²⁾ Tapped blind hole

Caution: Thread sizes ≥ M30 are not tapped all the way through

Thread pitch acc. to DIN 13-1

Thread depth is measured from flange face

Compliant with DIN EN 593 by ensuring effective thread depth of 1xD or 0,67xD

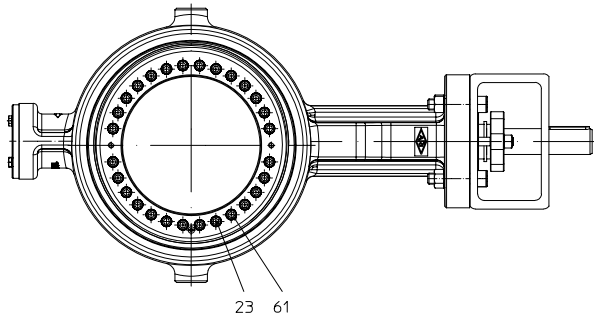
| Weights for threaded flanged process valve | | | | | | | | | | | | | | | |
|--|------------|---------------------|------|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| 1.0619+N | PN10/16/25 | Fig. 31./32./34.018 | (kg) | 24 | 29 | 41 | 45 | 64 | 74 | 121 | 152 | 192 | 221 | 416 | 446 |
| | PN40 | Fig. 35.018 | (kg) | 24 | 29 | 41 | 45 | 64 | 82 | 148 | 246 | 317 | 355 | 494 | 778 |
| 1.4408 | PN10/16/25 | Fig. 51./52./54.018 | (kg) | 26 | 31 | 42 | 47 | 68 | 78 | 128 | 158 | 198 | 244 | 422 | 458 |
| | PN40 | Fig. 55.018 | (kg) | 26 | 31 | 42 | 47 | 69 | 86 | 152 | 250 | 324 | 393 | 450 | 787 |

Pressure-temperature-ratings Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

| acc. to manuf. standard | PN | | -60°C to <-10°C | -10°C to 50 °C | 120 °C | 150 °C | 200 °C | 250 °C | 300 °C | 350 °C | 400°C | 450°C ¹⁾ |
|-------------------------|----|-------|-----------------|----------------|--------|--------|--------|--------|--------|--------|-------|---------------------|
| 1.0619+N | 6 | (bar) | on request | 6 | 5,38 | 5,2 | 5 | 4,5 | 4,1 | 3,8 | 3,5 | 1,9 |
| 1.0619+N | 10 | (bar) | on request | 10 | 9,2 | 8,8 | 8,3 | 7,6 | 6,9 | 6,4 | 5,9 | 3,2 |
| 1.0619+N | 16 | (bar) | 12 | 16 | 15,3 | 14 | 13 | 11 | 10,2 | 9,5 | 5,2 | |
| 1.0619+N | 25 | (bar) | 18,7 | 25 | 23,9 | 22 | 20 | 17,2 | 16 | 14,8 | 8,2 | |
| 1.0619+N | 40 | (bar) | 30 | 40 | 38,1 | 35 | 32 | 28 | 25,7 | 23,8 | 13,1 | |

¹⁾ see parts list

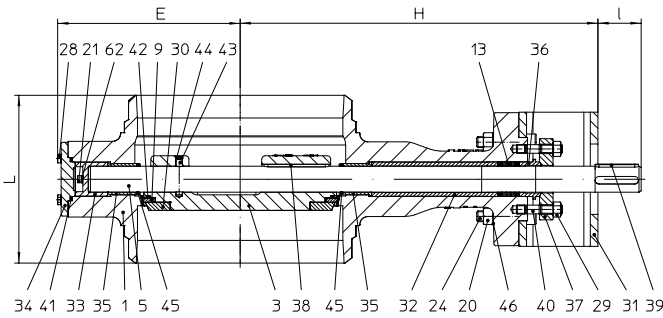
| acc. to DIN EN 1092-1 | PN | | -60°C to <-10°C | -10°C to 100°C | 150°C | 200°C | 250°C | 300°C | 350°C | 400°C |
|-----------------------|----|-------|-----------------|----------------|-------|-------|-------|-------|-------|-------|
| 1.4408 | 6 | (bar) | on request | 6 | 5,4 | 5 | 4,7 | 4,4 | 4,2 | 4,1 |
| 1.4408 | 10 | (bar) | on request | 10 | 9 | 8,4 | 7,9 | 7,4 | 7,1 | 6,8 |
| 1.4408 | 16 | (bar) | 16 | 16 | 14,5 | 13,4 | 12,7 | 11,8 | 11,4 | 10,9 |
| 1.4408 | 25 | (bar) | 25 | 25 | 22,7 | 21 | 19,8 | 18,5 | 17,8 | 17,1 |
| 1.4408 | 40 | (bar) | 40 | 40 | 36,3 | 33,7 | 31,8 | 29,7 | 28,5 | 27,4 |

Butt weld ended process valve - Triple offset (Cast steel)


| Figure | Nominal pressure | Material | Nominal diameter | Disc | Stem |
|----------------------|------------------|----------|------------------|----------|-----------|
| 31.019 ¹⁾ | PN6 - PN10 | 1.0619+N | DN 80-800 | 1.0619+N | 1.4021+QT |
| 32.019 ¹⁾ | PN16 | 1.0619+N | DN 80-800 | 1.0619+N | 1.4021+QT |
| 34.019 | PN25 | 1.0619+N | DN 80-800 | 1.0619+N | 1.4021+QT |
| 35.019 | PN40 | 1.0619+N | DN 80-800 | 1.0619+N | 1.4021+QT |

¹⁾ Sales item (in order confirmation) via 34.019 for DN80-600

Face-to-face dimension series 14 acc. to DIN EN 12982



| Sealing element: | |
|--------------------------------------|----------------|
| • Graphite / X2CrNiMoN22-5-3, 1.4462 | -60°C to 400°C |
| • Graphite / X8CrNi25-21, 1.4845 | 400°C to 450°C |
| Max. differential pressure: | |
| • = Nominal pressure | |

| Actuation arrangement: | |
|------------------------|---------------------------------|
| • Worm gear | • Pneumatic actuator |
| • Electric actuator | • Hydraulic actuator |
| Test: | |
| Sealing leakage test: | • DIN EN 12266-1 Leakage rate A |

Options on request (refer to page 16)

| Parts | | | |
|---------------|-------|-----------------------|--|
| Pos. | Sp.p. | Description | Fig. 31./32./34./35.019 |
| 1 | | Body | GP240GH+N, 1.0619+N |
| 1.2 | | Seat | Stellit 21 |
| 3 | | Disc | GP240GH+N, 1.0619+N |
| 5 | | Stem | X20Cr13+QT, 1.4021+QT / > 400°C: X6CrNiTiMoVB25-15-2, 1.4980 |
| 9 | x | Lamellar seal ring | Graphite / X2CrNiMoN22-5-3, 1.4462 / > 300°C: Graphite / X8CrNi25-21, 1.4845 |
| 13 | x | Packing unit | Graphite |
| 20 | | Hexagon nut | 8 - A2B |
| 21 | | Hexagon socket screw | A4-70 / > 400°C: SA193-B8M2 |
| 23 | | Hexagon socket screw | A4-70 / > 400°C: SA193-B8M2 |
| 24 | | Hexagon screw | 8.8-A2B |
| 28 | | Hexagon screw | A2-70 / > 400°C: SA193-B8M2 |
| 29 | | Hexagon nut | A4-70 / > 400°C: SA194-8M |
| 30 | | Retaining ring | P265 GH, 1.0425(nickel plated) |
| 31 | | Mounting bracket | S355J2H, 1.0576 (galvanized) |
| 32 | | Distance bushing | X5CrNi18-10, 1.4301 |
| 33 | | Axial bearing | X20Cr13+QT, 1.4021+QT (hardened) |
| 34 | | Bottom flange | P250 GH, 1.0460 (hardened) |
| 35 | | Bushing | X20Cr13+QT, 1.4021+QT (hardened) |
| 36 | | Packing bushing | X5CrNi18-10, 1.4301 |
| 37 | | Packing box flange | ≤ DN 600, PN6-40 und DN700-800, PN6-10: GX5CrNiMo19-11-2, 1.4408 / > DN 600 (außer DN700-800, PN6-10): X5CrNi18-10, 1.4301 |
| 38 / 39 | | Parallel key | A4 |
| 40 | | Stud | A4-70 / > 400°C: SA193-B8M2 |
| 41 | x | Spiral wounded gasket | Graphite / X6CrNiTi18-10, 1.4541 |
| 42 | x | Spiral wounded gasket | Graphite / Hastelloy C276, 2.4819 |
| 43 | | Parallel pin | A4-70 |
| 44 | | Retaining ring | X39CrMo17-1+QT, 1.4122+QT |
| 45 | | Packing ring | Graphite webbing |
| 46 | | Spring ring | FST-A2B |
| 46 | | Wedge-lock Washers | A4 |
| 61 / 62 | | Wedge-lock Washers | A4 |
| L Spare parts | | | |

Information / restriction of technical rules need to be observed!

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview).

| | | | | | | | | | | | | | | |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| DN | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

Face-to-face dimension series 14 acc. to DIN EN 12982

| | | | | | | | | | | | | | | | |
|---|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L | (mm) | 180 | 190 | 200 | 210 | 230 | 250 | 270 | 290 | 310 | 330 | 350 | 390 | 430 | 470 |
|---|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

Dimensions

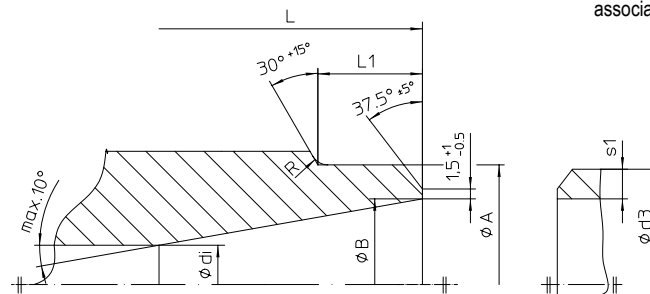
| PN | Dimension | Unit | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 |
|------------|-----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PN6 - PN10 | H | (mm) | 292 | 288 | 344 | 344 | 371 | 498 | 552 | 588 | 662 | 661 | 712 | 763 | 838 | 941 |
| | E | (mm) | 131 | 154 | 188 | 188 | 211 | 240 | 268 | 306 | 338 | 380 | 393 | 460 | 538 | 616 |
| | I | (mm) | 45 | 45 | 55 | 55 | 55 | 55 | 65 | 65 | 80 | 80 | 110 | 110 | 110 | 120 |
| PN16 | H | (mm) | 292 | 288 | 344 | 344 | 371 | 498 | 552 | 588 | 662 | 661 | 712 | 763 | 838 | 940 |
| | E | (mm) | 131 | 154 | 188 | 188 | 211 | 240 | 268 | 306 | 338 | 380 | 393 | 460 | 538 | 616 |
| | I | (mm) | 45 | 45 | 55 | 55 | 55 | 55 | 65 | 65 | 80 | 80 | 110 | 110 | 120 | 120 |
| PN25 | H | (mm) | 292 | 288 | 344 | 344 | 371 | 498 | 552 | 588 | 662 | 661 | 712 | 763 | 838 | 896 |
| | E | (mm) | 131 | 154 | 188 | 188 | 211 | 240 | 268 | 306 | 338 | 380 | 393 | 460 | 538 | 618 |
| | I | (mm) | 45 | 45 | 55 | 55 | 55 | 55 | 65 | 65 | 80 | 80 | 110 | 110 | 120 | 165 |
| PN40 | H | (mm) | 292 | 288 | 344 | 344 | 400 | 575 | 601 | 636 | 661 | 681 | 762 | 819 | 868 | 997 |
| | E | (mm) | 131 | 154 | 188 | 188 | 226 | 252 | 285 | 317 | 361 | 406 | 417 | 496 | 475 | 649 |
| | I | (mm) | 45 | 45 | 55 | 55 | 65 | 80 | 80 | 110 | 110 | 110 | 130 | 130 | 165 | 200 |

Butt weld ends according to EN12627

| | | | | | | | | | | | | | | | |
|------------------|------|------|-------|-------|-------|-------|-----|-------|-------|-------|-----|-----|------|-------|------|
| ØA | (mm) | 91 | 117 | 144 | 172 | 223 | 278 | 329 | 362 | 413 | 464 | 516 | 619 | 721 | 825 |
| ØB | (mm) | 80,9 | 104,3 | 130,7 | 157,1 | 204,9 | 257 | 307,9 | 338 | 384,4 | 437 | 486 | 585 | 682,6 | 781 |
| Ødi | (mm) | 80 | 104,3 | 128 | 152 | 200 | 250 | 296 | 331 | 380 | 437 | 480 | 581 | 682,6 | 781 |
| L1 (ähn. Bild 4) | (mm) | 12 | 14 | 18 | 20 | 20 | 25 | 33 | 45 | 45 | 33 | 40 | 40 | 48 | 48 |
| Ød3 | (mm) | 88,9 | 114,3 | 139,7 | 168,3 | 219,1 | 273 | 323,9 | 355,6 | 406,4 | 457 | 508 | 610 | 711 | 813 |
| s1 | (mm) | 4 | 5 | 4,5 | 5,6 | 7,1 | 8 | 8 | 8,8 | 11 | 10 | 11 | 12,5 | 14,2 | 16,0 |

- DIN EN 12627 picture 4
- Joint preparation acc. to - DIN EN ISO 9692-1 / DIN 2559-2
- Customer specific tube wall thickness acc. to ISO 4200
- Shoed ends (on request)
- Further, customer-specific dimensions on request

Edge shaping acc. to DIN EN ISO 5817



associated pipe dimensions: Ød3; s1

Our welded valve products are manufactured using the following materials: GP240GH, 1.0619+N

Based on our experience we recommend electric welding process for connecting valves or strainers with tubes or with each other. Lime based electrodes with an appropriate composite material should be used as filler material for welding. Gas welding should be avoided. Due to the different material composition and material thickness of valves and tubes, gas welding is more susceptible to produce faults than electric welding (hardness cracks, coarse-grained structure).

| | | | | | | | | | | | | | | |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| DN | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

Weights for butt weld ended process valve

| PN | Fig. | Unit | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | |
|----------|---------|-------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 1.0619+N | PN 6-10 | Fig. 31.019 | (kg) | 22 | 26 | 36 | 38 | 52 | 67 | 92 | 110 | 161 | 195 | 356 | 420 | 698 | 994 |
| | PN16 | Fig. 32.019 | (kg) | 22 | 26 | 36 | 38 | 52 | 67 | 92 | 110 | 161 | 195 | 356 | 420 | 767 | 1095 |
| | PN25 | Fig. 34.019 | (kg) | 22 | 26 | 36 | 38 | 52 | 67 | 92 | 110 | 161 | 195 | 356 | 420 | 728 | 1018 |
| | PN40 | Fig. 35.019 | (kg) | 22 | 26 | 36 | 38 | 59 | 78 | 113 | 165 | 208 | 256 | 371 | 577 | 815 | 1226 |

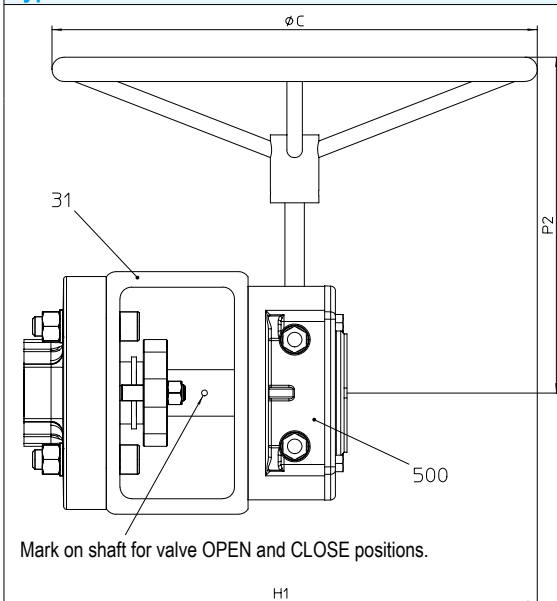
Pressure-temperature-ratings Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

| acc. to manuf. standard | PN | Unit | -60°C to <-10°C | -10°C to 50 °C | 120 °C | 150 °C | 200 °C | 250 °C | 300 °C | 350 °C | 400°C | 450°C ¹⁾ |
|-------------------------|----|-------|-----------------|----------------|--------|--------|--------|--------|--------|--------|-------|---------------------|
| 1.0619+N | 6 | (bar) | on request | 6 | 5,38 | 5,2 | 5 | 4,5 | 4,1 | 3,8 | 3,5 | 1,9 |
| 1.0619+N | 10 | (bar) | on request | 10 | 9,2 | 8,8 | 8,3 | 7,6 | 6,9 | 6,4 | 5,9 | 3,2 |
| 1.0619+N | 16 | (bar) | 12 | 16 | 15,3 | 14 | 13 | 11 | 10,2 | 9,5 | 5,2 | |
| 1.0619+N | 25 | (bar) | 18,7 | 25 | 23,9 | 22 | 20 | 17,2 | 16 | 14,8 | 8,2 | |
| 1.0619+N | 40 | (bar) | 30 | 40 | 38,1 | 35 | 32 | 28 | 25,7 | 23,8 | 13,1 | |

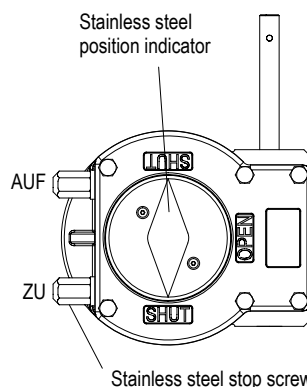
¹⁾ see parts list

ZETRIX® process valve with worm gear

Typ: AB



- With variable adjustment
- Self-locking
- Fire-safe (FS)



The SHUT-position can be adjusted to $\pm 5^\circ$ by a stop screw.

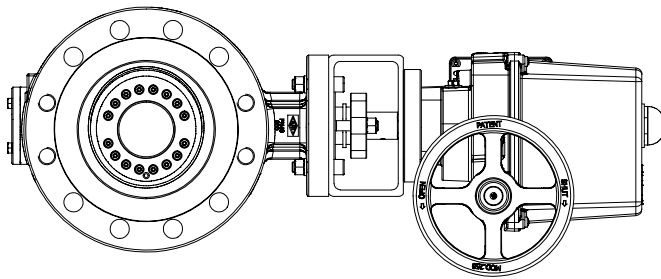
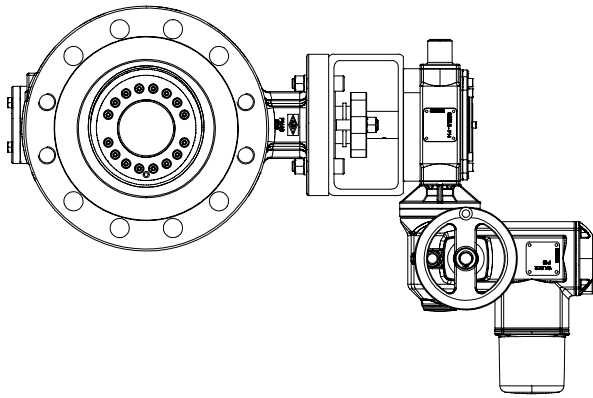
| Parts | | | |
|---------------|------|------------------|--|
| Pos. | Ers. | Description | Fig. 30./31./ 32./ 34./ 35.016; 50./51./ 52./ 54./ 55.016 ; 30./31./ 32./ 34./ 35.018; 50./51./ 52./ 54./ 55.018 ; 30./31./ 32./ 34./ 35.019 |
| 31 | | Mounting bracket | S355J2H, 1.0576 (galvanized) |
| 500 | | Worm gear | |
| L Spare parts | | | |

| DN | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700-1200 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|

| Dimensions | | | | | | | | | | | | | | | |
|-----------------------------------|-------------------------|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|------------------|------------------|---------------|
| PN6 / PN10 / PN16 / PN25 | H1 (to middle of valve) | (mm) | 395 | 395 | 585 | 585 | 612 | 739 | 844 | 880 | 960 | 1109 | 1017 | 1068 | on request |
| | P2 | (mm) | 217 | 217 | 297 | 297 | 297 | 297 | 305 | 305 | 346 | 346 | 417 | 417 | |
| | ØC | (mm) | 150 | 150 | 400 | 400 | 400 | 400 | 500 | 500 | 500 | 500 | 500 | 500 | |
| | Type of gear | | AB210 FS | AB215 FS | AB550 FS | AB550 FS | AB550 FS | AB550 FS | AB880 FS | AB880 FS | AB1250 FS | AB1250 FS | AB1950 PR4 FS | AB1950 PR4 FS | |

| | | | | | | | | | | | | | | | |
|------|-------------------------|------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|------------------|------------------|------------------|------------------|------------------|---------------|
| PN40 | H1 (to middle of valve) | (mm) | 395 | 395 | 585 | 585 | 692 | 873 | 899 | 941 | 966 | 986 | 1071 | 1128 | on request |
| | P2 | (mm) | 217 | 217 | 297 | 297 | 305 | 346 | 346 | 417 | 417 | 417 | 470 | 470 | |
| | ØC | (mm) | 150 | 150 | 400 | 400 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | |
| | Type of gear | | AB210 FS | AB215 FS | AB550 FS | AB550 FS | AB880 FS | AB1250 FS | AB1250 FS | AB1950 PR4 FS | AB1950 PR4 FS | AB1950 PR4 FS | AB6800 PR4 FS | AB6800 PR6 FS | |

| Weights | | | | | | | | | | | | | | | | |
|----------|--------------|-----------------------------------|------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| 1.0619+N | PN6/10/16/25 | Fig. 30./31./32./34.016 with gear | (kg) | 37 | 48 | 73 | 73 | 88 | 106 | 146 | 190 | 263 | 303 | 495 | 575 | on request |
| | PN40 | Fig. 35.016 with gear | (kg) | 37 | 48 | 73 | 73 | 105 | 120 | 209 | 301 | 390 | 441 | 607 | 916 | |
| | PN6/10/16/25 | Fig. 30./31./32./34.018 with gear | (kg) | 28 | 33 | 49 | 53 | 72 | 74 | 136 | 167 | 219 | 249 | 457 | 491 | |
| | PN40 | Fig. 35.018 with gear | (kg) | 28 | 33 | 49 | 53 | 79 | 82 | 175 | 287 | 362 | 412 | 578 | 862 | |
| | PN25 | Fig. 34.019 with gear | (kg) | 26 | 30 | 44 | 46 | 60 | 75 | 102 | 120 | 174 | 208 | 393 | 457 | |
| | PN40 | Fig. 35.019 with gear | (kg) | 26 | 30 | 44 | 46 | 69 | 91 | 126 | 178 | 245 | 293 | 446 | 652 | |
| 1.4408 | PN6/10/16/25 | Fig. 50./51./52./54.016 with gear | (kg) | 39 | 50 | 76 | 76 | 92 | 111 | 151 | 195 | 269 | 309 | 501 | 582 | |
| | PN40 | Fig. 55.016 with gear | (kg) | 39 | 50 | 76 | 76 | 111 | 125 | 214 | 306 | 397 | 458 | 613 | 925 | |
| | PN6/10/16/25 | Fig. 50./51./52./54.018 with gear | (kg) | 30 | 35 | 50 | 55 | 76 | 78 | 166 | 173 | 225 | 265 | 463 | 503 | |
| | PN40 | Fig. 55.018 with gear | (kg) | 30 | 35 | 50 | 55 | 84 | 86 | 179 | 291 | 369 | 443 | 534 | 871 | |

ZETRIX® process valve with electric rotary actuator

Type: Auma (further makes on request)

- for temporary service S2-15 min.
(or control: Auma S4 25%, Schiebel S4 40%)
- Enclosure IP 67
- Temperature guard in the motor
- Heating

Voltages:

- 400V 50Hz (230V 50Hz)
- Other voltages on request

Accessories:

- Travel switch
- Potentiometer
- Auma Matic
- Valve positioner 0-10V / 4-20mA
- Position-transmitter

For connection refer to terminal connection in the operating instructions of the actuator!

Type: PS Automation PSQ AMS

- Operating modes: S2-30 Min, S4 50% ED@ 25°C
- Enclosure IP 67
- with integrated positioner
- Optional: With fail-safe function based on supercapacitor (PSCP)

Voltages:

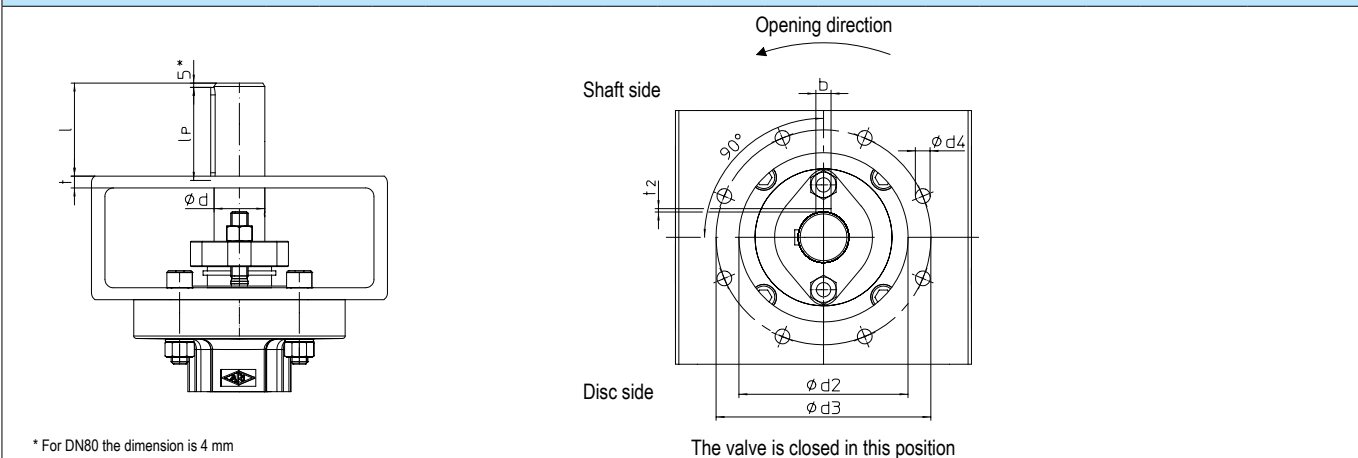
- 3Ph 400V 50Hz, 1Ph 230VAC, 24 VAC/DC
- Other voltages on request

Accessories:

- Travel limit switch (2WE)
- Power failure protection / fail-safe (PSCP)
- Fieldbus
- Local control (PSC.2)
- (For more options, see the actuator data sheets)

For connection refer to terminal connection in the operating instructions of the actuator!

Actuator allocation on request

Connection with 2 parallel keys 90° rotated (standard)


* For DN80 the dimension is 4 mm

PN6 / PN10

| DN | 80 | 100 | 125 (Fig.018) | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
|--|-----|-----|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| Connection EN ISO 5211 | F10 | | F12 | | | | | F14 | | F16 | | F25 | | | F30 | | F35 | |
| ϕd (stem diameter) (mm) | 22 | 28 | | 36 | | | 42 | | 48 | 50 | 60 | 70 | 80 | 98 | 110 | 130 | | |
| $\phi d4$ (hole- ϕ) (mm) | 11 | 13 | | | 17 | | 21 | | 17 | | | 21 | | 33 | | | | |
| $\phi d2$ (inside- ϕ) (mm) | 70 | 85 | | | 100 | | 130 | | 200 | | | 230 | | 260 | | | | |
| $\phi d3$ (screw-hole circle) (mm) | 102 | 125 | | | 140 | | 165 | | 254 | | | 298 | | 356 | | | | |
| l (bare stem length) (mm) | 45 | 55 | | | 65 | | 80 | | 110 | | | 120 | | 165 | | | | |
| l_p (parallel key length) (mm) | 45 | 50 | | 56 | | | 63 | | 80 | | 110 | | 125 | | 140 | | 180 | |
| b (parallel key width) (mm) | 6 | 8 | | 10 | | | 12 | | 14 | | 18 | 20 | 22 | 28 | 32 | | | |
| t2 (parallel key depth) (mm) | 2,8 | 3,3 | | | 3,8 | | 4,4 | | 4,9 | | 5,4 | | 6,4 | | 7,4 | | | |
| t (Mounting bracket wall thickness) (mm) | 8 | | | 12 | | 14 | | | 22 | | 27 | | 37 | | 45 | | | |

PN16

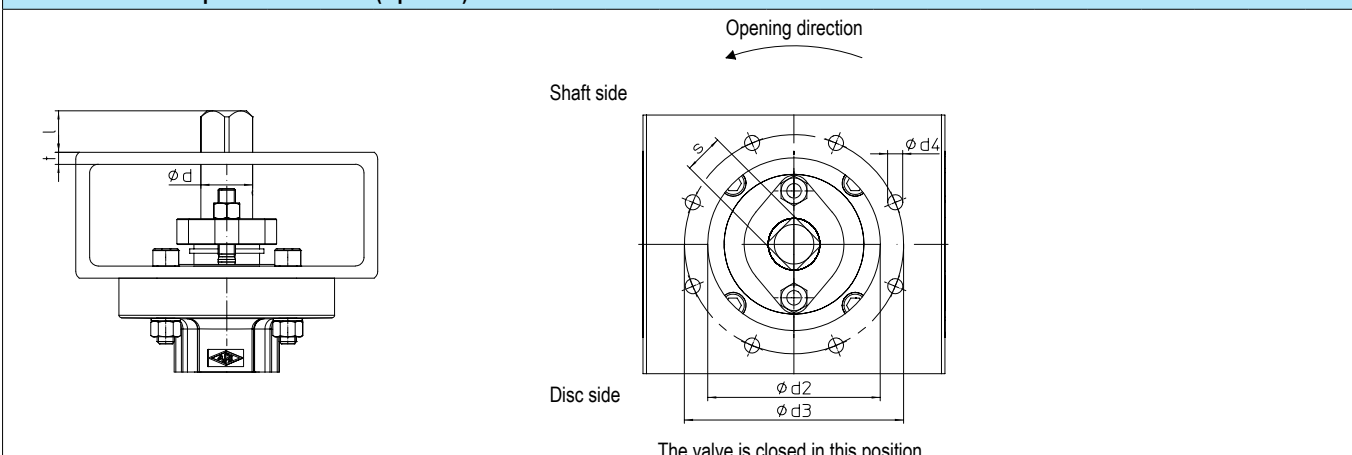
| DN | 80 | 100 | 125 (Fig.018) | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | |
|--|-----|-----|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|
| Connection EN ISO 5211 | F10 | | F12 | | | | | F14 | | F16 | | F25 | | | F30 | | F35 | | F40 |
| ϕd (stem diameter) (mm) | 22 | 28 | | 36 | | | 42 | | 48 | 50 | 60 | 70 | 98 | 110 | 120 | 130 | 160 | | |
| $\phi d4$ (hole- ϕ) (mm) | 11 | 13 | | | 17 | | 21 | | 17 | | | 21 | | 33 | | 39 | | | |
| $\phi d2$ (inside- ϕ) (mm) | 70 | 85 | | | 100 | | 130 | | 200 | | | 230 | | 260 | | 300 | | | |
| $\phi d3$ (screw-hole circle) (mm) | 102 | 125 | | | 140 | | 165 | | 254 | | | 298 | | 356 | | 406 | | | |
| l (bare stem length) (mm) | 45 | 55 | | | 65 | | 80 | | 110 | | | 120 | | 165 | | 200 | | | |
| l_p (parallel key length) (mm) | 45 | 50 | | 56 | | | 63 | | 80 | | 110 | | 140 | 160 | 180 | 220 | | | |
| b (parallel key width) (mm) | 6 | 8 | | 10 | | | 12 | | 14 | | 18 | 20 | 28 | 32 | 40 | | | | |
| t2 (parallel key depth) (mm) | 2,8 | 3,3 | | | 3,8 | | 4,4 | | 4,9 | | 6,4 | | 7,4 | | 9,4 | | | | |
| t (Mounting bracket wall thickness) (mm) | 8 | | | 12 | | 14 | | | 22 | | 27 | | 37 | | 45 | | | | |

PN25

| DN | 80 | 100 | 125 (Fig.018) | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | |
|--|-----|-----|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|--|
| Connection EN ISO 5211 | F10 | | F12 | | | | | F14 | | F16 | | F25 | | | F30 | F35 | | F40 | |
| ϕd (stem diameter) (mm) | 22 | 28 | | 36 | | | 42 | | 48 | 50 | 60 | 70 | 98 | 110 | 120 | 130 | 160 | | |
| $\phi d4$ (hole- ϕ) (mm) | 11 | 13 | | | 17 | | 21 | | 17 | | | 21 | | 33 | | 39 | | | |
| $\phi d2$ (inside- ϕ) (mm) | 70 | 85 | | | 100 | | 130 | | 200 | | | 230 | | 260 | | 300 | | | |
| $\phi d3$ (screw-hole circle) (mm) | 102 | 125 | | | 140 | | 165 | | 254 | | | 298 | | 356 | | 406 | | | |
| l (bare stem length) (mm) | 45 | 55 | | | 65 | | 80 | | 110 | | | 120 | | 165 | | 200 | | | |
| l_p (parallel key length) (mm) | 45 | 50 | | 56 | | | 63 | | 80 | | 110 | | 140 | 160 | 180 | 220 | | | |
| b (parallel key width) (mm) | 6 | 8 | | 10 | | | 12 | | 14 | | 18 | 20 | 28 | 32 | 40 | | | | |
| t2 (parallel key depth) (mm) | 2,8 | 3,3 | | | 3,8 | | 4,4 | | 4,9 | | 6,4 | | 7,4 | | 9,4 | | | | |
| t (Mounting bracket wall thickness) (mm) | 8 | | | 12 | | 14 | | | 22 | | 27 | | 37 | | 45 | | | | |

PN40

| DN | 80 | 100 | 125 (Fig.018) | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | |
|--|-----|-----|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|
| Connection EN ISO 5211 | F10 | | F12 | | | | | F14 | | F16 | | F25 | | | F30 | F35 | F40 | | F48 |
| ϕd (stem diameter) (mm) | 22 | 28 | | 36 | | | 42 | | 48 | 60 | | 70 | 80 | 110 | 120 | 145 | 160 | 190 | |
| $\phi d4$ (hole- ϕ) (mm) | 11 | 13 | | | 17 | | 21 | | 17 | | | 21 | | 33 | | 39 | | | |
| $\phi d2$ (inside- ϕ) (mm) | 70 | 85 | | | 100 | | 130 | | 200 | | | 230 | | 260 | | 300 | | 370 | |
| $\phi d3$ (screw-hole circle) (mm) | 102 | 125 | | | 140 | | 165 | | 254 | | | 298 | | 356 | | 406 | | 483 | |
| l (bare stem length) (mm) | 45 | 55 | | | 65 | | 80 | | 110 | | | 130 | | 165 | | 200 | | 280 | |
| l_p (parallel key length) (mm) | 45 | 50 | | 56 | | | 63 | | 80 | | 110 | | 125 | | 180 | 200 | 220 | 280 | |
| b (parallel key width) (mm) | 6 | 8 | | 10 | | | 12 | | 14 | | 18 | 20 | 22 | 28 | 32 | 36 | 40 | 45 | |
| t2 (parallel key depth) (mm) | 2,8 | 3,3 | | | 3,8 | | 4,4 | | 4,9 | | 5,4 | | 6,4 | | 7,4 | 8,4 | 9,4 | 10,4 | |
| t (Mounting bracket wall thickness) (mm) | 8 | | | 12 | | 14 | | | 22 | | 27 | | 37 | | 45 | | | | |

Connection with 4 square EN ISO 5211 (Optional)


| PN6 / PN10 | | | | | | | | | | | | | | | | | | |
|-------------------------------------|------|-----|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|-----|-----|-----|------|------|
| DN | 80 | 100 | 125 (Fig. 018) | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
| Connection EN ISO 5211 | F10 | | F12 | | | | F14 | | F16 | | F25 | | | F30 | | F35 | | |
| ϕd (stem diameter) | (mm) | 22 | 28 | | 36 | | | 42 | | 48 | 50 | 60 | 70 | 80 | 98 | 110 | 130 | |
| $\phi d4$ (hole- ϕ) | (mm) | 11 | 13 | | | | 17 | | 21 | | 17 | | | 21 | | 33 | | |
| $\phi d2$ (inside- ϕ) | (mm) | 70 | 85 | | | | 100 | | 130 | | 200 | | | 230 | | 260 | | |
| $\phi d3$ (screw-hole circle) | (mm) | 102 | 125 | | | | 140 | | 165 | | 254 | | | 298 | | 356 | | |
| l (bare stem length) | (mm) | 19 | 24 | | 29 | | | 38 | | 48 | 57 | 57 | on request | | | | | |
| s (width across flats) | (mm) | 17 | 22 | | 27 | | | 36 | | 46 | 55 | 55 | on request | | | | | |
| t (Mounting bracket wall thickness) | (mm) | 8 | | | | | | 12 | | 14 | | | 22 | | 27 | | | |

| PN16 | | | | | | | | | | | | | | | | | | |
|-------------------------------------|------|-----|----------------|-----|-----|-----|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|------|------|
| DN | 80 | 100 | 125 (Fig. 018) | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
| Anschluss EN ISO 5211 | F10 | | F12 | | | | F14 | | F16 | | F25 | | | F30 | | F35 | | F40 |
| ϕd (stem diameter) | (mm) | 22 | 28 | | 36 | | | 42 | | 48 | 50 | 60 | 70 | 98 | 110 | 120 | 130 | 160 |
| $\phi d4$ (hole- ϕ) | (mm) | 11 | 13 | | | | 17 | | 21 | | 17 | | | 21 | | 33 | | 39 |
| $\phi d2$ (inside- ϕ) | (mm) | 70 | 85 | | | | 100 | | 130 | | 200 | | | 230 | | 260 | | 300 |
| $\phi d3$ (screw-hole circle) | (mm) | 102 | 125 | | | | 140 | | 165 | | 254 | | | 298 | | 356 | | 406 |
| l (bare stem length) | (mm) | 19 | 24 | | 29 | | | 38 | | 48 | 57 | on request | | | | | | |
| s (width across flats) | (mm) | 17 | 22 | | 27 | | | 36 | | 46 | 55 | on request | | | | | | |
| t (Mounting bracket wall thickness) | (mm) | 8 | | | | | | 12 | | 14 | | | 22 | | 27 | | | |

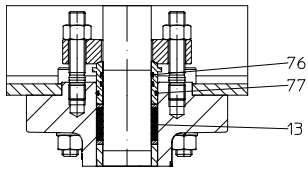
| PN25 | | | | | | | | | | | | | | | | | | |
|-------------------------------------|------|-----|----------------|-----|-----|-----|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|------|------|
| DN | 80 | 100 | 125 (Fig. 018) | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
| Anschluss EN ISO 5211 | F10 | | F12 | | | | F14 | | F16 | | F25 | | | F30 | | F35 | | F40 |
| ϕd (stem diameter) | (mm) | 22 | 28 | | 36 | | | 42 | | 48 | 50 | 60 | 70 | 98 | 110 | 120 | 130 | 160 |
| $\phi d4$ (hole- ϕ) | (mm) | 11 | 13 | | | | 17 | | 21 | | 17 | | | 21 | | 33 | | 39 |
| $\phi d2$ (inside- ϕ) | (mm) | 70 | 85 | | | | 100 | | 130 | | 200 | | | 230 | | 260 | | 300 |
| $\phi d3$ (screw-hole circle) | (mm) | 102 | 125 | | | | 140 | | 165 | | 254 | | | 298 | | 356 | | 406 |
| l (bare stem length) | (mm) | 19 | 24 | | 29 | | | 38 | | 48 | 57 | on request | | | | | | |
| s (width across flats) | (mm) | 17 | 22 | | 27 | | | 36 | | 46 | 55 | on request | | | | | | |
| t (Mounting bracket wall thickness) | (mm) | 8 | | | | | | 12 | | 14 | | | 22 | | 27 | | | |

| PN40 | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|------|-----|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|-----|------|------|-----|
| DN | 80 | 100 | 125 (Fig. 018) | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | |
| Anschluss EN ISO 5211 | F10 | | F12 | | | | F14 | | F16 | | F25 | | | F30 | | F35 | | F40 | F48 |
| ϕd (stem diameter) | (mm) | 22 | 28 | | 36 | | | 42 | | 48 | 60 | | 70 | 80 | 110 | 120 | 145 | 160 | 190 |
| $\phi d4$ (hole- ϕ) | (mm) | 11 | 13 | | | | 17 | | 21 | | 17 | | | 21 | | 33 | | 39 | |
| $\phi d2$ (inside- ϕ) | (mm) | 70 | 85 | | | | 100 | | 130 | | 200 | | | 230 | | 260 | | 300 | |
| $\phi d3$ (screw-hole circle) | (mm) | 102 | 125 | | | | 140 | | 165 | | 254 | | | 298 | | 356 | | 406 | |
| l (bare stem length) | (mm) | 19 | 24 | | 29 | | | 38 | | 48 | | 57 | | | on request | | | | |
| s (width across flats) | (mm) | 17 | 22 | | 27 | | | 36 | | 46 | | 55 | | | on request | | | | |
| t (Mounting bracket wall thickness) | (mm) | 8 | | | | | | 12 | | 14 | | | 22 | | 27 | | 37 | | |

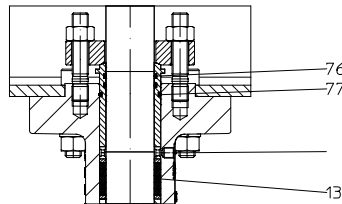
Options

- Design acc. to EN ISO 15848-1
- Design acc. to EN ISO 15848-1/ TA-Luft add. secondary sealing (O-rings)
- Threaded joint, f. ex. 1/4" with screw connection on the stem extension and/or on the bottom flange (e.g. Test-, buffer-, flushing port)
- Full metal sealing ring in 1.4571 for special applications
- Blow-out protected stem acc. to API 609
- Sealing against toxic media (on request)
- Heating jacket (on request)
- Cavity free design (on request)
- Design acc. to NACE MR 0103 / NACE MR 0175 (on request)
- Additional pick-up on the stem with inductive limit switches (OPEN / CLOSE)
- Special materials (z.B. Duplex 1.4470) on request
- Stainless steel internal parts

Options:
- Design acc. to EN ISO 15848-1
- TA-Luft with add. secondary sealing (O-Ring)



Graphite EN ISO 15848-1 with O-Rings



Graphite EN ISO 15848-1 with O-Rings and test port

test port

- For critical media (f.ex. Thermal oil, steams...)
- „Double“ security due to secondary sealing (Pos. 76/77)
- Leakage monitoring due to test port (Information required when ordering)

O-Rings

| Pos. | Material | Temperature range ¹⁾ | Applications (Examples) |
|---------|--|---------------------------------|--|
| 76 / 77 | Tetrafluoroethylene / Propylene (FEPM) | -15 °C to +300 °C | Thermal oil / hydrocarbons, hot water, steam, ammonia, hydrogen, sour gas, amine, methanol |
| | Special compound (XTR-F) | -15 °C to +350 °C | Thermal oil, most aggressive media (strong acids/bases) |
| | Fluorocarbon - rubber (FKM) | -60 °C to +230 °C | Cryogenic applications, concentrated acids, hydrocarbons |
| | Ethylene-Propylene-Diene-Rubber (EPDM) | -60 °C to +200 °C | Hot water, steam, cryogenic applications, ammonia |

¹⁾ Temperature range may be smaller owing to other limiting components / operating conditions

For the correct design of the O-rings, the operating conditions must be stated before ordering.

| Kvs-value / Zeta-value (Fig. 016, 018, 019) | | | | | | | | | | | | | | | | | | | |
|---|------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| DN | | | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
| PN6/10 | Kvs-value | (m ³ /h) | 100 | 190 | 345 | 515 | 1245 | 2110 | 3195 | 4230 | 5650 | 8165 | 9260 | 13520 | 27800 | 39569 | 45914 | 57885 | 80980 |
| | Zeta-value | -- | 6,54 | 4,42 | 3,28 | 3,05 | 1,65 | 1,40 | 1,27 | 1,34 | 1,28 | 0,98 | 1,16 | 1,13 | 0,47 | 0,42 | 0,49 | 0,47 | 0,50 |
| PN16/25 | Kvs-value | (m ³ /h) | 100 | 190 | 345 | 515 | 1245 | 2110 | 3195 | 4230 | 5650 | 8165 | 9260 | 13520 | 25350 | 34408 | 39850 | 49495 | 69740 |
| | Zeta-value | -- | 6,54 | 4,42 | 3,28 | 3,05 | 1,65 | 1,40 | 1,27 | 1,34 | 1,28 | 0,98 | 1,16 | 1,13 | 0,59 | 0,55 | 0,65 | 0,65 | 0,68 |
| PN40 | Kvs-value | (m ³ /h) | 100 | 190 | 345 | 515 | 1020 | 1940 | 2915 | 3765 | 5090 | 7312 | 8235 | 12445 | 23240 | 29920 | 37208 | 44422 | 62025 |
| | Zeta-value | -- | 6,54 | 4,42 | 3,28 | 3,05 | 2,46 | 1,66 | 1,52 | 1,69 | 1,58 | 1,23 | 1,47 | 1,34 | 0,71 | 0,73 | 0,75 | 0,81 | 0,86 |

| Difference between disc outside-diameter and face-to-face for double flange design | | | | | | | | | | | | | | | | | | | |
|--|------|----|----|-----|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|-----|-----|-----|------|------|
| DN | | | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 |
| B | (mm) | -- | -- | -- | -- | 28,5 | 43,5 | 57,5 | 77 | 87,4 | 113 | 132,5 | 165,5 | 208 | 245 | 283 | 285 | 351 | |
| D | (mm) | -- | -- | -- | -- | 123,3 | 169,3 | 209,6 | 261,3 | 301,6 | 373 | 411 | 503 | 614 | 715 | 797 | 854 | 1034 | |

| Difference between disc outside-diameter and face-to-face for threaded flange design | | | | | | | | | | | | | |
|--|------|----|------|-----|-----|-------|-----|-------|-------|-------|-----|-----|-----|
| DN | | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
| B | (mm) | 9 | 21 | 27 | 38 | 60 | 69 | 89 | 105 | 127 | 148 | 171 | 213 |
| D | (mm) | 43 | 73,5 | 91 | 118 | 168,5 | 204 | 247,5 | 292,5 | 342,5 | 403 | 444 | 542 |

| Difference between disc outside-diameter and face-to-face for butt weld ends design | | | | | | | | | | | | | | | |
|---|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| DN | | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 |
| B | (mm) | -- | -- | -- | -- | -- | -- | 9 | 23 | 37 | 59 | 69 | 99 | 139 | 170 |
| D | (mm) | -- | -- | -- | -- | -- | -- | 87 | 161 | 215 | 292 | 327 | 424 | 541 | 636 |

