

E3 Gate valve | Combi valves

Overview

Design features

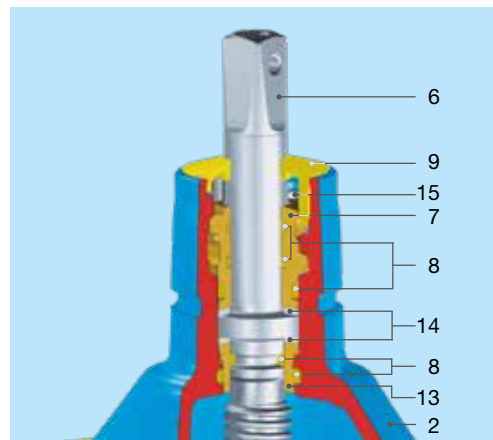
- Resilient seated gate valve according to EN 1171, EN 1074-1 and EN 1074-2 with smooth, straight-through bore
- Double bayonet O-ring carrier is connecting the spindle to the bonnet, allowing a fully encased, uniform epoxy powder coated bonnet for further improved corrosion protection
- Wedge guide made of wear resistant POM material in load optimized design minimizes attrition and ensures lowest torque actuation
- Wedge is flexible and fully linked in vulcanized elastomer to the wedge nut. This snug fit dampens vibration during opening and closing of the wedge
- Wedge nut has a long thread length allowing significantly higher torques than the standard before breaking
- O-rings, lip-seals mounted in the bonnet are replaceable under operating pressure
- Extended edge protection to avoid damages during transport, storage and assembly
- Sliding disks and ball bearing assure low friction performance of the spindle
- 100% suitable for buried installations

Material | Technical features

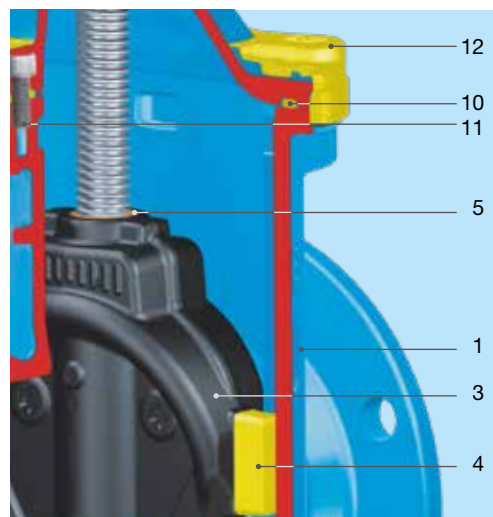
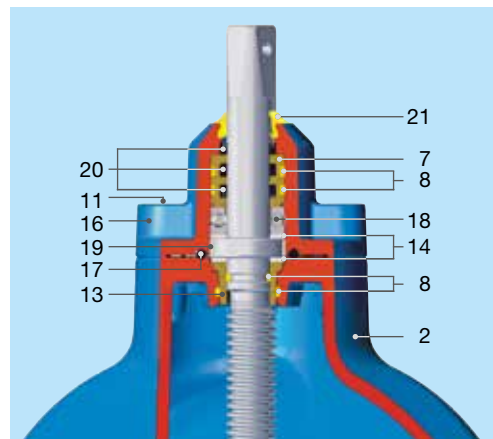
- 1,2 **Body (1), bonnet (2), centering flange (16)** made of ductile iron, 16 epoxy powder coated inside and out
- 3 **Wedge** made of ductile iron (DN 50 made of dezincification-resistant brass) with vulcanized elastomer all-over
- 4 **Wedge guide** made of wear-resistant plastic
- 5 **Wedge nut** made of dezincification-resistant brass
- 6 **Duplex stainless steel spindle** with rolled thread and flat-rolled anti-friction surface
- 7 **O-ring carrier** made of brass, DN 50 — 200 with double bayonet
- 8 **O-rings** made of elastomer
- 9 **Wiper ring** made of PE
- 10 **Bonnet gasket** made of elastomer
- 11 **Allen screws** made of stainless steel, encased into the body with interlacing gasket and sealing compounds, ensuring full corrosion protection
- 12 **Extended edge protection** made of PE
- 13 **Spindle bearing** made of dezincification resistant brass
- 14 **Sliding disks** made of POM
- 15 **Safety screw** made of stainless steel
- 17 **Centering flange gasket** made of elastomer
- 18 **Axial ball bearing** permanently lubricated
- 19 **Centering ring** made of POM
- 20 **Lip seals** made of elastomer
- 21 **Wiper ring** made of elastomer

DN 50 — 200

Spindle bearing with sliding disks



DN 250 — 400 Spindle bearing with ball bearing and additional sliding disks



E3 Valve

With flange DN 50 — 200, PN 10 | PN 16

Design features

- Resilient seated gate valve with smooth straight-through bore in compliance with EN 13774 (EN 1074-1 and 2)
- Flanges sized in accordance with EN 1092-2, drilled according to
EN 1092-2 | PN 10 standard (4005E3, 4705E3);
EN 1092-2 | PN 16 from DN 200 (4005E3, 4705E3)
Please specify on order - other standards on request
- **Wedge guide** with high glide characteristics; load-optimised design guarantees lowest wear and minimum closing torques
- **Wedge nut** allows high torque load through large dimensioning of the required thread length
- **O-rings, lip seals** mounted in rust-proof material on all sides
- **Edge protection** protects during transport and storage
- **Friction washers** (DN 50 to DN 200) guarantee low friction mounting of the spindle
- One extension spindle for several dimensions
- **100%** suitable for underground installation

Standard version: without handwheel and extension spindle

Design versions: with position indicator:
No. 4005STE3

Temperature range: operation: -10 °C to 50 °C
storage: -25 °C to 70 °C

No. 4005E3

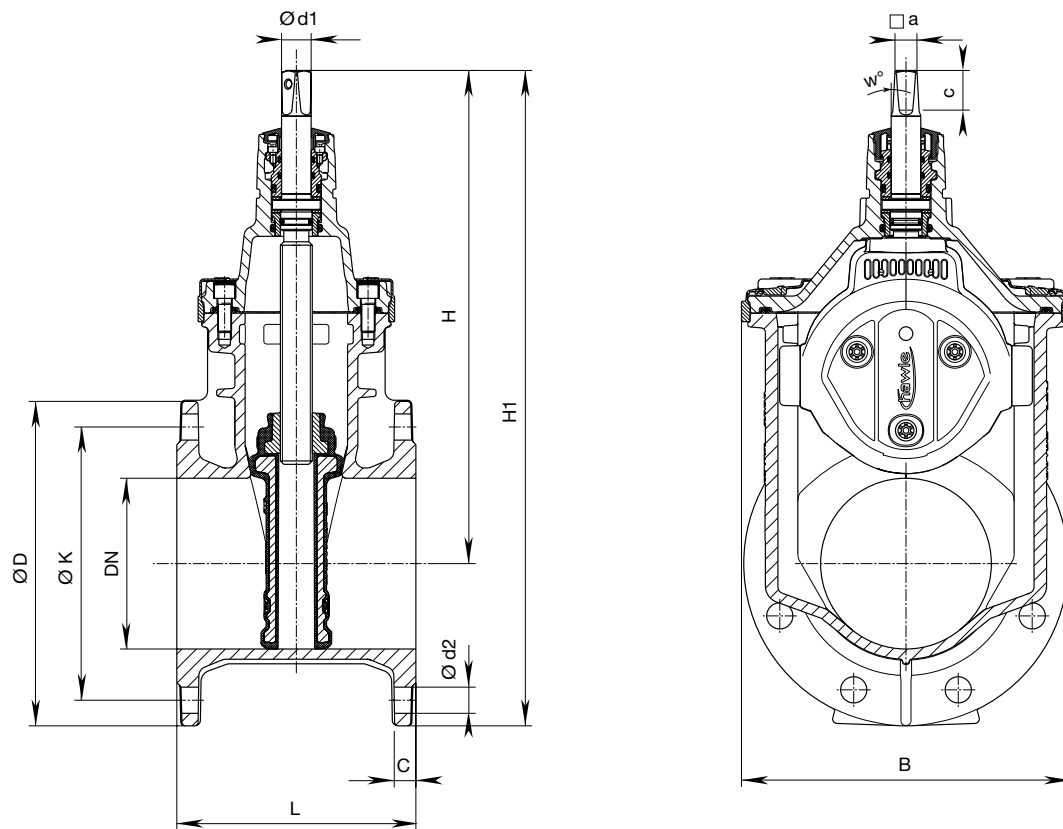
No. 4705E3



| Order no. | Version | MOP (PN) | Dimensions/DN | | | | | | |
|-----------|-------------------------|----------|---------------|----|----|-----|-----|-----|-----|
| | | | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
| 4005E3 | short EN 558-1 GR 14 | 16 | | | | | | | |
| 4705E3 | long EN 558-1 GR 15 | 16 | | | | | | | |

Suitable accessories:

| | | |
|---------------------|--------------------|---------------|
| Handwheel: | | No. 7800 |
| Extension spindles: | rigid | No. 9000E2/E3 |
| | telescopic | No. 9500E2/E3 |
| Surface boxes: | rigid | No. 1755 |
| Base plate: | No. 3481, No. 3490 | |



| DN | MOP (PN) | Flange | | | Bolts | | | Spindle | | | | Valve | | | | | Weight | |
|-----|-------------|--------|----|-----|---------|--------|------|---------|------|----|------|-------|-------|---------|--------|-----|--------|------|
| | | Ø D | C | Ø K | Qty. | Thread | Ø d2 | □ a | c | w° | Ø d1 | H | H1 | L short | L long | B | short | long |
| 50 | 10 16 | 165 | 19 | 125 | 4 | M 16 | 19 | 14,8 | 29,2 | 3° | 20,5 | 234 | 316,5 | 150 | 250 | 143 | 10,0 | 11,5 |
| 65 | 10 16 | 185 | 19 | 145 | 4 | M 16 | 19 | 17,3 | 33,8 | | 24 | 305 | 397,5 | 170 | 270 | 180 | 15,5 | 17,5 |
| 80 | 10 16 | 200 | 19 | 160 | 8 | M 16 | 19 | 17,3 | 33,8 | | 24 | 312,5 | 412,5 | 180 | 280 | 180 | 16,5 | 20,0 |
| 100 | 10 16 | 220 | 19 | 180 | 8 | M 16 | 19 | 19,3 | 37,2 | | 24 | 343 | 453 | 190 | 300 | 212 | 20,5 | 25,5 |
| 125 | 10 16 | 250 | 19 | 210 | 8 | M 16 | 19 | 19,3 | 34,9 | | 26 | 421 | 546 | 200 | 325 | 289 | 33,0 | 37,5 |
| 150 | 10 16 | 285 | 19 | 240 | 8 | M 20 | 23 | 19,3 | 34,9 | | 26 | 433 | 576 | 210 | 350 | 289 | 37,0 | 43,5 |
| 200 | 10 16 | 340 | 20 | 295 | 8 12 | M 20 | 23 | 24,3 | 47,3 | | 30 | 541 | 711 | 230 | 400 | 356 | 60,5 | 71,5 |

E3 Valve

With flange DN 250 — 400, PN 10 | PN 16

Design features

- Resilient seated gate valve with smooth straight-through bore in compliance with EN 13774 (EN 1074-1 and 2)
- Flanges sized in accordance with EN 1092-2, drilled according to
EN 1092-2 | PN 10 standard (4005**E3**, 4705**E3**);
EN 1092-2 | PN 16 from DN 200 (4005**E3**, 4705**E3**)
Please specify on order - other standards on request
- **Wedge guide** with high glide characteristics; load-optimised design guarantees lowest wear and minimum closing torques
- **Wedge nut** allows high torque load through large dimensioning of the required thread length
- **O-rings, lip seals** mounted in rust-proof material on all sides
- **Edge protection** protects during transport and storage
- **Ball bearings** (DN 250 to DN 400) in the spindle seating minimizes closing forces
- Easy to actuate without bypass and without power boost - even for 16 bar differential pressure
- For the assembling of a position indicator it is necessary to remove the centering flange and mount the adapter for position indicator
- **100%** suitable for underground installation

- Standard version:** without handwheel and extension spindle
- Design versions:** with position indicator:
No. 4005**STE3**
- Temperature range:** operation: -10 °C to 50 °C
storage: -25 °C to 70 °C

No. 4005**E3**
No. 4705**E3**



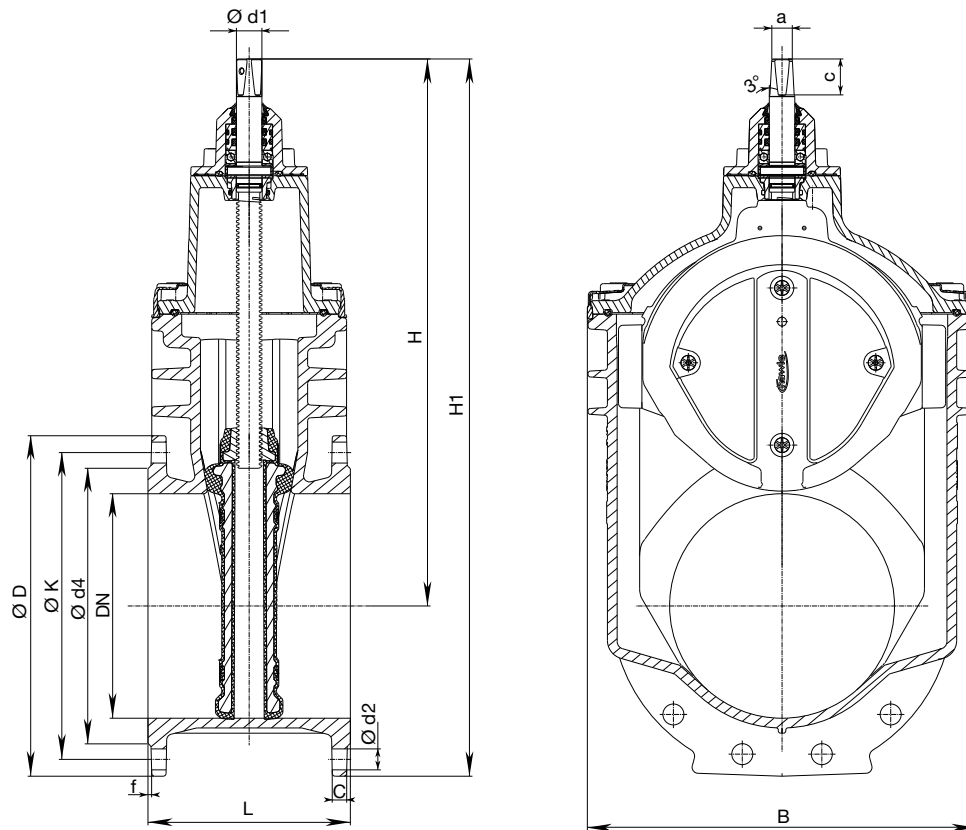
iii. DN 300

| Order no. | Version | MOP (PN) | Dimensions/DN | | | |
|----------------|----------------|----------|---------------|-----|-----|-----|
| | | | 250 | 300 | 350 | 400 |
| 4005 E3 | short | 16 | | | | |
| | EN 558-1 GR 14 | | | | | |
| 4705 E3 | long | 16 | | | | * |
| | EN 558-1 GR 15 | | | | | |

* in preparation

Suitable accessories:

- Handwheel: No. 7800
- Extension spindles: rigid No. 9000**E2/E3**
telescopic No. 9500**E2/E3**
- Surface boxes: rigid No. 1755
- Base plate: No. 3481, No. 3490



| DN | MOP (PN) | Flange | | | | | Bolts | | | Spindle | | | Valve | | | | | Weight | |
|-----|----------|--------|------|-----|------|---|-------|--------|------|---------|----|------|-------|------|---------|--------|-----|--------|-------|
| | | Ø D | C | Ø K | Ø d4 | f | Qty. | Thread | Ø d2 | a | c | Ø d1 | H | H1 | L short | L long | B | short | long |
| 250 | 10 | 400 | 22 | 350 | 319 | 3 | 12 | M 20 | 23 | 27,3 | 48 | 34 | 649 | 849 | 250 | | 432 | 99,0 | |
| | 16 | | | 355 | | | | M 24 | 28 | | | | | | | | | | |
| 300 | 10 | 455 | 24,5 | 400 | 367 | 4 | 12 | M 20 | 23 | 27,3 | 48 | 34 | 731 | 959 | 270 | 500 | 518 | 151,0 | 168,0 |
| | 16 | | | 410 | | | | M 24 | 28 | | | | | | | | | | |
| 350 | 10 | 520 | 26,5 | 460 | 427 | 4 | 16 | M 20 | 23 | 27,3 | 48 | 34 | 816 | 1076 | 290 | | 604 | 206,5 | |
| | 16 | | | 470 | | | | M 24 | 28 | | | | | | | | | | |
| 400 | 10 | 580 | 28 | 515 | 477 | 4 | 16 | M 24 | 28 | 32,3 | 55 | 44 | 925 | 1215 | 310 | 600* | 687 | 266,0 | 310* |
| | 16 | | | 525 | | | | M27 | 31 | | | | | | | | | | |

* in preparation



The specified pressure test for gas-valves is certified by an acceptance test certificate to EN 10204 -3.1.

