

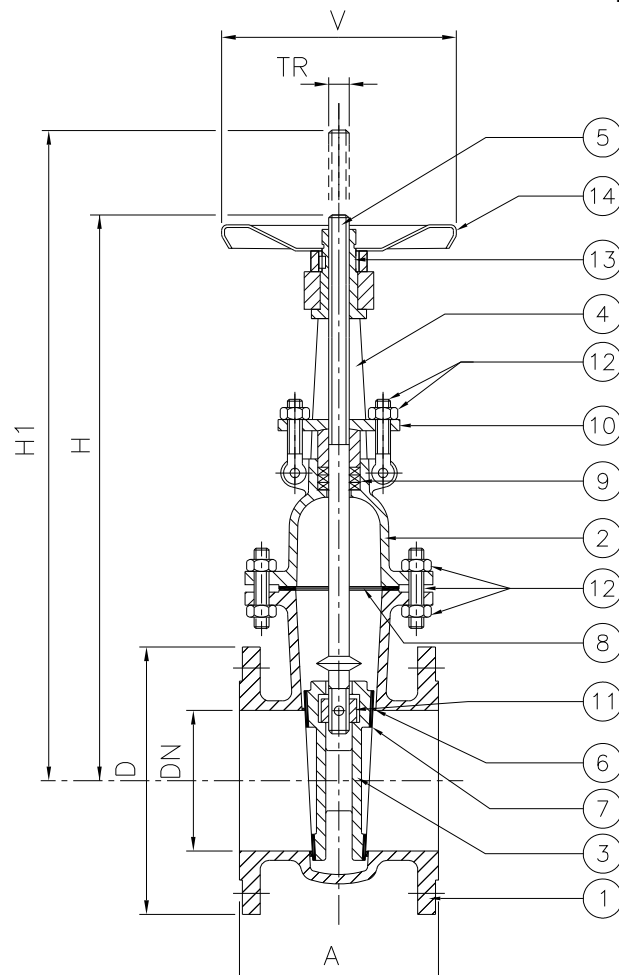
## KEILFLACHSCHIEBER, außenliegende Spindel

Gate Valve Outside Screw

PN 16 DN 50 - DN 800

Flanges PN 16 or PN 10

**Type: 7-210 - 7-510**



0948

### Standardausführung / Standard features:

- ☒ **Ausführung/** Design EN 12516  
EN 1984
- ☒ **Baulänge/** Face to face EN 558 series 14  
DIN 3202 F4
- ☒ **Flansche/** Flanges EN 1092-1/21/B1
- ☒ **Werkstoffe/** Materials EN 10213  
EN 10269  
EN 10088
- ☒ **Schrauben u. Muttern/** EN 1515-1  
Bolts and nuts
- ☒ **Schweißverfahren/** AD-M HP 0  
Welding overlay
- ☒ **Abnahme/** Testing EN 1984  
EN 12266
- ☒ **Markierung/** Marking EN 19
- ☒ **Prüfzeugnis/** Certificates EN 10204

### Auf Anfrage / Optional versions:

- ☐ AD 2000 – A4
- ☐ TRD 110
- ☐ DIN 3230 Part 4
- ☐ DIN 3230 Part 5
- ☐ DIN 3230 Part 6
- ☐ TRbF 131
- ☐ TRbF 301 or 302
- ☐ ATEX
- ☐ TA-Luft
- ☐ **mit Flansche PN 6/** With flanges PN 6
- ☐ **mit Flanschform/** With flanges form A, B2, C, D, E, F, G, H
- ☐ **mit Schweißenden/** With butt welding ends (EN 12982 / EN 12627)

**max. zulässige Durchflussgeschwindigkeit (lt. EN1074-1)**

**max. allowed flow speed (acc. EN1074-1):**

Wasser/water: PN 6 (2,5 m/s) Dampf/steam: PN 6 (25 m/s)  
PN 10 (3,0 m/s) PN 10 (30 m/s)  
PN 16 (4,0 m/s) PN 16 (35 m/s)

## Werkstoffe / Material Specification

| DESCRIPTION / Bauteile        | FIG. 7-210                     | FIG. 7-310                     | FIG. 7-310-J          | FIG. 7-410                     | Fig. 7-410-H                   | FIG. 7-510                     |
|-------------------------------|--------------------------------|--------------------------------|-----------------------|--------------------------------|--------------------------------|--------------------------------|
| 1 Body / Gehäuse              | 1.0619                         | 1.4581                         | 1.4308                | 1.7357                         | 1.7379                         | 1.1138                         |
| 2 Bonnet / Oberteil           | 1.0619                         | 1.4581                         | 1.4308                | 1.7357                         | 1.7379                         | 1.1138                         |
| 3 x Wedge / Keil              | 1.0619                         | 1.4581                         | 1.4308                | 1.7357                         | 1.7379                         | 1.1138                         |
| 4 Yoke / Bügel                | 1.0619                         | 1.4581                         | 1.4308                | 1.7357                         | 1.7379                         | 1.1138                         |
| 5 x Stem / Spindel            | 1.4021 <sup>(1)</sup>          | 1.4571 <sup>(1)</sup>          | 1.4301 <sup>(1)</sup> | 1.4021 <sup>(1)</sup>          | 1.4021 <sup>(1)</sup>          | 1.4021 <sup>(1)</sup>          |
| 6 Body seats / Gehäusesitz    | 1.4502 <sup>(2)</sup>          | 1.4430 <sup>(2)</sup>          | 1.4316 <sup>(2)</sup> | 1.4502 <sup>(2)</sup>          | Stellite                       | 1.4502 <sup>(2)</sup>          |
| 7 Wedge seats / Sitzringe     | 1.4502 <sup>(2)</sup>          | 1.4581 <sup>(2)</sup>          | 1.4308 <sup>(2)</sup> | 1.4502 <sup>(2)</sup>          | Stellite                       | 1.4502 <sup>(2)</sup>          |
| 8 O Gasket / Dichtung         | Graphite+1.4401 <sup>(3)</sup> | Graphite+1.4401 <sup>(3)</sup> | PTFE <sup>(3)</sup>   | Graphite+1.4401 <sup>(3)</sup> | Graphite+1.4401 <sup>(3)</sup> | Graphite+1.4401 <sup>(3)</sup> |
| 9 O Packing / Packung         | Graphite+1.4401 <sup>(3)</sup> | Graphite+1.4401 <sup>(3)</sup> | PTFE <sup>(3)</sup>   | Graphite+1.4401 <sup>(3)</sup> | Graphite+1.4401 <sup>(3)</sup> | Graphite+1.4401 <sup>(3)</sup> |
| 10 x Gland / Stopfbuchsbrille | 1.0402                         | 1.4571                         | 1.4301                | 1.0402                         | 1.0402                         | 1.4301                         |
| 11 x Boss / Nabe              | 1.4571                         | 1.4571                         | 1.4301                | 1.4571                         | 1.4571                         | 1.4571                         |
| 12 Bolts / Schrauben          | 1.7225 <sup>(4)</sup>          | 1.4301 <sup>(4)</sup>          | 1.4301 <sup>(4)</sup> | 1.7711 <sup>(4)</sup>          | 1.7711 <sup>(4)</sup>          | 1.7225 <sup>(4)</sup>          |
| 12 Nuts / Muttern             | 1.1191 <sup>(4)</sup>          | 1.4301 <sup>(4)</sup>          | 1.4301 <sup>(4)</sup> | 1.7225 <sup>(4)</sup>          | 1.7225 <sup>(4)</sup>          | 1.7225 <sup>(4)</sup>          |
| 13 x Yoke / Gewindebuchse     | 1.0511 NHT                     | 1.0511 NHT                     | 1.0511 NHT            | 1.0511 NHT                     | 1.0511 NHT                     | 1.0511 NHT                     |
| 14 x Handwheel / Handrad      | Pressed steel                  | Pressed steel                  | Pressed steel         | Pressed steel                  | Pressed steel                  | Pressed steel                  |

### Auf Anfrage:

<sup>(1)</sup> Also available on request 1.4571, 1.4301, 1.3964, Hastelloy, or other materials.

<sup>(2)</sup> Also available on request stellite, 1.4462 (duplex), 1.4430, 1.4316, Hastelloy, or other materials.

<sup>(3)</sup> Also available on request PTFE, Gore-tex, graphite, or other materials and different desing (e.g. cam-profile).

<sup>(4)</sup> Also available on request 1.7225 / 1.1191, 1.7711 / 1.7225, 1.4401, 1.4301, A4-70 or other materials.

### Empfohlene Ersatzteile für 2 Jahre Standard-Service; x empfohlene Ersatzteile für 5 Jahre Standard-Service.

O recommended spare parts for 2 years standard service; x recommended spare parts for 5 years standard service.

## Nennweiten / Dimensions

|          | DN   | A   | D    | H    | H1   | TR     | V   | Kg   | $\Delta p^{(5)}$ | Wedge <sup>(6)</sup> |
|----------|------|-----|------|------|------|--------|-----|------|------------------|----------------------|
| PN<br>16 | 50   | 150 | 165  | 315  | 375  | 18 x 4 | 200 | 15   | 16               | Split                |
|          | 65   | 170 | 185  | 370  | 450  | 20 x 4 | 200 | 25   | 16               | Split                |
|          | 80   | 180 | 200  | 410  | 500  | 20 x 4 | 200 | 27   | 16               | Split                |
|          | 100  | 190 | 220  | 450  | 560  | 22 x 5 | 200 | 35   | 16               | Split                |
|          | 125  | 200 | 250  | 525  | 660  | 24 x 5 | 250 | 40   | 16               | Split                |
|          | 150  | 210 | 285  | 600  | 765  | 24 x 5 | 250 | 55   | 16               | Flexible             |
|          | 200  | 230 | 340  | 760  | 975  | 28 x 5 | 300 | 82   | 16               | Flexible             |
|          | 250  | 250 | 405  | 990  | 1255 | 32 x 6 | 400 | 155  | 16               | Flexible             |
|          | 300  | 270 | 460  | 1095 | 1415 | 32 x 6 | 400 | 225  | 13               | Flexible             |
|          | 350  | 290 | 520  | 1245 | 1610 | 32 x 6 | 400 | 265  | 10               | Flexible             |
|          | 400  | 310 | 580  | 1350 | 1770 | 36 x 6 | 500 | 320  | 8                | Flexible             |
|          | 450  | 330 | 640  | 1180 | 2100 | 40 x 7 | 500 | 490  | 8                | Flexible             |
|          | 500  | 350 | 715  | 1660 | 2180 | 40 x 7 | 500 | 630  | 8                | Flexible             |
|          | 600  | 390 | 840  | 1965 | 2585 | 40 x 7 | 500 | 990  | 6                | Flexible             |
|          | 700  | 430 | 910  | 2185 | 2905 | 50 x 8 | 600 | 1150 | 1                | Flexible             |
|          | 800  | 470 | 1025 | 2500 | 3320 | 50 x 8 | 600 | 1550 | 0                | Flexible             |
|          | 900  | 510 | 1125 | 2820 | 3720 | 60 x 9 | 600 | 1800 | 0                | Flexible             |
|          | 1000 | 550 | 1255 | 3150 | 4150 | 60 x 9 | 600 | 2160 | 0                | Flexible             |

<sup>(5)</sup> Maximal möglicher Differenzdruck bei Betätigung "mit Handrad" od. By-Pass gem. EN 12570 (wenn gleich 0 - "Getriebe" empfohlen).

Maximum differential pressure for manoeuvre without gear box or by-pass according to EN 12570 (if equal to 0 the gearbox is recommended).

<sup>(6)</sup> Standardkeil - andere Ausführungen auf Anfrage möglich.

Standard wedge type. Other execution available on request.

## Druck/- Temperaturdiagramm / Pressure Temperature Ratings (°C / bar)

|                                          | PN | -195 | -150 | -100 | -50  | -10  | 0    | 20   | 100  | 150  | 200  | 250  | 300  | 350  | 400  | 425  | 450  | 475  | 500 | 525 | 550 | 575 | 600 |
|------------------------------------------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| Fig. 7-210                               | 16 |      |      |      |      | 16.0 | 16.0 | 15.8 | 14.9 | 13.7 | 12.4 | 11.4 | 10.3 | 9.6  | 9.2  | 7.6  | 5.9  |      |     |     |     |     |     |
| Fig. 7-310 <sup>(6)</sup>                | 16 |      |      | 16.0 | 16.0 | 16.0 | 16.0 | 15.4 | 13.2 | 12.3 | 11.4 | 10.8 | 10.3 | 9.8  | 9.2  | 9.1  | 8.9  | 8.7  | 8.5 | 8.4 | 8.2 |     |     |
| Fig. 7-310-J                             | 16 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 15.1 | 11.4 | 10.1 | 8.9  | 8.4  | 7.8  |      |      |      |      |      |     |     |     |     |     |
| Fig. 7-410 <sup>(6)</sup> <sup>(7)</sup> | 16 |      |      |      |      | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 15.3 | 14.2 | 13.9 | 13.5 | 10.9 | 8.3 | 6.1 | 3.9 |     |     |
| Fig. 7-410-H <sup>(6)</sup>              | 16 |      |      |      |      | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 15.8 | 15.5 | 12.6 | 9.7 | 7.2 | 4.7 | 3.3 | 2.0 |
| Fig. 7-510                               | 16 |      |      | 16.0 | 16.0 | 16.0 | 15.6 | 14.2 | 13.5 | 12.8 | 12.4 | 12.1 |      |      |      |      |      |      |     |     |     |     |     |

<sup>(7)</sup> Bei Verwendung über 450° C müssen stellierte Sitze berücksichtigt werden.

Suitable over 450 °C only if provided with stellite seats.

<sup>(6)</sup> Bei Verwendung über 530° C muss die Spindel aus 1.3964 berücksichtigt werden.

Suitable over 530 °C only if provided with 1.3964 stem.

Aufgrund der kurzen Baulänge, abhängig von Nennweite und Ausführung, werden z.T. die Flanschbohrungen mit Gewinde versehen.

Due to short face to face depending on DN and required execution some flange holes can be treaded.