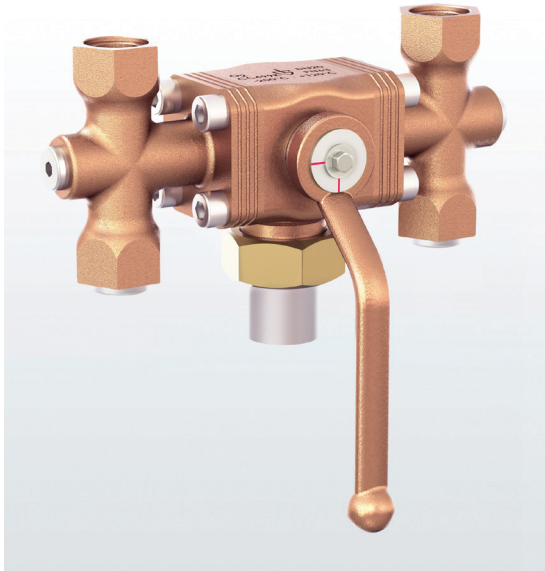


2781

Diverter ball valve made of gunmetal with pipe / threaded connection

→ **Series 2781**



■ SUITABLE FOR

| | | |
|------------------------|-------------------------|--|
| Liquids | neutral and non-neutral | |
| Air, gases and vapours | neutral and non-neutral | |

■ EXAMPLES OF USE

Diverter ball valve for the installation of for example two safety valves in combination with bursting discs for the protection of containers designed for the storage of cryogenic gases. The requirements of the PED relating to redundant or diverse safety devices are fulfilled by this fitting in combination with safety valves of the 2400 / 2480 series. On each side two additional connections for bursting discs are available. In case the safety valves need to be maintained or the bursting discs replaced, the side requiring maintenance can be shut off.

- For the storage of cryogenic liquified gases, such as LIN, LOX, LAr, CO₂, LNG.
- N₂ in pharmaceutical / foodstuffs applications
- O₂ for medical supply equipment
- CO₂ for foodstuffs/ industrial applications
- LAr for welding
- Cooling plants

The ball-valves are oil- and grease-free as standard. For applications with oxygen (O₂) applicable up to maximum 30 bar and 60°C.

■ APPROVALS

| |
|-----------------------|
| TR ZU 010/2011 |
| Requirements |
| AD 2000 Data sheet A2 |
| PED 2014/68/EU |



■ MATERIAL



■ SPECIFICATION



DN 25



- 200°C to + 120°C



PN 63

■ MATERIAL

| Component | Material | DIN EN | ASTM |
|----------------|-----------------|-----------|-----------|
| Body | Gunmetal | CC499K | CC499K |
| Internal parts | Stainless steel | 1.4404 | 316L |
| Primary Seal | PTFE mod. | PTFE mod. | PTFE mod. |
| Secondary Seal | PTFE | PTFE | PTFE |

| | |
|------------|--------|
| B01 | L-Bore |
| B02 | T-Bore |

■ MEDIUM

| | | |
|-----------|--------------------|--|
| GF | gaseous and liquid | cryogenic liquified gases, vapours and liquids |
|-----------|--------------------|--|

■ TYPE OF OPERATION

| | |
|------------|---------------------------------|
| A01 | cranked handle made of gunmetal |
|------------|---------------------------------|

■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

| Nominal diameter DN | | 20 |
|---------------------|-----------------------------|--------------|
| Inlet | | M40x2 (DN25) |
| Outlet | 1/2" (15) | ■ |
| | 3/4" (20) | ■ |
| | 1/2" - 3/4" (15/20) | ■ |
| | 1/2" NPT (15) | ■ |
| | 1/2" NPT - 3/4" NPT (15/20) | ■ |

■ TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

| | | | |
|---------------------|----------|---|-----------------------------|
| METm / f | Standard | Male thread M40x2 / Female thread BSP-P | DIN 13-7 / DIN EN ISO 228-1 |
| METm / NPT-f | | Male thread M40x2 / Female thread NPT-f | DIN 13-7 / ANSI B1.20.1 |

■ SCREW OPTIONS INLET

| | | |
|-------------|-------------------------------------|-----------------|
| VSE1 | Screw connection with welding end | DIN EN ISO 1127 |
| VSE2 | Screw connection with welding end | ASTM A312 S10 |
| VSE3 | Screw connection with welding end | ASTM A312 S40 |
| VLM1 | Screw connection with solder nipple | DIN EN ISO 1127 |
| VLM2 | Screw connection with solder nipple | ASTM A312 S10 |
| VLM3 | Screw connection with solder nipple | ASTM A312 S40 |
| VLM4 | Screw connection with solder nipple | DIN EN 12449 |

All screw fittings include a union nut M40x2.

■ DIMENSIONS AND ORDERING CODE FOR PIPE CONNECTIONS AT THE INLET

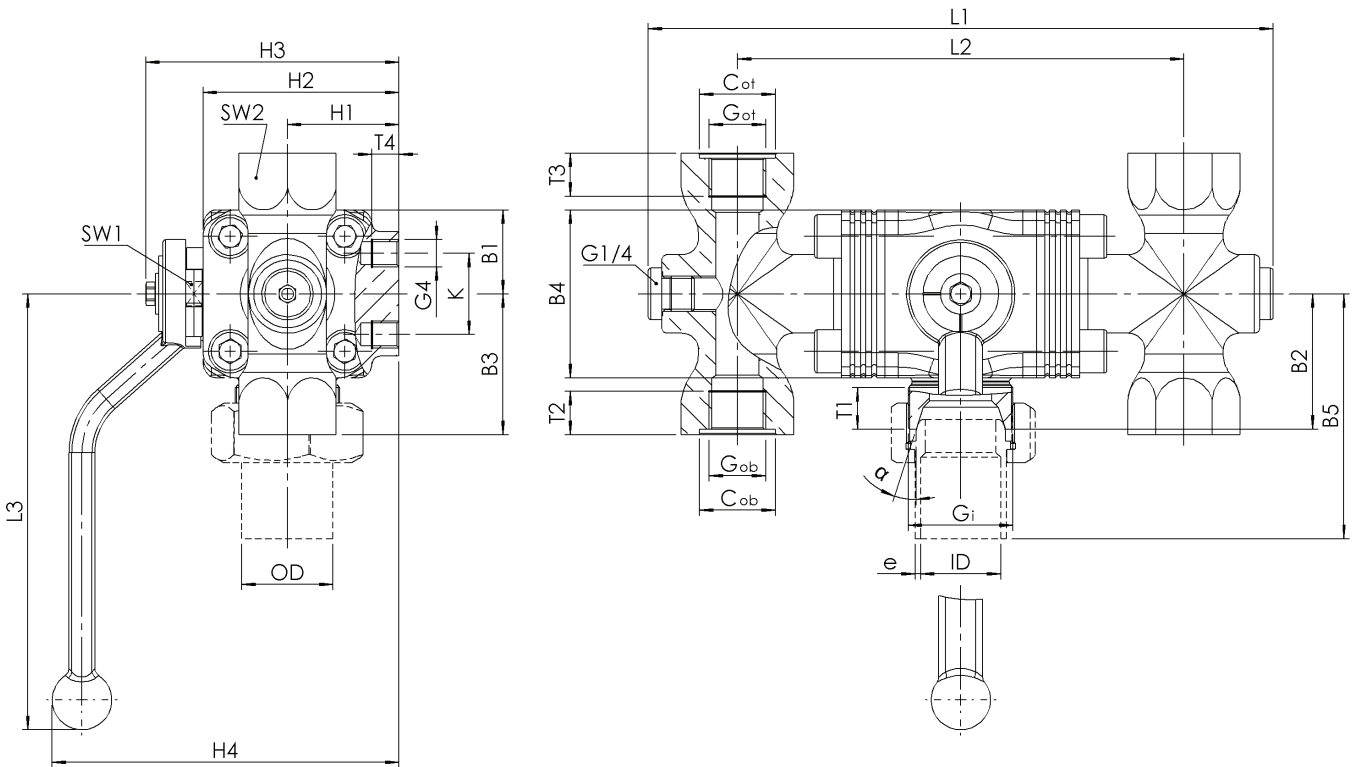
| Nominal diameter | DN | 20 |
|---|--------|--------------|
| Connection type for pipes according to DIN EN ISO 1127 – dimensions for welding end VSE1 | OD x e | 26,9 x 2,0 |
| Order code XX | | AH |
| Connection type for pipes according to ASTM A312 S10 – dimensions for welding end VSE2 | OD x e | 33,40 x 2,77 |
| Order code XX | | AY |
| Connection type for pipes according to ASTM A312 S40 – dimensions for welding end VSE3 | OD x e | 33,40 x 3,38 |
| Order code XX | | AZ |
| Connection type for pipes according to DIN EN ISO 1127 – dimensions for soldering sleeve LM1 | ID x e | 26,90 x 2,00 |
| Order code XX | | AH |
| Connection type for pipes according to ASTM A312 S10 – dimensions for soldering sleeve LM2 | ID x e | 33,40 x 2,77 |
| Order code XX | | AY |
| Connection type for pipes according to ASTM A312 S40 – dimensions for soldering sleeve LM3 | ID x e | 33,40 x 3,38 |
| Order code XX | | AZ |
| Connection type for pipes according to DIN 12449 – dimensions for soldering sleeve LM4 | ID x e | 28,00 x 1,50 |
| Order code XX | | BJ |

■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

| Series 2781: Connection, installation dimensions | | | | | | |
|--|-------------------|------------|------------|-------------------|---------------|----------------------------|
| Nominal diameter | DN | 20 | 20 | 20 | 20 | 20 |
| Connection DIN 13-7 | Gi | M40x2 (25) | M40x2 (25) | M40x2 (25) | M40x2 (25) | M40x2 (25) |
| Outlet | Got / Gob | 1/2" (15) | 3/4" (20) | 1/2"-3/4" (15/20) | 1/2" NPT (15) | 1/2" NPT -3/4" NPT (15/20) |
| Installation dimensions in mm | Cot | 28 | - | 33 | - | - |
| | Cob | 28 | - | 28 | - | - |
| | T1 | 15 | 15 | 15 | 15 | 15 |
| | T2/T3 | 15 | 15 | 15 | 15 | 15 |
| | H1 | 41 | 41 | 41 | 41 | 41 |
| | H2 | 72 | 72 | 72 | 72 | 72 |
| | H3 | 94 | 94 | 94 | 94 | 94 |
| | H4 | 128 | 128 | 128 | 128 | 128 |
| | B1 | 31 | 31 | 31 | 31 | 31 |
| | B2 | 50 | 50 | 50 | 50 | 50 |
| | B3 | 52 | 52 | 52 | 52 | 52 |
| | B4 | 62 | 62 | 62 | 62 | 62 |
| | B5 ¹⁾ | 91 | 91 | 91 | 91 | 91 |
| | L1 | 231 | 231 | 231 | 231 | 231 |
| | L2 | 165 | 165 | 165 | 165 | 165 |
| | L3 | 161 | 161 | 161 | 161 | 161 |
| SW1 | 9 | 9 | 9 | 9 | 9 | |
| SW2 | 36 | 36 | 36 | 36 | 36 | |
| K | 30 | 30 | 30 | 30 | 30 | |
| G4 | M10 | M10 | M10 | M10 | M10 | |
| T4 | 10 | 10 | 10 | 10 | 10 | |
| α | 18° | 18° | 18° | 18° | 18° | |
| Narrowest diameter | d0 | 16 | 21,5 | 16/21,5 | 16 | 16/21,5 |
| Test port | G1/4 | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" |
| Weight | kg | 4,6 | 4,4 | 4,4 | 4,6 | 4,4 |
| Kvs-value | m ³ /h | 6,9 | 12,2 | 6,9 / 12,2 | 6,9 | 6,9 / 12,2 |

¹⁾B5 is equivalent to option VSE2 AY. Other dimensions on request.

■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS



Series 2781 ■ INDIVIDUAL SELECTION / VALVE CONFIGURATION

| Series | Ball Version | Medium | Operation | Nominal diameter DN | Connection type | | Connection size | | Options |
|--------|--------------|--------|-----------|---------------------|-----------------|--------|-----------------|--------|---------|
| | | | | | Inlet | Outlet | Inlet | Outlet | |
| 2781 | B01 | GF | A01 | 20 | METm | f | 25 | 20 | |
| 2781 | B02 | GF | A01 | 20 | VSE2 | f | AY | 15/20 | |
| 2781 | | GF | A01 | | | | | | |
| 2781 | | GF | A01 | | | | | | |

■ TECHNICAL FINISHES, VARIANTS, ACCESSORIES

| | | |
|-----|--|--------------------------|
| S75 | fitted with lateral overflow valve DN10 to prevent the activation of the safety valves | <input type="checkbox"/> |
| S76 | fitted with lateral overflow valve DN15 to prevent the activation of the safety valves | <input type="checkbox"/> |
| | | <input type="checkbox"/> |

■ CERTIFICATES / APPROVALS

| | | | | | |
|-----|---|--------------------------|-----|--|--------------------------|
| C01 | Factory certificate acc. DIN EN 10204 2.2 (WKZ 2.2) | <input type="checkbox"/> | C05 | Sealing material manufacturer certification (FDA, USP 3, 3-A...), Please indicate description of certificate: _____ | <input type="checkbox"/> |
| C02 | Test certificate acc. DIN EN 10204 3.1 (WPZ 3.1) | <input type="checkbox"/> | C06 | ATEX evaluation acc. to 2014/34/EU | <input type="checkbox"/> |
| C03 | Material test certificate acc. DIN EN 10204 3.1 (MPZ 3.1) (pressure retaining part) | <input type="checkbox"/> | C11 | Certification of the production process especially for gaseous oxygen applications by employment of specific materials | <input type="checkbox"/> |

■ ADMISSIONS / ACCREDITATIONS

| | | | | | |
|-----|--|--------------------------|----|--|--------------------------|
| AA4 | EAC - certificate/declaration with passport for the valve and laser marking of the valve | <input type="checkbox"/> | AL | Individual inspection by notified body inspector – (body to be indicated): _____ | <input type="checkbox"/> |
| | | <input type="checkbox"/> | | | <input type="checkbox"/> |
| | | <input type="checkbox"/> | | | <input type="checkbox"/> |

■ ENQUIRY

Copy and send to: order@goetze-armaturen.de.

Order form easily to be found online under the section for each series.