

→ **Series 492 GOX**



■ SUITABLE FOR

Air, gases and vapours neutral and non-neutral



■ EXAMPLES OF USE

For the protection of:

- pressure tanks and
 - pressure systems
- for gaseous oxygen and oxygen mixed gases. Please observe plant-specific regulations and use of appropriate valve version and sealing material.

- high-pressure compressors
- pressure tanks
- pressure cylinder pack
- common O2 applications
- technical gas industry
- medical healthcare gas industry

Safety valves are set and sealed at the factory.

■ APPROVALS

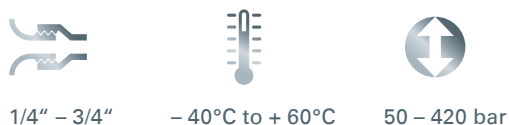
| | |
|---|---|
| TÜV-Type test approval 2100 | D/G |
| EU type examination | S/G |
| ASME | G |
| CRN | G |
| TSG ZF001-2006 | D/G (S/G) |
| KGS | G |
| BAM | |
| Air Liquide / CTE | |
| TR ZU 032/2013 - TR ZU 010/2011 | D/G (S/G) |
| Requirements | |
| AD 2000 Data sheet A2 DIN EN ISO 4126-1 DGR 2014/68/EU | ASME-Code Sec. VIII Div. 1 KGS AA 319 BG RCI M034 |
| Classification society | |
| DNVGL Lloyd's Register EMEA Bureau Veritas Russian Maritime Register of Shipping | DNVGL LR EMEA BV RS |



■ MATERIAL



■ SPECIFICATION



■ MATERIALS

| Component | Material | DIN EN | ASME |
|----------------|-------------------------|-------------------|-----------------------|
| Inlet body | Monel / Stellite | 2.4360 / Stellite | UNS N04400 / Stellite |
| Outlet body | Brass | CW617N | CW617N |
| Internal parts | Monel / Stainless steel | 2.4360 / 1.4404 | |
| Spring | Spring steel | VDSiCr | UNS N04400 / 316L |

| | | |
|----------|------------------------------------|--|
| t | gastight version of spring housing | for neutral and non-neutral media. The environment is protected from being affected by the medium. Model with positionable angled body and without lifting device. |
|----------|------------------------------------|--|

■ TYPE OF LIFTING MECHANISM

| | |
|----------|--|
| K | Standard with twist-type lifting mechanism |
| 0 | without lifting device |

■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

| Nominal diameter DN | | 10 | | | |
|---------------------|-----------|----------|-----------|-----------|-----------|
| Inlet | | 1/4" (8) | 3/8" (10) | 1/2" (15) | 3/4" (20) |
| Outlet | 1/2" (15) | ■ | ■ | ■ | |
| | 3/4" (20) | ■ | ■ | ■ | ■ |
| | 1" (25) | ■ | ■ | ■ | ■ |

■ TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

| | | | |
|----------------------|-------------------------------|---|-------------------------------------|
| m / f | with positionable angled body | Male thread BSP-P / Female thread BSP-P | DIN EN ISO 228-1 / DIN EN ISO 228-1 |
| NPT-m / NPT-f | with positionable angled body | Male thread NPT / Female thread NPT | ANSI B1.20.1 / ANSI B1.20.1 |

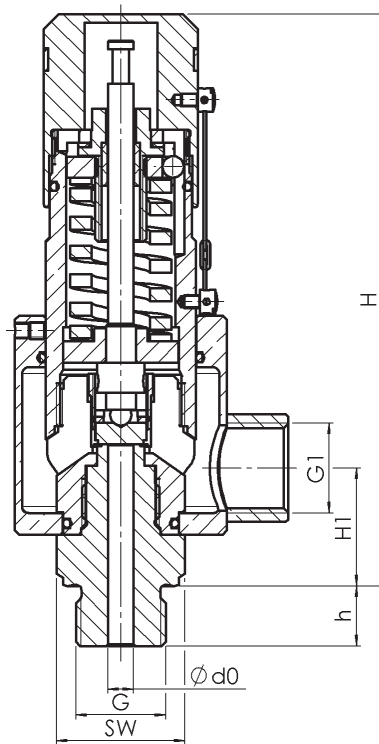
■ SEALS

| | | | |
|-----------|---|------------------------|----------------|
| MD | Metal-to-metal sealing / Monel / Stellite | Flat seal 50 – 420 bar | –40°C to +60°C |
|-----------|---|------------------------|----------------|

■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

| Series 492 GOX: Connection, installation dimensions, ranges of adjustment | | | | | |
|---|---------------------------|-----------|-----------|-----------|-----------|
| Nominal diameter | DN | 10 | | | |
| Connection DIN EN ISO 228 | G | 1/4" (8) | 3/8" (10) | 1/2" (15) | 3/4" (20) |
| | G1 | 1/2" (15) | 1/2" (15) | 1/2" (15) | |
| | | 3/4" (20) | 3/4" (20) | 3/4" (20) | 3/4" (20) |
| Installation dimensions in mm | | 1" (25) | 1" (25) | 1" (25) | 1" (25) |
| | H | 133 | 133 | 133 | 133 |
| | H1 | 28 | 28 | 28 | 28 |
| | h | 12 | 12 | 14 | 16 |
| | SW | 27 | 27 | 27 | 27 |
| red. coefficient of discharge EN ISO 4126-1 | $\alpha_w / K_{dr} (D/G)$ | 0,73 | 0,73 | 0,73 | 0,73 |
| rated slope ASME | (D/G) | 0,669 | 0,669 | 0,669 | 0,669 |
| flow area | d0 | 6 | 6 | 6 | 6 |
| Weight | kg | 0,74 | 0,74 | 0,74 | 0,74 |
| Range of adjustment EN ISO 4126-1 | bar | 50-420 | 50-420 | 50-420 | 50-420 |
| Range of adjustment ASME | psi | 725-6090 | 725-6090 | 725-6090 | 725-6090 |

■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS



Series 492 GOX ■ INDIVIDUAL SELECTION / VALVE CONFIGURATION

| Series | Valve version | Medium | Lifting device | Nominal diameter DN | Connection type | | Connection size | | Seal | Options | Set pressure | Quantity |
|--------|---------------|--------|----------------|---------------------|-----------------|--------|-----------------|--------|------|---------|--------------|----------|
| | | | | | Inlet | Outlet | Inlet | Outlet | | | | |
| 492 | t | G | 0 | 10 | m | f | 15 | 20 | MD | GOX | 300 | 2 |
| 492 | t | G | 0 | 10 | | | | | MD | GOX | | |
| 492 | t | G | 0 | 10 | | | | | MD | GOX | | |
| 492 | t | G | 0 | 10 | | | | | MD | GOX | | |

■ PROPERTIES

| | | | |
|------------|--|--------------------------|--------------------------|
| GOX | Especially for gaseous O2 applications by employment of specific materials including oil- and grease free production process | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> |

■ ADMISSIONS / ACCREDITATIONS

| | | | | | |
|------------|--|--------------------------|------------|--|--------------------------|
| AA1 | EC Type examination acc. to Directive 2014/68/EU | <input type="checkbox"/> | AK1 | DNV-GL (DNVGL) type approval | <input type="checkbox"/> |
| AA2 | TÜV component test acc. to VdTÜV specification sheet SV 100 | <input type="checkbox"/> | AK2 | Lloyd's Register (LR) type approval | <input type="checkbox"/> |
| AA3 | Certification acc. to ASME Boiler and Pressure Vessel Code, Section VIII.Div 1 (ASME) | <input type="checkbox"/> | AK3 | American Bureau of Shipping (ABS) type approval | <input type="checkbox"/> |
| AA4 | EAC - certificate/declaration with passport for the valve and laser marking of the valve | <input type="checkbox"/> | AK4 | Bureau Veritas (BV) type approval | <input type="checkbox"/> |
| AA5 | Manufacture License of Special Equipment People's Republic of China (ML) | <input type="checkbox"/> | AK5 | Russian Maritime Register of Shipping (RMRS) type approval | <input type="checkbox"/> |
| AA6 | Certification acc. to Korean Gas Safety Corporation (KGS) ³ | <input type="checkbox"/> | AK6 | Registro Italiano Navale (RINA) type approval | <input type="checkbox"/> |
| AA7 | Registration according to Canadian Registration Number (CRN) ⁴ | <input type="checkbox"/> | AL | Individual inspection by notified body inspector – (body to be indicated): | <input type="checkbox"/> |

³KGS only in combination with ASME | ⁴CRN only in combination with ASME

■ ENQUIRY

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

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

| Series 492 GOX: Blowing-off rates at 10% above set pressure | | | |
|---|-------|-------------|------|
| Nominal diameter DN | | 10 | |
| Set pressure bar | | d0 = 6,0 mm | |
| | | I | II |
| Air I | 50,0 | 817 | 782 |
| Nm ³ /h | 55,0 | 900 | 863 |
| | 60,0 | 984 | 944 |
| Gaseous oxygen II | 65,0 | 1069 | 1027 |
| Nm ³ /h | 70,0 | 1154 | 1110 |
| | 75,0 | 1240 | 1194 |
| | 80,0 | 1327 | 1279 |
| | 85,0 | 1414 | 1364 |
| | 90,0 | 1502 | 1451 |
| | 100,0 | 1679 | 1626 |
| | 110,0 | 1858 | 1805 |
| | 120,0 | 2038 | 1986 |
| | 130,0 | 2221 | 2171 |
| | 140,0 | 2405 | 2359 |
| | 150,0 | 2590 | 2549 |
| | 160,0 | 2777 | 2742 |
| | 170,0 | 2964 | 2937 |
| | 180,0 | 3151 | 3134 |
| | 190,0 | 3339 | 3332 |
| | 200,0 | 3527 | 3531 |
| | 210,0 | 3714 | 3731 |
| | 220,0 | 3902 | 3931 |
| | 230,0 | 4089 | 4132 |
| | 240,0 | 4275 | 4332 |
| | 250,0 | 4460 | 4532 |
| | 260,0 | 4644 | 4731 |
| | 270,0 | 4828 | 4929 |
| | 280,0 | 5010 | 5126 |
| | 290,0 | 5191 | 5322 |
| | 300,0 | 5370 | 5517 |
| | 310,0 | 5549 | 5710 |
| | 320,0 | 5726 | 5901 |
| | 330,0 | 5901 | 6091 |
| | 340,0 | 6075 | 6279 |
| | 350,0 | 6248 | 6465 |
| | 360,0 | 6419 | 6650 |
| | 370,0 | 6589 | 6833 |
| | 380,0 | 6757 | 7014 |
| | 390,0 | 6924 | 7193 |
| | 400,0 | 7089 | 7371 |
| | 410,0 | 7253 | 7547 |
| | 420,0 | 7416 | 7721 |

The calculation of the substance data is based on the extended substance data calculation according to CONVAL. The results achieve a higher accuracy, especially at higher pressure, because of the isentropic component and the real gas factor, which are usually assumed to be constant and change significantly with increasing pressure.

Series 492 GOX: Blowing-off rates at 10% above set pressure

| Nominal diameter DN | | 10 | |
|---------------------|------|-------------|------|
| Set pressure psi(g) | | d0 = 6,0 mm | |
| | | I | II |
| Air I | 725 | 543 | 519 |
| SCFM | 750 | 562 | 538 |
| | 775 | 580 | 557 |
| Gaseous oxygen II | 800 | 600 | 577 |
| SCFM | 850 | 638 | 616 |
| | 900 | 677 | 654 |
| | 950 | 715 | 693 |
| | 1000 | 754 | 732 |
| | 1100 | 832 | 810 |
| | 1200 | 910 | 890 |
| | 1300 | 989 | 970 |
| | 1400 | 1069 | 1052 |
| | 1500 | 1149 | 1135 |
| | 1600 | 1229 | 1218 |
| | 1700 | 1310 | 1303 |
| | 1800 | 1392 | 1389 |
| | 1900 | 1474 | 1476 |
| | 2000 | 1556 | 1563 |
| | 2200 | 1722 | 1735 |
| | 2400 | 1889 | 1909 |
| | 2600 | 2057 | 2084 |
| | 2800 | 2225 | 2260 |
| | 3000 | 2393 | 2437 |
| | 3200 | 2561 | 2615 |
| | 3400 | 2729 | 2792 |
| | 3600 | 2896 | 2969 |
| | 3800 | 3062 | 3145 |
| | 4000 | 3227 | 3321 |
| | 4200 | 3391 | 3495 |
| | 4400 | 3554 | 3669 |
| | 4600 | 3716 | 3841 |
| | 4800 | 3876 | 4011 |
| | 5000 | 4035 | 4180 |
| | 5200 | 4192 | 4347 |
| | 5400 | 4348 | 4513 |
| | 5600 | 4502 | 4677 |
| | 5800 | 4654 | 4839 |
| | 6000 | 4805 | 5000 |
| | 6090 | 4873 | 5073 |

The calculation of the substance data is based on the extended substance data calculation according to CONVAL. The results achieve a higher accuracy, especially at higher pressure, because of the isentropic component and the real gas factor, which are usually assumed to be constant and change significantly with increasing pressure.