

Check Valves

CVDO Valve Series

- SAE/GAS Cartridge - 350 bar
- Direct acting - Poppet type



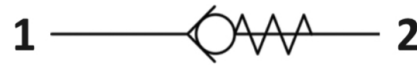
Description

A screw-in, direct acting, poppet type in-line check valve. Main use is as a blocking or load-holding device. The CVDO allows flow passage from port 1 to 2: the cartridge has a fully guided check which is spring-biased closed until sufficient pressure is applied at port 1 to open to 2. The flow is blocked in the opposite direction (2 to 1).

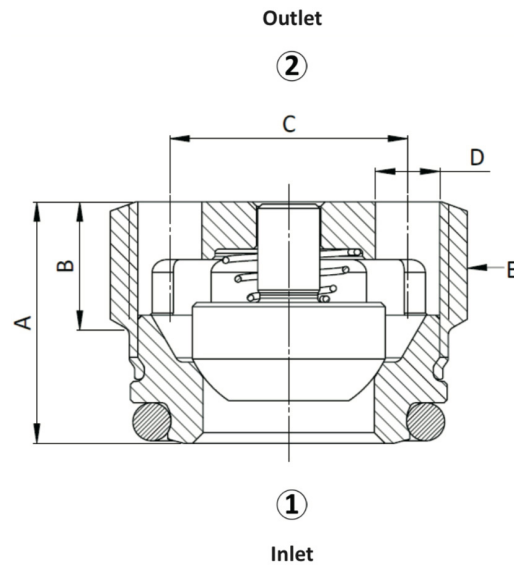
Technical Features

All valve parts are made of high strength steel. Poppet and seat are hardened and ground to guarantee low wear and to extend service life. Suitable for heavy duty applications. Extremely compact size. SAE and Gas cavity.

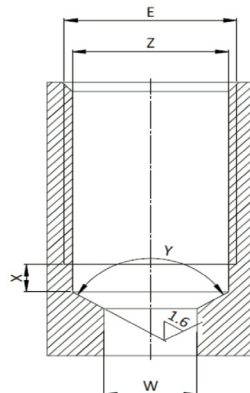
Symbol



Cross Section



Cavity Details

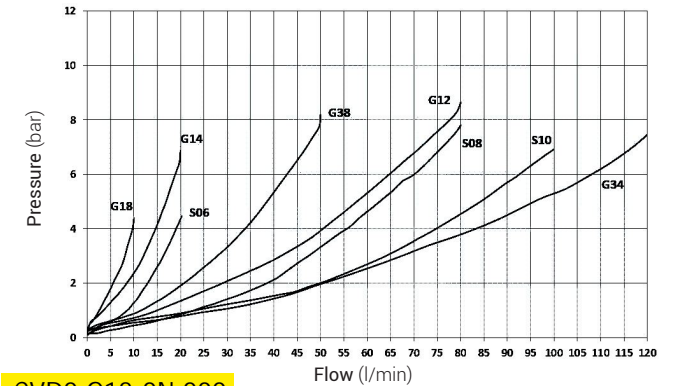


Technical Data

| | |
|---|---|
| Maximum operating pressure | 350 bar |
| Maximum flow | See table below |
| Cracking pressure | See table below |
| Maximum Internal Leakage | 0,10 cm ³ / min @ 10 bar 0,10 cm ³ / min @ 350 bar |
| O-ring Temperature Range | -30° C to 110° C (standard sealing NBR - BUNA-N) |
| Oil Temperature Range | -30° C to 110° C |
| Fluids | Mineral - based or synthetics with lubricating properties |
| Viscosities | 7,4 to 420 cSt |
| Filtration | 20/18/15 ISO 4406 (maximum filtration admitted) |
| Orientation | No restrictions |
| Installation torque | see tabel below |
| Technical Specifications for characterization | see page 480 |
| Oil testing condition | ISO VG 46 cSt |
| Seal kit code | See table below |
| Weight | See table below |

Performance Details

Note: The performance chart illustrates flow handling capacity. p/Q curves are recorded at T_{Oil} = 40°C and 46 cSt



Ordering Code

CVDO.G12-0N.000

CVDO • * * * • 0 N • 0 0 0

Valve basic code • Size: (see the table) • Bias Spring
N = Standard (cracking pressure < 0.5)
Note = customized bias spring can be offered upon request

| Valve Details | | | | | | | | | | Cavity Details | | | | |
|---------------|------|------|-------|------|----------|-----------------|---------------|----------|--------|----------------|---------|------|-------|------|
| E | A | B | C | D | MAX Flow | Install. Torque | Install. Tool | Seal Kit | Weight | Cavity code | x (max) | y | z | w |
| [size] | [mm] | [mm] | [mm] | [mm] | [l/min] | [Nm] | [code] | [code] | [kg] | [code] | [mm] | [mm] | [mm] | [mm] |
| S06 | 10,0 | 6 | Ø8,4 | Ø2,2 | 20 | 6 | IK.001 | SK.091 | 0,008 | VH169 | 3,0 | 118° | Ø12,9 | Ø7 |
| S08 | 12,7 | 6,5 | Ø12 | Ø3,8 | 80 | 10 | IK.016 | SK.108 | 0,016 | VH106 | 3,0 | 118° | Ø17,4 | Ø12 |
| S10 | 12,7 | 6,6 | Ø14 | Ø4,3 | 100 | 30 | IK.003 | SK.107 | 0,023 | VH166 | 3,0 | 118° | Ø20,3 | Ø12 |
| G18 | 7,5 | 3,5 | Ø5,6 | Ø1,6 | 10 | 6 | IK.004 | SK.013 | 0,002 | VH056 | 3,0 | 118° | Ø8,7 | Ø5 |
| G14 | 8,5 | 4,4 | Ø8,4 | Ø2,2 | 20 | 15 | IK.001 | SK.016 | 0,005 | VH007 | 3,0 | 118° | Ø11,6 | Ø7 |
| G38 | 11,3 | 6,0 | Ø11,1 | Ø3,0 | 50 | 30 | IK.002 | SK.017 | 0,011 | VH008 | 3,0 | 118° | Ø15,1 | Ø9 |
| G12 | 12,7 | 6,5 | Ø13,5 | Ø3,8 | 80 | 30 | IK.003 | SK.018 | 0,019 | VH009 | 3,0 | 118° | Ø18,8 | Ø12 |
| G34 | 14,8 | 7,6 | Ø16,5 | Ø5,0 | 120 | 50 | IK.005 | SK.015 | 0,040 | VH057 | 3,0 | 118° | Ø24,3 | Ø18 |