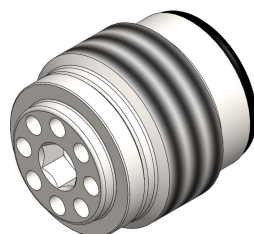
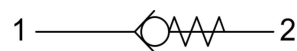


# CVBO VALVE SERIES

GAS Insert - 350 bar  
Direct acting - Ball type



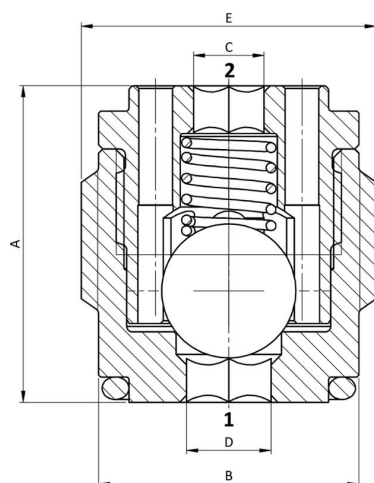
## HYDRAULIC SCHEME



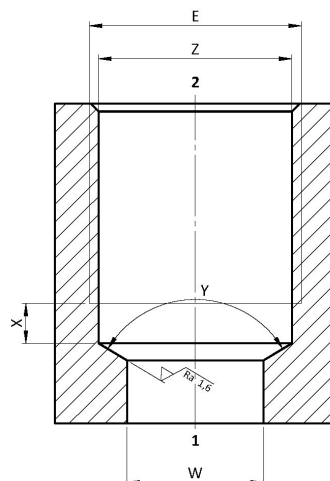
## DESCRIPTION

A screw-in, direct acting, ball type in-line check valve. Main use is as a blocking or load-holding device. The CVBO 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). Reserved installation is possible (except for size G18) yet not recommended.

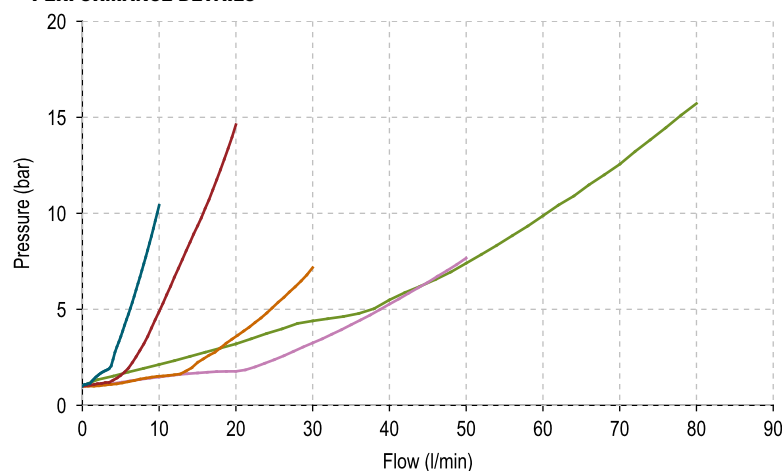
## CROSS SECTION



## CAVITY



## PERFORMANCE DETAILS



**NOTE**  
The performance chart illustrates flow handling capacity. p/Q curves are recorded at TOil = 40°C and 46 cSt.

**LEGEND**  
— G18 — G34  
— G14  
— G38  
— G12

## TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	see table below
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm <sup>3</sup> / min @ 10 bar 0,10 cm <sup>3</sup> / min @ 350 bar
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
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 table below
TECH. SPEC. FOR CHARACTERIZATION	see page 811
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	see table below
WEIGHT	see table below

## ORDERING CODE

<b>C</b>	<b>V</b>	<b>B</b>	<b>O</b>	.	<b>*</b>	<b>*</b>	<b>*</b>	.	<b>0</b>	<b>*</b>	.	<b>0</b>	<b>0</b>	<b>0</b>
VALVE BASIC CODE					SIZE (see table below)				BIAS SPRING			000 = Standard configuration.		
									Y = Standard (cracking pressure 0.3 )					
									N = Standard (cracking pressure 1.0 )					
									B = Standard (cracking pressure 3.0 )					
									<b>Note</b> = 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	Y	Z	W
[size]	[mm]	[mm]	[mm]	[mm]	[l/min]	[Nm]	[code]	[code]	[kg]	[code]	[mm]	[mm]	[mm]	[mm]
G18	12,5	8,4	Ø2,0	Ø0,0	10	2	IK.006	SK.013	0,004	VH058	2,5	118°	Ø8,5	Ø5
G14	17,0	11,3	Ø2,5	Ø3,0	20	4	IK.007	SK.016	0,013	VH012	3,0	118°	Ø11,4	Ø7
G38	18,5	14,8	Ø3,0	Ø4,0	30	6	IK.008	SK.017	0,021	VH013	3,0	118°	Ø14,9	Ø9
G12	22,5	18,5	Ø5,0	Ø6,0	50	10	IK.009	SK.018	0,041	VH014	4,0	118°	Ø18,6	Ø12
G34	28,0	24,0	Ø8,0	Ø8,0	80	20	IK.010	SK.022	0,082	VH015	5,0	118°	Ø24,1	Ø17

Specifications may change without notice.