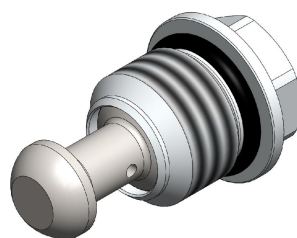
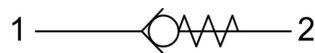


# ICVO.M20 VALVE SERIES

METRIC Insert - 420 bar  
Direct acting - Poppet type



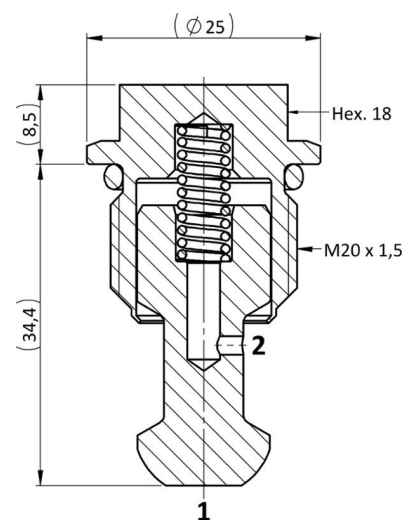
HYDRAULIC SYMBOL



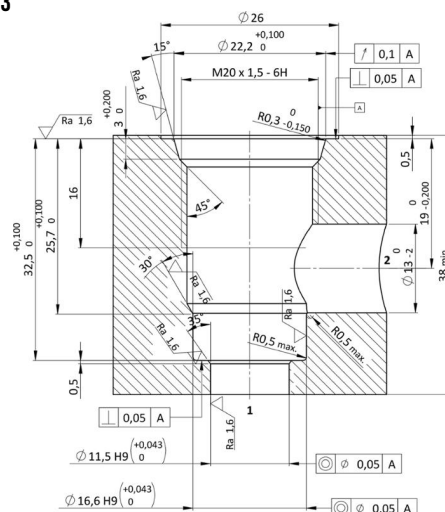
## DESCRIPTION

A screw-in, direct acting, poppet type check valve. Main use is as a blocking or load-holding device. The ICVO.M20 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). Insert type valve: the poppet seals directly against the cavity.

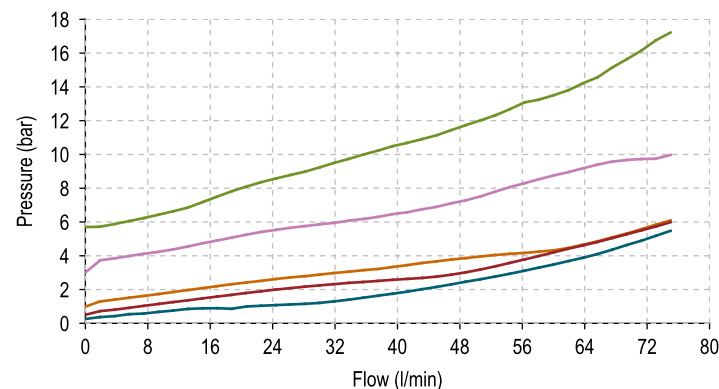
## CROSS SECTION



CAVITY  
VH003



## PERFORMANCE DETAILS



### NOTE

The performance chart illustrates flow handling capacity for standard bias springs. p/Q curves are recorded at TOil = 40°C and 46 cSt.

### LEGEND

Spring Y — Spring P  
Spring N —  
Spring B —  
Spring G —

## TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	75 l/min
CRACKING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	0,10 cm <sup>3</sup> / min @ 10 bar 0,10 cm <sup>3</sup> / min @ 420 bar
EXTERNAL COMPONENT TREATMENT	Zn/Fe - standard (96h) Zn/Ni (720h) (Upon customer request)
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	45-50 Nm  Hex. 18
TECH. SPEC. FOR CHARACTERIZATION	see page 811
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.007 (standard sealing NBR-BUNA-N)
COINING KIT	CK.003
WEIGHT	0,062 kg

## ORDERING CODE

I C V O

VALVE BASIC CODE

M 2 0

MARKING

0 = Standard factory marking.  
Customized marking can be done upon request.

0 \*

0 0 0

000 = Standard configuration.

SIZE

METRIC M20x1,5

### BIAS SPRING OPTIONS

Spring model code	Cracking pressure (bar)
Y	0,25
N	0,5
B	1,0
G	3,6
P	5,7