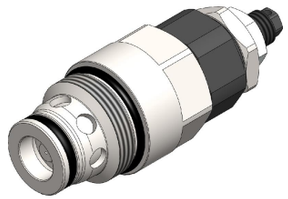
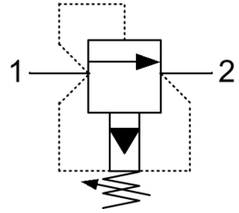
RVRO.M24 VALVE SERIES

METRIC Cartridge - 420 bar

Pilot Operated - Poppet type



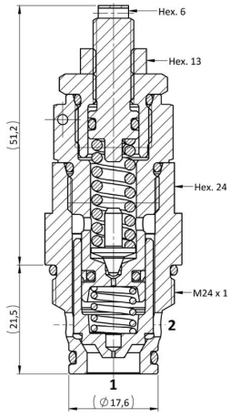
HYDRAULIC SYMBOL



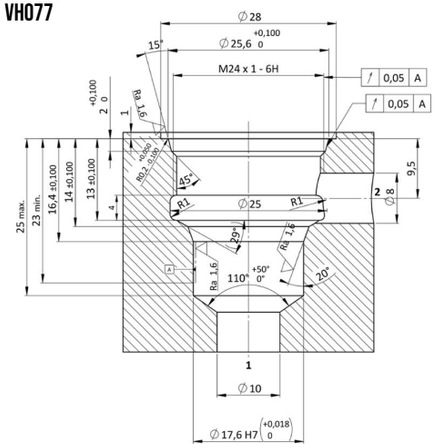
DESCRIPTION

A screw-in, cartridge style, pilot operated (2-stage), poppet type, normally closed, hydraulic relief valve. When the pressure at the Inlet (1) reaches the valve setting, the pilot poppet starts to open from its seat and determines the shifting of the main stage poppet that throttles oil flow to tank (2). The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits. Smooth response, reduced pressure rise and limited hysteresis.

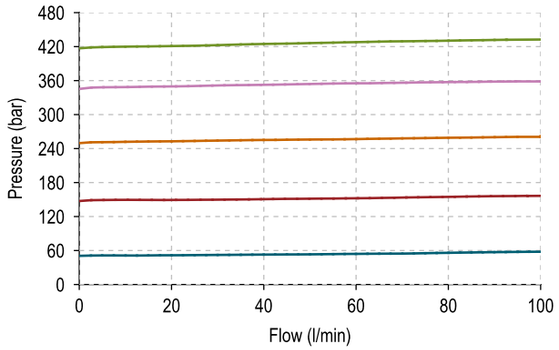
CROSS SECTION



CAVITY VH077



PERFORMANCE DETAILS



NOTE

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

LEGEND

- 50 bar @ 10 lpm
- 150 bar @ 10 lpm
- 250 bar @ 10 lpm
- 350 bar @ 10 lpm
- 420 bar @ 10 lpm

TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	100 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min @ 100 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
PRESSURE SETTINGS ESTABLISHED	5 l/min
RESEAT PRESSURE	nominal 90% of cracking pressure
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	60-80 Nm Hex.24
NUT TINGHTENING TORQUE	15-20 Nm Hex.13
TECH. SPEC. FOR CHARACTERIZATION	see page 700
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.054 (standard sealing NBR-BUNA-N)
WIRE SEALS TAMPER PROOF	Suitable design upon request
WEIGHT	0,174 kg

ORDERING CODE

R	V	R	0	·	M	2	4	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M24x1 with Ø17,6 nose size

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

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)	Pressure increment per turn [bar/turn]
N	50-420	92

SETTING PRESSURE IN [BAR]
000 = No specific setting required.

Specifications may change without notice.