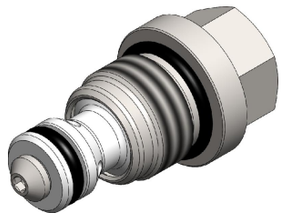
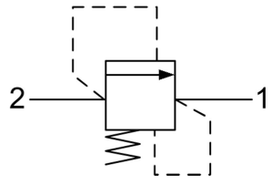
IRV0.M20 VALVE SERIES

METRIC Insert - 420 bar

Direct acting - Poppet type



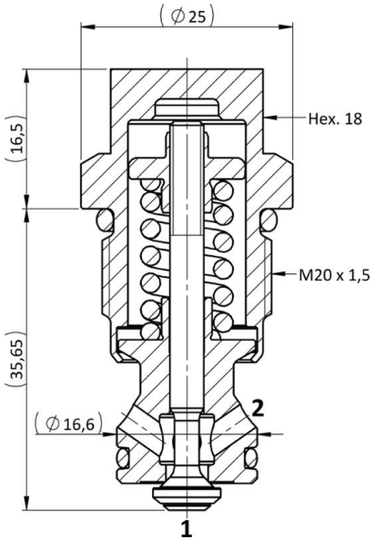
HYDRAULIC SYMBOL



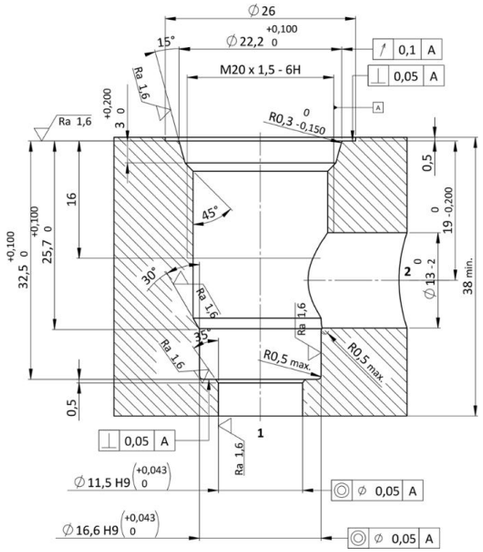
DESCRIPTION

The IRV valve provides in one compact insert cartridge the typical function of shock relief valve, side-in nose-exhaust. When the pressure at the high pressure inlet (2) reaches the valve setting, the valve starts to open to tank (1). The pressure rise is very low thanks to the smart deflector design. Flow passage in the opposite direction (1 to 2) is blocked. High precision machining guarantees quick response to load changes, limited hysteresis and reduced internal leakage.

CROSS SECTION



CAVITY VH003



TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	420 bar
MAXIMUM FLOW	75 l/min
SETTING PRESSURE	see table below
MAXIMUM INTERNAL LEAKAGE	1 cm^3 / min at 80 % of nominal set point
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	10 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	45-50 Nm Hex.18
TECH. SPEC. FOR CHARACTERIZATION	see page 811
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.012 (standard sealing NBR-BUNA-N)
WEIGHT	0,090 kg

ORDERING CODE

I	R	V	0	·	M	2	0	·	0	*	·	*	*	*

VALVE BASIC CODE

SIZE
METRIC M20x1,5 with Ø16,6 nose size

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

BIAS SPRING OPTIONS

Spring model code	Setting pressure range (bar)
N	20-100
B	101-170
G	171-250
V	251-350
W	351-420

SETTING PRESSURE IN [BAR]
Standard setting are multiple of 5 bars.

Specifications may change without notice.

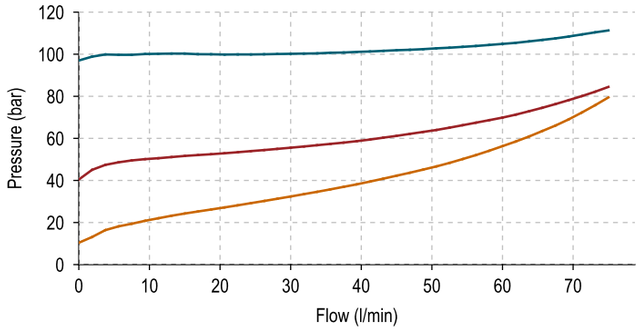
IRV0.M20 SPRINGS' GRAPHS

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

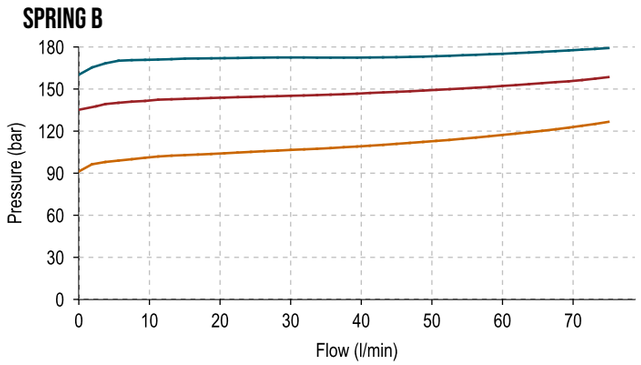
LEGEND

- Maximum setting pressure range
- Medium setting pressure range
- Minimum setting pressure range

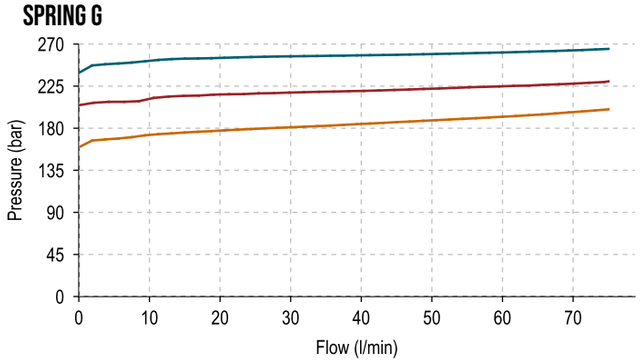
SPRING N



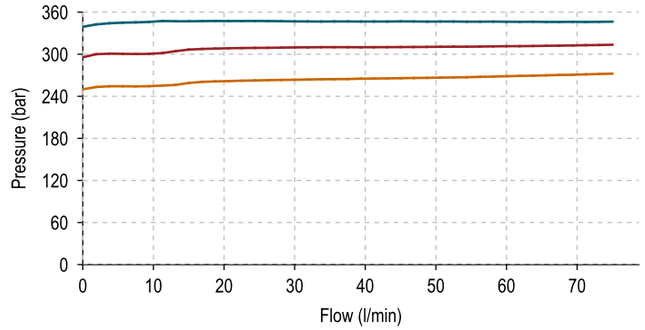
SPRING B



SPRING G



SPRING V



SPRING W