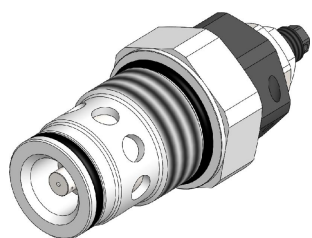
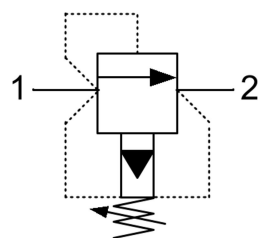


RVRO.116 VALVE SERIES

Hybrid SAE Cartridge - 420 bar
Pilot Operated - Poppet type



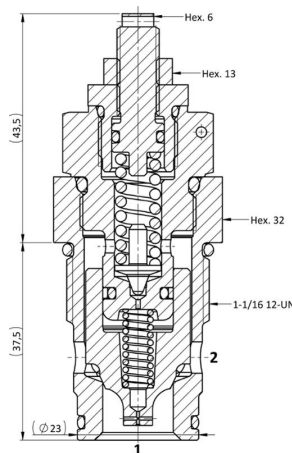
HYDRAULIC SYMBOL



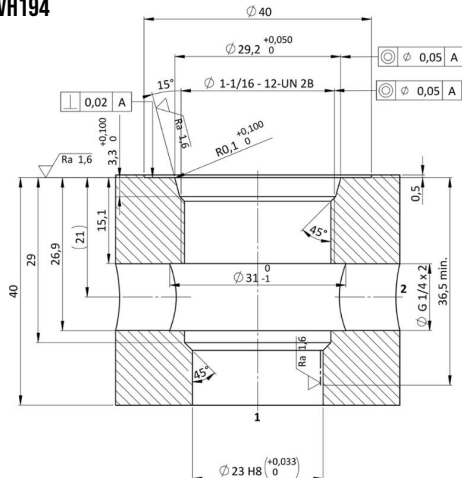
DESCRIPTION

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.

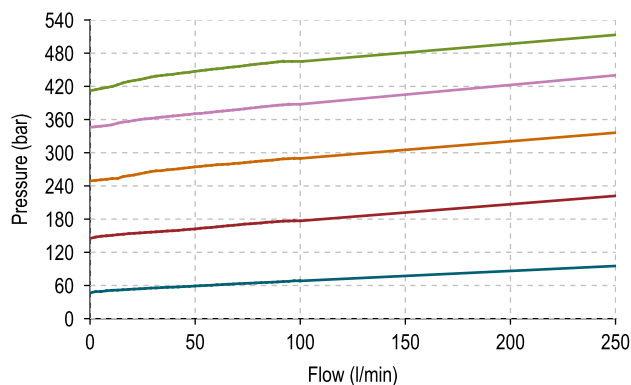
CROSS SECTION



CAVITY VH194



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.
p/Q curves are recorded up to 200 l/min. These are theoretical from 200 l/min onward.

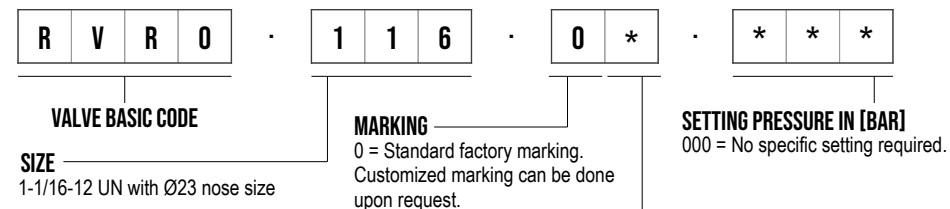
LEGEND

- 50 bar @ 5 lpm
- 150 bar @ 5 lpm
- 200 bar @ 5 lpm
- 350 bar @ 5 lpm
- 400 bar @ 5 lpm

TECHNICAL DATA

| | |
|----------------------------------|---|
| MAXIMUM OPERATING PRESSURE | 420 bar |
| MAXIMUM FLOW | 250 l/min |
| SETTING PRESSURE | see table below |
| MAXIMUM INTERNAL LEAKAGE | 2 cm ³ / min @ 30 bar - Pressure setting at 210 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 | 90-100 Nm Hex.32 |
| NUT TIGHTENING TORQUE | 15-20 Nm Hex.13 |
| TECH. SPEC. FOR CHARACTERIZATION | see page 700 |
| OIL TESTING CONDITIONS | ISO VG 46 cSt |
| SEAL KIT CODE | SK.100 (standard sealing NBR-BUNA-N) |
| WIRE SEALS TAMPER PROOF | Suitable design upon request |
| WEIGHT | 0,260 kg |

ORDERING CODE



BIAS SPRING OPTIONS

| Spring model code | Setting pressure range (bar) | Pressure increment per turn [bar/turn] |
|-------------------|------------------------------|--|
| N | 50-420 | 134 |