

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SISTEMS**

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HYDROMA

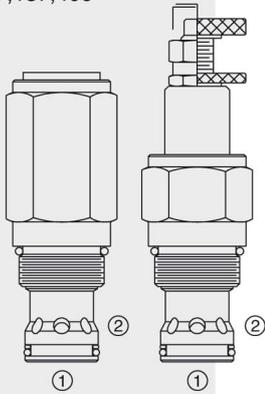
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

PRESSURE CONTROLS

Blue rectangles are links to other catalog pages.

RV16-26 Relief, Pilot-Operated Spool

U.S. Patent
7,137,406



DESCRIPTION

A screw-in, cartridge-style, pilot-operated (two-stage), spool-type hydraulic relief valve, intended for use as a pressure limiting device in demanding hydraulic circuits which require fast response and low hysteresis.

OPERATION

The **RV16-26** blocks flow from 1 to 2 until sufficient pressure is present at 1 to force the piloting relief off its seat, allowing the main (second stage) spool to shift, opening 1 to 2.

The cartridge offers smooth transition in response to load changes in demanding hydraulic circuits.

NOTE: The RV16-26 cannot be used in cross-over relief applications.

FEATURES

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Hardened spool and cage for long life.
- Optional spring ranges to 275.8 bar (4000 psi).
- Fast, smooth response to pressure surges.

RATINGS

Operating Pressure: 275.8 bar (4000 psi)

Flow: See Performance Chart

Internal Leakage: 115 cc/minute (7 cu. in./minute) max. for pressure settings below 138 bar (2000 psi); 197 cc/minute (30 cu. in./minute) for pressure settings of 138 bar (2000 psi) or higher. Leakage measured at 85% of nominal setting.

Crack Pressure Defined: bar (psi) evident at 7.61 lpm (2 gpm) attained

Reseat Pressure: Nominal 90% of crack pressure

Standard Spring Ranges:

03: 9.66–20.70 bar (140–300 psi);

06: 15.87–41.41 bar (230–600 psi);

15: 36.63–103.52 bar (530–1500 psi);

35: 82.82–241.55 bar (1200–3500 psi)

Temperature: -40 to 70°C (-40 to 160°F)

Filtration: See page 9.010.1

Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

Installation: No restrictions; See page 9.020.1

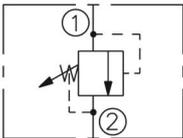
Cavity: VC16-2; See page 9.116.1

Cavity Tool: CT16-2XX; See page 8.600.1

Seal Kit: SK16-2X-B; See page 8.650.1

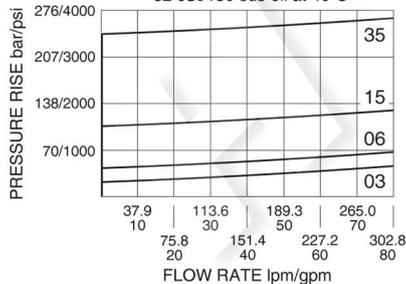
SYMBOLS

USASI/ISO:

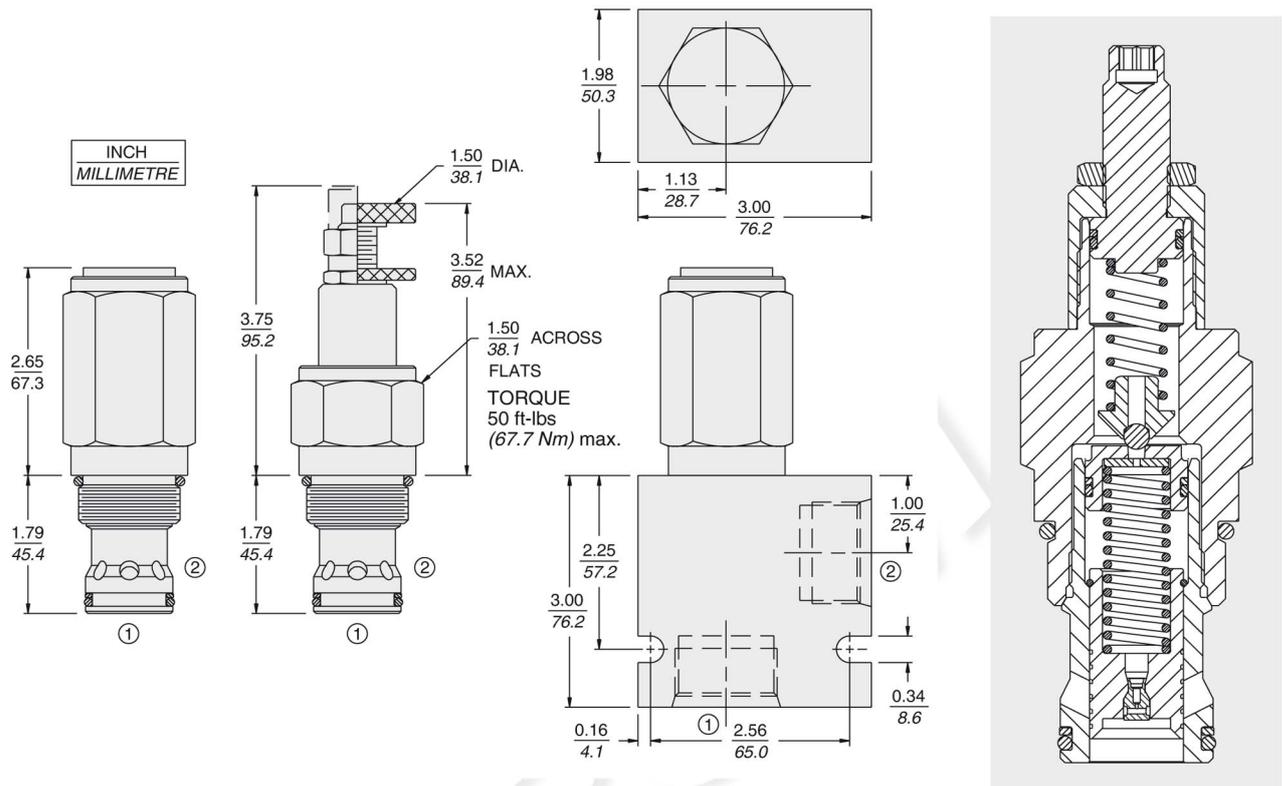


PERFORMANCE (Cartridge Only)

Flow Characteristic 1 to 2
for each Spring Range
32 cSt/150 sus oil at 40°C



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.73 kg. (1.60 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-up standard.
Anodized aluminum knobs.

Standard Ported Body: Weight:
0.57 kg. (1.25 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.016.1

TO ORDER

RV16-26 - - - /

Adjustment Option

- 1/4 in. Hex Allen Head **A**
- 1-1/2 in. Dia. Alum. Knob **B**
- Option A w/ Cover Cap **C**
- Factory Preset Non-Adj. **F**
- Factory Preset Hidden Adjustment **H**
- Option (C) with Lockwire Holes **L**

Porting

- Cartridge Only **0**
- SAE 12 **12T**
- SAE 16 **16T**
- 3/4 in. BSP* **6B**
- 1 in. BSP* **8B**

*BSP Body; UK Mfr. Only

Seals

- Pressure on P Only:**
- N** Buna N (Std.)
 - V** Fluorocarbon
 - P** Polyurethane

Setting in bar[†]

(Blank) for Adjustable, or Specify, for example:

M25 25 bar

M100 100 bar

Setting in psi[†]

(Blank) for Adjustable, or Specify, for example:

9.0 900 psi

23.5 2350 psi

Spring Range

03 9.7 to 20.7 bar

(140 to 300 psi)

06 15.9 to 41.4 bar

(230 to 600 psi)

15 36.6 to 103.5 bar

(530 to 1500 psi)

35 82.8 to 241.6 bar

(1200 to 3500 psi)

[†]Adjustable valves will be preset to approx. 50% of spring max. potential.