

## Pilot-operated, Pressure Reducing/Relieving Valve (High Pressure)

Type: HPR10-S6

Max. operating pressure: 350 bar (5000 psi)

Proof pressure: 630 bar (9000 psi)

Flow: 60 L/min

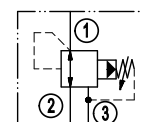
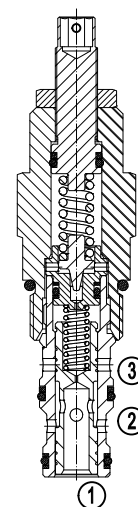


### Description

A screw-in, cartridge-style, pilot-operated, spool-type, hydraulic pressure reducing/relieving valve with internal pilot and internal spring chamber drain for a pressure-regulating device for secondary circuit. It is intended for use in stable input flow circuits.

### Operation

In its steady state, the HPR10-S6 allows flow to pass bi-directionally from ② to ①. On attainment of a pre-determined pressure at ①, the cartridge shifts upward to restrict the input flow at ②, thereby regulating pressure at ① to keep the pressure at ① steady. The spring chamber constantly drained at ③ to prevent the pressure at ③ impact the spool. In this mode, when the pressure at ① exceeds the setting pressure, the spool will shift to relieve ① to ③, until the pressure at ① regains the setting pressure.



(Symbol)

### Technical Data

<b>Max. operating pressure</b>	350 bar (5000 psi)
<b>Proof pressure</b>	630 bar (9000 psi)
<b>Flow</b>	See Performance Chart
<b>Standard spring ranges</b>	Factory default preset value: 50% of rated pressure (See chart 1)
<b>Temperature range</b>	-40°C ~ 120°C with standard buna seals -26°C ~ 204°C with fluorocarbon seals -54°C ~ 107°C with polyurethane seals
<b>Filtration</b>	Max. nominal value: 10μm (NAS 8), ISO4406 19/17/14
<b>Fluids</b>	Mineral based or synthetics with lubricating properties at viscosities of 7.4~420cSt (50-2000ssu)
<b>Installation</b>	No restriction
<b>Cavity</b>	VC10-3
<b>Cavity tool</b>	T10-3RC (Rough), T10-3FM (Finishing)
<b>Seal kit</b>	SK10-3X-BM

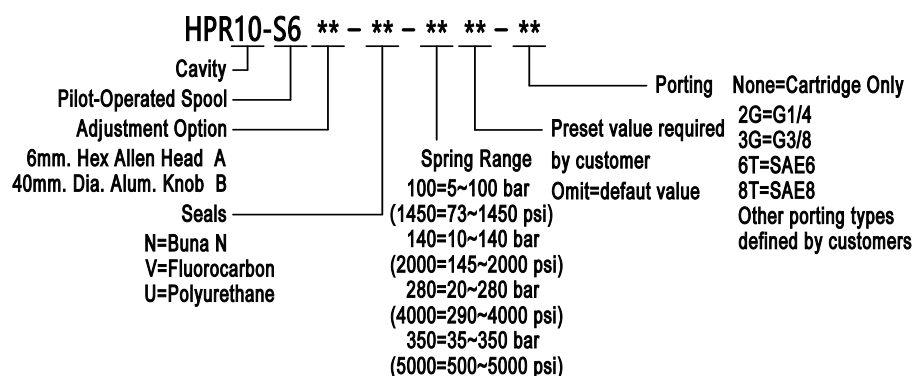
Code	Pressure Range
100	7-100 bar
140	10-140 bar
280	20-280 bar
350	35-350 bar

(Chart 1: Standard Spring Range)

## Features

- Fast and smooth response to pressure changes.
- Compact size.
- Adjustments cannot be backed out of the valve.
- Hardened spool and cage for long life.
- Industry common cavity.

## Ordering Code



## Materials

**Cartridge:** Weight: 0.21 kg (0.46 lbs) ; Steel with hardened working surfaces and zinc-plated exposing surfaces ; Buna N O-rings and back-up (standard) .

**Standard ported body:** Weight : 0.30 kg (0.66 lbs) ; Anodized high-strength 6061 T6 aluminum alloy, rated to 250 bar (3600 psi).

**Others:** Ductile iron bodies and steel bodies available. Dimensions may differ. Contact the factory.

## Dimensions

