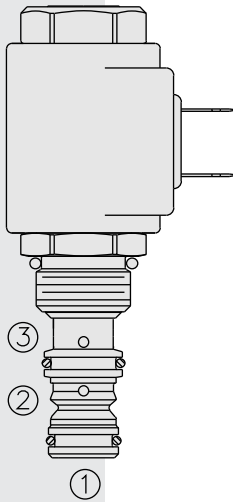


ELECTRO-PROPORTIONAL VALVES—PRESSURE CONTROLS

EHPR08-33 Proportional Reducing/Relieving Valve



DESCRIPTION

A screw-in, cartridge-style, direct acting, spool-type reducing/relieving valve, which can be infinitely adjusted across a prescribed range using a variable electric input. Pressure output is proportional to DC current input. This valve is intended for use as a pressure control device in demanding applications.

OPERATION

The **EHPR08-33** allows free flow from ① to ③ when no current is applied to the coil. When the coil is energized, ② is connected to ①. Increasing current applied to the coil will increase the control (reduced) pressure proportionally. If pressure at ① exceeds the setting induced by the coil, pressure from ① is relieved to ③.

Note: Back pressure on port ③ becomes additive to the pressure setting at a 1:1 ratio.

FEATURES

- 12 and 24 volt coils standard.
- Optional manual override.
- Industry common cavity.
- Optional waterproof E-coils rated up to IP69K.

RATINGS

Maximum Inlet Pressure at port ②: 207 bar (3000 psi)

Maximum Tank Pressure at port ③: 34.5 bar (500 psi)

Maximum Control Current: 1.2 amps for 12 VDC coil; 0.6 amps for 24 VDC coil;
For other voltages, consult factory

Dither Frequency Required: 200 Hz

Typical Frequency Response: See Section 10

Hysteresis: Less than 3%

Reducing/Relieving Pressure Range from Zero to Maximum Control Current:
0–26 bar (0–375 psi)

Rated Flow: 4.0 lpm (1.05 gpm), $\Delta P=6$ bar (87 psi), Cartridge only,
① to ③ coil de-energized

Step Response: $T_{ON} < 30$ ms; $T_{OFF} < 12$ ms

Flow Path: Free Flow: ① to ③ coil de-energized; Reduced: ② to ① coil energized;
Relieving: ① to ③ coil energized

Temperature: -40 to 120°C (-40 to 250°F), with standard Buna N seals

Ambient Air Temperature: -40 to 80°C (-40 to 176°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

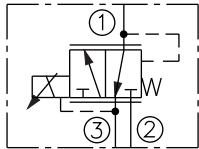
Installation: No restrictions; See page 9.020.1

Cavity: VC08-3; See page 9.108.1; **Cavity Tool:** CT08-3XX; See page 8.600.1

Seal Kit: SK08-3X-00; See page 8.650.1

SYMBOLS

USAS/ISO:



PERFORMANCE

