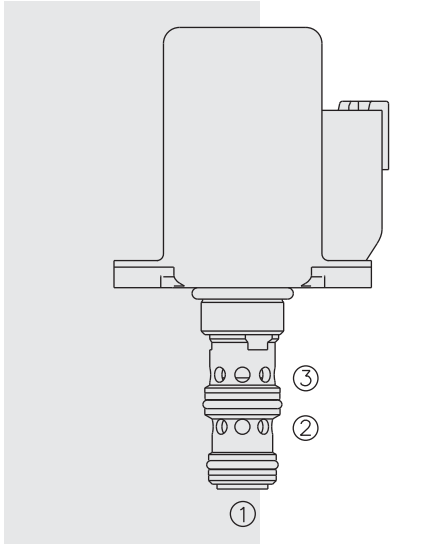


# ELECTRO-PROPORTIONAL VALVES—PRESSURE CONTROLS

## EHPR98-T38 Proportional Reducing/Relieving



### DESCRIPTION

A direct-acting, spool-type, drop-in-style, flange-mounted, pressure 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. The Ecoil is an integral part of the valve assembly, and cannot be replaced or field-serviced.

### OPERATION

The **EHPR98-T38** 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

- Economical drop-in style.
- 1000-hour salt spray protection.
- Integral waterproof coil standard.
- 10, 12, 20 or 24 VDC coils.

### RATINGS

**Maximum Inlet Pressure:** 241 bar (3500 psi)

**Tank Port (③) Pressure:** 34.5 bar (500 psi) maximum;  
17.2 bar (250 psi) maximum with manual override option.

**Maximum Control Current:** 1.38 amps for 10 VDC coil; 1.30 amps for 12 VDC coil;  
0.69 amps for 20 VDC coil; 0.65 amps for 24 VDC coil;

**Control Pressure at Maximum Control Current:** 30 bar (435 psi)

**Resistance:** 4.3 ohm (10V); 5.2 ohm (12V); 17.5 ohm (20V); 20.9 ohm (24V)

**Inductance:** 80 mH (12V)

**Hysteresis:** at 150 Hz PWM: 5% of maximum control pressure

**Rated Flow:** 18.9 lpm (5.0 gpm)

**Maximum Internal Leakage:** De-energized: 50 ml/min. (3 cu. in./min.) at 34.5 bar (500 psi); Energized at I-max: 100 ml/min. (6 cu. in./min.) at 34.5 bar (500 psi)

**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)

**Environmental Rating:** IP69K

**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

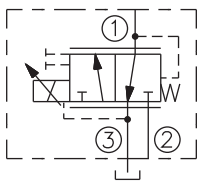
**Mounting Screws:** M4 x 0.7 x 12 Long; Part No. 4001015 (not provided with valve)

**Cavity and Cavity Tool:** VC-T011; See page 9.111.1

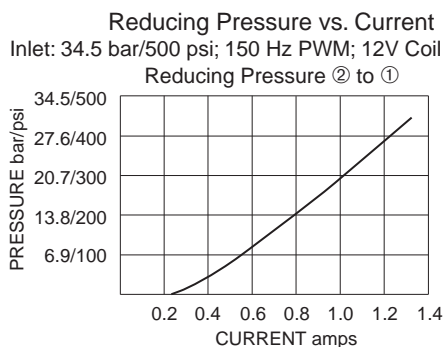
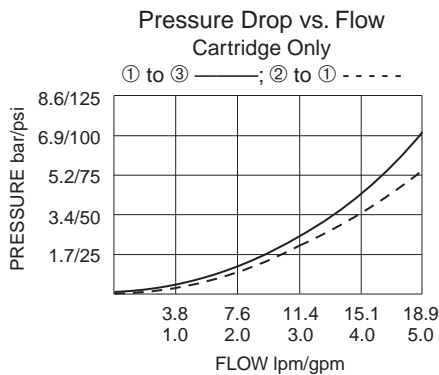
**Seal Kit:** SKEHPR98-T38x; See page 8.650.1

### SYMBOLS

#### USASI/ISO:



### PERFORMANCE



Typical Relieving/Reducing Pressure vs. Flow Characteristic  
Typical Relieving Pressure at Various %s of Maximum Control Current  
Inlet: 34.5 bar/500 psi ———; Inlet 241 bar/3500 psi - - - -  
(Curves overlap on Relieving Pressure side of graph); 150 Hz PWM (Both Directions)

