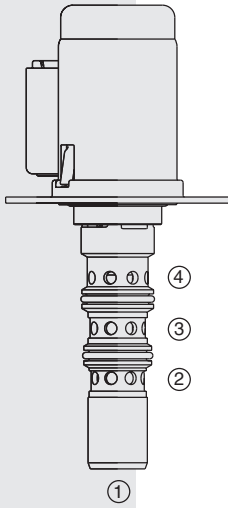


TS98-T34 Proportional Pressure Reducing/Relieving



DESCRIPTION

A pilot-operated, spool-type, proportional pressure reducing/relieving valve. It is a drop-in, flange-mounted, cartridge-type valve, which can be infinitely adjusted across a prescribed range using a variable electric input. Back pressure at port 4 becomes additive to the pressure setting at a 1:1 ratio. The coil is an integral part of the valve and is not serviceable. The regulated pressure is proportional to DC current input.

OPERATION

Without applied current, the TS98-T34 allows free flow from 3 to 4. When the coil is energized, in reducing mode, flow is allowed from port 2 to 3. When the coil is energized, in relieving mode, flow is allowed from port 3 to 4.

FEATURES

- Economical drop-in style.
- Optional 233 micron mesh screen
- Optional lock-down flange
- 12 or 24 VDC coils.
- Several push-on termination options.
- Integral waterproof coil standard.

RATINGS

Maximum Inlet Pressure and Regulated Pressure: 30 bar (435 psi)

Maximum Control Current: To achieve 20 bar (290 psi) regulated pressure:
0.85 amps for 12 VDC coil; 0.43 amps for 24 VDC coil

Note: Regulated pressures up to 29.3 bar (425 psi) can be attained with increased current values and 30 bar (435 psi) inlet pressure.

Coil Resistance: 7.25 ohms (12 VDC); 28.5 ohms (24 VDC) at 20°C (68°F)

Coil Inductance: 70 mH (12 VDC) 330 mH (24 VDC) at 20°C (68°F)

Regulated Pressure Range from Zero to Maximum Control Current:

0–20 bar (0–290 psi) with 20.7 bar (300 psi) inlet.

Rated Flow: 30 lpm (8 gpm)

Internal Leakage at 0A: 0.55 lpm (0.15 gpm) with 20.7 bar (300 psi) inlet

Cycle Life: Five million cycles

Operating Fluid Temperature: -40 to 149°C (-40 to 300°F) with HBNR seals.

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

Ambient Temperature: -40 to 90°C (-40 to 194°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: Flange-mounted. Mounting screws sold separately. Optional lockdown flange also available.

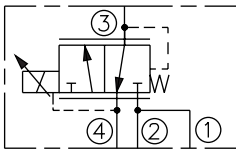
Flange Mounting Screws: M5 x 8; Part No. 4000039 (sold separately)

Cavity: VC-T003; See page 9.111.1

Cavity Tool: CT-T003R0-x-G; See page 8.600.1

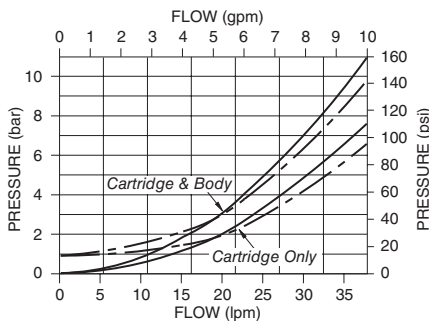
Seal Kit: SK98-T3N; See page 8.650.1

ISO SYMBOL

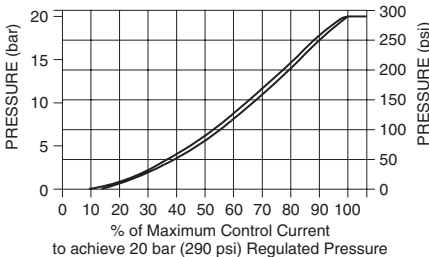


PERFORMANCE

Pressure Drop vs. Flow Characteristic
 - - - For Flow 3 to 4 with Coil De-energized
 — For Flow 2 to 3 with Coil Energized



Reduced Pressure vs. Current Characteristic
 With Inlet Pressure at 2 of 0–20.7 bar (0–300 psi)
 Control Current: 200 Hz Dither



Note: Regulated pressures up to 29.3 bar (425 psi) can be attained with increased current values and 30 bar (435 psi) inlet pressure.

Reducing/Relieving Pressure vs. Flow Characteristic
 Regulated Pressure Range: 0–20 bar (0–290 psi) with 20.7 bar (300 psi) Input
 Pressure at 2 for Various Control Currents (P Shown for Cartridge & Body)

