

Part number:

**HYDROMA**

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SYSTEMS

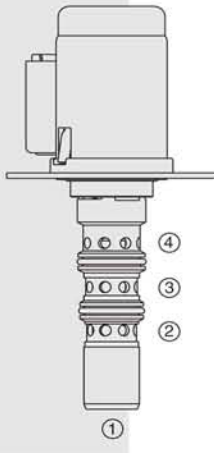
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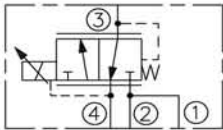
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

## ELECTRO-PROPORTIONAL VALVES—PRESSURE CONTROLS

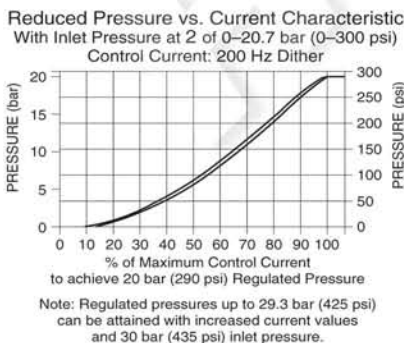
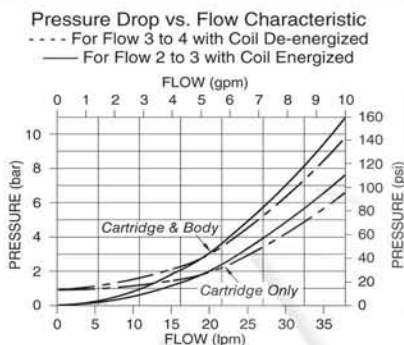
# TS98-T34 Proportional Pressure Reducing/Relieving



### ISO SYMBOL



### PERFORMANCE



### 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.

**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

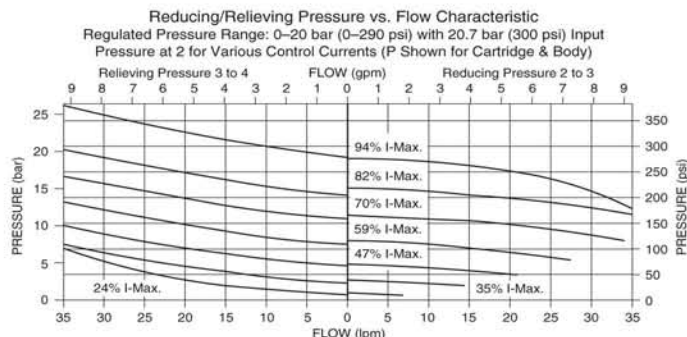
**Installation:** Flange-mounted. Mounting screws sold separately. Optional lockdown flange also available.

**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

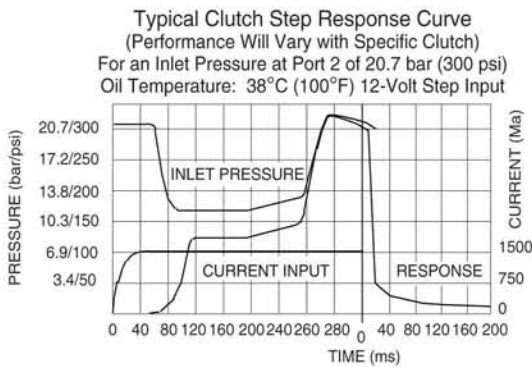
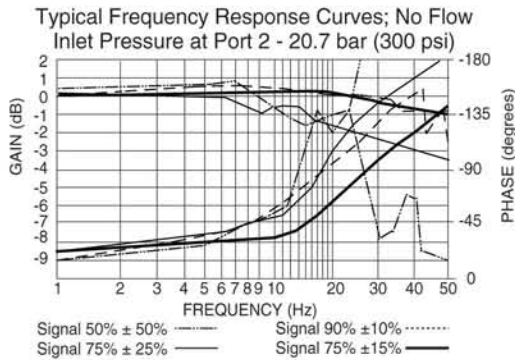
**Seal Kit:** SK98-T3N; See page 8.650.1



# Valve w/Internally Piloted Spool

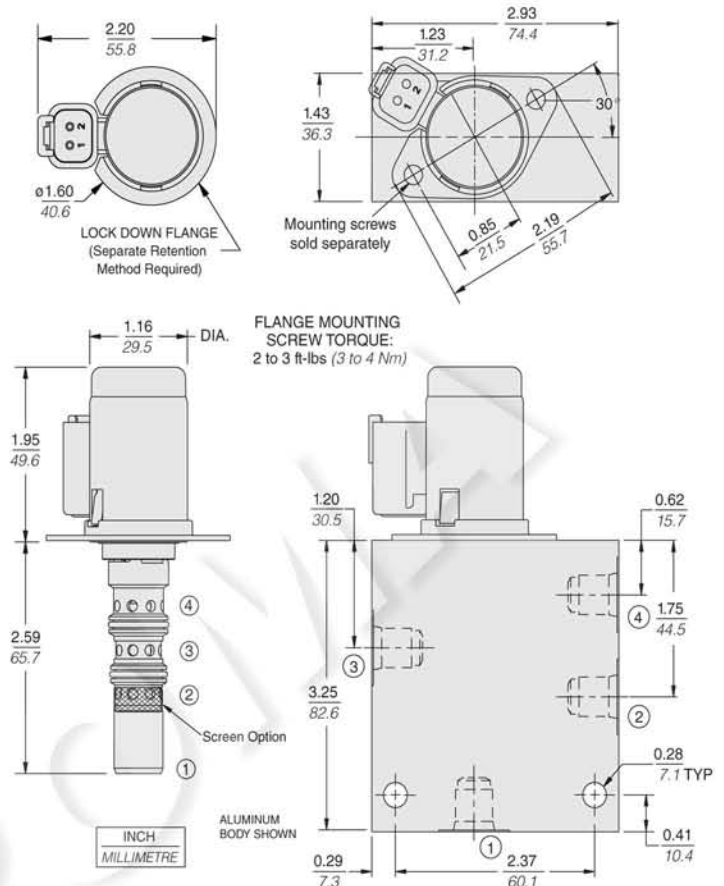
# TS98-T34

## PERFORMANCE (continued)



**Recommended Electronic Controllers:**  
See page 2.001.1 or our Electronics catalog.

## DIMENSIONS



## MATERIALS

**Cartridge including Coil:** Weight:  
0.24 kg (0.51 lb) Steel with hardened work surfaces.  
Zinc-Nickel plated exposed surfaces; HNBR O-rings standard.  
Coil is encapsulated, Class H high-temperature magnet wire, with zinc-nickel plated shell.

**Special Ported Body:** Weight:  
0.11 kg (0.26 lb) Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi).  
See page 8.010.1  
Part No. 71501X0 (sold separately)

**Mounting Screws:** Part No. 4000039 (sold separately)

## TO ORDER

### TS98-T34

#### Flange Option

Standard (Blank)  
Lockdown **L**

#### Screen Option

None (Blank)  
Inlet Port Screen  
233 µm **S**

#### Porting

Cartridge Only **0**  
SAE 6 **6T**

#### Seals

Hydrogenated Nitrile (HNBR) **N**

#### Diode

(Blank) None  
**Z** Zener Diode

#### Termination

**DJ** Amp Junior Timer  
**DY2A** Metri-Pack® 150.2A  
**DR** Deutsch DT04-2P

#### Voltage

**12** 12 VDC (0.70 amps max.)  
**24** 24 VDC (0.35 amps max.)  
Consult factory for other voltages