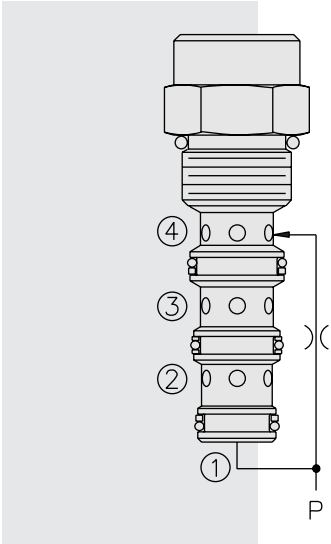


# EC10-40 Pressure Compensator



## DESCRIPTION

A screw-in, cartridge-style pressure-compensating element, intended for use with a remote fixed or variable orifice to yield a three-port (bypass-type), pressure-compensated, flow regulating hydraulic valve.

## OPERATION

The **EC10-40** maintains a constant flow rate from ③ regardless of load pressure changes in the circuit downstream of ③.

The cartridge maintains a constant differential pressure from circuit point P to port ③ (see USASI Symbol), thereby regulating the hydraulic flow rate between the two points in the circuit. The EC10-40 is a priority type regulator, delivering pump flow first to ③, then bypassing excess to ②. All ports may be fully pressurized.

## FEATURES

- Hardened parts for long life.
- Quiet, modulated response.
- Industry common cavity.

## RATINGS

**Operating Pressure:** 207 bar (3000 psi)

**Flow Rate:** 38 lpm (10 gpm) max. regulated; 57 lpm (15 gpm) max. input.  
EC10-40 inlet pressure begins to rise over compensating pressure when bypass oil exceeds 26 lpm (7 gpm).

**Standard Compensator Bias Spring:** 5.5 bar (80 psid)

**Flow Maintenance:** 0.38 to 1.86 lpm (0.1 to 0.49 gpm) settings  $\pm 20\%$ ;  
1.89 to 5.64 lpm (0.5 to 1.49 gpm) settings  $\pm 15\%$ ;  
5.68 to 37.85 lpm (1.5 to 10 gpm) settings  $\pm 10\%$

**Temperature:** -40 to 120°C

**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

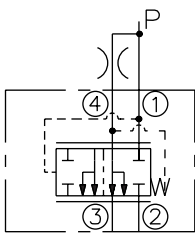
**Cavity:** VC10-4; See page 9.110.1

**Cavity Tool:** CT10-4XX; See page 8.600.1

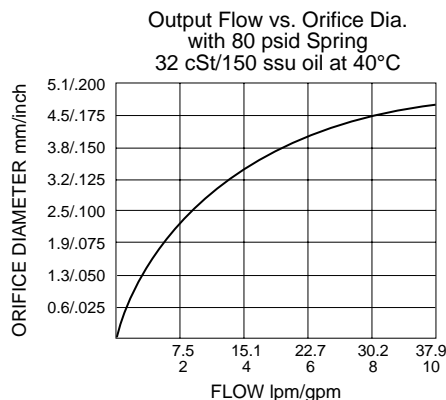
**Seal Kit:** SK10-4X-TMB; See page 8.650.1

## SYMBOLS

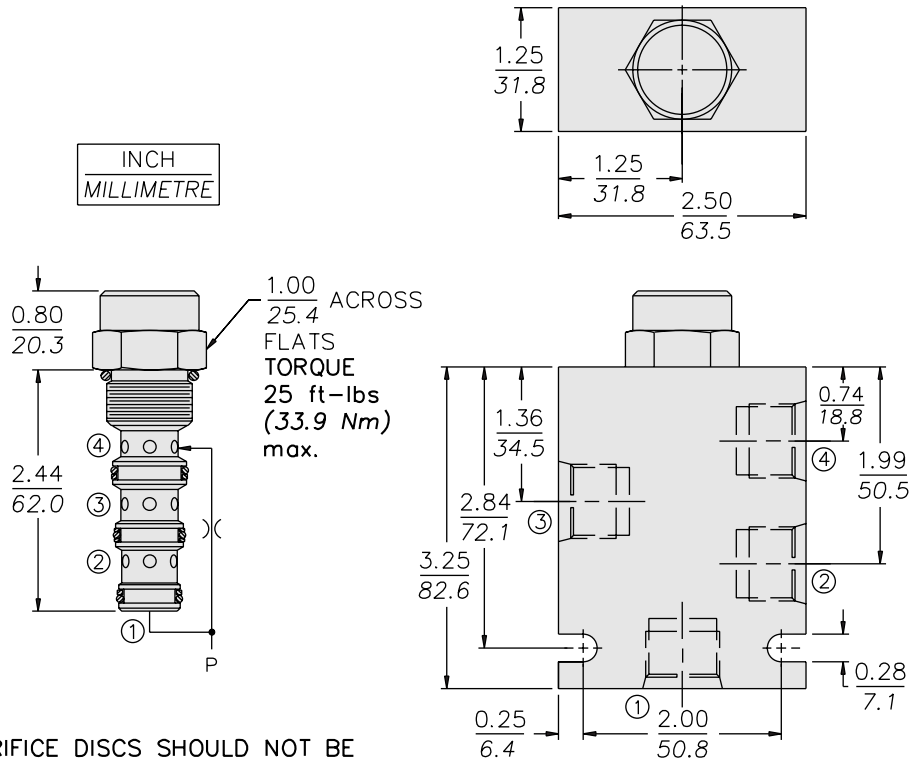
### USASI/ISO:



## PERFORMANCE (Cartridge Only)



**DIMENSIONS**



ORIFICE DISCS SHOULD NOT BE USED WITH THIS PRODUCT.

**MATERIALS**

**Cartridge:** Weight: 0.16 kg. (0.35 lbs.)  
Steel with hardened work surfaces.  
Zinc-plated exposed surfaces.  
Buna N O-rings and polyester elastomer back-ups standard.

**Standard Ported Body:** Weight: 0.34 kg. (0.75 lbs.)  
Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1

**TO ORDER**

|                  |           |                           |                            |
|------------------|-----------|---------------------------|----------------------------|
| <b>EC10-40 -</b> |           | <b>Compensator Spring</b> |                            |
|                  |           | <b>40</b>                 | 2.8 bar (40 psid)          |
|                  |           | <b>80</b>                 | 5.5 bar (80 psid) standard |
|                  |           | <b>160</b>                | 11.0 bar (160 psid)        |
|                  |           | <b>Seals</b>              |                            |
|                  |           | <b>N</b>                  | Buna N (Std.)              |
|                  |           | <b>V</b>                  | Fluorocarbon               |
| <b>Porting</b>   |           |                           |                            |
| Cartridge Only   | <b>0</b>  |                           |                            |
| SAE 6            | <b>6T</b> |                           |                            |
| SAE 8            | <b>8T</b> |                           |                            |
| 1/4 in. BSP*     | <b>2B</b> |                           |                            |
| 3/8 in. BSP*     | <b>3B</b> |                           |                            |
|                  |           |                           |                            |
|                  |           |                           |                            |

\*BSP Body; U.K. Mfr. Only