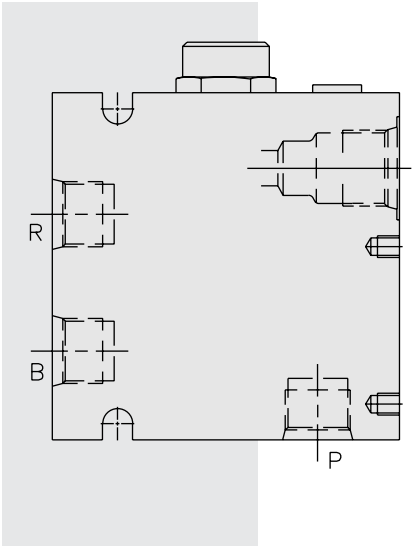


ECV10-44 In-Line Pressure Compensator w/Control Cavity



DESCRIPTION

The ECV10-44 is a standard model EC10-40 in a convenient in-line plumbed body with an integral control cartridge cavity VC10-2. Addition of needle valves, rotary valves, electro-proportional valves, etc. allow for infinitely variable pressure-compensated priority flow output.

OPERATION

The **ECV10-44** maintains a constant flow rate from port R regardless of load pressure changes in the circuit downstream of port R.

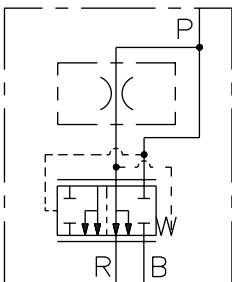
The cartridge maintains a constant differential pressure from port P to port R (see USASI Symbol), thereby regulating the hydraulic flow rate between the two ports. The ECV10-44 is a priority type regulator, delivering pump flow first to R, then bypassing excess to B. All ports may be fully pressurized. Flow output is a function of the flow required to maintain a pressure drop as determined by the compensating spring value. The control cavity is cartridge port ② in, cartridge port ① out, so all cartridge restrictions on ① to ② use apply.

FEATURES

- Hardened parts for long life.
- Quiet, modulated response.
- Panel-mount capability.
- Lock-down bracket holes.

SYMBOL

USASI/ISO:



RATINGS

Operating Pressure: 207 bar (3000 psi)

Flow Rate: Determined by control used

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

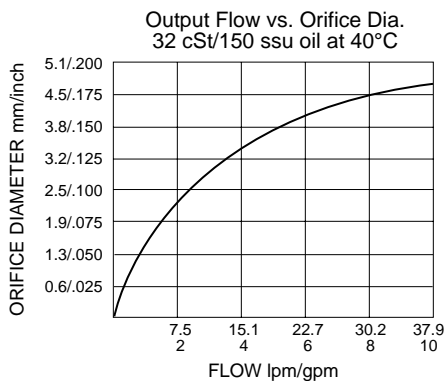
Filtration: See page 9.010.1.

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

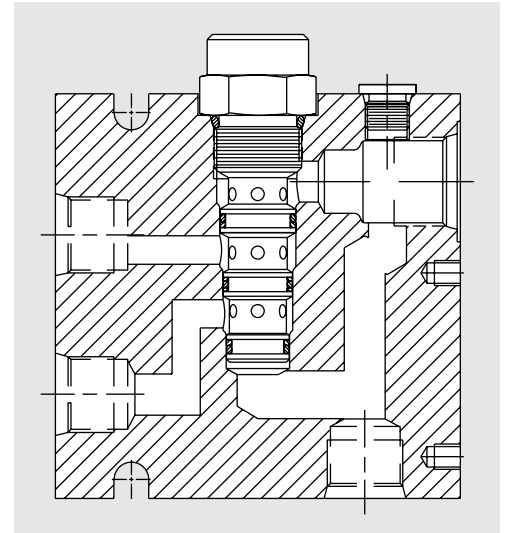
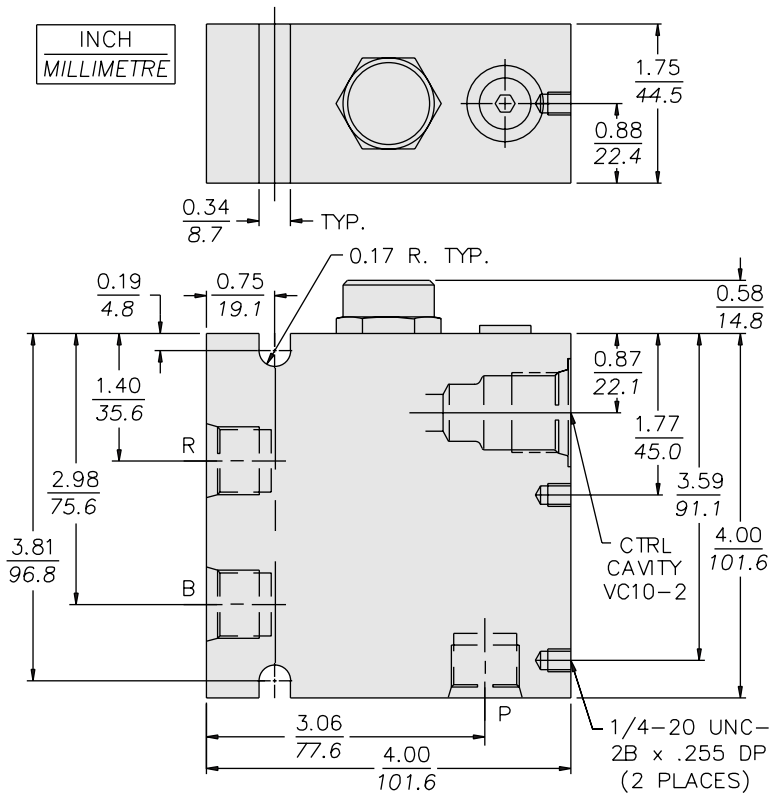
Installation: No restrictions; See page 9.020.1

Seal Kit: Refer to EC10-40 data, page 5.482.1

PERFORMANCE (EC Cartridge Only)



DIMENSIONS



**NOTE: EUROPEAN MANUFACTURED VERSION
MAY DIFFER IN DESIGN/DIMENSIONS.
CONSULT HYDRAFORCE HYDRAULICS LTD.**

MATERIALS

Cartridge: Weight: 0.11 kg. (0.25 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight:
1.13 kg. (2.5 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi).

TO ORDER

ECV10-44 - - - 80

Porting
SAE 8 8T

Compensator Spring
80 5.5 bar (80 psid) (Std.)

Seals
N Buna N (Std.)
V Fluorocarbon