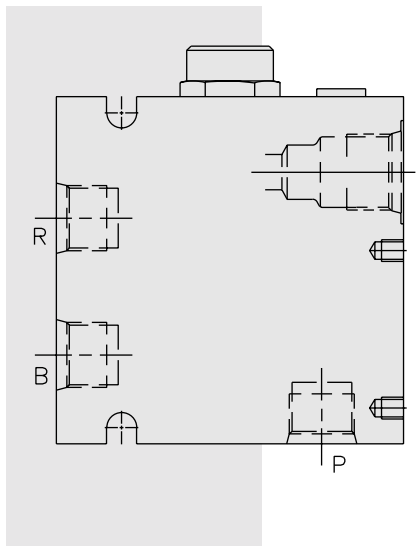


## ECV10-44 In-Line Pressure Compensator w/Control Cavity



### 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.

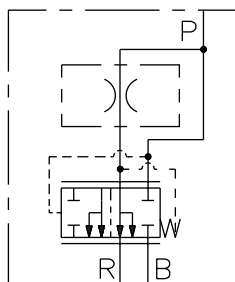
The cartridge maintains a constant differential pressure from port P to port R (see USASI Symbol), thereby regulating the hydraulic flow rate between the two ports. The ECV10-44 is a priority type regulator, delivering pump flow first to R, then bypassing excess to B. All ports may be fully pressurized. 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.

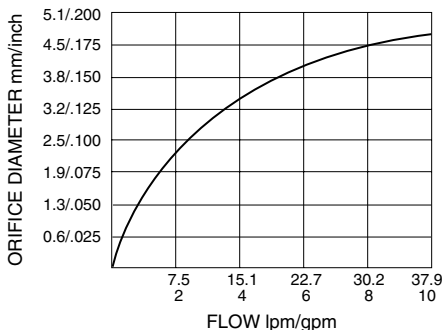
**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)

**Installation:** No restrictions; See page 9.020.1

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

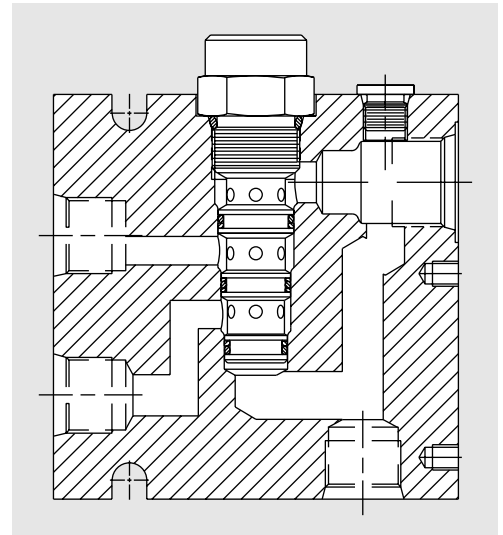
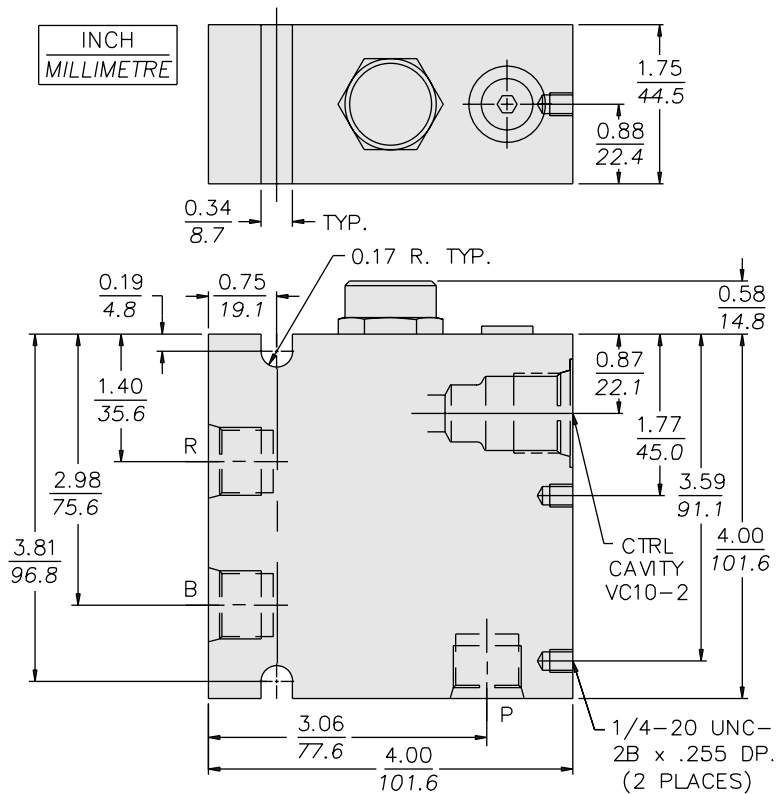
### PERFORMANCE (EC Cartridge Only)

Output Flow vs. Orifice Dia.  
32 cSt/150 ssu oil at 40°C



# ECV10-44

## 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 240 bar (3500 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