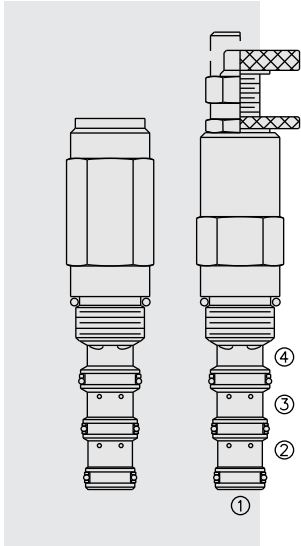


# UP10-40 Piloted Unloading Valve



## DESCRIPTION

A screw-in, cartridge-style, remote sequence, piloted unloading valve with optional fixed unload/reload pressure ratios of 60%, 70% or 80%, for use in accumulator-type hydraulic systems..

## OPERATION

In its steady state, the **UP10-40** blocks flow from ② to ③. On attainment of a pre-determined pressure at ①, the spool shifts to allow flow from ② to ③. The spring chamber is vented to ④.

If pressure at ① drops to a level below the ratio-established reload value, the valve will close, blocking flow from ② to ③.

## FEATURES

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Hardened precision spool and cage for long life.
- Industry common cavity.

## RATINGS

**Operating Pressure:** 206 bar (3000 psi) with standard Buna N seals

**Flow:** 3.8 lpm (1 gpm); See Performance Chart

**Pressure Setting Range:** 69 to 207 bar (1000 to 3000 psi)

**Loading and Unloading Ratios:** 60% ±5%, 70% ±5%, 80% ±5%

**Temperature:** -40 to 120°C with standard Buna 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

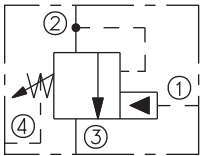
**Installation:** No restrictions; See page 9.020.1

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

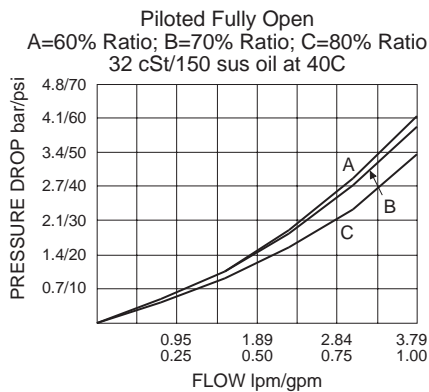
**Cavity Tool:** CT10-4XX; See page 8.600.1

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

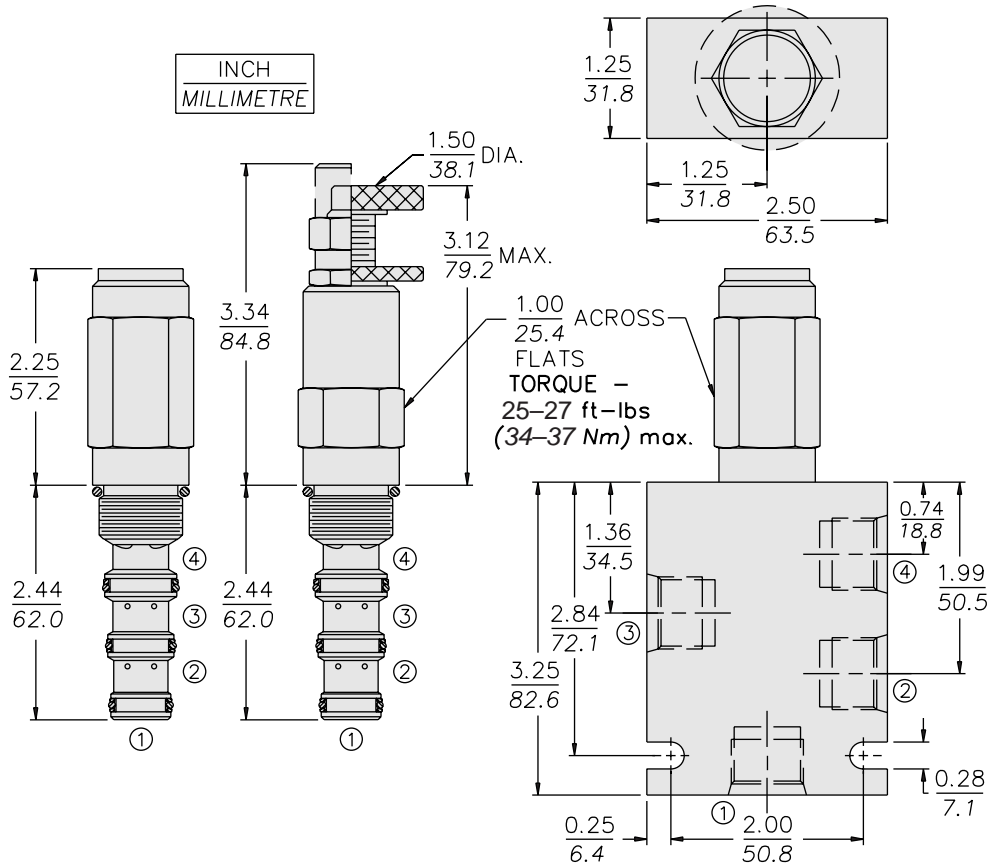
## SYMBOL



## PERFORMANCE (Cartridge Only)



**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.34 kg. (0.70 lbs.)  
Steel with hardened work surfaces.  
Zinc-plated exposed surfaces.  
Buna N O-rings and polyester  
elastomer back-ups standard.  
Anodized aluminum knobs  
and caps.

**Standard Ported Body:** Weight:  
0.34 kg. (0.70 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**

**UP10-40 - - - - 30 /**

**Adjustment Option**  
1/4 in. Hex Allen Head **A**  
1-1/2 in. Dia. Alum Knob **B**  
Option A w/Cover Cap **C**  
Factory Preset Non-Adjst. **F**  
Factory Preset  
Hidden Adjustment **H**  
Option C  
w/Lockwire Holes **L**

**Porting**  
Cartridge Only **0**  
SAE 6 **6T**  
SAE 8 **8T**  
1/4 in. BSP\* **2B**  
3/8 in. BSP\* **3B**

**Seals**  
Buna N (Std.) **N**  
Fluorocarbon **V**

**Setting in bar<sup>†</sup>**  
(Blank) for Adjustable, or  
Specify, for example:  
**M25** 25 bar  
**M100** 100 bar

**Setting in psi<sup>†</sup>**  
(Blank) for Adjustable, or  
Specify, for example:  
**9.0** 900 psi  
**21.0** 2100 psi

**Pressure Ratio**  
**60** 60% Ratio  
**70** 70% Ratio  
**80** 80% Ratio

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

<sup>†</sup>Adjustable valves will be preset to approx. 50% of spring max. potential.