

**TR-PCA PRESSURE COMPENSATING REGULATOR VALVE**
**DESCRIPTION**

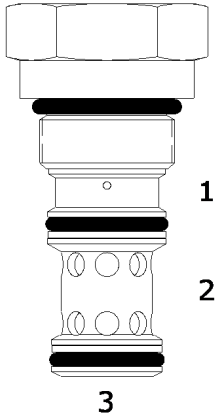
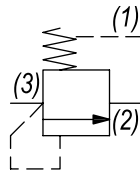
12 size, 1 1/16-12 thread, "TWELVE" series, pressure compensating regulator valve.

**OPERATION**

The TR-PCA-0P with an orifice between ports (3) and (1) maintains a constant flow rate from (3) regardless of load pressure changes in the system upstream of (3), or in the bypass leg at (2) as long as pressure at (2) is less than (1). The valve's spool maintains a constant differential pressure across an external orifice, thereby regulating the hydraulic flow rate across this external orifice (see options table for pressure ranges). When used with an orifice as described above, it functions as a priority type regulator, delivering pump flow first to the external orifice, then bypassing excess to (2). All ports may be fully pressurized. The TR-PCA-0V with a dump valve and a pilot relief valve at (1) acts as main stage of a ventable relief valve.

**FEATURES**

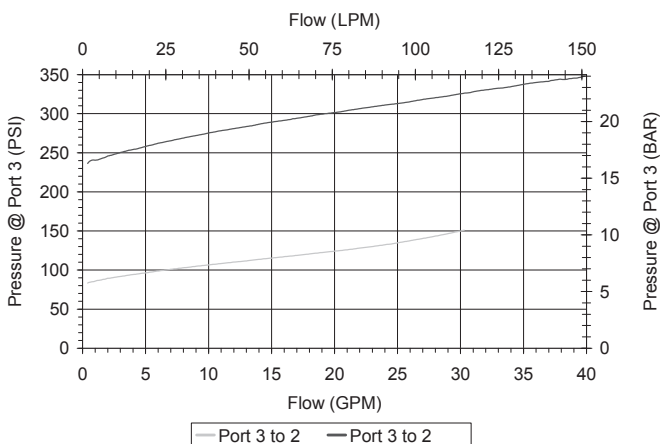
- Hardened parts for long life.
- Industry common cavity.


**HYDRAULIC SYMBOL**


Can be used as a logic element. TR-PCA-0P is commonly used as a bypass flow regulator (90 and 150 PSI recommended). TR-PCA-0V is commonly used as the main stage of a ventable relief valve (50 and 90 PSI recommended).

**PERFORMANCE**

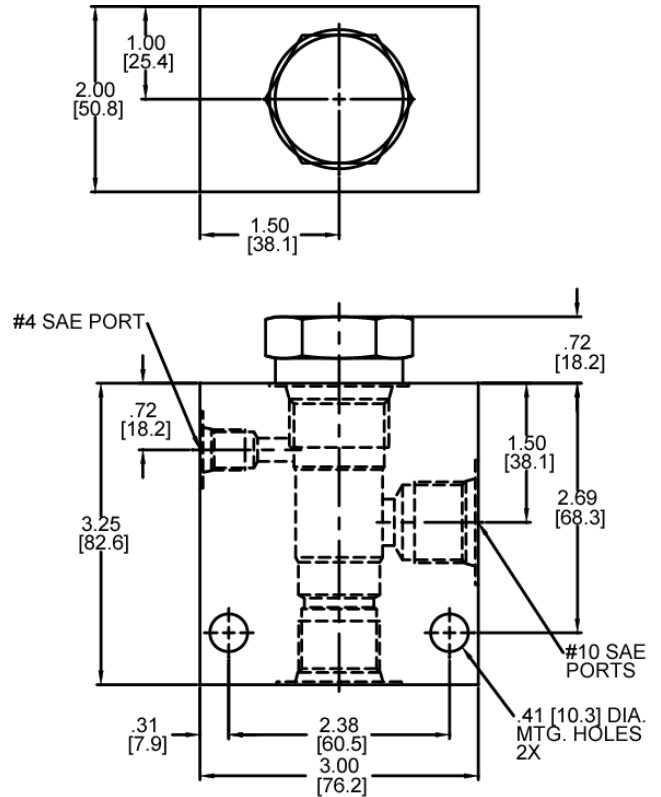
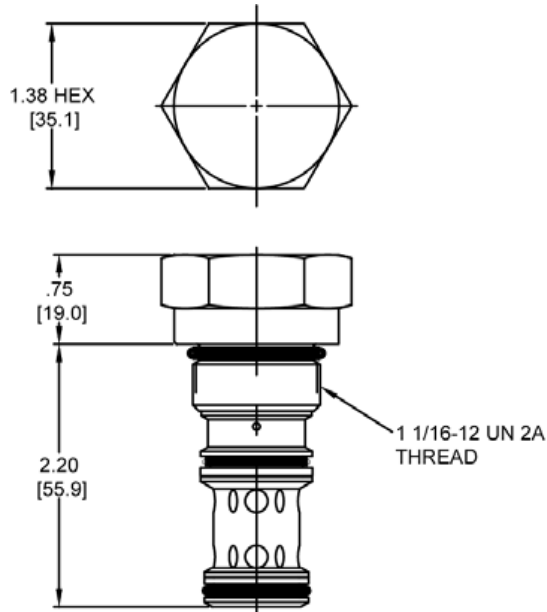
Actual Test Data (Cartridge Only)


**VALVE SPECIFICATIONS**

Nominal Flow	40 GPM (151 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Seat Ratio	Area of Pilot is equal to the area at Port (3)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temp. Range	-40° to 250°F (-40° to 120°C)
Weight	.54 lbs (.24 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	70 ft-lbs (95 Nm)
Cavity	TWELVE 3WS
Cavity Form Tool (Finishing)	40500033
Seal Kit	21191306

**WARNING:** the specifications/application data shown in our catalogs and data sheets are intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

**DIMENSIONS**



Body Weight: 1.56 lbs (.70 kg)

**ORDERING INFORMATION**

<p><b>TR-PCA</b> - - -</p> <p><b>OPTIONS</b></p> <p>Buna, Pilot to Close <b>0P</b></p> <p>Viton, Pilot to Close <b>VP</b></p> <p>Buna, Vent to Open <b>0V</b></p> <p>Viton, Vent to Open <b>VV</b></p>	<p><b>BODIES</b></p> <p><b>Blank</b> Without Body</p> <p><b>S</b> #10 SAE Ports</p>
<p><b>Δ P SETTING</b></p> <p><b>@ 1 GPM with Pilot Vented</b></p> <p><b>0020</b> 20 PSI</p> <p><b>0050</b> 50 PSI</p> <p><b>0090</b> 90 PSI</p> <p><b>0150</b> 150 PSI</p> <p><b>0230</b> 230 PSI</p> <p>±10%</p>	

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