TR-PCA PRESSURE COMPENSATING REGULATOR VALVE

DESCRIPTION
12 size, 1 1/16-12 thread, “Tecnord” 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

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 TECNORD 3WS
Cavity Form Tool (Finishing) 40500033
Seal Kit 21191306

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).

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### ORDERING INFORMATION

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| Body Weight: 1.56 lbs (.70 kg) |

**ΔP SETTINGS**

- 0020: 20 PSI
- 0050: 50 PSI
- 0090: 90 PSI
- 0150: 150 PSI
- 0230: 230 PSI

±10%