



Pressure Reducing Valve



U. S. Patent Nos.
6,581,628
5,931,182

Pressure Reducing Valve

- Use this valve in double or single acting systems.
- Direct acting, poppet style, adjustable, cartridge construction.
- Cartridge construction is the adjustable, direct acting, poppet style.
- Model 47-0540-01 set the pressure range from 52 bar (5.2 MPa) to 310 bar (31 MPa). Repeatability $\pm 7\%$.
- Model 47-0540-03 set the pressure range from 10 bar (1 MPa) to 62 bar (6.2 MPa). Repeatability $\pm 10\%$.
- Maximum inlet pressure is 350 bar (35 MPa).
- Two-port design eliminates the need for third fluid line to drain bypass flow (internal leakage) back to the system reservoir.
- Recommended Filtration is 25 Micron (NOM) / 40 Micron (ABS) (minimum).

Operation: The Pressure Reducing Valve (PRV) is a Normally Open (N/O) pressure control device. The valve remains open and fluid flows freely to downstream devices (from the valve to devices) until the pressure in the valve reaches the pressure (adjustable) set-point. At the set-point pressure, the valve closes blocking further flow and pressure rise to the downstream devices. If there is a sufficient downstream pressure loss (from the valve to devices), the PRV will re-open, allowing flow to pass through the valve until the pressure again reaches the valve set-point.

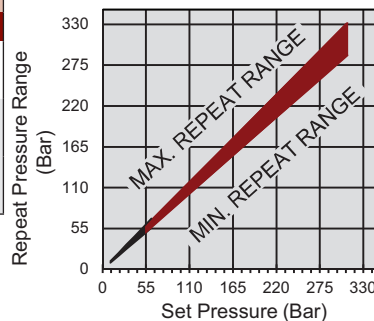
Pressure Reducing Valve				
Model No.	Inlet Pressure	Set Pressure Range	Repeat	A
Manifold Mount Valve Assembly				
47-0540-01	350 bar (35 MPa)	52-310 bar (5.2 -31.0 MPa)	$\pm 7\%$	148
47-0540-03	< 200 bar (20 MPa)	10 - 62 bar (1-6.2 MPa)	$\pm 10\%$	165
	>200 bar (20 MPa)	20-62 bar (2.0 - 6.2 MPa)		

NOTE: Maximum system flow rate is 5.7 l/min. for all VektorFlo® special function valves.

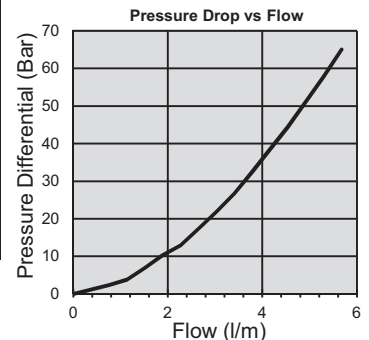
Excess flow voids warranty.

For proper sealing, the mating surface must be flat within 0.08 mm with a maximum surface roughness of 1.6 μm R_a .

The graphs show the repeat range based on set pressure



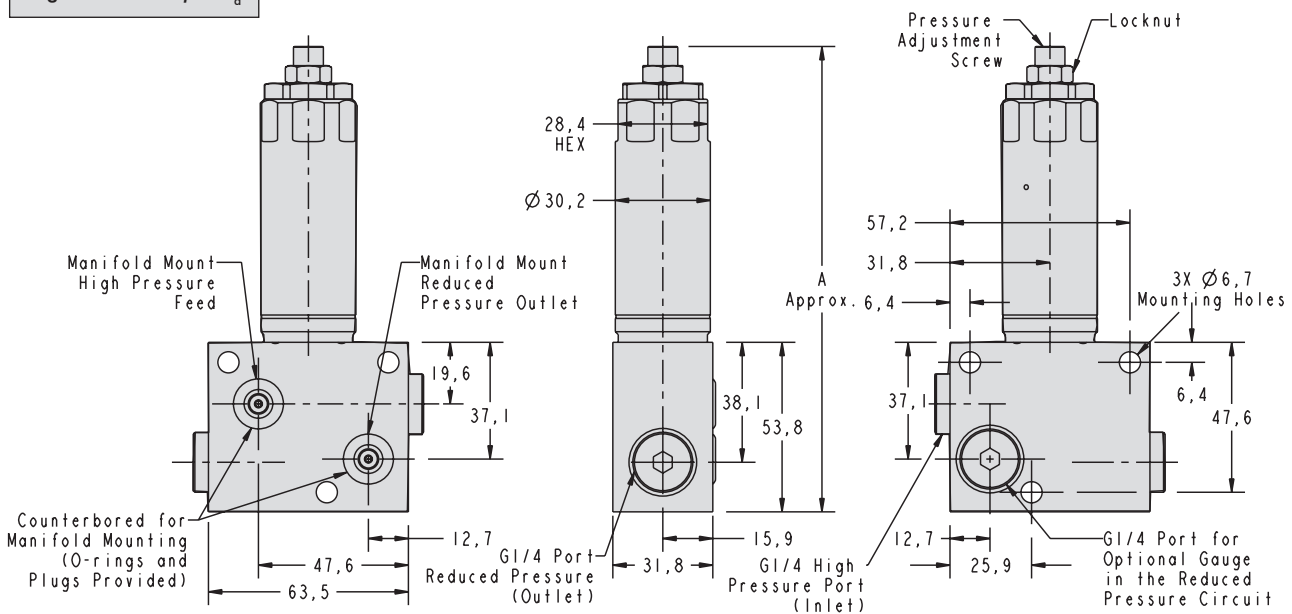
The graph shows the pressure drop through a PRV and manifold mount block.



- 47-0540-00 ■ 47-0540-04
- 47-0540-01 ■ 47-0530-03

ILMV705406 REV C

ILMV705405 REV A



Manifold Mount Pressure Reducing Valve Assembly

ILMV705407 REV B