

Valves

Pressure Reducing Valve



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

Pressure Reducing Valve for Circuit Pressure Control

- For use in double or single acting systems.
- Direct acting, poppet style, adjustable, cartridge construction.
- Cartridge can be installed directly into your manifold.
- Set Range from 1 MPa (10 bar) to 6.2 MPa (62 bar) recommended.
- Repeatability is +/- 10% of set pressure.
- Maximum inlet pressure 20 MPa (200 bar).
- Two-port design eliminates need for third fluid line to drain bypass flow (internal leakage) back to system reservoir.

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 down stream 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. The PRV is designed for use in both single-acting and double-acting systems.

Pressure Reducing Valve (PRV)

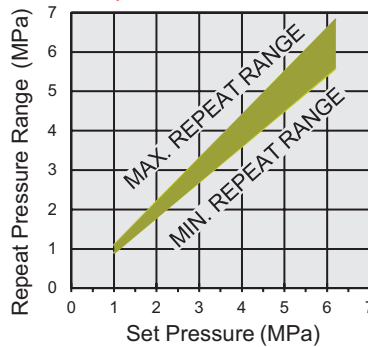
Model No.	L7-0512-00
Description	Assembly
Set Pressure Range	1.0 MPa (10 bar) to 6.2 MPa (62 bar)
System Pressure	20 MPa (200 bar)
	ILML70500

NOTE: Maximum system flow rate is 5.7 l/m unless otherwise noted.

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 .

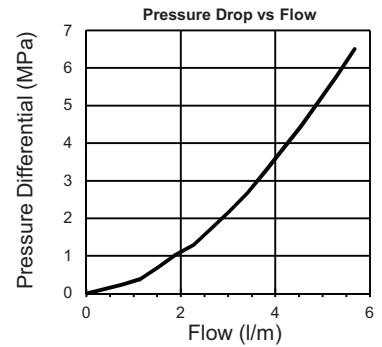
The graphs show the repeat range based on set pressure



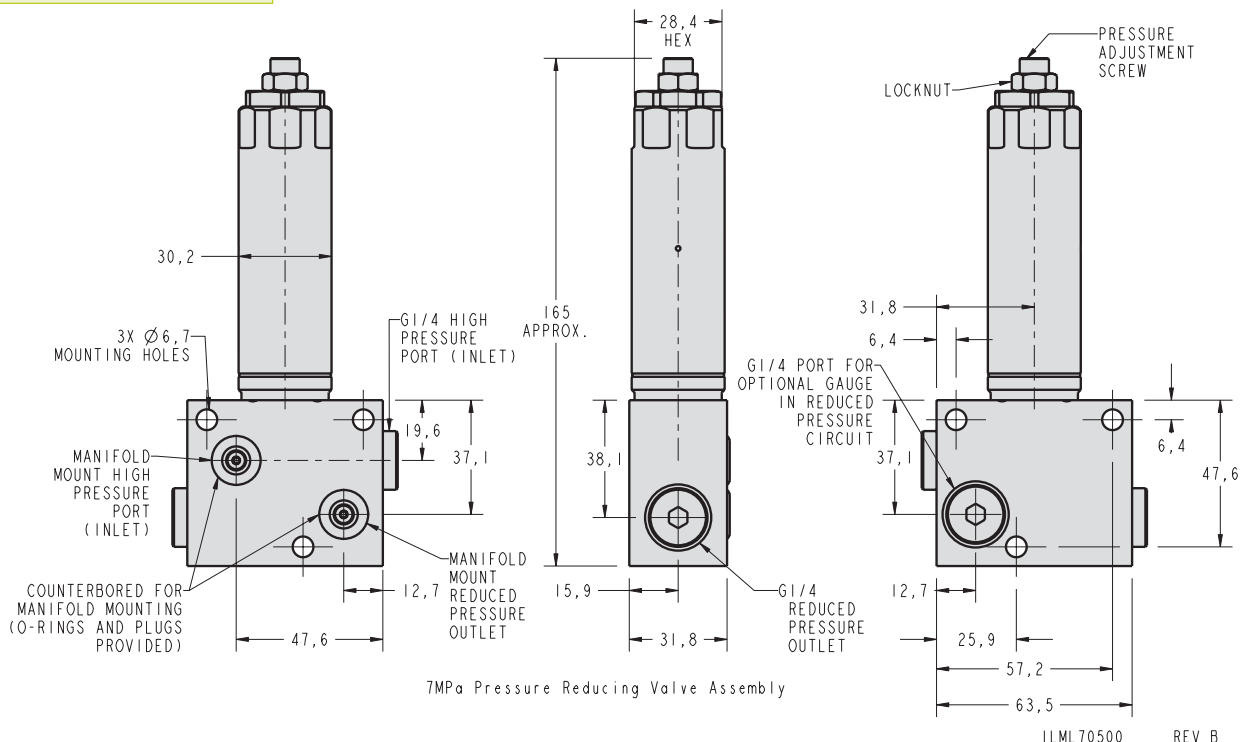
■ L7-0512-00
L7-0530-00

ILML705406 REV A

The graphs show the pressure drop through a PRV and manifold mount block

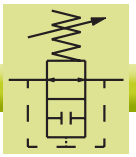


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7MPa Pressure Reducing Valve Assembly

ILML70500 REV B

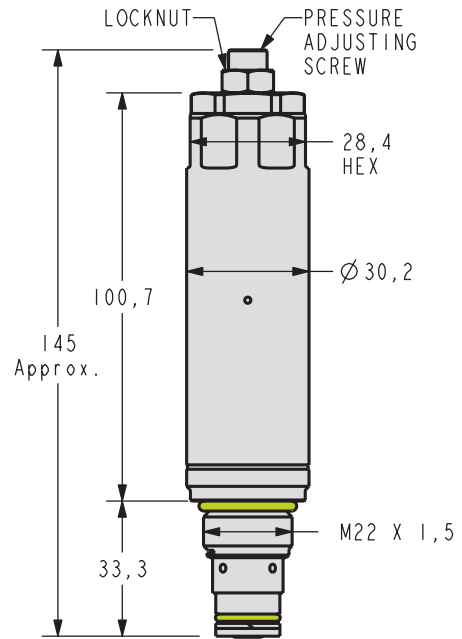


Pressure Reducing Cartridge Dimensions



PRV Cartridge

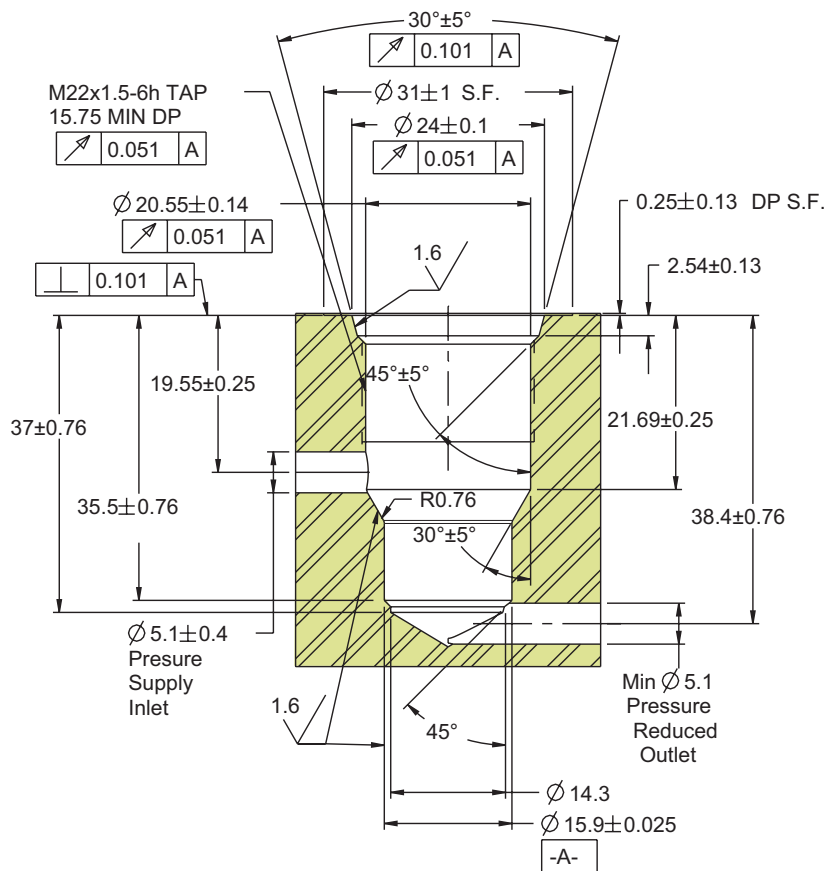
Model No.	L7-0530-00
Description	Cartridge
Set Pressure Range	1.0 MPa (10 bar) to 6.2 MPa (62 bar)
System Pressure	20 MPa (200 bar)
ILML70501	



7MPa Pressure Reducing Valve Cartridge

ILML70501 REV B

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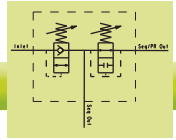


ILML70502 REV B

NOTE: For cavity tooling (multistep Reamer), order kit 62-7050-00.



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Combination Sequence/PRV Block



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Efficient Space Saving Combination Sequence/PRV Block

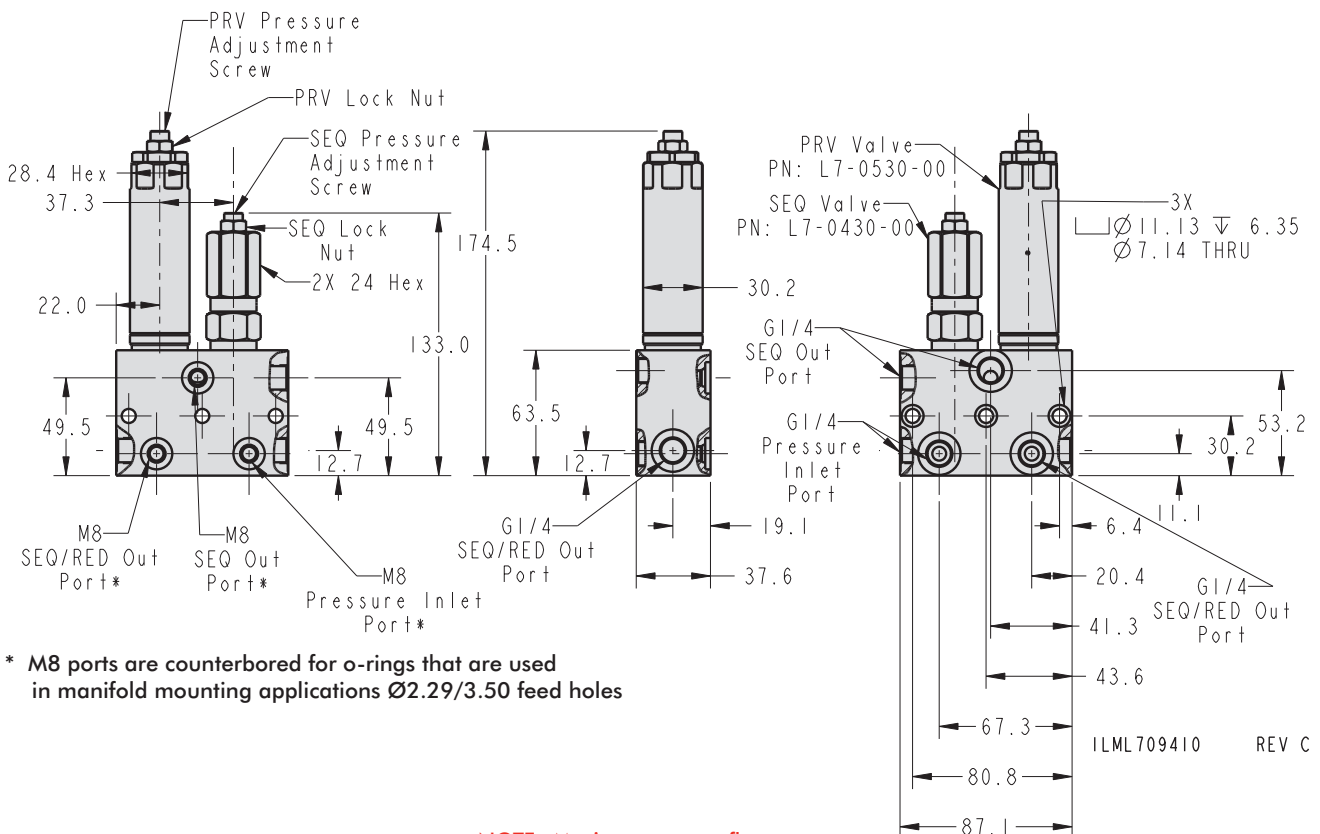
- Control both timing and pressure with this dual purpose combination block.
- Common inlet port feeds both sequence and reducing valves.
- Use with single or double acting devices.
- Block includes standard Sequence and PRV cartridges.
- Direct acting poppet style valve construction.
- Sequence Pressure adjustment range: 2.0 to 6.2 MPa (20 to 62 bar), PRV adjustment range: 1.0 - 6.2 MPa (10 to 62 bar).
- Elements spaced to accommodate Gauge for setup or trouble shooting.
- Recommended Filtration: 25 Micron (NOM) / 40 Micron (ABS) (minimum).

Combination SEQ/PRV

Assembly Model	L7-0818-01
SEQ Valve	L7-0430-00
SEQ Valve Set Pressure Range	2.0 - 6.2 MPa
PRV Model	L7-0530-00
PRV Set Pressure	1.0 - 6.2 MPa
ILML709410	

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

H-4



* M8 ports are counterbored for o-rings that are used in manifold mounting applications $\varnothing 2.29/3.50$ feed holes

NOTE: Maximum system flow rate is 5.7 l/m unless otherwise noted.

Excess flow voids warranty.

