

LMWIA

Load Control Valve

DESCRIPTION

A cartridge-style vented, load reactive, load control valve

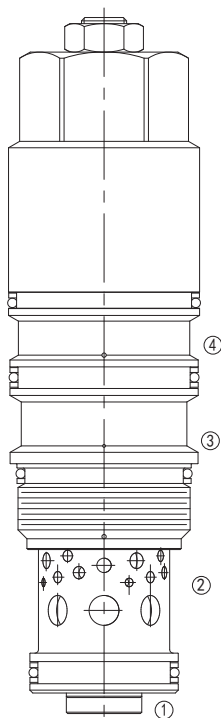
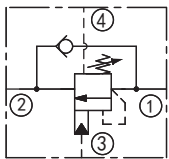
OPERATION

Vented, load reactive load control valves with pilot assist combine two valves: a check valve and a relief valve. The check valve allows free flow from port ② to port ① while a direct-acting, pilot-assisted relief valve controls flow from port ① to port ② . Pilot assist at port ③ lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Backpressure at port ② does not affect the valve setting because the spring chamber references the vent (port ④).

FEATURES

- Load control valves should be set at least 1.3 times the maximum load induced pressure. (1.5 times when the setting is less than 140 bar)
- Reseat exceeds 77% of set pressure when the valve is standard set. Setting lower than the standard set pressure may result in lower reseat percentages.
- This valve is functionally a 4-port counterbalance valve. It seats as a poppet valve and modulates as a spool valve, offering the best of both valve types.
- This valve has full relief capacity.
- Factory pressure setting established at 30cc/min(2 in³/min).

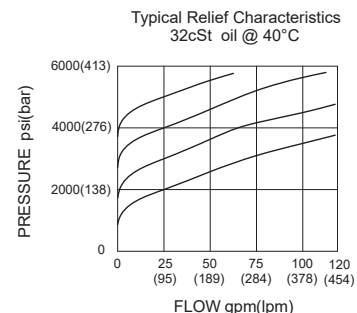
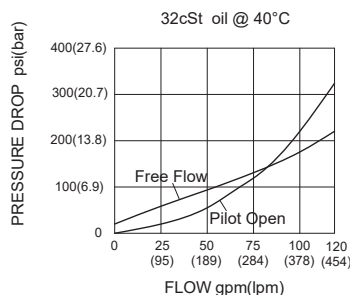
SYMBOL



SPECIFICATIONS

Max. Setting	350 bar
Max. Recommended Load Pressure at Max. Setting	265 bar
Flow	See PRESSURE DROP VS.FLOW graph.
Internal Leakage	5 drops/min.
Pilot Rate	3:1
Check Cracking Pressure	1.7 bar
Temperature	-40°F to +250°F(-40°C to +120°C)
Filtration	See Page N-1
Fluids	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity	SUN T-24A, See page M-33
Housing Material	6061-T6 aluminum alloy rated to 207bar, Steel & Ductile iron rated to 350bar

PRESSURE DROP VS.FLOW



TO ORDER

LMW * * - * * * - * *

1 2 3 4 5 6 7

1 Function LMW=Load Control Valve	5 Spring Ranges H=1000-4000psi(70-280bar) Preset:3000psi(210bar) J=2000-5000psi(140-350bar) Preset:3000psi(210bar)	7 Port Size Omit=None 16T=SAE16 20T=SAE20 8G=G 1 10G=G 1/4
2 Flow I=480L/min	6 Seal Kits N=Buna N V=Viton	※Other port sizes are available
3 Pilot Ratio A=3:1		
4 Control L= Standard Screw Adjustment		

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INSTALLATION DIMENSIONS

Unit=Millimeters

