

# LDRB

Direct-acting Relief Valve

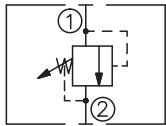
## DESCRIPTION

A cartridge-style direct-acting relief valve

## OPERATION

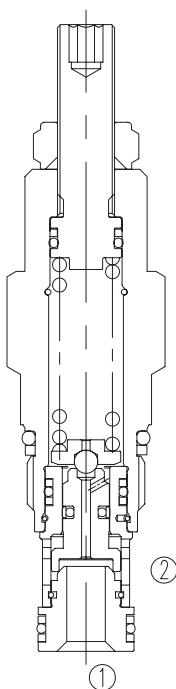
The valve is normally closed, pressure-limiting valves used to protect hydraulic components from pressure transients. When the pressure at the inlet (port ①) reaches the valve setting, the valve starts to open to tank (port ②), throttling flow to limit the pressure rise. These valves are smooth and quiet, essentially zero leak, dirt tolerant, immune to silting and are very fast.

## SYMBOL

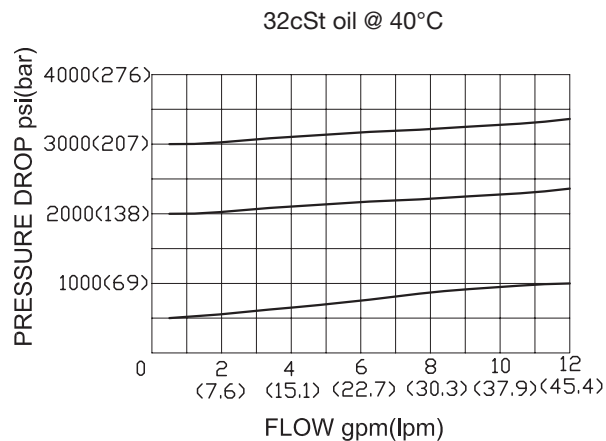


## SPECIFICATIONS

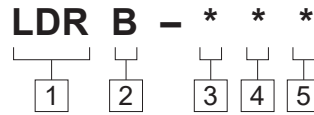
Operating Pressure	350bar
Capacity	See PRESSURE DROP VS.FLOW graph
Maximum valve leakage at reseal	10 drops/min
Reseat Pressure	>80% of setting pressure
Standard Spring Ranges	A 35-210 bar; Preset:70bar B 20-105 bar; Preset:70bar C 70-420 bar; Preset:70bar D 14- 55 bar; Preset:28bar E 10- 28 bar; Preset:14bar W 55-315 bar; Preset:70bar S 3.5- 14 bar; Preset: 7bar
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-162A, See page M-22
Housing Material	Steel & Ductile iron rated to 350bar



## PRESSURE DROP VS.FLOW



**TO ORDER**



- 1 Function**  
LDR=Direct-acting Relief Valve

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- 2 Capacity**  
B=45L/min

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- 3 Control**  
L=Standard Screw Adjustment

- 4 Spring Ranges**  
 A=500-3000psi(35-210bar) Preset:1000psi(70bar)  
 B=300-1500psi(20-105bar) Preset:1000psi(70bar)  
 C=1000-6000psi(70-420bar) Preset:1000psi(70bar)  
 D=200-800psi(14-55bar) Preset:400psi(28bar)  
 E=150-400psi(10-28bar) Preset:200psi(14bar)  
 W=800-4500psi(55-315bar) Preset:1000psi(70bar)  
 S=50-200psi(3.5-14bar) Preset:100psi(7bar)  
 Factory pressure setting established at 15L/min;

- 5 Seal Kits**  
 N= Buna N  
 V= Viton

- 6 Port Size**  
 Omit=None  
 6T=SAE6  
 8T=SAE8  
 2G=G 1/4  
 3G=G 3/8

※Other port sizes are available



**INSTALLATION DIMENSIONS**

Unit=Millimeters

