

Fast-acting, pilot operated, balanced piston relief valve

Capacity:
200 gpm (760
L/min.)

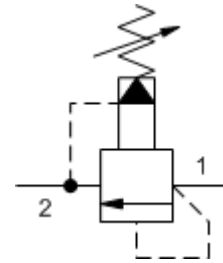
Functional Group:

Products : Cartridges : Relief : 2 Port : Pilot Operated, Balanced Piston,
Fast Acting

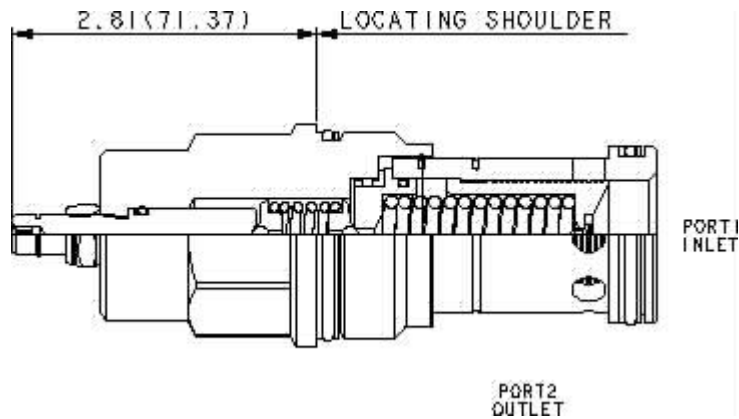
Model:
RPKE-LAN

Product Description

Fast-acting, pilot-operated, balanced piston relief cartridges are normally closed, pressure-limiting valves used to protect hydraulics components from pressure transients. Fast opening and closing is gained at the expense of smoothness. 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 have low pressure rise vs. flow and are very fast.



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Technical Features

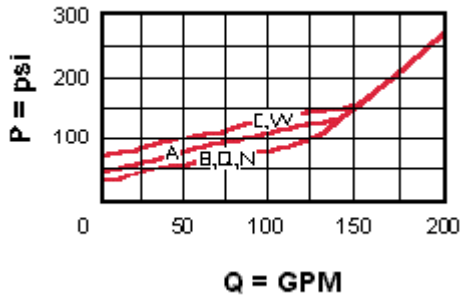
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits. If used in cross port relief circuits, consider spool leakage.
- Not suitable for use in load holding applications due to spool leakage.
- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- Main stage orifice is protected by a 150 micron stainless steel screen.
- Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

Technical Data

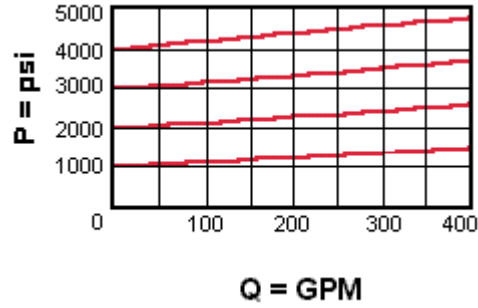
	U.S. Units	Metric Units
Model Weight	2.58 lb.	1.17 kg.
Cavity		T-18A
Capacity	200 gpm	760 L/min.
Adjustment - Number of Clockwise Turns to Increase Setting		5
Factory Pressure Settings Established at	4 gpm	15 L/min.
Maximum Operating Pressure	5000 psi	350 bar

Maximum Valve Leakage at 110 SUS (24 cSt)	5 in ³ /min.@1000 psi 80 cc/min.@70 bar	
Response Time - Typical	2 ms	
Series (from Cavity)	Series 4	
Valve Hex Size	1 5/8 in.	41,3 mm
Valve Installation Torque	350 - 375 lbf ft	465 - 500 Nm
Adjustment Screw Hex Socket Size	5/32 in.	4 mm
Adjustment Nut Hex Size	9/16 in.	15 mm
Adjustment Nut Torque	108 lbf in.	12 Nm
Seal Kits	Buna: 990-018-007	
Seal Kits	Viton: 990-018-006	

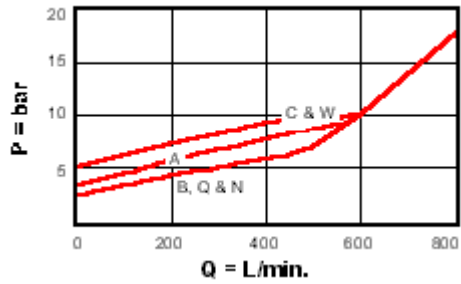
Minimum Setting



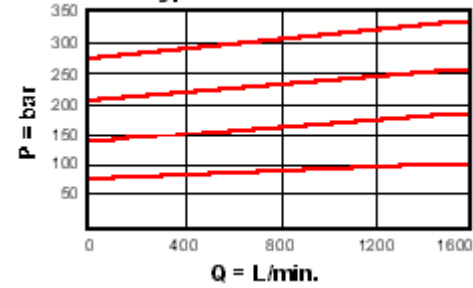
Typical Pressure Rise



Minimum Setting



Typical Pressure Rise



RPKE-LAN

Control

Adjustment Range

External Material/Seal Material

L Standard Screw Adjustment	+0.00	100 - 3000 psi (7 - 210 A bar), 1000 psi (70 bar) Standard Setting	+0.00	N Buna-N +0.00
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Customer specified setting stamped on hex \$1.10

- Explanation of Sun cartridge control options - US units.
- Explanation of Sun cartridge control options - metric units.
- Two-piece, floating cartridge construction.

