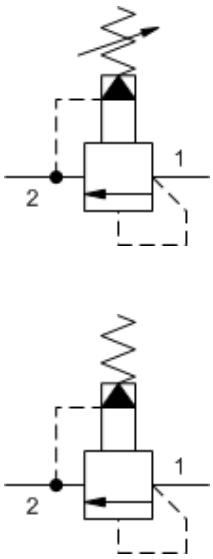
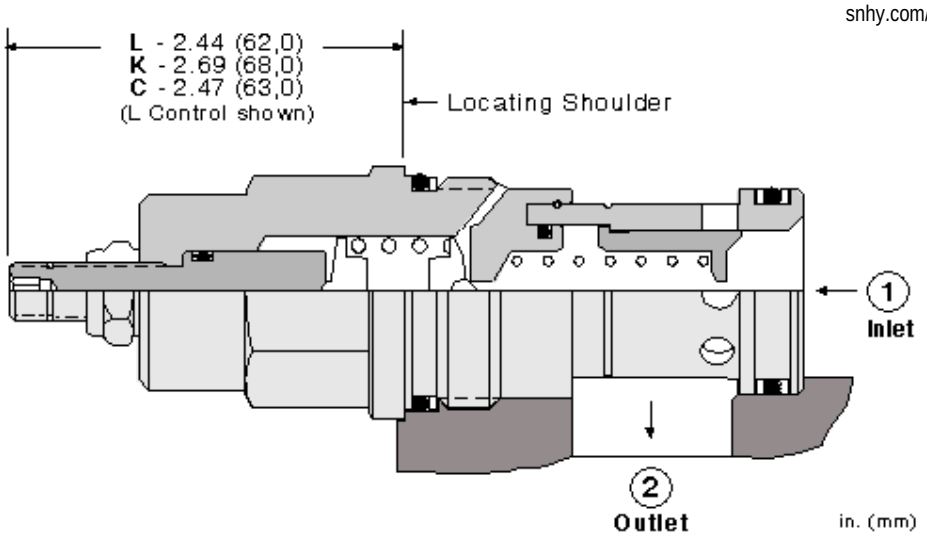
Fast-acting, pilot operated, balanced piston relief valve
SERIES 3 / CAPACITY: 380 L/min. / CAVITY: T-16A

snhy.com/RPIE





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.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-16A
Series	3
Capacity	380 L/min.
Factory Pressure Settings Established at	15 L/min.
Maximum Operating Pressure	350 bar
Response Time - Typical	2 ms
Maximum Valve Leakage at 110 SUS (24 cSt)	65 cc/min.@70 bar
Adjustment - No. of CW Turns from Min. to Max. Setting	5
Valve Hex Size	31,8 mm
Valve Installation Torque	203 - 217 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990016007
Seal kit - Cartridge	Polyurethane: 990016002
Seal kit - Cartridge	Viton: 990016006
Model Weight	0.54 kg.

CONFIGURATION OPTIONS

Model Code Example: RPIELAN

CONTROL (L)	ADJUSTMENT RANGE (A)	SEAL MATERIAL (N)	MATERIAL/COATING
L Standard Screw Adjustment	**A** 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting	**N** Buna-N	Standard Material/Coating
C Tamper Resistant - Factory Set	**B** 50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar) Standard Setting	**V** Viton	**/AP** Stainless Steel, Passivated
K Handknob	**C** 150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting		
	D 25 - 800 psi (1,7 - 55 bar), 400 psi (28 bar) Standard Setting		
	E 25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting		
	W 150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 bar) Standard Setting		

TECHNICAL FEATURES

- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- 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.
- Main stage orifice is protected by a 150 micron stainless steel screen.
- Not suitable for use in load holding applications due to spool leakage.
- 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.

PERFORMANCE CURVES