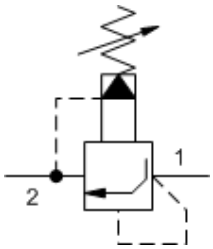
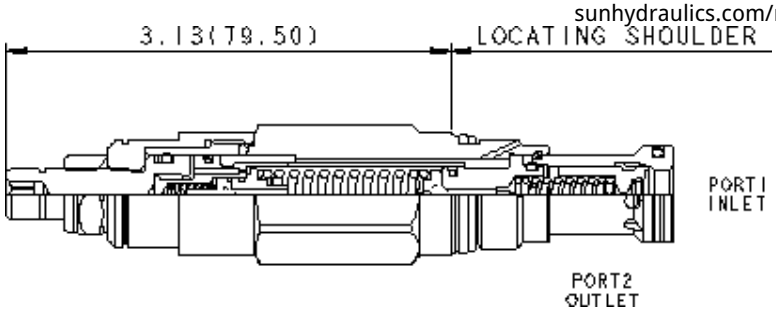
MODEL
RPET

Anti-Shock, pilot-operated, balanced poppet relief valve
SERIES 1 / CAPACITY: 95 L/min. / CAVITY: T-10A

sunhydraulics.com/model/RPET





CONFIGURATION

L	Control	Standard Screw Adjustment
A	Adjustment Range	2000 - 3000 psi (140 - 210 bar), 2000 psi (140 bar) Standard Setting
N	Seal Material	Buna-N
(none)	Material/Coating	

Pilot-operated, anti shock relief cartridges limit maximum system pressure and also limit the rate of pressure rise. The valve opens and then ramps closed at a constant speed, independent of settings and flows. The adjust screw determines the maximum (relief) setting and the minimum (threshold) setting.

TECHNICAL DATA

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

Cavity	T-10A
Series	1
Capacity	95 L/min.
Maximum Operating Pressure	350 bar
Factory Pressure Settings Established at	15 L/min.
Control Pilot Flow	0,16 - 0,41 L/min.
Pressure Ramp Up Time	100 - 300 ms
Response Time - Typical	2 ms
Adjustment - No. of CW Turns from Min. to Max. setting	4.5
Valve Hex Size	22,2 mm
Valve Installation Torque	41 - 47 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
U.S. Patent #	6,039,070
Seal kit - Cartridge	Buna: 990310007
Seal kit - Cartridge	Viton: 990310006
Model Weight	0.22 kg.

CONFIGURATION OPTIONS

Model Code Example: RPETArray

CONTROL (L)

- **L** Standard Screw Adjustment
- **C** Tamper Resistant - Factory Set

ADJUSTMENT RANGE (A)

- **A** 2000 - 3000 psi (140 - 210 bar), 2000 psi (140 bar) Standard Setting
- **C** 4500 - 6000 psi (315 - 420 bar), 4500 psi (315 bar) Standard Setting
- **W** 3000 - 4500 psi (210 - 315 bar), 3000 psi (210 bar) Standard Setting

SEAL MATERIAL (N)

- **N** Buna-N
- **V** Viton

MATERIAL/COATING

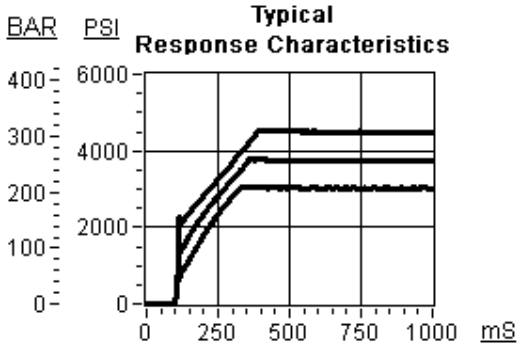
- Standard Material/Coating
- **/AP** Stainless Steel, Passivated
- **/LH** Mild Steel, Zinc-Nickel

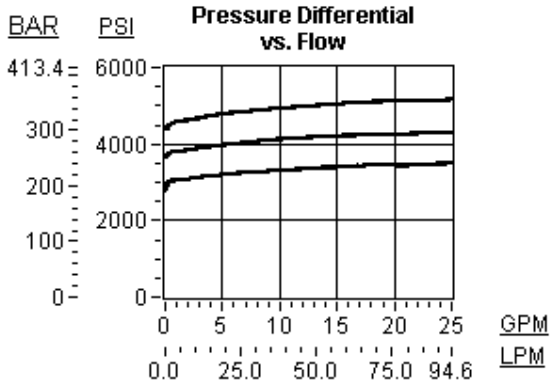
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TECHNICAL FEATURES

- 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.
- Not suitable for use in load holding applications.
- When pressure at the inlet (port 1) exceeds the threshold setting, the valve opens to tank (port 2). The pilot section moves forward at a steady rate, increasing the setting by compressing the pilot spring. Maximum setting is achieved when the pilot section reaches a mechanical stop.
- Valve provides protection for pumps and motors from pressure transients due to sudden load changes, especially variable displacement pumps, since the displacement mechanism is sometimes too slow to catch these pressure transients.
- Valve provides protection for hydrostatic drives by reducing the jerk caused by sudden reversals. The valve is suitable for cross-port applications.
- When used with a switching device, the valve can provide the ramp characteristic typically provided by proportional valves.
- Small power units can be started against an anti shock relief to provide longer pump life.
- Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio.
- Corrosion resistant cartridge valves are intended for use in corrosive environments and are identified by the model code suffix /AP for external stainless steel components, or /LH for external zinc-nickel plated components. See the CONFIGURATION section for all options. For further details, please see the Materials of Construction page located under TECH RESOURCES.
- 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





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