

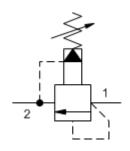


Pilot-operated, balanced piston relief valve

CAPACITY: 25 gpm / CAVITY: T-10A

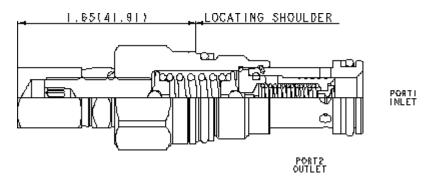


sunhydraulics.com/model/RPEC



CONFIGURATION

J	Control	Capped Screw Adjustment
Α	Adjustment Range	100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting
N	Seal Material	Buna-N
Ξ	Material/Coating	



Pilot-operated, balanced-piston relief cartridges are normally closed pressure regulating valves. When the pressure at the inlet (port 1) reaches the valve setting, the valve starts to open to tank (port 2), throttling flow to regulate the pressure. These valves are accurate, have low pressure rise vs. flow,

they are smooth and quiet, and are moderately fast.

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

Cavity	T-10A				
Series	1				
Capacity	25 gpm				
Maximum Operating Pressure	5000 psi				
Factory Pressure Settings Established at	4 gpm				
Maximum Valve Leakage at 110 SUS (24 cSt)	2 in ³ /min.@1000 psi				
Response Time - Typical	10 ms				
Adjustment - No. of CW Turns from Min. to Max. setting	5				
Valve Hex Size	7/8 in.				
Valve Installation Torque	30 - 35 lbf ft				
Adjustment Screw Internal Hex Size	5/32 in.				
Locknut Hex Size	9/16 in.				
Locknut Torque	80 - 90 lbf in.				
Model Weight	0.30 lb.				
Seal kit - Cartridge	Buna: 990-010-007				
Seal kit - Cartridge	EPDM: 990-010-014				
Seal kit - Cartridge	Polyurethane: 990-010-002				
Seal kit - Cartridge	Viton: 990-010-006				

NOTES: • For Series 1 cartridges configured with an O control (panel mount handknob), a .75 in. (19 mm) diameter hole is required in the panel.

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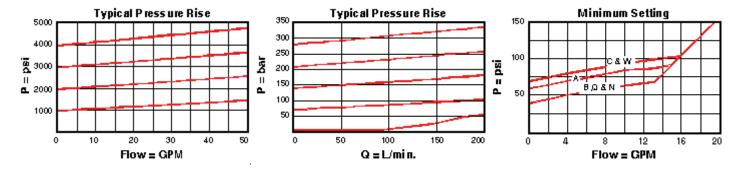
OPTION SELECTION EXAMPLE: RPECJAN

CONTROL		AD	JUSTMENT RANGE	(A)	SEA	L MATERIAL	(N)	MATE	ERIAL/COATING	(/LH)
J Capped Screw Adjustment C Tamper Resistant - Factory Set L Standard Screw Adjustment Y Tri-Grip Handknob		B C D	100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting 50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar) Standard Setting 150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Settin 25 - 800 psi (1,7 - 55 bar), 400 psi (28 bar) Standard Setting	E V	E EPDM		/LH /AP	Mild Steel, Zinc-Nickel Stainless Steel, Passivated Standard Material/Coating		
		E	25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting							
		Q	60 - 400 psi (4 - 28 bar), 200 psi (bar) Standard Setting	(14						
		W	150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 bar) Standard Settin	g						

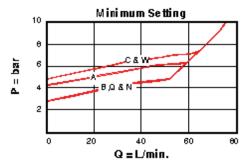
TECHNICAL FEATURES

- 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.
- Cartridges configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- W and Y controls (where applicable) can be specified with or without a special setting. When no special setting is specified, the valve is adjustable throughout its full range using the W or Y control. When a special setting is specified, this setting represents the maximum setting of the valve.
- 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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