



Direct-acting relief cartridges are 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.

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

Cavity	T-3A
Series	2
Capacity	50 gpm
Maximum Operating Pressure	5000 psi
Factory Pressure Settings Established at	4 gpm
Maximum Valve Leakage at 110 SUS (24 cSt)	3 in ³ /min. @1000 psi
Response Time - Typical	10 ms
Adjustment - No. of CW Turns from Min. to Max. setting	6
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Model Weight	0.55 lb.
Seal kit - Cartridge	Buna: 990-203-007
Seal kit - Cartridge	EPDM: 990-203-014
Seal kit - Cartridge	Polyurethane: 990-003-002
Seal kit - Cartridge	Viton: 990-203-006

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.

OPTION SELECTION EXAMPLE: RGFALCN

CONTROL	(L)	ADJUSTMENT RANGE	(C)	SEAL MATERIAL	(N)	MATERIAL/COATING
L Standard Screw Adjustment		C 18 - 50 psi (1,2 - 3,5 bar), 50 psi (3,5 bar) Standard Setting		N Buna-N		Standard Material/Coating
C Tamper Resistant - Factory Set		E 20 - 75 psi (1,4 - 5 bar), 75 psi (5 bar) Standard Setting		E EPDM		/AP Stainless Steel, Passivated
K Handknob		F 35 - 80 psi (2,4 - 5,5 bar), 80 psi (5,5 bar) Standard Setting		V Viton		
		G 30 - 150 psi (2 - 10,5 bar), 150 psi (10,5 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.
- 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.
- 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

