



Kick-down relief cartridges act similar to a circuit breaker in an electrical system. The valves will kick completely open and remain open once the pressure at the inlet (port 1) exceeds the valve setting, creating an unrestricted flow path from port 1 to tank (port 2). The valve remains open as long as the pressure at port 1 exceeds the pressure at port 2. To reset the valve, flow from port 1 to port 2 must cease and pressure at port 2 must be equal to or greater than the pressure at port 1.

**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	Kick down point
Maximum Valve Leakage at 110 SUS (24 cSt)	3 in <sup>3</sup> /min. @1000 psi
Response Time - Typical	25 ms
Adjustment - No. of CW Turns from Min. to Max. setting	5
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	0.57 lb.
Seal kit - Cartridge	Buna: 990-203-007
Seal kit - Cartridge	Polyurethane: 990-003-002
Seal kit - Cartridge	Viton: 990-203-006

- NOTES:**
- Do not use in load holding applications.
  - 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: RQGBLAN

CONTROL	(L)	ADJUSTMENT RANGE	(A)	SEAL MATERIAL	(N)	MATERIAL/COATING
<b>L</b>	Standard Screw Adjustment	<b>A</b>	100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting	<b>N</b>	Buna-N	Standard Material/Coating
<b>C</b>	Tamper Resistant - Factory Set	<b>B</b>	50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar) Standard Setting	<b>V</b>	Viton	<b>/AP</b> Stainless Steel, Passivated
<b>K</b>	Handknob	<b>C</b>	150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting			<b>/LH</b> Mild Steel, Zinc-Nickel
<b>W</b>	Hex Wrench Adjustment	<b>D</b>	25 - 800 psi (1,7 - 55 bar), 400 psi (28 bar) Standard Setting			
		<b>E</b>	25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting			
		<b>N</b>	60 - 800 psi (4 - 55 bar), 400 psi (28 bar) Standard Setting			
		<b>Q</b>	60 - 400 psi (4 - 28 bar), 200 psi (14 bar) Standard Setting			
		<b>W</b>	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).
- To reset valve, flow through the cartridge must cease.
- Main stage orifice is protected by a 150-micron stainless steel screen.
- Not suitable for use in load holding applications.
- Intended for use on the actuator side of the system as flow through the valve must cease for the valve to reset. If used on the pump side of a system, pump flow must be shut off for the valve to reset.
- 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



