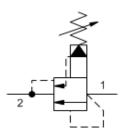




Kick-down, pilot-operated, balanced piston relief valve SERIES 1 / CAPACITY: 25 gpm / CAVITY: T-10A





# sunhydraulics.com/model/RQEB 2.0(50.8) PORTI PORT2 OUTLET

### **CONFIGURATION**

L	Control	Standard Screw Adjustment
С	Adjustment Range	150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting
N	Seal Material	Buna-N
(none) Material/Coating		Standard Material/Coating

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 settling, 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-10A
Series	1
Capacity	25 gpm
Factory Pressure Settings Established at	Kick down point
Maximum Operating Pressure	5000 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	2 in³/min.@1000 psi
Response Time - Typical	25 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.
Seal kit - Cartridge	Buna: 990010007
Seal kit - Cartridge	Polyurethane: 990010002
Seal kit - Cartridge	Viton: 990010006
Model Weight	0.31 lb.

# **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.

# **CONFIGURATION OPTIONS**

## Model Code Example: RQEBLCN

L Standard Screw Adjustment

(L) ADJUSTMENT RANGE

(C) SEAL MATERIAL

(N) MATERIAL/COATING

- C Tamper Resistant Factory Set
- K Handknob

CONTROL

O Handknob with Panel Mount

**C** 150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting

- A 100 3000 psi (7 210 bar), 1000 psi (70 bar) Standard Setting
- **B** 50 1500 psi (3,5 105 bar), 1000 psi (70 bar) Standard Setting
- 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

N Buna-N Viton

/AP Stainless Steel, Passivated

Standard Material/Coating

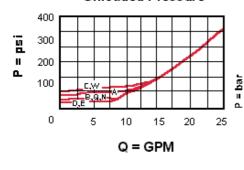
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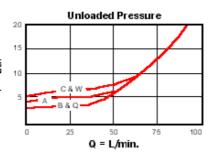
#### **TECHNICAL FEATURES**

- 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.
- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- 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**

### Unloaded Pressure





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