

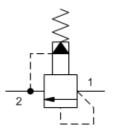


Pilot-operated, balanced piston relief valve

SERIES 1 / CAPACITY: 95 L/min. / CAVITY: T-10A

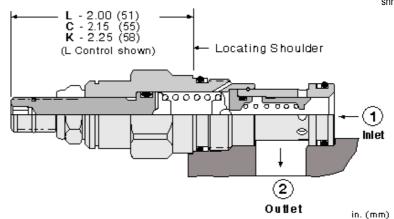


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## **CONFIGURATION**

M	Control	Capped Screw Adjustment with Lockwire Holes
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



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	95 L/min.
Factory Pressure Settings Established at	15 L/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	30 cc/min.@70 bar
Response Time - Typical	10 ms
Adjustment - No. of CW Turns from Min. to Max. setting	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
Seal kit - Cartridge	Buna: 990010007
Seal kit - Cartridge	EPDM: 990010014
Seal kit - Cartridge	Polyurethane: 990010002
Seal kit - Cartridge	Viton: 990010006
Model Weight	0.14 kg.

**NOTES** 

CONTROL

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

Model Code Example: RPECMCN

## **CONFIGURATION OPTIONS**

# (M) ADJUSTMENT RANGE

## (C) SEAL MATERIAL

# (N) MATERIAL/COATING

# M Capped Screw Adjustment with Lockwire Holes

- L Standard Screw Adjustment
- C Tamper Resistant Factory Set
- K Handknob
- O Handknob with Panel Mount
- W Hex Wrench Adjustment
- Y Tri-Grip Handknob

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

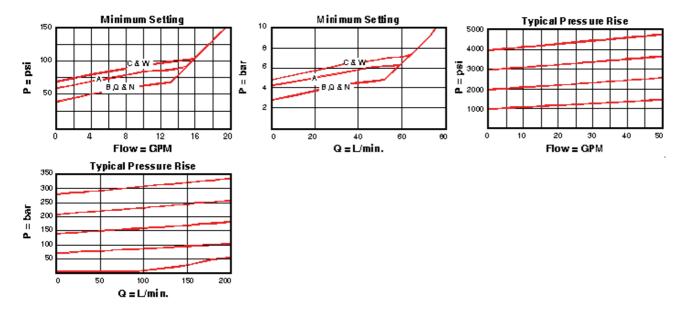
- **A** 100 3000 psi (7 210 bar), 1000 psi (70 bar) Standard Setting
- **W** 150 4500 psi (10,5 315 bar), 1000 psi (70 bar) Standard Setting
- **B** 50 1500 psi (3,5 105 bar), 1000 psi (70 bar) Standard Setting
- **N** 60 800 psi (4 55 bar), 400 psi (28 bar) Standard Setting
- **Q** 60 400 psi (4 28 bar), 200 psi (14 bar) Standard Setting

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

#### **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).
- 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.
- 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.
- 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



#### **RELATED MODELS**

• RPEC8 Pilot-operated, balanced piston relief main stage with integral T-8A control cavity