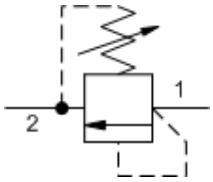
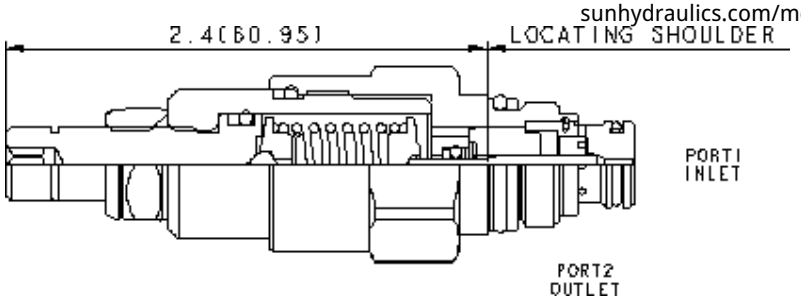
MODEL
RBAE

Direct-acting relief valve - pilot capacity
SERIES P / CAPACITY: 10 L/min. / CAVITY: T-8A

sunhydraulics.com/model/RBAE





CONFIGURATION

L	Control	Standard Screw Adjustment
D	Adjustment Range	25 - 800 psi (1,7 - 55 bar), 400 psi (28 bar) Standard Setting
N	Seal Material	Buna-N
(none)	Material/Coating	

Two-port, pilot-stage, direct-acting relief cartridges are fully adjustable, normally closed pressure regulating valves. When the pressure at port 1 (inlet) is sufficient to overcome the spring force (valve setting), a flow path is opened from port 1 to port 2 (tank).

TECHNICAL DATA

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

Cavity	T-8A
Series	P
Capacity	10 L/min.
Maximum Operating Pressure	350 bar
Factory Pressure Settings Established at	30 cc/min.
Maximum Valve Leakage at 110 SUS (24 cSt)	1 cc/min.
Response Time - Typical	2 ms
Valve Hex Size	22,2 mm
Valve Installation Torque	27 - 33 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990608007
Seal kit - Cartridge	EPDM: 990608014
Seal kit - Cartridge	Polyurethane: 990008002
Seal kit - Cartridge	Viton: 990608006
Model Weight	0.12 kg.

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.

© 2025 Sun Hydraulics

CONFIGURATION OPTIONS

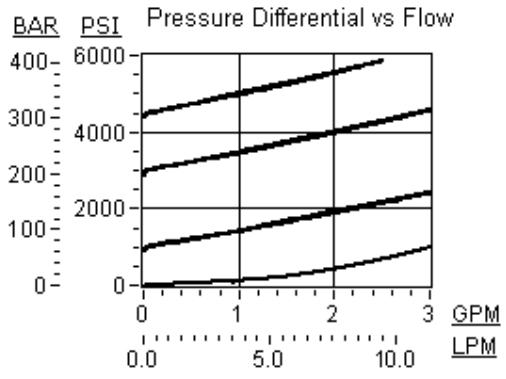
Model Code Example: RBAELDN

CONTROL (L)	ADJUSTMENT RANGE (D)	SEAL MATERIAL (N)	MATERIAL/COATING
L Standard Screw Adjustment	**D** 25 - 800 psi (1,7 - 55 bar), 400 psi (28 bar) Standard Setting	**N** Buna-N	Standard Material/Coating
C Tamper Resistant - Factory Set	**A** 25 - 3000 psi (1,7 - 210 bar), 1000 psi (70 bar) Standard Setting	**E** EPDM	**/AP** Stainless Steel, Passivated
K Handknob	**B** 25 - 1500 psi (1,7 - 105 bar), 1000 psi (70 bar) Standard Setting	**V** Viton	**/LH** Mild Steel, Zinc-Nickel
O Handknob with Panel Mount	**C** 25 - 6000 psi (1,7 - 420 bar), 1000 psi (70 bar) Standard Setting		
Y Tri-Grip Handknob	**E** 25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting		
	W 25 - 4500 psi (1,7 - 315 bar), 1000 psi (70 bar) Standard Setting		

TECHNICAL FEATURES

- Utilizes the Sun T-8A 2-port cavity making it the ideal choice to use in conjunction with Sun's main stage pilot or vent-to-operate cartridges. Separate pilot lines are eliminated and only one cavity needs to be machined to accommodate both the control and primary function. Note: All 2-position, 2-way pilot stage control cartridges utilize the same cavity and are physically interchangeable. Functionality is the only consideration.
- Note: The main stage valve should first be installed to the correct torque value followed by the T-8A pilot control section into the main stage valve to its required torque value.
- Ports 1 and 2 may be pressured to 5000 psi (350 bar).
- Hardened poppet and seat provide consistent operation, low leakage rates and superior wear characteristics.
- Backpressure at port 2 (outlet) is directly additive to the pressure setting at port 1 (inlet).
- 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.
- 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



© 2025 Sun Hydraulics