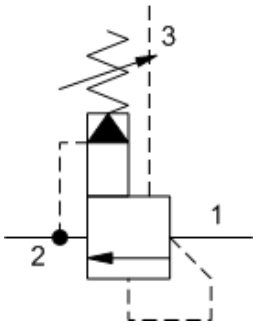
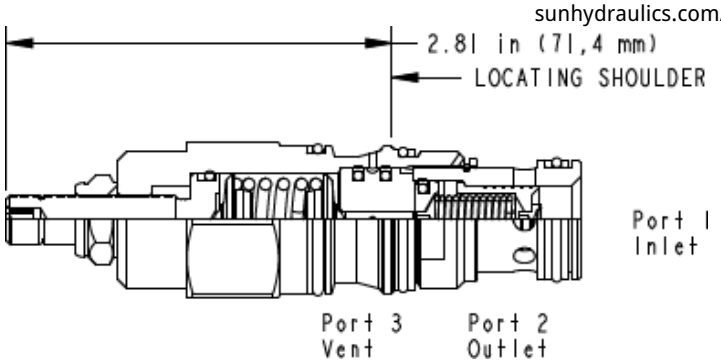
MODEL
RVEA

Ventable, pilot-operated, balanced piston relief valve
SERIES 2 / CAPACITY: 30 gpm / CAVITY: T-2A

sunhydraulics.com/model/RVEA





CONFIGURATION

L	Control	Standard Screw Adjustment
A	Adjustment Range	100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting
N	Seal Material	Buna-N
(none)	Material/Coating	

Ventable, 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. They provide a vent port (port 3) that connects between the main piston and pilot stage to provide for remote control by other pilot or 2-way valves. 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-2A
Series	2
Capacity	30 gpm
Maximum Operating Pressure	5000 psi
Factory Pressure Settings Established at	4 gpm
Control Pilot Flow	10 - 15 in^3/min.
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	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.
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	EPDM: 990202014
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006
Model Weight	0.64 lb.

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.

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CONFIGURATION OPTIONS

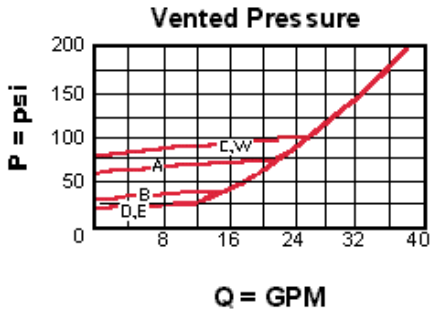
Model Code Example: RVEALAN

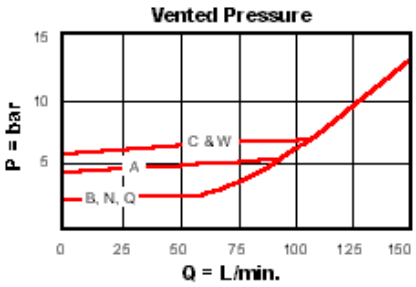
CONTROL (L)	ADJUSTMENT RANGE (A)	SEAL MATERIAL (N)	MATERIAL/COATING
L Standard Screw Adjustment	**A** 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting	**N** Buna-N	Standard Material/Coating
C Tamper Resistant - Factory Set	**W** 150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 bar) Standard Setting	**E** EPDM	**/AP** Stainless Steel, Passivated
K Handknob	**B** 50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar) Standard Setting	**V** Viton	**/LH** Mild Steel, Zinc-Nickel
O Handknob with Panel Mount	**C** 150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting		
W Hex Wrench Adjustment	**D** 25 - 800 psi (1,7 - 55 bar), 400 psi (28 bar) Standard Setting		
Y Tri-Grip Handknob	**E** 25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting		

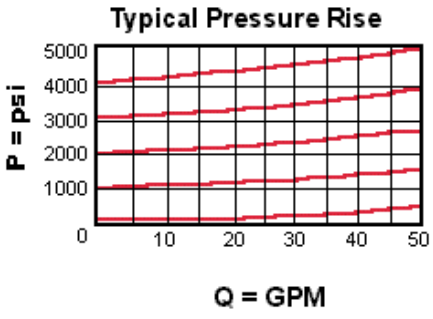
TECHNICAL FEATURES

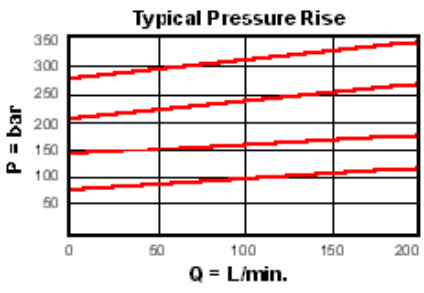
- A remote pilot relief on port 3 (vent) will control the valve below its own setting.
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits. If used in cross port relief circuits, consider spool leakage.
- Main stage orifice is protected by a 150-micron stainless steel 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.
- 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









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