



Ventable, pilot-operated, balanced piston relief valve with drain to port 4

SERIES 3 / CAPACITY: 240 L/min. / CAVITY: T-23A



sunhydraulics.com/model/RVGD

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		Standard Material/Coating

Ventable, pilot-operated, balanced piston relief cartridges with external drain 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 and a drain (port 4) that makes them insensitive to back 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-23A
Series	3
Capacity	240 L/min.
Factory Pressure Settings Established at	15 L/min.
Maximum Operating Pressure	350 bar
Control Pilot Flow	0,25 - 0,33 L/min.
Maximum Valve Leakage at 110 SUS (24 cSt)	65 cc/min.@70 bar
Response Time - Typical	10 ms
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	31,8 mm
Valve Installation Torque	203 - 217 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990023007
Seal kit - Cartridge	Polyurethane: 990023002
Seal kit - Cartridge	Viton: 990023006
Model Weight	0.74 kg.

CONFIGURATION OPTIONS

(L) ADJUSTMENT RANGE

(D) SEAL MATERIAL

N Buna-N

Model Code Example: RVGDLDN

(N) MATERIAL/COATING

L Standard Screw Adjustment

C Tamper Resistant - Factory Set

K Handknob

CONTROL

25 - 800 psi (1,7 - 55 bar), 400 psi (28 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
- C 150 6000 psi (10,5 420 bar), 1000 psi (70 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

V Viton

/AP Stainless Steel, Passivated

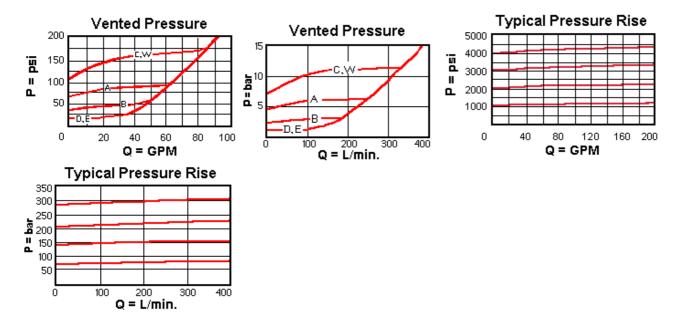
Standard Material/Coating

TECHNICAL FEATURES

- 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.
- Pressure at port 4 is directly additive to the valve setting at a 1:1 ratio and should not exceed 5000 psi (350 bar).
- 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

© 2020 Sun Hydraulics



RELATED MODELS

• RVGD8 Ventable, pilot-operated, balanced piston relief main stage with integral T-8A control cavity and drain to port 4

© 2020 Sun Hydraulics 2 of 2