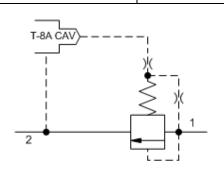


MODEL RPIC8

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

SERIES 3 / CAPACITY: 100 gpm / CAVITY: T-16A





sunhydraulics.com/model/RPIC8 Outlet Sunhydraulics.com/model/RPIC8 Port 1 Inlet

CONFIGURATION

W	Minimum Control Pressure	100 psi (7 bar)
N	Seal Material	Buna-N

This valve is a normally closed modulating element that incorporates an integral pilot control cavity. It is a balanced piston design. The pilot control cavity will accept any T-8A pressure control cartridge. When the pressure at the inlet (port 1) reaches the pilot control cartridge's setting, the modulating element starts to open to tank (port 2), throttling flow to regulate the pressure. The pilot cartridge's setting determines the difference in pressure between port 1 and port 2.

TECHNICAL DATA

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

Cavity	T-16A
Series	3
Capacity	100 gpm
Maximum Operating Pressure	5000 psi
Control Pilot Flow	15 - 20 in³/min.
Pilot Control Cavity	T-8A
Main stage leakage at 110 SUS (24 cSt)	4 in³/min.@1000 psi
Valve Hex Size	1 1/4 in.
Valve Installation Torque	150 - 160 lbf ft
Seal kit - Cartridge	Buna: 990016007
Seal kit - Cartridge	EPDM: 990016014
Seal kit - Cartridge	Polyurethane: 990016002
Seal kit - Cartridge	Viton: 990016006
Model Weight	0.94 lb.

NOTES

Compound cartridge (pilot and main stage) assembly information is provided for reference only. Cartridges must be ordered separately and assembled at point of use.

CONFIGURATION OPTIONS

Model Code Example: RPIC8WN

MINIMUM CONTROL PRESSURE (W)

SEAL MATERIAL

(N

W 100 psi (7 bar)
D 25 psi (1,7 bar)

N Buna-N

E EPDM

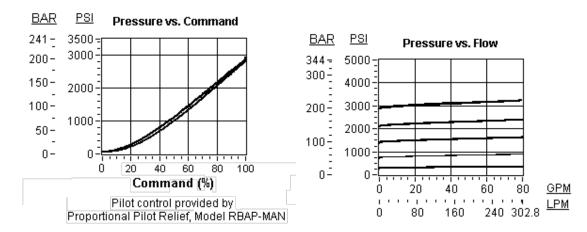
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TECHNICAL FEATURES

- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits.
- 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.
- NOTE: With the -8 control option, the main stage valve should first be installed to the correct torque value. The T-8A pilot control valve should then be installed into the main stage valve to its required torque value.
- The -8 control option allows the pilot control valve to be incorporated directly into the end of the relief cartridge via the T-8A cavity. These pilot control cartridges are sold separately and include electro-proportional, solenoid, air pilot, and hydraulic pilot operation. See Pilot Control Cartridges.
- 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

• RPIC Pilot-operated, balanced piston relief valve

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