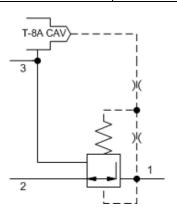




Pilot-operated, pressure reducing/relieving main stage with integral T-8A control cavity

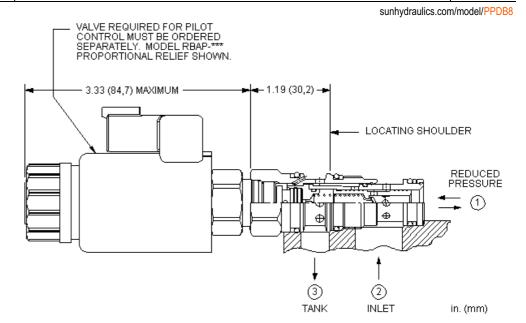
SERIES 1 / CAPACITY: 40 L/min. / CAVITY: T-11A





CONFIGURATION

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



This valve is a 3-way, normally open modulating element that incorporates an integral pilot control cavity. The pilot control cavity will accept any T-8A pressure control cartridge. The valve reduces a high primary pressure at the inlet (port 2) to a constant reduced pressure at port 1, with a full flow relief function from port 1 to tank (port 3). The pilot cartridge's setting determines the difference in pressure between reduced pressure (port 1) and the tank (port 3).

TECHNICAL DATA

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

| Cavity | T-11A |
|---|-------------------------|
| Series | 1 |
| Capacity | 40 L/min. |
| Maximum Operating Pressure | 350 bar |
| Control Pilot Flow | 0,11 - 0,16 L/min. |
| Pilot Control Cavity | T-8A |
| Pilot Control Valve Installation Torque | 27 - 33 Nm |
| Pilot Control Valve Hex Size | 22,2 mm |
| Valve Hex Size | 22,2 mm |
| Valve Installation Torque | 41 - 47 Nm |
| Seal kit - Cartridge | Buna: 990011007 |
| Seal kit - Cartridge | EPDM: 990011014 |
| Seal kit - Cartridge | Polyurethane: 990011002 |
| Seal kit - Cartridge | Viton: 990011006 |
| Model Weight | 0.10 kg. |

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: PPDB8WN

MINIMUM CONTROL PRESSURE (W) SEAL MATERIAL

(N)

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

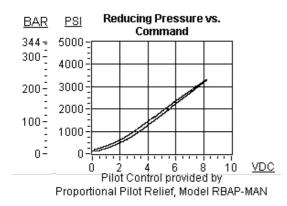
N Buna-N V Viton

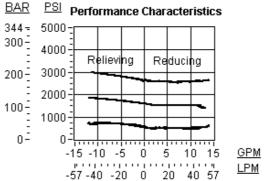
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TECHNICAL FEATURES

- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio and should not exceed 3000 psi (210 bar).
- Maximum inlet pressure is determined by the bias spring. The D spring is tested with 2000 psi (140 bar) maximum differential pressure and the W spring is tested with 5000 psi (350 bar) maximum inlet pressure.
- 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.
- 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.
- All three-port pressure reducing and reducing/relieving cartridges are physically interchangeable (i.e. same flow path, same cavity for a given frame size). When
 considering mounting configurations, it is sometimes recommended that a full capacity return line (port 3) be used with reducing/relieving cartridges.
- Full reverse flow from reduced pressure (port 1) to inlet (port 2) may cause the main spool to close. If reverse free flow is required in the circuit, consider adding a separate check valve to the circuit.
- Pilot operated valves exhibit very low dead-band transition between reducing and relieving modes.
- Pilot operated valves exhibit exceptionally flat pressure/flow characteristics, are very stable and have low hysteresis.
- 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

• PPDB Pilot-operated, pressure reducing/relieving valve

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