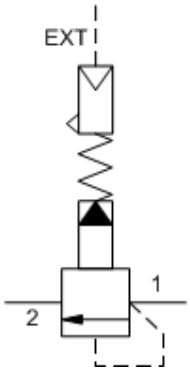
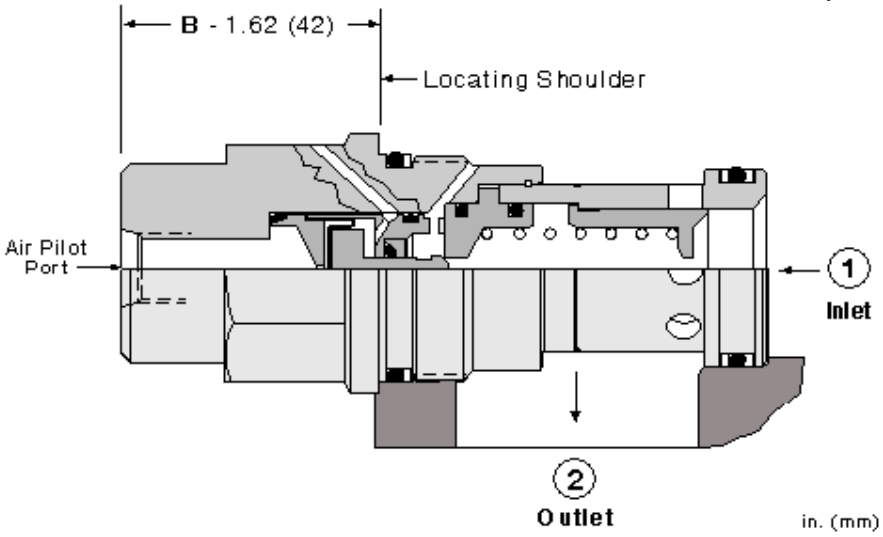
Air-controlled, pilot operated, balanced piston relief valve
SERIES 3 / CAPACITY: 380 L/min. / CAVITY: T-16A

snhy.com/RPID





Air-controlled, pilot-operated, balanced piston relief cartridges use compressed air over a diaphragm instead of an adjustable spring to control pressure setting. The air signal is supplied through a port in the hex-end of the cartridge. They 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. 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-16A
Series	3
Capacity	380 L/min.
Pilot Ratio	20:1
Hysteresis (with dither)	<4%
Maximum Operating Pressure	140 bar
Response Time - Typical	10 ms
Maximum Valve Leakage at 110 SUS (24 cSt)	65 cc/min.@70 bar
Maximum Air Pressure	10,5 bar
Valve Hex Size	31,8 mm
Valve Installation Torque	203 - 217 Nm
Seal kit - Cartridge	Buna: 990016007
Seal kit - Cartridge	Polyurethane: 990016002
Seal kit - Cartridge	Viton: 990016006

CONFIGURATION OPTIONS

Model Code Example: RPIDBBN

CONTROL	(B)	OPERATING RANGE	(B)	SEAL MATERIAL	(N)
B External 4-SAE Port		**B** 50 - 1500 psi (3,5 - 105 bar)		**N** Buna-N	
				V Viton	

TECHNICAL FEATURES

- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits.
- Maximum air pressure should not exceed 150 psi (10 bar).
- All 2-port relief cartridges (except pilot reliefs) are physically and functionally interchangeable (same flow path, same cavity for a given frame size).
- 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