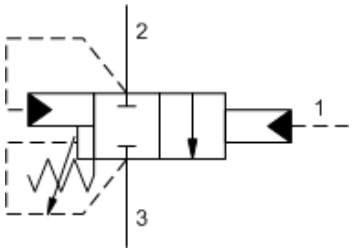
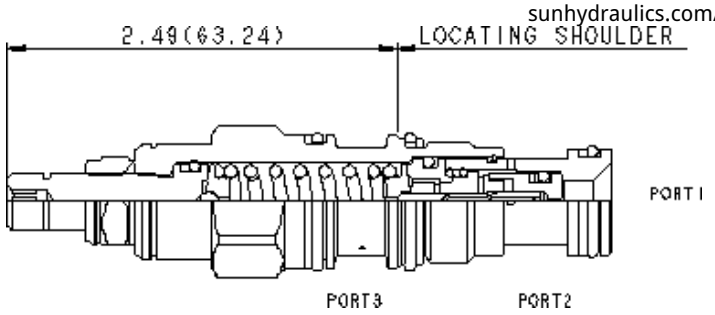
MODEL
QPAC

30%, accumulator sense, pump unload valve - pilot capacity
SERIES 1 / CAPACITY: 0,75 L/min. / CAVITY: T-11A

sunhydraulics.com/model/QPAC





CONFIGURATION

L	Control	Standard Screw Adjustment
A	Adjustment Range	1000 - 3000 psi (70 - 210 bar), 1000 psi (70 bar) Standard Setting
N	Seal Material	Buna-N

The accumulator sense, pump unload pilot valve is used to sense pressure in an accumulator at port 1 of the valve and when the pressure at port 1 reaches the valve setting, port 2 connects to port 3 to vent a relief valve and unload the pump. This valve has a 30% ratio between unload setting and reset; when pressure at port 1 falls below 70% of the valve setting, port 2 is blocked from port 3 and the pump will come back online to recharge the accumulator.

This valve requires a separate check valve between port 1 and the pump. Another version of the accumulator sense, pump unload valve, QCDC, includes a free-flow check valve for pump flows under 12 gpm (50 L/min).

TECHNICAL DATA

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

Cavity	T-11A
Series	1
Capacity	0,75 L/min.
Maximum Operating Pressure	350 bar
Pilot Flow Capacity	0,75 L/min.
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	22,2 mm
Valve Installation Torque	41 - 47 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990011007
Seal kit - Cartridge	Polyurethane: 990011002
Seal kit - Cartridge	Viton: 990011006
Model Weight	0.16 kg.

CONFIGURATION OPTIONS

Model Code Example: QPACArray

CONTROL (L)

- **L** Standard Screw Adjustment
- **C** Tamper Resistant - Factory Set

ADJUSTMENT RANGE (A)

- **A** 1000 - 3000 psi (70 - 210 bar), 1000 psi (70 bar) Standard Setting
- **B** 500 - 1500 psi (35 - 105 bar), 500 psi (35 bar) Standard Setting
- **C** 2000 - 5000 psi (140 - 350 bar), 2000 psi (140 bar) Standard Setting
- **D** 250 - 800 psi (18 - 55 bar), 250 psi (18 bar) Standard Setting

SEAL MATERIAL (N)

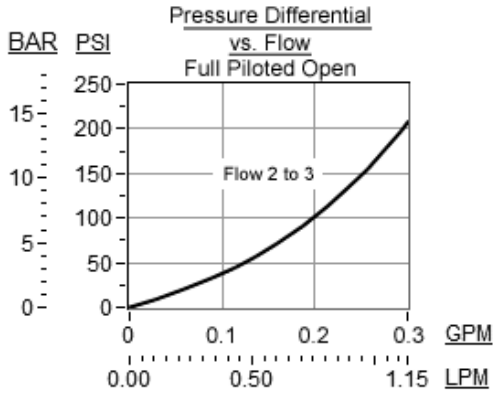
- **N** Buna-N
- **V** Viton

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TECHNICAL FEATURES

- The pressure differential between unload and reset will be within +2/-3% of the stated ratio of the valve.
- The accumulator sensing area is positively sealed.
- The spool design of this valve allows it to maintain a fixed differential ratio because the areas are created by diameters on the spool that will not wear or change with use.
- Minimum clearances between the spool and sleeve and a seal on the pilot piston diameter significantly reduce the potential for silting.
- When applying this cartridge, a separate drain line is required to prevent erratic operation caused by tank line pressure fluctuations.
- NOTE: Careful consideration should be given when selecting an adjustment range. System pressure drops and flows tend to affect the operation of unloading valves. Low operating pressures combined with low differentials result in a very narrow band between unload and reset, requiring precise system design. High flow rates typically mean high pressure drops, which subtract from the differential the valve has to work with.
- Sun has designed a variety of standard accumulator/pump unload assemblies with a variety of features. These assemblies can be found on our website under SOLUTIONS: ACCUMLATOR SENSE, PUMP UNLOAD.
- 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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