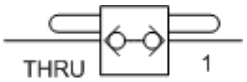
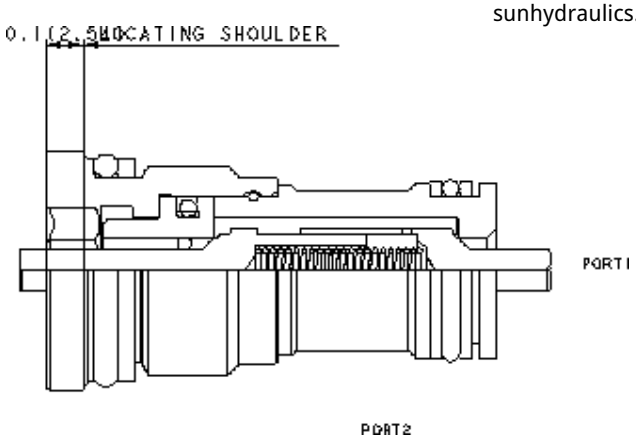
MODEL
CDAQ

Mechanically operated, back-to-back check valve
CAPACITY: 1.25 gpm / CAVITY: T-162DP

sunhydraulics.com/model/CDAQ





CONFIGURATION

M	Control	Mechanical Actuation
C	Cracking Pressure	30 psi (2 bar)
N	Seal Material	Buna-N

The phaser check is a pair of checks, back-to-back, with both poppets mechanically actuated. The valve is meant to be installed into the piston or rod of a cylinder. When the cylinder reaches the end of its stroke the poppet in the phaser check is shoved off its seat allowing flow through the piston. This allows two cylinders to get back into phase.

TECHNICAL DATA

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

Cavity	T-162DP
Series	0
Capacity	1.25 gpm
Maximum Operating Pressure	5000 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	1 drops/min.
Valve Internal Hex Size	5/16 in.
Valve Installation Torque	20 - 25 lbf ft
Seal kit - Cartridge	Buna: 990162007
Seal kit - Cartridge	Polyurethane: 990162002
Seal kit - Cartridge	Viton: 990162006
Model Weight	0.07 lb.

NOTES

A special tool is required to install this cartridge. Use part number 998-101 to order this tool.

CONFIGURATION OPTIONS

Model Code Example: CDAQArray

CONTROL (M)	CRACKING PRESSURE (C)	SEAL MATERIAL (N)
M Mechanical Actuation	**C** 30 psi (2 bar)	**N** Buna-N
		V Viton

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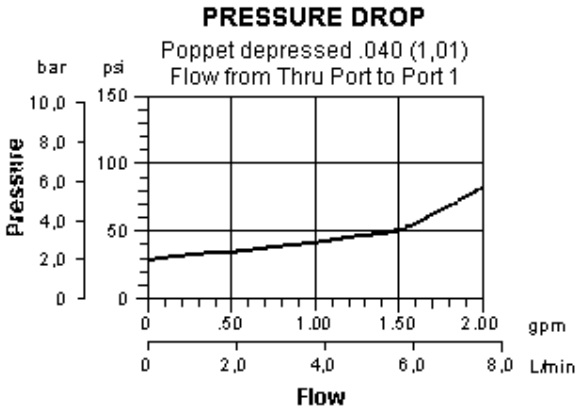
TECHNICAL FEATURES

- This valve is not designed to handle side forces. Actuating direction must be axial, and contact surface must be perpendicular to valve axis to within 5°.
- This valve is NOT meant to be cam operated.
- This valve is NOT to be used in place of a mechanical stop.
- Maximum stroke of the poppet must be limited to .047 in. (1,2 mm) by a mechanical stop other than the valve itself.
- Note: Port 2 of the T-162A cavity is not used with this valve.
- A cylinder that does its work while extending can put a large load on the rod gland at the end of its stroke. A phaser check in the piston can limit the unnecessary force on the gland.
- If you need to monitor the pressure in a cylinder, a phaser check can prevent the trapping of a false pressure value by a load holding valve.
- A phaser check in the piston of a vertically mounted cylinder will bleed air at the end of the stroke.
- Phaser checks in the pistons of master/slave cylinders will synchronize the cylinders simply by taking the mechanism to the end of its travel in both directions. This lends itself to dual cylinder steering applications.
- Check valves offer extremely low leakage rates with a maximum leakage of less than 1 drop per minute (0,07 cc/min).
- 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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