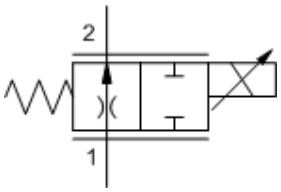
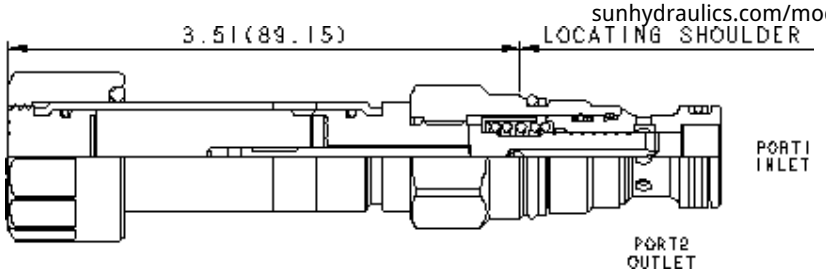
MODEL
# FPCH

Electro-proportional flow control valve - normally open
**SERIES 1 / CAPACITY: 28 L/min. / CAVITY: T-13A**

sunhydraulics.com/model/FPCH




## CONFIGURATION

| | | |
|---|---|---|
| **X** | Control | No Manual Override |
| **A** | Flow Rate | .1 - 1.5 gpm (0,4 - 6 L/min.) |
| **N** | Seal Material | Buna-N |
| **(none)** | Coil | No coil |

This valve is a normally open electro-proportional throttle that is spring-biased open. Energizing the coil generates an closing force on the spool proportional to the command current, and this force is countered by the spring and flow forces. This force balance creates a metering orifice whose effective size is proportional to the current. The valve exhibits a large degree of self-compensation in the 1-to-2 direction and will provide proportional flow control in the 2-to-1 direction with the addition of an external compensator. Full reverse flow (2-to-1) with no command in the 2-to-1 direction is possible without a compensator under all conditions.

## TECHNICAL DATA

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

| | |
|---|---|
| Maximum Valve Leakage at 110 SUS (24 cSt) | 100 cc/min.@210 bar |
| Manual Override Force Requirement | 33 N/100 bar @ Port 1 |
| Manual Override Stroke | 2,5 mm |
| Seal kit - Cartridge | Buna: 990413007 |
| Seal kit - Cartridge | Polyurethane: 990413002 |
| Seal kit - Cartridge | Viton: 990413006 |

## NOTES

Please verify cartridge clearance requirements when choosing a Sun manifold. Different valve controls and coils require different clearances.

## CONFIGURATION OPTIONS

**Model Code Example: FPCHXAN**

### CONTROL (X)

- **X** No Manual Override
- **D** Twist/Lock (Dual) Manual Override
- **E** Twist (Extended) Manual Override
- **L** Twist/Lock (Detent) Manual Override
- **M** Manual Override
- **T** Twist (Momentary) Manual Override

### FLOW RATE (A)

- **A** .1 - 1.5 gpm (0,4 - 6 L/min.)
- **C** .25 - 7 gpm (1 - 28 L/min.)
- **B** .15 - 3.5 gpm (0,6 - 14 L/min.)

### SEAL MATERIAL (N)

- **N** Buna-N
- **E** EPDM
- **V** Viton

### COIL *

| | |
|---|---|
| | No coil |
| **212** | DIN 43650-Form A, 12 VDC |
| **224** | DIN 43650-Form A, 24 VDC |
| **224NX01** | DIN 43650-Form A, 24 VDC, no transient voltage suppression (TVS) diodes, with XMD-01 driver |
| **224NX02** | DIN 43650-Form A, 24 VDC, no transient voltage suppression (TVS) diodes, with XMD-02 driver |
| **912** | Deutsch DT04-2P, 12 VDC |
| **912NX01** | Deutsch DT04-2P, 12 VDC, no transient voltage suppression (TVS) diodes, with XMD-01 driver |

driver

**912NX02** Deutsch DT04-2P, 12 VDC, no transient voltage suppression (TVS) diodes, with XMD-02 driver

**924** Deutsch DT04-2P, 24 VDC

**924NX01** Deutsch DT04-2P, 24 VDC, no transient voltage suppression (TVS) diodes, with XMD-01 driver

**924NX02** Deutsch DT04-2P, 24 VDC, no transient voltage suppression (TVS) diodes, with XMD-02 driver

* Additional coil options are available