


[sunhydraulics.com/model/FPCC](http://sunhydraulics.com/model/FPCC)

### CONFIGURATION

<b>M</b>	Control	Manual Override
<b>D</b>	Flow Rate	.25 - 10 gpm (1 - 40 L/min.)
<b>N</b>	Seal Material	Buna-N
<b>(none)</b>	Coil	No coil

This valve is a normally closed, electro-proportional throttle that is spring-biased closed. Energizing the coil generates an opening 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 100% 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	EPDM: 990010014
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: FPCCMDN**

CONTROL	(M) FLOW RATE	(D) SEAL MATERIAL	(N) COIL *
<b>M</b> Manual Override	<b>D</b> .25 - 10 gpm (1 - 40 L/min.)	<b>N</b> Buna-N	No coil
<b>X</b> No Manual Override	<b>C</b> .25 - 7 gpm (1 - 28 L/min.)	<b>E</b> EPDM	<b>212</b> DIN 43650-Form A, 12 VDC
<b>D</b> Twist/Lock (Dual) Manual Override	<b>A</b> .1 - 1.5 gpm (0,4 - 6 L/min.)	<b>V</b> Viton	<b>224</b> DIN 43650-Form A, 24 VDC
<b>E</b> Twist (Extended) Manual Override	<b>B</b> .15 - 3.5 gpm (0,6 - 14 L/min.)		<b>224NX01</b> DIN 43650-Form A, 24 VDC, no transient voltage suppression (TVS) diodes, with XMD-01 driver
<b>L</b> Twist/Lock (Detent) Manual Override			<b>224NX02</b> DIN 43650-Form A, 24 VDC, no transient voltage suppression (TVS) diodes, with XMD-02 driver
<b>T</b> Twist (Momentary) Manual Override			<b>912</b> Deutsch DT04-2P, 12 VDC
			<b>912NX01</b> Deutsch DT04-2P, 12 VDC, no transient voltage suppression (TVS)

diodes, with XMD-01  
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