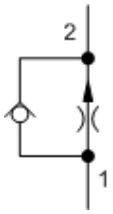
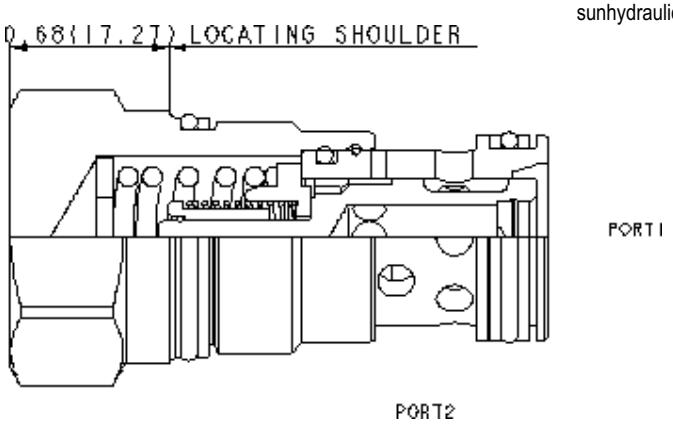
MODEL
FCDB

Fixed-orifice pressure compensated flow control valve with reverse flow check
SERIES 2 / CAPACITY: 12 gpm / CAVITY: T-5A

sunhydraulics.com/model/FCDB





CONFIGURATION

X	Control	Not Adjustable
A	Setting Range	Replaceable Orifice .1 - 12 gpm (0,4 - 45 L/min.)
N	Seal Material	Buna-N
(none)	Material/Coating	

Fixed-orifice, pressure-compensated flow controls with reverse-flow check provide precise flow regulation for meter-in or meter-out applications where there may be wide pressure fluctuations. An integral high-capacity check valve provides unrestricted flow from port 2 to port 1. The flow setting is specified by the user and is set at the factory.

TECHNICAL DATA

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

Cavity	T-5A
Series	2
Capacity	12 gpm
Maximum Operating Pressure	5000 psi
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990203007
Seal kit - Cartridge	Viton: 990203006
Model Weight	0.37 lb.

CONFIGURATION OPTIONS

Model Code Example: FCDBXAN

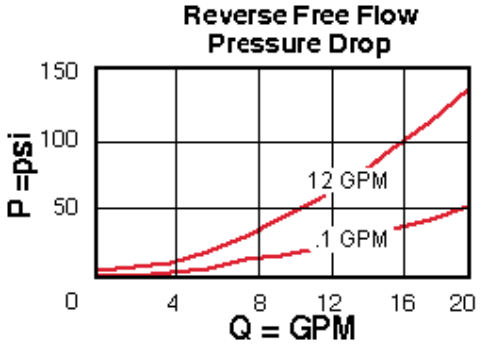
CONTROL (X)	SETTING RANGE (A)	SEAL MATERIAL (N)	MATERIAL/COATING
X Not Adjustable	**A** Replaceable Orifice .1 - 12 gpm (0,4 - 45 L/min.)	**N** Buna-N	Standard Material/Coating
L Tuning Adjustment		**V** Viton	**/AP** Stainless Steel, Passivated
K Handknob			**/LH** Mild Steel, Zinc-Nickel

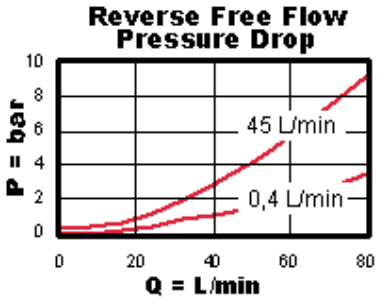
TECHNICAL FEATURES

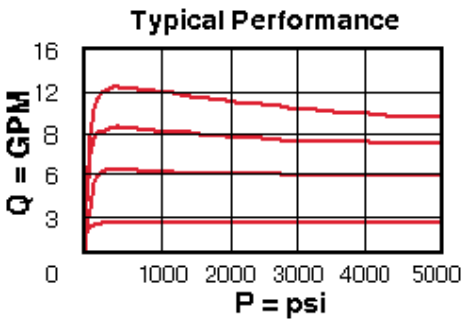
- Customer must specify a flow rating. Factory set flow ratings are within +/- 10% of the requested setting.
- All 2-port flow control cartridges are physically and functionally interchangeable (i.e. same flow path, same cavity for a given frame size). However, cartridge extension dimensions from the mounting surface may vary.
- The sharp-edged orifice design minimizes flow variations due to viscosity changes.
- The tuneable control option provides +/- 25% variation from the nominal factory pre-set flow. Turn the adjustment clockwise to increase.
- Corrosion resistant cartridge valves are intended for use in corrosive environments and are identified by the model code suffix /AP for external stainless steel components, or /LH for external zinc-nickel plated components. See the CONFIGURATION section for all options. For further details, please see the Materials of Construction page located under TECH RESOURCES.
- 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.

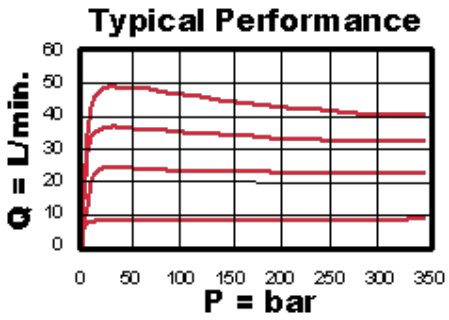
© 2025 Sun Hydraulics

PERFORMANCE CURVES









© 2025 Sun Hydraulics