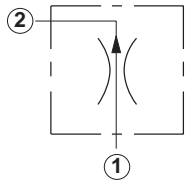


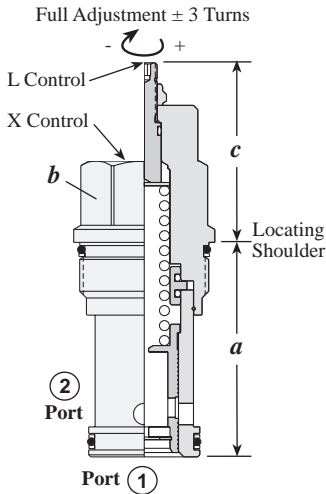
Flow Control Valves

FIXED ORIFICE, PRESSURE COMPENSATED



Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions					Installation Torque (lb. ft.)
			a	b	c			
					X	L	K	
.1-3 GPM	FXBA - LAN	T - 162A	1.22	3/4"	.82	2.11	2.25	25/30
.1-6.0 GPM	FXCA - LAN	T - 13A	1.38	7/8"	.75	2.00	2.25	30/35
.1-12.0 GPM	FXDA - LAN	T - 5A	1.62	1 1/8"	.69	2.12	2.38	45/50
.2-25 GPM	FXEA - LAN	T - 16A	2.44	1 1/4"	.97	2.44	2.69	150/160
.2-50 GPM	FXFA - LAN	T - 18A	3.13	1 5/8"	1.19	2.81	3.06	350/375

OPTION ORDERING INFORMATION



FX * A - * A *

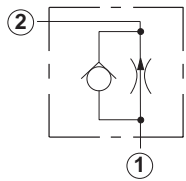
Nominal Capacity	Control**	Adjustment Range	Seal
B .1-3 GPM	X Non-adjustable Factory set at customer specified flow	A Fixed Orifice	N Buna-N
C .1-6.0 GPM		L Tuning Adjustment ±25% of customer specified flow	V Viton
D .1-12.0 GPM		K Handknob for L control	
E .2-25 GPM			
F .2-50 GPM			

Customer must specify flow

Flow Ranges by Frame Size:
 FXBA: .1 - 3 GPM
 FXCA: .1 - 6.0 GPM
 FXDA: .1 - 12.0 GPM
 FXEA: .2 - 25 GPM
 FXFA: .2 - 50 GPM

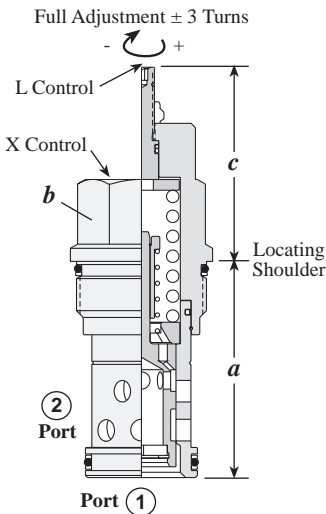
** See page 244 for information on Control Options

FIXED ORIFICE, PRESSURE COMPENSATED WITH FREE FLOW CHECK



Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions					Installation Torque (lb. ft.)
			a	b	c			
					X	L	K	
.1-3 GPM	FCBB - LAN	T - 162A	1.22	3/4"	.82	2.11	2.55	25/30
.1-6.0 GPM	FCCB - LAN	T - 13A	1.38	7/8"	.75	2.00	2.25	30/35
.1-12.0 GPM	FCDB - LAN	T - 5A	1.62	1 1/8"	.69	2.12	2.38	45/50
.2-25 GPM	FCEB - LAN	T - 16A	2.44	1 1/4"	.97	2.44	2.69	150/160
.2-50 GPM	FCFB - LAN	T - 18A	3.13	1 5/8"	1.19	2.81	3.06	350/375

OPTION ORDERING INFORMATION



FC * B - * A *

Nominal Capacity	Control**	Adjustment Range	Seal
B .1-3 GPM	X Non-adjustable Factory set at customer specified flow	A Fixed Orifice	N Buna-N
C .1-6.0 GPM		L Tuning Adjustment ±25% of customer specified flow	V Viton
D .1-12.0 GPM		K Handknob for L control	
E .2-25 GPM			
F .2-50 GPM			

Customer must specify flow

Flow Ranges by Frame Size:
 FCBB: .1 - 3 GPM
 FCCB: .1 - 6.0 GPM
 FCDB: .1 - 12.0 GPM
 FCEB: .2 - 25 GPM
 FCFB: .2 - 50 GPM

** See page 244 for information on Control Options

TECHNICAL TIPS / PERFORMANCE CURVES

Flow Control Valves, Fixed Orifice, Pressure Compensated

Applications

These pressure-compensated cartridges provide precise flow regulation for meter-in and meter-out applications. They also offer accurate control in bleed-off circuits where the load pressure and inlet flow are relatively constant.

NOTE: Accurate pressure-compensated control requires a 195 psi minimum pressure differential be maintained across the valve.

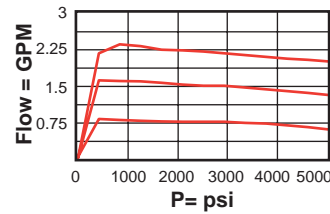
Design Concepts and Features

- Minimum flow change over widely varying load pressure changes (less than $\pm 5\%$ over 4500 psi load change).
- Selectable fixed orifice size (flow capacity 0.1 to 50 GPM, dependent on frame size).
- Tunable control option to provide $\pm 25\%$ variation of the nominal factory set flow.

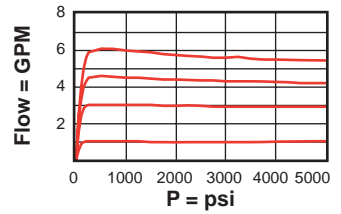
Performance Curves

Typical Performance

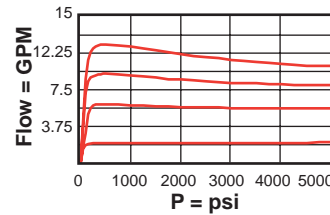
FXBA-*A*



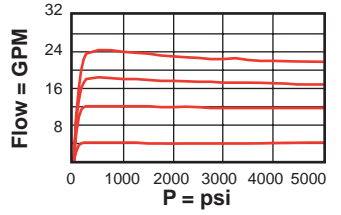
FXCA-*A*



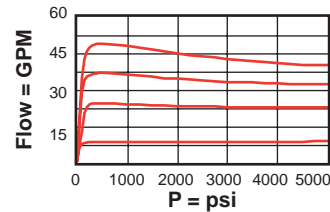
FXDA-*A*



FXEA-*A*



FXFA-*A*



Flow Control Valves, Fixed Orifice, Pressure Compensated with Free Flow Check

Applications

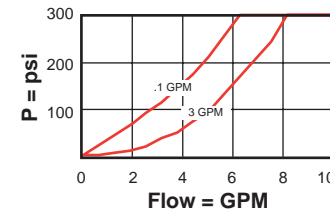
The performance parameters of the FC*B pressure compensated flow control with free flow check are identical to the FX*A, but with the addition of a high capacity free flow check.

Note: Accurate pressure-compensated control requires a 195 psi minimum pressure differential be maintained across the valve.

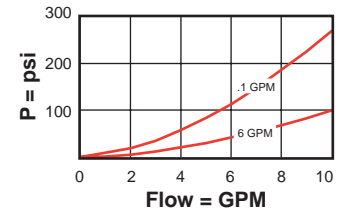
Performance Curves

Reverse Free Flow Pressure Drop

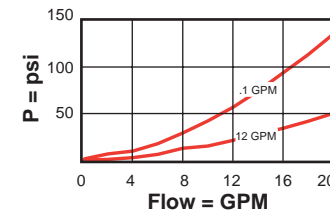
FCBB-*A*



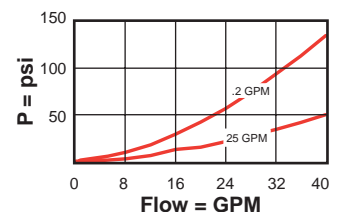
FCCB-*A*



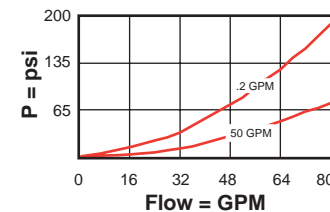
FCDB-*A*



FCEB-*A*



FCFB-*A*



General Application Requirements

- Operating Temperature Range: Buna-N seals -50° F to 200° F, Viton seals 0° F to 250° F.
- Viscosity Range: 60-3000 SUS.
- Fluid Contamination Level: ISO 4406 18/15 or better; Recommend $\beta_{10} \geq 75$ to achieve ISO 18/15 or better in most systems.
- Factory Pressure Setting for cartridge is established at a 4 GPM flow rate.