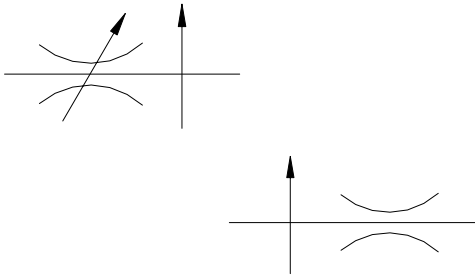
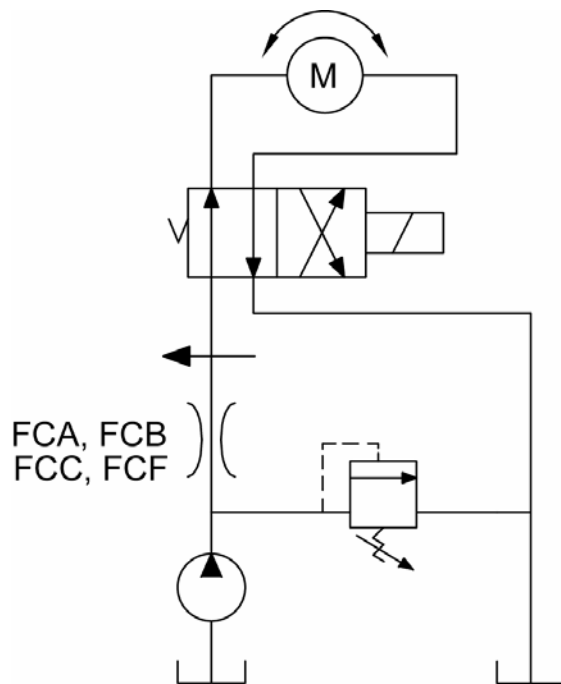


Pressure Compensated Flow Regulator Valves

	GPM	PSI	LPM	BAR	MODEL	PAGE
	3	3000	11	207	MA-FCA	232
	4	3500	15	241	PB-FCA	234
	8	3500	30	241	DE-FCA	236
	20	5000	76	345	HT-FCA	238
	25	3500	95	241	SJ-FCA	240
	8	3500	30	241	DE-FCB	242
	8	3500	30	241	DE-FCC	244
	8	3500	30	241	DE-FCF	246

Typical Schematic

Typical application for the FCA, FCB, FCC, and the FCF is for motor speed control.



WARNING: The specifications/application data shown in our catalogs and data sheets are intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

MA-FCA Adjustable Flow Control Valve, Pressure Compensated

DESCRIPTION

7 size, 5/8-18 thread, "Mini" series, pressure compensated, flow control valve.

OPERATION

The cartridge maintains a constant flow rate out of (1) regardless of load pressure changes in the circuit downstream of (1).

The adjustable control differential spring load can be set to customer flow specification (see options for ranges).

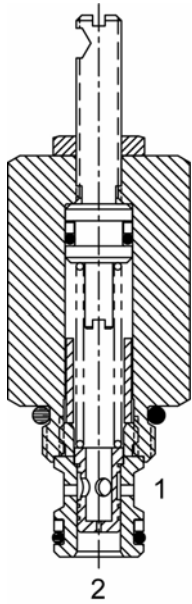
The valve begins to respond to load changes when the flow through the valve creates a pressure differential from (2) to (1) greater than 200 PSI with accurate flow maintenance from 200 to 3000 PSI (14 to 207 bar).

Reverse flow (1) to (2) returns through the control orifice and is non-compensated.

The regulated flow increases from low to high with clockwise rotation of the knob.

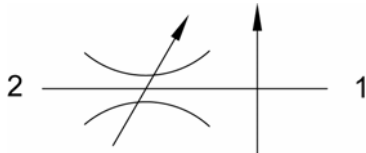
FEATURES

- Hardened parts for long life.
- Industry common cavity.
- Fine low-torque adjustment.



Best stability is obtained with adjustment at highest flow.

HYDRAULIC SYMBOL

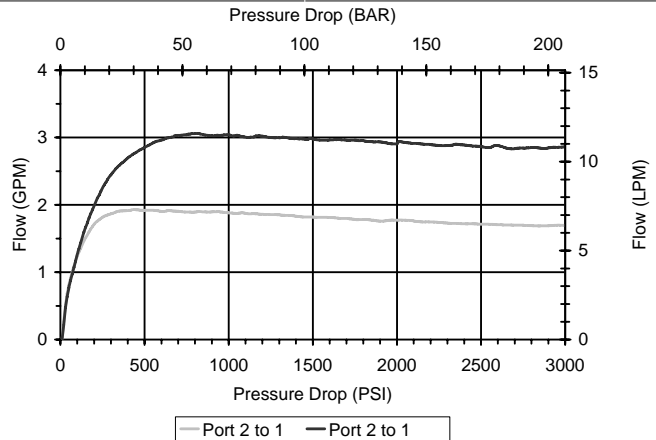
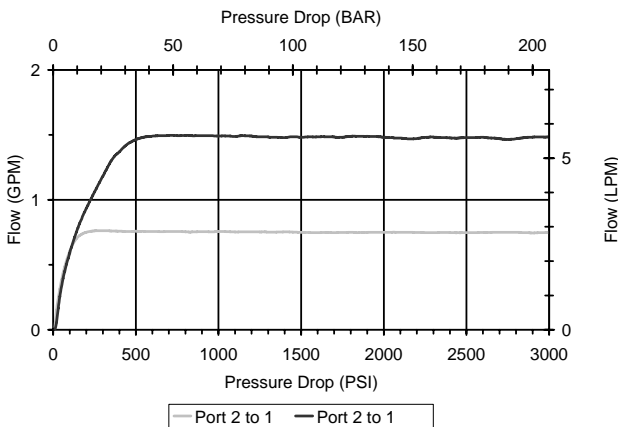


PERFORMANCE

Actual Test Data (Cartridge Only)

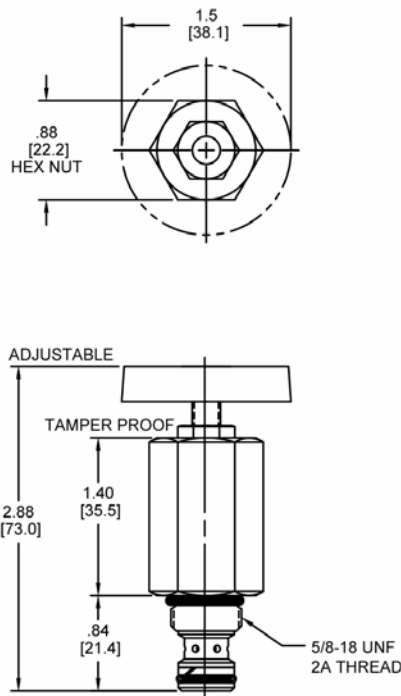
VALVE SPECIFICATIONS

Nominal Flow	3 GPM (11 LPM)
Rated Operating Pressure	3000 PSI (207 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.29 lbs. (.13 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	15 ft-lbs (20.3 Nm)
Cavity	MINI 2W
Cavity Tools kit (form tool, reamer, tap)	40500003
Seal Kit	21191000



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DIMENSIONS



(for bodies style and sizes see section "Accessories")

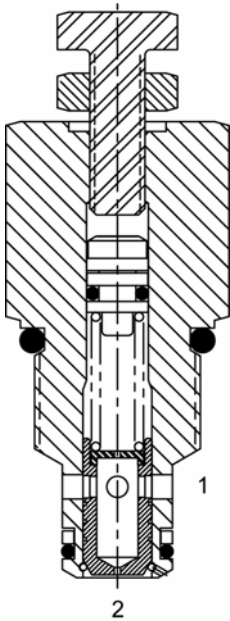
ORDERING INFORMATION

MA-FCA		-	-	-	-
OPTIONS					BODIES
Buna Standard	00			Blank	Without Body
Viton Standard	V0			N	1/4" BSP Ports
Buna, Knob	OK			S	#6 SAE Ports
Viton, Knob	VK				
FLOW					
0.17	.08 - .17 GPM (1,3 – 1,6 LPM)				
00.5	.25 - .5 GPM (0,9 – 1,9 LPM)				
00.9	.5 - .9 GPM (1,9 – 3,4 LPM)				
01.5	.75 - 1.5 GPM (2,8 – 5,7 LPM)				
02.9	1.9 – 3.0 GPM (7,2 – 11,3 LPM)				

Tamper Proof
 Fill in Digit Flow Setting
 Example: 02.0 – 2 GPM

WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

PB-FCA Adjustable Flow Control Valve, Pressure Compensated



DESCRIPTION

8 size, 3/4-16 thread, "Power" series, pressure compensated, flow control valve.

OPERATION

The cartridge maintains a constant flow rate out of (1) regardless of load pressure changes in the circuit downstream of (1).

The adjustable control differential spring load can be set to customer flow specification (see options for ranges).

The valve begins to respond to load changes when the flow through the valve creates a pressure differential from (2) to (1), greater than 200 PSI (14 bar), with accurate flow maintenance from 200 to 3500 PSI (14 to 241 bar).

Reverse flow (1) to (2) returns through the control orifice and is non-compensated.

The regulated flow increases from low to high with clockwise rotation of the knob.

FEATURES

- Hardened parts for long life.
- Industry common cavity.
- Fine low-torque adjustment.

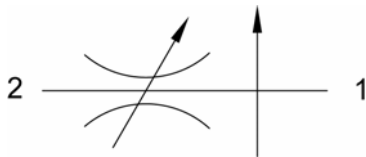
VALVE SPECIFICATIONS

Nominal Flow	4 GPM (15 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.26 lbs. (.12 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	25 ft-lbs (33.8 Nm)
Cavity	POWER 2W
Cavity Tools kit (form tool, reamer, tap)	40500005
Seal Kit	21191100



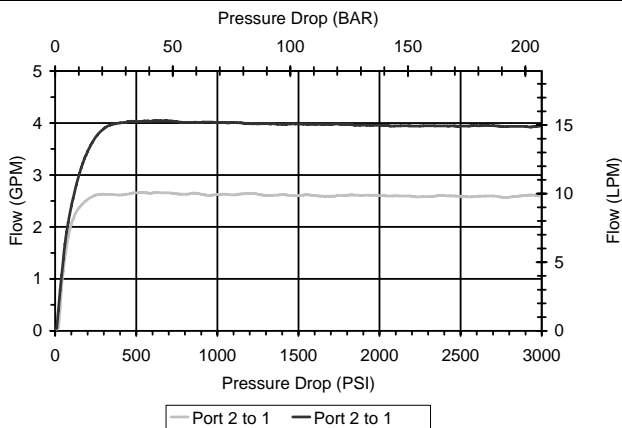
Best stability is obtained with adjustment at highest flow.

HYDRAULIC SYMBOL



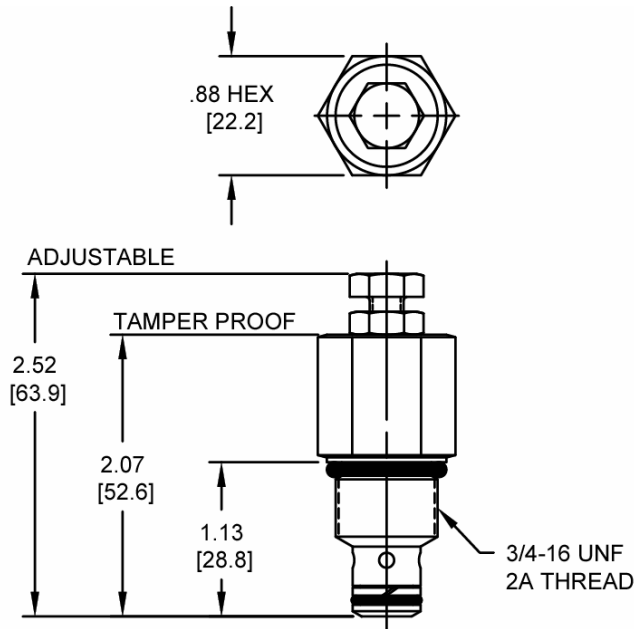
PERFORMANCE

Actual Test Data (Cartridge Only)



WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

DIMENSIONS



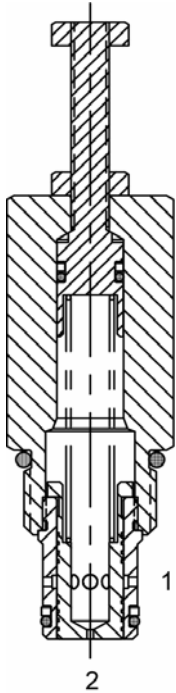
(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION

PB-FCA - - - -			
OPTIONS			BODIES
Buna Standard	00	Blank	Without Body
Viton Standard	V0	N	1/4" BSP Ports
Buna Tamper Proof	0T	S	#6 SAE Ports
Viton Tamper Proof	VT		
		FLOW	
	0.45	.25 - .45 GPM (0,9 - 1,7 LPM)	
	0.75	.45 - .75 GPM (1,7 - 2,8 LPM)	
	1.35	.75 - 1.35 GPM (2,8 - 4,9 LPM)	
	2.65	1.35 - 2.65 GPM (4,9 - 10 LPM)	
	4.00	2.65 - 4.00 GPM (10 - 15,1 LPM)	
		Tamper Proof	
		Fill in Digit Flow Setting	
		Example: 02.0 - 2 GPM	

WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

DE-FCA Adjustable Flow Control Valve, Pressure Compensated



DESCRIPTION

10 size, 7/8-14 thread, "Delta" series, pressure compensated, flow control valve.

OPERATION

The DE-FCA maintains a constant flow rate out of (1) regardless of load pressure changes in the circuit downstream of (1).

The adjustable control (see options for ranges) differential spring load can be set to customer flow specification.

The valve begins to respond to load changes when the flow through the valve creates a pressure differential across the control orifice greater than 100 PSI (6.9 bar), with accurate flow maintenance from 100 to 3500 PSI (6.9 to 241 bar).

Reverse flow (1) to (2) returns through the control orifice and is non-compensated.

The regulated flow increases from low to high with clockwise rotation of the knob.

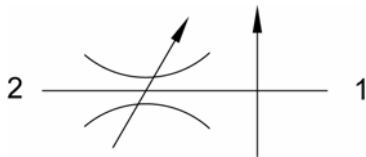
FEATURES

- Hardened parts for long life.
- Industry common cavity.
- Fine low-torque adjustment.



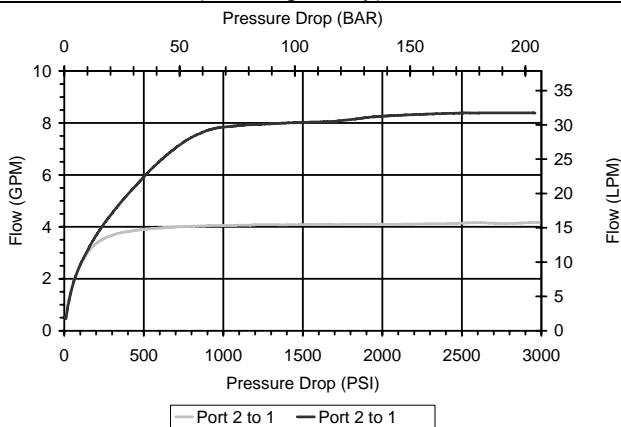
Best stability is obtained with adjustment at highest flow.

HYDRAULIC SYMBOL



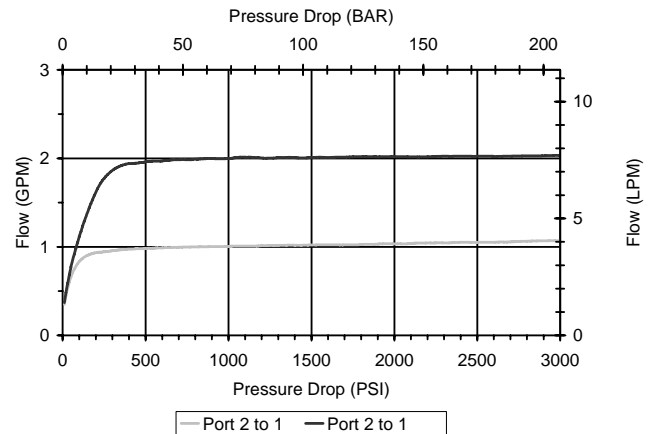
PERFORMANCE

Actual Test Data (Cartridge Only)



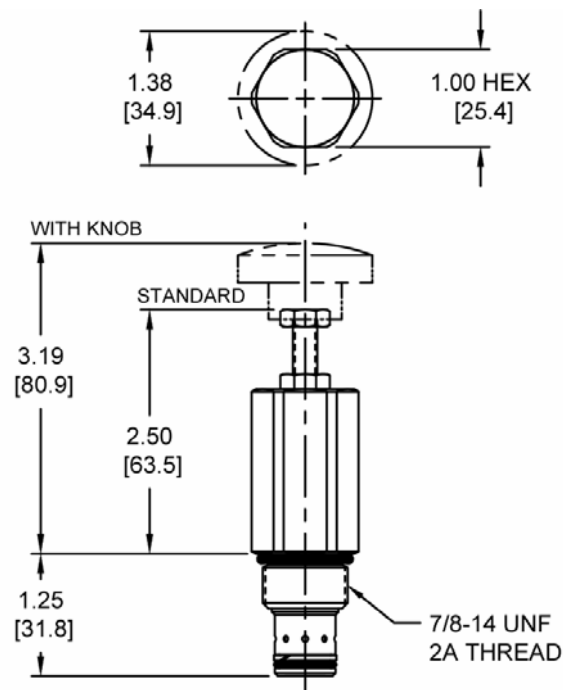
VALVE SPECIFICATIONS

Max Flow	8 GPM (30 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.49 lbs. (.22 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 2W
Cavity Tools kit (form tool, reamer, tap)	40500000
Seal Kit	21191200



WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

DIMENSIONS



(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION

DE-FCA - - - -		
OPTIONS		BODIES
Buna Standard	00	Blank
Viton Standard	V0	N 3/8" BSP Ports
Buna, Knob	0K	S #8 SAE Ports
Viton, Knob	VT	
		FLOW
	01.0	.5-1 GPM (1,9 – 3,8 LPM)
	02.0	1-2 GPM (3,8 – 7,6 LPM)
	04.0	2-4 GPM (7,6 – 15,1 LPM)
	08.0	4-8 GPM (15,1 – 30,2 LPM)
		Tamper Proof
		Fill in Digit Flow Setting
		Example: 02.0 – 2 GPM

WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

HT-FCA Adjustable Flow Control Valve, Pressure Compensated

DESCRIPTION

“High Pressure” 12 size, 1 1/16 -12 thread, “Tecnorm” series, pressure compensated, flow control valve.

OPERATION

The HT-FCA maintains a constant flow rate out of (1) regardless of load pressure changes in the circuit downstream of (1).

The adjustable control orifice can be set to customer flow specification (see options for ranges).

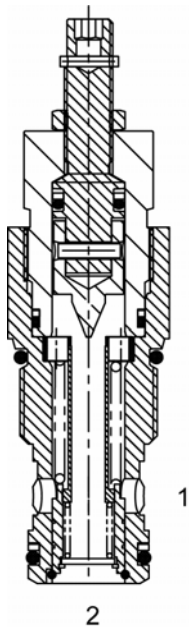
The valve begins to respond to load changes when the flow through the valve creates a pressure differential across the control orifice. Consult chart to see regulation at high and low adjustment settings.

Reverse flow (1) to (2) returns through the control orifice and is non-compensated.

The regulated flow increases from low to high with clockwise rotation of the adjustment screw.

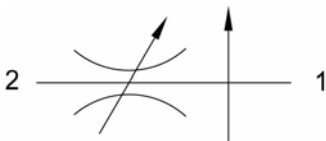
FEATURES

- Hardened parts for long life.
- Industry common cavity.
- Fine low-torque adjustment.



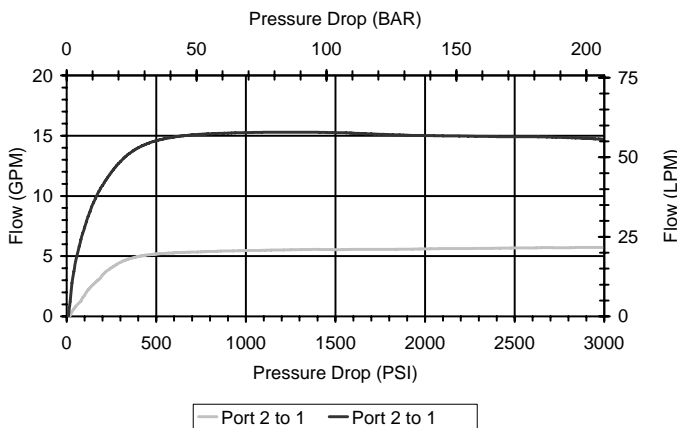
“Fully Adjustable”. Valve can adjust down to leakage flow.

HYDRAULIC SYMBOL



PERFORMANCE

Actual Test Data (Cartridge Only)

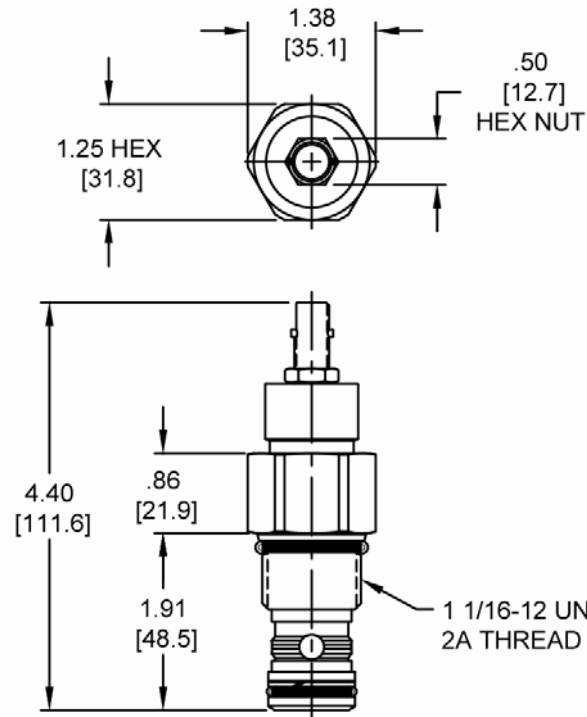


VALVE SPECIFICATIONS

Max Regulated Flow	20 GPM (76 LPM)
Rated Operating Pressure	5000 PSI (345 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.73 lbs. (.33 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	50 ft-lbs (67.8 Nm)
Cavity	TECNORD 2W
Cavity Tools kit (form tool, reamer, tap)	40500032
Seal Kit	21191300

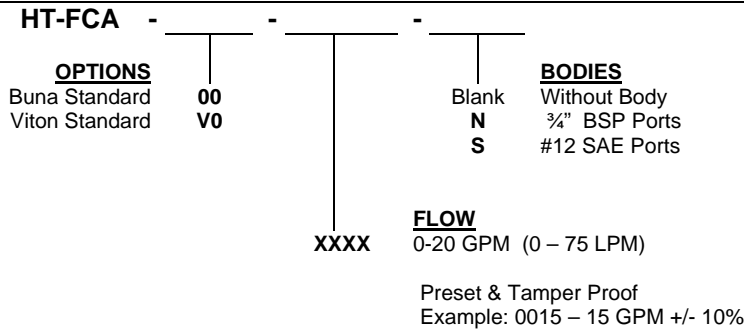
WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

DIMENSIONS



(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION



WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

SJ-FCA Adjustable Flow Control Valve, Pressure Compensated

DESCRIPTION

16 size, 1 5/16 -12 thread, "Super" series, pressure compensated, flow control valve.

OPERATION

The SJ-FCA maintains a constant flow rate out of (1) regardless of load pressure changes in the circuit downstream of (1).

The adjustable control orifice can be set to customer flow specification (see options for ranges).

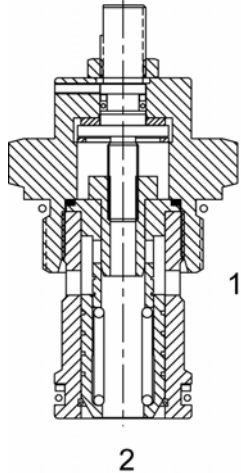
The valve begins to respond to load changes when the flow through the valve creates a pressure differential across the control orifice. Consult chart to see regulation at high and low adjustment settings.

Reverse flow (1) to (2) returns through the control orifice and is non-compensated.

The regulated flow increases from low to high with clockwise rotation of the adjustment knob.

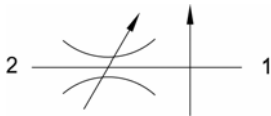
FEATURES

- Hardened parts for long life.
- Industry common cavity.
- Fine low-torque adjustment.



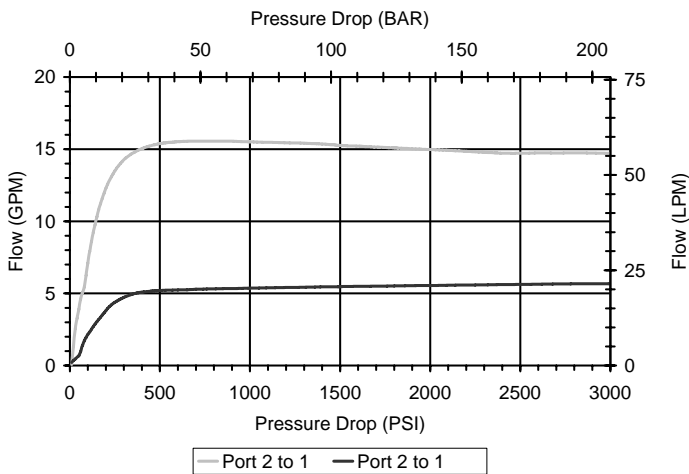
"Fully Adjustable," Valve can be adjusted down to leakage flow.

HYDRAULIC SYMBOL



PERFORMANCE

Actual Test Data (Cartridge Only)

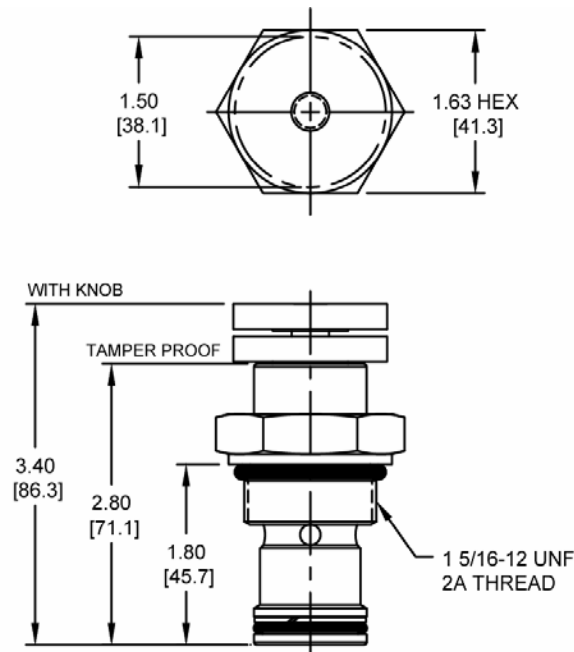


VALVE SPECIFICATIONS

Nominal Flow	25 GPM (95 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.89 lbs. (.40 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	90 ft-lbs (122 Nm)
Cavity	SUPER 2W
Seal Kit	21191400

WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

DIMENSIONS



(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION

SJ-FCA - - -			
OPTIONS			BODIES
External Adj. w/locknut Buna	00	Blank	Without Body
External Adj. w/locknut Viton	V0	N	3/4" BSP Ports
Buna, Knob	0K	S	#12 SAE Ports
Viton, Knob	VK		
Internally Adj. Buna	0I		
Internally Adj. Viton	VI		
Tamper Proof Buna	0T		
Tamper Proof Viton	VT		
		FLOW SETTING	
	XXXX	0-25 GPM (0 – 95 LPM)	
		Preset & tamper Proof	
		Example: 0015 – 15 GPM +/- 10%	

WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

DE-FCB Fixed Flow Control Valve, Pressure Compensated

DESCRIPTION

10 size, 7/8-14 thread, "Delta" series, fixed pressure compensated, flow control valve.

OPERATION

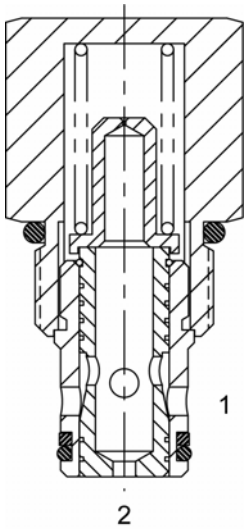
The DE-FCB maintains a constant flow rate out of (1) regardless of load pressure changes in the circuit downstream of (1).

The valve begins to respond to load changes when the flow through the valve creates a pressure differential across the control orifice, in excess of the spring load. Consult chart for regulation performance.

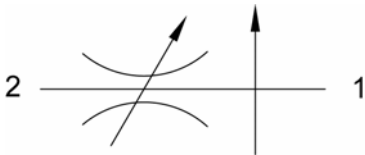
Reverse flow (1) to (2) returns through the control orifice and is non-compensated.

FEATURES

- Industry common cavity.
- Hardened parts for long life.



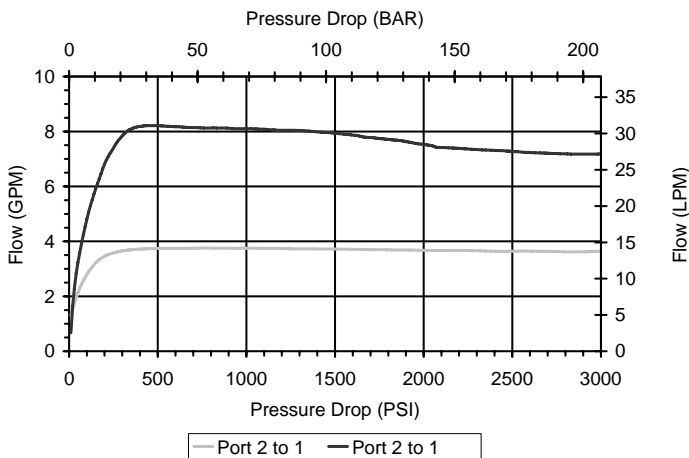
HYDRAULIC SYMBOL



Low pressure drop version for low differential circuits.

PERFORMANCE

Actual Test Data (Cartridge Only)

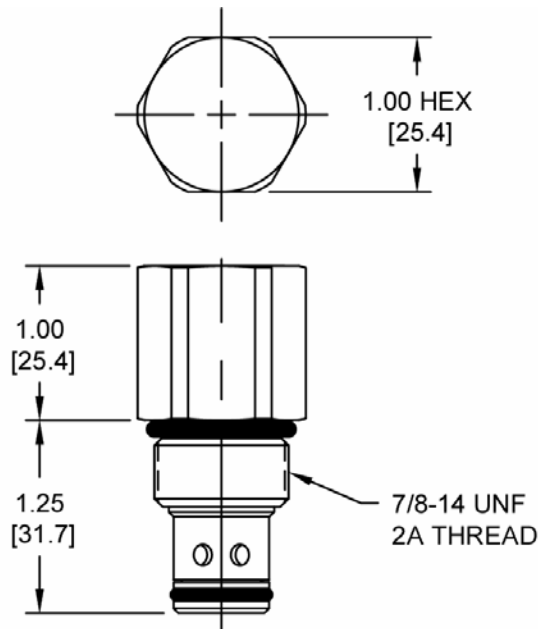


VALVE SPECIFICATIONS

Max Regulated Flow	8 GPM (30 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.29 lbs. (.13kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 2W
Cavity Tools kit (form tool, reamer, tap)	40500000
Seal Kit	21191204

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DIMENSIONS



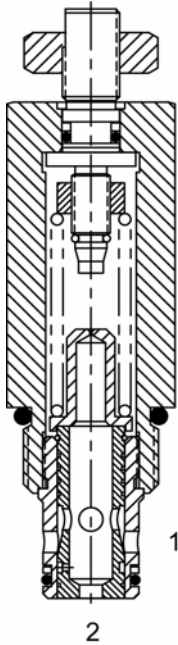
(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION

DE-FCB		-	-	-	-
OPTIONS					BODIES
Buna Standard	00				Blank
Viton Standard	V0				N 3/8" BSP Ports
					S #8 SAE Ports
					FLOW SETTING
			01.0		1 GPM (3,8 LPM)
			02.0		2 GPM (7,6 LPM)
			03.0		3 GPM (11,3 LPM)
			04.0		4 GPM (15,1 LPM)
			05.0		5 GPM (18,9 LPM)
			06.0		6 GPM (22,7 LPM)
			07.0		7 GPM (26,5 LPM)
			08.0		8 GPM (30,2 LPM)
					+/- 15%

WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

DE-FCC Adjustable Flow Control Valve, Pressure Compensated



DESCRIPTION

10 size, 7/8-14 thread, "Delta" series, pressure compensated, flow control valve.

OPERATION

The DE-FCC maintains a constant flow rate out of (1) regardless of load pressure changes in the circuit downstream of (1).

The adjustable control orifice can be set to customer flow specification (see options for ranges).

The valve begins to respond to load changes when the flow through the valve creates a pressure differential across the control orifice. Consult chart to see regulation at high and low adjustment settings.

Reverse flow (1) to (2) returns through the control orifice and is non-compensated.

The regulated flow increases from low to high with clockwise rotation of the knob.

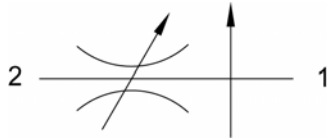
FEATURES

- Hardened parts for long life.
- Industry common cavity.
- Fine low-torque adjustment.



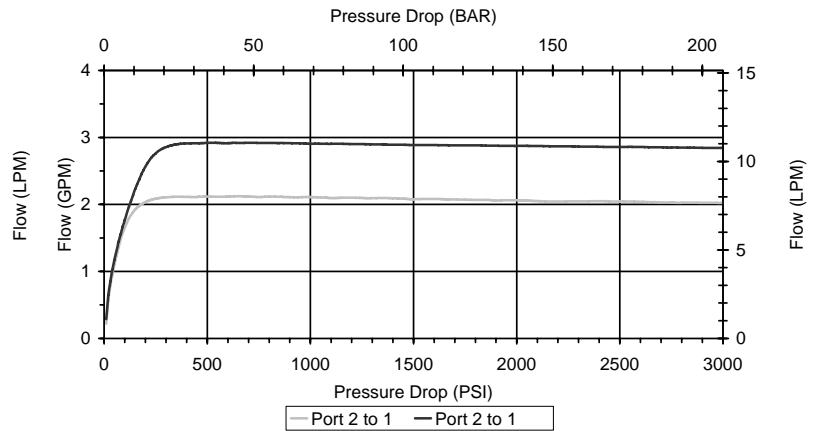
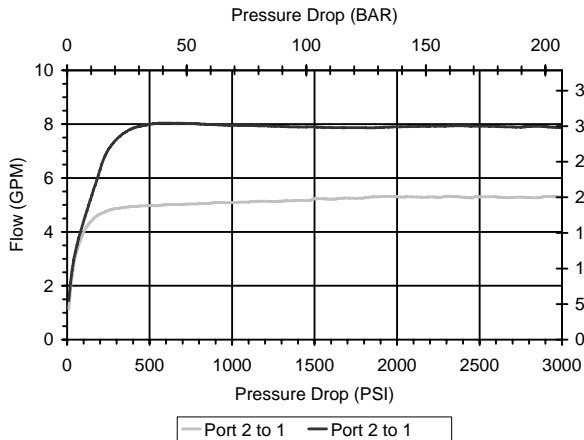
Lowest pressure drop is obtained with adjustment at lowest setting.

HYDRAULIC SYMBOL



PERFORMANCE

Actual Test Data (Cartridge Only)

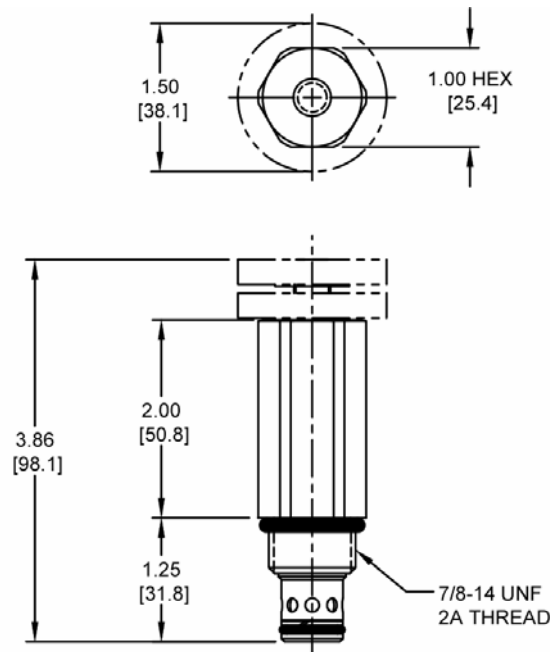


VALVE SPECIFICATIONS

Max Regulated Flow	8 GPM (30 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.51 lbs. (.23 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 2W
Cavity Tools kit (form tool, reamer, tap)	40500000
Seal Kit	21191200

WARNING: The specifications/application data shown in our catalogs and data sheets is intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

DIMENSIONS



(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION

DE - FCC		-	-	-	-
OPTIONS					BODIES
Buna Standard	00			Blank	Without Body
Viton Standard	V0			N	3/8" BSP Ports
Buna, Knob	OK			S	#8 SAE Ports
Viton, Knob	VT				
				FLOW	
		1.16		.80-1.16 GPM	(3 - 4,4, LPM)
		1.62		1.16-1.62 GPM	(4,4 - 6,1 LPM)
		2.09		1.62-2.09 GPM	(6,1 - 7,9 LPM)
		2.90		2.09-2.90 GPM	(7,9 - 11 LPM)
		3.82		2.90-3.82 GPM	(11 - 14,4 LPM)
		5.00		3.82-5.00 GPM	(14,4 - 18,9 LPM)
		8.00		5.00-8.00 GPM	(18,9 - 30,2 LPM)

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DE-FCF Fixed Flow Control Valve, Pressure Compensated

DESCRIPTION

10 size, 7/8-14 thread, "Delta" series, fixed pressure compensated, flow control valve.

OPERATION

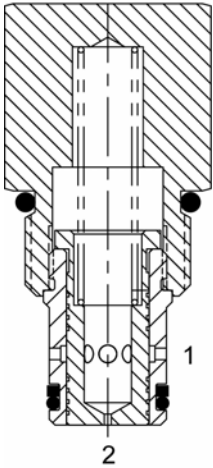
The DE-FCF maintains a constant flow rate out of (1) regardless of load pressure changes in the circuit downstream of (1).

The valve begins to respond to load changes when the flow through the valve creates a pressure differential across the control orifice, in excess of the spring load. Consult chart for regulation performance.

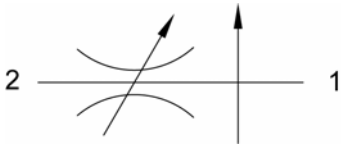
Reverse flow (1) to (2) returns through the control orifice and is non-compensated.

FEATURES

- Hardened parts for long life.
- Industry common cavity.



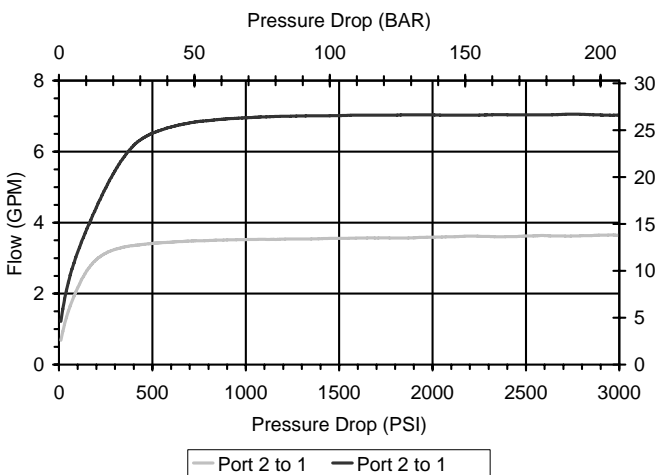
HYDRAULIC SYMBOL



Best stability version for high differential circuits.

PERFORMANCE

Actual Test Data (Cartridge Only)

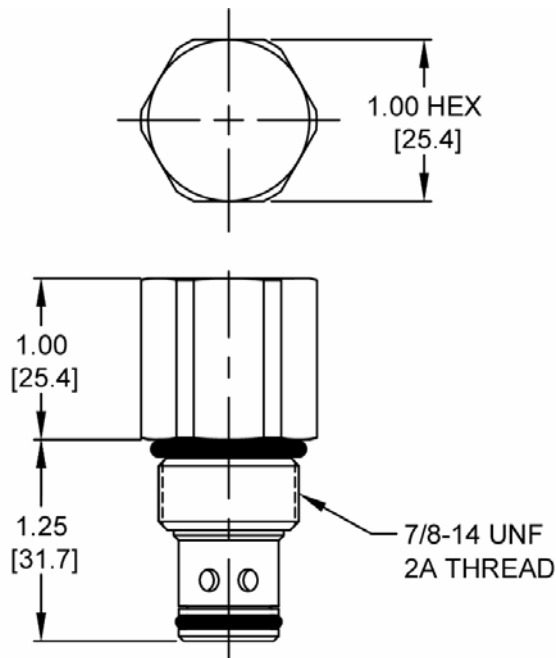


VALVE SPECIFICATIONS

Max Flow	8 GPM (30 LPM)
Rated Operating Pressure	3500 PSI (241 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	.32 lbs. (.14 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Cavity	DELTA 2W
CavityTools kit (form tool, reamer, tap)	40500000
Seal Kit	21191204

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DIMENSIONS



(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION

DE-FCF - - -			
OPTIONS			BODIES
Buna Standard	00		Blank
Viton Standard	V0		Without Body
			N 3/8" BSP Ports
			S #8 SAE Ports
			FLOW SETTING
		01.0	1 GPM (3,8 LPM)
		02.0	2 GPM (7,6 LPM)
		03.0	3 GPM (11,3 LPM)
		04.0	4 GPM (15,1 LPM)
		05.0	5 GPM (18,9 LPM)
		06.0	6 GPM (22,7 LPM)
		07.0	7 GPM (26,5 LPM)
		08.0	8 GPM (30,2 LPM)
			+/- 15%

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