

Technical Information

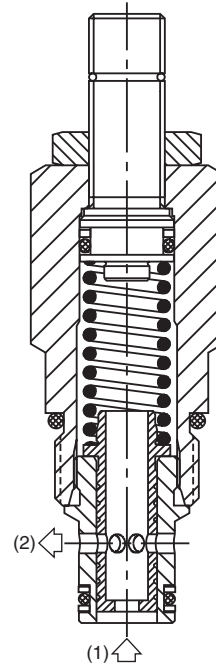
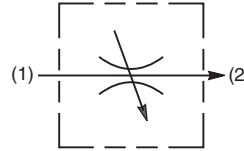
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical Data

General Description

Restrictive Style, Pressure Compensated Flow Control Valve. For additional information see Technical Tips on pages FC1-FC4.

Features

- Minimal flow change with pressure variation
- Reverse flow function
- Full adjustment from 1-20 LPM (0.3-5.3 GPM)
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated

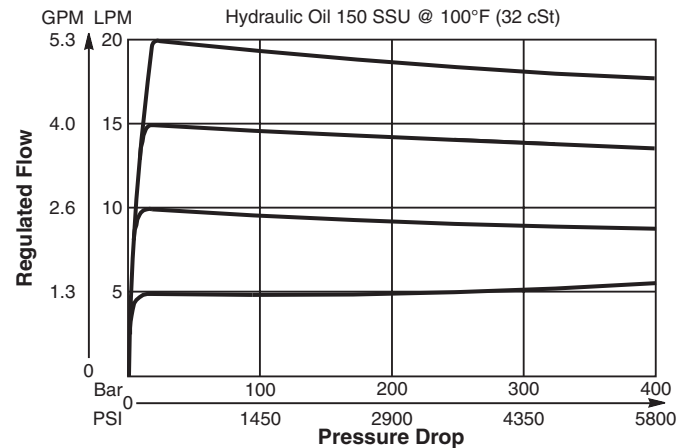


Specifications

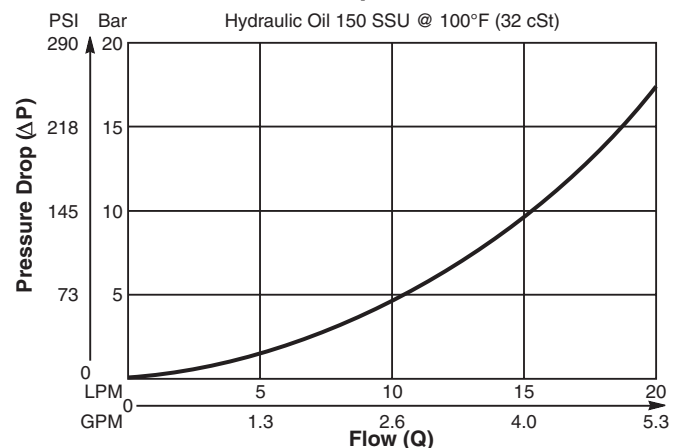
Rated Flow	20 LPM (5.3 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-40°C to +93.3°C (Nitrile) (-40°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F)
Fluid Compatibility/Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
Filtration	ISO Code 16/13, SAE Class 4 or better
Approx. Weight	.13 kg (.29 lbs.)
Cavity	C08-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT08-2F

Performance Curves (Through cartridge only)

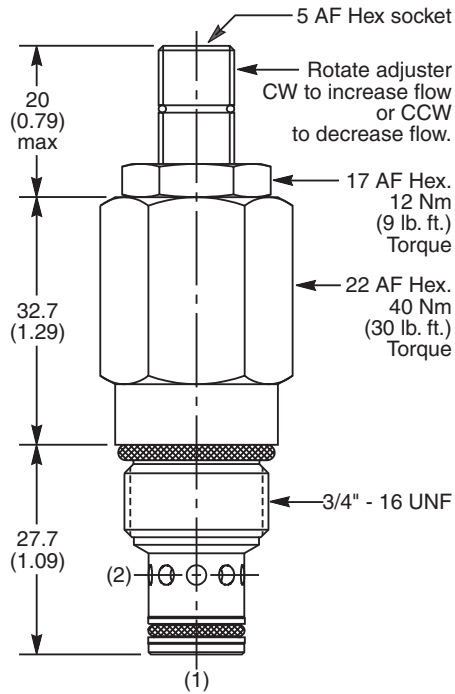
Flow Regulating Performance



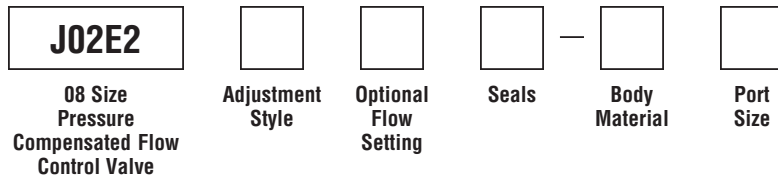
Reverse Flow Pressure Drop vs. Flow



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Seals / Kit. No.
N	Nitrile, Buna-N (Std.) / (SK30500N-1)
V	Fluorocarbon / (SK30500V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Port Size	Body Part No.
Omit	Cartridge Only	
4P	1/4" NPTF	(B08-2-*4P)
6P	3/8" NPTF	(B08-2-*6P)
4T	SAE-4	(B08-2-*4T)
6T	SAE-6	(B08-2-*6T)
6B	3/8" BSPG	(B08-2-*6B)

* Add "A" for aluminum, omit for steel.

Code	Optional Flow Setting
Omit	Omit for no setting* Specify setting if required (LPM)

* Appropriate mid-range setting for Standard = 10 LPM

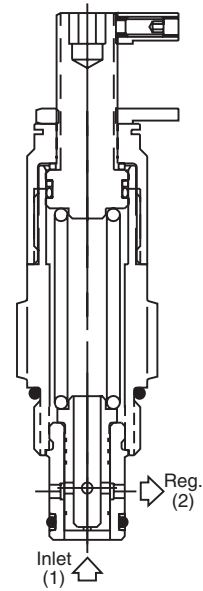
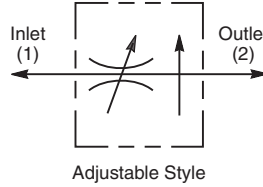
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General Description

Pressure Compensated Flow Regulator Valve.
NOTE: When used with a fixed displacement pump, pressure to the cartridge must be controlled by a relief valve located between the pump and the FR101 cartridge. For additional information see Technical Tips on pages FC1-FC4.

Features

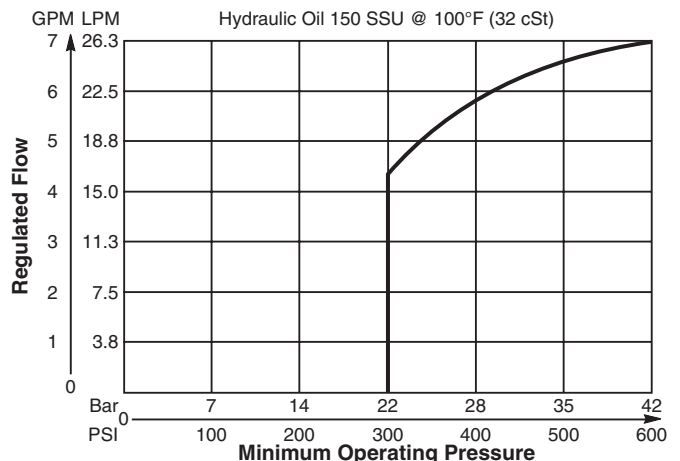
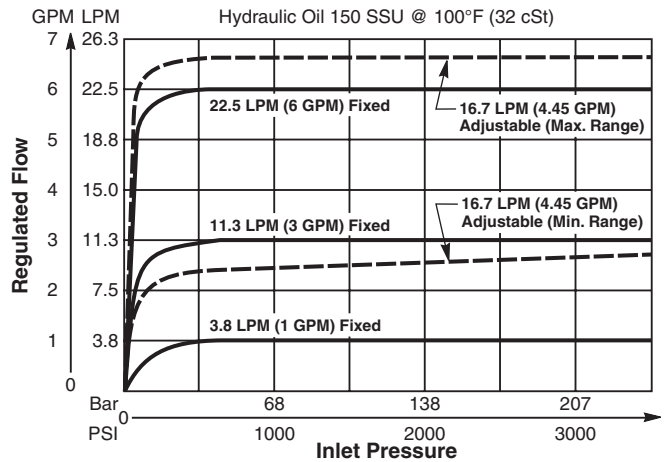
- Hardened, precision ground parts for durability
- Cartridge design
- Acts as a fixed orifice in reverse flow condition
- All external parts zinc plated



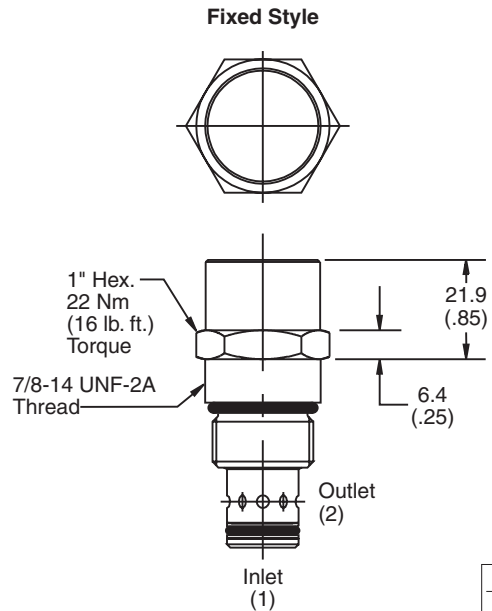
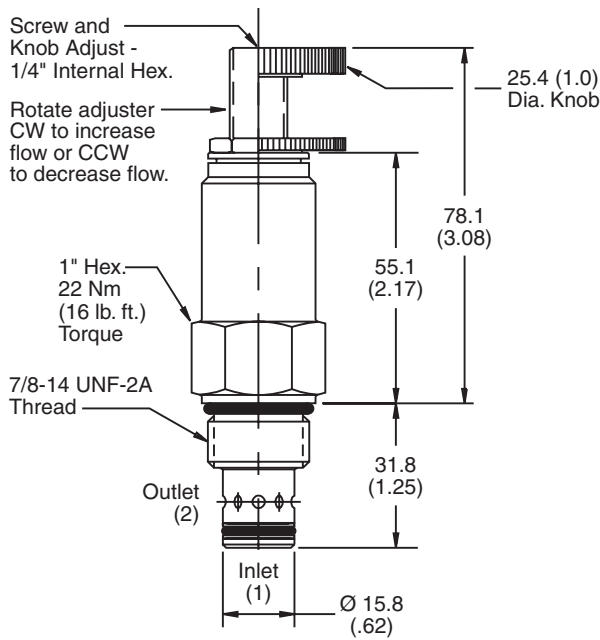
Specifications

Rated Flow	Fixed 22.5 LPM (6 GPM) Adjusted 26.5 LPM (7 GPM)
Maximum Inlet Pressure	245 Bar (3500 PSI)
Accuracy (Fixed)	3.8 LPM (1 GPM) ±20% 7.5 - 11.3 LPM (2-3 GPM) ±15% 15 - 22.5 LPM (4-6 GPM) ±10%
Adjustment Range (Adj. Version)	±30% Nominal
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-40°C to +93.3°C (Nitrile) (-40°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F)
Fluid Compatibility/Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
Filtration	ISO Code 16/13, SAE Class 4 or better
Approx. Weight	.23 kg (0.5 lbs.)
Cavity	No. C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT10-2F

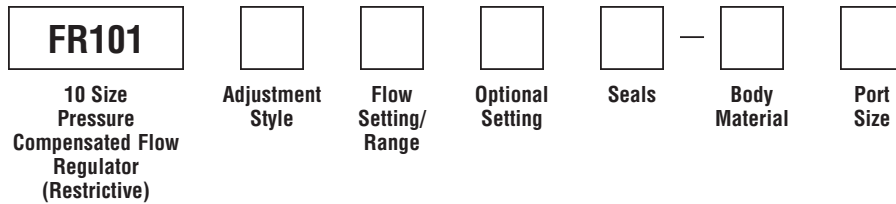
Performance Curves Regulated Flow vs. Pressure (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style
F	Fixed Style present at factory
K	Knob Adjust
S	Screw Adjust

Code	Fixed Style Flow
100	3.8 LPM (1 GPM)
200	7.5 LPM (2 GPM)
300	11.3 LPM (3 GPM)
400	15 LPM (4 GPM)
500	18.8 LPM (5 GPM)
600	22.5 LPM (6 GPM)

Optional Setting
 Flow setting specified in .38 LPM (.1 GPM) increments other than standard

Code	Seals / Kit. No.
Omit	Nitrile / (SK10-2N)
V	Fluorocarbon / (SK10-2V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Knob/Screw Style Flow Range
065	1.9-3.0 LPM (0.5-0.8 GPM)
095	3.0-4.5 LPM (0.8-1.2 GPM)
135	4.1-6.4 LPM (1.1-1.7 GPM)
185	6.0-8.3 LPM (1.6-2.2 GPM)
260	7.9-11.6 LPM (2.1-3.1 GPM)
375	11.3-16.9 LPM (3.0-4.5 GPM)
550	16.1-25.1 LPM (4.3-6.7 GPM)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
4P	1/4" NPTF	(B10-2-*4P)
6P	3/8" NPTF	(B10-2-*6P)
8P	1/2" NPTF	(B10-2-*8P)
6T	SAE-6	(B10-2-*6T)
8T	SAE-8	(B10-2-*8T)
T8T	SAE-8	(B10-2-T8T)†
6B	3/8" BSPG	(B10-2-6B)†

* Add "A" for aluminum, omit for steel.
 † Steel body only.

Technical Information

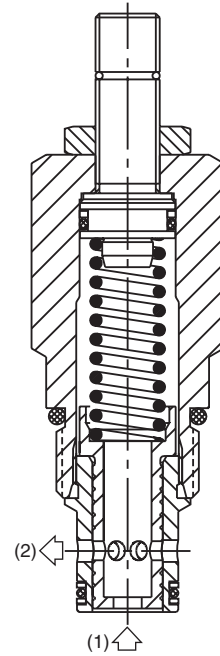
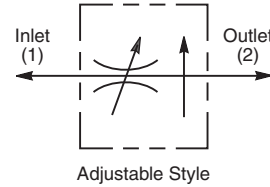
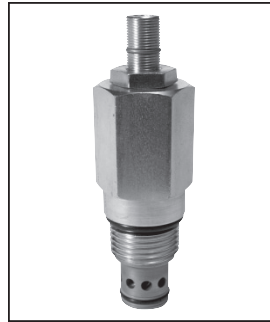
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- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
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- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical Data

General Description

Restrictive Style, Pressure Compensated Flow Control Valve. For additional information see Technical Tips on pages FC1-FC4.

Features

- Minimal flow change with pressure variation
- Reverse flow function
- Full adjustment from 1-40 LPM (0.3-10.6 GPM)
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated

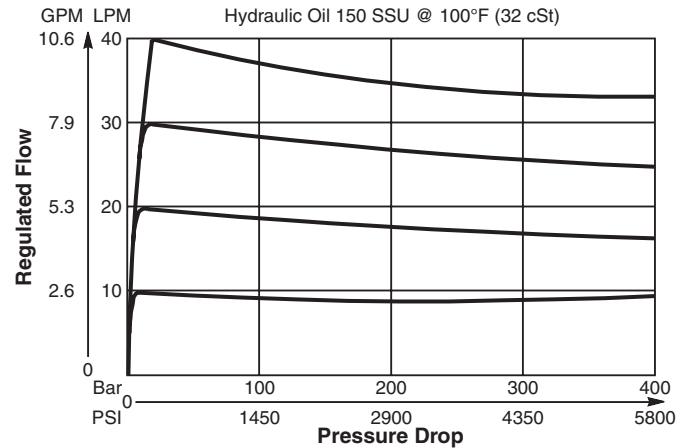


Specifications

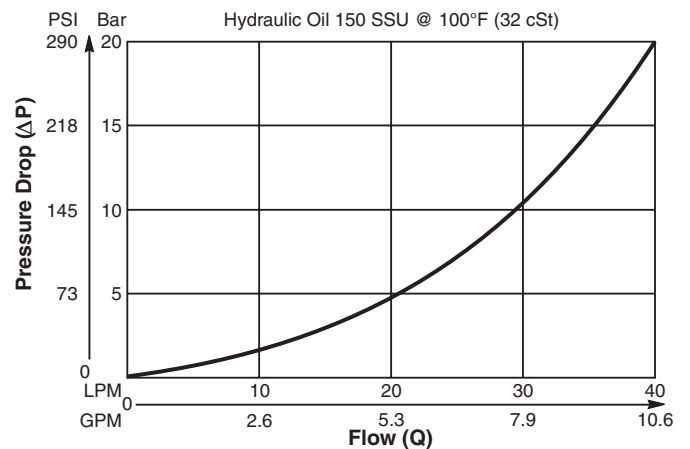
Rated Flow	40 LPM (10.6 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-40°C to +93.3°C (Nitrile) (-40°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F)
Fluid Compatibility/Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
Filtration	ISO Code 16/13, SAE Class 4 or better
Approx. Weight	.20 kg (.44 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT10-2F

Performance Curves (Through cartridge only)

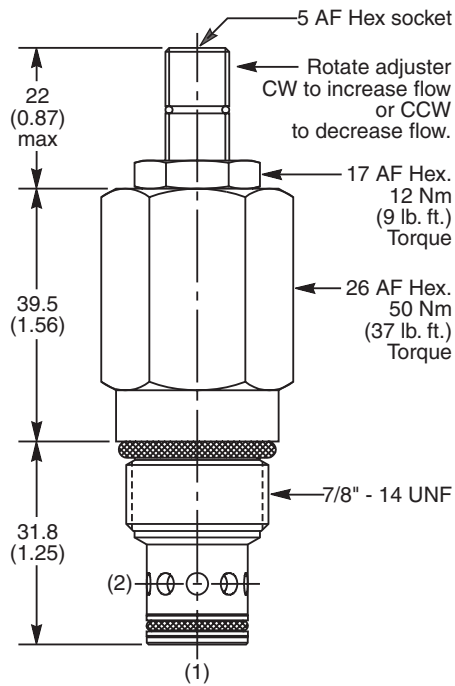
Flow Regulating Performance



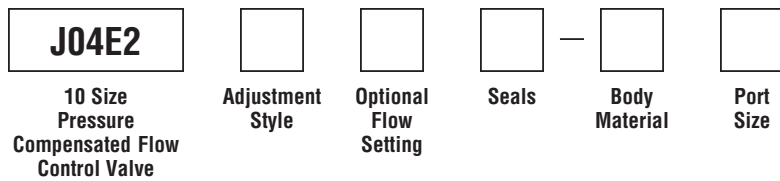
Reverse Flow Pressure Drop vs. Flow



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Seals / Kit. No.
N	Nitrile, Buna-N (Std.) / (SK30500N-1)
V	Fluorocarbon / (SK30500V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Port Size	Body Part No.
Omit	Cartridge Only	
4P	1/4" NPTF	(B10-2-*4P)
6P	3/8" NPTF	(B10-2-*6P)
8P	1/2" NPTF	(B10-2-*8P)
6T	SAE-6	(B10-2-*6T)
8T	SAE-8	(B10-2-*8T)
T8T	SAE-8	(B10-2-T8T)†
6B	3/8" BSPG	(B10-2-6B)†

Code	Optional Flow Setting
Omit	Omit for no setting* Specify setting if required (LPM)

* Appropriate mid-range setting for Standard = 20 LPM

* Add "A" for aluminum, omit for steel.
 † Steel body only.

Technical Information

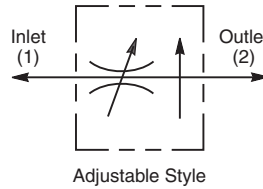
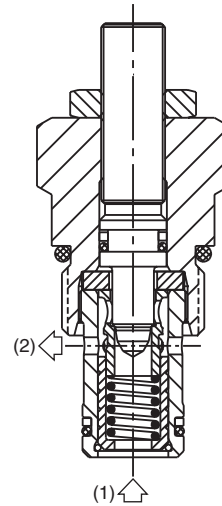
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- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical Data

General Description

Restrictive Variable Orifice Style, Pressure Compensated Flow Control Valve. For additional information see Technical Tips on pages FC1-FC4.

Features

- Minimal flow change with pressure variation
- Partial reverse flow capability
- Full adjustment from 1-40 LPM (0.3-10.6 GPM)
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated

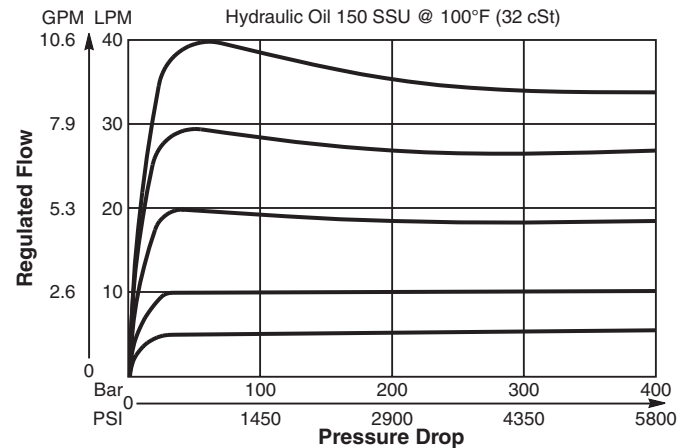


Specifications

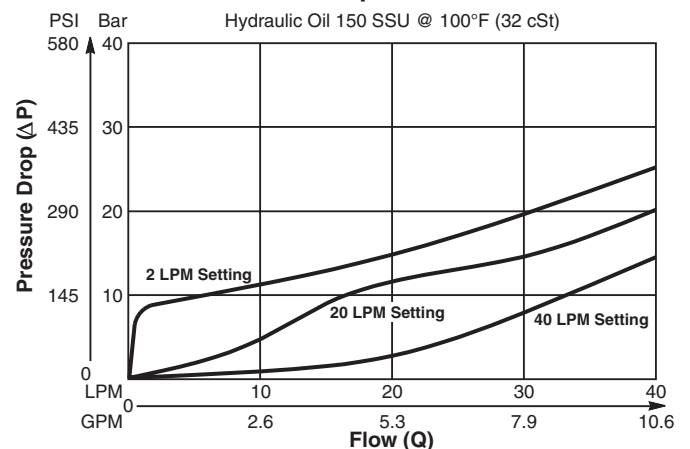
Rated Flow	40 LPM (10.6 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-40°C to +93.3°C (Nitrile) (-40°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F)
Fluid Compatibility/Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
Filtration	ISO Code 16/13, SAE Class 4 or better
Approx. Weight	.15 kg (.33 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT10-2F

Performance Curves (Through cartridge only)

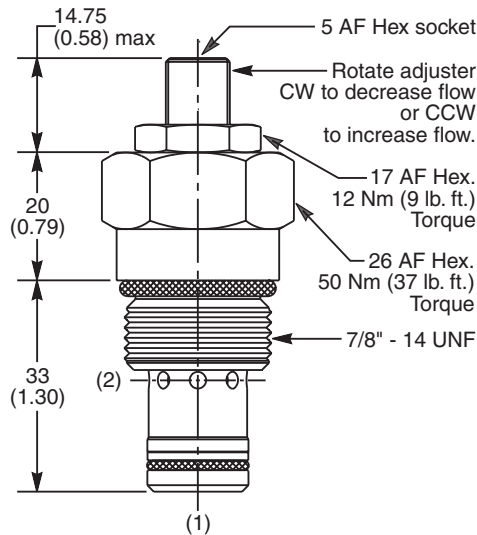
Flow Regulating Performance 2 to 1



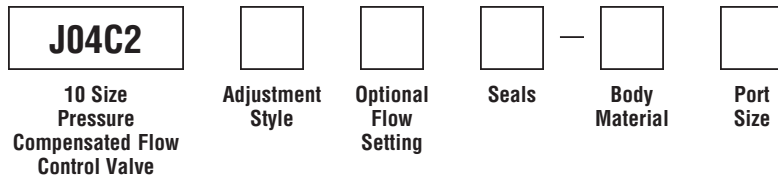
Reverse Flow Pressure Drop vs. Flow 2 to 1



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Seals / Kit. No.
N	Nitrile, Buna-N (Std.) / (SK30503N-1)
V	Fluorocarbon / (SK30503V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Port Size	Body Part No.
Omit	Cartridge Only	
4P	1/4" NPTF	(B10-2-*4P)
6P	3/8" NPTF	(B10-2-*6P)
8P	1/2" NPTF	(B10-2-*8P)
6T	SAE-6	(B10-2-*6T)
8T	SAE-8	(B10-2-*8T)
T8T	SAE-8	(B10-2-T8T)†
6B	3/8" BSPG	(B10-2-6B)†

Code	Optional Flow Setting
Omit	Omit for no setting* Specify setting if required (LPM)

* Appropriate mid-range setting for Standard = 20 LPM

* Add "A" for aluminum, omit for steel.
 † Steel body only.

Technical Information

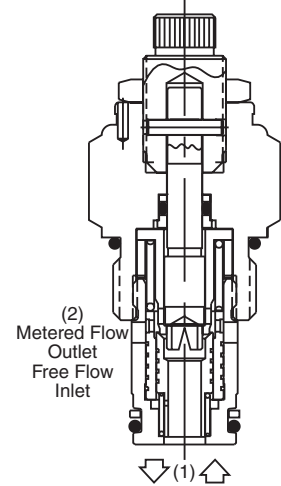
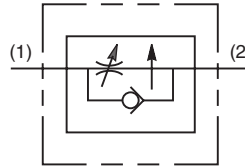
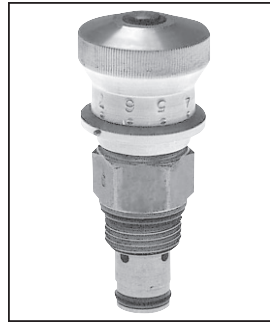
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- FC Flow Controls
- PC Pressure Controls
- LE Logic Elements
- DC Directional Controls
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- SV Solenoid Valves
- PV Proportional Valves
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General Description

Fully Adjustable, Pressure Compensated Flow Control Valve. For additional information see Technical Tips on pages FC1-FC4.

Features

- Fully adjustable from 0.75 LPM (0.2 GPM) to 20.6 LPM (5.5 GPM)
- Hardened, precision ground parts for durability
- All external parts are finished in yellow zinc dichromate. This enables them to withstand a 200 hour salt spray test.
- Compact size for reduced space requirements

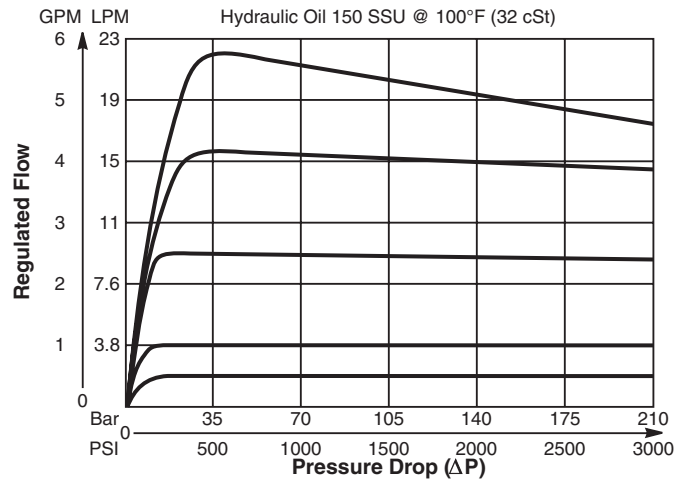


Specifications

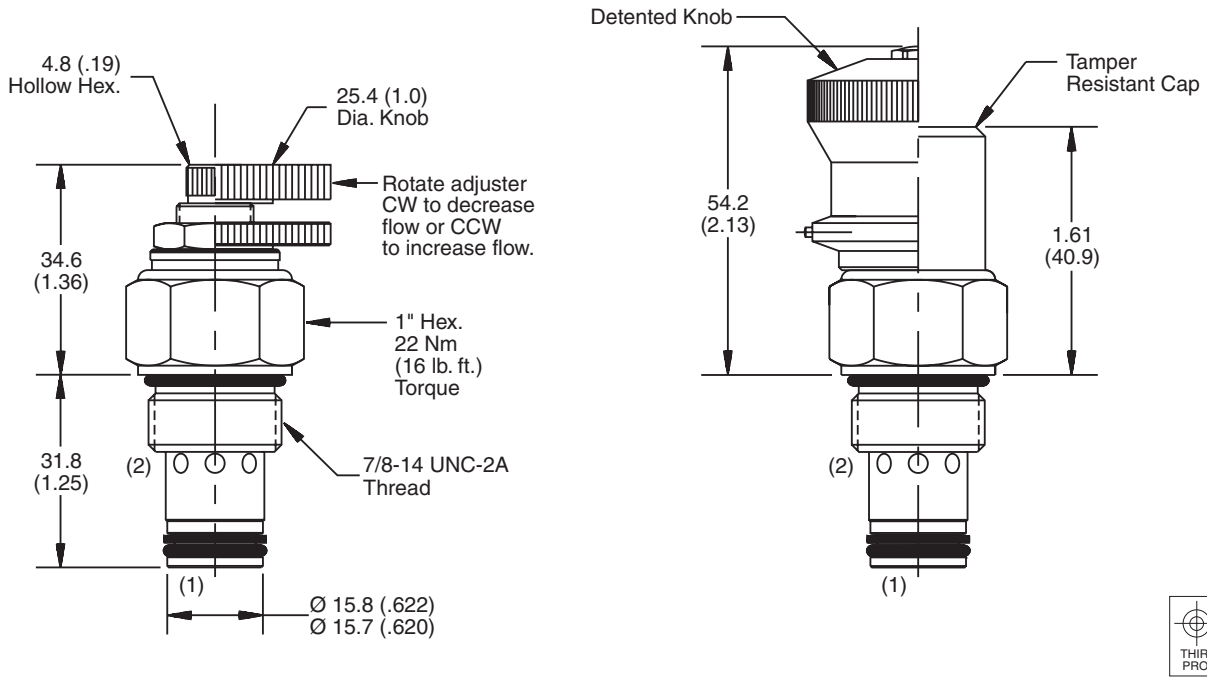
Rated Flow	0.75 LPM (0.2 GPM) 20.6 LPM (5.5 GPM)
Maximum Inlet Pressure	210 Bar (3000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-40°C to +93.3°C (Nitrile) (-40°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F)
Fluid Compatibility/ Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
Filtration	ISO Code 16/13, SAE Class 4 or better
Approx. Weight	.23 kg (0.5 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT10-2F

Performance Curves

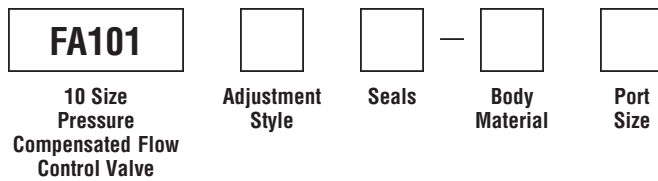
Regulated Flow vs. Pressure Drop
(Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style
D	Detented Knob
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

Code	Seals / Kit. No.
Omit	Nitrile / (SK10-2N)
V	Fluorocarbon / (SK10-2V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Port Size	Body Part No.
Omit	Cartridge Only	
4P	1/4" NPTF	(B10-2-*4P)
6P	3/8" NPTF	(B10-2-*6P)
8P	1/2" NPTF	(B10-2-*8P)
6T	SAE-6	(B10-2-*6T)
8T	SAE-8	(B10-2-*8T)
T8T	SAE-8	(B10-2-T8T)†
6B	3/8" BSPG	(B10-2-*6B)

* Add "A" for aluminum, omit for steel.
 † Steel body only.

Technical Information

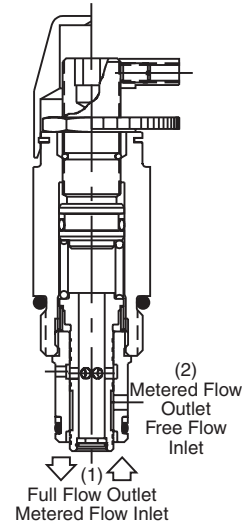
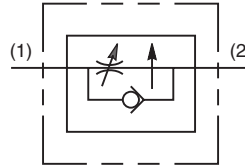
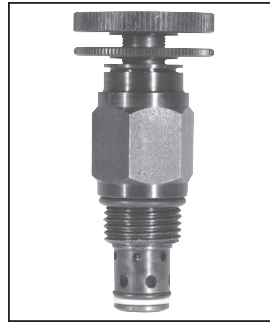
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General Description

Pressure Compensated Flow Control. For additional information see Technical Tips on pages FC1-FC4.

Features

- Hardened, precision ground parts for durability
- Compact size for reduced space requirements
- Free flow in reverse condition
- All external parts zinc plated

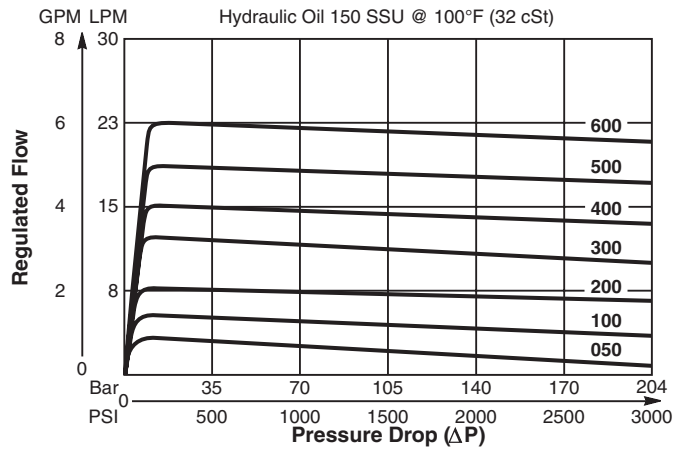


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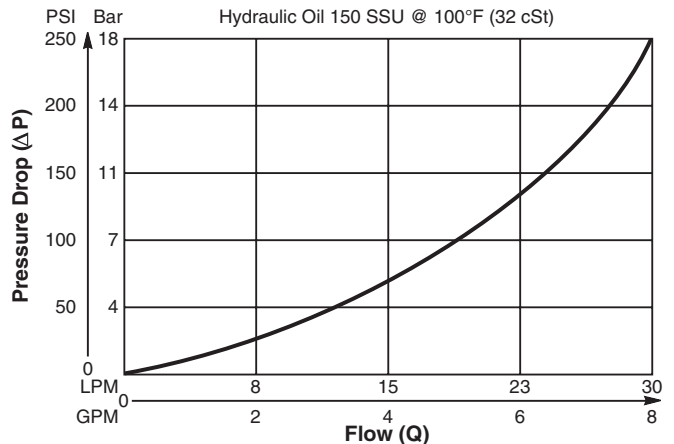
Rated Flow	20.6 LPM (5.5 GPM)
Maximum Inlet Pressure	210 Bar (3000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-40°C to +93.3°C (Nitrile) (-40°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F)
Fluid Compatibility/ Viscosity	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
Filtration	ISO Code 16/13, SAE Class 4 or better
Approx. Weight	.23 kg (0.5 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT10-2F

Performance Curves

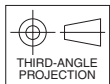
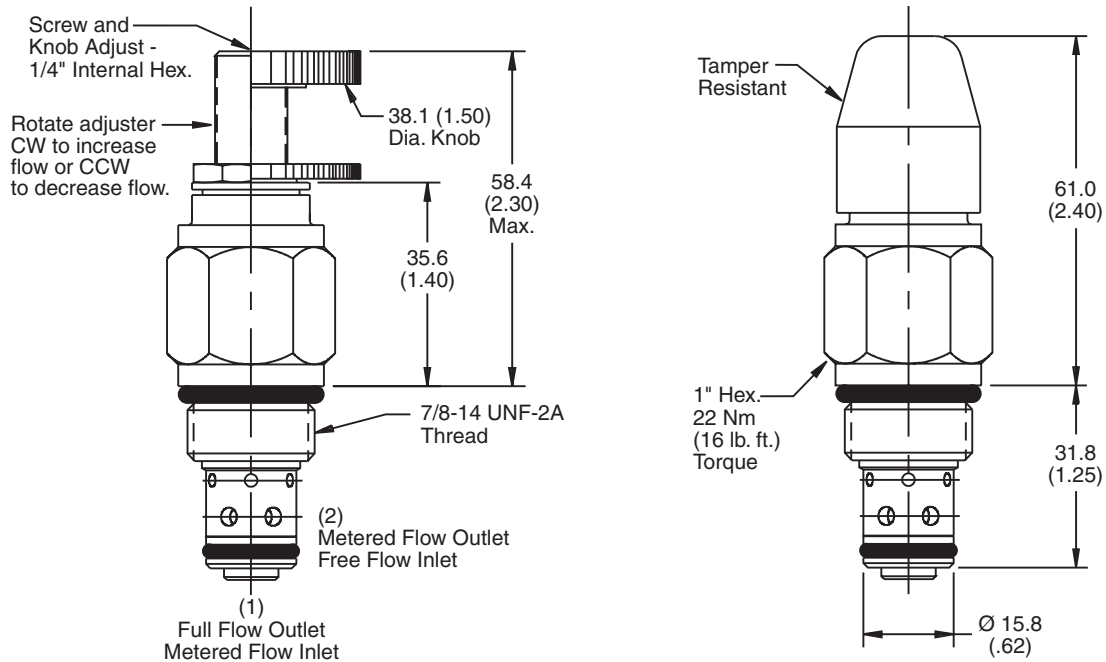
Regulated Flow vs. Pressure Drop
(Through cartridge only)



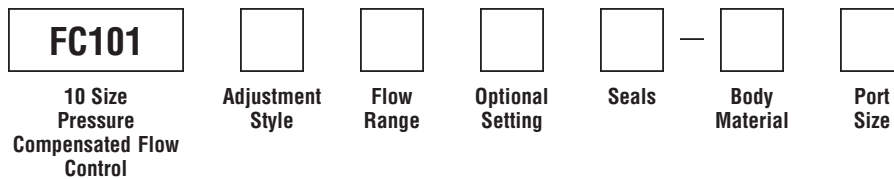
Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style
K	Knob Adjust (840208K)
S	Screw Adjust
T	Tamper Resistant Cap (717783)

Code	Optional Setting
	Flow setting specified in .38 LPM (.1 GPM) increments other than standard

Code	Body Material
Omit	Steel
A	Aluminum

Code	Flow Range and Standard Setting
050	1.1-3.8 LPM (.30-1.0 GPM) (1.9 LPM (.5 GPM) @ 69 Bar (1000 PSI) ΔP)
100	2.8-8.3 LPM (.75-2.2 GPM) (3.8 LPM (1 GPM) @ 69 Bar (1000 PSI) ΔP)
300	7.5-16.9 LPM (2.0-4.5 GPM) (11.3 LPM (3 GPM) @ 69 Bar (1000 PSI) ΔP)
600	15-30 LPM (4.0-8.0 GPM) (22.5 LPM (6 GPM) @ 69 Bar (1000 PSI) ΔP)

Code	Seals / Kit. No.
Omit	Nitrile / (SK10-2N)
V	Fluorocarbon / (SK10-2V)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
4P	1/4" NPTF	(B10-2-*4P)
6P	3/8" NPTF	(B10-2-*6P)
8P	1/2" NPTF	(B10-2-*8P)
6T	SAE-6	(B10-2-*6T)
8T	SAE-8	(B10-2-*8T)
T8T	SAE-8	(B10-2-T8T)†
6B	3/8" BSPG	(B10-2-6B)†

* Add "A" for aluminum, omit for steel.
 † Steel body only.