

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

2 Way, Normally Closed, Proportional Poppet Valve. For additional information see Technical Tips on pages PV1-PV6.

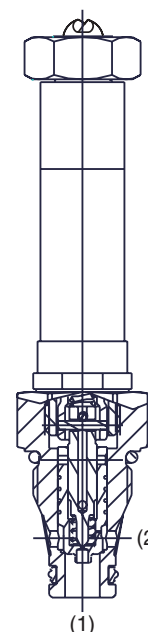
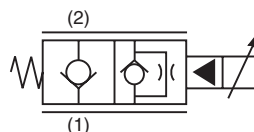
Features

- One piece cartridge housing ensures internal concentricity
- Adjusted at factory for low variation
- Coil: Waterproof, hermetically sealed, requires no O’Rings; Symmetrical coil can be reversed without affecting performance.
- Industry common cavity
- External surfaces plated
- Excellent low flow metering capability

Specifications

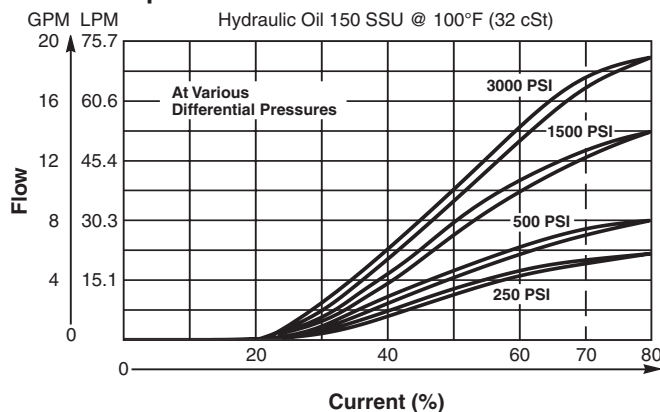
All performance data with CAS coil.
Maximum current, 70% recommended.
Hydraulic oil 150 SSU @ 40°C (32 cSt)

Rated Flow @ 70% of Full Current at ΔP 34.5 Bar (500 PSI)	27 LPM (7 GPM)
Maximum Input Pressure at Port 2	210 Bar (3000 PSI)
Minimum Pressure Differential	21 Bar (300 PSI)
Maximum Internal Leakage	5 drops/min. (.33 cc/min.) @ 210 Bar (3000 PSI)
Hysteresis @ 100 Hz PWM	<15% NOTE: Current regulated PWM recommended
Cartridge Material	All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C (“D”-Ring) (-50°F to +200°F) -34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°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 18/16/13, SAE Class 4
Approx. Weight	.17 kg (.38 lbs.)
Cavity	C08-2 (See BC Section for more details)

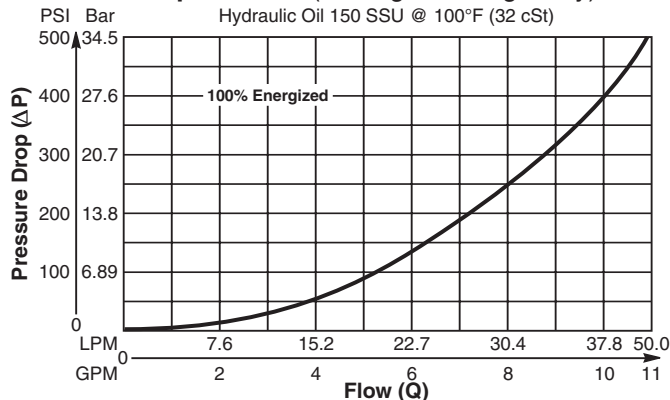


Performance Curves

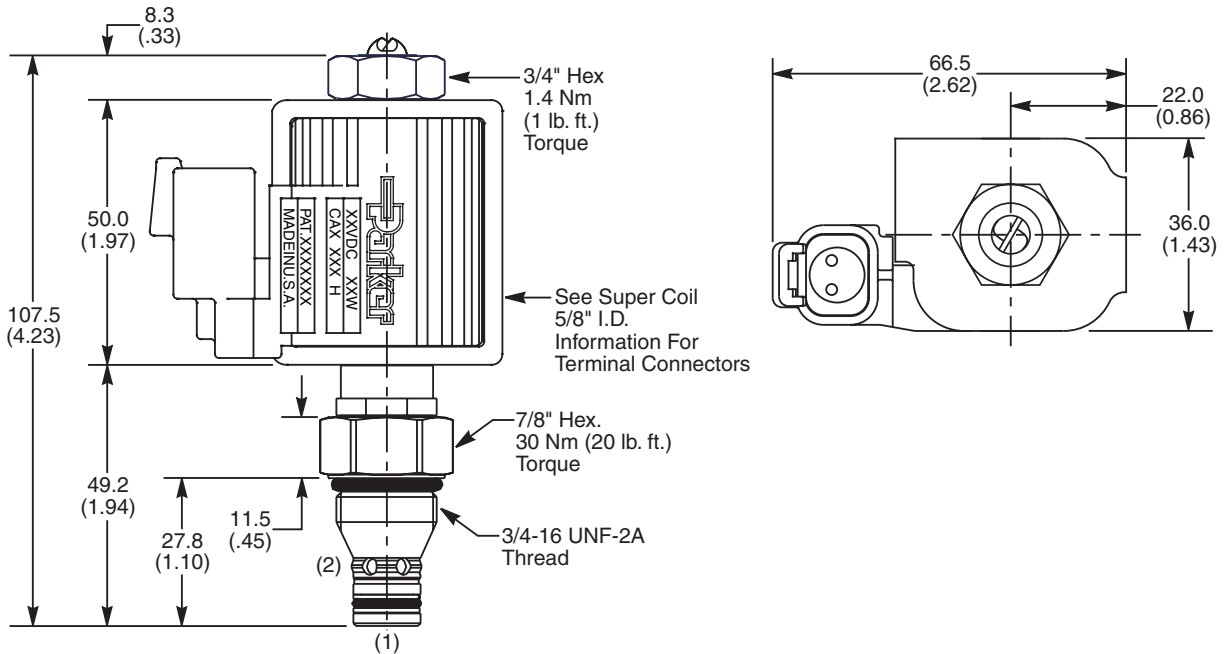
Flow vs. Input Current



Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information

FAP081 **C** -

08 Size Proportional Valve Style Seals Coil Type Coil Voltage Coil Termination Body Material Port Size

Code	Style
C	Normally Closed

Code	Coil Type
Omit	Without Coil
SS	Super Coil - 18 Watts

Code	Coil Termination
Omit	Without Coil
D	DIN Plug Face
A	Amp Jr. Timer*
S	Dual Spade*
W	Dual Screw*
L	Dual Lead Wire*
H	Molded Deutsch*
PF	Dual Lead Wire with Packard Female Weather Pack Connector 1201 5792*
PM	Dual Lead Wire with Packard Male Weather Pack Connector 1201 0973*

Code	Body Material
Omit	Steel
A	Aluminum

Code	Seals / Kit No.
Omit	"D"-Ring / (SK08-2)
N	Nitrile / Buna-N (Std.) (SK08-2N)
V	Fluorocarbon / (SK08-2V)

Code	Coil Voltage
Omit	Without Coil
D012	12 VDC
D024	24 VDC

Code	Port Size	Body Part No.
Omit	Cartridge Only	
4T	SAE-4	(B08-2-*4T)
6T	SAE-6	(B08-2-*6T)

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

See Super Coil 5/8" I.D.
*DC Only



- 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

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

2 Way, Normally Closed, Proportional Poppet Valve. For additional information see Technical Tips on pages PV1-PV6.

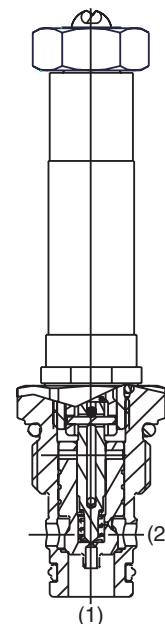
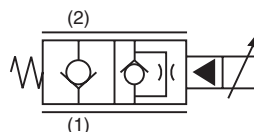
Features

- One piece cartridge housing ensures internal concentricity
- Adjusted at factory for low variation
- Coil: Waterproof, hermetically sealed, requires no O'Rings; Symmetrical coil can be reversed without affecting performance.
- Industry common cavity
- External surfaces plated
- Excellent low flow metering capability

Specifications

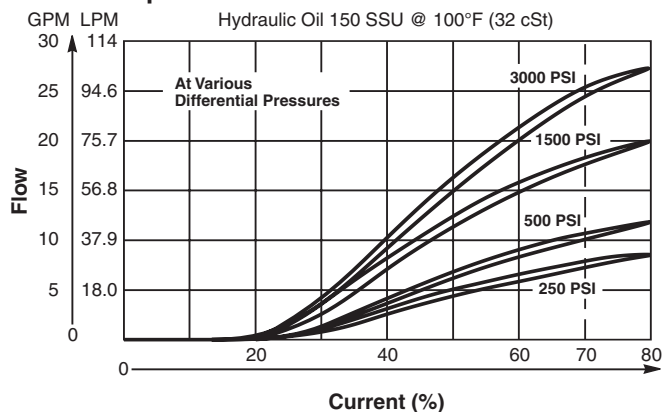
All performance data with CAS coil.
Maximum current, 70% recommended.
Hydraulic oil 150 SSU @ 40°C (32 cSt)

Rated Flow @ 70% of Full Current at ΔP 34.5 Bar (500 PSI)	40 LPM (10.5 GPM)
Maximum Input Pressure at Port 2	210 Bar (3000 PSI)
Minimum Pressure Differential	21 Bar (300 PSI)
Maximum Internal Leakage	5 drops/min. (.33 cc/min.) @ 210 Bar (3000 PSI)
Hysteresis @ 100 Hz PWM	<15% NOTE: Current regulated PWM recommended
Cartridge Material	All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°F to +200°F) -34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°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 18/16/13, SAE Class 4
Approx. Weight	.19 kg (.42 lbs.)
Cavity	C10-2 (See BC Section for more details)

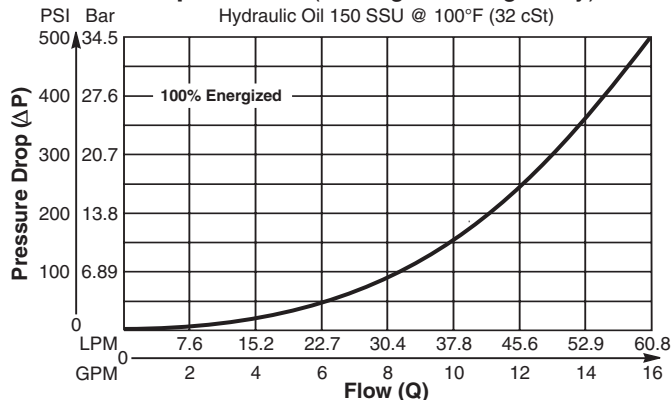


Performance Curves

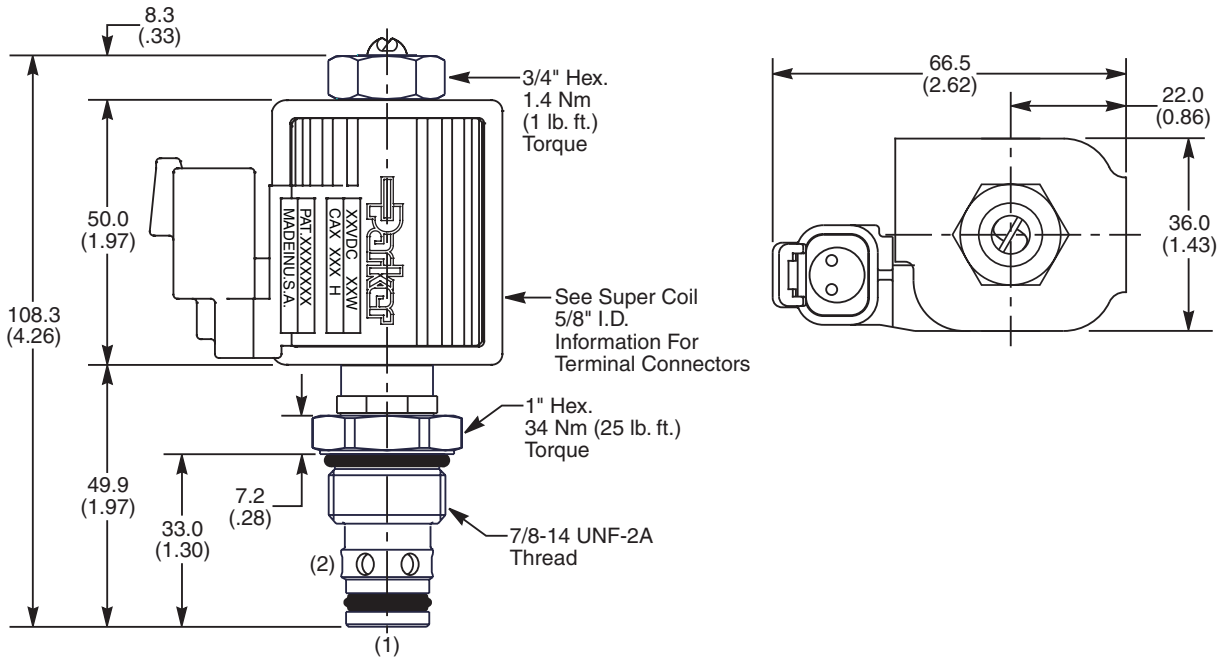
Flow vs. Input Current



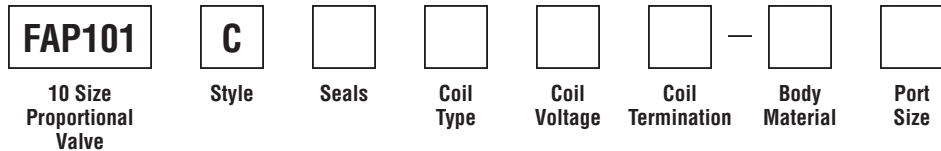
Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Style
C	Normally Closed

Code	Coil Type
Omit	Without Coil
SS	Super Coil - 18 Watts

Code	Coil Termination
Omit	Without Coil
D	DIN Plug Face
A	Amp Jr. Timer*
S	Dual Spade*
W	Dual Screw*
L	Dual Lead Wire*
H	Molded Deutsch*
PF	Dual Lead Wire with Packard Female Weather Pack Connector 1201 5792*
PM	Dual Lead Wire with Packard Male Weather Pack Connector 1201 0973*

Code	Body Material
Omit	Steel
A	Aluminum

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-2)
N	Nitrile / Buna-N (Std.) (SK10-2N)
V	Fluorocarbon / (SK10-2V)

Code	Coil Voltage
Omit	Without Coil
D012	12 VDC
D024	24 VDC

Code	Port Size	Body Part No.
Omit	Cartridge Only	
6T	SAE-6	(B10-2-*6T)
8T	SAE-8	(B10-2-*8T)

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

See Super Coil 5/8" I.D.
*DC Only

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

2 Way, Normally Closed, Proportional Poppet Valve.
For additional information see Technical Tips on pages PV1-PV6.

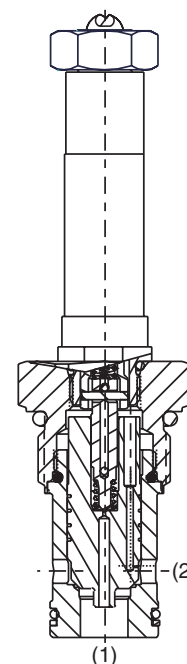
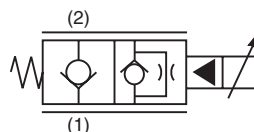
Features

- Adjusted at factory for low variation
- Coil: Waterproof, hermetically sealed, requires no O'Rings; Symmetrical coil can be reversed without affecting performance.
- Industry common cavity
- External surfaces plated
- Excellent low flow metering capability

Specifications

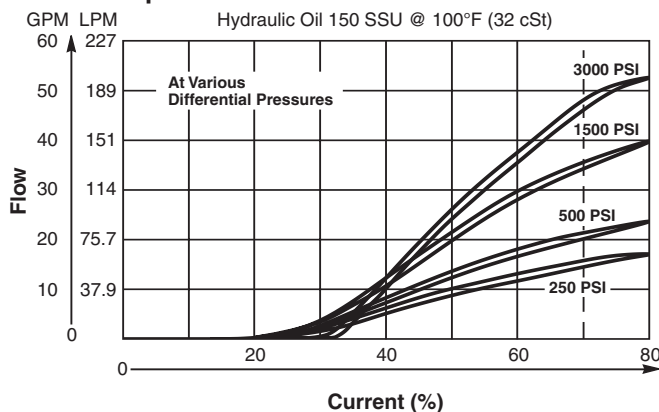
All performance data with CAS coil.
Maximum current, 70% recommended.
Hydraulic oil 150 SSU @ 40°C (32 cSt)

Rated Flow @ 70% of Full Current at ΔP 34.5 Bar (500 PSI)	81.5 LPM (21.5 GPM)
Maximum Input Pressure at Port 2	210 Bar (3000 PSI)
Minimum Pressure Differential	21 Bar (300 PSI)
Maximum Internal Leakage	5 drops/min. (.33 cc/min.) @ 210 Bar (3000 PSI)
Hysteresis @ 100 Hz PWM	<15% NOTE: Current regulated PWM recommended
Cartridge Material	All operating parts hardened steel.
Operating Temp. Range/Seals	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°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 18/16/13, SAE Class 4
Approx. Weight	.30 kg (.65 lbs.)
Cavity	C12-2F (See BC Section for more details)

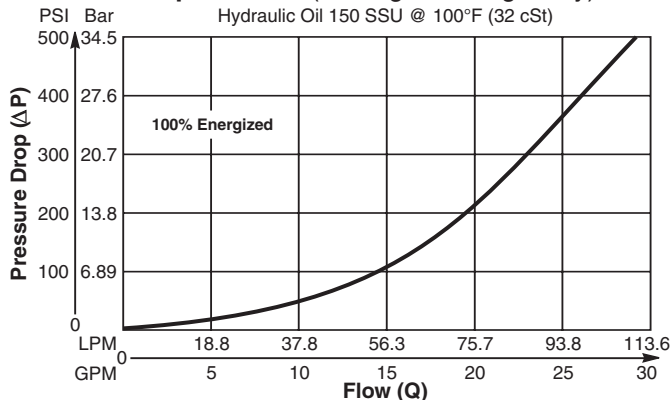


Performance Curves

Flow vs. Input Current



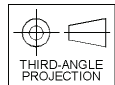
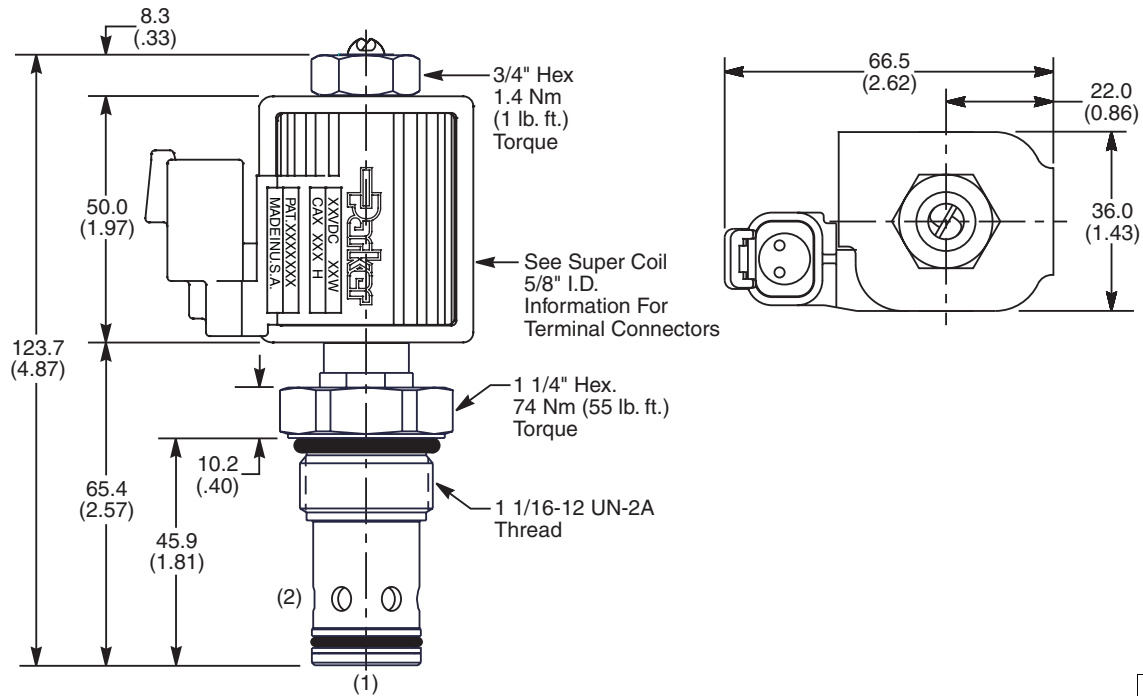
Pressure Drop vs. Flow (Through cartridge only)



Technical Information

Proportional Poppet Valve Series FAP121C

Dimensions Millimeters (Inches)



Ordering Information

FAP121 **C**

12 Size Proportional Valve Style Seals Coil Type Coil Voltage Coil Termination Body Material Port Size

Code	Style
C	Normally Closed

Code	Coil Type
Omit	Without Coil
SS	Super Coil - 18 Watts

Code	Coil Termination
Omit	Without Coil
D	DIN Plug Face
A	Amp Jr. Timer*
S	Dual Spade*
W	Dual Screw*
L	Dual Lead Wire*
H	Molded Deutsch*
PF	Dual Lead Wire with Packard Female Weather Pack Connector 1201 5792*
PM	Dual Lead Wire with Packard Male Weather Pack Connector 1201 0973*

Code	Body Material
Omit	Steel
A	Aluminum

Code	Seals / Kit No.
N	Nitrile / Buna-N (Std.) (SK12-2)
V	Fluorocarbon / (SK12-2V)

Code	Coil Voltage
Omit	Without Coil
D012	12 VDC
D024	24 VDC

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12T	SAE-12	(B12-2F-*12T)

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

See Super Coil 5/8" I.D.
*DC Only



- 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

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

2 Way, Normally Closed, Proportional Poppet Valve.
For additional information see Technical Tips on pages PV1-PV6.

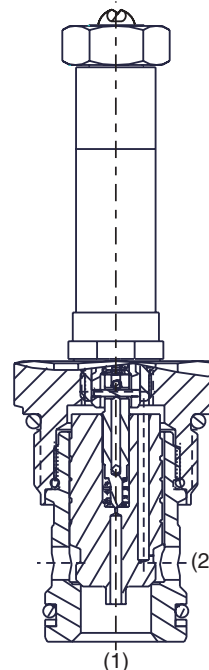
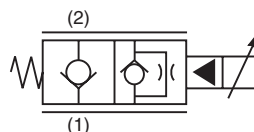
Features

- Adjusted at factory for low variation
- Coil: Waterproof, hermetically sealed, requires no O'Rings; Symmetrical coil can be reversed without affecting performance.
- Industry common cavity
- External surfaces plated
- Excellent low flow metering capability

Specifications

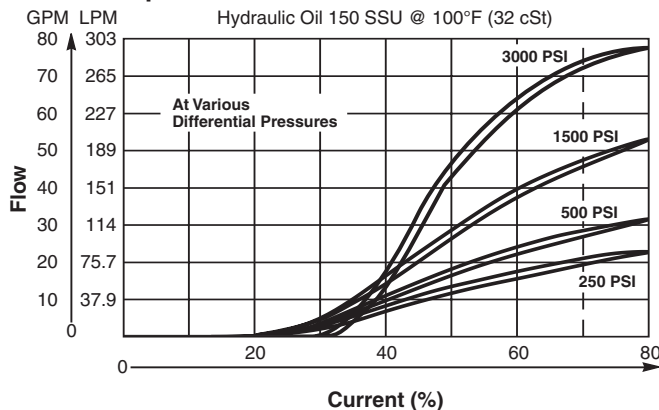
All performance data with CAS coil.
Maximum current, 70% recommended.
Hydraulic oil 150 SSU @ 40°C (32 cSt)

Rated Flow @ 70% of Full Current at ΔP 34.5 Bar (500 PSI)	106 LPM (28 GPM)
Maximum Input Pressure at Port 2	210 Bar (3000 PSI)
Minimum Pressure Differential	21 Bar (300 PSI)
Maximum Internal Leakage	5 drops/min. (.33 cc/min.) @ 210 Bar (3000 PSI)
Hysteresis @ 100 Hz PWM	<15% NOTE: Current regulated PWM recommended
Cartridge Material	All operating parts hardened steel.
Operating Temp. Range/Seals	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°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 18/16/13, SAE Class 4
Approx. Weight	.40 kg (.88 lbs.)
Cavity	C16-2 (See BC Section for more details)

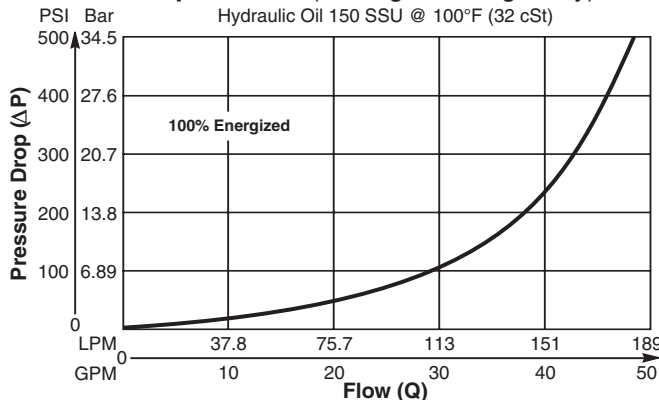


Performance Curves

Flow vs. Input Current



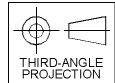
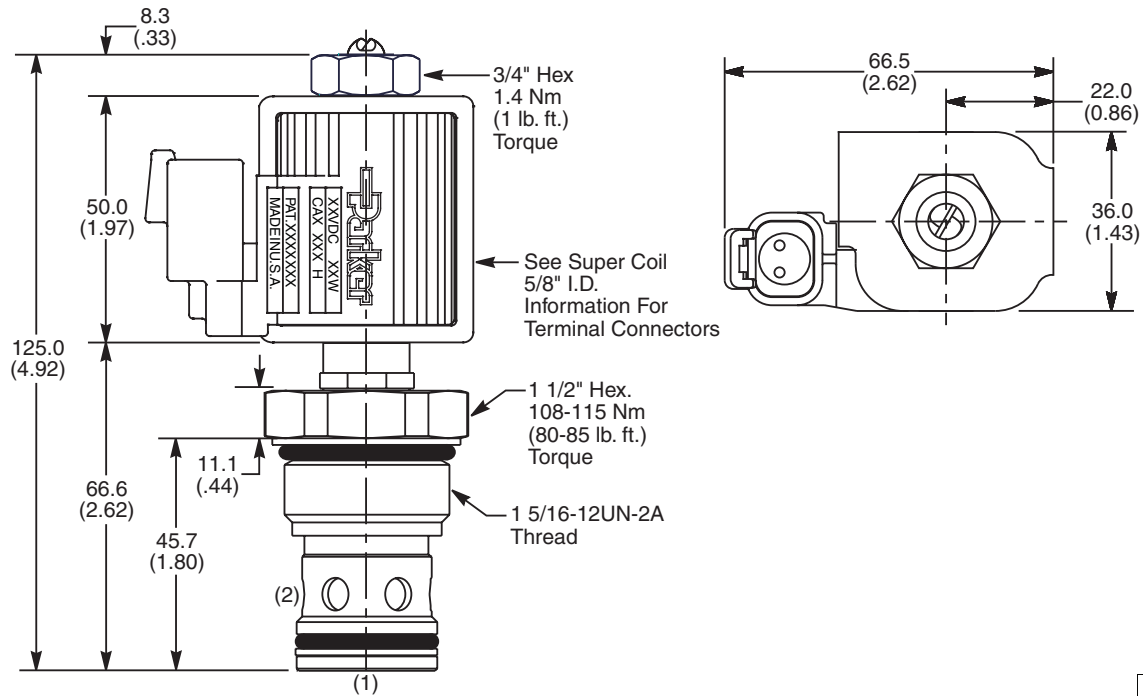
Pressure Drop vs. Flow (Through cartridge only)



Technical Information

Proportional Poppet Valve Series FAP161C

Dimensions Millimeters (Inches)



Ordering Information

FAP161	C						
16 Size Proportional Valve	Style	Seals	Coil Type	Coil Voltage	Coil Termination	Body Material	Port Size

Code	Style
C	Normally Closed

Code	Coil Type
Omit	Without Coil
SS	Super Coil - 18 Watts

Code	Coil Termination
Omit	Without Coil
D	DIN Plug Face
A	Amp Jr. Timer*
S	Dual Spade*
W	Dual Screw*
L	Dual Lead Wire*
H	Molded Deutsch*
PF	Dual Lead Wire with Packard Female Weather Pack Connector 1201 5792*
PM	Dual Lead Wire with Packard Male Weather Pack Connector 1201 0973*

Code	Body Material
Omit	Steel
A	Aluminum

Code	Seals / Kit No.
N	Nitrile / Buna-N (Std.) (SK16-2)
V	Fluorocarbon / (SK16-2V)

Code	Coil Voltage
Omit	Without Coil
D012	12 VDC
D024	24 VDC

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12T	SAE-12	(B16-2-*12T)
16T	SAE-16	(B16-2-*16T)

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

See Super Coil 5/8" I.D.
*DC Only



- 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

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

2 Way, Normally Open, Proportional Poppet Valve. For additional information see Technical Tips on pages PV1-PV6.

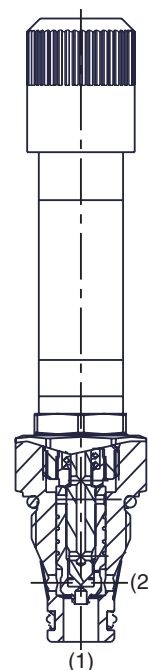
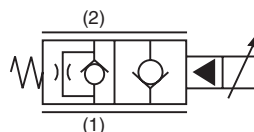
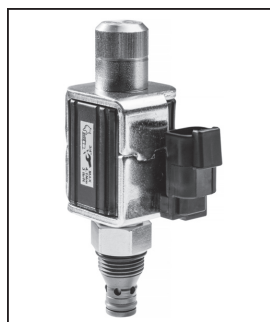
Features

- One piece cartridge housing ensures internal concentricity
- Adjusted at factory for low variation
- Coil: Waterproof, hermetically sealed, requires no O’Rings; Symmetrical coil can be reversed without affecting performance.
- Industry common cavity
- External surfaces plated
- Excellent low flow metering capability

Specifications

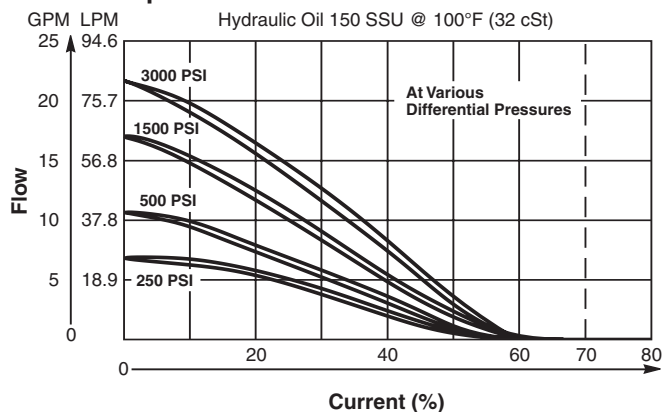
All performance data with CAS coil.
Maximum current, 70% recommended.
Hydraulic oil 150 SSU @ 40°C (32 cSt)

Rated Flow De-Energized at ΔP 34.5 Bar (500 PSI)	40 LPM (10.5 GPM)
Maximum Input Pressure at Port 2	210 Bar (3000 PSI)
Minimum Pressure Differential	21 Bar (300 PSI)
Maximum Internal Leakage	5 drops/min. (.33 cc/min.) @ 210 Bar (3000 PSI)
Hysteresis @ 100 Hz PWM	<15% NOTE: Current regulated PWM recommended
Cartridge Material	All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C (“D”-Ring) (-50°F to +200°F) -34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°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 18/16/13, SAE Class 4
Approx. Weight	.22 kg (.48 lbs.)
Cavity	C08-2 (See BC Section for more details)

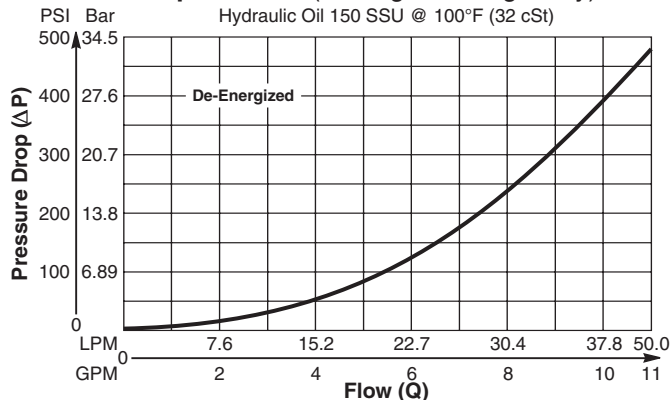


Performance Curves

Flow vs. Input Current



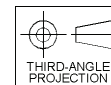
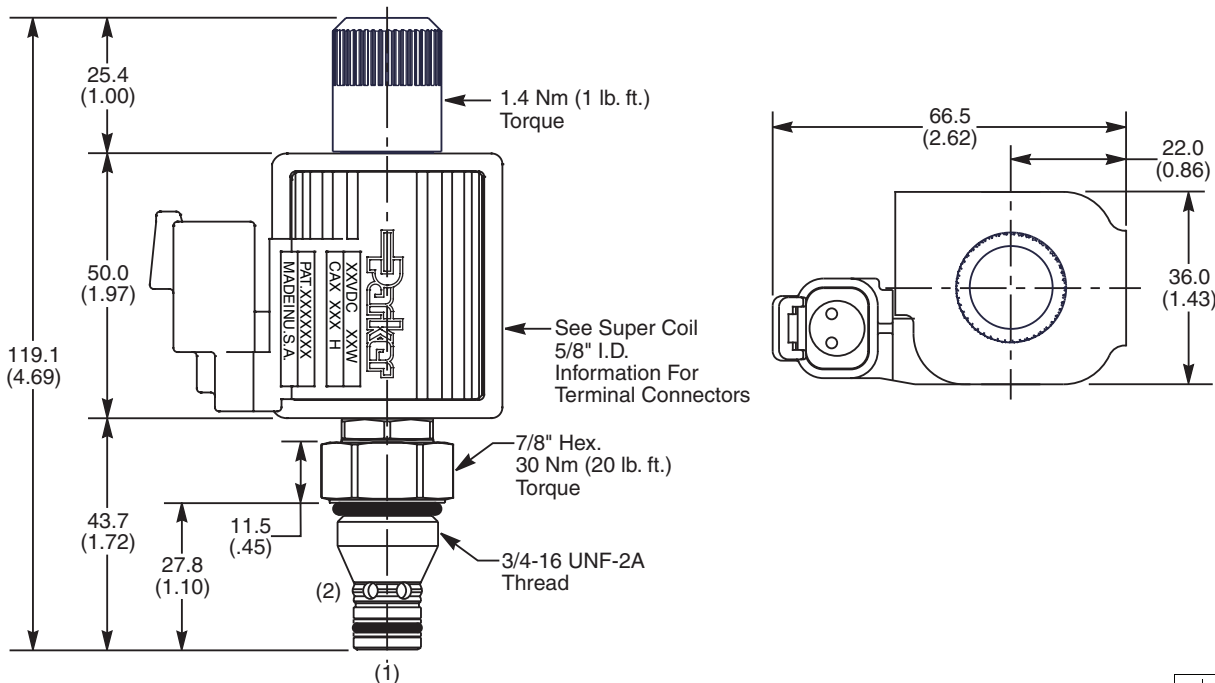
Pressure Drop vs. Flow (Through cartridge only)



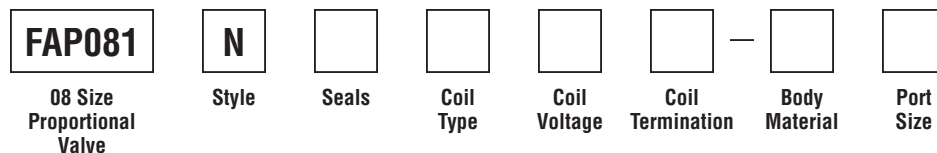
Proportional Poppet Valve Series FAP081N

Technical Information

Dimensions Millimeters (Inches)



Ordering Information



Code	Style
N	Normally Open

Code	Coil Type
Omit	Without Coil
SS	Super Coil - 18 Watts

Code	Coil Termination
Omit	Without Coil
D	DIN Plug Face
A	Amp Jr. Timer*
S	Dual Spade*
W	Dual Screw*
L	Dual Lead Wire*
H	Molded Deutsch*
PF	Dual Lead Wire with Packard Female Weather Pack Connector 1201 5792*
PM	Dual Lead Wire with Packard Male Weather Pack Connector 1201 0973*

Code	Body Material
Omit	Steel
A	Aluminum

Code	Seals / Kit No.
Omit	"D"-Ring / (SK08-2)
N	Nitrile / Buna-N (Std.) (SK08-2N)
V	Fluorocarbon / (SK08-2V)

Code	Coil Voltage
Omit	Without Coil
D012	12 VDC
D024	24 VDC

Code	Port Size	Body Part No.
Omit	Cartridge Only	
4T	SAE-4	(B08-2-*4T)
6T	SAE-6	(B08-2-*6T)

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

See Super Coil 5/8" I.D.
*DC Only



- 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

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

2 Way, Normally Open, Proportional Poppet Valve. For additional information see Technical Tips on pages PV1-PV6.

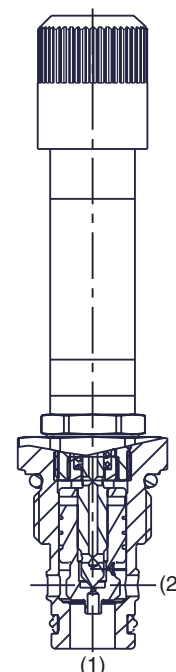
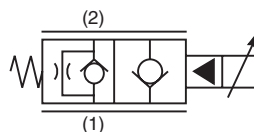
Features

- One piece cartridge housing ensures internal concentricity
- Adjusted at factory for low variation
- Coil: Waterproof, hermetically sealed, requires no O’Rings; Symmetrical coil can be reversed without affecting performance.
- Industry common cavity
- External surfaces plated
- Excellent low flow metering capability

Specifications

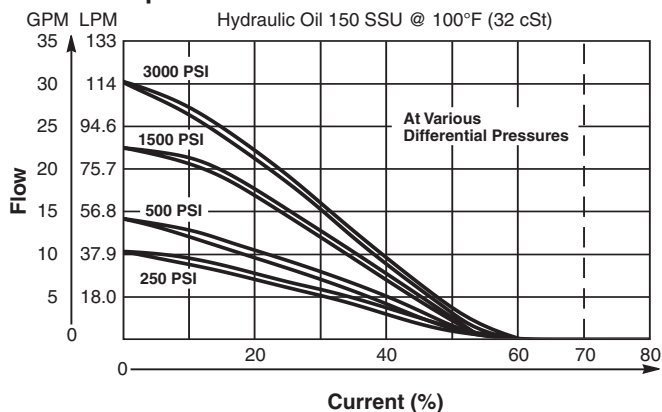
All performance data with CAS coil.
Maximum current, 70% recommended.
Hydraulic oil 150 SSU @ 40°C (32 cSt)

Rated Flow De-Energized at ΔP 34.5 Bar (500 PSI)	55 LPM (14.5 GPM)
Maximum Input Pressure at Port 2	210 Bar (3000 PSI)
Minimum Pressure Differential	21 Bar (300 PSI)
Maximum Internal Leakage	5 drops/min. (.33 cc/min.) @ 210 Bar (3000 PSI)
Hysteresis @ 100 Hz PWM	<15% NOTE: Current regulated PWM recommended
Cartridge Material	All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C (“D”-Ring) (-50°F to +200°F) -34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°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 18/16/13, SAE Class 4
Approx. Weight	.23 kg (.52 lbs.)
Cavity	C10-2 (See BC Section for more details)

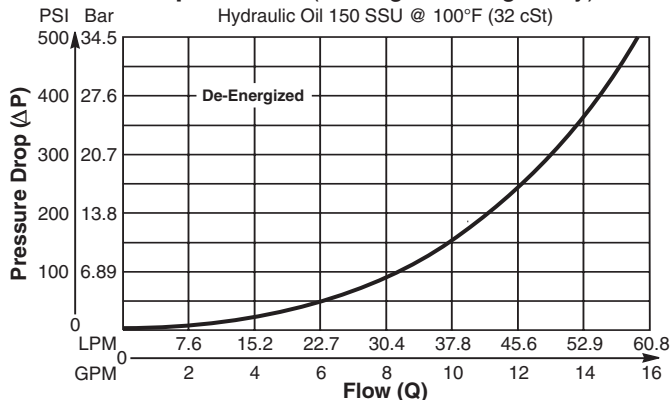


Performance Curves

Flow vs. Input Current



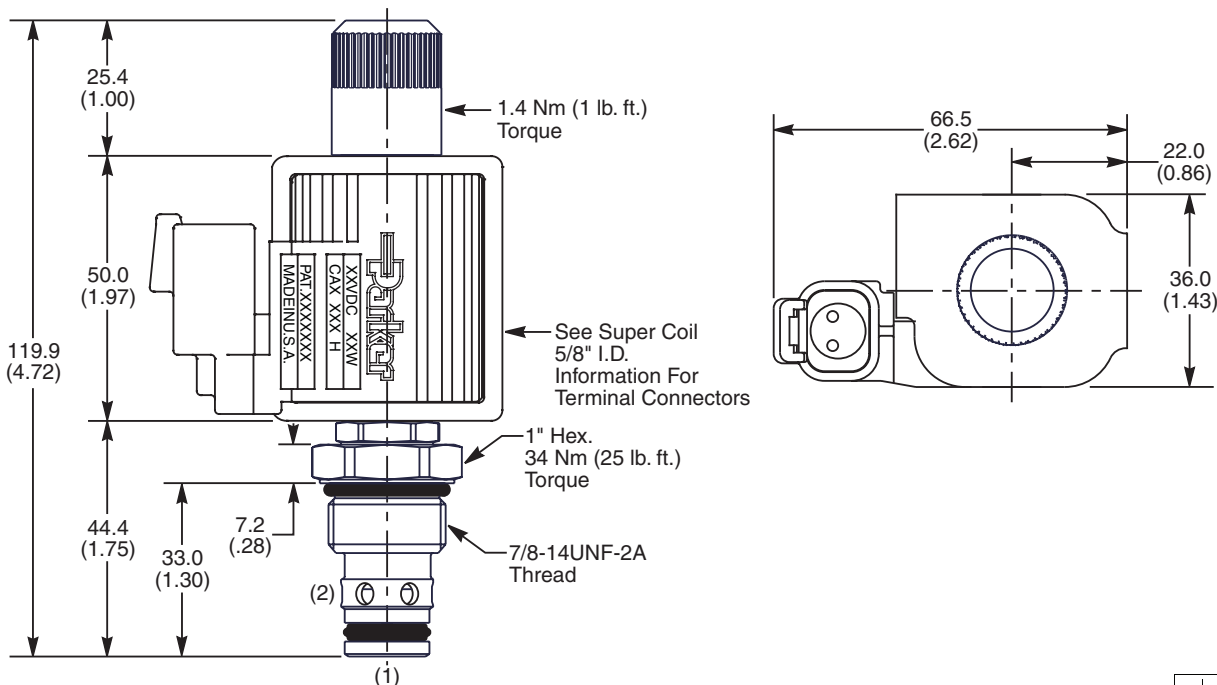
Pressure Drop vs. Flow (Through cartridge only)



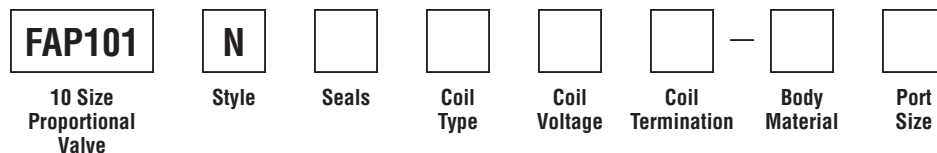
Proportional Poppet Valve Series FAP101N

Technical Information

Dimensions Millimeters (Inches)



Ordering Information



Code	Style
N	Normally Open

Code	Coil Type
Omit	Without Coil
SS	Super Coil - 18 Watts

Code	Coil Termination
Omit	Without Coil
D	DIN Plug Face
A	Amp Jr. Timer*
S	Dual Spade*
W	Dual Screw*
L	Dual Lead Wire*
H	Molded Deutsch*
PF	Dual Lead Wire with Packard Female Weather Pack Connector 1201 5792*
PM	Dual Lead Wire with Packard Male Weather Pack Connector 1201 0973*

Code	Body Material
Omit	Steel
A	Aluminum

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-2)
N	Nitrile / Buna-N (Std.) (SK10-2N)
V	Fluorocarbon / (SK10-2V)

Code	Coil Voltage
Omit	Without Coil
D012	12 VDC
D024	24 VDC

Code	Port Size	Body Part No.
Omit	Cartridge Only	
6T	SAE-6	(B10-2-*6T)
8T	SAE-8	(B10-2-*8T)

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

See Super Coil 5/8" I.D.
*DC Only



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

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

2 Way, Normally Open, Proportional Poppet Valve.
For additional information see Technical Tips on pages PV1-PV6.

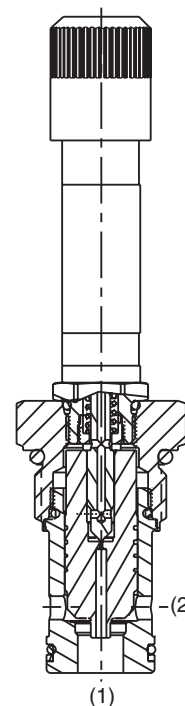
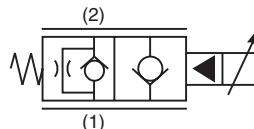
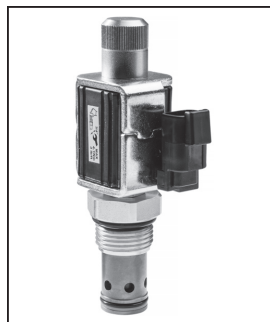
Features

- Adjusted at factory for low variation
- Coil: Waterproof, hermetically sealed, requires no O'Rings; Symmetrical coil can be reversed without affecting performance.
- Industry common cavity
- External surfaces plated
- Excellent low flow metering capability

Specifications

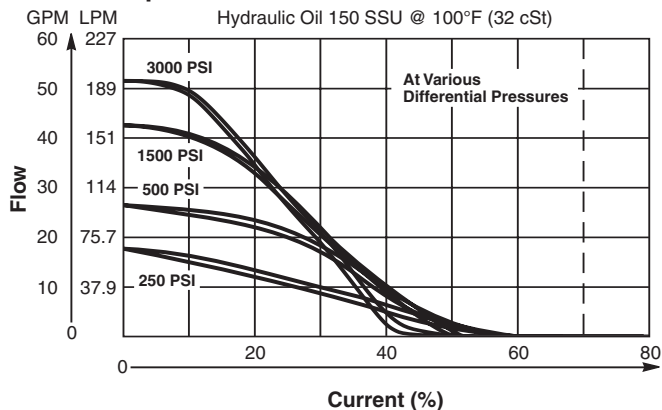
All performance data with CAS coil.
Maximum current, 70% recommended.
Hydraulic oil 150 SSU @ 40°C (32 cSt)

Rated Flow De-Energized at ΔP 34.5 Bar (500 PSI)	98.5 LPM (26 GPM)
Maximum Input Pressure at Port 2	210 Bar (3000 PSI)
Minimum Pressure Differential	21 Bar (300 PSI)
Maximum Internal Leakage	5 drops/min. (.33 cc/min.) @ 210 Bar (3000 PSI)
Hysteresis @ 100 Hz PWM	<15% NOTE: Current regulated PWM recommended
Cartridge Material	All operating parts hardened steel.
Operating Temp. Range/Seals	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°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 18/16/13, SAE Class 4
Approx. Weight	.31 kg (.68 lbs.)
Cavity	C12-2F (See BC Section for more details)

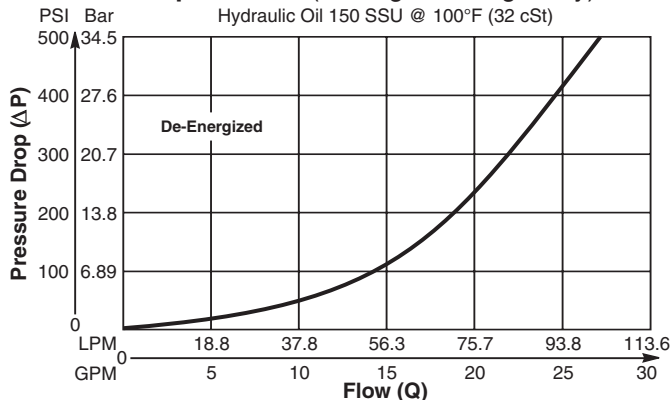


Performance Curves

Flow vs. Input Current



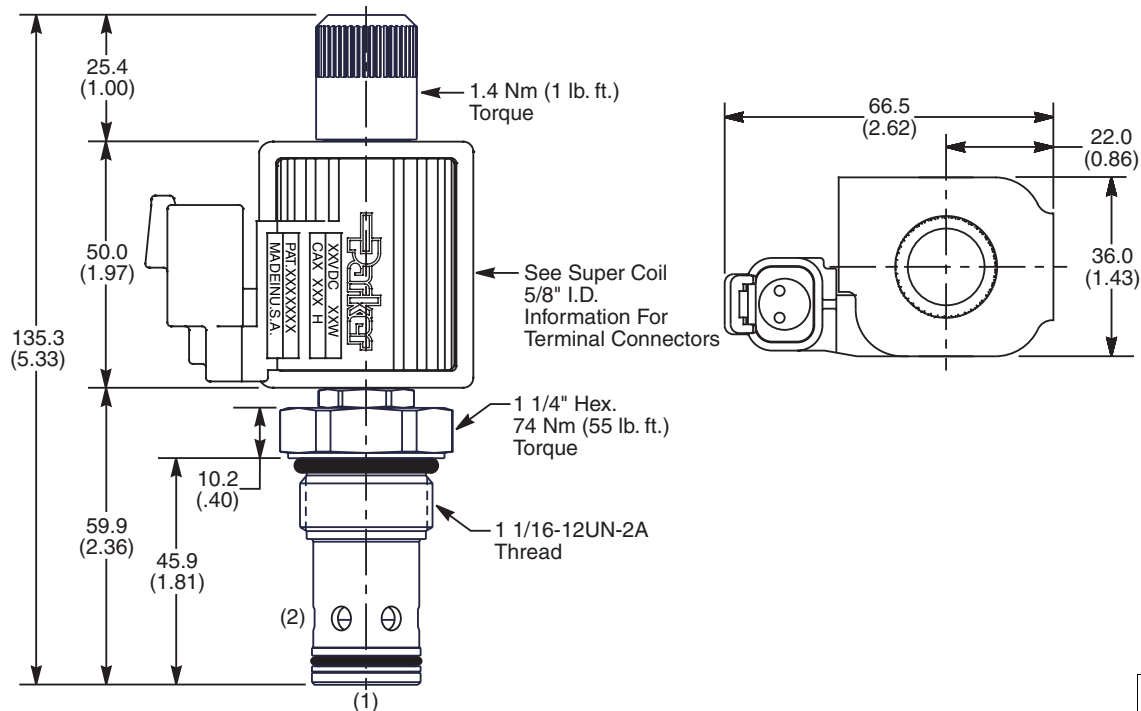
Pressure Drop vs. Flow (Through cartridge only)



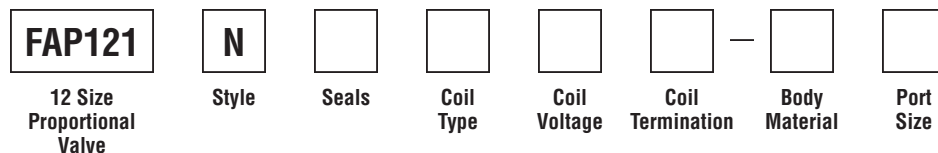
Proportional Poppet Valve Series FAP121N

Technical Information

Dimensions Millimeters (Inches)



Ordering Information



Code	Style
N	Normally Open

Code	Coil Type
Omit	Without Coil
SS	Super Coil - 18 Watts

Code	Coil Termination
Omit	Without Coil
D	DIN Plug Face
A	Amp Jr. Timer*
S	Dual Spade*
W	Dual Screw*
L	Dual Lead Wire*
H	Molded Deutsch*
PF	Dual Lead Wire with Packard Female Weather Pack Connector 1201 5792*
PM	Dual Lead Wire with Packard Male Weather Pack Connector 1201 0973*

Code	Body Material
Omit	Steel
A	Aluminum

Code	Seals / Kit No.
N	Nitrile / Buna-N (Std.) (SK12-2)
V	Fluorocarbon / (SK12-2V)

Code	Coil Voltage
Omit	Without Coil
D012	12 VDC
D024	24 VDC

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12T	SAE-12	(B12-2F-*12T)

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

See Super Coil 5/8" I.D.
*DC Only



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

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

2 Way, Normally Open, Proportional Poppet Valve.
For additional information see Technical Tips on pages PV1-PV6.

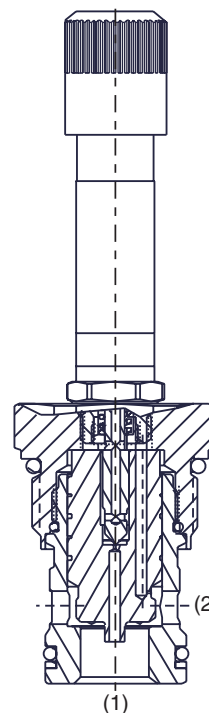
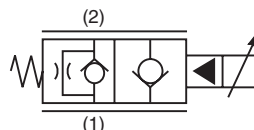
Features

- Adjusted at factory for low variation
- Coil: Waterproof, hermetically sealed, requires no O'Rings; Symmetrical coil can be reversed without affecting performance.
- Industry common cavity
- External surfaces plated
- Excellent low flow metering capability

Specifications

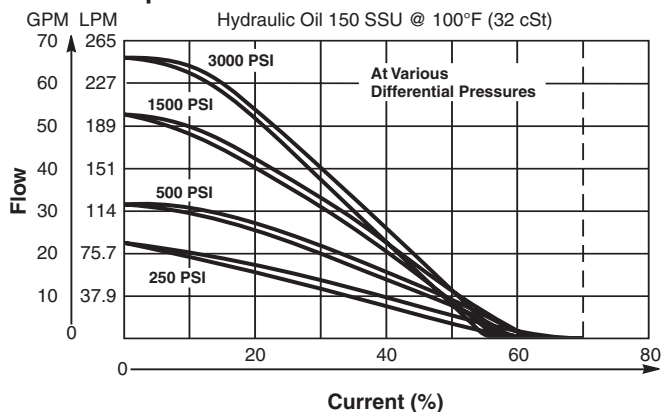
All performance data with CAS coil.
Maximum current, 70% recommended.
Hydraulic oil 150 SSU @ 40°C (32 cSt)

Rated Flow De-Energized at ΔP 34.5 Bar (500 PSI)	117 LPM (31 GPM)
Maximum Input Pressure at Port 2	210 Bar (3000 PSI)
Minimum Pressure Differential	21 Bar (300 PSI)
Maximum Internal Leakage	5 drops/min. (.33 cc/min.) @ 210 Bar (3000 PSI)
Hysteresis @ 100 Hz PWM	<15% NOTE: Current regulated PWM recommended
Cartridge Material	All operating parts hardened steel.
Operating Temp. Range/Seals	-34°C to +121°C (Nitrile) (-30°F to +250°F) -26°C to +204°C (Fluorocarbon) (-15°F to +400°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 18/16/13, SAE Class 4
Approx. Weight	.41 kg (.90 lbs.)
Cavity	C16-2 (See BC Section for more details)

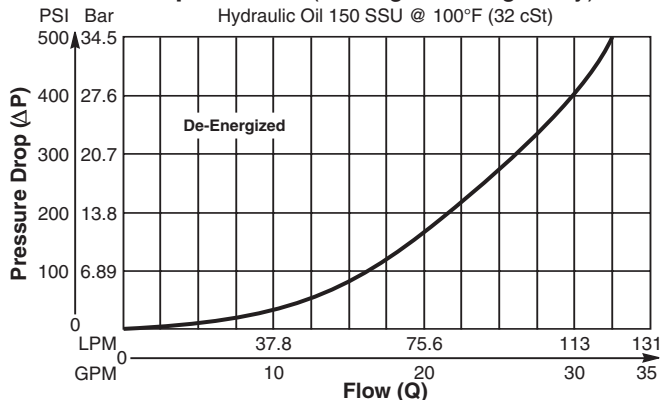


Performance Curves

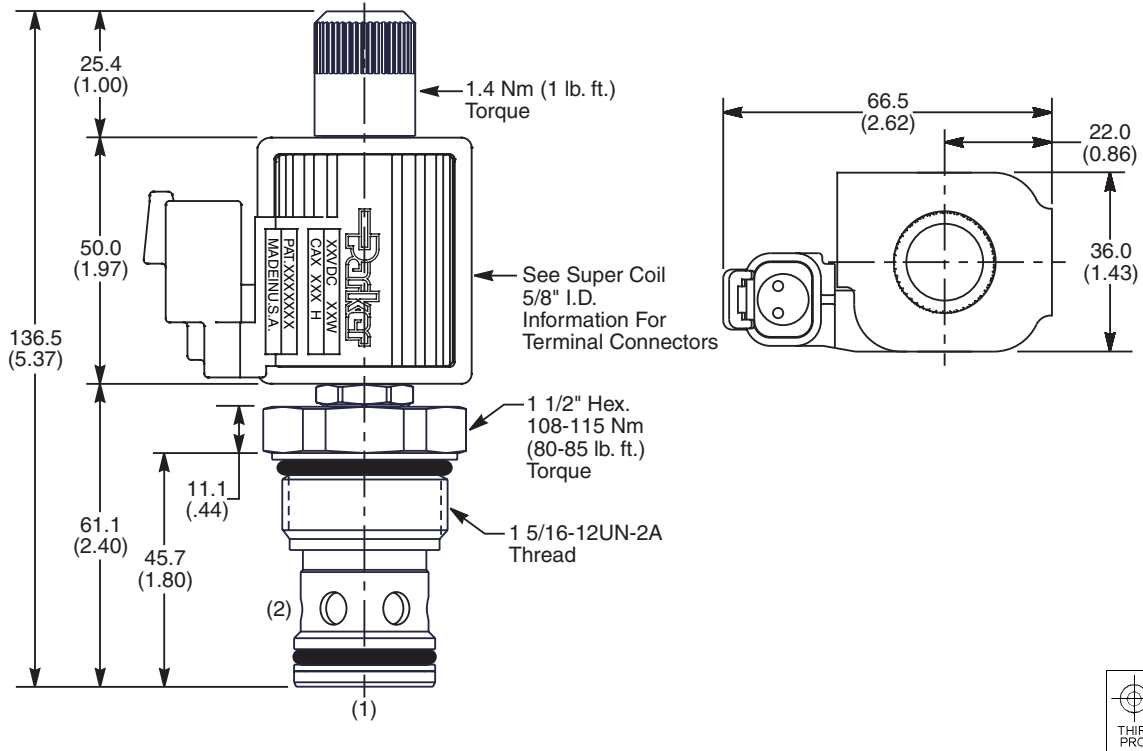
Flow vs. Input Current



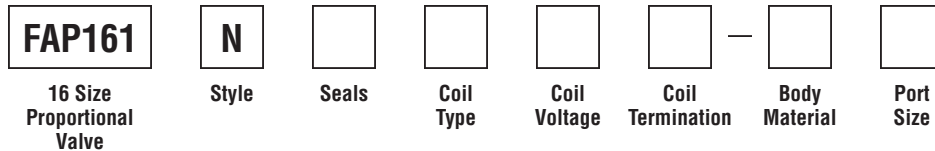
Pressure Drop vs. Flow (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Style
N	Normally Open

Code	Coil Type
Omit	Without Coil
SS	Super Coil - 18 Watts

Code	Coil Termination
Omit	Without Coil
D	DIN Plug Face
A	Amp Jr. Timer*
S	Dual Spade*
W	Dual Screw*
L	Dual Lead Wire*
H	Molded Deutsch*
PF	Dual Lead Wire with Packard Female Weather Pack Connector 1201 5792*
PM	Dual Lead Wire with Packard Male Weather Pack Connector 1201 0973*

Code	Body Material
Omit	Steel
A	Aluminum

Code	Seals / Kit No.
N	Nitrile / Buna-N (Std.) (SK16-2)
V	Fluorocarbon / (SK16-2V)

Code	Coil Voltage
Omit	Without Coil
D012	12 VDC
D024	24 VDC

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12T	SAE-12	(B16-2-*12T)
16T	SAE-16	(B16-2-*16T)

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

See Super Coil 5/8" I.D.
*DC Only