



Hydraulic Screw-in Cartridge Valves

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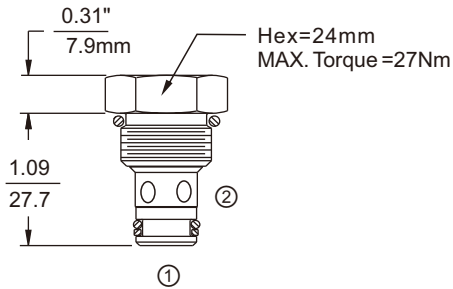
CVP08R

Check Valve, Poppet Type

Hydraulic Screw-in Cartridge Valves

OPERATION

Pressure at ① overcomes the spring-bias poppet and allows free flow from ① to ②. Flow in the opposite direction, from ② to ①, is blocked by the poppet.



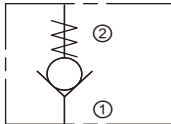
SPECIFICATIONS

Max. Operating Pressure:	250bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	2 drops/min.max. at 250bar
Temperature:	-40°F to +212°F(-40°C to +100°C)
Crack Pressures:	3.0bar
Filtration:	
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	08-2, See page I-A1

Unit

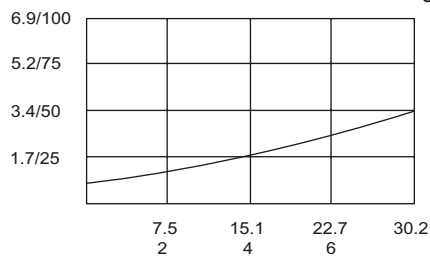
in
mm

SYMBOL



PRESSURE DROP VS.FLOW

Pressure drop (bar/psi) ① to ② (FREE FLOW)
32cSt oil @ 40°C



FLOW gpm(lpm)

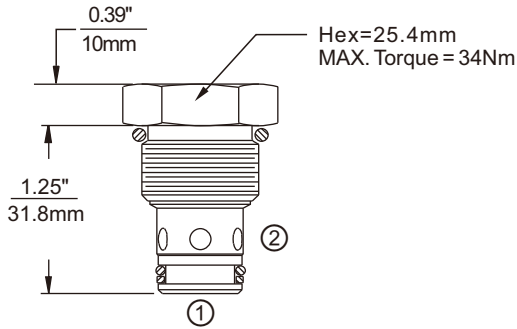
CVP10R

Check Valve, Poppet Type

Hydraulic Screw-in Cartridge Valves

OPERATION

Pressure at ① overcomes the spring-bias poppet and allows free flow from ① to ②. Flow in the opposite direction, from ② to ①, is blocked by the poppet.



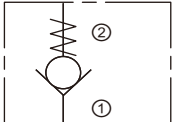
SPECIFICATIONS

Max. Operating Pressure:	250bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	2 drops/min.max. at 250bar
Temperature:	-40°F to +212°F (-40°C to +100°C)
Crack Pressures:	6.9bar
Filtration:	
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	10-2, See page I-A2

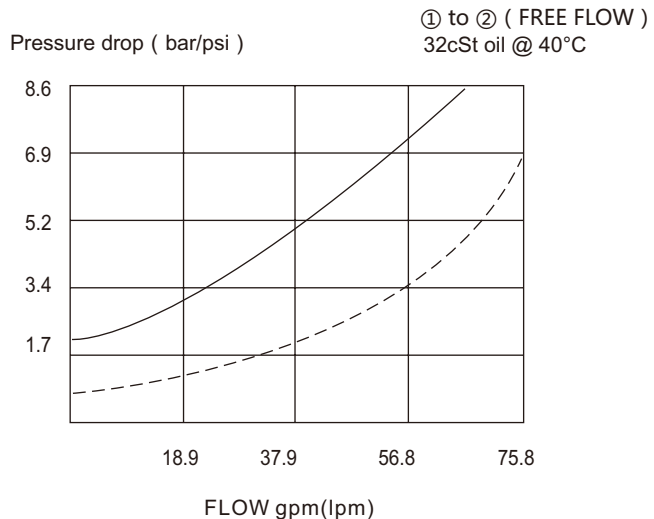
Unit

in
mm

SYMBOL



PRESSURE DROP VS.FLOW



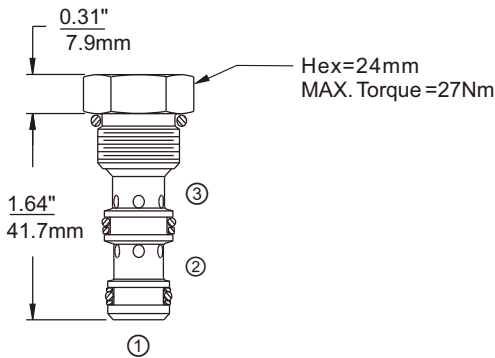
CVP0830

Check Valve, Pilot Operated

Hydraulic Screw-in Cartridge Valves

OPERATION

The valve allows flow from ② to ③, while normally blocking flow from ③ to ②. Flow will be allowed from ③ to ② when sufficient pressure is applied at ①. The cartridge has a 3:1 pilot ratio, meaning that at least one-third of the load pressure held at ③ is required at ① to open the valve.



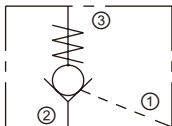
SPECIFICATIONS

Max. Operating Pressure:	250bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	③to②: 3 drops/min. (0.15 ml/min.) at 250bar ②to① with sealed piston: zero leakage
Temperature:	-40°F to +212°F (-40°C to +100°C)
Crack Pressures:	5.0bar
Filtration:	
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	08-3, See page I-A1

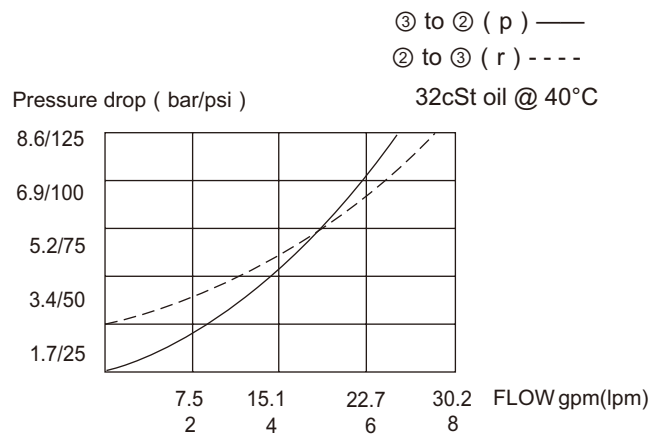
Unit

in
mm

SYMBOL



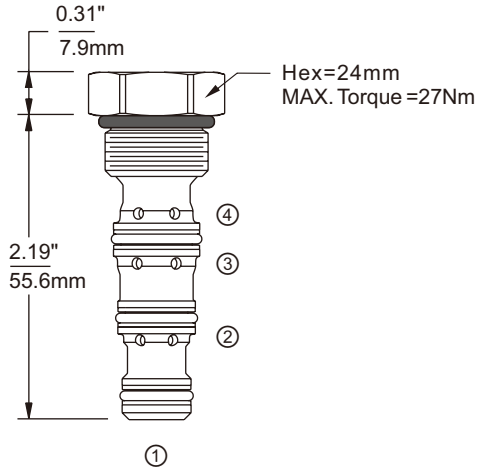
PRESSURE DROP VS.FLOW



CVP0840

Check Valve, Dual-pilot Operated

Hydraulic Screw-in Cartridge Valves



OPERATION

The valve will block flow from ① to ②, and from ④ to ③. Flow is allowed in the opposite direction when pressure is applied to port ② and/or ③. The valve has a 3:1 pilot ratio, so at least 40 percent of the load pressure at port ① or ④ is required at the pilot lines (port ③ or ②) to open the flow passage to allow flow from port ① or ④.

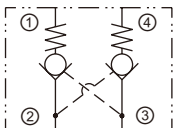
SPECIFICATIONS

Max. Operating Pressure: 210bar
 Flow: See PRESSURE DROP VS.FLOW graph
 Internal Leakage: 2 drops/min.max. at 210bar
 Temperature: -40°F to +212°F(-40°C to +100°C)
 Crack Pressures: 3.4bar
 Filtration:
 Fluids: Mineral-based fluids with viscosities of 7.4 to 420 cSt.
 Cavity: 08-4, See page I-A2

Unit

in
mm

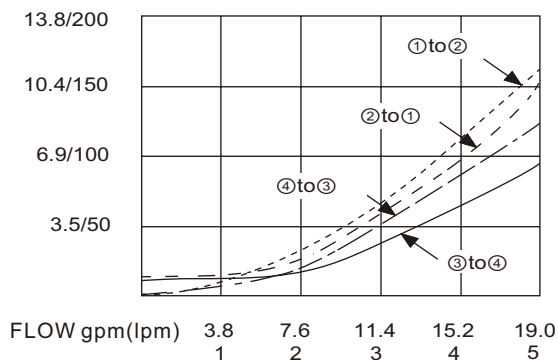
SYMBOL



PRESSURE DROP VS.FLOW

32cSt oil @ 40°C

Pressure drop (bar/psi)



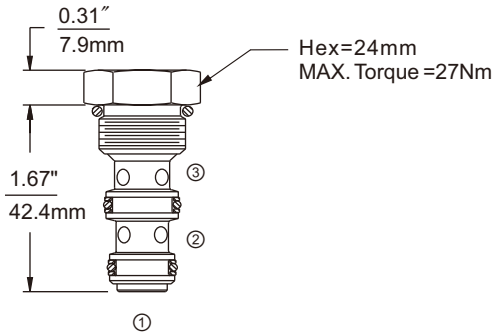
LS0830

Shuttle Valve, Ball Type

Hydraulic Screw-in Cartridge Valves

OPERATION

The valve will allow flow from the higher pressure of port ① or ③ to the port ②. The valve is commonly used to direct oil from the pressure side of a bidirectional hydraulic motor to a pressure-released hydraulic brake.



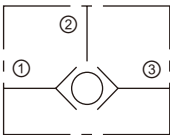
SPECIFICATIONS

Max. Operating Pressure:	240bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	5 drops/min.max. at 210bar
Temperature:	-40°F to +212°F(-40°C to +100°C)
Filtration:	
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	08-3, See page I-A2

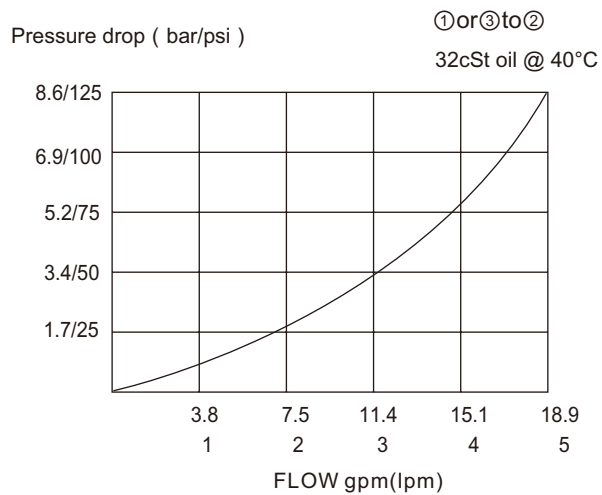
Unit

in
mm

SYMBOL



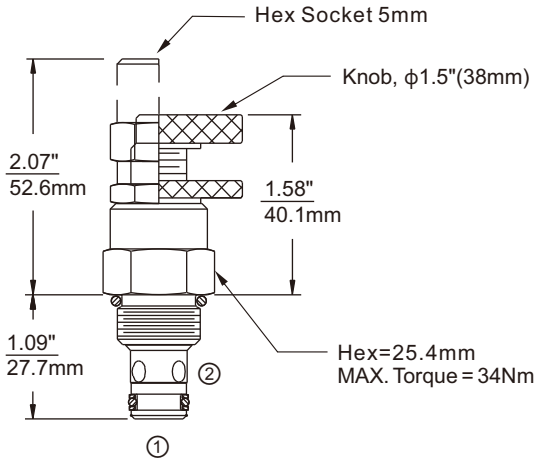
PRESSURE DROP VS.FLOW



NVA08

Needle Valve, Manually Adjustable

Hydraulic Screw-in Cartridge Valves



OPERATION

The valve varies flow restriction by adjusting needle in or out and will shut off when fully closed. These valves will meter flow in either direction.

SPECIFICATIONS

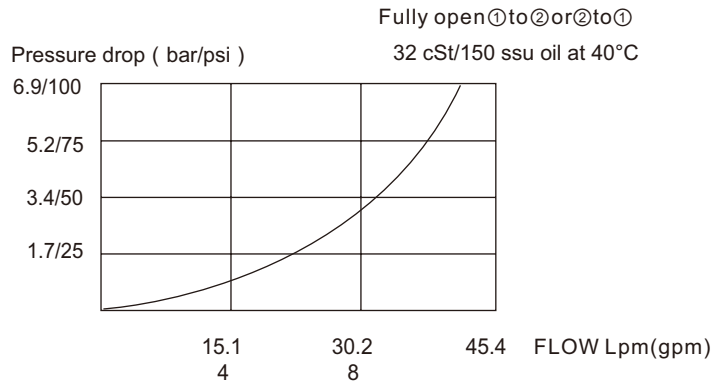
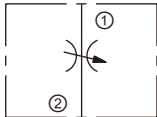
Max. Operating Pressure:	250bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	3 drops/min. max. at shut-off
Temperature:	-40°F to +212°F (-40°C to +100°C)
Filtration:	
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	08-2, See page I-A1

Unit

in
mm

PRESSURE DROP VS.FLOW

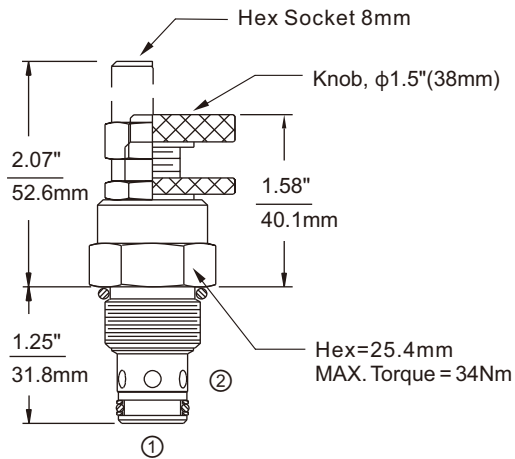
SYMBOL



NVA10

Needle Valve, Manually Adjustable

Hydraulic Screw-in Cartridge Valves



OPERATION

The valve varies flow restriction by adjusting needle in or out and will shut off when fully closed. These valves will meter flow in either direction.

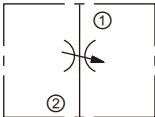
SPECIFICATIONS

Max. Operating Pressure:	250bar
Flow:	See PRESSURE DROP VS. FLOW graph
Internal Leakage:	3 drops/min. max. at shut-off
Temperature:	-40°F to +212°F (-40°C to +100°C)
Filtration:	
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	10-2, See page I-A2

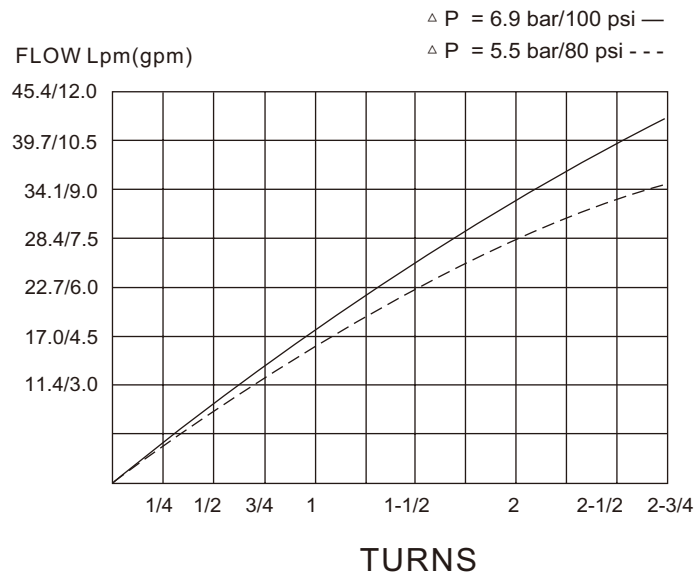
Unit

in
mm

SYMBOL



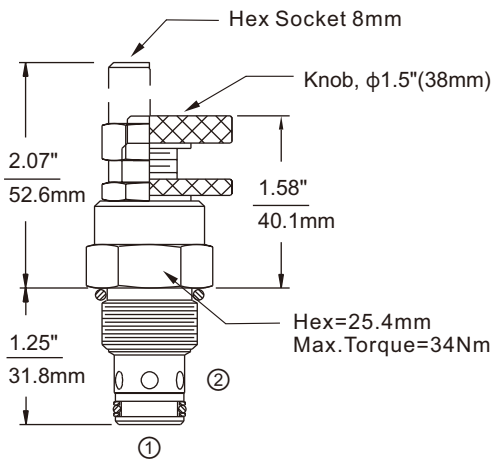
PRESSURE DROP VS. FLOW



FC1020

Flow Control Valve, with Reverse Flow Check

Hydraulic Screw-in Cartridge Valves



OPERATION

The valve varies flow restriction by adjusting needle in or out. Flow is metered from ② to ①. Free reverse flow is from ① to ②

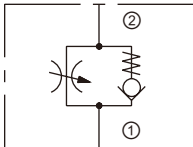
SPECIFICATIONS

Max. Operating Pressure: 250bar
 Flow: See PRESSURE DROP VS.FLOW graph
 Internal Leakage: 3 drops/min. max. at shut-off
 Temperature: -40°F to +212°F(-40°C to +100°C)
 Filtration:
 Fluids: Mineral-based fluids with viscosities of 7.4 to 420 cSt.
 Cavity: 10-2, See page I-A2

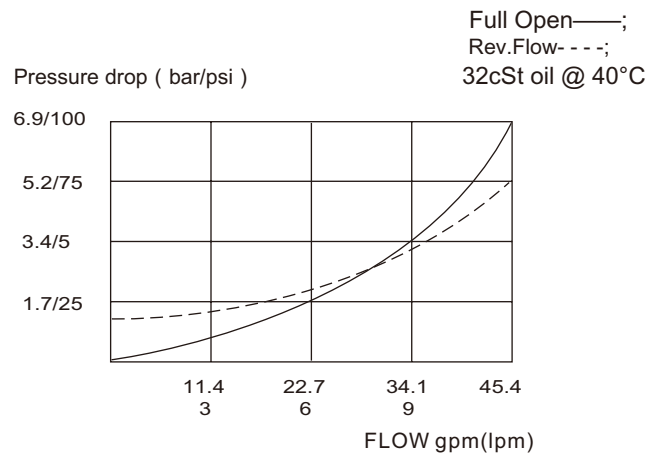
Unit

in
mm

SYMBOL



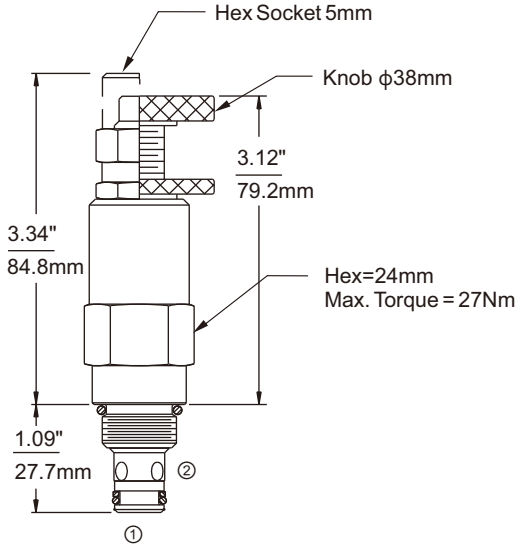
PRESSURE DROP VS.FLOW



RVP08

Pressure Relief Valve, Adjustable

Hydraulic Screw-in Cartridge Valves



OPERATION

The valve prevents flow from ① to ② until the set crack pressure at ① is achieved. The poppet then unseats allowing flow from ① to ② to protect the circuit from over pressurization.

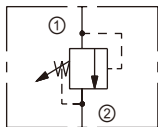
SPECIFICATIONS

Max. Operating Pressure:	350bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	5 drops/min. max. to 80% of nominal setting
Temperature:	-40°F to +212°F(-40°C to +100°C)
Reseat Pressure:	80% of crack pressure
Standard Spring Ranges:	20 to 125 bar; preset: 69 bar 40 to 180 bar; preset: 138 bar 180 to 350 bar; preset: 207 bar
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	08-2, See page I-A1

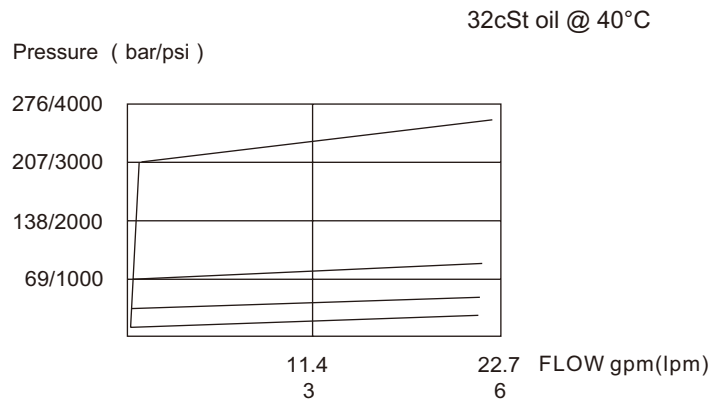
Unit

in
mm

SYMBOL



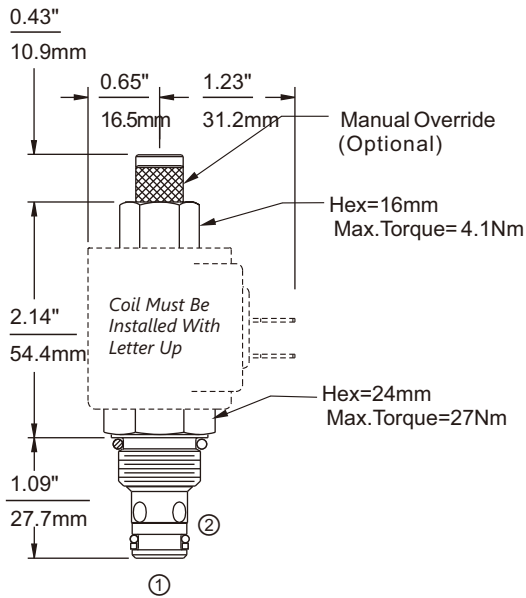
PRESSURE DROP VS.FLOW



SVP08DL

2-Way Solenoid Valve, Normally Closed, Dual-Lock

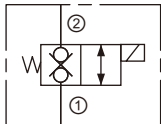
Hydraulic Screw-in Cartridge Valves



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the valve blocks flow in both directions.
When energized, the poppet shifts to allow flow in both directions.

Operation of Manual Override (SVP08DLM)

To override, push button in to activate. To return to normal valve function, release button.

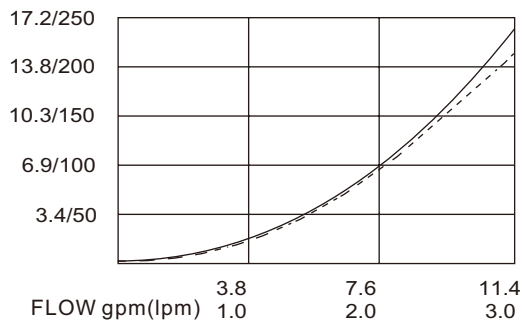
SPECIFICATIONS

Max. Operating Pressure:	250bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	1 drops/min.max. at 250bar
Temperature:	-40°F to +212°F(-40°C to +100°C)
Coil Duty Rating:	Continuous from 85% to 115% of nominal voltage
Filtration:	
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	08-2, See page I-A1

PRESSURE DROP VS.FLOW

② to ① (Energized) ——
① to ② (Energized) - - - -
32cSt oil @ 40°C

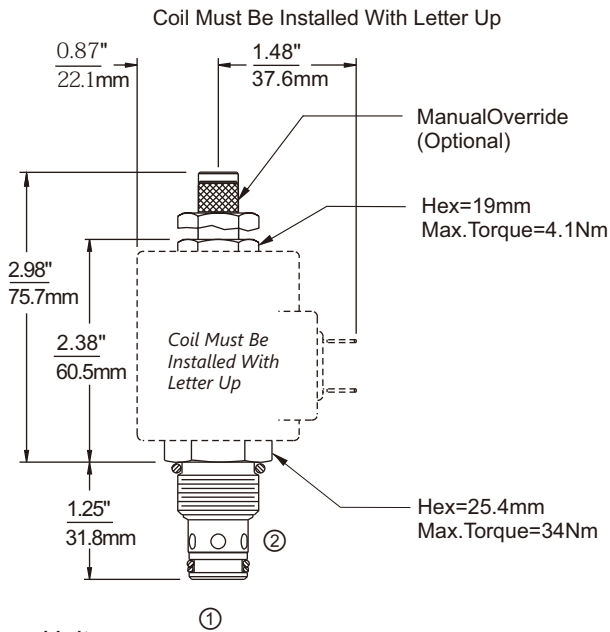
Pressure drop (bar/psi)



SVP10DL

2-Way Solenoid Valve, Normally Closed, Dual-Lock

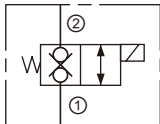
Hydraulic Screw-in Cartridge Valves



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the valve blocks flow in both directions.
When energized, the poppet shifts to allow flow in both directions.

Operation of Manual Override (SVP10DLM)

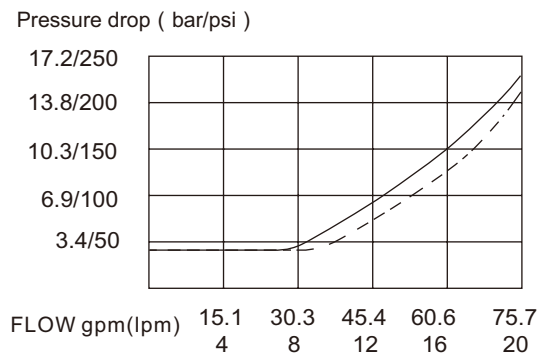
To override, push button in to activate. To return to normal valve function, release button.

SPECIFICATIONS

Max. Operating Pressure:	300bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	5 drops/min.max. at 300bar
Temperature:	-40°F to +212°F (-40°C to +100°C)
Coil Duty Rating:	Continuous from 85% to 115% of nominal voltage
Filtration:	
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	10-2, See page I-A2

PRESSURE DROP VS.FLOW

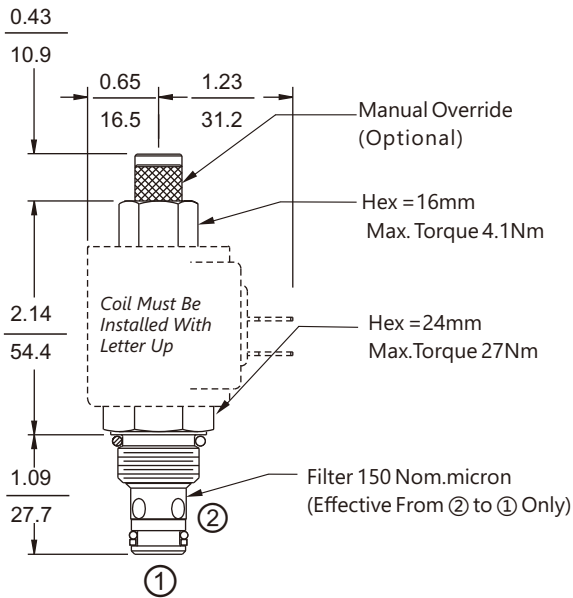
② to ① (Energized) ———
① to ② (De-energized) - - - -
32cSt oil @ 40°C



SVP08NC

2-Way Solenoid Valve, Normally Closed, Poppet-type

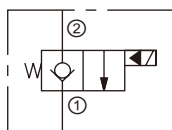
Hydraulic Screw-in Cartridge Valves



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the valve acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ①. When energized, the poppet lifts to open the ② to ① flow path.

Operation of Manual Override (SVP08NCM)

To override, push button in, twist counterclockwise 180° and release. In this position, the valve will remain open in a detented condition. To return to normal operation, push button in, twist clockwise 180° and release. Override will be detented in this position.

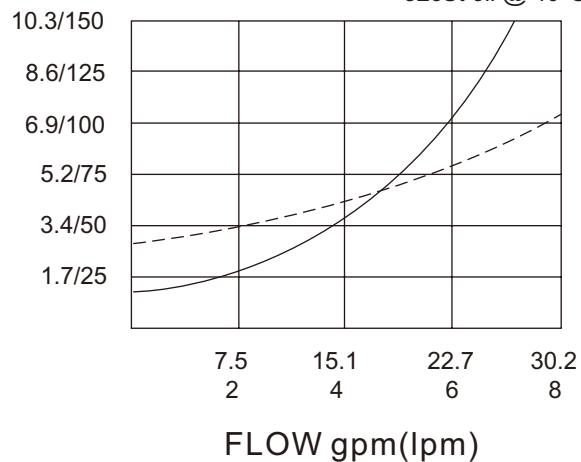
SPECIFICATIONS

Max. Operating Pressure:	210bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	2 drops/min.max. at 210bar
Temperature:	- 40°F to +212°F (- 40°C to +100°C)
Coil Duty Rating:	Continuous from 85% to 115% of nominal voltage
Filtration:	Filter 150Nom.micron Effective From ②To ① Only
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	08-2, See page I-A1

PRESSURE DROP VS.FLOW

Pressure drop (bar/psi)

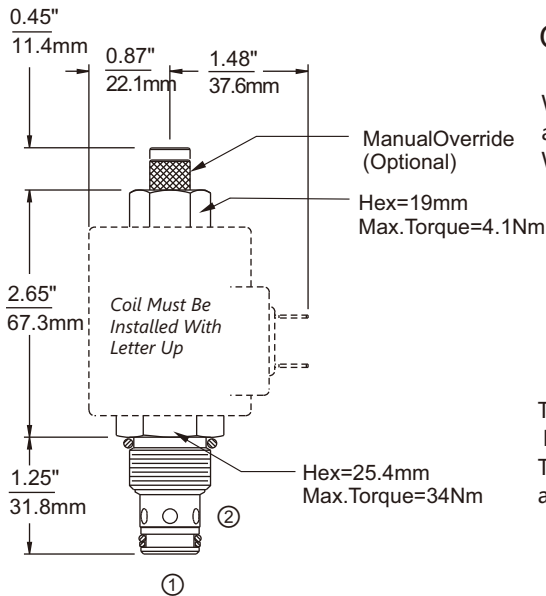
② to ① (Energized) ———
 ① to ② (De-energized) - - - -
 32cSt oil @ 40°C



SVP10NC

2-Way Solenoid Valve, Normally Closed, Poppet-type

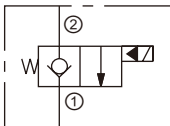
Hydraulic Screw-in Cartridge Valves



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the valve acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ①. When energized, the poppet lifts to open the ② to ① flow path.

Operation of Manual Override (SVP10NCM)

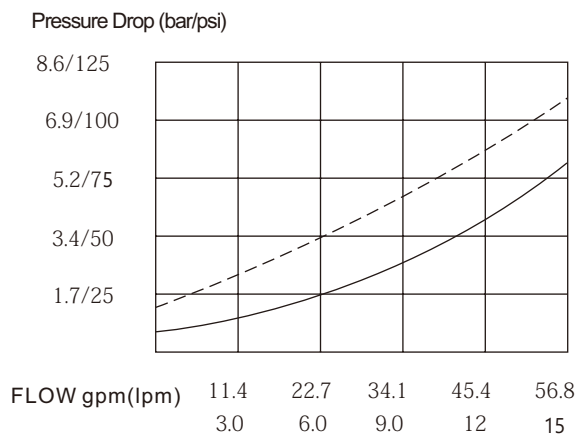
To override, push button in, twist counterclockwise 180° and release. In this position, the valve will remain open in a detented condition. To return to normal operation, push button in, twist clockwise 180° and release. Override will be detented in this position.

SPECIFICATIONS

Max. Operating Pressure:	210bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	3 drops/min.max. at 210bar
Temperature:	-40°F to +212°F (-40°C to +100°C)
Coil Duty Rating:	Continuous from 85% to 115% of nominal voltage
Filtration:	Filter 150Nom.micron Effective From ② To ① Only
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	10-2, See pag I-A2

PRESSURE DROP VS.FLOW

② to ① (Energized) ———
 ① to ② (De-energized) - - - -
 32cSt oil @ 40°C

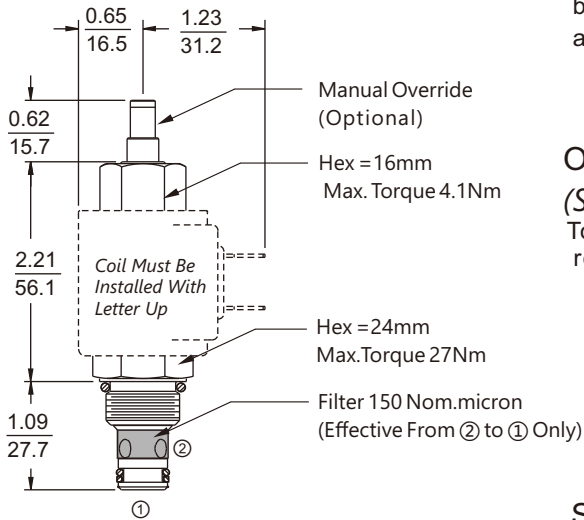


SVP08NO

2-Way Solenoid Valve, Normally Open, Poppet-type

Hydraulic Screw-in Cartridge Valves

Coil Must Be Installed With Letter Up



OPERATION

When de-energized, the valve allows flow from ② to ①. Flow from ① to ② is severely restricted in this mode. When energized the valve's poppet closes on its seat, blocking flow from ② to ①. The cartridge will allow ① to ② flow after overcoming the solenoid force.

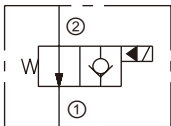
Operation of Manual Override (SVP08NOM)

To override, push button in to activate. To return to normal valve function, release button..

Unit

in
mm

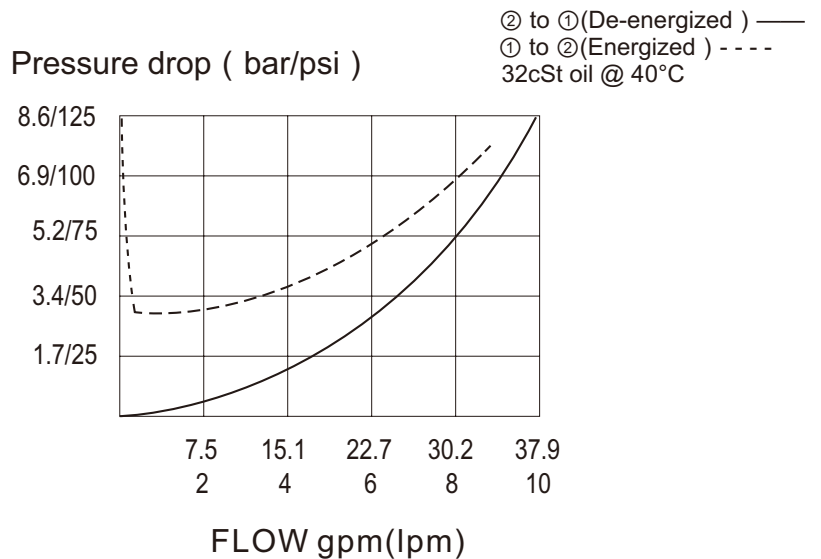
SYMBOL



SPECIFICATIONS

Max. Operating Pressure:	210bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	2 drops/min.max. at 210bar
Temperature:	-40°F to +212°F (-40°C to +100°C)
Coil Duty Rating:	Continuous from 85% to 115% of nominal voltage
Filtration:	Filter 150Nom.micuron Effective From②To①Only
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	08-2, See page I-A1

PRESSURE DROP VS.FLOW

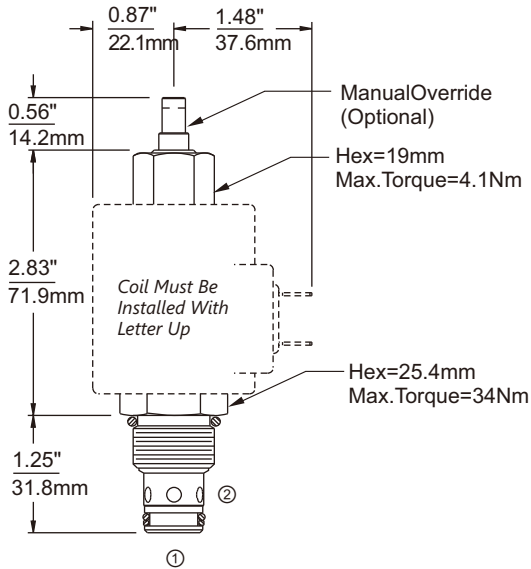


SVP10NO

2-Way Solenoid Valve, Normally Open, Poppet-type

Hydraulic Screw-in Cartridge Valves

Coil Must Be Installed With Letter Up



OPERATION

When de-energized, the valve allows flow from ② to ①. Flow from ① to ② is severely restricted in this mode. When energized the valve's poppet closes on its seat, blocking flow from ② to ①. The cartridge will allow ① to ② flow after overcoming the solenoid force.

Operation of Manual Override (SVP10NORM)

To override, push button in to activate. To return to normal valve function, release button..

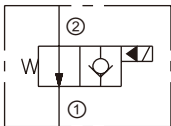
SPECIFICATIONS

- Max. Operating Pressure: 210bar
- Flow: See PRESSURE DROP VS.FLOW graph
- Internal Leakage: 3 drops/min.max. at 210bar
- Temperature: -40°F to +212°F (-40°C to +100°C)
- Coil Duty Rating: Continuous from 85% to 115% of nominal voltage
- Filtration: Filter 150Nom.micron Effective From②To①Only
- Fluids: Mineral-based fluids with viscosities of 7.4 to 420 cSt.
- Cavity: 10-2, See page I-A2

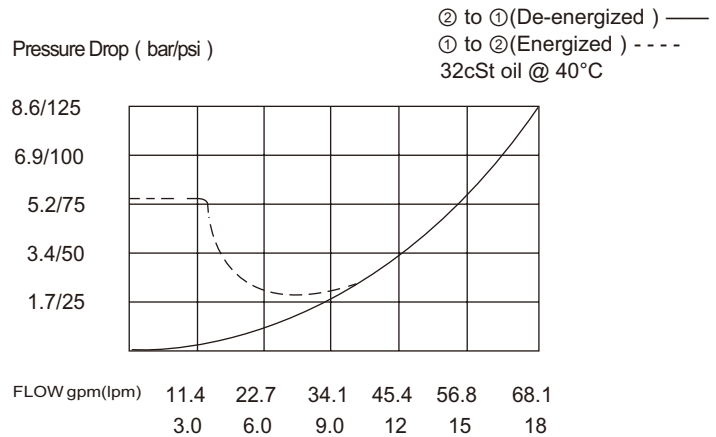
Unit

in
mm

SYMBOL



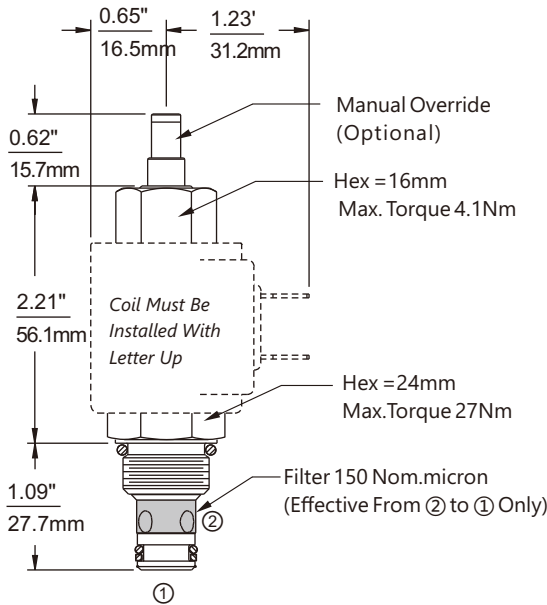
PRESSURE DROP VS.FLOW



SVP08NOR

2-Way Solenoid Valve, Normally Open, Poppet-type

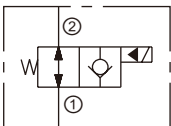
Hydraulic Screw-in Cartridge Valves



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the poppet lifts to open flow from ② to ①. Flow is also open from ① to ②.

When energized, the cartridge acts as a check valve, allowing flow from ① to ② while blocking flow from ② to ①, after overcoming the solenoid force (requires 3.4 to 10.3bar [50 to 150 psi]).

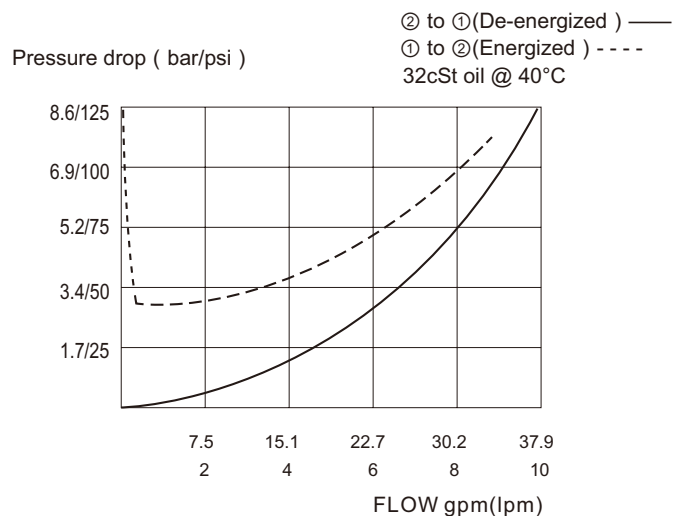
Manual Override Option (SVP08NORM)

To override, push button in to activate. To return to normal valve function, release button..

SPECIFICATIONS

Max. Operating Pressure:	210bar
Flow:	See PRESSURE DROP VS. FLOW graph
Internal Leakage:	2 drops/min. max. at 210bar
Temperature:	-40°F to +212°F (-40°C to +100°C)
Coil Duty Rating:	Continuous from 85% to 115% of nominal voltage
Filtration:	Filter 150Nom. micron Effective From ② To ① Only
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	08-2, See page I-A1

PRESSURE DROP VS. FLOW

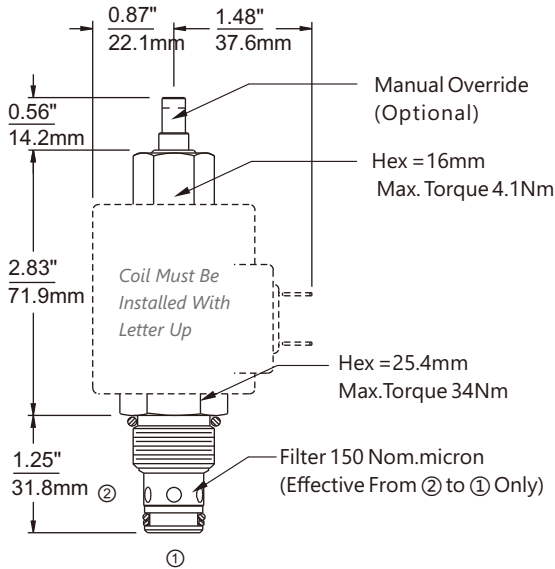


SVP10NOR

2-Way Solenoid Valve, Normally Open, Poppet-type

Hydraulic Screw-in Cartridge Valves

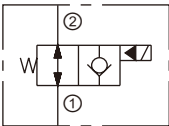
Coil Must Be Installed With Letter Up



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the poppet lifts to open flow from ② to ① .
Flow is also open from ① to ② .
When energized ,the cartridge acts as a check valve, allowing flow from ① to ② while blocking flow from ② to ① , after overcoming the solenoid force (requires 3.4 to 10.3 bar [50 to 150 psi]..

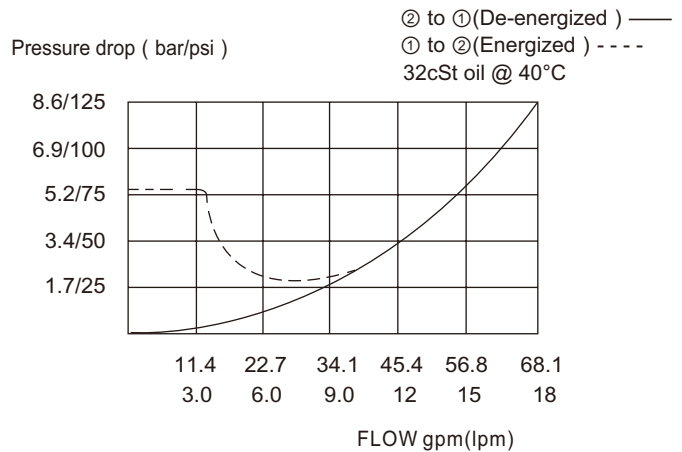
Manual Override Option (SVP10NORM)

To override, push button in to activate. To return to normal valve function, release button..

SPECIFICATIONS

Max. Operating Pressure:	210bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	3 drops/min.max. at 210bar
Temperature:	-40°F to +212°F(-40°C to +100°C)
Coil Duty Rating:	Continuous from 85% to 115% of nominal voltage
Filtration:	Filter 150Nom.micuron Effective From②To①Only
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	10-2, See page I-A2

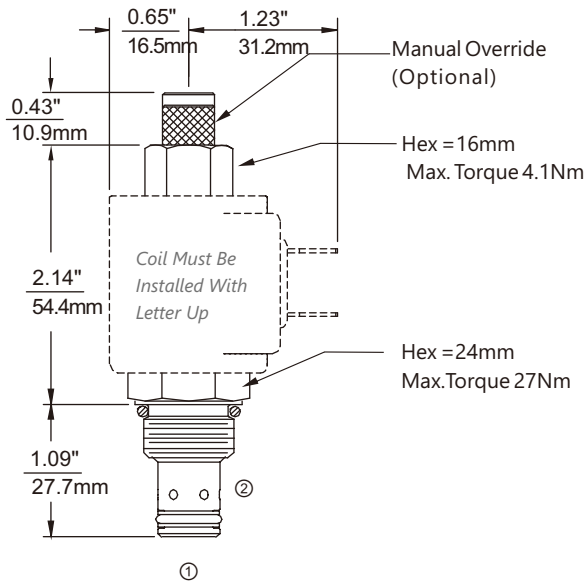
PRESSURE DROP VS.FLOW



SV5082NOP

2-Way Solenoid Valve, Normally Open, Poppet-type

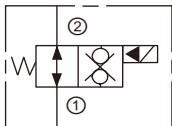
Hydraulic Screw-in Cartridge Valves



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the poppet allows flow in both directions.
When energized, the valve blocks flow in both directions.

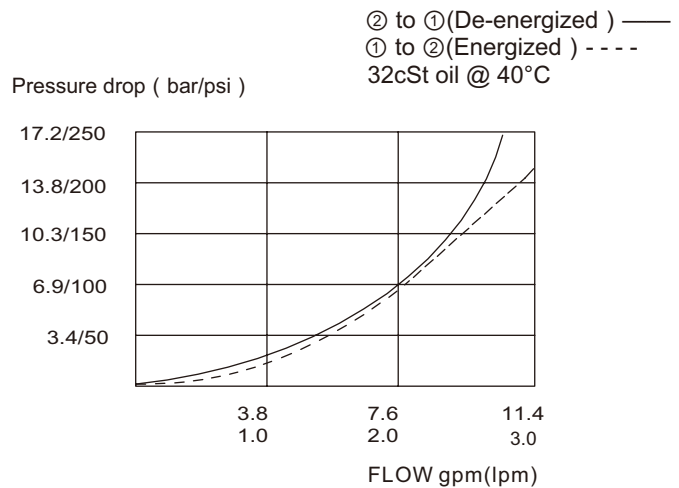
Manual Override Option (SV5082NOPM)

To override, push button in to activate. To return to normal valve function, release button..

SPECIFICATIONS

Max. Operating Pressure: 280bar
 Flow: See PRESSURE DROP VS.FLOW graph
 Internal Leakage: 1 drops/min.max. at 280bar
 Temperature: -40°F to +212°F (-40°C to +100°C)
 Coil Duty Rating: Continuous from 85% to 115% of nominal voltage
 Filtration: Filter 150Nom.micron Effective From②To①Only
 Fluids: Mineral-based fluids with viscosities of 7.4 to 420 cSt.
 Cavity: 08-2, See page I-A1

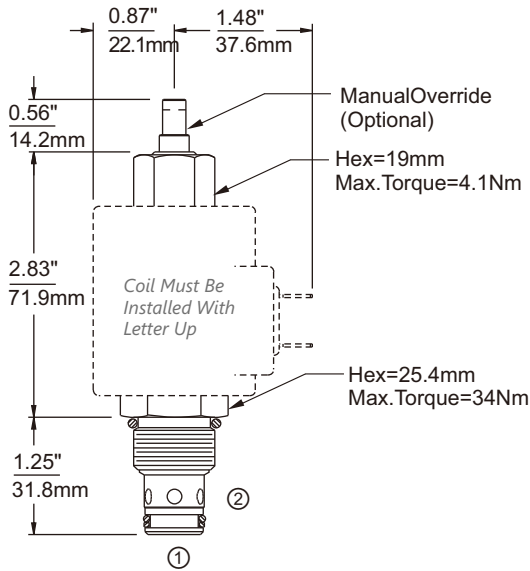
PRESSURE DROP VS.FLOW



SV5102NOP

2-Way Solenoid Valve, Normally Open, Poppet-type

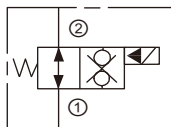
Hydraulic Screw-in Cartridge Valves



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the poppet allows flow in both directions.
When energized, the valve blocks flow in both directions.

Manual Override Option (SV5102NOPM)

To override, push button in to activate. To return to normal valve function, release button..

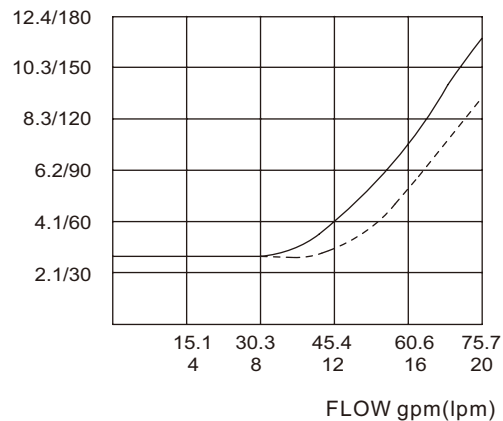
SPECIFICATIONS

Max. Operating Pressure:	300bar
Flow:	See PRESSURE DROP VS.FLOW graph
Internal Leakage:	5 drops/min.max. at 300bar
Temperature:	-40°F to +212°F (-40°C to +100°C)
Coil Duty Rating:	Continuous from 85% to 115% of nominal voltage
Filtration:	Filter 150Nom.micron Effective From②To①Only
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	10-2, See page I-A2

PRESSURE DROP VS.FLOW

② to ① (De-energized) —
① to ② (Energized) - - - -
32cSt oil @ 40°C

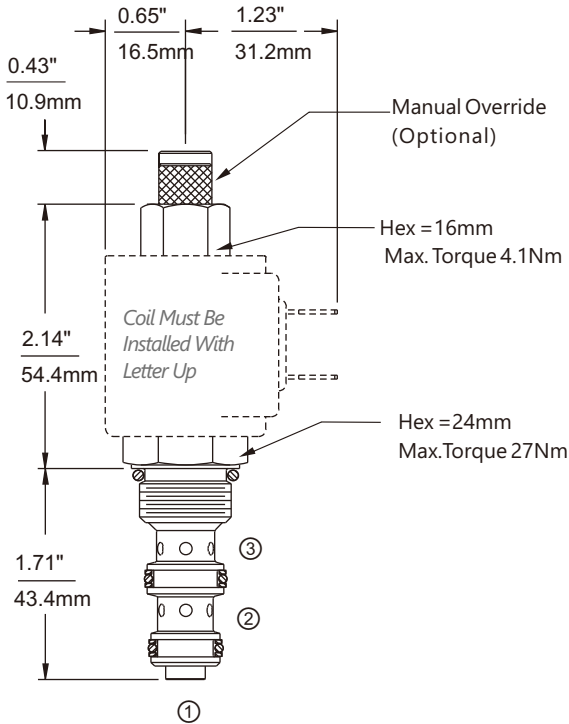
Pressure drop (bar/psi)



SV0830

2-Way Solenoid Valve, Normally Open, Poppet-type

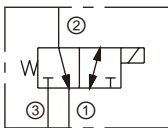
Hydraulic Screw-in Cartridge Valves



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the valve allows flow from ② to ①, while blocking flow at ③. When energized, the cartridge's spool shifts to allow flow from ② to ③, while blocking flow at ①.

Manual Override Option (SV0830M)

To override, push button in, twist counterclockwise 180° and release. In this position, valve will remain detented in the shifted condition.

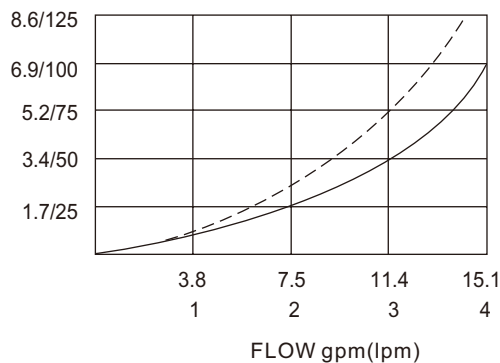
To return to normal operation, push button in, twist clockwise 180° and release. Override will be detented in this position.

SPECIFICATIONS

Max. Operating Pressure:	210bar
Flow:	See PERFORMANCE CHARACTERISTIC graph
Internal Leakage:	(per land) 82cc/min. max. at 207bar
Temperature:	-40°F to +212°F (-40°C to +100°C)
Coil Duty Rating:	Continuous from 85% to 115% of nominal voltage
Filtration:	
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	08-3, See page I-A1

PRESSURE DROP VS. FLOW

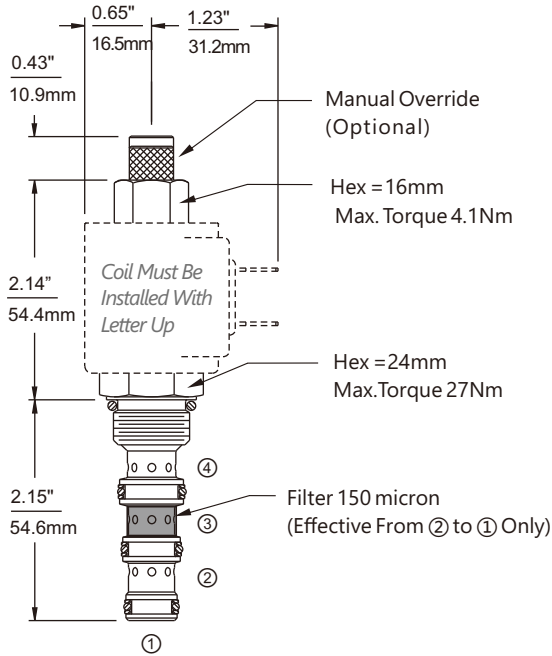
② to ① (De-energized) ———
③ to ② (Energized) - - - -
32cSt oil @ 40°C



FSV08E

Directional Valve, 4-way 2-position

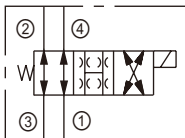
Hydraulic Screw-in Cartridge Valves



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the valve allows flow from ③ to ② and from ④ to ①. When energized, the cartridge's spool shifts to allow flow from ③ to ④ and from ② to ①.

Operation of Manual Override (FSV08EM)

To override, push button in, twist counterclockwise 180° and release. In this position, the valve will remain open in a detented condition. To return to normal operation, push button in, twist clockwise 180° and release. Override will be detented in this position.

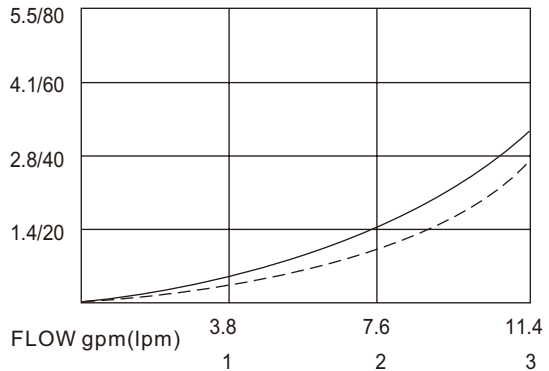
SPECIFICATIONS

Max. Operating Pressure: 210bar
 Flow: See PRESSURE DROP VS.FLOW graph
 Internal Leakage: (per land) 82cc/minmax. at 210bar
 Temperature: -40°F to +212°F (-40°C to +100°C)
 Coil Duty Rating: Continuous from 85% to 115% of nominal voltage
 Filtration:
 Fluids: Mineral-based fluids with viscosities of 7.4 to 420 cSt.
 Cavity: 08-4, See page I-A2

PRESSURE DROP VS.FLOW

Pressure drop (bar/psi)

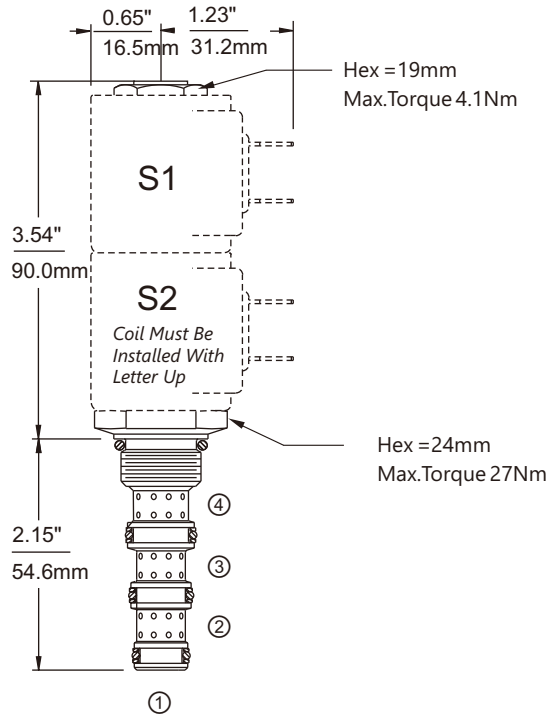
③to② : ———
 ④to① : - - - - -
 32cSt oil @ 40°C



FSV08M

Directional Valve, 4-way 3-position,
Tandem Center

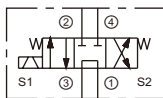
Hydraulic Screw-in Cartridge Valves



Unit

in
mm

SYMBOL



OPERATION

When de-energized, the valve allows flow from ③ to ① while blocking ② and ④. When the coil S1 is energized, the valve allows flow from ④ to ① and from ③ to ②; When the coil S2 is energized, the valve allows flow from ② to ① and from ③ to ④.

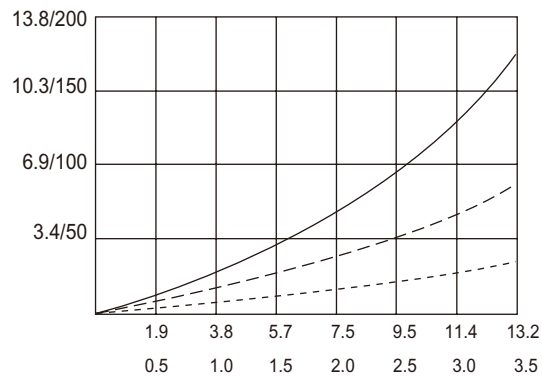
SPECIFICATIONS

Max. Operating Pressure: 210bar
 Flow: See PERFORMANCE CHARACTERISTIC graph.
 Internal Leakage: 164cc/min.max
 Temperature: -40°F to +212°F (-40°C to +100°C)
 Coil Duty Rating: Continuous from 85% to 115% of nominal voltage
 Filtration:
 Fluids: Mineral-based fluids with viscosities of 7.4 to 420 cSt.
 Cavity: 08-4, See page I-20

PRESSURE DROP VS. FLOW

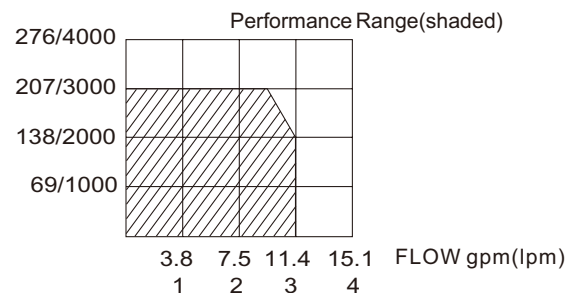
Pressure drop (bar/psi)

③to②or③to④ —————
 ②to①or④to① - - - - -
 ③to①
 32cSt oil @ 40°C



FLOW gpm(lpm)

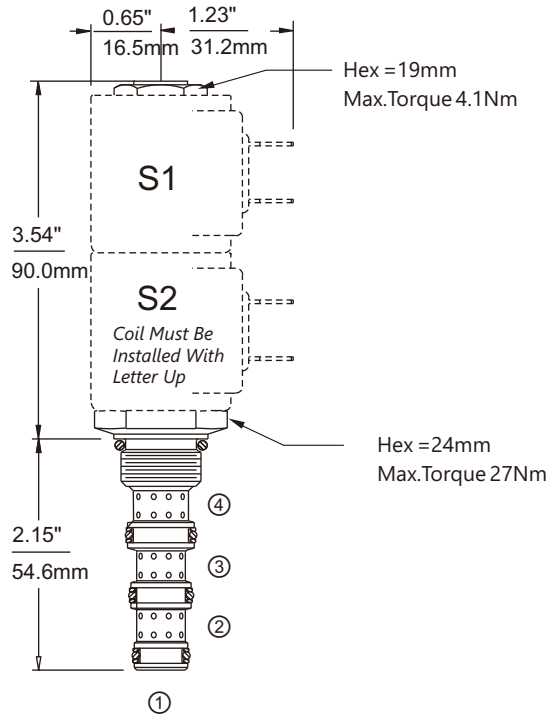
Pressure drop (bar/psi)



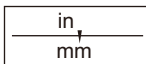
FSV08H

Directional Valve, 4-way 3-position,
Open Center

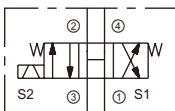
Hydraulic Screw-in Cartridge Valves



Unit



SYMBOL



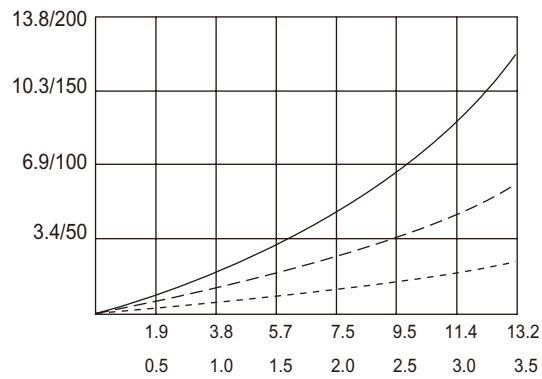
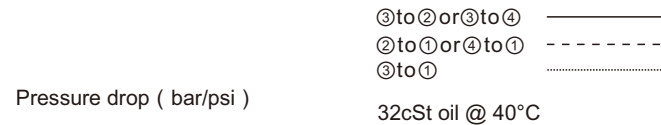
OPERATION

When de-energized, the valve allows flow at all ports. When the coil S1 is energized, the valve allows flow from ③ to ④ and from ② to ①; When the coil S2 is energized, the valve allows flow from ③ to ② and from ④ to ①.

SPECIFICATIONS

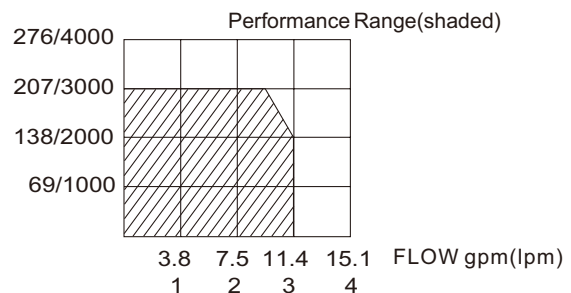
Max. Operating Pressure: 210bar
 Flow: See PERFORMANCE CHARACTERISTIC graph.
 Internal Leakage: 164cc/min.max
 Temperature: -40°F to +212°F (-40°C to +100°C)
 Coil Duty Rating: Continuous from 85% to 115% of nominal voltage
 Filtration:
 Fluids: Mineral-based fluids with viscosities of 7.4 to 420 cSt.
 Cavity: 08-4, See page I-20

PRESSURE DROP VS. FLOW



FLOW gpm(lpm)

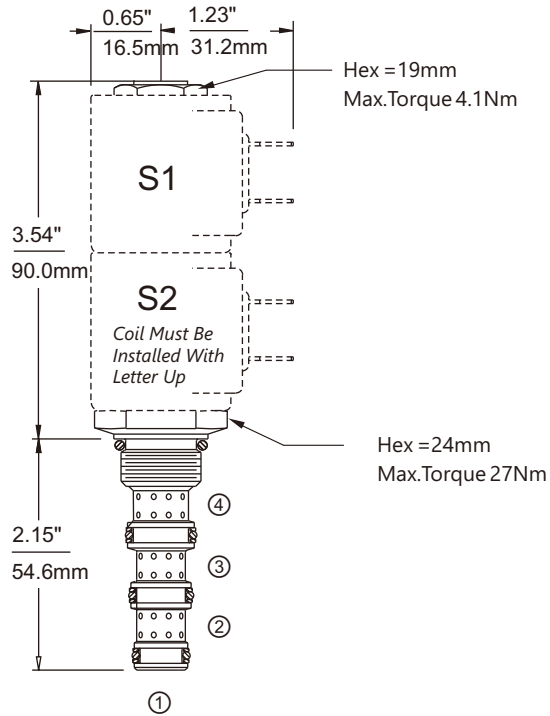
Pressure drop (bar/psi)



FSV08O

Directional Valve, 4-way 3-position,
Closed Center

Hydraulic Screw-in Cartridge Valves



OPERATION

When de-energized, the valve blocks flow at all ports. When the coil S1 is energized, the valve allows flow from ③ to ④ and from ② to ①. When the coil S2 is energized, the valve allows flow from ③ to ② and from ④ to ①.

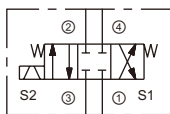
SPECIFICATIONS

Max. Operating Pressure: 210bar
 Flow: See PERFORMANCE CHARACTERISTIC graph.
 Internal Leakage: 164cc/min.max
 Temperature: -40°F to +212°F (-40°C to +100°C)
 Coil Duty Rating: Continuous from 85% to 115% of nominal voltage
 Filtration:
 Fluids: Mineral-based fluids with viscosities of 7.4 to 420 cSt.
 Cavity: 08-4, See page I-A2

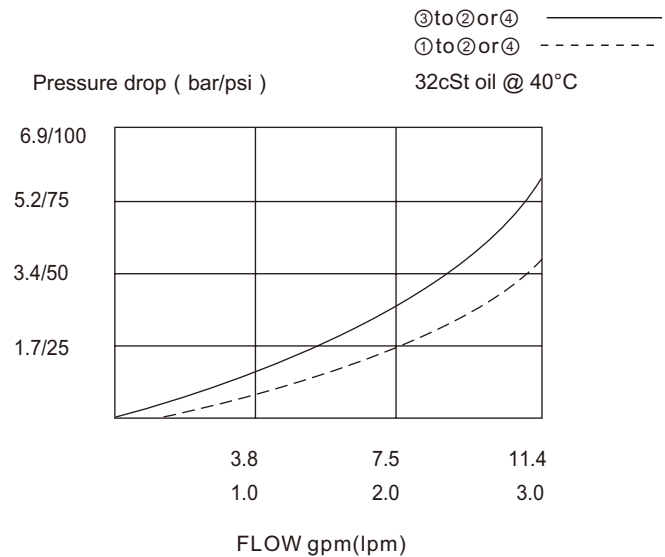
Unit

in
mm

SYMBOL



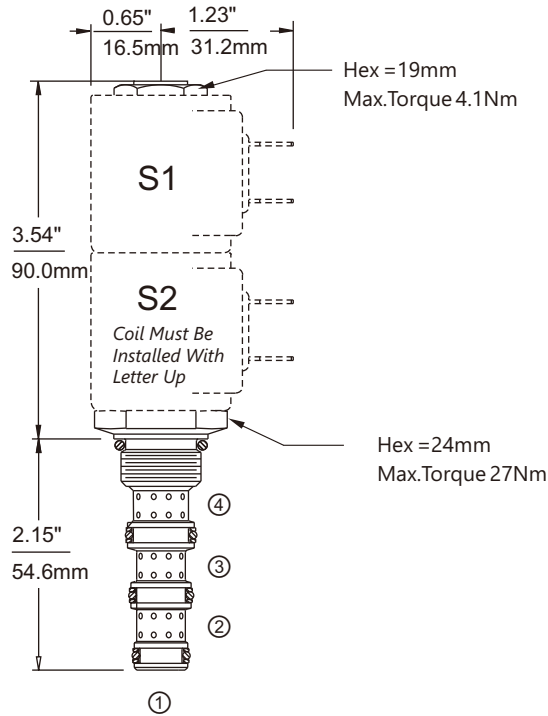
PRESSURE DROP VS. FLOW



FSV08Y

Directional Valve, 4-way 3-position,
Motor Center

Hydraulic Screw-in Cartridge Valves



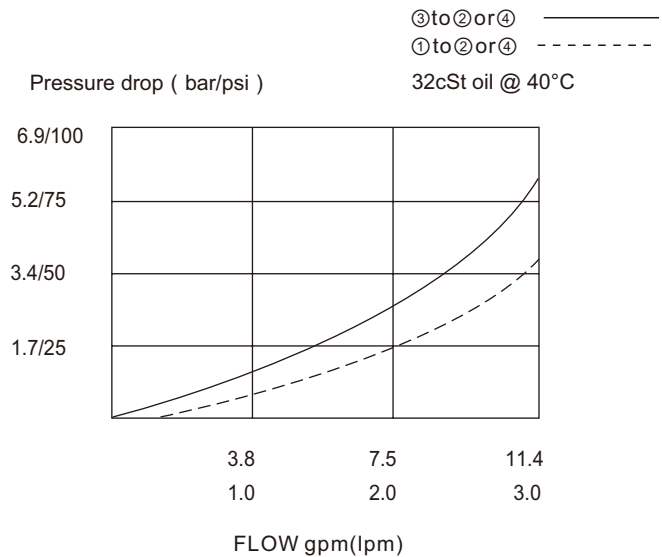
OPERATION

When de-energized, the valve allows flow from ② to ① and from ④ to ① while blocking ③. When the coil S1 is energized, the valve allows flow from ③ to ④ and from ② to ①. When the coil S2 is energized, the valve allows flow from ③ to ② and from ④ to ①.

SPECIFICATIONS

Max. Operating Pressure: 210bar
 Flow: See PERFORMANCE CHARACTERISTIC graph.
 Internal Leakage: 164cc/min.max
 Temperature: -40°F to +212°F (-40°C to +100°C)
 Coil Duty Rating: Continuous from 85% to 115% of nominal voltage
 Filtration:
 Fluids: Mineral-based fluids with viscosities of 7.4 to 420 cSt.
 Cavity: 08-4, See page I-A2

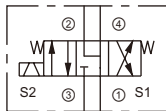
PRESSURE DROP VS. FLOW



Unit

in
mm

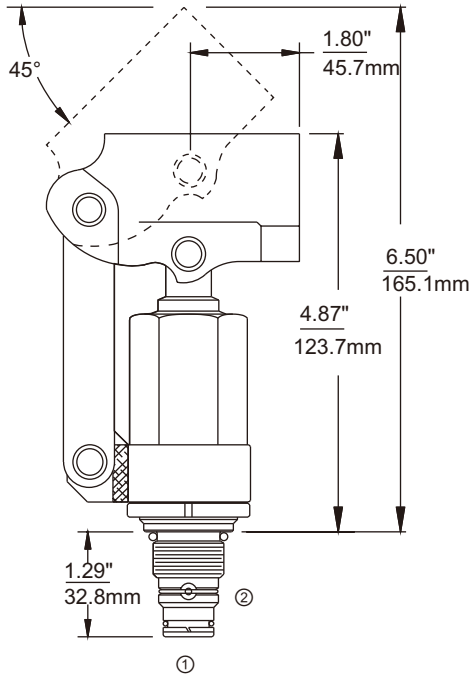
SYMBOL



CHP10-08

Hand Pump

Hydraulic Screw-in Cartridge Valves



OPERATION

When the operator is pushed, the valve delivers a nominal flow of 8.8cc to the ② port. When the operator is pulled, the valve suctions fluid from the ① port.

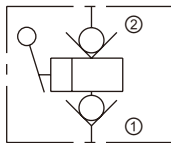
SPECIFICATIONS

Max. Operating Pressure:	210bar
Displacement:	8.8 cc per stroke
Internal Leakage:	2 drops/min. max. at 138 bar
Temperature:	-40°F to +212°F (-40°C to +100°C)
Filtration:	
Fluids:	Mineral-based fluids with viscosities of 7.4 to 420 cSt.
Cavity:	10-2, See page I-A2

Unit

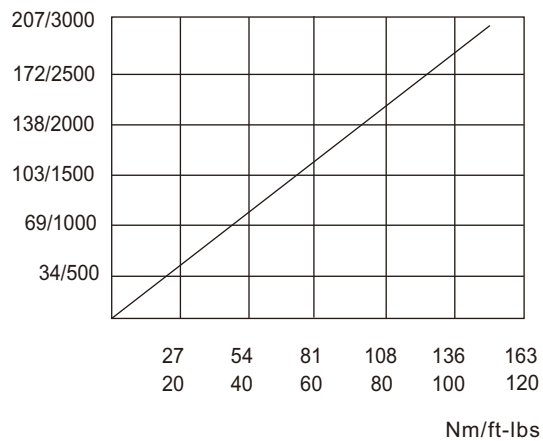
in
mm

SYMBOL

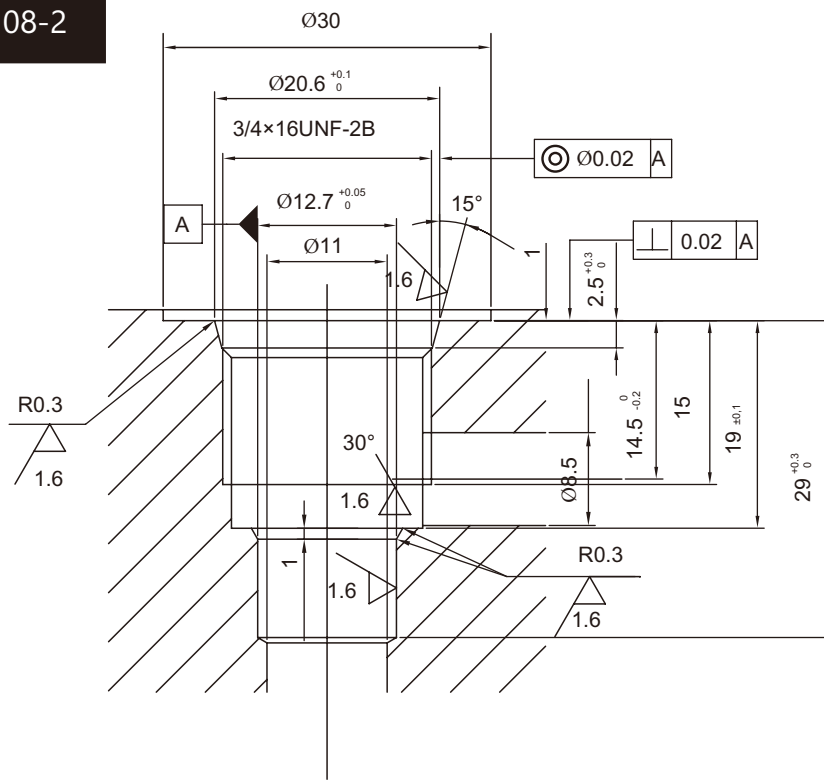


PRESSURE DROP VS.FLOW

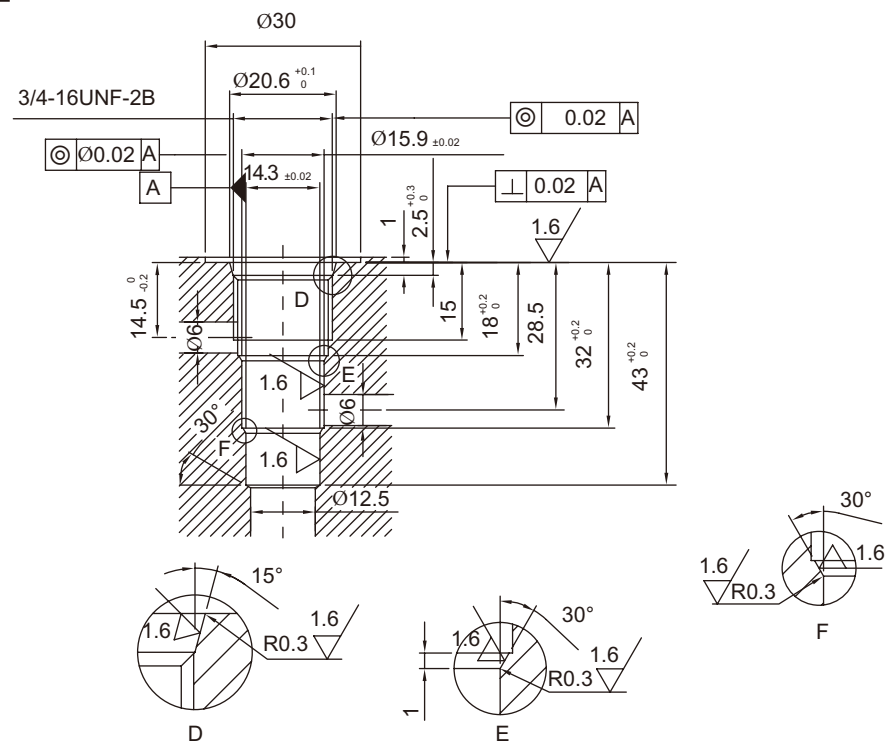
Pressure (bar/psi)



Cavity 08-2



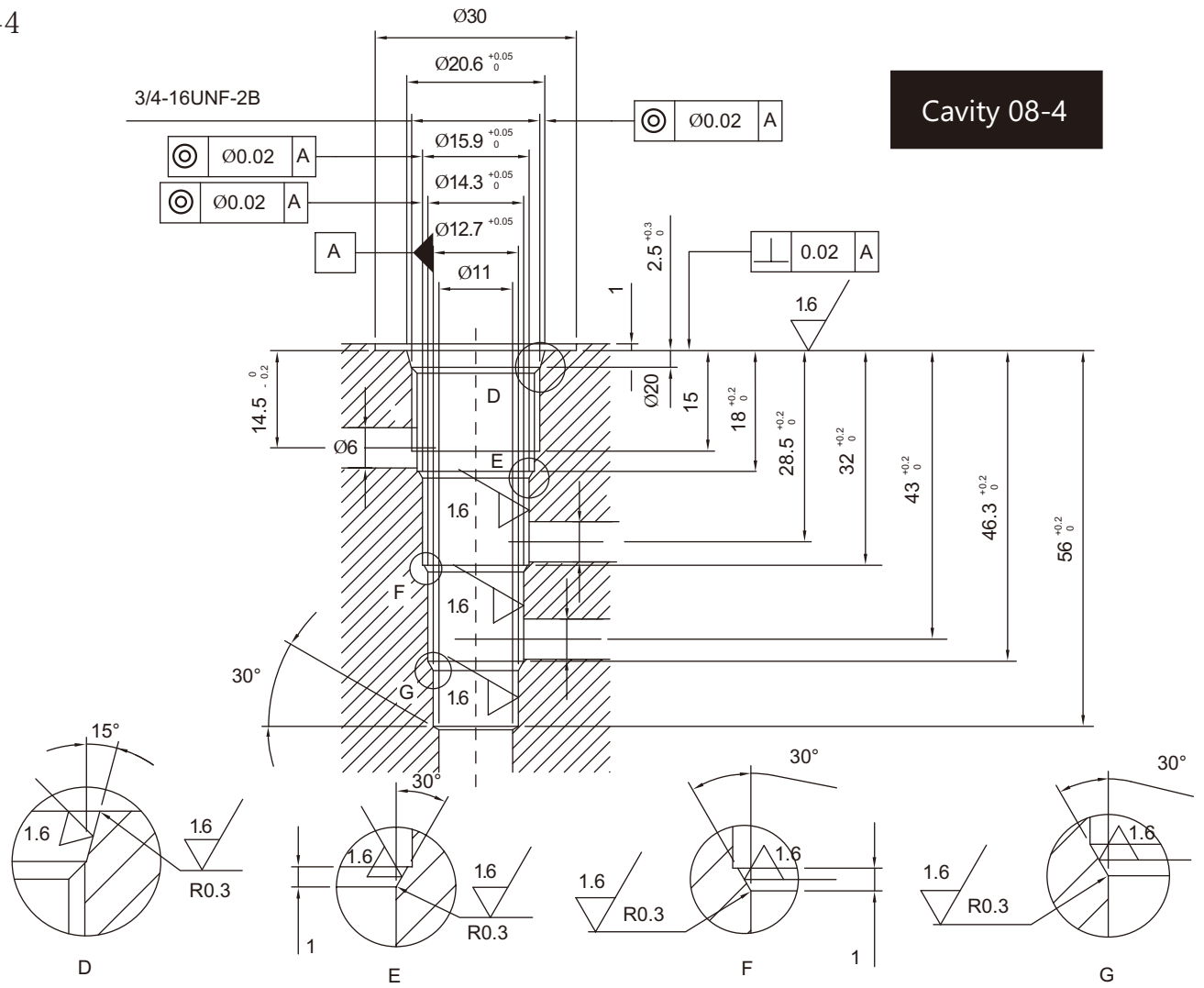
Cavity 08-3



Cavities

Hydraulic Screw-in Cartridge Valves

08-4



Cavity 10-2

