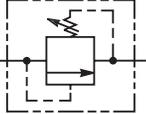
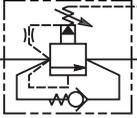
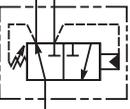
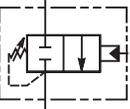
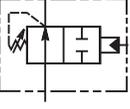
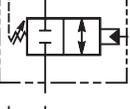
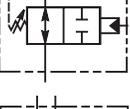
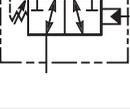
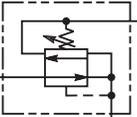
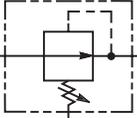
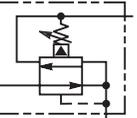


CV	Check Valves
SH	Shuttle Valves
LM	Load/Motor Controls
FC	Flow Controls
PC	Pressure Controls
LE	Logic Elements
DC	Directional Controls
MV	Manual Valves
SV	Solenoid Valves
PV	Proportional Valves
CE	Coils & Electronics
BC	Bodies & Cavities
TD	Technical Data

SERIES	CAVITY	DESCRIPTION	FLOW LPM/GPM	PRESSURE BAR/PSI	PAGE NO.
RELIEF VALVES					
DIRECT ACTING					
					
RDH042	C04-2	Direct Acting Relief, Poppet Type	3.8/1	350/5000	PC7-PC8
★ RDH081	C08-2	Direct Acting Relief, Ball Type	1.9/5	380/5500	PC9-PC10
RDH082	C08-2	Direct Acting Relief, Poppet Type	30/8	380/5500	PC11-PC12
★ RDH101	C10-2	Direct Acting Relief, Ball Type	1.9/5	380/5500	PC13-PC14
A02A2	C08-2	Direct Acting Relief, Ball Type	6/1.6	420/6000	PC15-PC16
A02B2	C08-2	Direct Acting Relief, Poppet Type	8/30	420/6000	PC17-PC18
★ RD102	C10-2	Direct Acting Relief, Poppet Type	38/10	250/3600	PC19-PC20
A04B2	C10-2	Direct Acting Relief, Poppet Type	100/26	420/6000	PC21-PC22
A04B2*CE	C10-2	Direct Acting Relief, Poppet Type*			PC23-PC24
A04C2	C10-2	Direct Acting Relief, Spool Type	200/53	100/1450	PC25-PC26
<i>*CE marked, PED Compliant</i>					
DIFFERENTIAL AREA					
RDH083	C08-2	Direct Acting Differential Area Relief	45/12	350/5000	PC27-PC28
★ RDH103	C10-2	Direct Acting Differential Area Relief	75/20	350/5000	PC29-PC30
★ RDCH103	C10-2	Direct Acting Differential Relief Assembly with Reverse Check	60/16	380/5500	PC31-PC32
RD163	C16-2	Direct Acting Differential Area Relief	151/40	210/3000	PC33-PC34
PILOT OPERATED					
★ RAH081	C08-2	Pilot Operated Spool Type	75.8/20	350/5000	PC35-PC36
★ RAH101	C10-2	Pilot Operated Spool Type	113/30	350/5000	PC37-PC38
RAH121	C12-2	Pilot Operated Spool Type	190/50	350/5000	PC39-PC40
RAH161	C16-2	Pilot Operated Spool Type	303/80	380/5500	PC41-PC42
A06G2	C16-2	Pilot Operated Spool Type	400/106	420/6000	PC43-PC44
RAH201	C20-2	Pilot Operated Spool Type	379/100	350/5000	PC45-PC46
A04K2	C10-2	Pilot Operated Spool Type Kick Down	160/42	420/6000	PC47-PC48
SOLENOID OPERATED					
AS04G2	C10-2	Solenoid Operated Unloading Relief	90/24	220/3200	PC49-PC50
<i>*See page PC49 for symbol</i>					
VENTABLE					
★ RAH101V	C10-3	Pilot Operated Vented Relief	68/18	380/5500	PC51-PC52
A04H3	C10-3S	Pilot Operated Vented Relief	190/50	420/6000	PC53-PC54
A06H3	C16-3S	Pilot Operated Vented Relief	400/106	420/6000	PC55-PC56
CROSS-OVER					
XR101	C10-2	Direct Acting Cross-over Relief	61/16	245/3500	PC57-PC58
A04J2	C10-2	Direct Acting Cross-over Relief	120/32	350/5000	PC59-PC60
A04J2*CE	C10-2	Direct Acting Cross-over Relief*	120/32	350/5000	PC61-PC62
★ XRDH101		Direct Acting Cross-over Relief	75/20	380/5500	PC63-PC64
★ XRDH102		Direct Acting Cross-over Relief with Anti-Cav Check	60/16	380/5500	PC65-PC66
★ XRDH103		Direct Acting Cross-over Relief, Motor Mount	75/20	380/5500	PC67-PC68
<i>*CE marked, PED Compliant</i>					
UNLOADING					
RU101	C10-3	Direct Acting Unloading	3.75/1	210/3000	PC69-PC70
*M04A4J	C10-4	Direct Acting Piloting Unloading	2/0.53	420/6000	PC71-PC72
<i>*See page PC71 for symbol</i>					
PILOT OPERATED WITH REVERSE CHECK					
A06P2	C16-2	Pilot Operated Poppet Type	400/106	420/6000	PC73-PC74
SEQUENCE VALVES					
PILOT OPERATED					
★ SVH081	C08-3	Pilot Operated, Int. Pilot, Ext. Drain	45/12	350/5000	PC75-PC76
★ SVH101	C10-3	Pilot Operated, Int. Pilot, Ext. Drain	56.3/15	350/5000	PC77-PC78
SVH161	C16-3	Pilot Operated, Int. Pilot, Ext. Drain	151.6/40	350/5000	PC79-PC80
★ SVH102	C10-3	Pilot Operated, Ext. Pilot, Int. Drain	56.3/15	350/5000	PC81-PC82
SVH162	C16-3	Pilot Operated, Ext. Pilot, Int. Drain	151.6/40	350/5000	PC83-PC84
★ SVCH101		Pilot Operated with Reverse Check Assy	56/15	380/5500	PC85-PC86

★ Denotes New Winner's Circle Product Line.



	SERIES	CAVITY	DESCRIPTION	FLOW LPM/GPM	PRESSURE BAR/PSI	PAGE NO.	
SEQUENCE VALVES							
	Pilot Operated (Continued)						
	B04D3	C10-3S	Pilot Operated, Reverse Check, Ext. Drain	120/32	420/6000	PC87-PC88	
	B04C3	C10-3S	Pilot Operated, Kick Down	160/42	420/6000	PC89-PC90	
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	DIRECT ACTING						
	B02E3F	C08-3	Direct Acting, 2P-3W, Int. Pilot, Int. Drain	30/8	420/6000	PC91-PC92	
	B04E3	C10-3	Direct Acting, 2P-3W, Int. Pilot, Int. Drain	50/13	420/6000	PC93-PC94	
☆	SV103	C10-3	Direct Acting, 2P-3W, Int. Pilot, Ext. Drain	56/15	250/3600	PC95-PC96	
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	☆	SV105	Direct Acting, 2P-2W, NC, Ext. Pilot, Int. Drain	38/10	250/3600	PC97-PC98	
	B04F3	C10-3	Direct Acting, 2P-2W, NC, Ext. Pilot, Int. Drain	34/9	420/6000	PC99-PC100	
	B04G3	C10-3	Direct Acting, 2P-2W, NO, Ext. Pilot, Int. Drain	40/10.6	420/6000	PC101-PC102	
	<hr/>						
	B04H4	C10-4	Direct Acting, 2P-2W, NC, Ext. Pilot, Ext. Drain	47/12	420/6000	PC103-PC104	
	☆	SV104	Direct Acting, 2P-2W, NO, Ext. Pilot, Ext. Drain	30/8	250/3600	PC105-PC106	
	B04J4	C10-4	Direct Acting, 2P-2W, NO, Ext. Pilot, Ext. Drain	47/12	420/6000	PC107-PC108	
	<hr/>						
	B04K4	C10-4	Direct Acting, 2P-3W, NO, Ext. Pilot, Int. Drain	42/11	420/6000	PC109-PC110	
	<hr/>						
REDUCING VALVES							
	DIRECT ACTING						
	C02A3	C08-3	Direct Acting Reducing/Relieving	20/5	420/6000	PC111-PC112	
☆	PR103	C10-3	Direct Acting Reducing/Relieving	56/13	210/3000	PC113-PC114	
<hr/>							
	PILOT OPERATED						
	☆	PRH082	C08-3	Pilot Operated Reducing	30/8	350/5000	PC115-PC116
☆	PRH102	C10-3	Pilot Operated Reducing	56.3/15	350/5000	PC117-PC118	
	PRH122	C12-3	Pilot Operated Reducing	113.7/30	350/5000	PC119-PC120	
	PRH162	C16-3	Pilot Operated Reducing	150/40	350/5000	PC121-PC122	
<hr/>							
	☆	PRH081	C08-3	Pilot Operated Reducing/Relieving	30/8	350/5000	PC123-PC124
	☆	PRH101	C10-3	Pilot Operated Reducing/Relieving	56.3/15	350/5000	PC125-PC126
	PRH121	C12-3	Pilot Operated Reducing/Relieving	113.7/30	350/5000	PC127-PC128	
	PRH161	C16-3	Pilot Operated Reducing/Relieving	150/40	350/5000	PC129-PC130	
☆	PRCH101		Pilot Operated Reducing/Relieving with Reverse Check	56/15	380/5500	PC131-PC132	

☆ Denotes New Winner's Circle Product Line.



CV

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PV

Proportional Valves

CE

Coils & Electronics

BC

Bodies & Cavities

TD

Technical Data

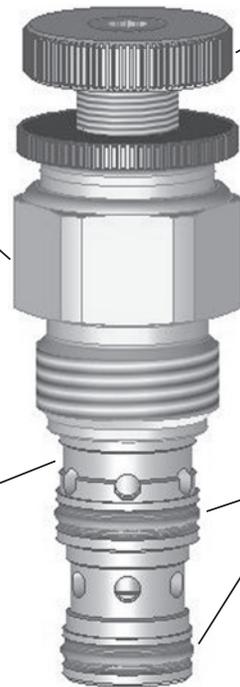
INTRODUCTION

This technical tips section is designed to help familiarize you with the Parker line of Pressure Controls. In this section we highlight new products to this catalog as well as some design features of our pressure control line. In addition we present common options available to help you in selecting products for your application. Finally we give a brief synopsis of the operation and applications of the various product offered in this section.

NEW PRODUCTS

There are several new additions and product improvements to our Pressure Controls product line.

Here are just some of the design features and advantages to the "Winner's Circle" product line.



Variety of Adjustments
Pressure controls are offered in screw adjust, knob adjust, fixed and tamper resistant configurations.

Yellow Zinc Coating
Steel adapters are coated with yellow zinc di-chromate for protection from salt spray.

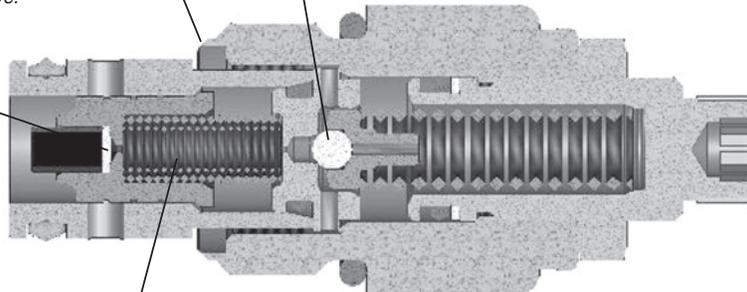
High Pressure Design
Pilot operated valves are rated to 350 Bar (5000 PSI) for use at elevated pressure.

"D"-Ring
Standard 4301 Polyurethane Seal eliminates the need for backup rings providing easier manifold installation. (For more information on "D"-Ring see Technical Data Section)

Crimp Design
Fold over crimp provides secure holding and eliminates the need for adhesive.

Guided Pilot
Pilot is fully guided providing a more consistent reseat.

Internal Screen
A small internal screen protects the pilot orifice and spring chamber from debris.



High Rate Bias Spring
Pilot operated reducing and sequence valves are designed with a high rate bias spring pressure, enhancing stability.

Low Profile Adapter
The low profile shape of the pilot operated pressure controls reduces the manifold clearance required.

COMMON OPTIONS

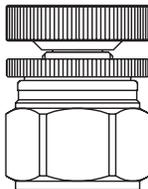
As you will see, Parker offers a variety of Pressure Control products. As such, some of the options mentioned below may not be available on all valves. Consult the model coding and dimensions for each valve for specifics. Here are some of the common options available.

Adjustment Types: Parker offers four primary types of adjustments for most of the pressure control products. Samples of these types are shown below. Please note all options may not be available for all valves. Consult the individual catalog pages for more details.

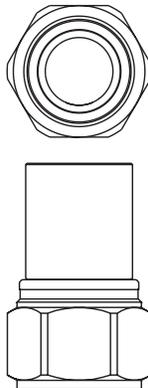
Screw Adjustment - Valve can be adjusted with an allen wrench. Lock nut included to maintain desired setting after adjustment. This is the most common adjustment option available on most Parker products.



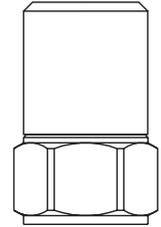
Knob Adjustment - An aluminum knob is added to the standard screw adjustment. A lock knob is provided to help maintain the desired setting after adjustment. Parker offers knob conversion kits for most pressure control valves. For kit numbers consult individual valve pages.



Fixed Style - In most cases, the Fixed Style product is a screw adjustable product with a steel collet threaded over the screw adjustment. These valves are preset at the factory.



Tamper Resistant - The tamper resistant option is a screw adjustable valve with a steel cap installed to conceal the adjustment. The cap is designed so that the internal edges clamp into the groove of the valve adapter. Once the cap is installed, it cannot be removed without damaging the cap and the valve. When a valve is ordered with the tamper resistant option, it will be preset at the factory, and the cap will be included in a separate plastic bag to allow for fine tuning at the customer site. Parker offers tamper resistant cap conversion kits for most pressure control valves. For kit numbers consult individual valve pages.



Seals: The Winner's Circle products feature a standard 4301 Polyurethane "D"-Ring. The "D"-Ring eliminates the need for backup rings. The majority of the products are available in Nitrile or Fluorocarbon Seals. You should match the seal compatibility to the temperature and fluid being used in your application.

Pressure Range: Parker offers a range of spring settings for the Pressure Control product line. You want to choose the setting that best meets the operating range. The model callout is equivalent to the maximum setting (in psi) of the spring divided by 100 (i.e. 50 = 5000 psi).

CV

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Proportional Valves

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Coils & Electronics

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Bodies & Cavities

TD

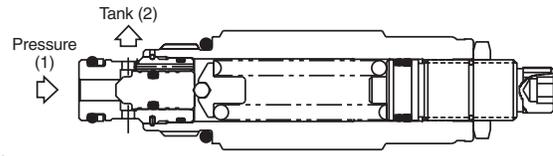
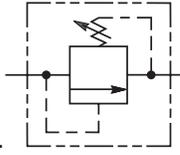
Technical Data

- 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
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PRODUCT TYPES / APPLICATIONS

Direct Acting Relief Valves

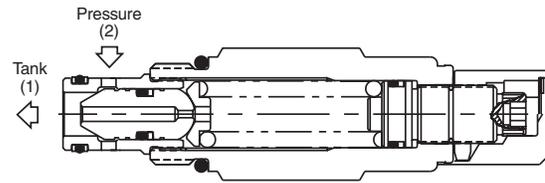
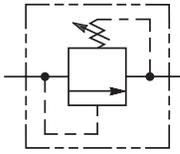
Direct acting relief valves are designed for fast response in intermittent duty applications. They are often used as an economical solution to clip pressure spikes. The poppet design allows for low leakage.



OPERATION - The valve poppet is held against the seat by the spring force. Inlet pressure on the nose (port 1) of the poppet acts against the spring force to unseat the poppet at the valve setting and allow flow to pass to tank. Since the pressure is working directly on the spring, this valve is very fast responding. It is not the best choice for system pressure regulation as it is slightly noisier than pilot operated relief valves and has higher pressure rise. *Note:* Any backpressure on port 2 would be additive to the spring setting.

Differential Area Relief Valves

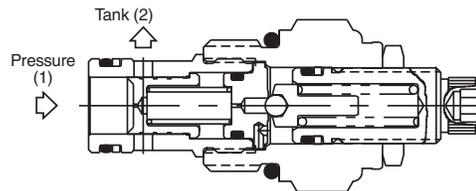
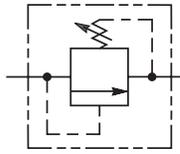
Differential area relief valves also are also best suited for intermittent applications where fast response is critical. These valves are often used as cross-over relief valves to chop pressure spikes. Due to their design, they generally can handle a larger flow rate and have a lower pressure rise than the standard directing acting relief. The poppet design allows for low leakage.



OPERATION - Pressure on the inlet (port 2) of the valve acts on the differential area of the poppet (difference between the O.D. of the poppet and the seat diameter) to produce a force which is opposed by the spring force. When pressure reaches the valve setting, the poppet is pushed off its seat, permitting flow to tank. *Note:* Any backpressure on port 1 would be additive to the spring setting.

Pilot Operated Relief

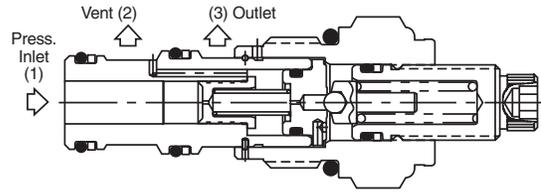
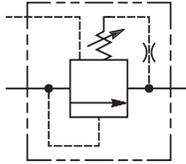
Pilot operated relief valves are designed for continuous duty applications. Due to their stability and low pressure rise, the pilot operated relief is the best option for setting the pressure of a hydraulic system.



OPERATION - When inlet pressure at the nose (port 1) exceeds the valve setting, the pilot ball unseats. The pilot flow creates a pressure imbalance across the main spool causing the spool to move and allowing flow from inlet (port 1) to tank (port 2.) *Note:* Any backpressure on port 2 would be additive to the spring setting.

Ventable Pilot Operated Relief

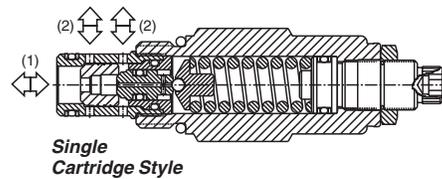
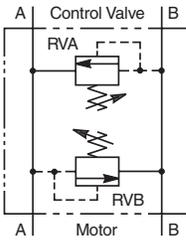
Ventable relief valves are a unique type of pilot operated relief. With this valve, you can control the pressure setting with the internal adjustment as well as via remote circuit. These valves are ideal in circuits where multiple pressures are needed.



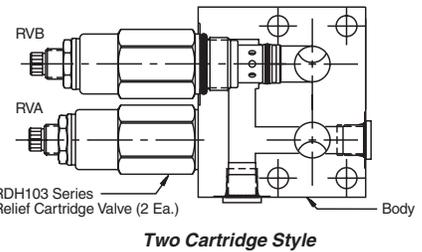
OPERATION - This valve can be controlled by the adjustment setting on the valve, or a remote circuit via the vent line. When the vent line is used, the smaller of the two pressure settings will determine the valve setting. In other words, if the pressure setting of the remote circuit is less than the adjusted setting, then the valve will relieve at the remote setting. If the pressure setting of the remote circuit is greater than the adjusted setting, then the valve will relieve at the adjusted setting. With the vent port (port 2) blocked, the valve operates like a standard pilot operated relief valve. Thus, a solenoid valve could be used on the vent port to select control between this valve another remote valve.

Dual Crossover Relief Valves

Dual crossover relief valves provide pressure surge protection for double acting hydraulic actuators. For best results, you always want to install the valve as close to the actuator as possible. The dual crossover feature can be achieved in two different methods. One way is to manifold two Differential Area Relief Valves into a single body. Parker offers three versions of this two cartridge arrangement. The advantage gained is higher flows can be pushed through this arrangement. The second method is to combine this dual function into a single cartridge. The single cartridge arrangement reduces cost considerably of the total package. In addition, a standard common cavity line body can be used instead of a special two body arrangement. The operation for the single cartridge style is shown below.



Single Cartridge Style

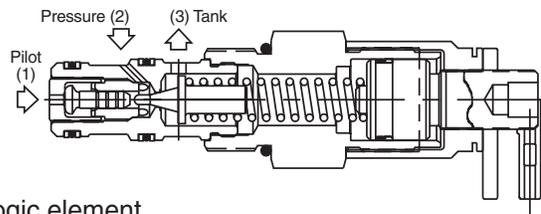
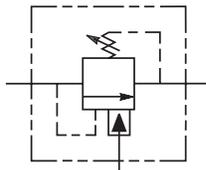


Two Cartridge Style

OPERATION - Pressure at port 1 acts on the spool to produce a force which is opposed by the spring setting. When pressure reaches the valve setting, the spool and poppet move relieving flow from port 1 to port 2. When port 2 is pressurized, the pressure acts on the differential area poppet to produce a force which is opposed by the spring force. When the pressure reaches the valve setting, the poppet is pushed off of its seat, relieving flow from port 2 to port 1. *Note:* Due to the construction and flow paths through the valve, the relief pressure settings may vary by approximately 300 psi from one direction to the other.

Differential Area Unloading Relief Valve

Unloading valves are differential area relief valves that can also be fully dumped or unloaded via a remote signal. They are best suited for low flow accumulator unloading circuits. They provide a fixed percentage between load and unload pressures. This pilot valve would generally be used in conjunction with a logic element.



OPERATION - The fixed differential is provided by the pilot piston which has greater area than the dart seat. With its greater area, the piston is able to hold the dart off its seat, permitting flow from pressure to tank, until pressure on the pilot piston falls below the fixed percentage of the valve settings.

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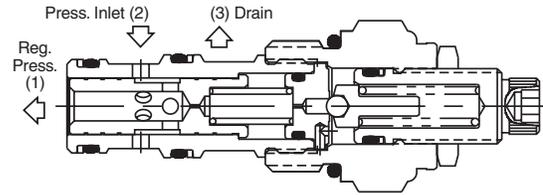
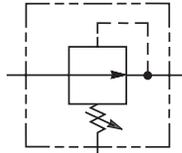
Bodies & Cavities

TD

Technical Data

Pilot Operated Reducing Valve

Pilot operated pressure reducing valves can be used to reduce the pressure in a leg of the circuit lower than system pressure. Thus, they can be used to provide protection to downstream components from higher pressures.



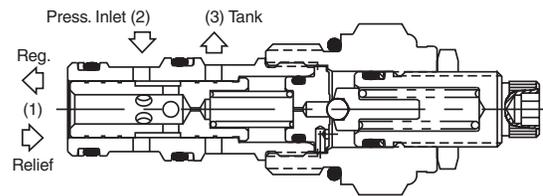
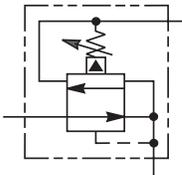
OPERATION - The pilot section controls the valve setting when reducing. As pressure at the regulated port exceeds the valve setting, the pilot ball is unseated. The pilot flow creates a pressure imbalance across the main spool causing the spool to throttle in order to maintain constant downstream pressure. The normally open design will allow flow to pass from inlet to reduced port with the only restriction being the pressure drop.

Pressure Reducing / Relieving Valves

Pressure reducing / relieving valves can be used to reduce the pressure in a leg of the circuit lower than system pressure. The valve also acts as a relief valve, relieving any shocks or surges that occur between the regulated port and the actuator. When the valve is in the relieving mode, the inlet port is blocked. Parker offers pressure reducing/relieving valves in both pilot operated and directing acting styles. The direct acting version is generally used in static applications where response is critical, or leakage is a concern.

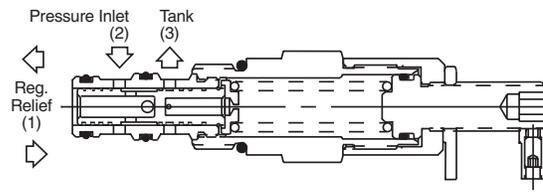
Pilot Operated

OPERATION - The pilot section controls the valve setting when reducing. As pressure at the regulated port exceeds the valve setting, the pilot ball is unseated. The pilot flow creates a pressure imbalance across the main spool causing the spool to throttle in order to maintain constant downstream pressure. A shock or surge at the regulated port shifts the spool, relieving flow to tank.



Direct Acting

OPERATION - As pressure at the regulated port exceeds the valve setting, the valve throttles or closes in order to maintain constant downstream pressure. A shock or surge at the regulated port further shifts the spool, relieving flow to tank. This valve is not intended for rapidly changing flows which could lead to instability.

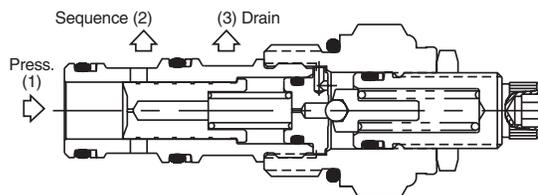


Pilot Operated Sequence Valves

Sequence valves are used to control the sequence of operation of two or more hydraulic actuators. The sequence valve pressure is set higher than the first actuator operation pressure. Once the first actuator has completed its cycle, the sequence valve opens allowing the second actuator to move. Parker's line of pilot operated sequence valves include a series of internally piloted, externally drained valves and a series of externally piloted, internally vented valves. Parker also offers a line of direct acting sequence valves which are ideal for piloting logic elements in steady state applications.

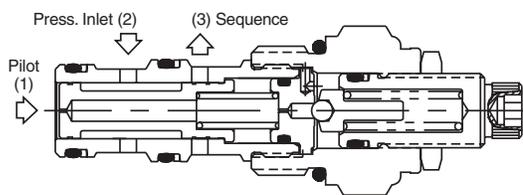
P.O. Sequence (Internally Piloted, Externally Drained)

OPERATION - For this valve, the pilot pressure is sensed from the inlet of the valve (port 1). When the pilot pressure exceeds the valve setting, the pilot section opens creating a pressure imbalance across the main spool. This causes the spool to move allowing the flow to pass from the nose of the cartridge (port 1) to the actuator port (port 2). By externally draining the pilot flow directly to tank (port 3), the valve is insensitive to back pressure at the sequence port.



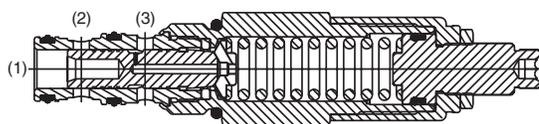
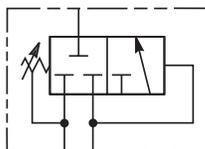
P.O. Sequence (Externally Piloted, Internally Vented)

OPERATION - For this valve, the pilot pressure is obtained from an external source and not from the pressure port. When the external pilot pressure (port 1) exceeds the valve setting, the pilot section opens creating a pressure imbalance across the main spool. This causes the spool to move allowing the flow to pass from the side of the cartridge (port 2) to the actuator port (port 3). Any pressure at port 3 is additive to the pressure setting. It is most common for port 3 to be connected to tank.



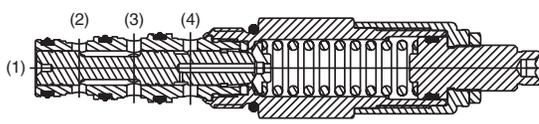
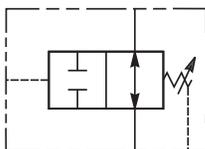
D.A. Sequence (Internally Piloted, Externally Drained)

OPERATION - In the steady state condition, all three ports are blocked with the spring chamber drained to port 3. When the pressure at port 1 exceeds the valve setting, the spool moves allowing flow from the nose of the cartridge (port 1) to the actuator port (port 2). By externally draining the spring chamber directly to tank (port 3), the valve is insensitive to back pressure at the sequence port.



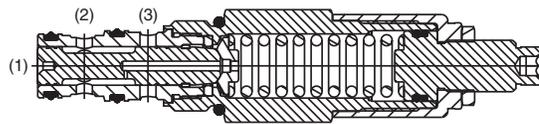
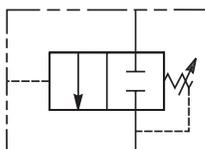
D.A. Sequence, N.O. (Externally Piloted, Externally Drained)

OPERATION - With no pressure at the pilot port (port 1), bi-directional flow is allowed between port 3 and port 2. When the pilot pressure at port 1 exceeds the valve setting the spool moves blocking both port 3 and port 2. By externally draining the spring chamber to tank (port 4), the valve is insensitive to back pressure at the sequencing ports.



D.A. Sequence, N.C. (Externally Piloted)

OPERATION - With no pressure at the pilot port (port 1), both port 3 and port 2 are blocked. When the pilot pressure at port 1 exceeds the valve setting, the spool moves opening a path and allowing flow from port 3 to port 2. This valve internally drains the spring chamber to tank via the sequencing port, thus any backpressure on port 2 would be additive to the spring setting.



Technical Information

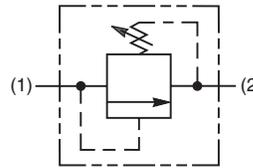
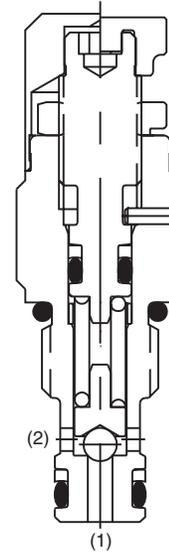
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Direct Acting Ball-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened, precision ground parts for durability
- Compact size for reduced space requirements
- Low leakage design
- Fast response
- All external parts zinc plated



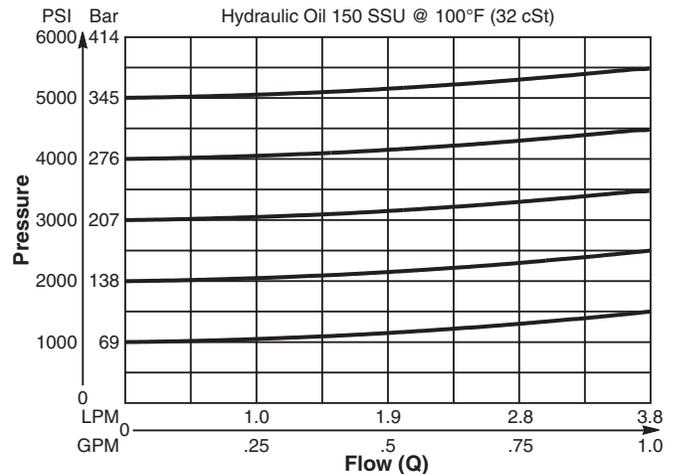
Specifications

Rated Flow	3.8 LPM (1 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Reseat Pressure	80% of crack pressure
Leakage at 150 SSU (32 cSt)	10 drops/min. (.66 cc/min.) @75% of crack pressure
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	.03 kg (.07 lbs.)
Cavity	C04-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT04-2F

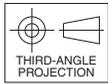
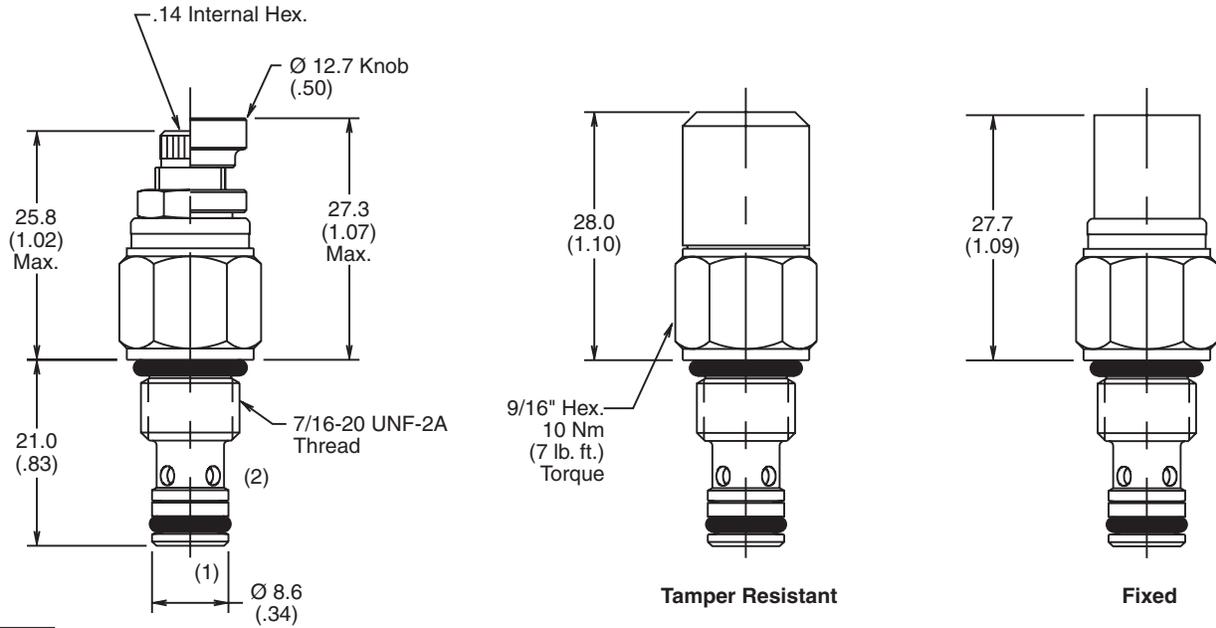
Performance Curve

Flow vs. Inlet Pressure

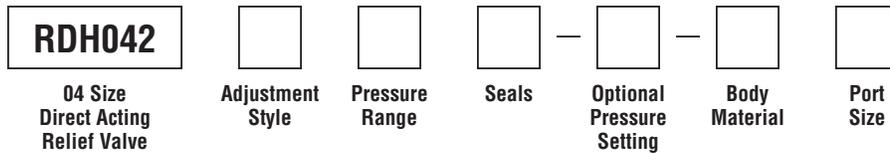
(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (852544)
S	Screw Adjust
T	Tamper Resistant Cap (852519)

Code	Pressure Range
30	6.9 - 207 Bar (100 - 3000 PSI) Standard Setting: 103 Bar (1500 PSI) @ 1.9 LPM (.5 GPM)
50	103 - 345 Bar (1500 - 5000 PSI) Standard Setting: 172 Bar (2500 PSI) @ 1.9 LPM (.5 GPM)

Code	Seals / Kit No.
Omit	Nitrile / (SK04-2)
V	Fluorocarbon / (SK04-2V)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at 1.9 LPM (.5 GPM)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Port Size	Body Part No.
Omit	Cartridge Only	
4T	SAE-4	(B04-2-*4T)

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

- 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

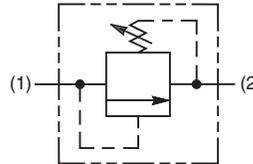
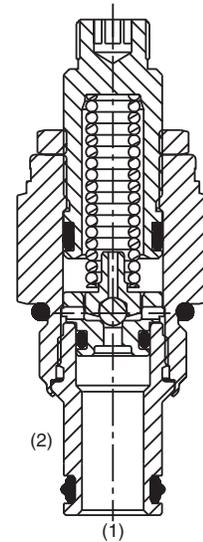
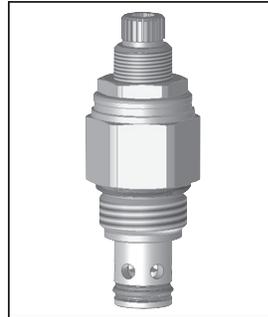
General Description

Direct Acting Relief Valve. This valve is designed for pilot flow circuits. For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided pilot for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane “D”-Ring eliminates backup rings and prevents hydrolysis



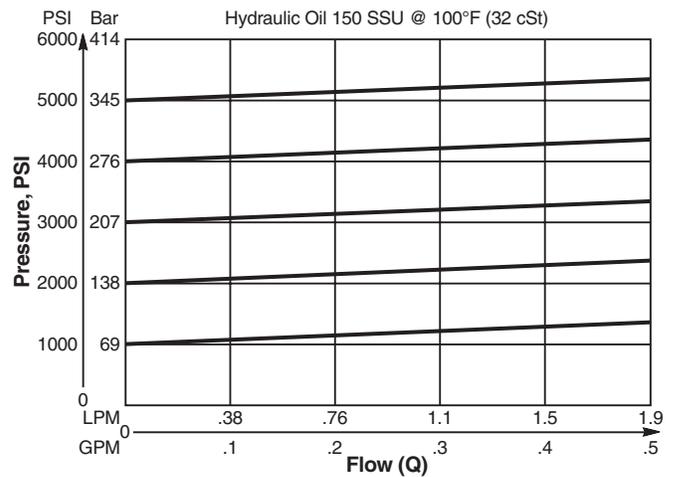
Specifications

Rated Flow	1.9 LPM (.5 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Reseat Pressure	90% of crack pressure
Leakage at 150 SSU (32 cSt)	5 drops/min. (.33 cc/min.) @75% of crack pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C (“D”-Ring) (-50°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	.09 kg (.20 lbs.)
Cavity	C08-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT08-2F

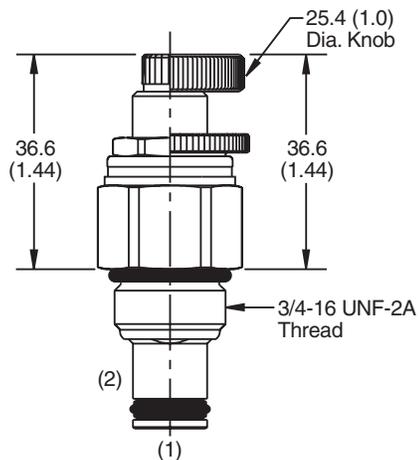
Performance Curve

Flow vs. Inlet Pressure

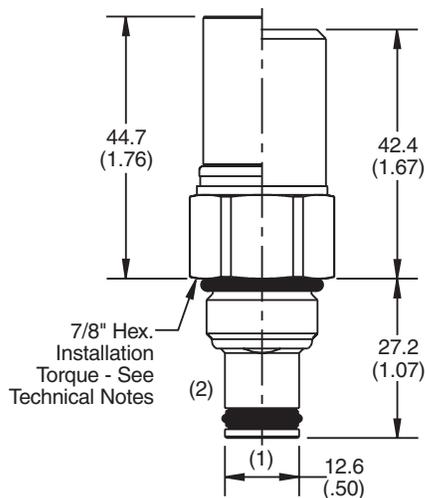
(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)



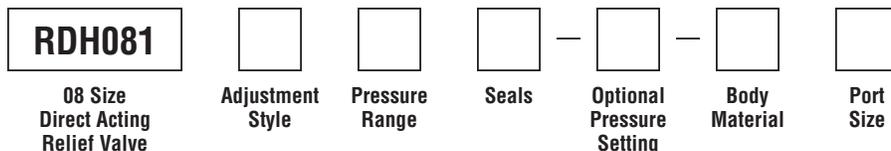
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (717943)

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

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used)
Setting Range: 100 to 5000 PSI All settings at crack pressure, approximately 100 cc/min (6.1 in ³ /min)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
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.

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

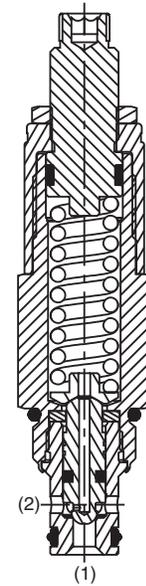
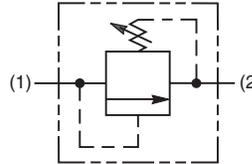
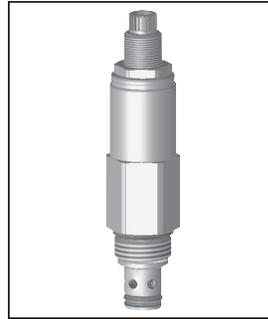
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Direct Acting Poppet-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened, precision ground parts for durability
- Fast response
- Spherical poppets for low leakage
- Internal mechanical stop limits poppet travel eliminating spring solidification
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis



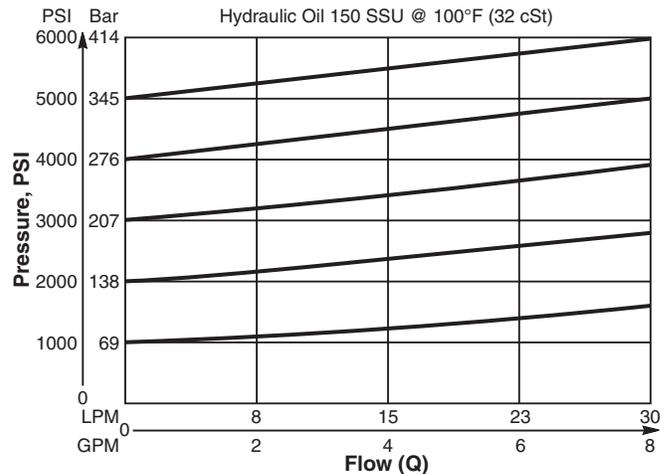
Specifications

Rated Flow	30 LPM (8 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Reseat Pressure	85% of crack pressure
Leakage at 150 SSU (32 cSt)	5 drops/min. (.33 cc/min.) @75% of crack pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	.18 kg (.40 lbs.)
Cavity	C08-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT08-2F

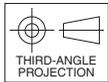
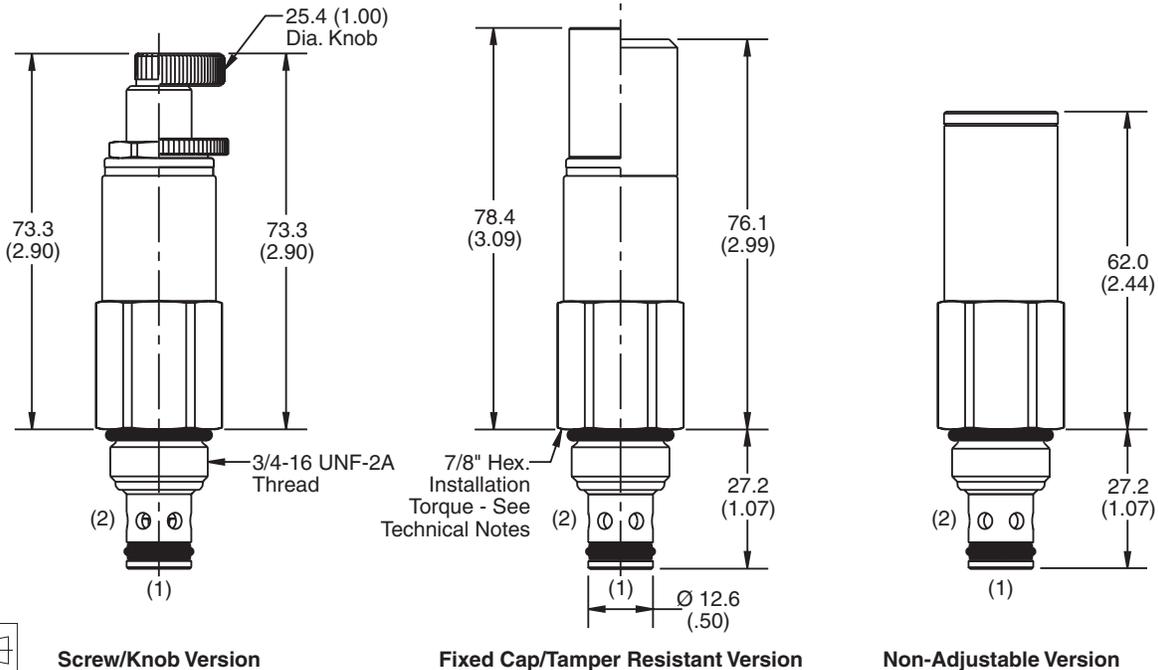
Performance Curve

Flow vs. Inlet Pressure

(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)

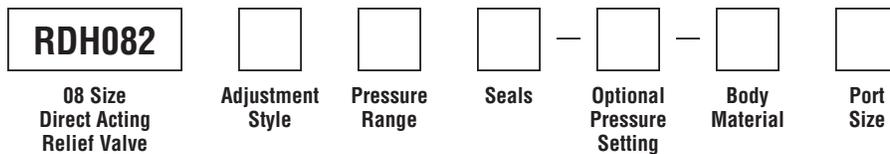


Screw/Knob Version

Fixed Cap/Tamper Resistant Version

Non-Adjustable Version

Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
N	Non-Adjustable
S	Screw Adjust
T	Tamper Resistant Cap (717943)

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

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
15	6.9 - 103 Bar (100 - 1500 PSI) Standard Setting: 51.7 Bar (750 PSI) @ crack pressure approximately .95 LPM (.25 GPM)
30	17.2 - 207 Bar (250 - 3000 PSI) Standard Setting: 103 Bar (1500 PSI) @ crack pressure approximately .95 LPM (.25 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure approximately .95 LPM (.25 GPM)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at crack pressure, approximately .95 LPM (.25 GPM)

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

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

- 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
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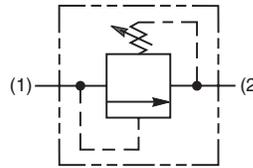
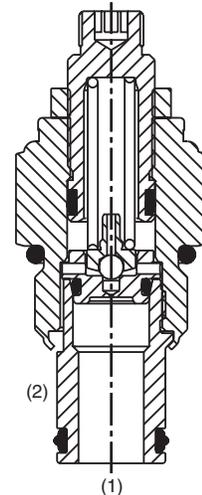
General Description

Direct Acting Relief Valve. This valve is designed for pilot flow circuits. For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided poppet for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis



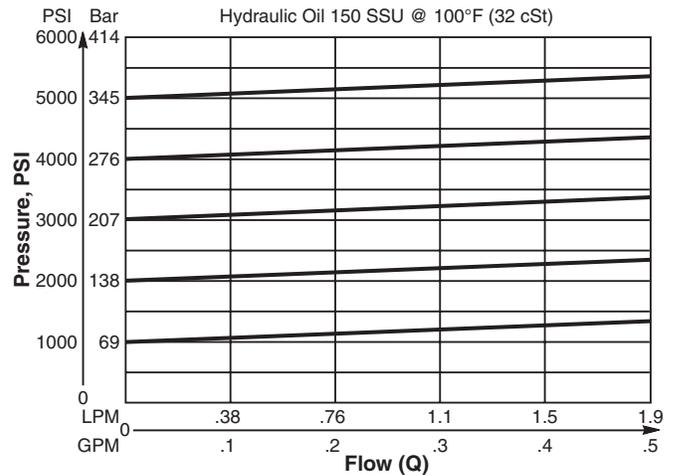
Specifications

Rated Flow	1.9 LPM (.5 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Reseat Pressure	90% of crack pressure
Leakage at 150 SSU (32 cSt)	5 drops/min. (.33 cc/min.) @ 80% of crack pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	.18 kg (.40 lbs.)
Cavity	C10-2
Form Tool	Rougher None Finisher NFT10-2F

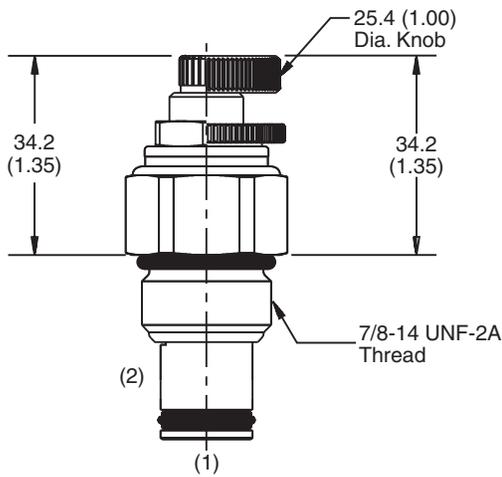
Performance Curve

Flow vs. Inlet Pressure

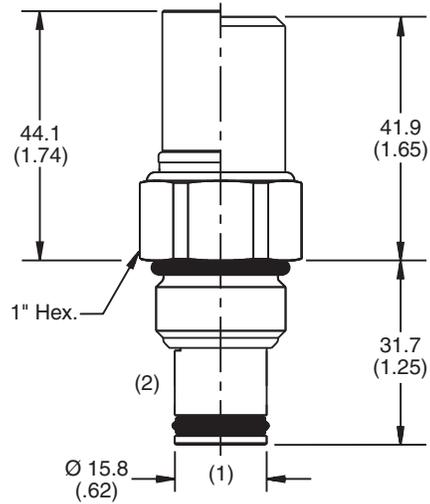
(Pressure rise through cartridge only)



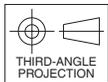
Dimensions Millimeters (Inches)



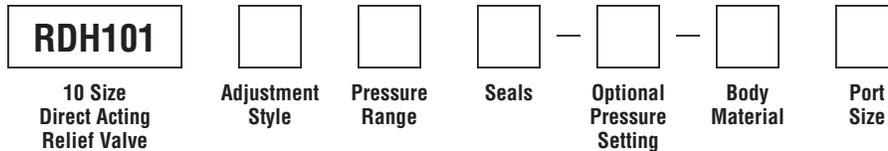
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (718083)

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

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately 100 cc/min (6.1 in ³ /min)

Optional Pressure Setting
Pressure ÷ 10 i.e. 235 = 2350 PSI (Omit if standard setting is used)
Setting Range: 100 to 5000 PSI
All settings at crack pressure, approximately 100 cc/min (6.1 in ³ /min)

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)
T6T	SAE-6	(B10-2-T6T)†
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

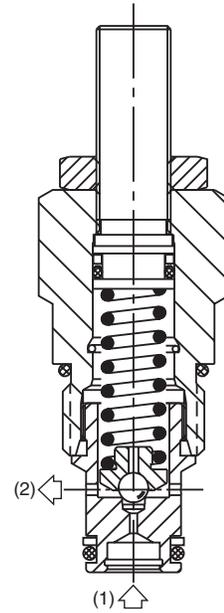
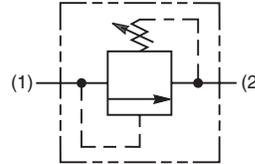
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Direct Acting Ball-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Fast response
- Ideal for controlling ventable relief valves, or for thermal relief
- Hardened working parts for maximum durability
- Integral 250 micron inlet filter available
- All external parts zinc plated



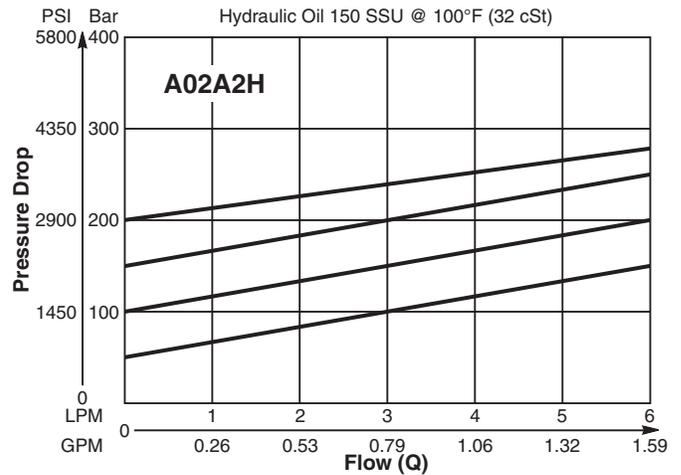
Specifications

Rated Flow	6 LPM (1.6 GPM)
Maximum Inlet Pressure	H - 10-210 Bar (145-3000 PSI) P - 10-420 Bar (145-6000 PSI)
Maximum Pressure Setting	420 Bar (6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	5 drops/min. @ 100 Bar (1450 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	0.11 kg (0.24 lbs.)
Cavity	C08-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT08-2F

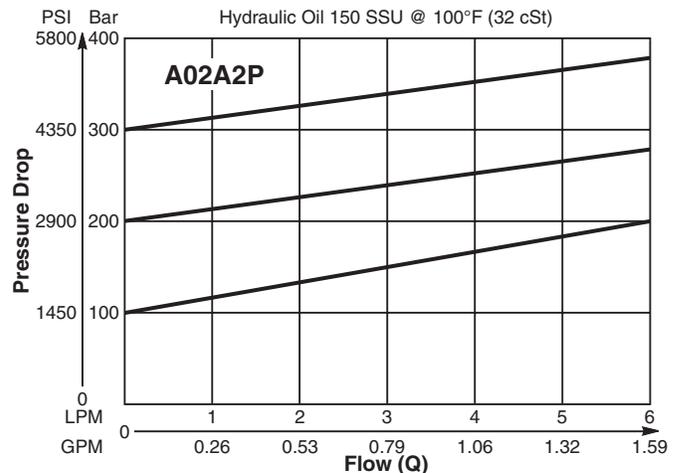
Performance Curves

(Pressure rise through cartridge only)

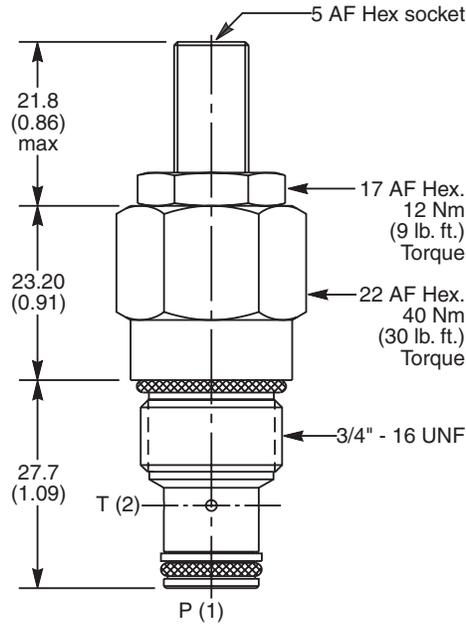
Flow vs. Inlet Pressure



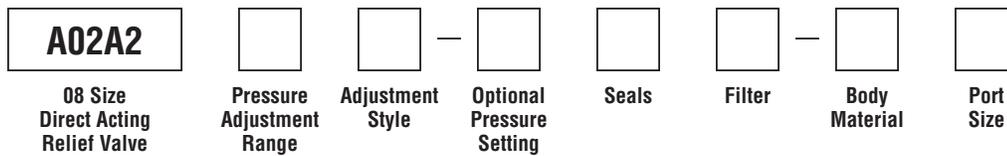
Flow vs. Inlet Pressure



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
H	10 - 210 Bar (145 - 3000 PSI)
P	10 - 420 Bar (145 - 6000 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30515N-1)
V	Fluorocarbon / (SK30515V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Filter
Omit	Omit for no filter (Std.)
F	250 micron inlet filter

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.

Optional Pressure Setting	
Specify setting if required (Bar)	
A02A2H Standard Setting: 100 Bar (1400 PSI) @ 0.5 LPM (0.13 GPM)	
A02A2P Standard Setting: 200 Bar (2900 PSI) @ 0.5 LPM (0.13 GPM)	

- 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

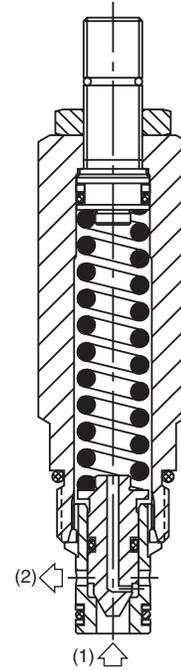
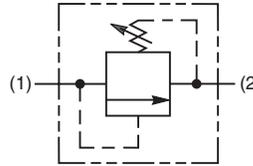
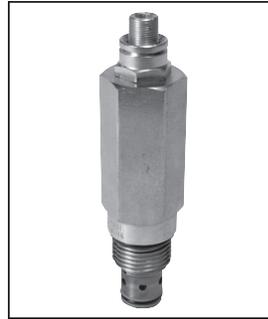
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Direct Acting Poppet-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Fast response
- Excellent stability throughout flow range
- Virtually leak free
- Hardened working parts for maximum durability
- Adjustable, preset and tamper resistant versions available
- Preset version is tamper resistant and compact
- All external parts zinc plated



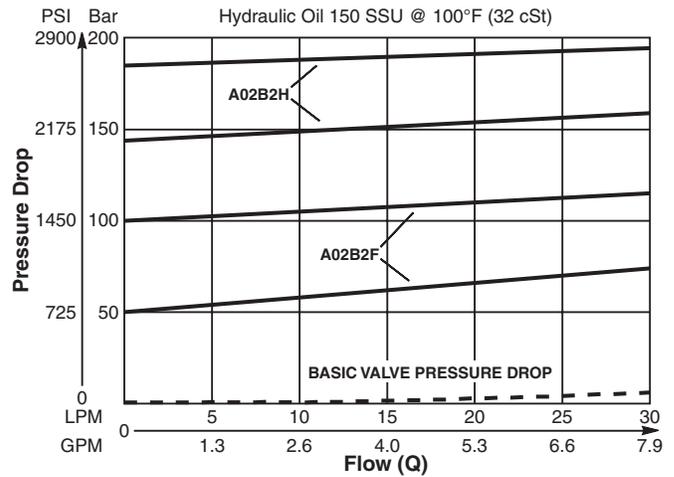
Specifications

Rated Flow	30 LPM (8 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	F - 2-100 Bar (29-1450 PSI) H - 5-210 Bar (72-3000 PSI) P - 5-420 Bar (72-6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	5 drops/min. @ 100 Bar (1450 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	0.20 kg (0.44 lbs.)
Cavity	C08-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT08-2F

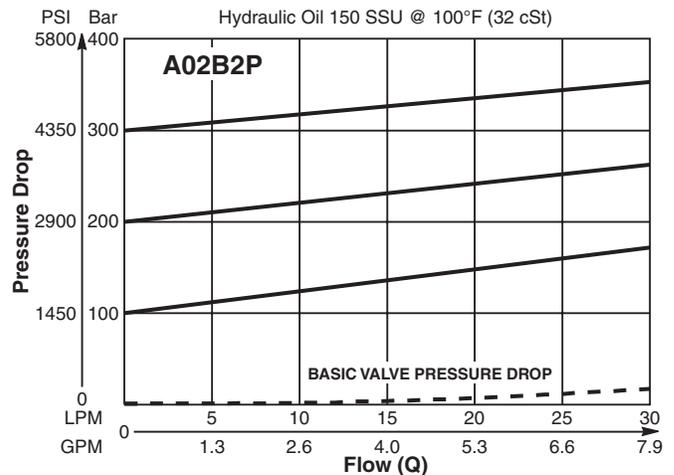
Performance Curves

(Pressure rise through cartridge only)

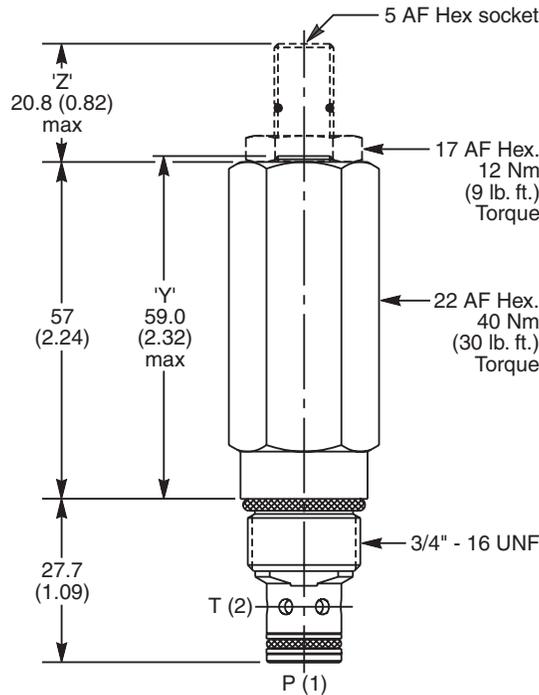
Flow vs. Inlet Pressure



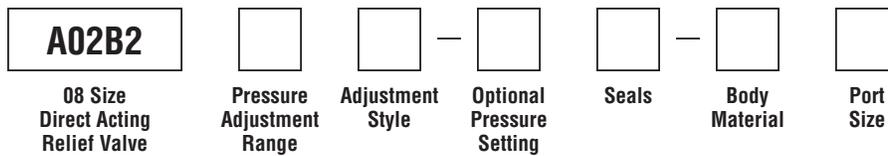
Flow vs. Inlet Pressure



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
F	2 - 100 Bar (29 - 1450 PSI)
H	5 - 210 Bar (72 - 3000 PSI)
P	5 - 420 Bar (72 - 6000 PSI)

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)
Y	Non Adjustable Preset

Code	Optional Pressure Setting
	Specify setting if required (Bar) Y Setting must be specified
A02B2F	Standard Setting: 50 Bar (725 PSI) @ 2 LPM (0.5 GPM)
A02B2H	Standard Setting: 100 Bar (1450 PSI) @ 2 LPM (0.5 GPM)
A02B2P	Standard Setting: 200 Bar (2900 PSI) @ 2 LPM (0.5 GPM)

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

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
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- TD** Technical Data

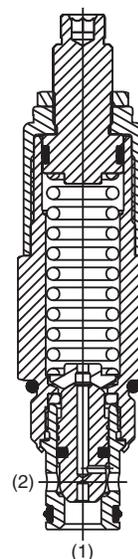
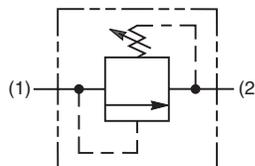
General Description

Direct Acting Poppet-Type Relief Valve.
For additional information see
Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Internal mechanical stop limits poppet travel eliminating spring solidification
- Spherical poppets for low leakage
- “D”-Ring eliminates backup rings
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.
- Fast response



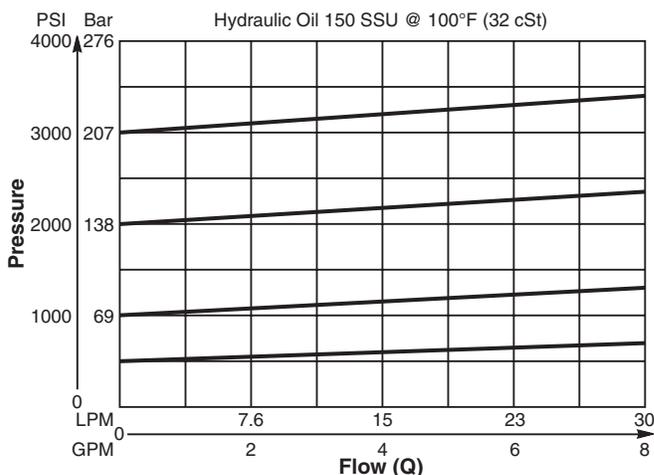
Specifications

Rated Flow	38 LPM (10 GPM)
Maximum Inlet Pressure	250 Bar (3600 PSI)
Maximum Pressure Setting	210 Bar (3000 PSI)
Maximum Tank Pressure	210 Bar (3000 PSI)
Reseat Pressure	85% of crack pressure
Leakage at 150 SSU (32 cSt)	5 drops/min. (.33 cc/min.) @75% of crack pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range (Ambient)	-45°C to +93.3°C (“D”-Ring) (-50°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F)
Fluids	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

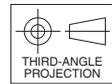
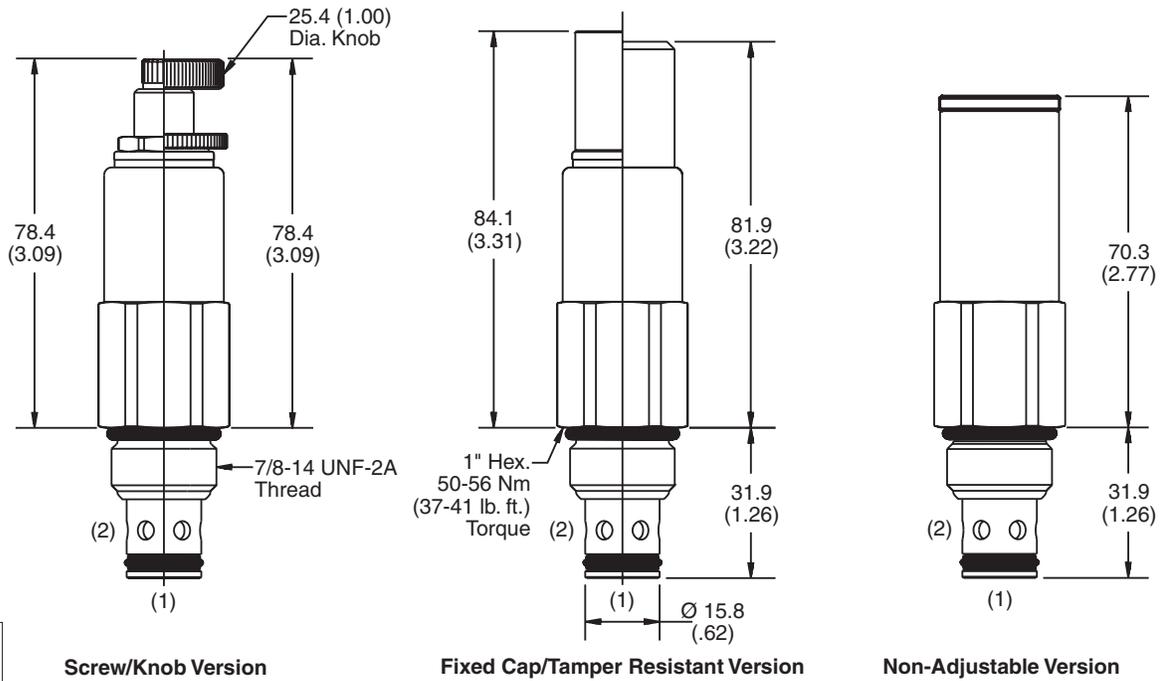
Performance Curve

Flow vs. Inlet Pressure

(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)

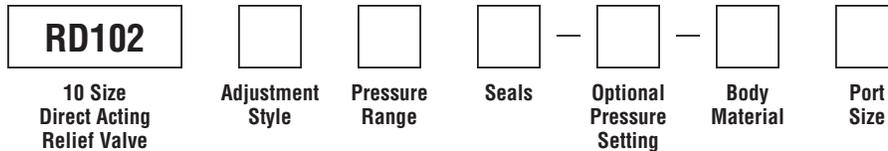


Screw/Knob Version

Fixed Cap/Tamper Resistant Version

Non-Adjustable Version

Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
N	Non-Adjustable
S	Screw Adjust
T	Tamper Resistant Cap (717943)

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

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
03	3.5 - 20.7 Bar (50 - 300 PSI) Standard Setting: 10.3 Bar (150 PSI) @ .95 LPM (.25 GPM)
09	7 - 62 Bar (100 - 900 PSI) Standard Setting: 31.0 Bar (450 PSI) @ .95 LPM (.25 GPM)
18	13.8 - 124 Bar (200 - 1800 PSI) Standard Setting: 62.1 Bar (900 PSI) @ .95 LPM (.25 GPM)
30	41.4 - 207 Bar (600 - 3000 PSI) Standard Setting: 103.4 Bar (1500 PSI) @ .95 LPM (.25 GPM)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 3000 PSI All settings at .95 LPM (.25 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

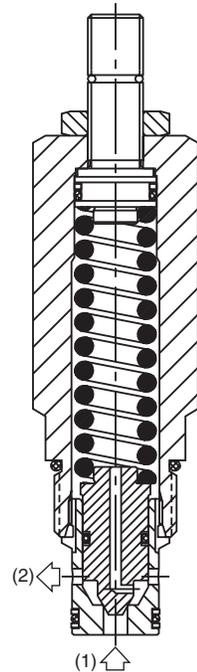
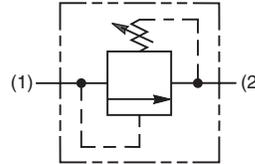
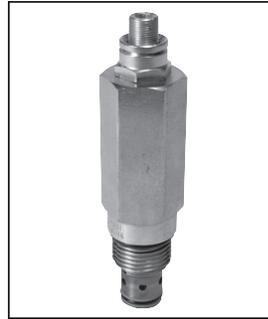
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
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General Description

Direct Acting Poppet-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Fast response with good stability
- Virtually leak-free
- Hardened working parts for maximum durability
- Adjustable, preset and tamperproof versions available
- Preset version is tamperproof and compact
- All external parts zinc plated



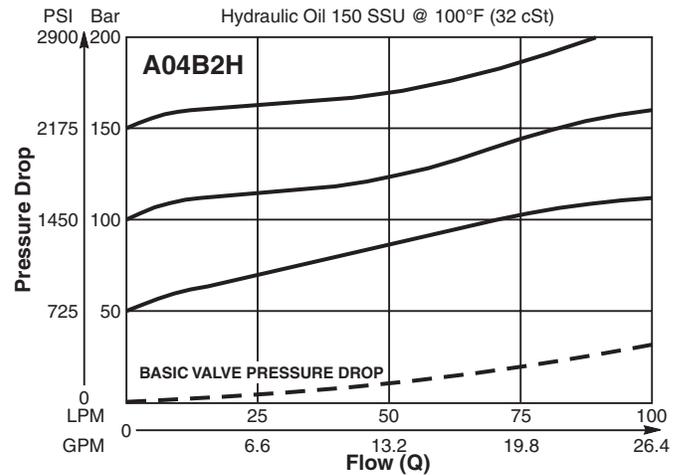
Specifications

Rated Flow	100 LPM (26 GPM)
Maximum Inlet Pressure	H - 5-210 Bar (72-3000 PSI) P - 5-420 Bar (72-6000 PSI)
Maximum Pressure Setting	420 Bar (6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	5 drops/min. @ 100 Bar (1450 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	0.28 kg (0.62 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT10-2F

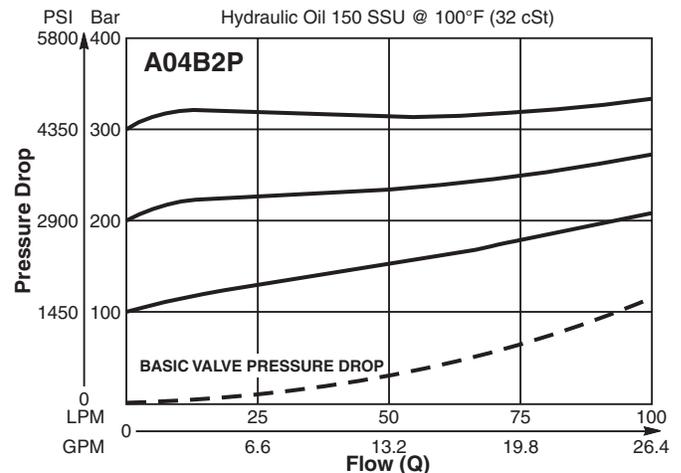
Performance Curves

(Pressure rise through cartridge only)

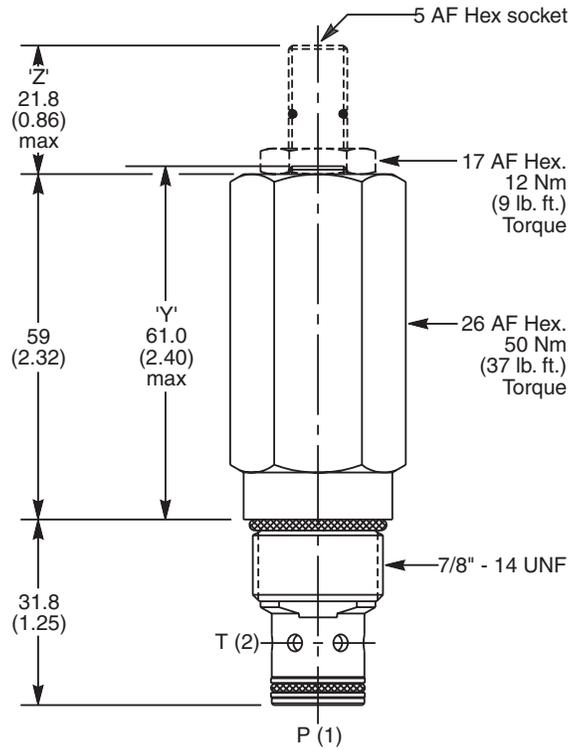
Flow vs. Inlet Pressure



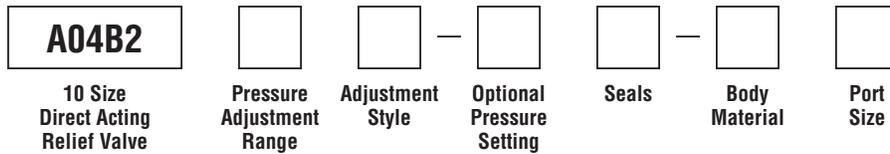
Flow vs. Inlet Pressure



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
H	5 - 210 Bar (72 - 3000 PSI)
P	5 - 420 Bar (72 - 6000 PSI)

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

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)
Y	Non Adjustable Preset

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)†

Optional Pressure Setting	
Specify setting if required (Bar)	
Y Setting must be specified	
A04B2H Standard Setting: 100 Bar (1450 PSI) @ 15 LPM (4.0 GPM)	
A04B2P Standard Setting: 200 Bar (2900 PSI) @ 15 LPM (4.0 GPM)	

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

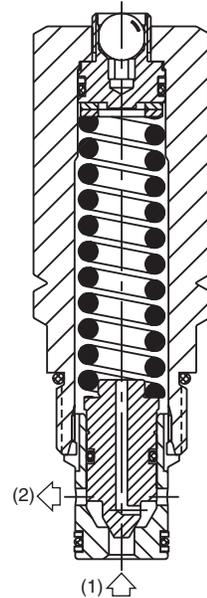
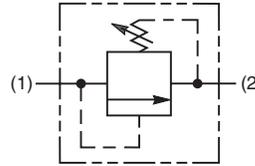
Direct Acting Poppet-Type Relief Valve. Pressure Equipment Directive (PED 97/23/EC) compliant to hazard category IV. For additional information see Technical Tips on pages PC1-PC6.

Features

- Fast response with good stability
- Compact space saving design
- Poppet type construction for lower leakage
- Full 420 Bar (6000 PSI) pressure capability
- Hardened working parts for maximum durability
- Tamperproof setting
- All external parts zinc plated

Specifications

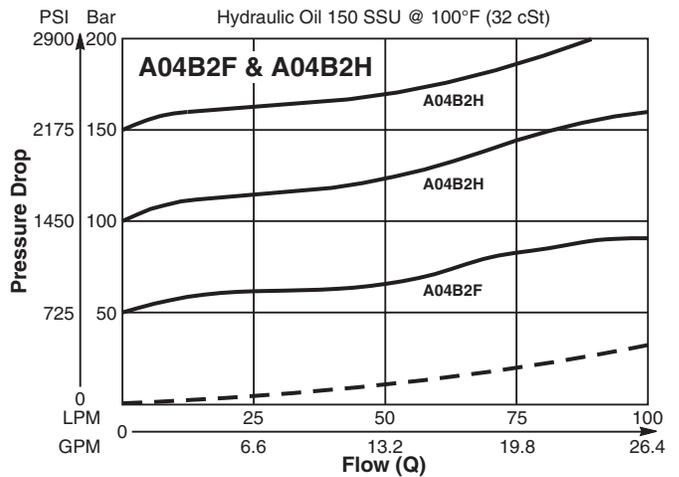
Rated Flow	100 LPM (26 GPM)
Maximum Inlet Pressure	FY - 2-100 Bar (29-1450 PSI) HY - 5-210 Bar (72-3000 PSI) PY - 5-420 Bar (72-6000 PSI)
Maximum Pressure Setting	420 Bar (6000 PSI)
Sensitivity: Pressure/Turn	FY - 11 Bar (165 PSI) HY - 21 Bar (305 PSI) PY - 44 Bar (630 PSI)
Leakage at 150 SSU (32 cSt)	5 drops/min. @ 100 Bar (1450 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	0.25 kg (0.55 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT10-2F



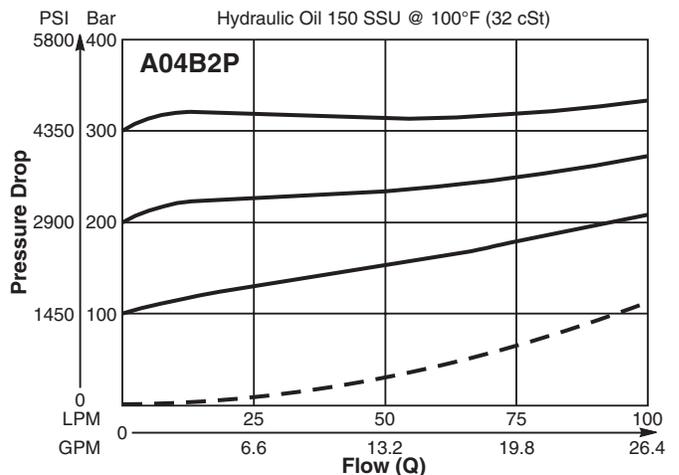
Performance Curves

(Pressure rise through cartridge only)

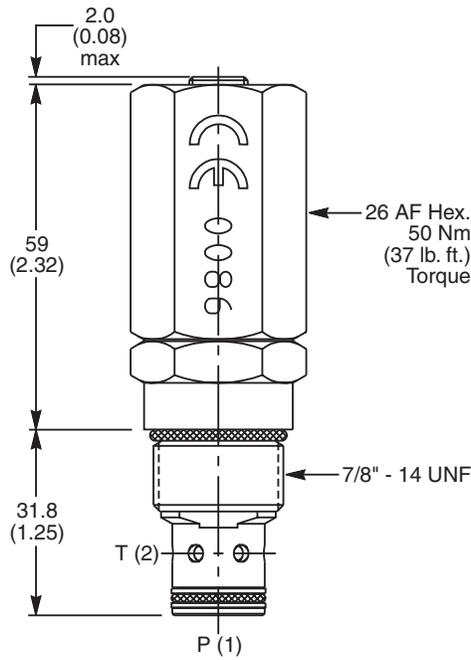
Flow vs. Inlet Pressure



Flow vs. Inlet Pressure



Dimensions Millimeters (Inches)



Ordering Information

A04B2		Y			CE		
10 Size Direct Acting Relief Valve	Pressure Adjustment Range	Adjustment Style	Optional Pressure Setting	Seals	Body Material	Port Size	

Code	Pressure Adjustment Range
F	2 - 100 Bar (29 - 1450 PSI)
H	5 - 210 Bar (72 - 3000 PSI)
P	5 - 420 Bar (72 - 6000 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30503NP-1)
V	Fluorocarbon / (SK30503VP-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Y	Non Adjustable Preset (Std.)

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)†

Optional Pressure Setting	
Setting must be specified (Bar)	

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

Technical Information

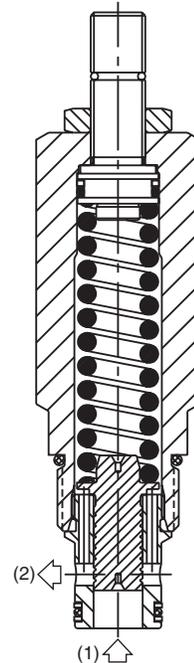
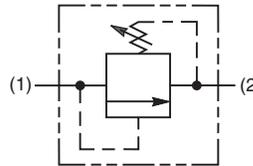
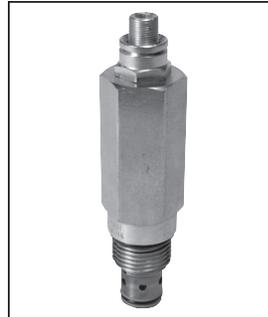
- CV Check Valves
- SH Shuttle Valves
- LM Load/Motor Controls
- FC Flow Controls
- PC Pressure Controls
- LE Logic Elements
- DC Directional Controls
- MV Manual Valves
- SV Solenoid Valves
- PV Proportional Valves
- CE Coils & Electronics
- BC Bodies & Cavities
- TD Technical Data

General Description

Direct Acting Spool-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- High flow capacity
- Fast response with good stability
- Low pressure setting
- Full 420 Bar 6000 PSI tank line back pressure
- Hardened working parts for maximum durability
- Adjustable, preset and tamperproof versions available
- All external parts zinc plated



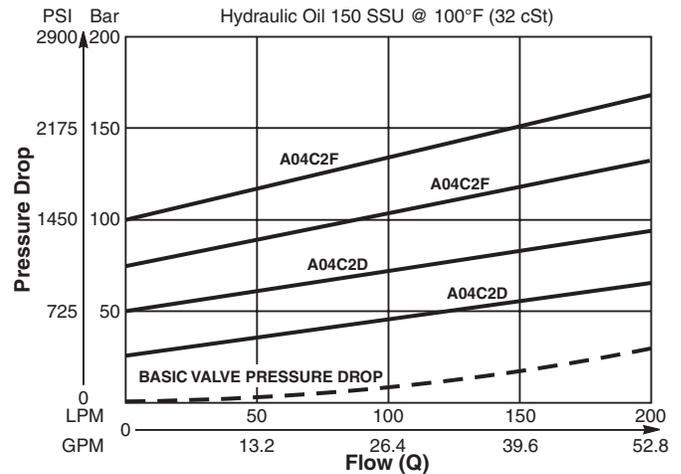
Specifications

Rated Flow	200 LPM (53 GPM)
Maximum Inlet Pressure	D - 2-50 Bar (29-725 PSI) F - 2-100 Bar (29-1450 PSI)
Maximum Pressure Setting	420 Bar (6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	25 ml/min. @ 50 Bar (725 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	0.28 kg (0.62 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT10-2F

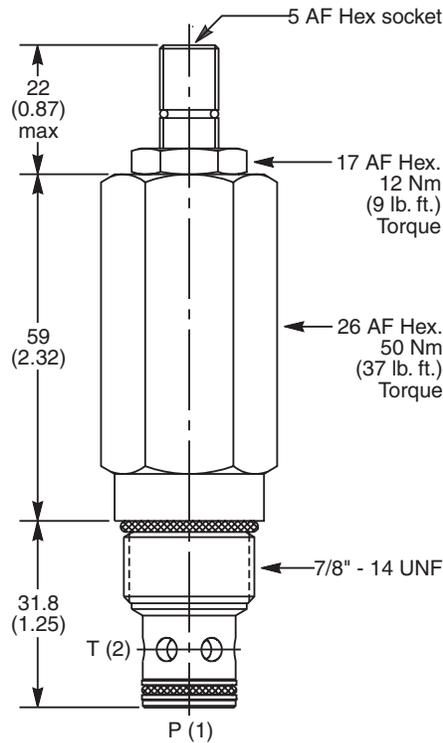
Performance Curve

(Pressure rise through cartridge only)

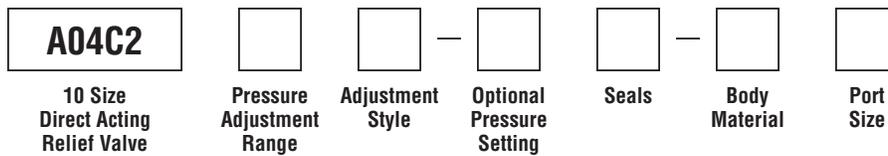
Flow vs. Inlet Pressure



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
D	2 - 50 Bar (29 - 725 PSI)
F	2 - 100 Bar (29 - 1450 PSI)

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

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust (ASV014975)
T	Tamper Resistant Cap (TC1130)

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)†

Optional Pressure Setting	
Specify setting if required (Bar)	
A04C2D Standard Setting: 25 Bar (360 PSI) @ 15 LPM (4.0 GPM)	
A04C2F Standard Setting: 50 Bar (725 PSI) @ 15 LPM (4.0 GPM)	

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

Technical Information

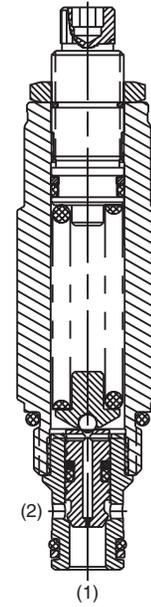
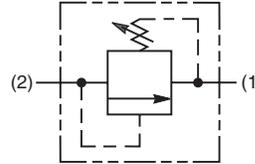
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Differential Area Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened, precision ground parts for durability
- Spherical poppets for low leakage
- High flow capacity
- Internal mechanical stop limits poppet travel eliminating spring solidification
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



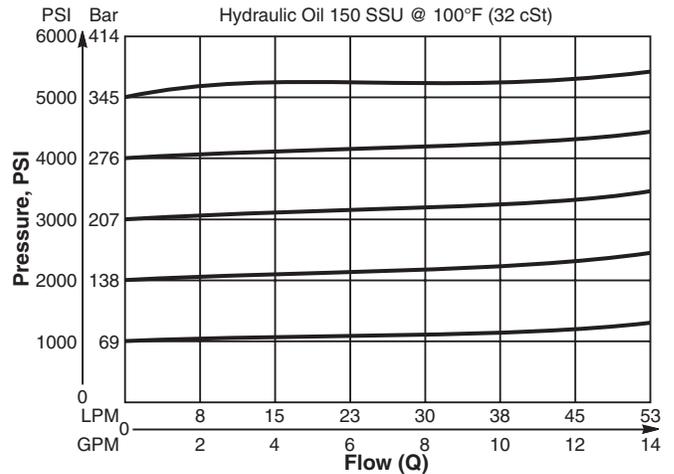
Specifications

Rated Flow	45 LPM (12 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Reseat Pressure	75% of crack pressure
Leakage at 150 SSU (32 cSt)	10 drops/min. (.67 cc/min.) @75% of crack pressure
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	.19 kg (.43 lbs.)
Cavity	C08-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT08-2F

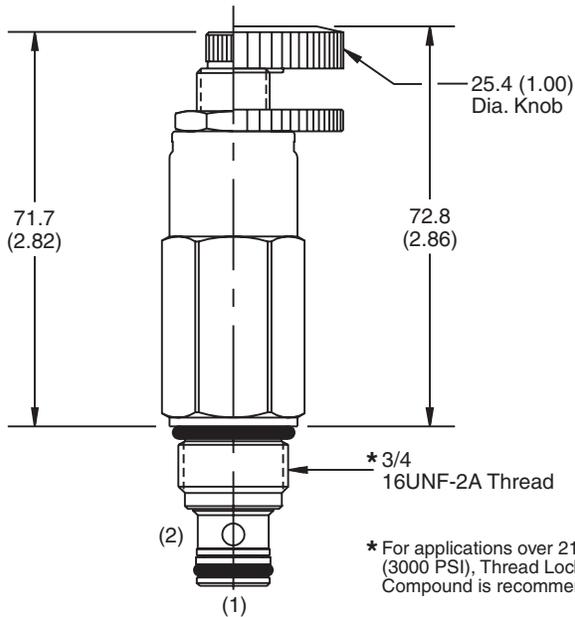
Performance Curve

Flow vs. Inlet Pressure

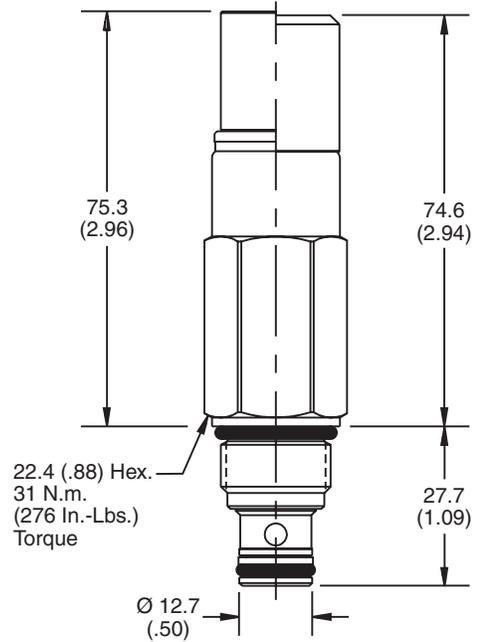
(Pressure rise through cartridge only)



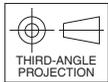
Dimensions Millimeters (Inches)



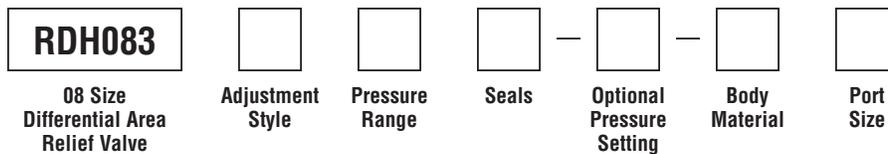
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (718083)

Code	Seals / Kit No.
Omit	Nitrile / (SK08-2N)
V	Fluorocarbon / (SK08-2V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
15	6.9 - 103 Bar (100 - 1500 PSI) Standard Setting: 51.7 Bar (750 PSI) @ crack pressure approximately .95 LPM (.25 GPM)
30	69 - 207 Bar (1000 - 3000 PSI) Standard Setting: 103 Bar (1500 PSI) @ crack pressure approximately .95 LPM (.25 GPM)
50	138 - 345 Bar (2000 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure approximately .95 LPM (.25 GPM)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at crack pressure, approximately .95 LPM (.25 GPM)

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.

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

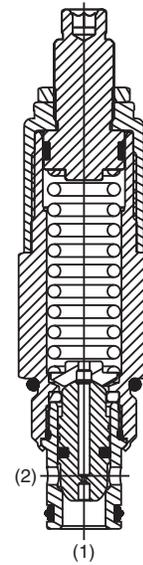
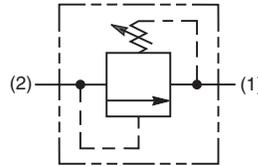
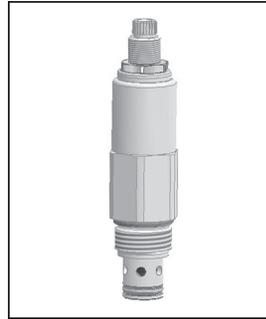
General Description

Differential Area Relief Valve. For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Internal mechanical stop limits poppet travel eliminating spring solidification
- Spherical poppets for low leakage
- “D”-Ring eliminates backup rings
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.
- High flow capacity



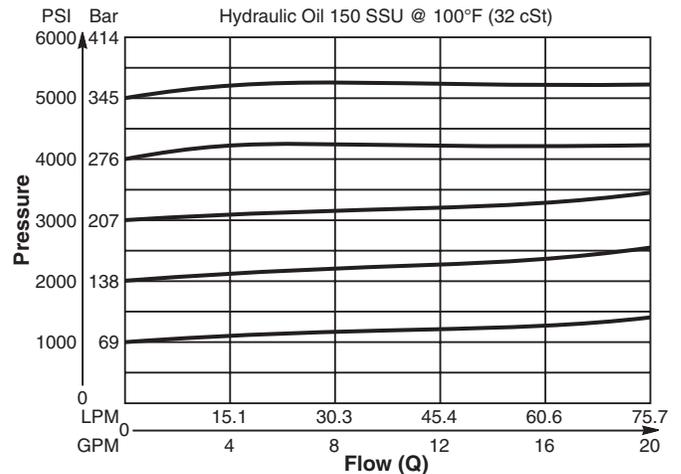
Specifications

Rated Flow	75 LPM (20 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Reseat Pressure	85% of crack pressure
Leakage at 150 SSU (32 cSt)	5 drops/min. (.33 cc/min.) @75% of crack pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C (“D”-Ring) (-50°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

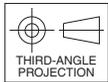
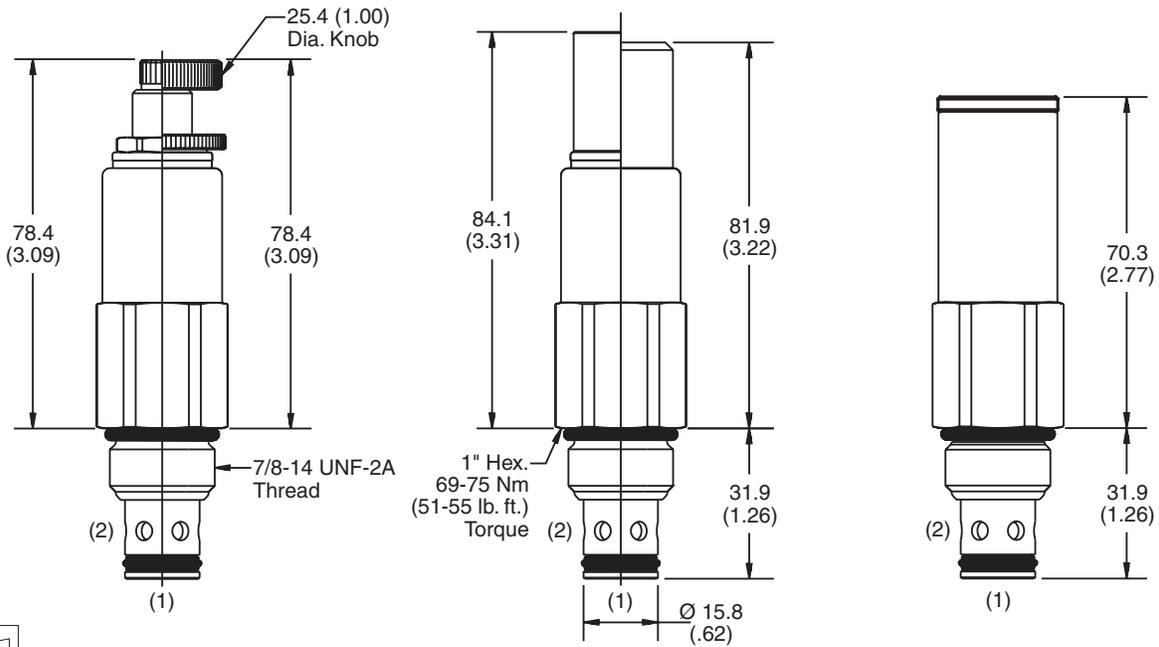
Performance Curve

Flow vs. Inlet Pressure

(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)

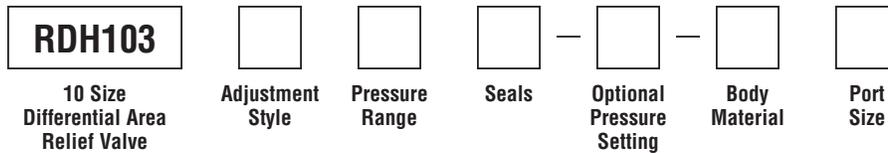


Screw/Knob Version

Fixed Cap/Tamper Resistant Version

Non-Adjustable Version

Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
N	Non-Adjustable
S	Screw Adjust
T	Tamper Resistant Cap (717943)

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

Code	Body Material
Omit	Steel
A	Aluminum

Optional Pressure Setting	
Pressure	± 10
	i.e. 235 = 2350 PSI
	(Omit if standard setting is used)
Setting Range:	100 to 5000 PSI
	All settings at .95 LPM (.25 GPM)

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ .95 LPM (.25 GPM)
20	34.5 - 138 Bar (500 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ .95 LPM (.25 GPM)
30	34.5 - 207 Bar (500 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ .95 LPM (.25 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ .95 LPM (.25 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)
6B	3/8" BSPG	(B10-2-6B)†

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

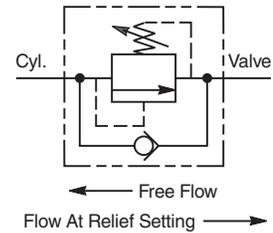
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

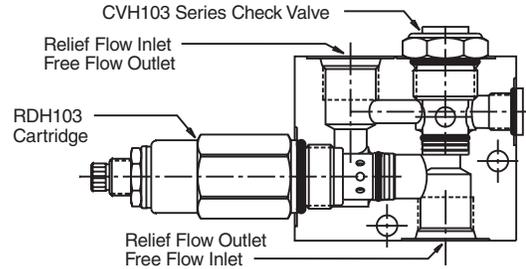
General Description

Direct Acting Relief Valve with Reverse Free Flow Check Valve. For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Rugged steel body construction
- Spherical poppets for low leakage
- Built-in cartridge check reduces plumbing
- Differential area cartridge relief for high flow capacity
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.
- "D"-Ring eliminates backup rings

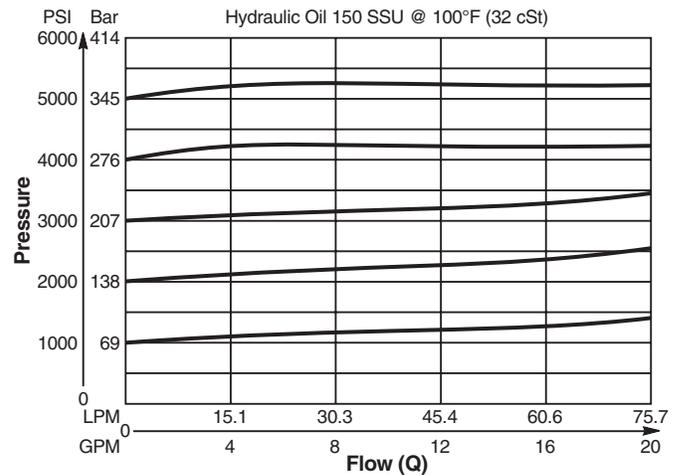


Specifications

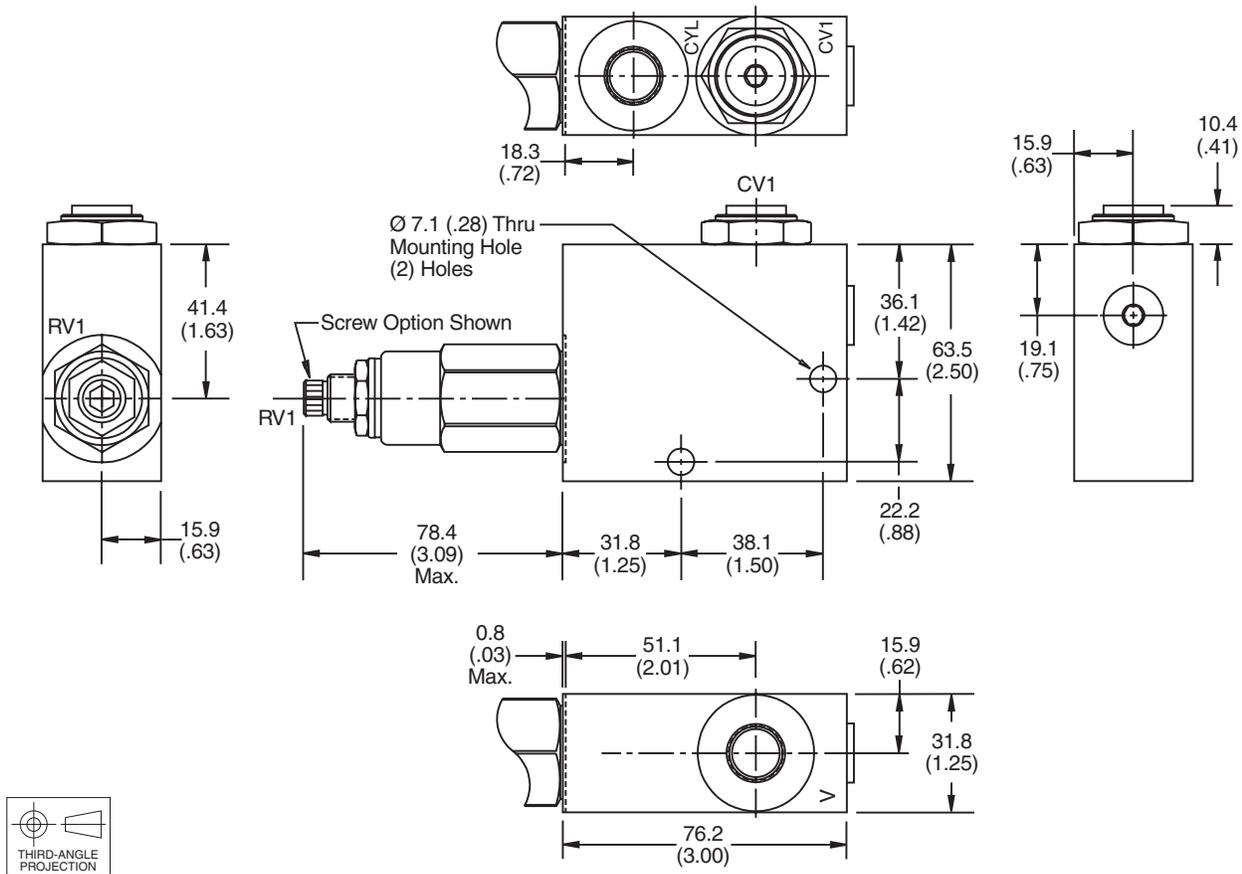
Maximum Flow	60 LPM (16 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Reseat Pressure	85% of crack pressure
Leakage at 150 SSU (32 cSt)	5 drops/min. (.33 cc/min.) @ 75% of crack pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Body Material	Steel
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	1.2 kg (2.7 lbs.)

Performance Curve

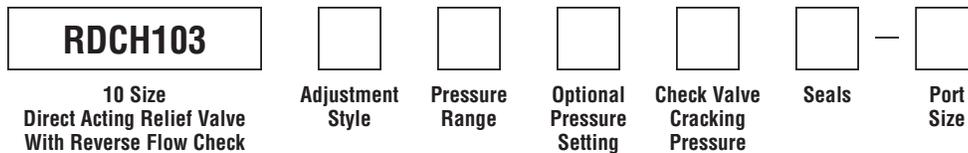
Flow vs. Inlet Pressure
(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (717943)

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ .95 LPM (.25 GPM)
20	34.5 - 138 Bar (500 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ .95 LPM (.25 GPM)
30	34.5 - 207 Bar (500 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ .95 LPM (.25 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ .95 LPM (.25 GPM)

Code	Optional Pressure Setting
Omit	Pressure + 10 i.e. 235 = 2350 PSI (Omit if standard setting is used)
	Setting Range: 100 to 5000 PSI All settings at .95 LPM (.25 GPM)

Code	Cracking Pressure
Omit	0.3 Bar (5 PSI)
P20	1.4 Bar (20 PSI)
P50	3.5 Bar (50 PSI)
P65	4.5 Bar (65 PSI)
P100	6.9 Bar (100 PSI)

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

Code	Port Size	Part No.
8T	SAE-8	830313

Individual body requires 1 SAE 5 plug.
 Part number 5 HP50N-S.

Technical Information

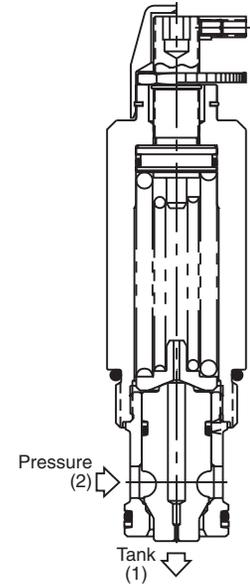
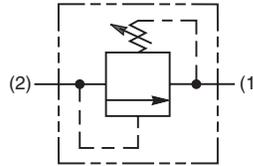
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Differential Area Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened, precision ground parts for durability
- Compact size for reduced space requirements
- Low leakage design
- Fast response
- All external parts zinc plated



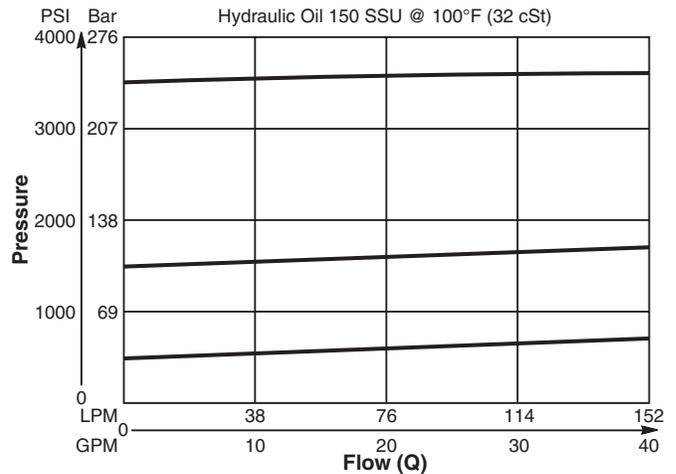
Specifications

Rated Flow	151 LPM (40 GPM)
Maximum Inlet Pressure	240 Bar (3500 PSI)
Maximum Pressure Setting	210 Bar (3000 PSI)
Maximum Tank Pressure	210 Bar (3000 PSI)
Reseat Pressure	80% of crack pressure
Leakage at 150 SSU (32 cSt)	10 drops/min. (.66 cc/min.) @75% of crack pressure
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	C16-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT16-2F

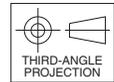
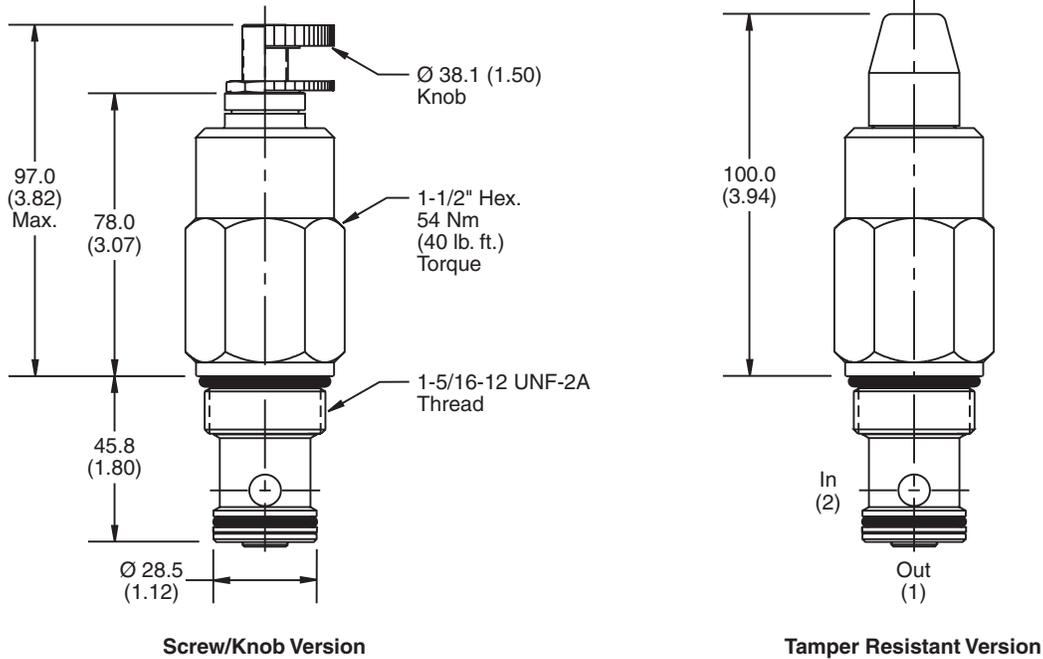
Performance Curve

Flow vs. Inlet Pressure

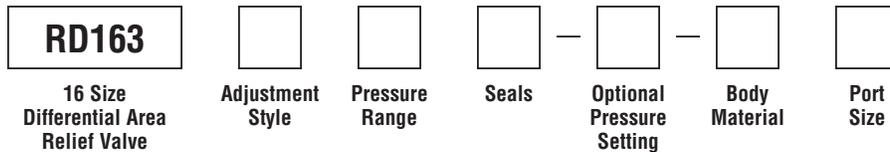
(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style / Kit No.
K	Knob Adjust (840208K)
S	Screw Adjust
T	Tamper Resistant Cap (717783)

Code	Seals / Kit No.
Omit	Nitrile / (SK16-2)
V	Fluorocarbon / (SK16-2V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	13.8 - 69 Bar (200 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ 11.3 LPM (3 GPM)
20	27.6 - 138 Bar (400 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ 11.3 LPM (3 GPM)
30	41.4 - 207 Bar (600 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ 11.3 LPM (3 GPM)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 3000 PSI All settings at 11.3 LPM (3 GPM)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12P	3/4" NPTF	(B16-2-*12P)
16P	1" NPTF	(B16-2-*16P)
8T	SAE-8	(B16-2-*8T)
12T	SAE-12	(B16-2-*12T)
16T	SAE-16	(B16-2-*16T)
12B	3/4" BSPG	(B16-2-12B)†
16B	1" BSPG	(B16-2-*16B)

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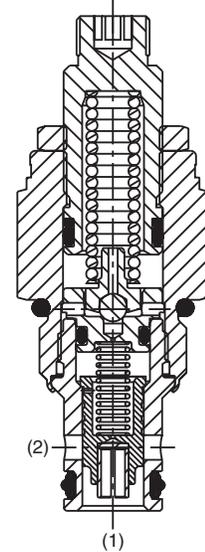
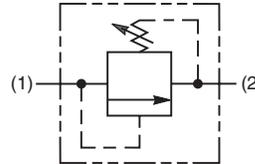
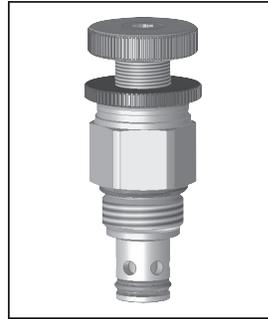
General Description

Pilot Operated Spool-Type Relief Valve
For additional information see
Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided pilot for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis
- Internal screening protects pilot spring from debris



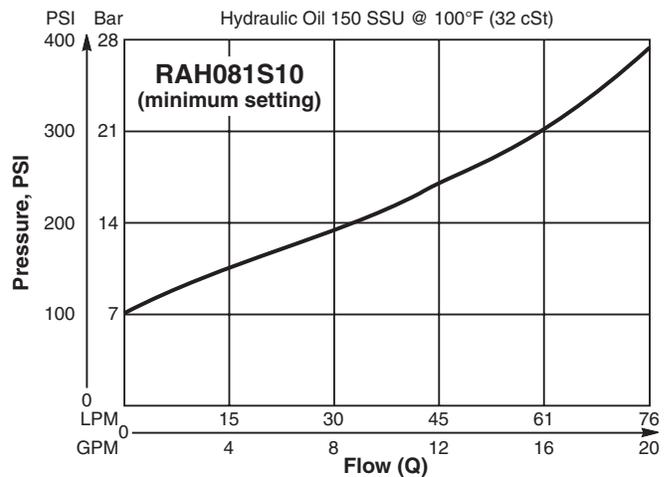
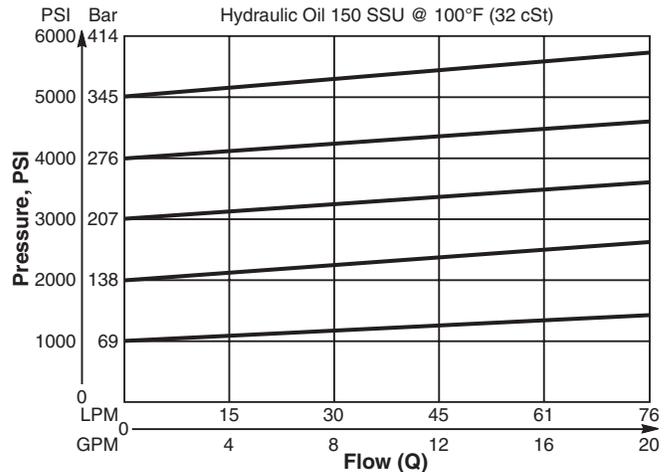
Specifications

Rated Flow	75.8 LPM (20 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Reseat Pressure	90% of crack pressure
Leakage at 150 SSU (32 cSt)	5 cc per 100 PSI (6.8 Bar) setting
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	.09 kg (.20 lbs.)
Cavity	C08-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT08-2F

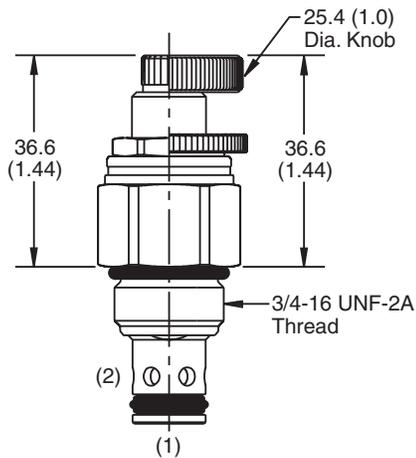
Performance Curves

Flow vs. Inlet Pressure

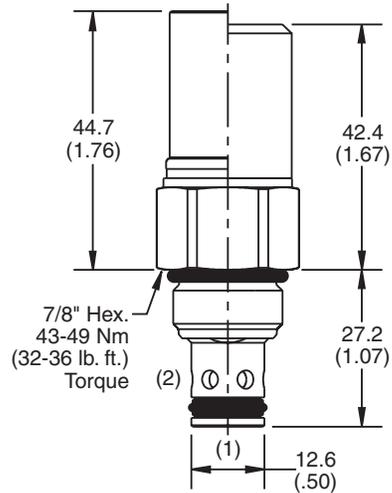
(Pressure rise through cartridge only)



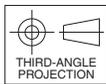
Dimensions Millimeters (Inches)



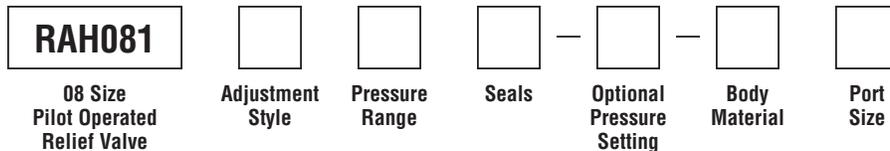
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (717943)

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

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at crack pressure, approximately .95 LPM (.25 GPM)

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.

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

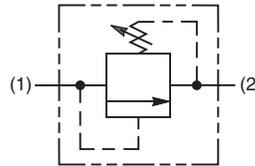
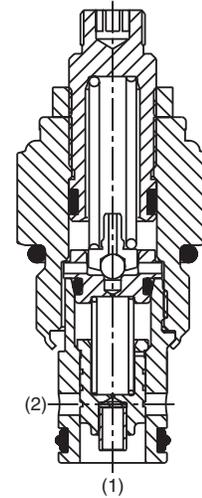
General Description

Pilot Operated Spool-Type Relief Valve
For addition information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided poppet for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis
- Internal screening protects pilot spring from debris



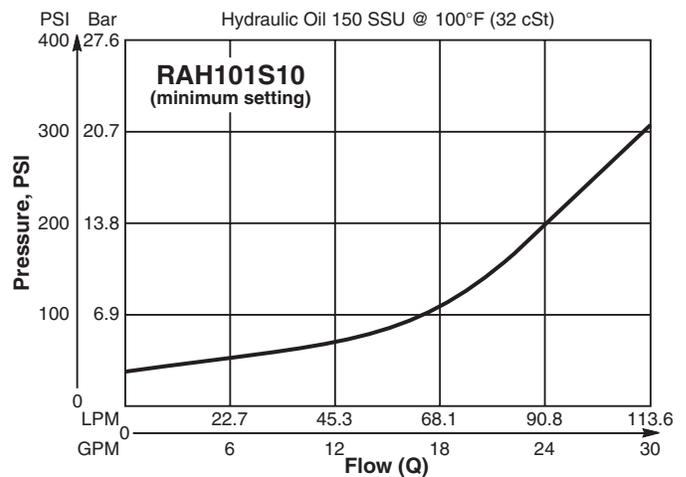
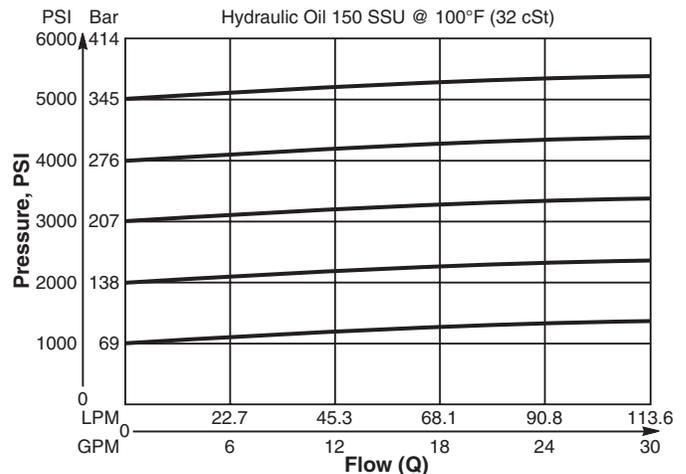
Specifications

Rated Flow	113 LPM (30 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Reseat Pressure	90% of crack pressure
Leakage at 150 SSU (32 cSt)	5 cc per 100 PSI (6.8 Bar) setting
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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 (.50 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT10-2F

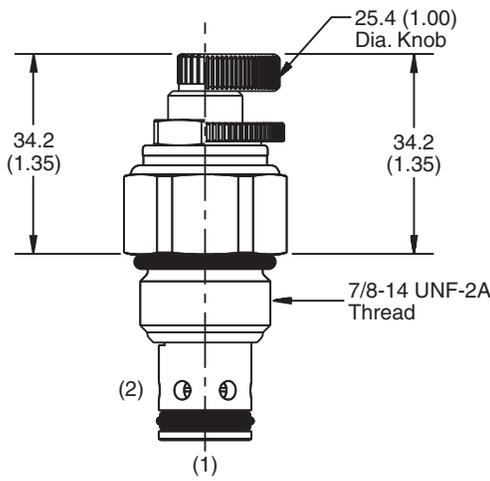
Performance Curves

Flow vs. Inlet Pressure

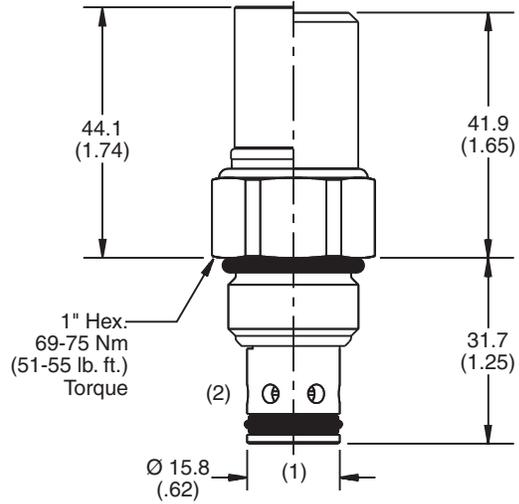
(Pressure rise through cartridge only)



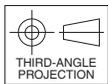
Dimensions Millimeters (Inches)



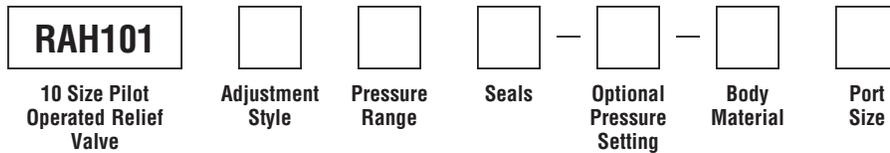
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (718083)

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

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)

Optional Pressure Setting
Pressure ÷ 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at crack pressure, approximately .95 LPM (.25 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

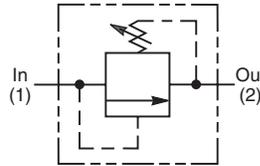
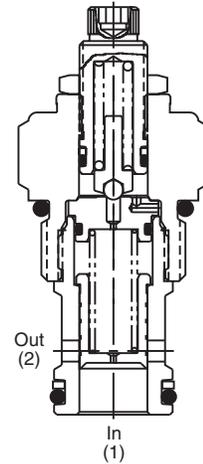
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated Spool-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Low override curve
- Ball-type pilot for added stability
- High accuracy - pilot operated design
- Hardened, precision ground parts for durability
- Compact size for reduced space requirements
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



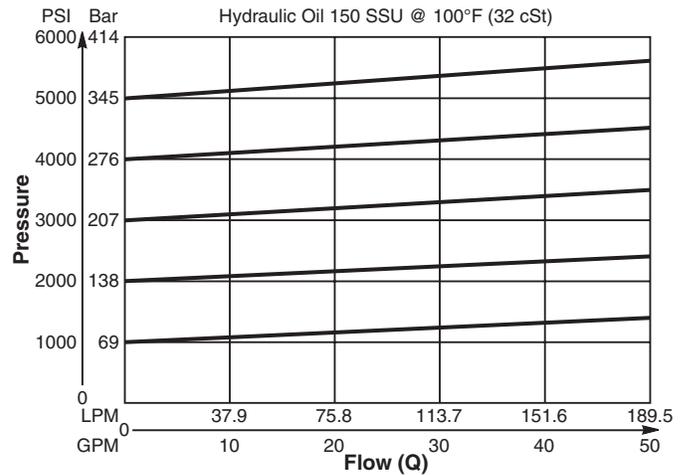
Specifications

Rated Flow	189.5 LPM (50 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Reseat Pressure	80% of crack pressure
Leakage at 150 SSU (32 cSt)	82 cc/min. (5 cu. in./min.) @ 75% of crack pressure
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	.22 kg (.48 lbs.)
Cavity	C12-2
Form Tool	Rougher None Finisher NFT12-2F

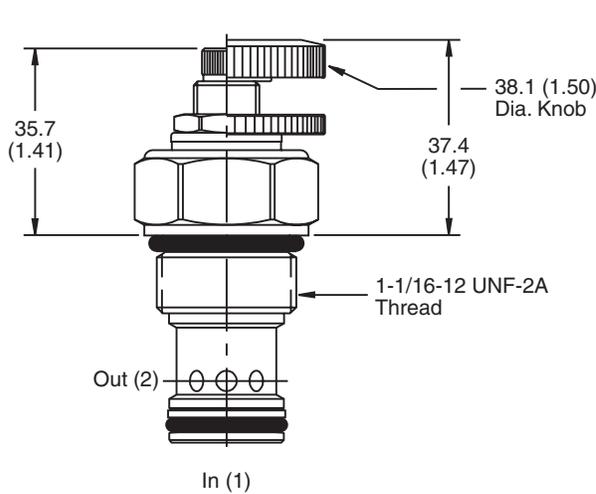
Performance Curve

Flow vs. Inlet Pressure

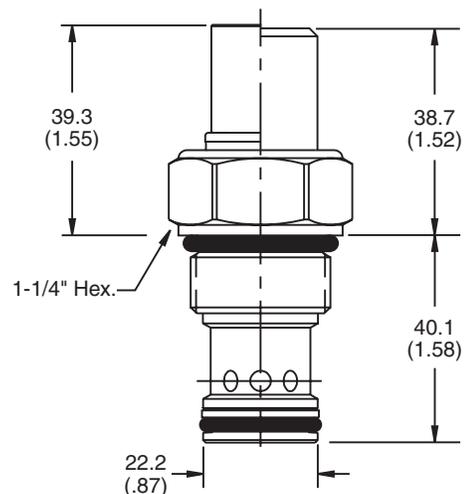
(Pressure rise through cartridge only)



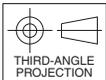
Dimensions Millimeters (Inches)



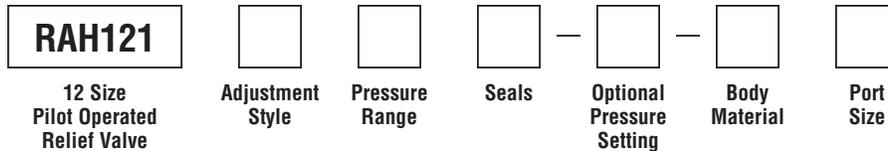
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-15)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

Code	Seals / Kit No.
Omit	Nitrile / (SK12-2)
V	Fluorocarbon / (SK12-2V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ 11.3 LPM (3 GPM)
20	13.8 - 138 Bar (200 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ 11.3 LPM (3 GPM)
30	20.7 - 207 Bar (300 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ 11.3 LPM (3 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ 11.3 LPM (3 GPM)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at 11.3 LPM (3 GPM)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12P	3/4" NPTF	(B12-2-*12P)
8T	SAE-8	(B12-2-*8T)
12T	SAE-12	(B12-2-*12T)

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

- 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

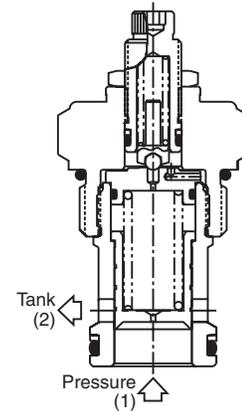
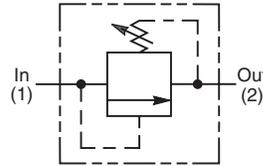
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated Spool-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Low override curve
- Ball-type pilot for added stability
- High accuracy - pilot operated design
- Hardened, precision ground parts for durability
- Compact size for reduced space requirements
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



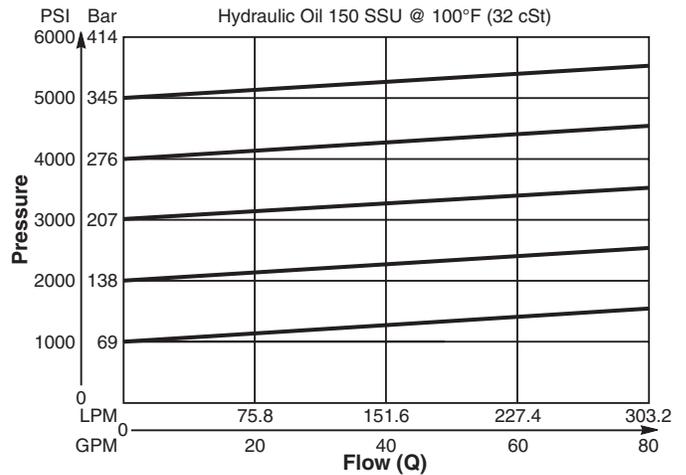
Specifications

Maximum Flow	302.8 LPM (80 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Reseat Pressure	80% of crack pressure
Leakage at 150 SSU (32 cSt)	5 cc per 100 PSI (6.8 Bar) setting
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range (Ambient)	-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	0.9 kg (2.0 lbs.)
Cavity	C16-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT16-2F

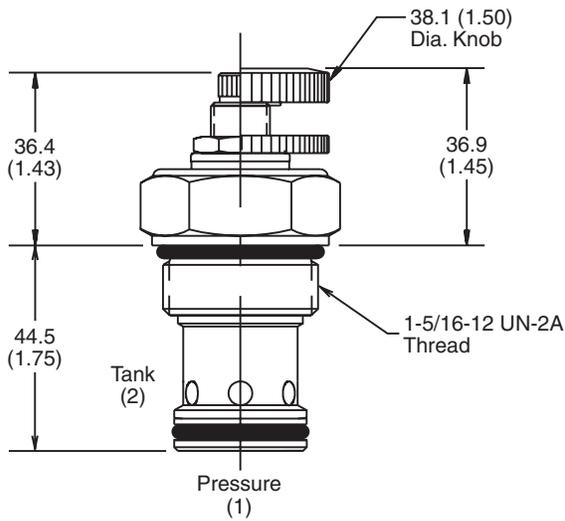
Performance Curve

Flow vs. Inlet Pressure

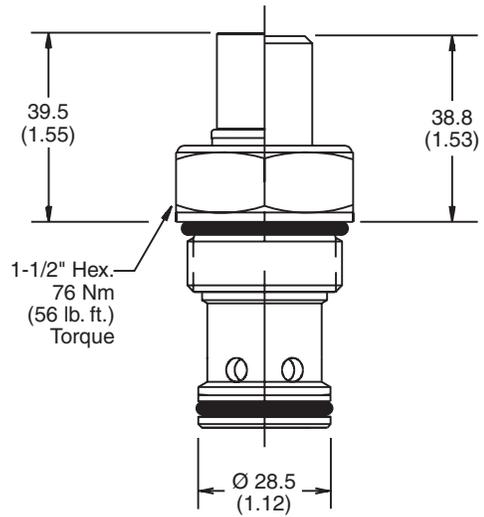
(Pressure rise through cartridge only)



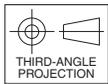
Dimensions Millimeters (Inches)



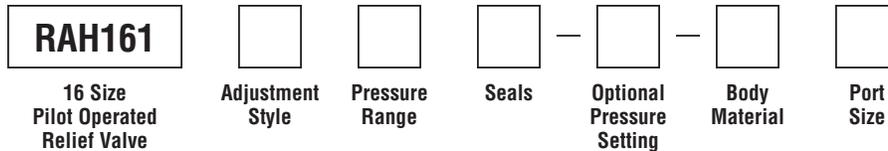
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-15)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

Code	Seals / Kit No.
Omit	Nitrile / (SK16-2)
V	Fluorocarbon / (SK16-2V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ 37.5 LPM (10 GPM)
20	13.8 - 138 Bar (200 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ 37.5 LPM (10 GPM)
30	20.7 - 207 Bar (300 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ 37.5 LPM (10 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ 37.5 LPM (10 GPM)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at 37.5 LPM (10 GPM)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12P	3/4" NPTF	(B16-2-*12P)
16P	1" NPTF	(B16-2-*16P)
8T	SAE-8	(B16-2-*8T)
12T	SAE-12	(B16-2-*12T)
16T	SAE-16	(B16-2-*16T)
12B	3/4" BSPG	(B16-2-12B)†
16B	1" BSPG	(B16-2-*16B)

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

Technical Information

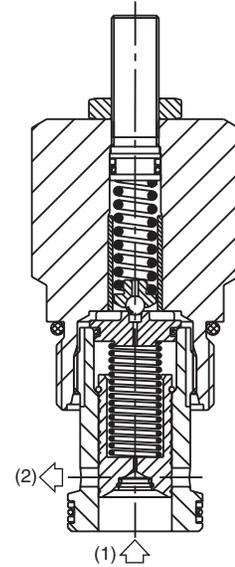
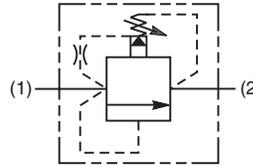
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated, Spool-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Very high flow capacity
- Minimal pressure variation with flow change
- Full tank line back pressure capability, ideal for crossline relief applications
- Integral 250 micron pilot flow filter
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated



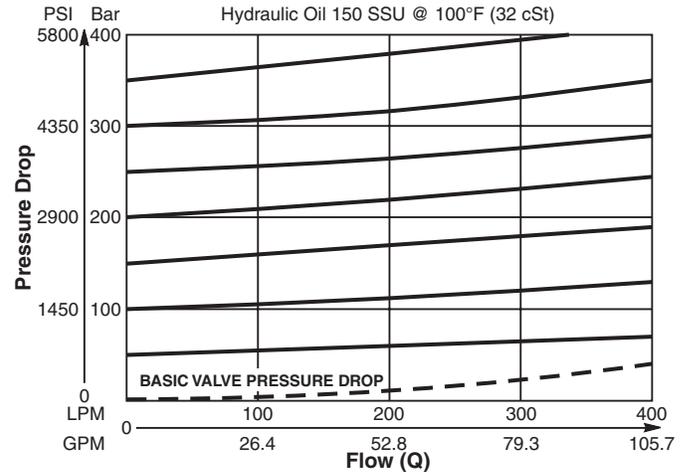
Specifications

Rated Flow	400 LPM (106 GPM)
Maximum Inlet Pressure	H - 10-210 Bar (145-3000 PSI) P - 10-420 Bar (145-6000 PSI)
Maximum Pressure Setting	420 Bar (6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	100 ml/min. @ 100 Bar (1450 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	0.57 kg (1.26 lbs.)
Cavity	C16-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT16-2F

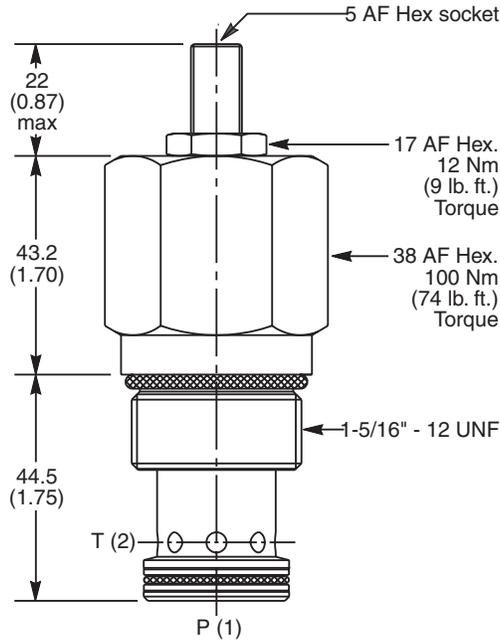
Performance Curve

(Pressure rise through cartridge only)

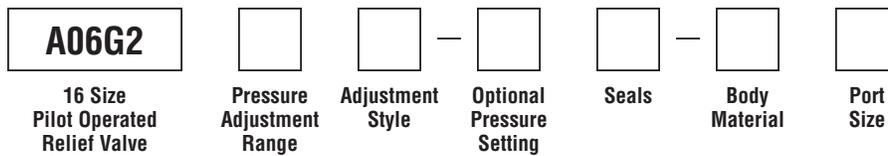
Flow vs. Inlet Pressure



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
H	10 - 210 Bar (145 - 3000 PSI)
P	10 - 420 Bar (145 - 6000 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30507N-1)
V	Fluorocarbon / (SK30507V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12P	3/4" NPTF	(B16-2-*12P)
16P	1" NPTF	(B16-2-*16P)
8T	SAE-8	(B16-2-*8T)
12T	SAE-12	(B16-2-*12T)
16T	SAE-16	(B16-2-*16T)
12B	3/4" BSPG	(B16-2-12B)†
16B	1" BSPG	(B16-2-*16B)

Optional Pressure Setting	
Specify setting if required (Bar)	
A06G2H Standard Setting: 100 Bar (1450 PSI) @ 15 LPM (4.0 GPM)	
A06G2P Standard Setting: 200 Bar (2900 PSI) @ 15 LPM (4.0 GPM)	

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

Technical Information

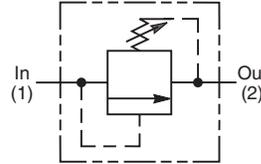
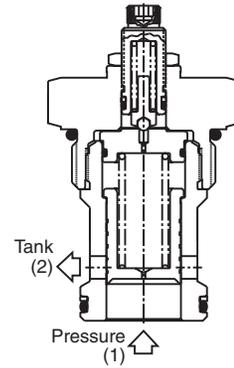
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated Spool-Type Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Low override curve
- Ball-type pilot for added stability
- High accuracy - pilot operated design
- Hardened, precision ground parts for durability
- Compact size for reduced space requirements
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



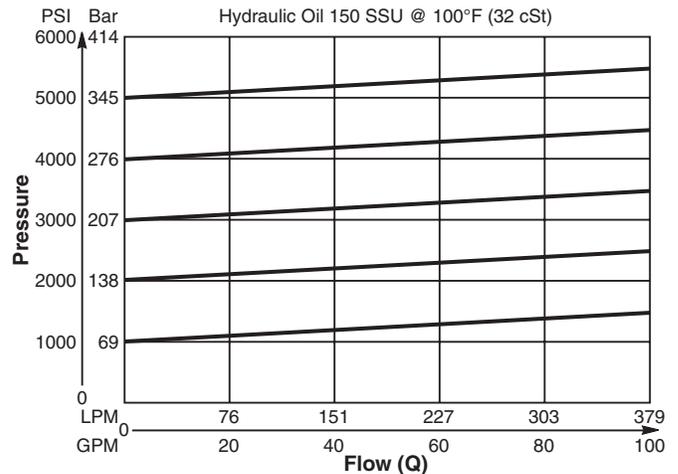
Specifications

Rated Flow	379 LPM (100 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Reseat Pressure	80% of crack pressure
Leakage at 150 SSU (32 cSt)	5 cc per 100 PSI (6.8 Bar) setting
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	0.9 kg (2.0 lbs.)
Cavity	C20-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT20-2F

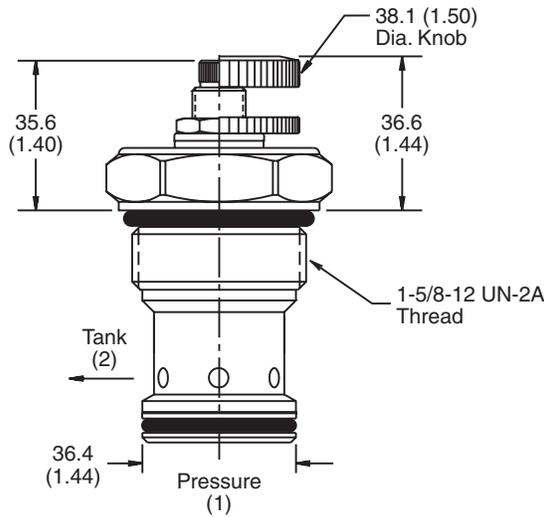
Performance Curve

Flow vs. Inlet Pressure

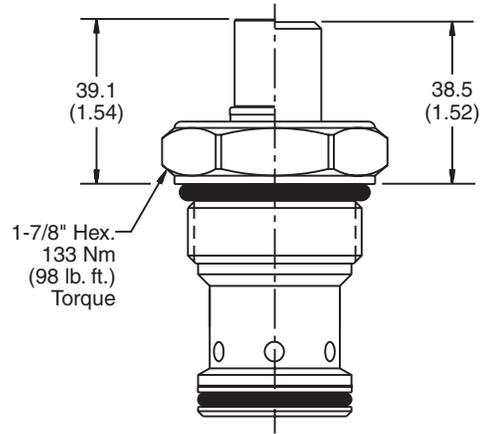
(Pressure rise through cartridge only)



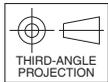
Dimensions Millimeters (Inches)



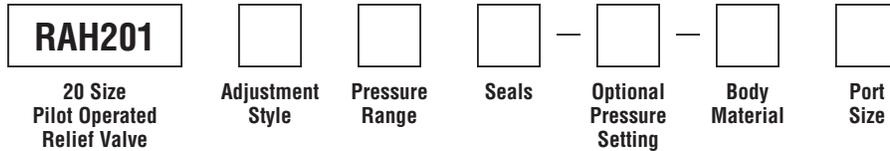
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-15)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

Code	Seals / Kit No.
Omit	Nitrile / (SK20-2)
V	Fluorocarbon / (SK20-2V)

Code	Body Material
Omit	Steel

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ 37.5 LPM (10 GPM)
20	13.8 - 138 Bar (200 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ 37.5 LPM (10 GPM)
30	20.7 - 207 Bar (300 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ 37.5 LPM (10 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ 37.5 LPM (10 GPM)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at 37.5 LPM (10 GPM)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
20T	SAE-20	(B20-2-20T)
20B	1-1/4" BSPG	(B20-2-20B)

Technical Information

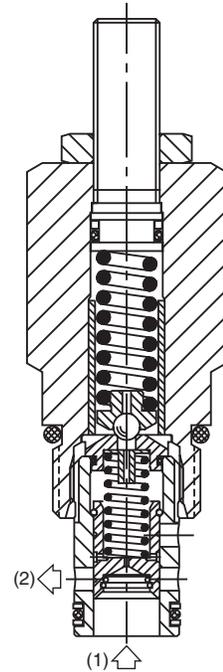
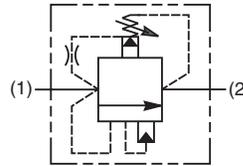
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Kick-Down, Pilot Operated Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- High flow capacity
- Integral 250 micron pilot flow filter
- Hardened working parts for maximum durability
- Adjustable and tamper resistant versions available
- All external parts zinc plated



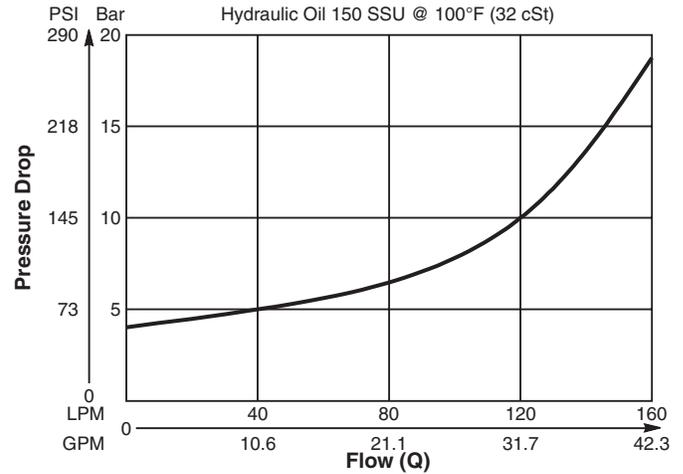
Specifications

Rated Flow	160 LPM (42 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	H - 10-210 Bar (145-3000 PSI) P - 10-420 Bar (144-6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Sensitivity: Pressure/Turn	H - 30 Bar (435 PSI) P - 55 Bar (800 PSI)
Leakage at 150 SSU (32 cSt)	25 ml/min. @ 50 Bar (725 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	0.29 kg (0.64 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher

Performance Curve

(Pressure rise through cartridge only)

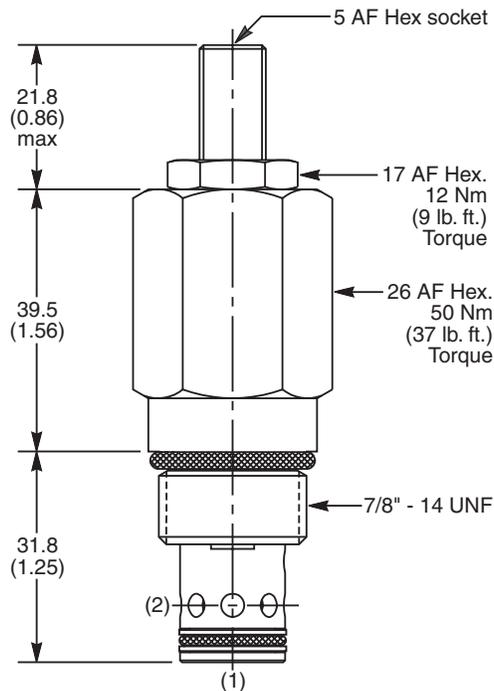
Pressure Drop vs. Flow



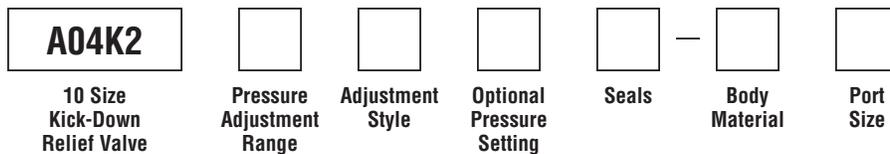
Application Note

Valve unloads completely when setting is reached and resets when fluid supply is removed.

Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
H	10 - 210 Bar (145 - 3000 PSI)
P	10 - 420 Bar (145 - 6000 PSI)

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

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

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)†

Optional Pressure Setting	
Specify setting if required (Bar)	
A04K2H	Standard Setting: 100 Bar (1450 PSI)
A04K2P	Standard Setting: 200 Bar (2900 PSI)

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

Technical Information

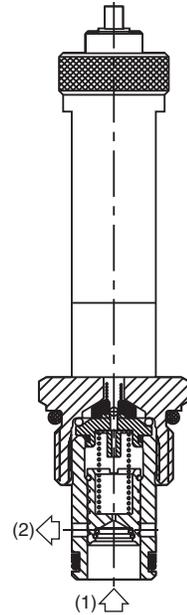
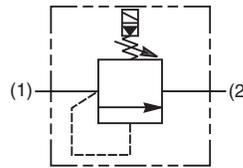
- CV** Check Valves
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- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC**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

General Description

Solenoid Operated Unloading Relief Valve. For additional information see Technical Tips on pages PV1-PV6.

Features

- Two functions in one valve, unloading and relieving
- Factory set relief pressure or adjustable option
- Integral 250 micron pilot flow filter
- Coil: Waterproof, hermetically sealed, requires no O’Rings; Symmetrical coil can be reversed without affecting performance.

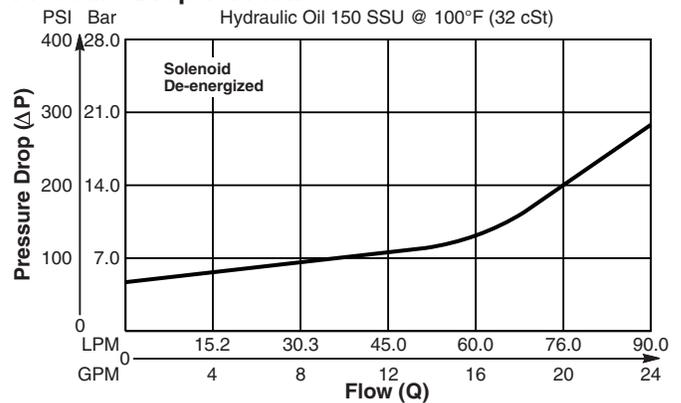


Specifications

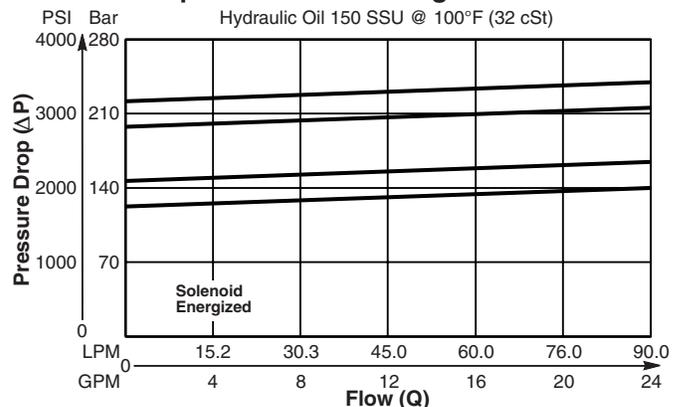
Rated Flow (At 70 PSI ΔP)	60 LPM (16 GPM)
Max. Pressure	6.9 - 276 Bar (100 - 4000 PSI)
Reseat Pressure 200 Hz PWM	90% of Cracking Pressure
Max. Tank Pressure	70 Bar (1000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-40°C to +93.3°C (Nitrile) (-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	.45 kg (.98 lbs.)
Cavity	C10-2 (See BC Section for more details)

Performance Curves

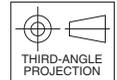
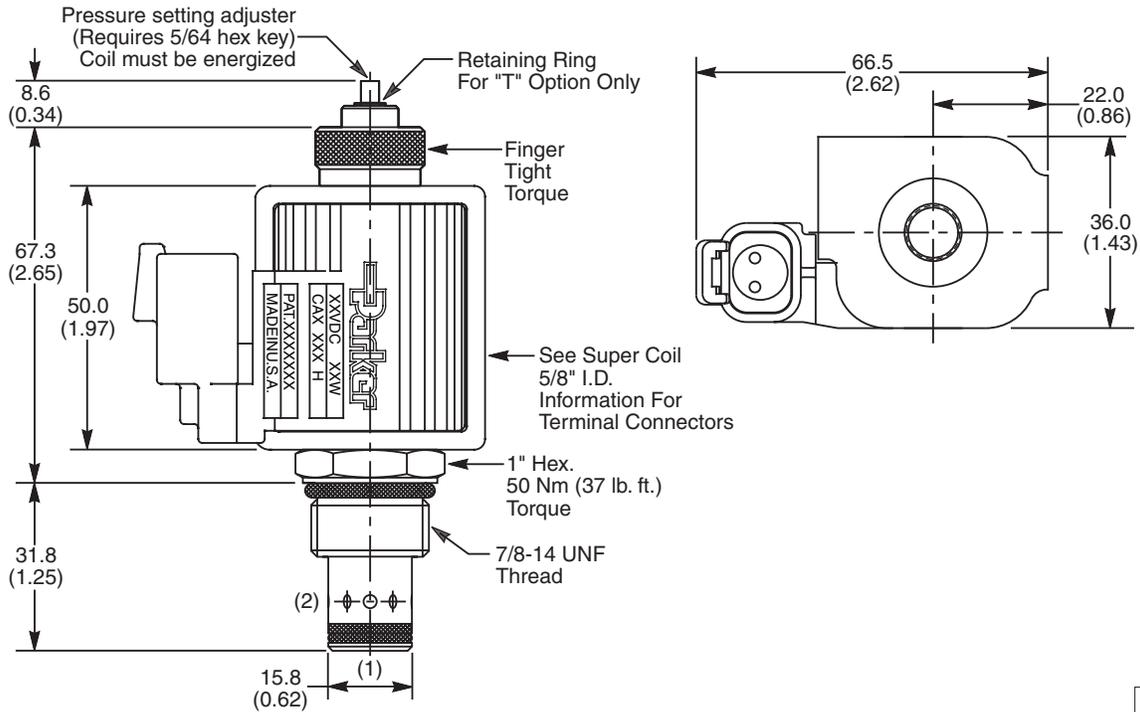
Pressure Drop vs. Flow



Pressure Drop vs. Flow - Relieving Performance



Dimensions Millimeters (Inches)



Ordering Information

AS04G2

10 Size Proportional Relief Valve Adjustment Option Relief Setting Seals Coil Type Coil Voltage Coil Termination Body Material Port Size

Code	Adjustment Options
T	Tamper Proof
Z	Push and Turn

Code	Seals / Kit. No.
N	Nitrile / Buna-N (Std.) (SK30006N-1)
V	Fluorocarbon / (SK30006V-1)

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

Code	Body Material
Omit	Steel
A	Aluminum

Code	Relief Setting
Omit	124 Bar (1800 PSI) Standard
14	140 Bar (2000 PSI)
20	200 Bar (2900 PSI)
22	220 Bar (3200 PSI)
27	276 Bar (4000 PSI)

Code	Coil Type
Omit	Without Coil
SP	Super Coil - 28 Watts

Code	Coil Termination
Omit	Without Coil
D	DIN Plug Face
A	Amp Jr. Timer*
L	Dual Lead Wire*
LS	Sealed Lead Wire*
H	Molded Deutsch*

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)

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

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

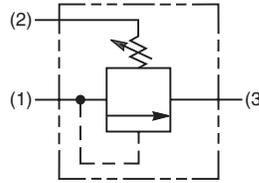
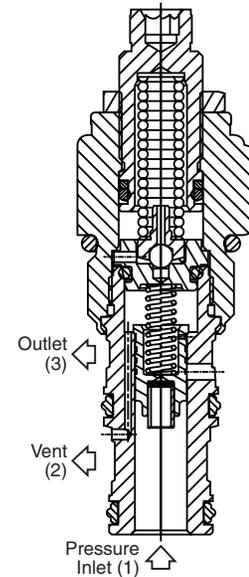
- CV
Check Valves
- SH
Shuttle Valves
- LM
Load/Motor Controls
- FC
Flow Controls
- PC
Pressure Controls
- LE
Logic Elements
- DC
Directional Controls
- MV
Manual Valves
- SV
Solenoid Valves
- PV
Proportional Valves
- CE
Coils & Electronics
- BC
Bodies & Cavities
- TD
Technical Data

Technical Information

- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
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- DC** Directional Controls
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- TD** Technical Data

General Description

Ventable Pilot Operated Spool-Type Relief Valve. This valve controls pressure via the internal spring chamber or via an external vent line. For addition information see Technical Tips on pages PC1-PC6.



Features

- Low override curve
- Ball-type pilot for added stability
- High accuracy - pilot operated design
- Hardened, precision ground parts for durability
- Compact size for reduced space requirements
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.

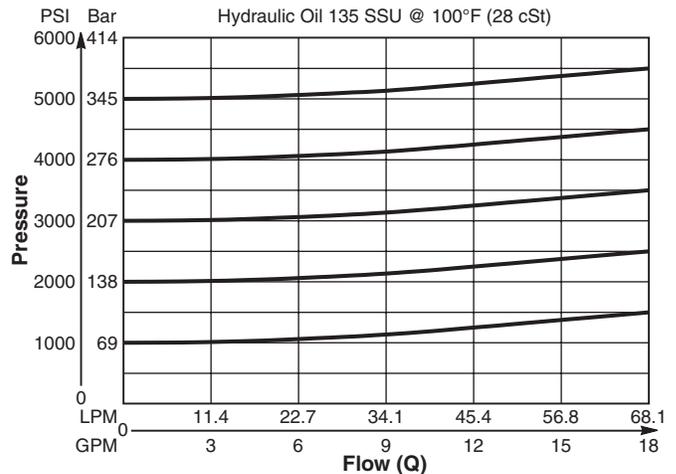
Specifications

Rated Flow	68 LPM (18 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Reseat Pressure	80% of crack pressure
Leakage at 150 SSU (32 cSt)	5 cc per 100 PSI (6.8 Bar) setting
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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 (.50 lbs.)
Cavity	C10-3 (See BC Section for more details)
Form Tool	Rougher NFT10-3R Finisher NFT10-3F

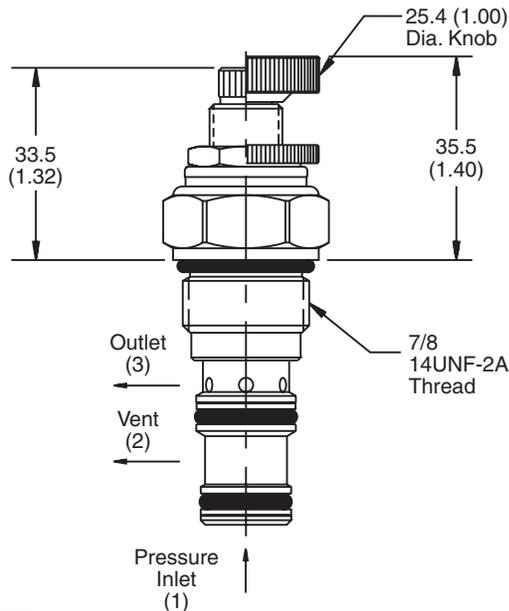
Performance Curves

Flow vs. Inlet Pressure

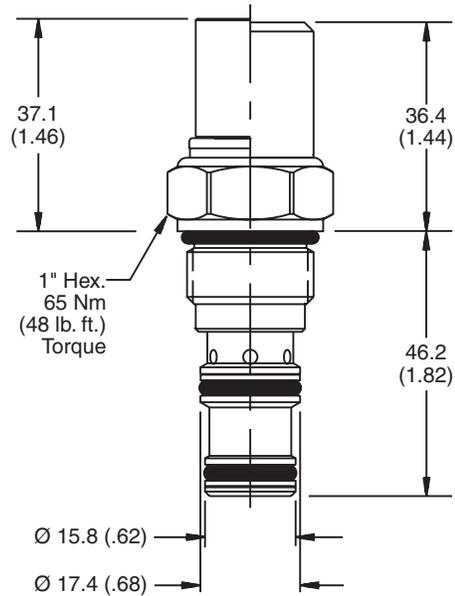
(Pressure rise through cartridge only)



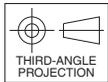
Dimensions Millimeters (Inches)



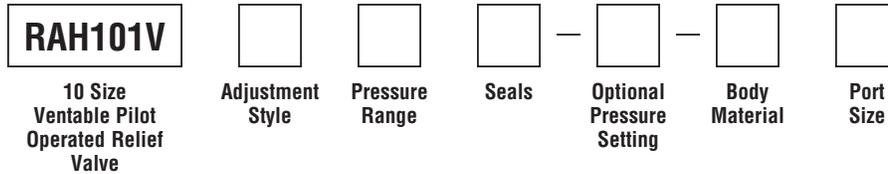
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (718083)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-3)
N	Nitrile / (SK10-3N)
V	Fluorocarbon / (SK10-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ 11.3 LPM (3 GPM)
20	13.8 - 138 Bar (200 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ 11.3 LPM (3 GPM)
30	20.7 - 207 Bar (300 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ 11.3 LPM (3 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ 11.3 LPM (3 GPM)

Optional Pressure Setting
Pressure ÷ 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at 11.3 LPM (3 GPM)

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

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

Technical Information

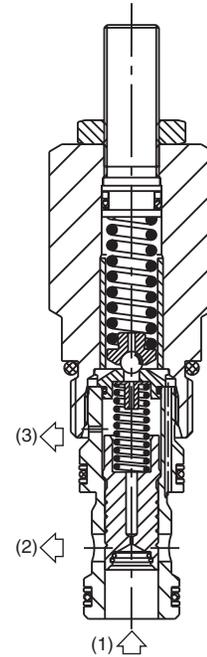
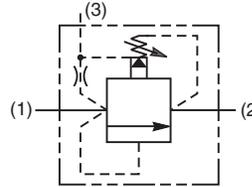
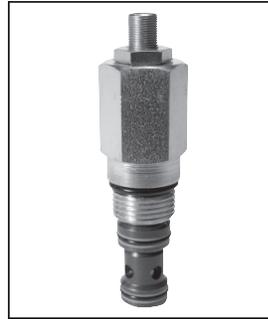
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated, Spool-Type, Ventable Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- High flow capacity
- Full tank line back pressure capability
- Excellent flow pressure characteristics for consistent pressure setting
- Ideal for pump relief and remote control or unloading via vent (port 3)
- Integral 250 micron pilot flow filter
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated



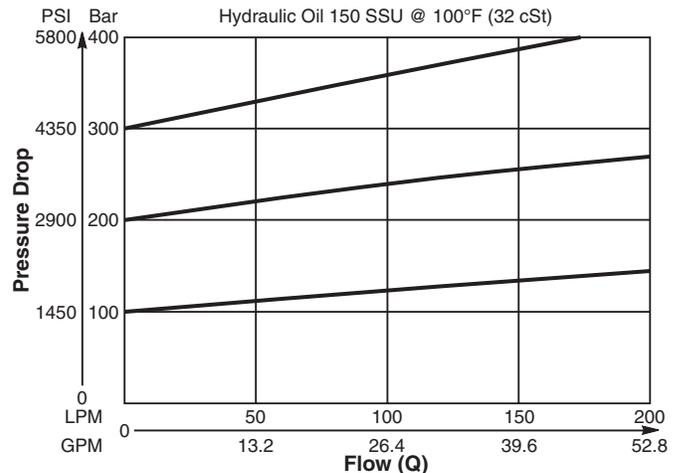
Specifications

Rated Flow	190 LPM (50 GPM)
Maximum Inlet Pressure	H - 10-210 Bar (145-3000 PSI) P - 10-420 Bar (145-6000 PSI)
Maximum Pressure Setting	420 Bar (6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	25 ml/min. @ 100 Bar (1450 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	0.25 kg (0.55 lbs.)
Cavity	C10-3S (See BC Section for more details)
Form Tool	Rougher None Finisher

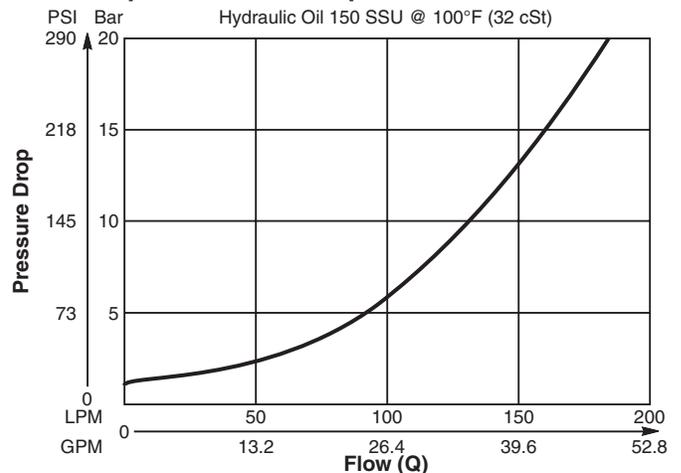
Performance Curves

(Pressure rise through cartridge only)

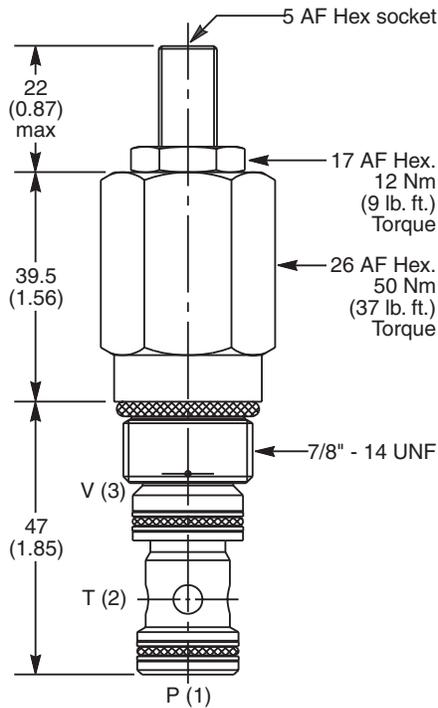
Flow vs. Inlet Pressure 1 to 2



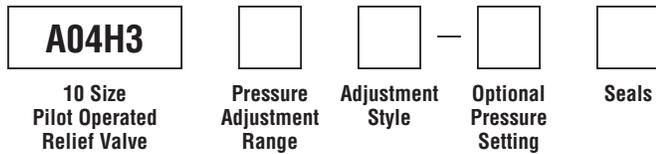
Vented Open Pressure Drop 1 to 2



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
H	10 - 210 Bar (145 - 3000 PSI)
P	10 - 420 Bar (145 - 6000 PSI)

Optional Pressure Setting	
Specify setting if required (Bar)	
A04H3H Standard Setting: 100 Bar (1450 PSI) @ 15 LPM (4.0 GPM)	
A04H3P Standard Setting: 200 Bar (2900 PSI) @ 15 LPM (4.0 GPM)	

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30504N-1)
V	Fluorocarbon / (SK30504V-1)

Order Bodies Separately



Code	Porting
710	5/8" SAE (main) 3/8" SAE (aux)
711	3/4" BSP (main) 1/4" BSP (aux)

Code	Body Material
A	Aluminum
S	Steel

- CV**
Check Valves
- SH**
Shuttle Valves
- LM**
Load/Motor Controls
- FC**
Flow Controls
- PC**
Pressure Controls
- LE**
Logic Elements
- DC**
Directional Controls
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Technical Data

Technical Information

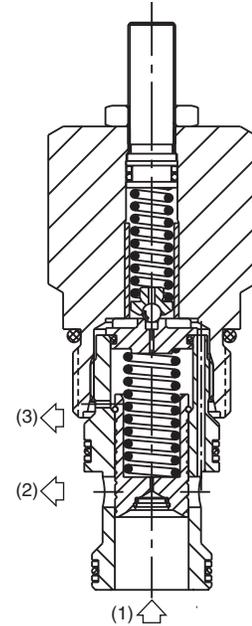
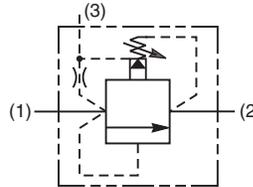
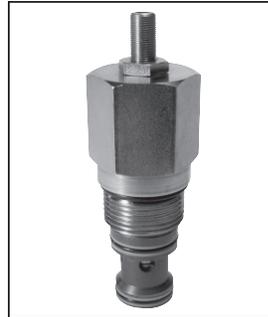
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated, Spool-Type, Ventable Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- High flow capacity
- Full tank line back pressure
- Excellent pressure flow characteristics
- Ideal for pump relief and remote control or unloading via vent (port 3)
- Integral 250 micron pilot flow filter
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated



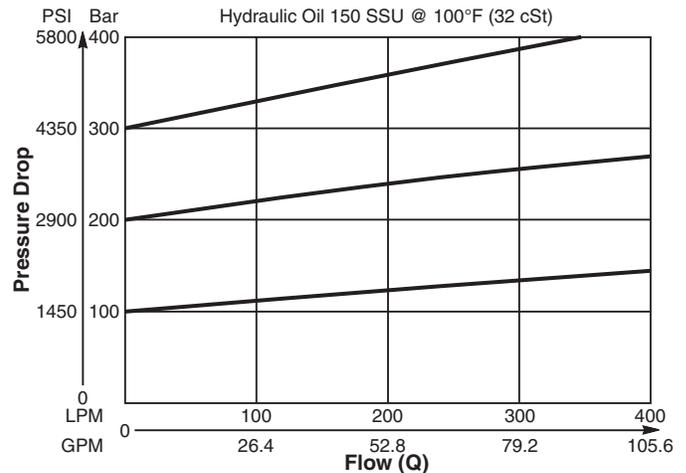
Specifications

Rated Flow	400 LPM (106 GPM)
Maximum Inlet Pressure	H - 10-210 Bar (145-3000 PSI) P - 10-420 Bar (145-6000 PSI)
Maximum Pressure Setting	420 Bar (6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	100ml/min. @ 100 Bar (1450 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	0.58 kg (1.28 lbs.)
Cavity	C16-3S (See BC Section for more details)
Form Tool	Rougher None Finisher

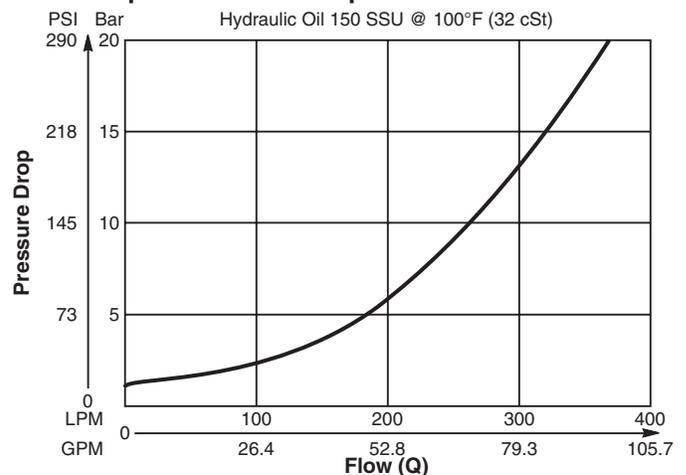
Performance Curves

(Pressure rise through cartridge only)

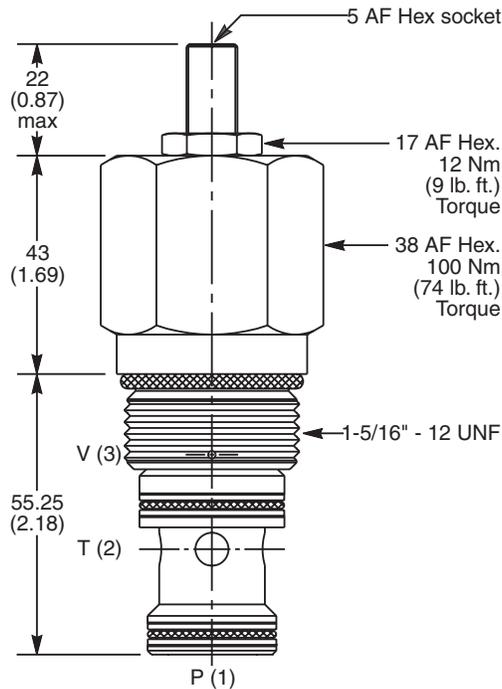
Flow vs. Inlet Pressure 1 to 2



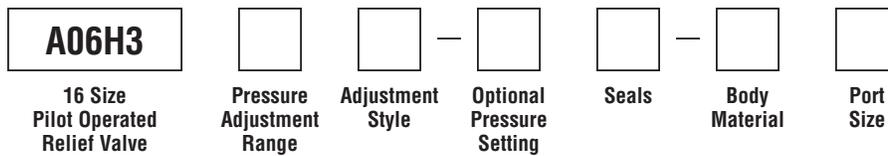
Vented Open Pressure Drop 1 to 2



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
H	10 - 210 Bar (145 - 3000 PSI)
P	10 - 420 Bar (145 - 6000 PSI)

Optional Pressure Setting	
Specify setting if required (Bar)	
A06H3H Standard Setting: 100 Bar (1450 PSI) @ 15 LPM (4.0 GPM)	
A06H3P Standard Setting: 200 Bar (2900 PSI) @ 15 LPM (4.0 GPM)	

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30508N-1)
V	Fluorocarbon / (SK30508V-1)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
16T	SAE-16	(B16-3S-*16T)
16B	1" BSPG	(B16-3S-*16B)

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

Technical Information

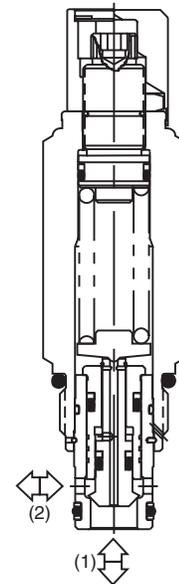
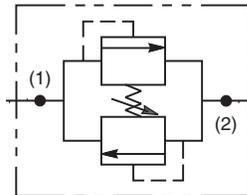
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Dual Cross-Over Relief Valve in a single cartridge. For additional information see Technical Tips on pages PC1-PC6.

Features

- Fast response
- Compact size for reduced space requirements
- Low leakage design
- Single cartridge reduces plumbing, component and manifold costs

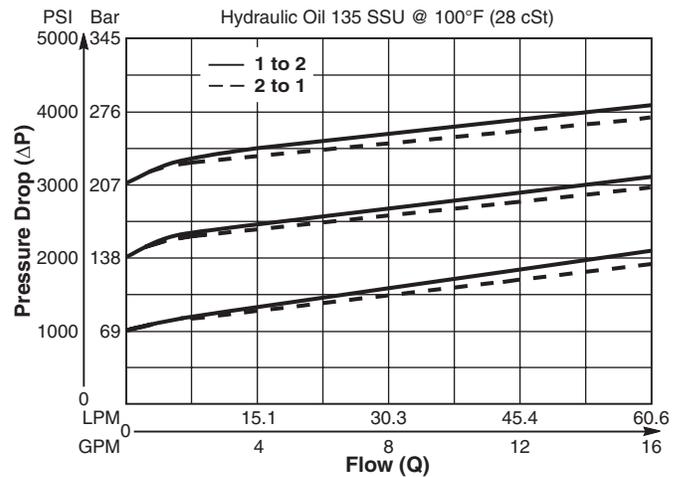


Specifications

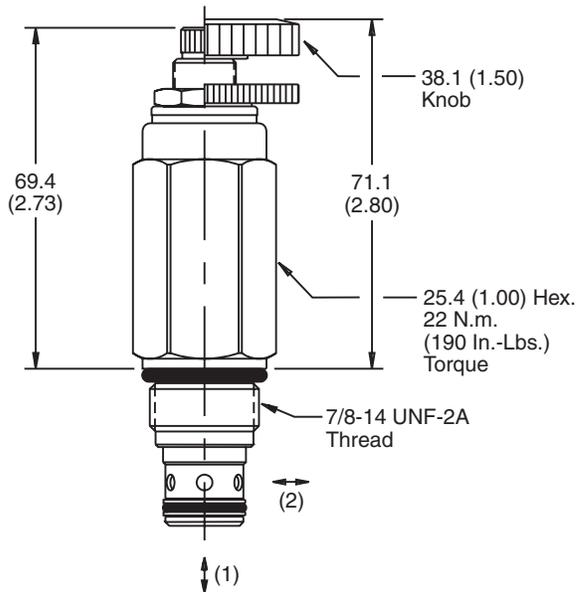
Flow Rate	60.6 LPM (16 GPM)
Maximum Inlet Pressure	245 Bar (3500 PSI)
Maximum Pressure Setting	210 Bar (3000 PSI)
Reseat Pressure	80% of crack pressure
Leakage at 150 SSU (32 cSt)	10 drops/min. (.66 cc/min.) @ 75% of crack pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range (Ambient)	-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)
Filtration	ISO Code 16/13, SAE Class 4 or better
Fluids	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
Approx. Weight	.26 kg (.58 lbs.)
Cavity	C10-2
Form Tool	Rougher None Finisher NFT10-2F

Performance Curve

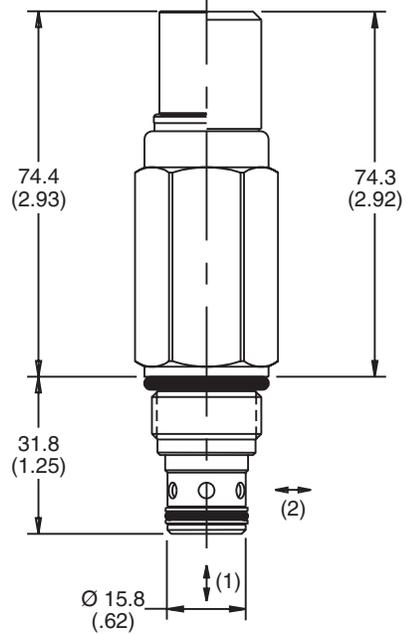
Flow vs. Inlet Pressure
(Pressure rise through cartridge only)



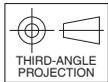
Dimensions Millimeters (Inches)



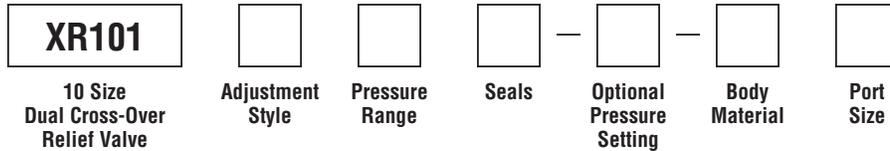
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-15)
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	Pressure Range
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ 11.3 LPM (3 GPM)
30	103 - 207 Bar (1500 - 3000 PSI) Standard Setting: 172 Bar (2500 PSI) @ 11.3 LPM (3 GPM)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 3000 PSI All settings at 11.3 LPM (3 GPM)

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

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

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
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- BC** Bodies & Cavities
- TD** Technical Data

General Description

Direct Acting, Dual Poppet-Type, Cross-over Relief Valve. For additional information see Technical Tips on pages PC1-PC6.

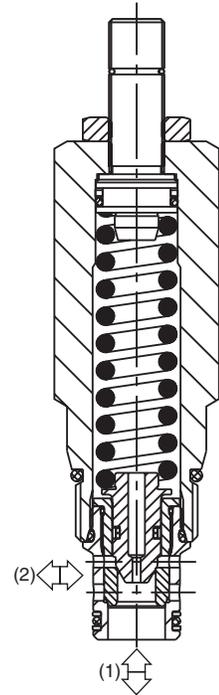
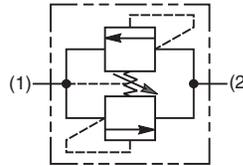
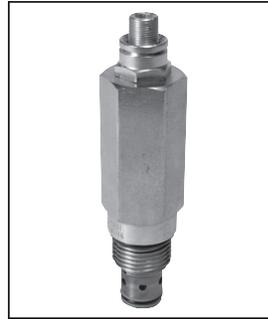
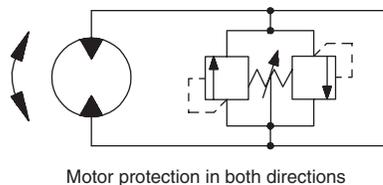
Features

- Compact space saving design
- Cost effective - only requires one cavity
- Poppet-type construction for lower leakage
- Full 350 Bar, 5000 PSI pressure capability
- High flow capability for the size of valve
- Minimal pressure variation with flow change
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- Available as CE marked valve in compliance with Pressure Equipment Directive
- All external parts zinc plated

Specifications

Rated Flow	120 LPM (32 GPM)
Maximum Inlet Pressure	H - 5-210 Bar (72-3000 PSI) M - 10-350 Bar (144-5000 PSI)
Maximum Pressure Setting	420 Bar (6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	10 drops/min. @ 100 Bar (1450 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	0.29 kg (0.64 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher

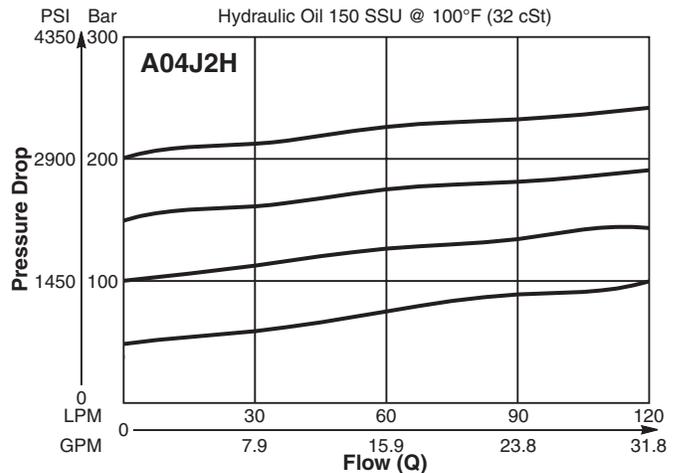
Application



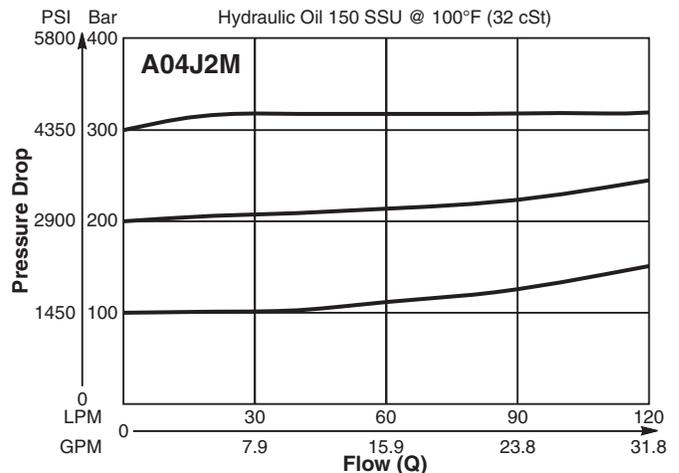
Performance Curves

(Pressure rise through cartridge only)

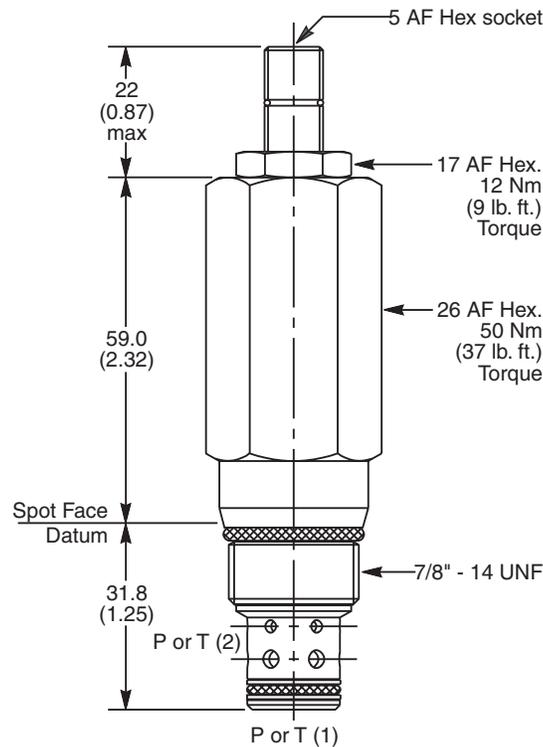
Flow vs. Inlet Pressure 1 to 2 and 2 to 1



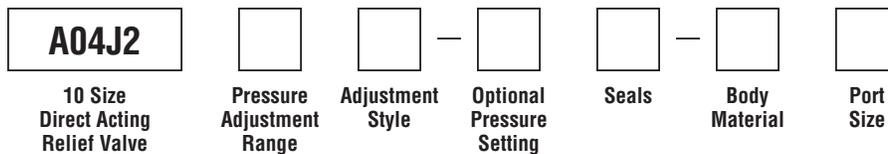
Flow vs. Inlet Pressure 1 to 2 and 2 to 1



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
H	5 - 210 Bar (72 - 3000 PSI)
M	10 - 350 Bar (144 - 5000 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30529N-1)
V	Fluorocarbon / (SK30529V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

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)
6B	3/8" BSPG	(B10-2-6B)†

Optional Pressure Setting	
Specify setting if required (Bar)	
A04J2H Standard Setting: 100 Bar (1450 PSI) @ 15 LPM (4.0 GPM)	
A04J2M Standard Setting: 200 Bar (2900 PSI) @ 15 LPM (4.0 GPM)	

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

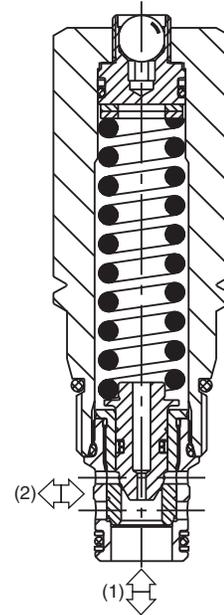
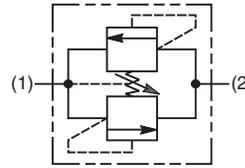
Direct Acting Poppet-Type Relief Valve. Pressure Equipment Directive (PED 97/23/EC) compliant to hazard category IV. For additional information see Technical Tips on pages PC1-PC6.

Features

- Bi-directional flow design for installation flexibility and security
- Compact space saving design
- Poppet type construction for lower leakage
- Full 350 Bar (5000 PSI) pressure capability
- High flow compatibility for the size of valve
- Minimal pressure variation with flow change
- Hardened working parts for maximum durability
- Tamperproof setting
- All external parts zinc plated

Specifications

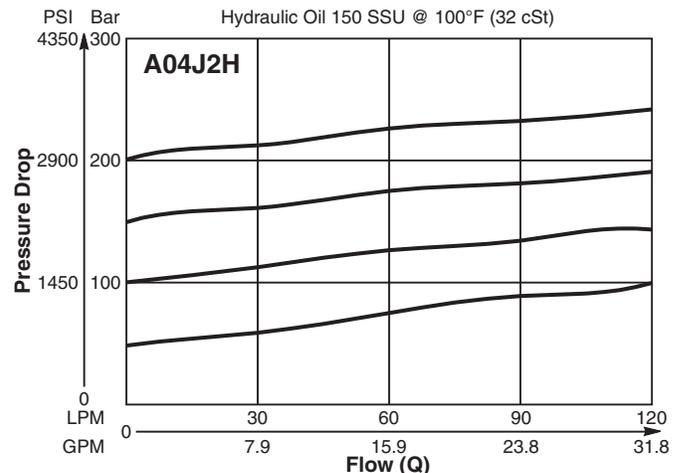
Rated Flow	120 LPM (32 GPM)
Maximum Inlet Pressure	350 Bar (5000 PSI)
Maximum Pressure Setting	HY - 5-210 Bar (72-3000 PSI) MY - 10-350 Bar (145-5000 PSI)
Sensitivity: Pressure/Turn	HY - 25 Bar (362 PSI) MY - 34 Bar (493 PSI)
Leakage at 150 SSU (32 cSt)	10 drops/min. @ 100 Bar (1450 PSI)
Cartridge Material	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	0.29 kg (0.64 lbs.)
Cavity	C10-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT10-2F



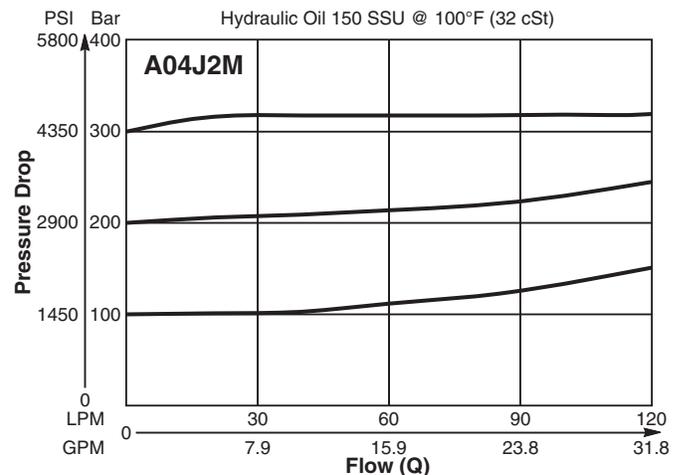
Performance Curves

(Pressure rise through cartridge only)

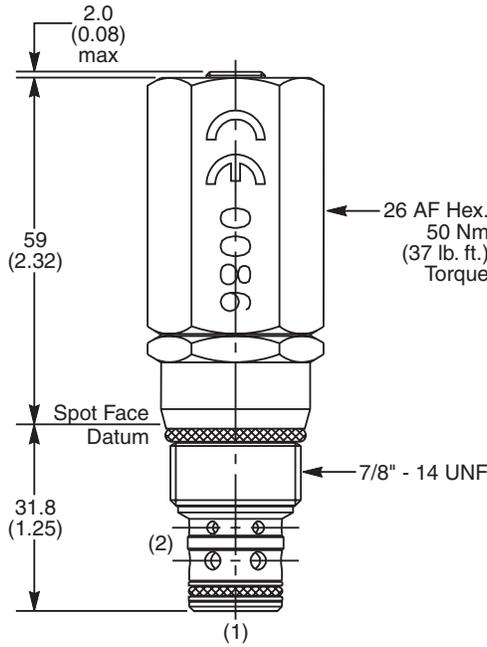
Flow vs. Inlet Pressure 1 to 2 and 2 to 1



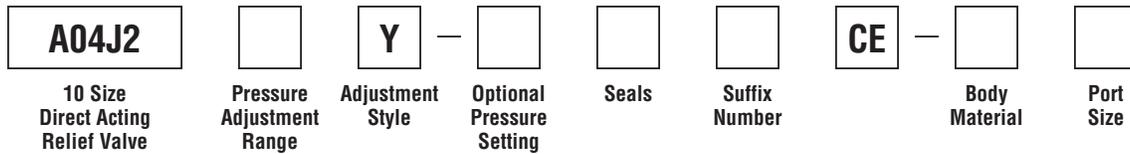
Flow vs. Inlet Pressure 1 to 2 and 2 to 1



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
H	5 - 210 Bar (72 - 3000 PSI)
M	10 - 350 Bar (145 - 5000 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30529N-1)
V	Fluorocarbon / (SK30529V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Y	Non Adjustable Preset (Std.)

Code	Suffix Number
Omit	Omit for valve to be set side to nose (2 to 1)
580	For valve to be set nose to side (1 to 2)

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)
6B	3/8" BSPG	(B10-2-6B)†

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

Optional Pressure Setting
Setting must be specified (Bar)

- 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
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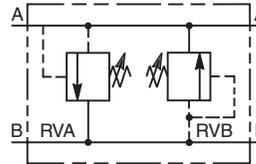
General Description

Dual Cross-Over Relief Valve. For additional information see Technical Tips on pages PC1-PC6.



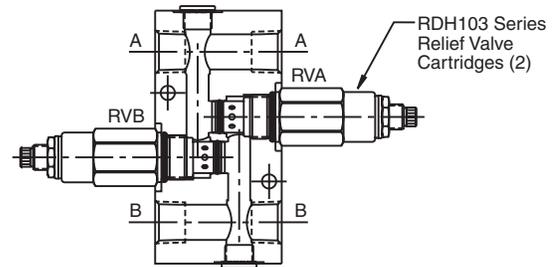
Features

- Fast acting differential area reliefs for high flow capacity
- Spherical poppets for low leakage
- Internal mechanical stop limits poppet travel eliminating spring solidification
- “D”-Ring eliminates backup rings
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



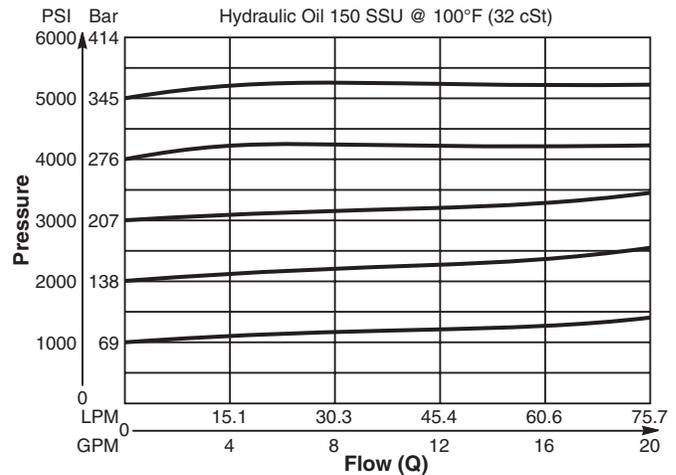
Specifications

Maximum Flow	75 LPM (20 GPM)
Maximum Inlet Pressure	350 Bar (5000 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Reseat Pressure	85% of crack pressure
Leakage at 150 SSU (32 cSt)	5 drops/min. (.33 cc/min.) @ 75% of crack pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Body Material	Steel
Operating Temp. Range (Ambient)	-45°C to +93.3°C (“D”-Ring) (-50°F to +200°F) -31.7°C to +121.1°C (Fluorocarbon) (-25°F to +250°F)
Filtration	ISO Code 16/13, SAE Class 4 or better
Fluids	Mineral-based or synthetic with lubricating properties at viscosities of 45 to 2000 SSU (6 to 420 cSt)
Approx. Weight	



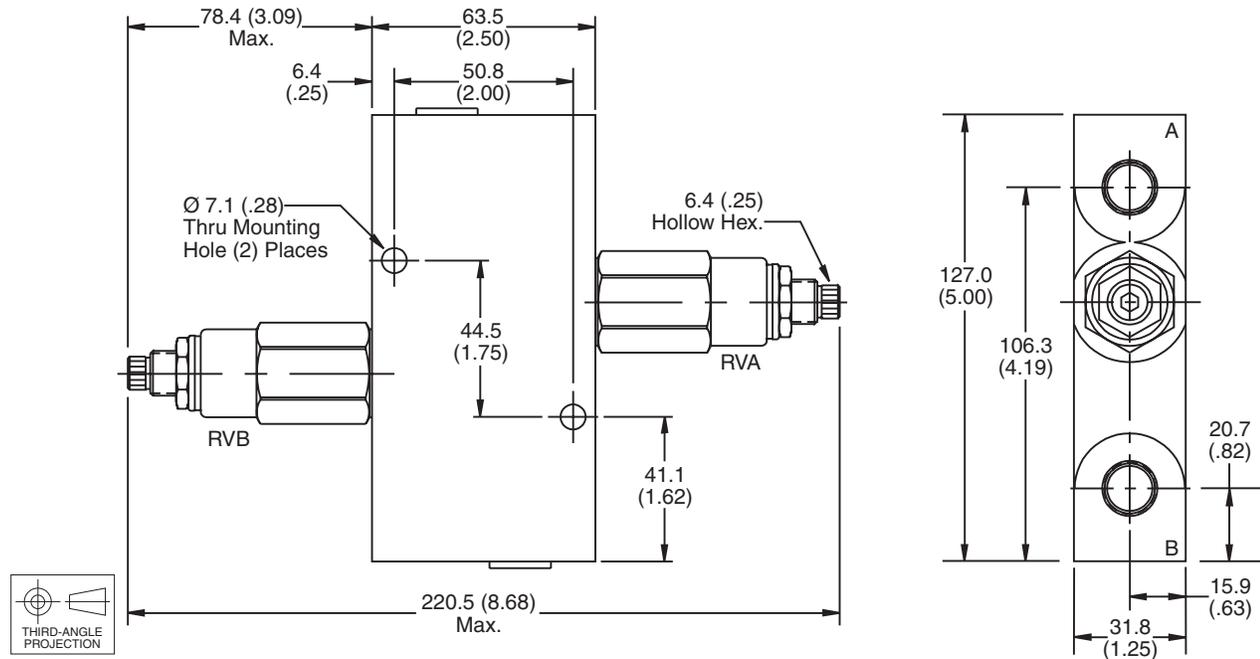
Performance Curve

Flow vs. Inlet Pressure
(Pressure rise through cartridge only)

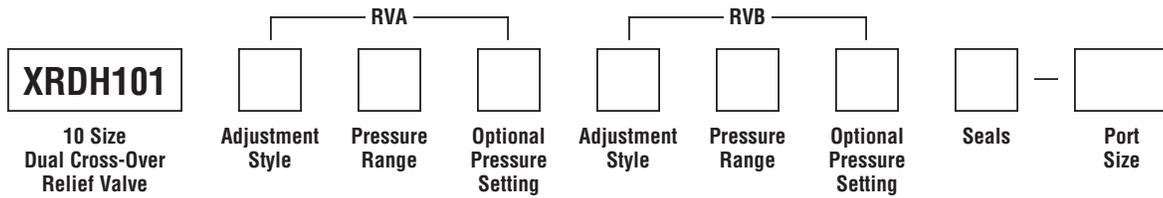


Note: A 6.9 Bar (100 PSI) pressure differential must be maintained between the two relief valve settings.

Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10) (Requires 2)
S	Screw Adjust
T	Tamper Resistant Cap (717943) (Requires 2)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at 11.3 LPM (3 GPM)

Code	Port Size	Part No.
Omit	Cartridge Only	
8T	SAE-8	830318

*Steel body only.
 Individual body requires 2 SAE 6 plugs.
 Part number 6 HP50N-S.*

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ 11.3 LPM (3 GPM)
20	34.5 - 138 Bar (500 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ 11.3 LPM (3 GPM)
30	69 - 207 Bar (1000 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ 11.3 LPM (3 GPM)
50	138 - 345 Bar (2000 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ 11.3 LPM (3 GPM)

Code	Seals
Omit	"D"-Ring
N	Nitrile
V	Fluorocarbon

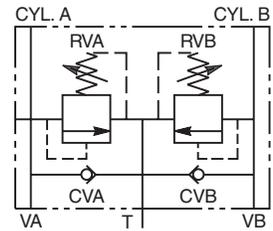
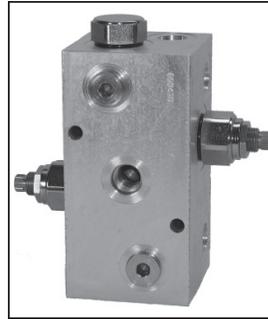
*Note: A 6.9 Bar (100 PSI) pressure differential must be maintained between the two relief valve settings. If both reliefs are adjustable and have the same pressure range; it is not necessary to repeat the adjustment and setting.
 i.e. XRDH101S50-8T means that both A & B reliefs are screw adjustable and have a range of 138 - 345 Bar (2000 - 5000 PSI).*

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
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- TD Technical Data

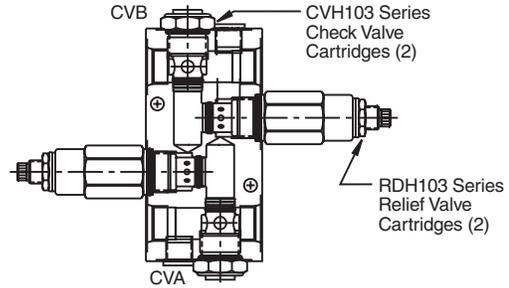
General Description

Dual Cross-Over Relief Valve with anti-cavitation checks. This valve provides both overload and shock protection for double acting hydraulic actuators as well as cavitation protection. For additional information see Technical Tips on pages PC1-PC6.



Features

- Fast acting differential area reliefs for high flow capacity
- Spherical poppets for low leakage
- Internal mechanical stop limits poppet travel eliminating spring solidification
- "D"-Ring eliminates backup rings
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



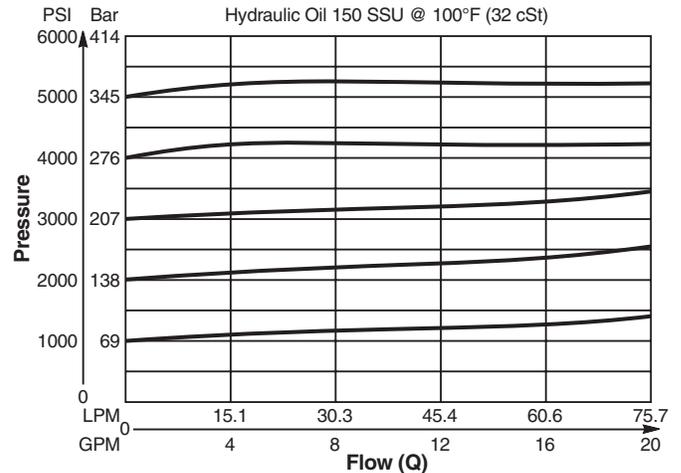
Specifications

Maximum Flow	60 LPM (16 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Reseat Pressure	85% of crack pressure
Leakage at 150 SSU (32 cSt)	5 drops/min. (.33 cc/min.) @ 75% of crack pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Body Material	Steel
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	1.8 kg (4.0 lbs.)

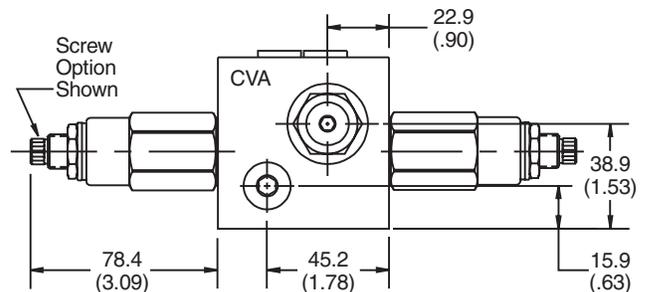
Note: A 6.9 Bar (100 PSI) pressure differential must be maintained between the two relief valve settings.

Performance Curve

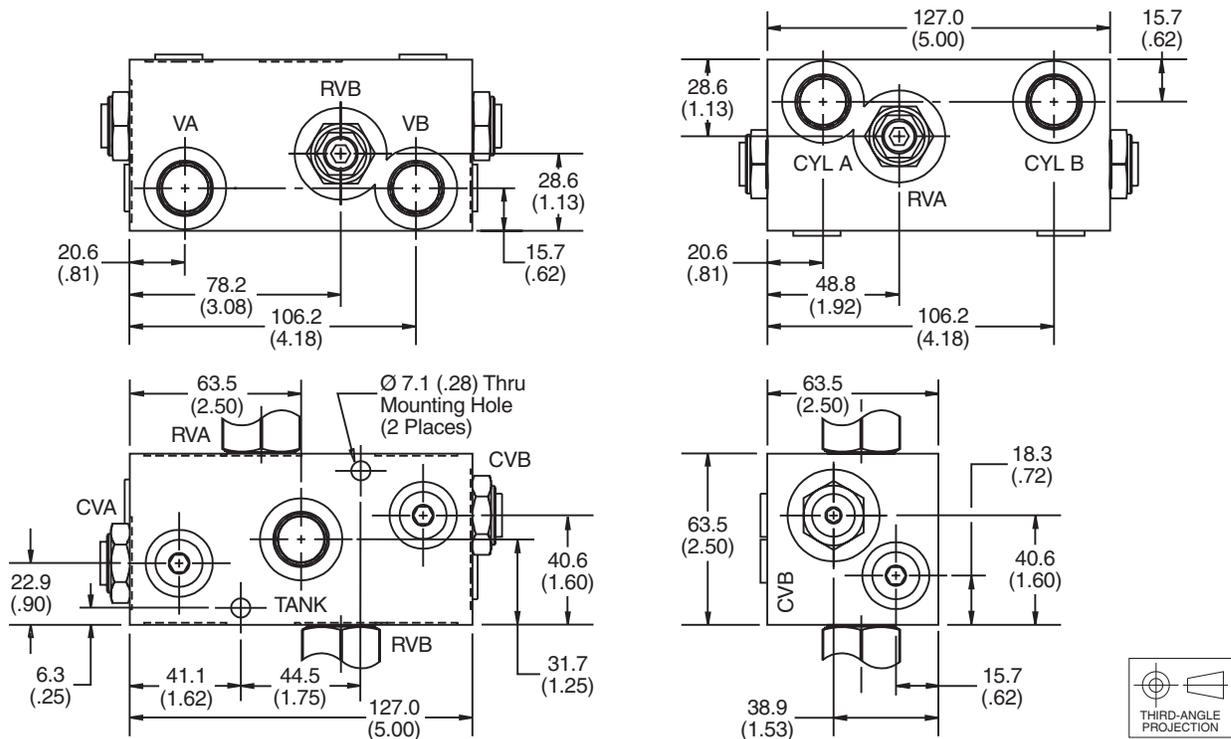
Flow vs. Inlet Pressure
(Pressure rise through cartridge only)



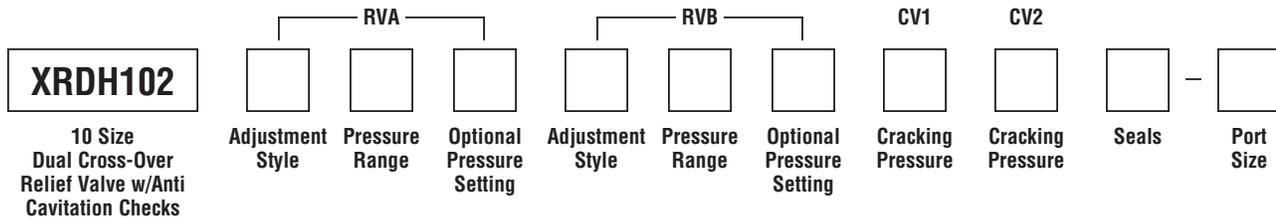
Dimensions



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10) (Requires 2)
S	Screw Adjust
T	Tamper Resistant Cap (717943) (Requires 2)

Optional Pressure Setting	
Pressure ÷ 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at .95 LPM (.25 GPM)	

Code	Seals
Omit	"D"-Ring
N	Nitrile
V	Fluorocarbon

Code	Port Size	Part No.
8T	SAE-8	850437

Individual body requires 4 SAE 6 plugs.
 Part number 6 HP50N-S.

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ .95 LPM (.25 GPM)
20	34.5 - 138 Bar (500 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ .95 LPM (.25 GPM)
30	34.5 - 207 Bar (500 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ .95 LPM (.25 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ .95 LPM (.25 GPM)

Code	Cracking Pressure
P	0.3 Bar (5 PSI)
P20	1.4 Bar (20 PSI)
P50	3.5 Bar (50 PSI)
P65	4.5 Bar (65 PSI)
P100	6.9 Bar (100 PSI)

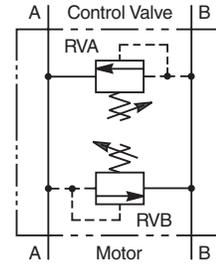
Note: A 6.9 Bar (100 PSI) pressure differential must be maintained between the two relief valve settings. If both reliefs are adjustable and have the same pressure range; it is not necessary to repeat the adjustment and setting.
 i.e. XRDH102S50P-T6 means that both A & B reliefs are screw adjustable and have a range of 34.5 - 345 Bar (500 - 5000 PSI).

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

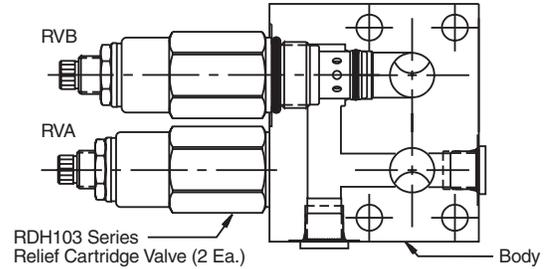
General Description

Dual Cross-Over Relief Valve with Motor Mount. This valve provides overload and shock protection for small gerotor motors with a manifold mounting pattern, such as the Parker TB and TE series. Close coupling the valve to the motor provides ideal protection and eliminates plumbing. For additional information see Technical Tips on pages PC1-PC6.



Features

- Fast acting differential area reliefs for high flow capacity
- Spherical poppets for low leakage
- Internal mechanical stop limits poppet travel eliminating spring solidification
- "D"-Ring eliminates backup rings
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



Specifications

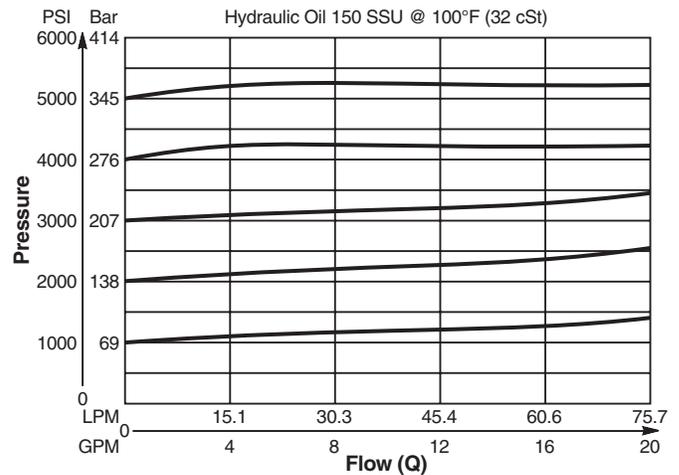
Maximum Flow	75 LPM (20 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Reseat Pressure	85% of crack pressure
Leakage at 150 SSU (32 cSt)	5 drops/min. (.33 cc/min.) @ 75% of crack pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Body Material	Steel
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	2.0 kg (4.5 lbs.)

Note: A 6.9 Bar (100 PSI) pressure differential must be maintained between the two relief valve settings.

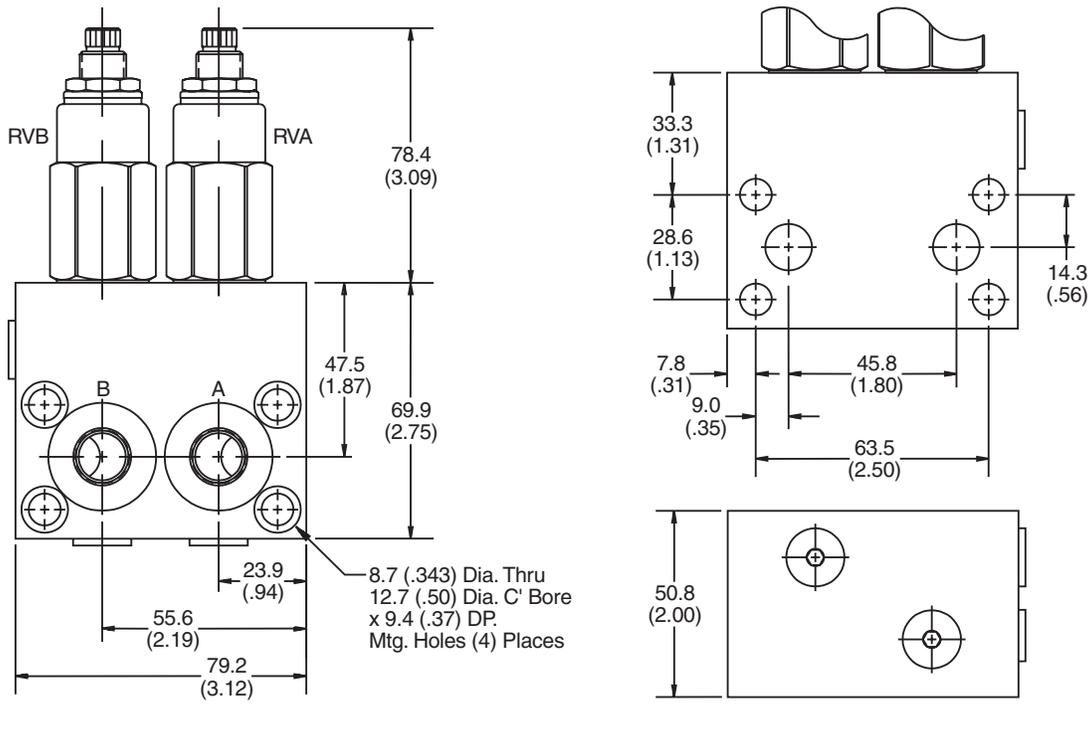
Performance Curve

Flow vs. Inlet Pressure

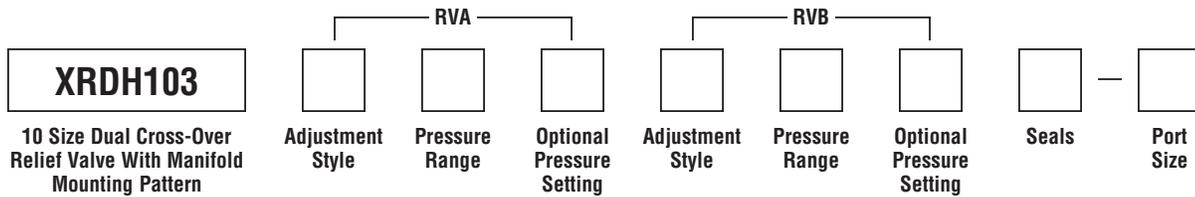
(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10) (Requires 2)
S	Screw Adjust
T	Tamper Resistant Cap (717943) (Requires 2)

Optional Pressure Setting	
Pressure	± 10
	i.e. 235 = 2350 PSI
	(Omit if standard setting is used)
Setting Range:	100 to 5000 PSI
	All settings at .95 LPM (.25 GPM)

Code	Port Size	Part No.
8T	SAE-8	830338

*Individual body requires 4 SAE 5 plugs.
 Part number 5 HP50N-S.*

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ .95 LPM (.25 GPM)
20	34.5 - 138 Bar (500 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ .95 LPM (.25 GPM)
30	34.5 - 207 Bar (500 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ .95 LPM (.25 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ .95 LPM (.25 GPM)

Code	Seals
Omit	"D"-Ring
N	Nitrile
V	Fluorocarbon

*Note: A 6.9 Bar (100 PSI) pressure differential must be maintained between the two relief valve settings. If both reliefs are adjustable and have the same pressure range; it is not necessary to repeat the adjustment and setting.
 i.e. XRDH10350-6T means that both A & B reliefs are screw adjustable and have a range of 34.5 - 345 Bar (500 - 5000 PSI).*

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

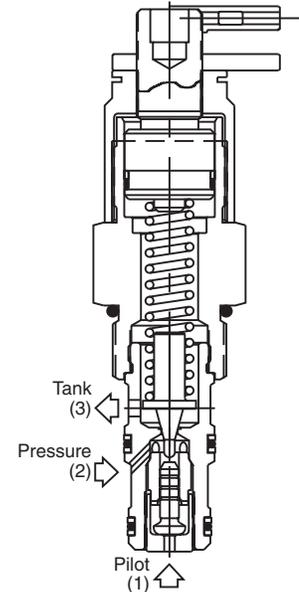
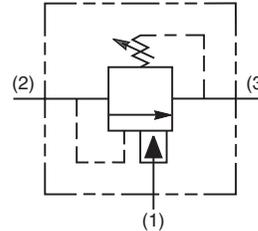
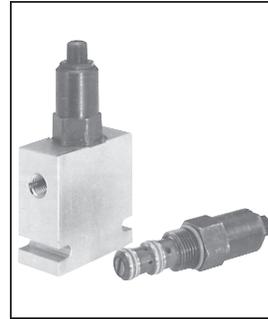
Differential Area Unloading Relief Valve. This valve is best suited for low flow accumulator unloading circuits or can be used as remote pilot valves. They provide a fixed percentage between load and unload pressures. For additional information see Technical Tips on pages PC1-PC6.

Features

- Low hysteresis
- Cartridge design
- All external parts zinc plated

Specifications

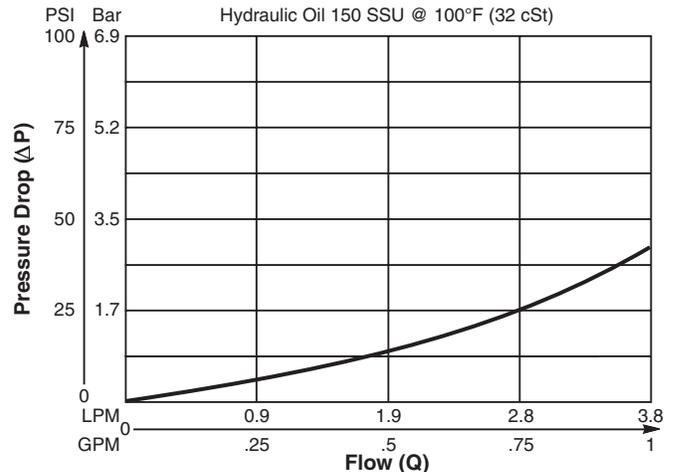
Rated Flow	3.75 LPM (1 GPM)
Maximum Pilot Flow	.94 LPM (.25 GPM)
Maximum Inlet Pressure	245 Bar (3500 PSI)
Maximum Pressure Setting	210 Bar (3000 PSI)
Maximum Tank Pressure	210 Bar (3000 PSI)
Leakage at 150 SSU (32 cSt)	Port 2 to 3 10 drops/min. (0.66 cc/min.) Port 1 to 2 60 drops/min. (3 cc/min.)
Cartridge 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 (.50 lbs.)
Cavity	C10-3 (See BC Section for more details)
Form Tool	Rougher NFT10-3R Finisher NFT10-3F



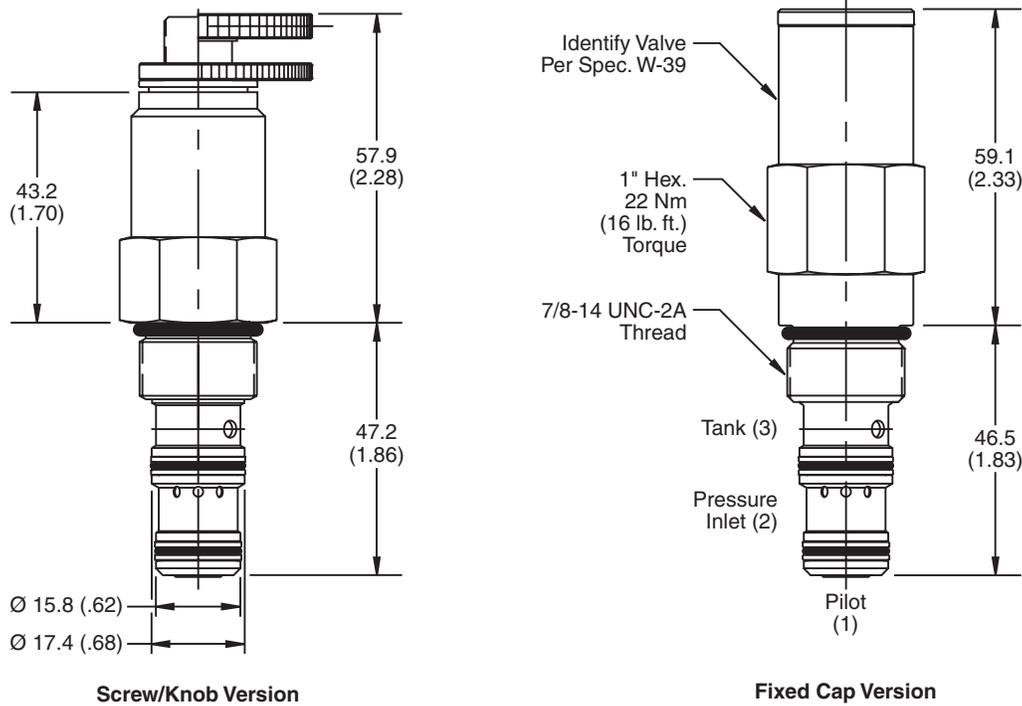
Performance Curve

Inlet Flow vs. Pressure Drop

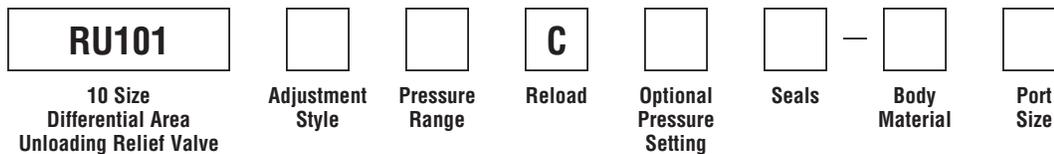
Without pilot assist (Through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (840208K)
S	Screw Adjust

Code	Reload
C	80% ±5% of Pressure Setting

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ 1.1 LPM (.3 GPM)
20	10.3 - 138 Bar (150 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ 1.1 LPM (.3 GPM)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ 1.1 LPM (.3 GPM)

Optional Pressure Setting
Pressure ± 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 3000 PSI All settings at 1.1 LPM (0.3 GPM)

Code	Seals / Kit No.
Omit	Nitrile / (SK10-3N)
V	Fluorocarbon / (SK10-3V)

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

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

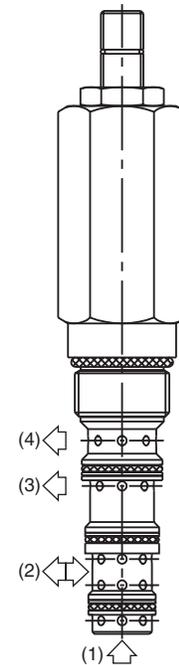
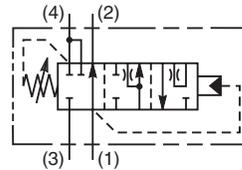
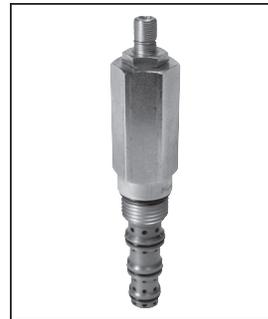
Direct Acting, Spool-Type, Unloading Relief Valve with Internal Pilot. For additional information see Technical Tips on pages PC1-PC6.

Features

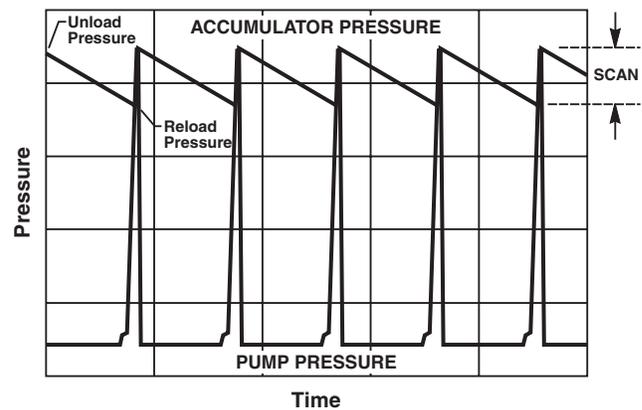
- Use to unload a load sense pump in an accumulator circuit
- One size unloading valve for all flow size applications
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated

Specifications

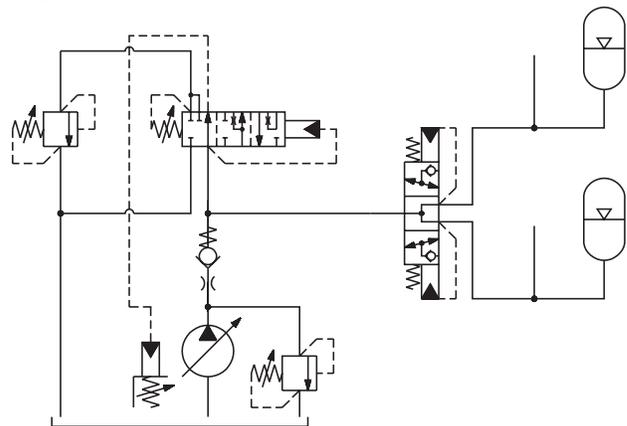
Rated Flow	2 LPM (0.53 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	200 Bar (2900 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	25 ml/min. @ 100 Bar (1450 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. 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	0.33 kg (0.73 lbs.)
Cavity	C10-4 (See BC Section for more details)
Form Tool	Rougher None Finisher



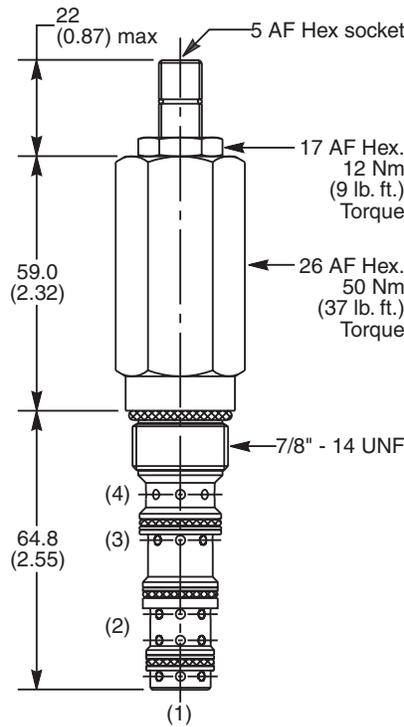
**Performance Curve
Accumulator Circuit**



Application



Dimensions Millimeters (Inches)



Ordering Information

M04A4	J					
10 Size Direct Acting Unloading Relief Valve	Reload Pressure Adjustment Range	Adjustment Style	Reload Pressure Setting	Seals	Body Material	Port Size

Code	Reload Pressure Adjustment Range
J	50 - 200 Bar (725 - 2900 PSI)

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
T	Tamper Resistant Cap (TC1130)

Code	Reload Pressure Setting
Omit	Omit for standard setting Specify setting if required M04A4J Standard Setting: 125 Bar (1850 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30530N-1)
V	Fluorocarbon / (SK30530V-1)

Code	Body Material
Omit	Steel
A	Aluminum

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

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

Technical Information

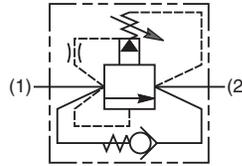
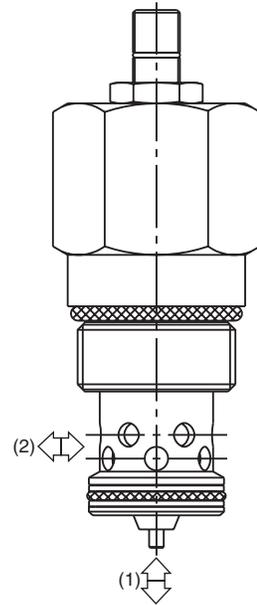
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated, Poppet-Type Relief Valve with Free Reverse Check. For additional information see Technical Tips on pages PC1-PC6.

Features

- High flow capacity
- Virtually leak free, can be used for load holding applications
- Compact space saving design
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated



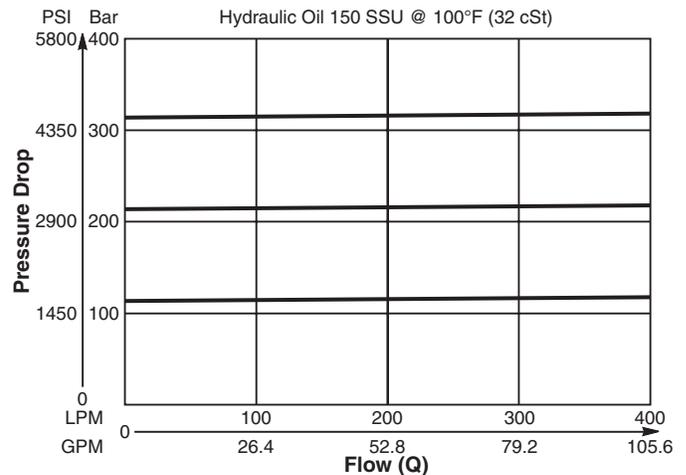
Specifications

Rated Flow	350 LPM (92 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	H - 10-210 Bar (145-3000 PSI) P - 10-420 Bar (145-6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	5 drops/min. @ 100 Bar (1450 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	0.57 kg (1.26 lbs.)
Cavity	C16-2 (See BC Section for more details)
Form Tool	Rougher None Finisher NFT16-2F

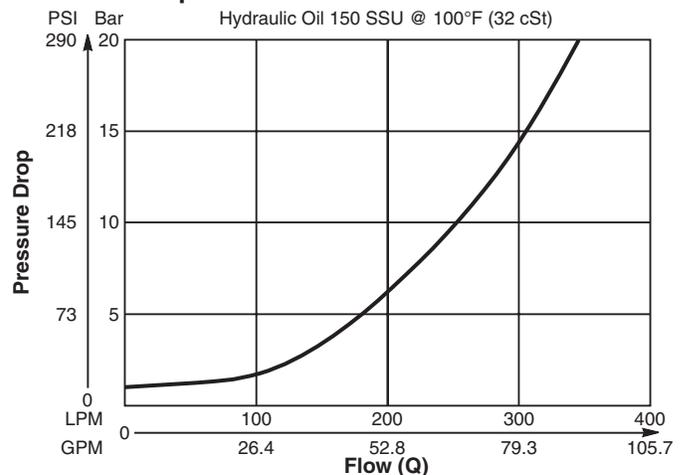
Performance Curves

(Pressure rise through cartridge only)

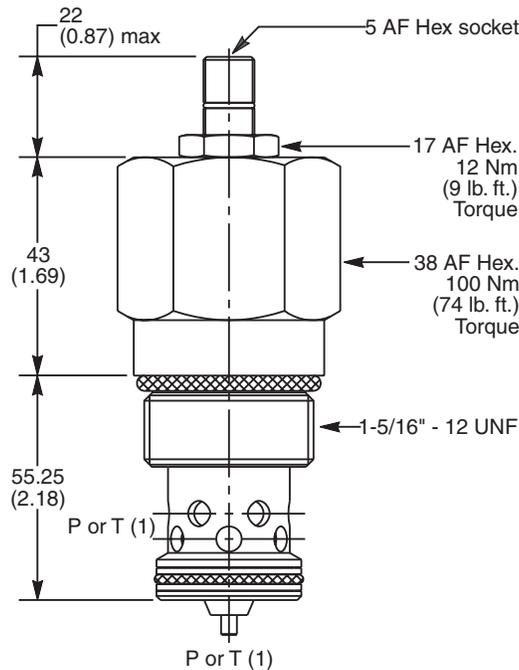
Relief Performance 1 to 2



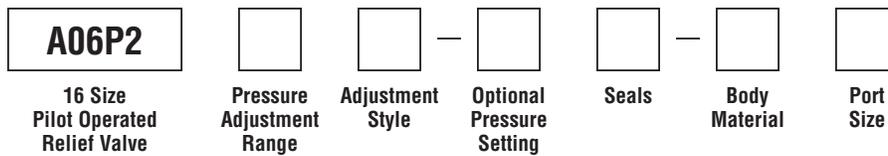
Pressure Drop vs. Flow 2 to 1



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
H	10 - 210 Bar (145 - 3000 PSI)
P	10 - 420 Bar (145 - 6000 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30507N-1)
V	Fluorocarbon / (SK30507V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12P	3/4" NPTF	(B16-2-*12P)
16P	1" NPTF	(B16-2-*16P)
8T	SAE-8	(B16-2-*8T)
12T	SAE-12	(B16-2-*12T)
16T	SAE-16	(B16-2-*16T)
12B	3/4" BSPG	(B16-2-12B)†
16B	1" BSPG	(B16-2-*16B)

Optional Pressure Setting	
Specify setting if required (Bar)	
A06P2H Standard Setting: 100 Bar (1450 PSI) @ 20 LPM (5.3 GPM)	
A06P2P Standard Setting: 200 Bar (2900 PSI) @ 20 LPM (5.3 GPM)	

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

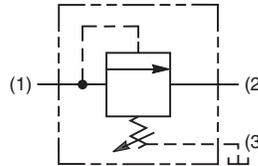
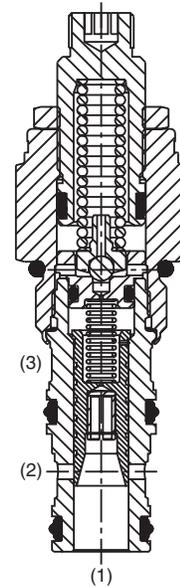
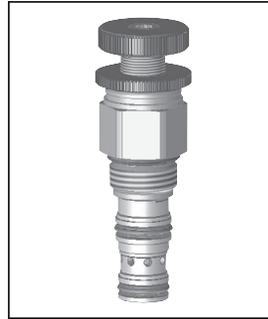
General Description

Pilot Operated Sequence Valve (Internally Piloted, Externally Vented). For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided pilot for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis
- Internal screening protects pilot spring from debris



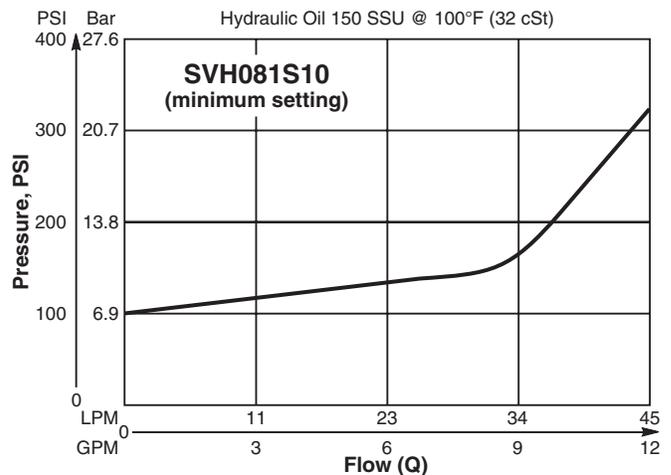
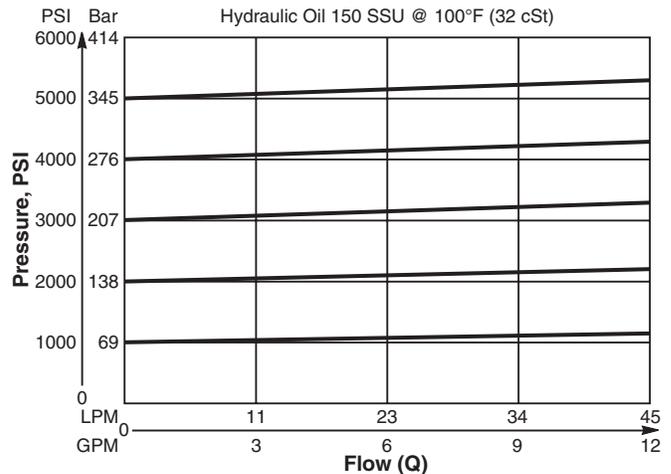
Specifications

Rated Flow	45 LPM (12 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	0.56 LPM (0.15 GPM)
Reseat Pressure	90% of crack pressure
Leakage at 150 SSU (32 cSt)	82 cc/min. (5 cu. in./min.) @ 210 Bar (3000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	.11 kg (.25 lbs.)
Cavity	C08-3 (See BC Section for more details)
Form Tool	Rougher NTF08-3R Finisher NFT08-3F

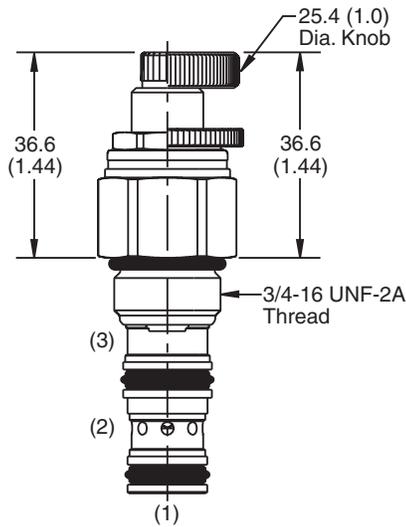
Performance Curves

Flow vs. Inlet Pressure

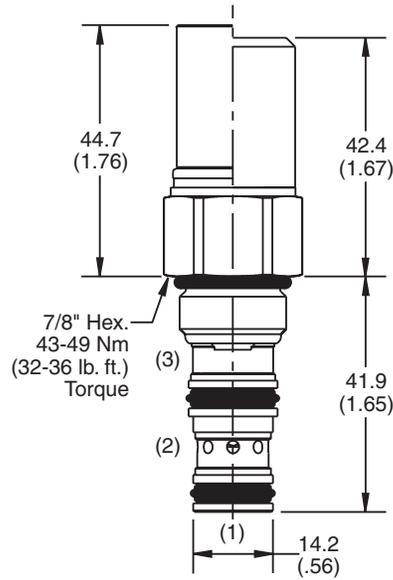
(Pressure rise through cartridge only)



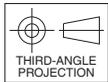
Dimensions Millimeters (Inches)



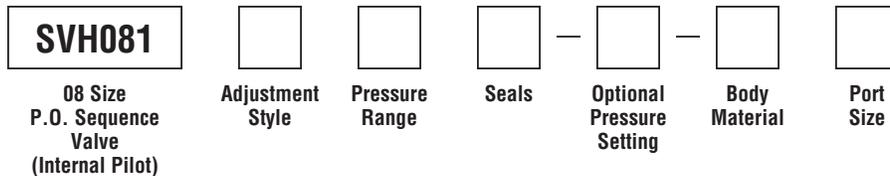
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (717943)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK08-3)
N	Nitrile / (SK08-3N)
V	Fluorocarbon / (SK08-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)

Optional Pressure Setting	
Pressure	± 10 i.e. 235 = 2350 PSI (Omit if standard setting is used)
Setting Range:	100 to 5000 PSI
All settings at crack pressure,	approximately .95 LPM (.25 GPM)

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

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

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

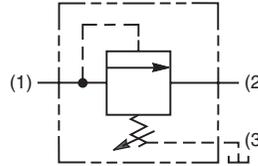
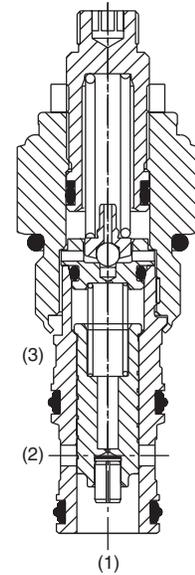
General Description

Pilot Operated Sequence Valve (Internally Piloted, Externally Drained). For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided poppet for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis
- Internal screening protects pilot spring from debris



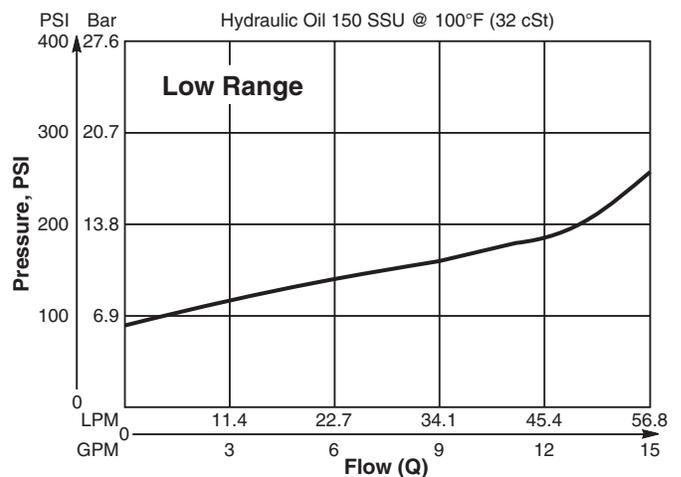
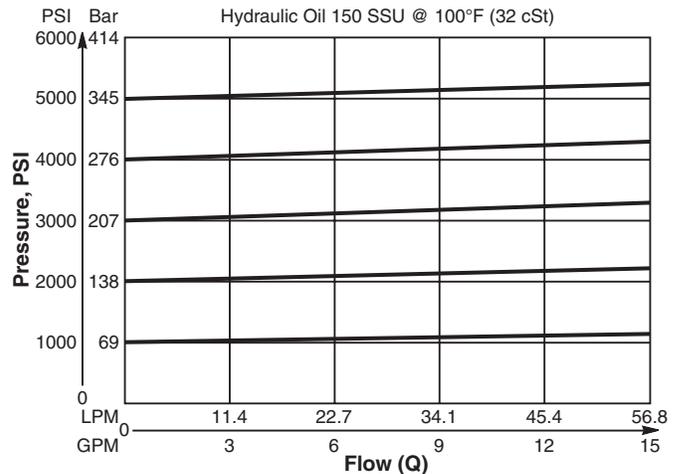
Specifications

Rated Flow	56.3 LPM (15 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow (Port 3)	0.94 LPM (0.25 GPM)
Reseat Pressure	90% of crack pressure
Leakage at 150 SSU (32 cSt)	82 cc/min. (5 cu. in./min.) @ 210 Bar (3000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	.45 kg (1.0 lbs.)
Cavity	C10-3 (See BC Section for more details)
Form Tool	Rougher NTF10-3R Finisher NFT10-3F

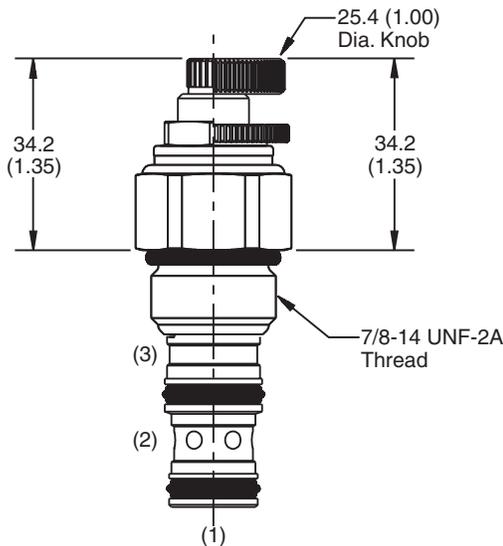
Performance Curves

Flow vs. Inlet Pressure

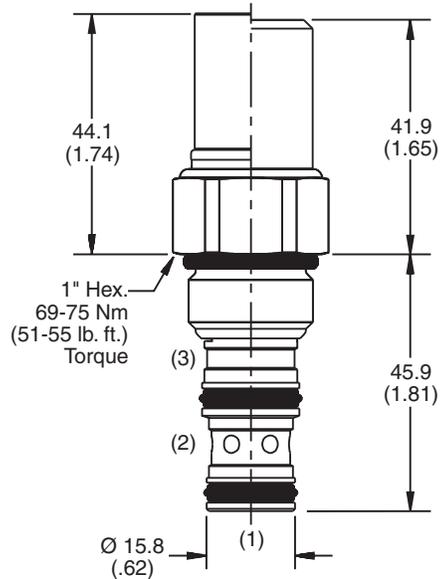
(Pressure rise through cartridge only)



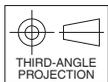
Dimensions Millimeters (Inches)



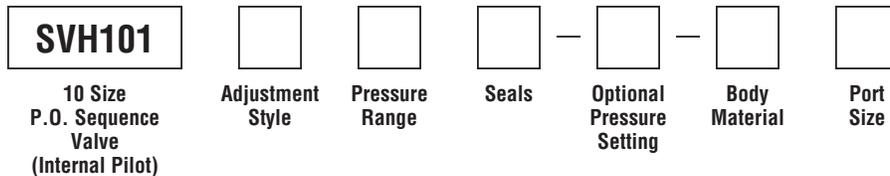
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (718083)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-3)
N	Nitrile / (SK10-3N)
V	Fluorocarbon / (SK10-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)

Optional Pressure Setting	
Pressure	± 10 i.e. 235 = 2350 PSI (Omit if standard setting is used)
Setting Range:	100 to 5000 PSI
All settings at crack pressure,	approximately .95 LPM (.25 GPM)

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

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

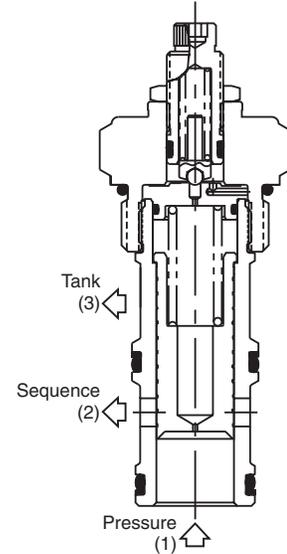
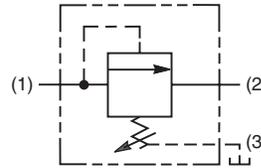
Pilot Operated Sequence Valve (Internally Piloted, Externally Drained). For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened, precision ground parts for durability
- High accuracy, pilot operation design
- Ball-type pilot for added stability
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.

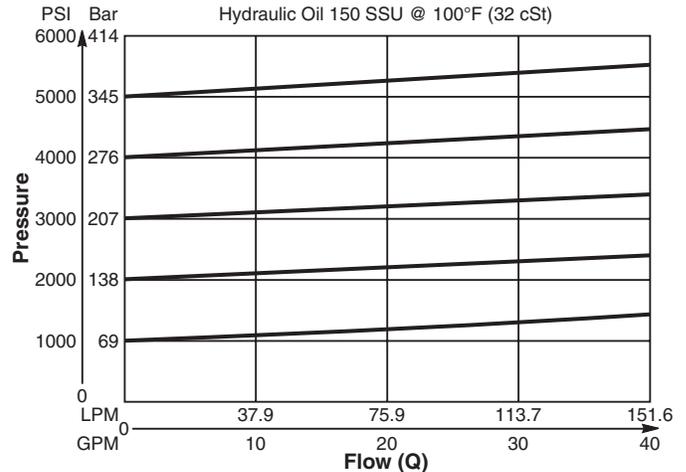
Specifications

Rated Flow	151.6 LPM (40 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	1.9 LPM (0.5 GPM)
Reseat Pressure	80% of crack pressure
Leakage at 150 SSU (32 cSt)	5 cc per 100 PSI (6.8 Bar) setting
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	.45 kg (1.0 lbs.)
Cavity	C16-3 (See BC Section for more details)
Form Tool	Rougher NTF16-3R Finisher NFT16-3F

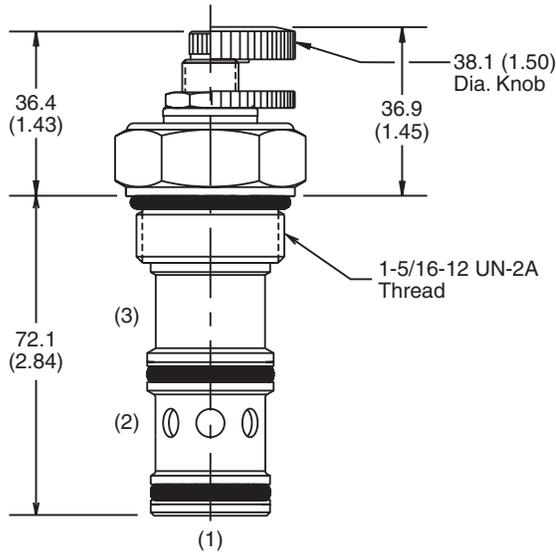


Performance Curve
Flow vs. Inlet Pressure

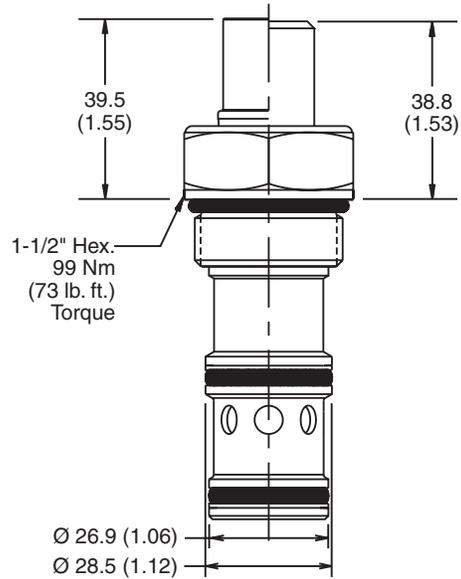
(Pressure rise through cartridge only)



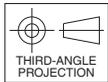
Dimensions Millimeters (Inches)



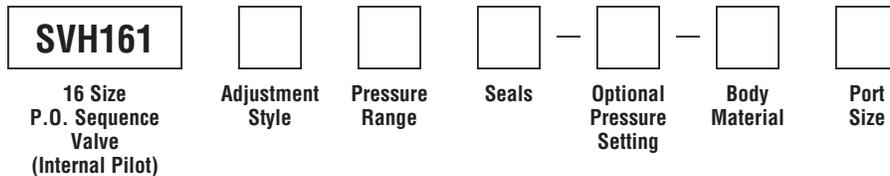
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-15)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

Code	Seals / Kit No.
Omit	Nitrile / (SK16-3)
V	Fluorocarbon / (SK16-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ 11.3 LPM (3 GPM)
20	13.8 - 138 Bar (200 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ 11.3 LPM (3 GPM)
30	20.7 - 207 Bar (300 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ 11.3 LPM (3 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ 11.3 LPM (3 GPM)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at 11.3 LPM (3 GPM)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12T	SAE-12	(B16-3-*12T)
16T	SAE-16	(B16-3-*16T)

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

- 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

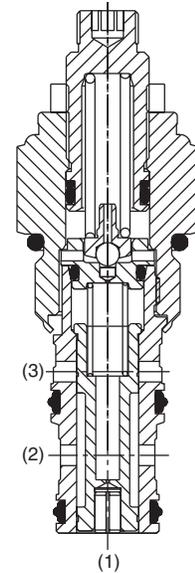
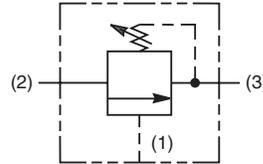
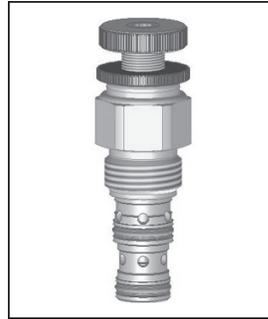
General Description

Pilot Operated Sequence Valve (Externally Piloted, Internally Vented). For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided poppet for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis
- Internal screening protects pilot spring from debris

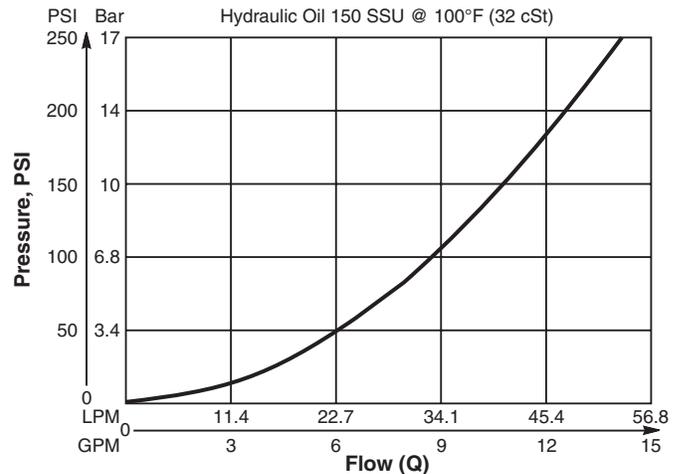


Specifications

Rated Flow	56.3 LPM (15 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	See maximum drain flow chart (Lower right)
Reseat Pressure	90% of crack pressure
Leakage at 150 SSU (32 cSt)	82 cc/min. (5 cu. in./min.) @ 210 Bar (3000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	.45 kg (1.0 lbs.)
Cavity	C10-3 (See BC Section for more details)
Form Tool	Rougher NTF10-3R Finisher NFT10-3F

Performance Curve
Flow vs. Inlet Pressure

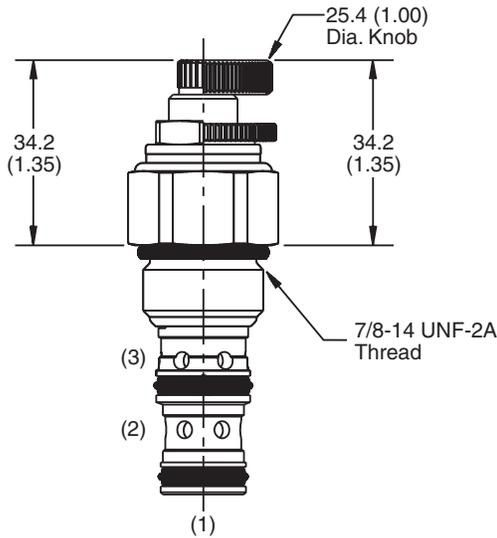
(Pressure rise through cartridge only)



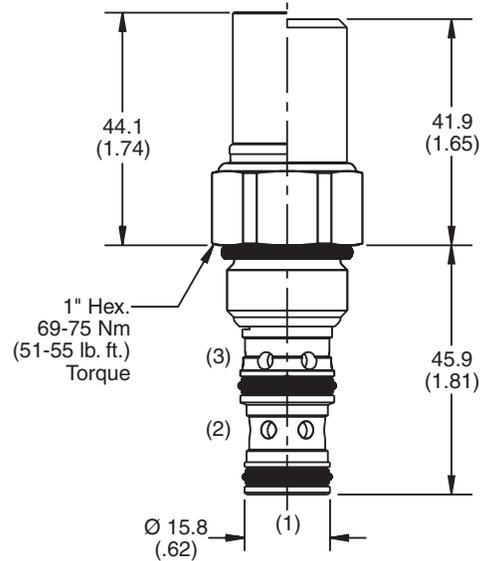
Maximum Drain Flow

P_{PILOT} - P_{SETTING}	Drain Flow
6.9 Bar (100 PSI)	0.34 LPM (0.09 GPM)
35 Bar (500 PSI)	0.76 LPM (0.20 GPM)
69 Bar (1000 PSI)	1.08 LPM (0.29 GPM)
138 Bar (2000 PSI)	1.53 LPM (0.40 GPM)
207 Bar (3000 PSI)	1.87 LPM (0.50 GPM)

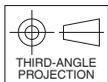
Dimensions Millimeters (Inches)



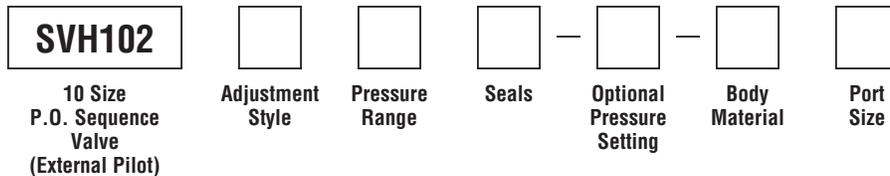
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (718083)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-3)
N	Nitrile / (SK10-3N)
V	Fluorocarbon / (SK10-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately 11.3 LPM (3 GPM)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately 11.3 LPM (3 GPM)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ crack pressure, approximately 11.3 LPM (3 GPM)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately 11.3 LPM (3 GPM)

Optional Pressure Setting	
Pressure	± 10 i.e. 235 = 2350 PSI (Omit if standard setting is used)
Setting Range:	100 to 5000 PSI
All settings at crack pressure,	approximately 11.3 LPM (3 GPM)

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

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

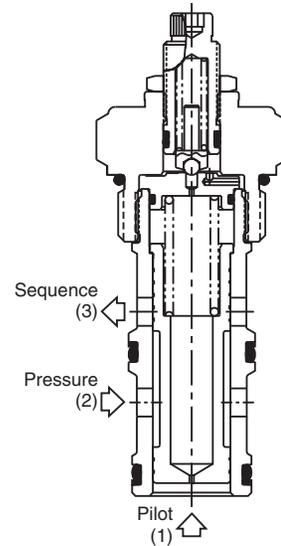
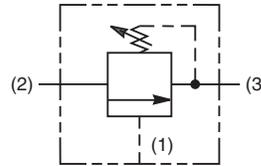
Pilot Operated Sequence Valve (Externally Piloted, Internally Vented). For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened, precision ground parts for durability
- High accuracy, pilot operation design
- Ball-type pilot for added stability
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.

Specifications

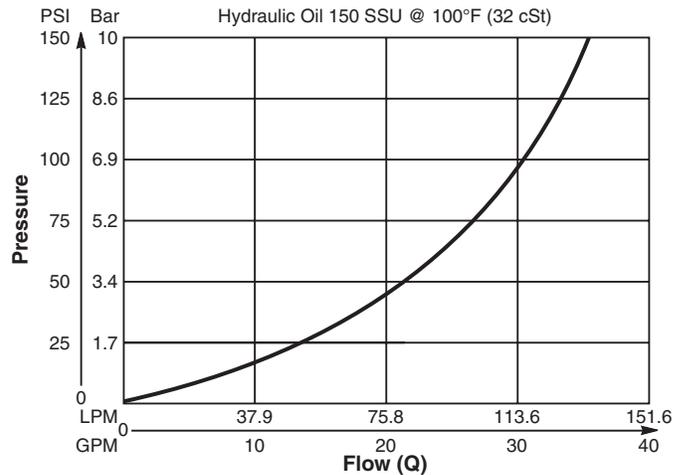
Rated Flow	151.6 LPM (40 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	See maximum drain flow chart (Lower right)
Reseat Pressure	80% of Crack Pressure
Leakage at 150 SSU (32 cSt)	82 cc/min. (5 cu. in./min.) @ 75% of Crack Pressure
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	.45 kg (1.0 lbs.)
Cavity	C16-3 (See BC Section for more details)
Form Tool	Rougher NFT16-3R Finisher NFT16-3F



Performance Curve

Flow vs. Inlet Pressure

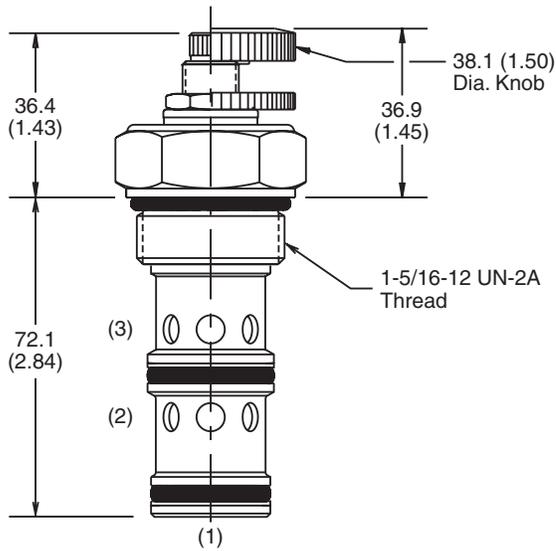
(Pressure rise through cartridge only)



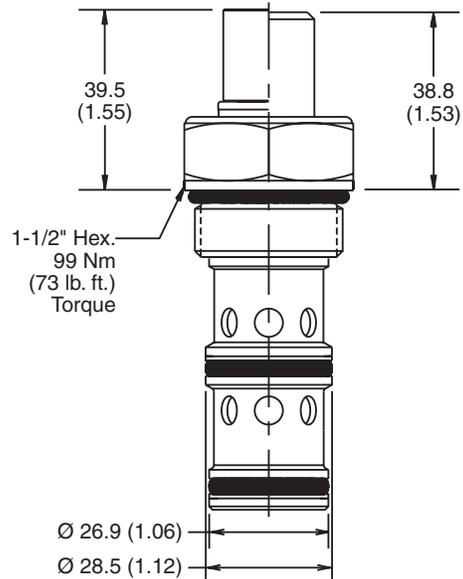
Maximum Drain Flow

P_{PILOT} - P_{SETTING}	Drain Flow
6.9 Bar (100 PSI)	0.69 LPM (0.18 GPM)
35 Bar (500 PSI)	1.55 LPM (0.41 GPM)
69 Bar (1000 PSI)	2.19 LPM (0.58 GPM)
138 Bar (2000 PSI)	3.10 LPM (0.82 GPM)
207 Bar (3000 PSI)	3.79 LPM (1.00 GPM)

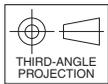
Dimensions Millimeters (Inches)



Screw/Knob Version



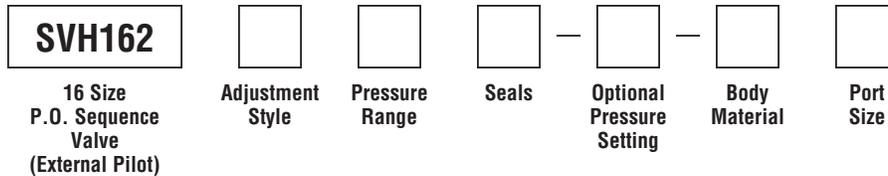
Fixed Cap/Tamper Resistant Version



Screw/Knob Version

Fixed Cap/Tamper Resistant Version

Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-15)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

Code	Seals / Kit No.
Omit	Nitrile / (SK16-3)
V	Fluorocarbon / (SK16-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ 11.3 LPM (3 GPM)
20	13.8 - 138 Bar (200 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ 11.3 LPM (3 GPM)
30	20.7 - 207 Bar (300 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ 11.3 LPM (3 GPM)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ 11.3 LPM (3 GPM)

Optional Pressure Setting
Pressure ÷ 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI All settings at 11.3 LPM (3 GPM)

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12T	SAE-12	(B16-3-*12T)
16T	SAE-16	(B16-3-*16T)

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

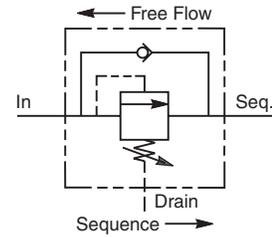
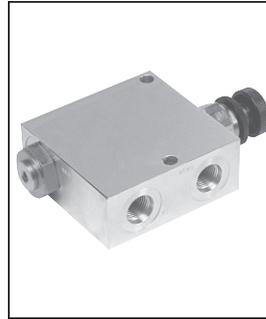
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

Technical Information

- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
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- DC** Directional Controls
- MV** Manual Valves
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- TD** Technical Data

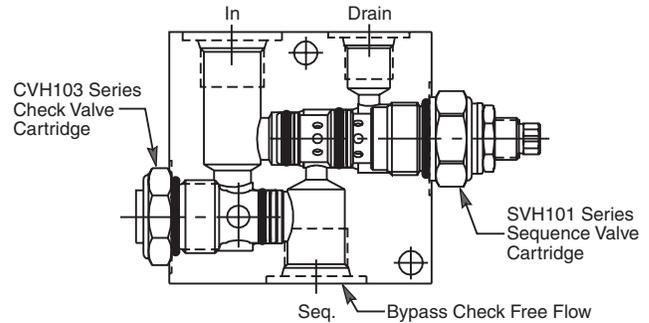
General Description

Pilot Operated Sequence Valve with Reverse Flow Check. For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Built-in reverse flow check reduces plumbing
- Cartridge design
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



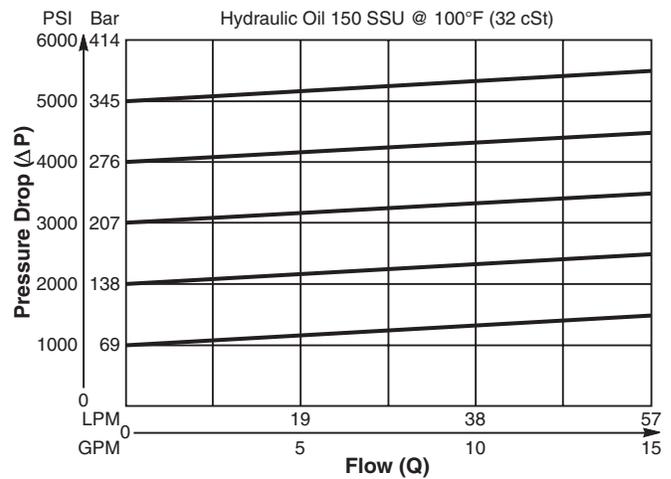
Specifications

Rated Flow	56.3 LPM (15 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Drain Flow	.94 LPM (0.25 GPM)
Reseat Pressure	90% of Crack Pressure
Leakage at 150 SSU (32 cSt)	82 cc/min. (5 cu. in./min.) at 210 Bar (3000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Body Material	Steel
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	1.6 kg (3.5 lbs.)

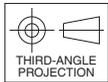
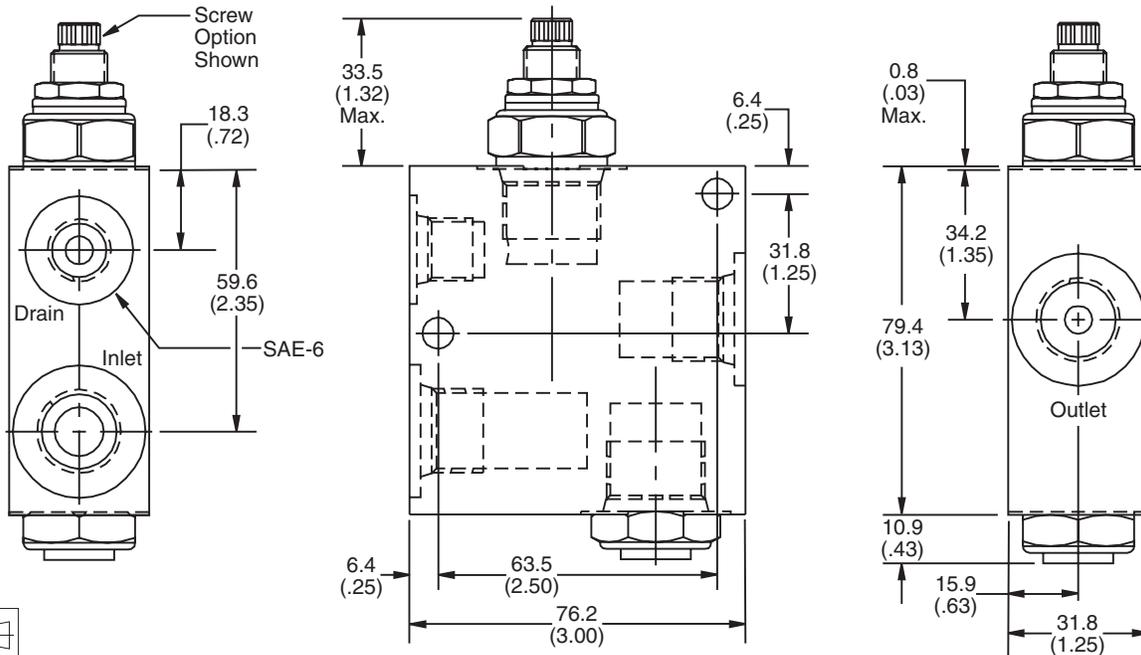
Performance Curve

Flow vs. Inlet Pressure

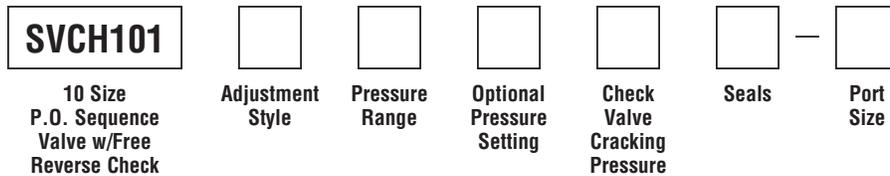
(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (718083)

Optional Pressure Setting	
Pressure	± 10
	i.e. 235 = 2350 PSI
	(Omit if standard setting is used)
Setting Range:	100 to 5000 PSI
	All settings at crack pressure, approximately .95 LPM (.25 GPM)

Code	Seals
Omit	"D"-Ring
N	Nitrile
V	Fluorocarbon

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)

Code	Cracking Pressure
Omit	0.3 Bar (5 PSI)
P20	1.4 Bar (20 PSI)
P50	3.5 Bar (50 PSI)
P65	4.5 Bar (65 PSI)
P100	6.9 Bar (100 PSI)

Code	Port Size	Part No.
8T	SAE-8	830343

- 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

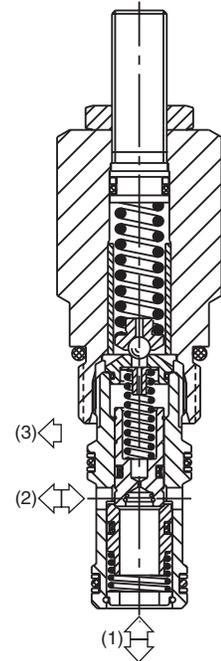
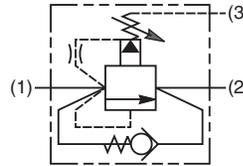
- CV** Check Valves
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- TD** Technical Data

General Description

Pilot Operated Sequence Valve with Reverse Flow Check. For additional information see Technical Tips on pages PC1-PC6.

Features

- High flow capacity
- For use on clamp and drill circuits where pressure is to be maintained regardless of drop in system pressure
- Integral 250 micron pilot flow filter
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated



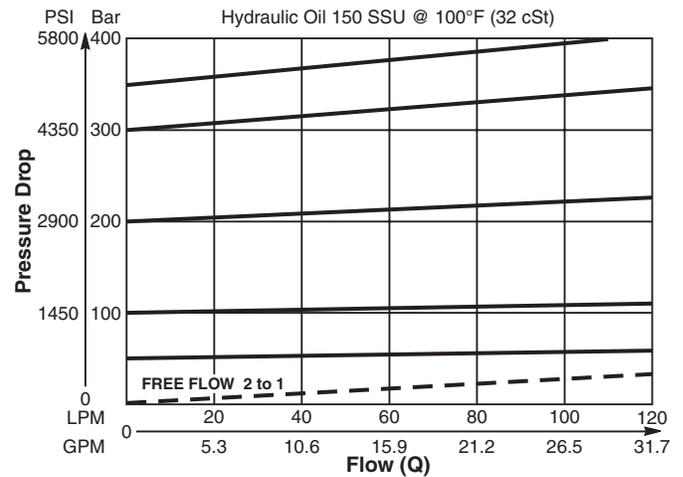
Specifications

Rated Flow	70 LPM (18.5 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	H - 10-210 Bar (145-3000 PSI) P - 10-420 Bar (145-6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	50 drops/min. @ 100 Bar (1450 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	0.25 kg (0.55 lbs.)
Cavity	C10-3S (See BC Section for more details)
Form Tool	Rougher NFT10S-3R Finisher NFT10S-3F

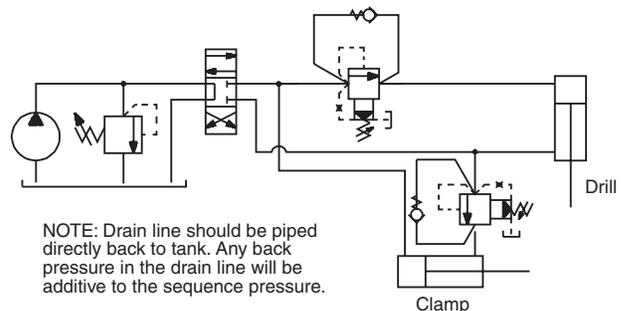
Performance Curve

(Pressure rise through cartridge only)

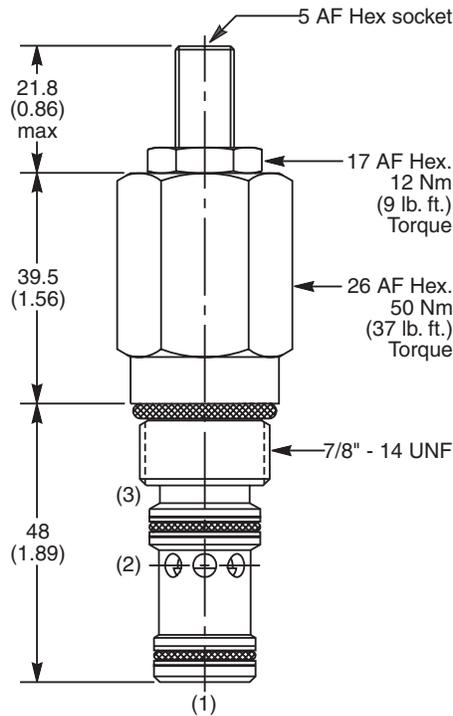
Flow vs. Inlet Pressure 1 to 2



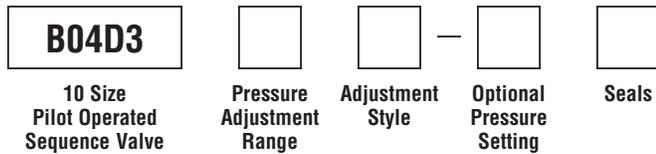
Application



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
H	10 - 210 Bar (145 - 3000 PSI)
P	10 - 420 Bar (145 - 6000 PSI)

Optional Pressure Setting	
Specify setting if required (Bar)	
B04D3H Standard Setting: 100 Bar (1450 PSI) @ 15 LPM (4.0 GPM)	
B04D3P Standard Setting: 200 Bar (2900 PSI) @ 15 LPM (4.0 GPM)	

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30504N-1)
V	Fluorocarbon / (SK30504V-1)

Order Bodies Separately



Code	Porting
710	5/8" SAE (main) 3/8" SAE (aux)
711	3/4" BSP (main) 1/4" BSP (aux)

Code	Body Material
A	Aluminum
S	Steel

- 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

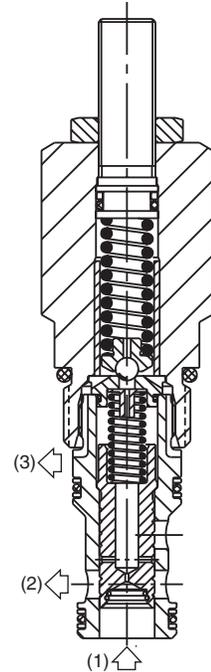
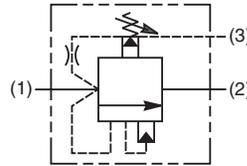
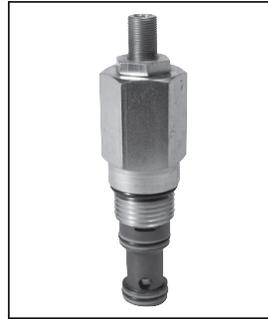
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- TD** Technical Data

General Description

Kick-Down, Spool Type, Pilot Operated Sequence Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- High flow capacity
- Integral 250 micron pilot flow filter
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated



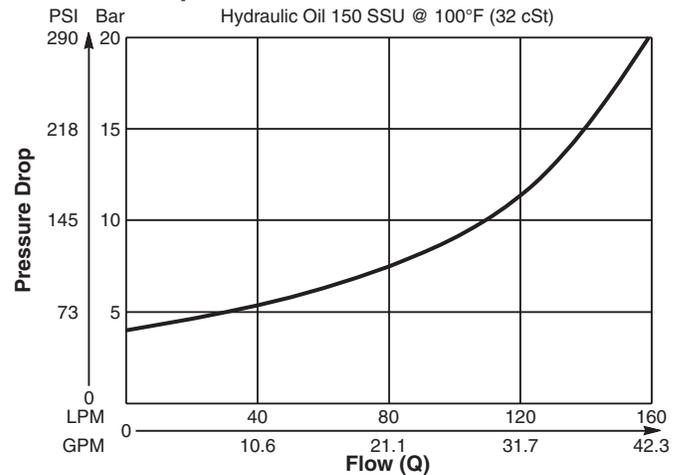
Specifications

Rated Flow	160 LPM (42 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	H - 10-210 Bar (145-3000 PSI) P - 10-420 Bar (145-6000 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Sensitivity: Pressure/Turn	H - 30 Bar (435 PSI) P - 55 Bar (800 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	0.27 kg (0.55 lbs.)
Cavity	C10-3S (See BC Section for more details)
Form Tool	Rougher NFT10S-3R Finisher NFT10S-3F

Performance Curve

(Pressure rise through cartridge only)

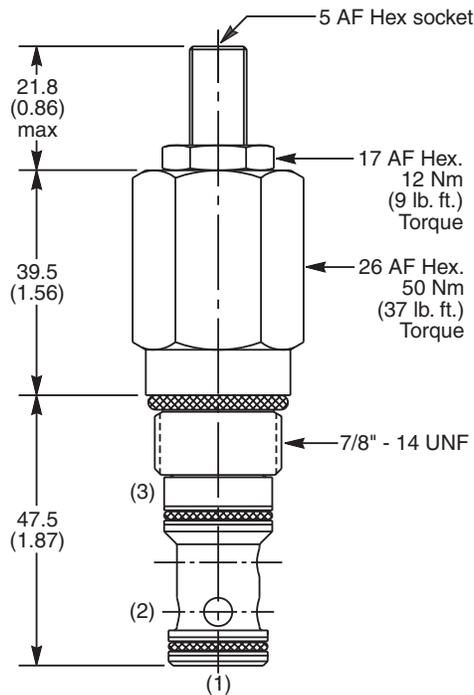
Pressure Drop vs. Flow 1 to 2



Application Note

Valve unloads completely when setting is reached and resets when fluid supply is removed.

Dimensions Millimeters (Inches)



Ordering Information

B04C3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Size Kick-Down Pilot Operated Sequence Valve	Pressure Adjustment Range	Adjustment Style	Optional Pressure Setting	Seals	

Code	Pressure Adjustment Range
H	10 - 210 Bar (145 - 3000 PSI)
P	10 - 420 Bar (145 - 6000 PSI)

Optional Pressure Setting	
Specify setting if required (Bar)	
B04C3H Standard Setting: 100 Bar (1450 PSI)	
B04C3P Standard Setting: 200 Bar (2900 PSI)	

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30504N-1)
V	Fluorocarbon / (SK30504V-1)

Order Bodies Separately

LB10	<input type="checkbox"/>	<input type="checkbox"/>
Line Body	Porting	Body Material

Code	Porting
710	5/8" SAE (main) 3/8" SAE (aux)
711	3/4" BSP (main) 1/4" BSP (aux)

Code	Body Material
A	Aluminum
S	Steel

- 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

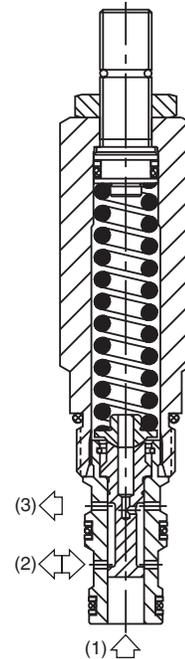
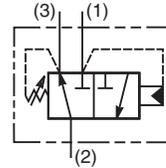
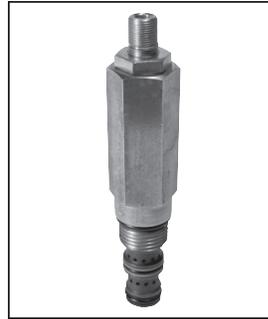
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- TD** Technical Data

General Description

Direct Acting Sequence Valve with Internal Pilot and Drain. For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened working parts for maximum durability
- All external parts zinc plated
- Adjustable and tamperproof versions available



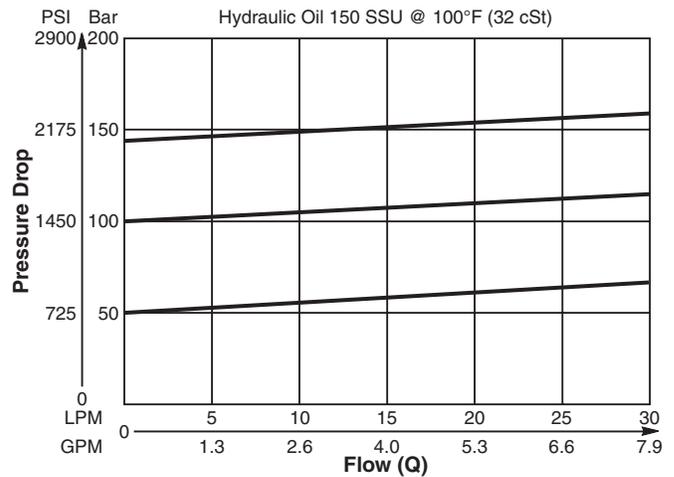
Specifications

Rated Flow	30 LPM (8 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	2-148 Bar (30-2150 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	25 ml/min. @ 35 Bar (580 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	0.21 kg (0.46 lbs.)
Cavity	C08-3 (See BC Section for more details)
Form Tool	Rougher NFT08-3R Finisher NFT08-3F

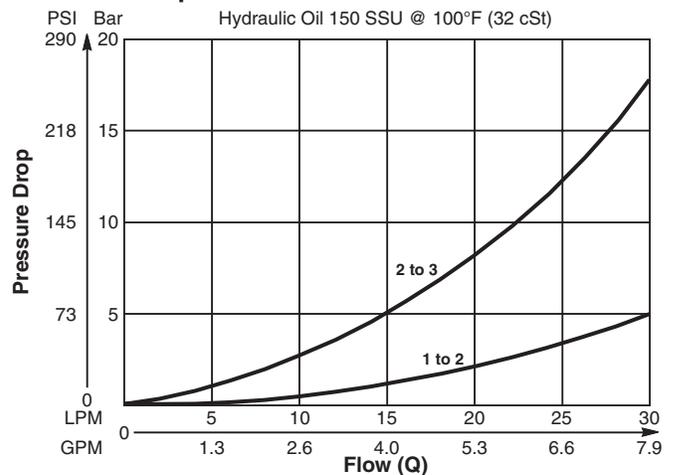
Performance Curves

(Pressure rise through cartridge only)

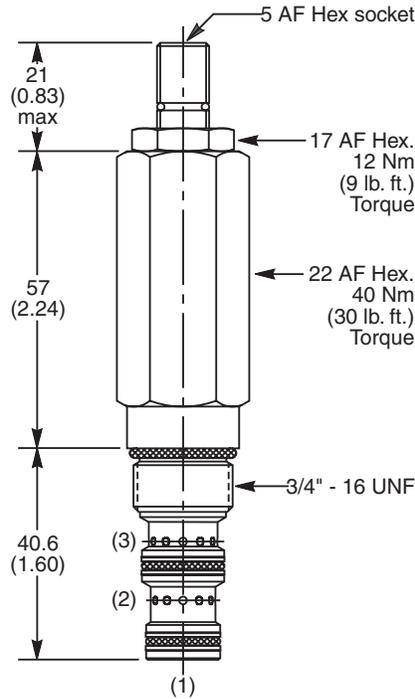
Flow vs. Inlet Pressure 1 to 2



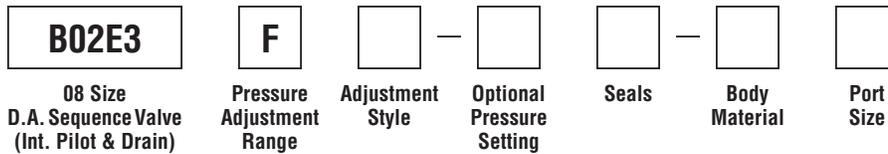
Pressure Drop vs. Flow



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
F	2 - 148 Bar (30 - 2150 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30501N-1)
V	Fluorocarbon / (SK30501V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

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

Optional Pressure Setting	
Specify setting if required (Bar)	
B02E3F Standard Setting: 75 Bar (1100 PSI) @ 5 LPM (1.3 GPM)	

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

- 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
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Proportional Valves
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Coils & Electronics
- BC**
Bodies & Cavities
- TD**
Technical Data

Technical Information

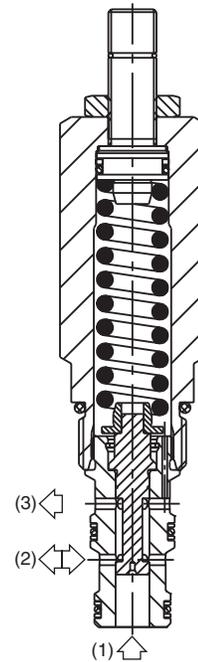
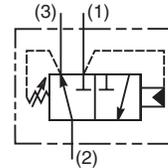
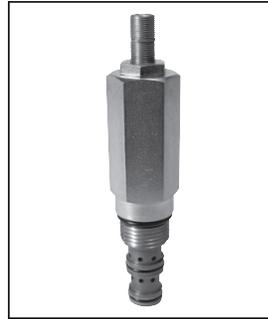
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- BC** Bodies & Cavities
- TD** Technical Data

General Description

Direct Acting Sequence Valve with Internal Pilot and Drain. For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened working parts for maximum durability
- All external parts zinc plated
- Adjustable and tamperproof versions available



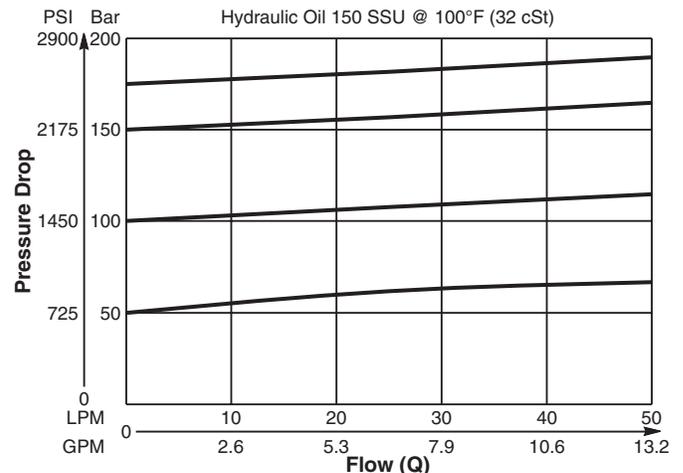
Specifications

Rated Flow	50 LPM (13 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	E - 2-80 Bar (30-1160 PSI) G - 2-166 Bar (30-2400 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	25 ml/min. @ 60 Bar (870 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	0.27 kg (0.60 lbs.)
Cavity	C10-3 (See BC Section for more details)
Form Tool	Rougher NFT10-3R Finisher NFT10-3F

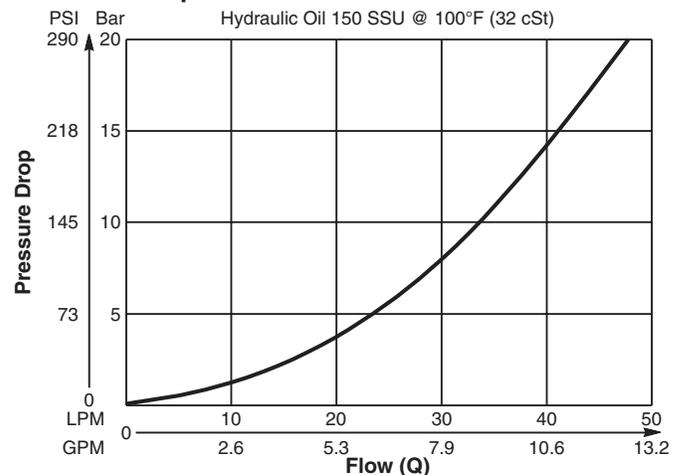
Performance Curves

(Pressure rise through cartridge only)

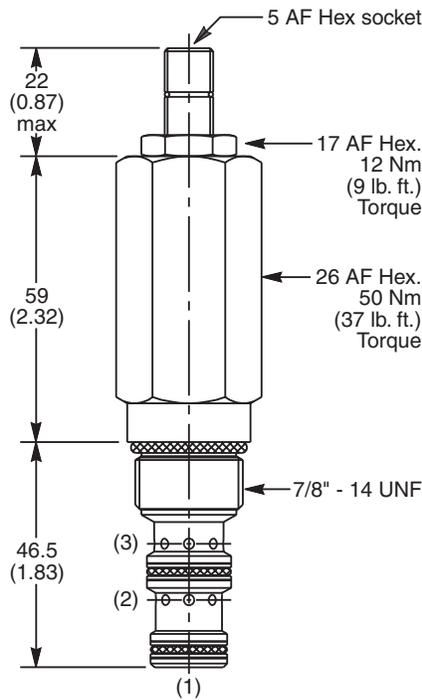
Flow vs. Inlet Pressure 1 to 2



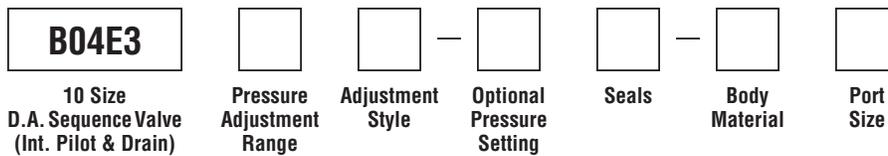
Pressure Drop vs. Flow 1 to 2 and 2 to 3



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
E	2 - 80 Bar (30 - 1160 PSI)
G	2 - 166 Bar (30 - 2400 PSI)
J	40 - 240 Bar (580 - 3500 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30505N-1)
V	Fluorocarbon / (SK30505V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

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

Optional Pressure Setting	
Specify setting if required (Bar)	
B04E3E	Standard Setting: 40 Bar (580 PSI) @ 5 LPM (1.3 GPM)
B04E3G	Standard Setting: 80 Bar (1160 PSI) @ 5 LPM (1.3 GPM)
B04E3J	Standard Setting: 120 Bar (1750 PSI) @ 5 LPM (1.3 GPM)

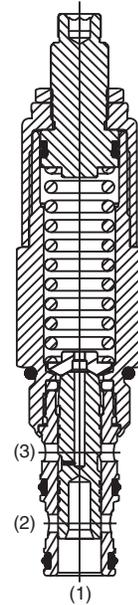
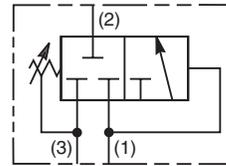
* Add "A" for aluminum, omit for steel.
 † Steel body only.

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
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- TD** Technical Data

General Description

Direct Acting Sequence Valve (Internally Piloted, Externally Drained). In the steady state condition, all three ports are blocked with the spring chamber drained to port 3. When the pressure at port 1 exceeds the valve setting, the spool moves allowing flow from the nose of the cartridge (port 1) to the actuator port (port 2). By externally draining the spring chamber directly to tank (port 3), the valve is insensitive to back pressure at the sequence port.



Features

- Hardened, precision ground parts for durability
- Internal mechanical stop limits spool travel eliminating spring solidification
- “D”-Ring eliminates backup rings
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.
- Fast response

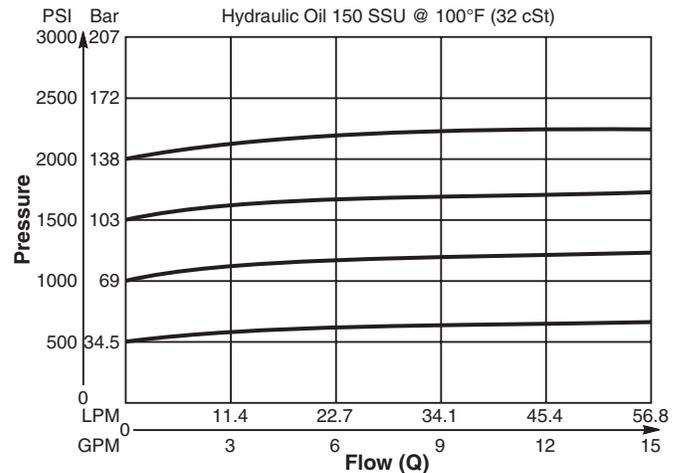
Specifications

Flow Rate	56 LPM (15 GPM)
Maximum Inlet Pressure	250 Bar (3600 PSI)
Maximum Pressure Setting	138 Bar (2000 PSI)
Leakage at 150 SSU (32 cSt)	82 cc/min. (5 cu. in./min.) at 210 Bar (3000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C (“D”-Ring) (-50°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	.45 kg (1.0 lbs.)
Cavity	C10-3
Form Tool	Rougher NFT10-3R Finisher NFT10-3F

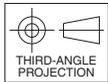
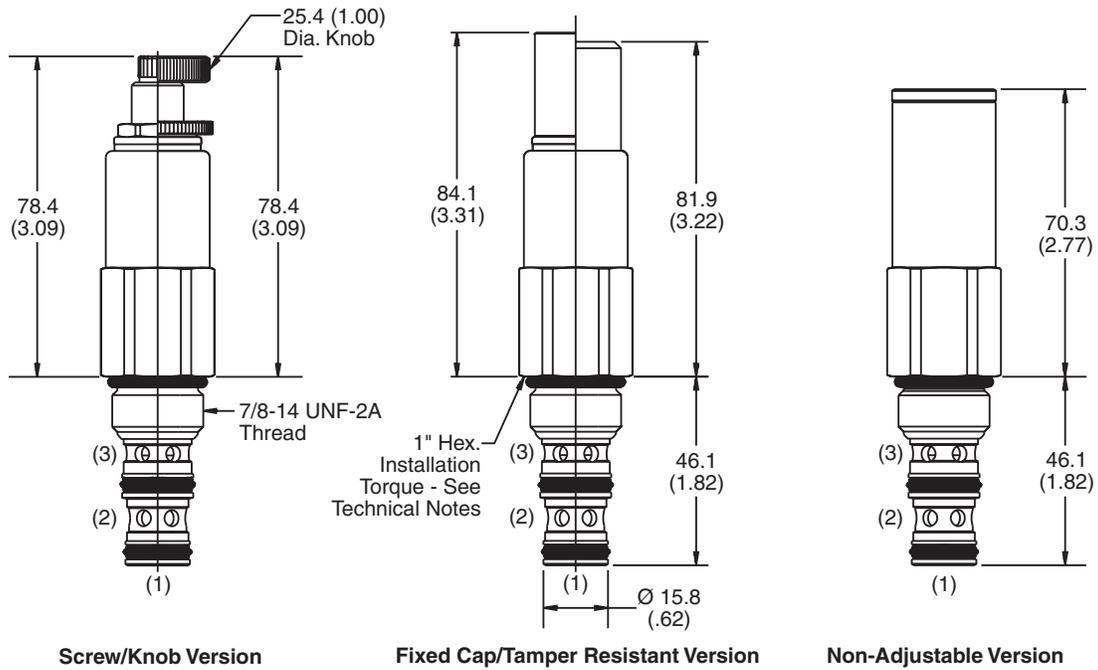
Performance Curve

Flow vs. Inlet Pressure

(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)

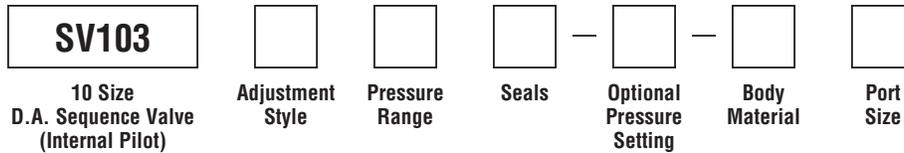


Screw/Knob Version

Fixed Cap/Tamper Resistant Version

Non-Adjustable Version

Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, covered adjustment
K	Knob Adjust (717784-10)
N	Non-Adjustable
S	Screw Adjust
T	Tamper Resistant Cap (717943)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-3)
N	Nitrile / (SK10-3N)
V	Fluorocarbon / (SK10-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
02	5.1 - 14 Bar (75 - 200 PSI) Standard Setting: 6.9 Bar (100 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
06	6.9 - 42 Bar (100 - 600 PSI) Standard Setting: 21 Bar (300 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
12	14 - 83 Bar (200 - 1200 PSI) Standard Setting: 42 Bar (600 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
20	28 - 138 Bar (400 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)

Optional Pressure Setting
Pressure ÷ 10 i.e. 150 = 1500 PSI (Omit if standard setting is used) Setting Range: 100 to 2000 PSI All settings at crack pressure, approximately .95 LPM (.25 GPM)

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

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

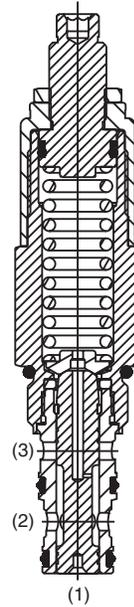
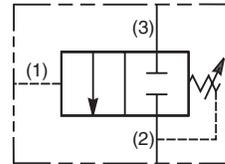
- CV**
- Check Valves
- SH**
- Shuttle Valves
- LM**
- Load/Motor Controls
- FC**
- Flow Controls
- PC**
- Pressure Controls
- LE**
- Logic Elements
- DC**
- Directional Controls
- MV**
- Manual Valves
- SV**
- Solenoid Valves
- PV**
- Proportional Valves
- CE**
- Coils & Electronics
- BC**
- Bodies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

Direct Acting, Normally Closed Sequence Valve (Externally Piloted). With no pressure at the pilot port (port 1), both port 3 and port 2 are blocked. When the pilot pressure at port 1 exceeds the valve setting, the spool moves opening a path and allowing flow from port 3 to port 2. This valve internally drains the spring chamber to tank via the sequencing port, thus any backpressure on port 2 would be additive to the spring setting.



Features

- Hardened, precision ground parts for durability
- Internal mechanical stop limits spool travel eliminating spring solidification
- “D”-Ring eliminates backup rings
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.
- Fast response

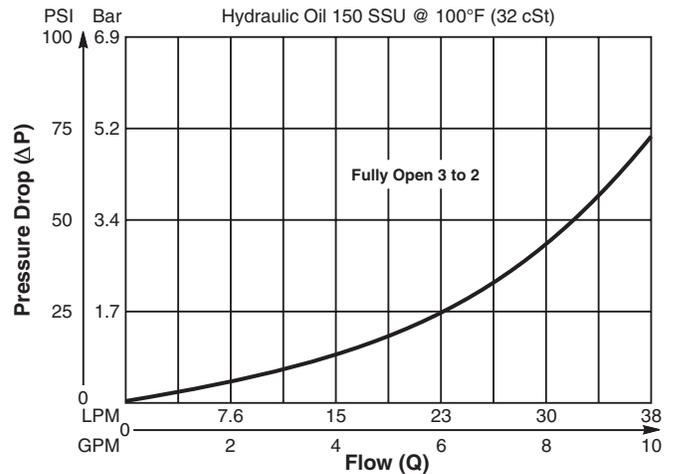
Specifications

Rated Flow	38 LPM (10 GPM)
Maximum Inlet Pressure	250 Bar (3600 PSI)
Maximum Pressure Setting	138 Bar (2000 PSI)
Leakage at 150 SSU (32 cSt)	82 cc/min. (5 cu. in./min.) at 210 Bar (3000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C (“D”-Ring) (-50°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	.45 kg (1.0 lbs.)
Cavity	C10-3
Form Tool	Rougher NFT10-3R Finisher NFT10-3F

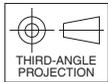
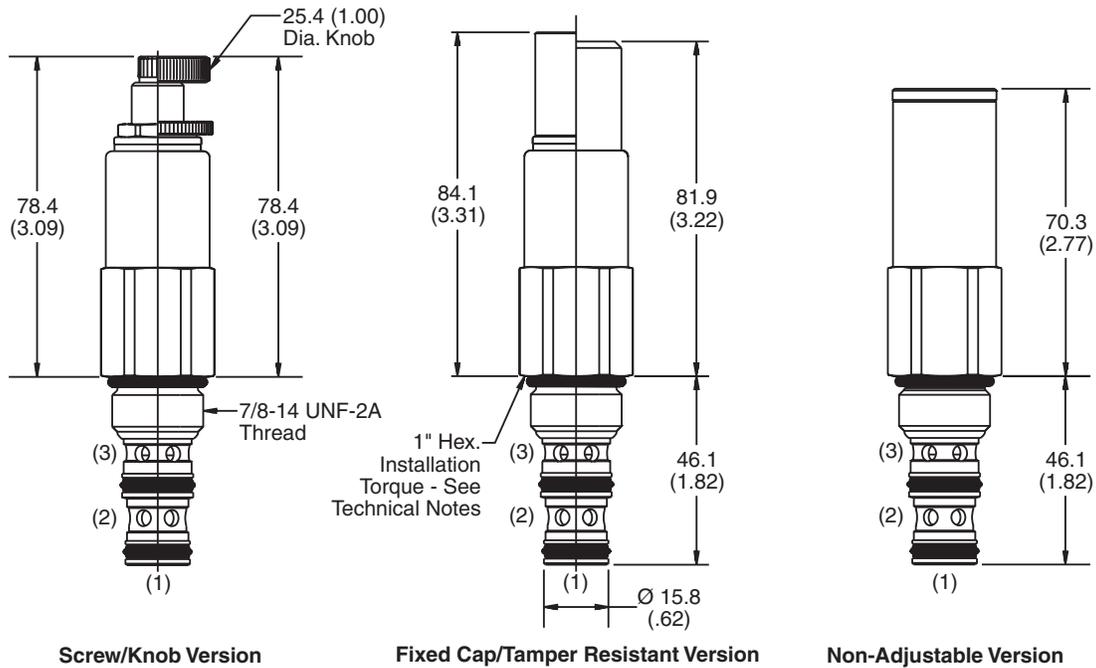
Performance Curve

Flow vs. Inlet Pressure

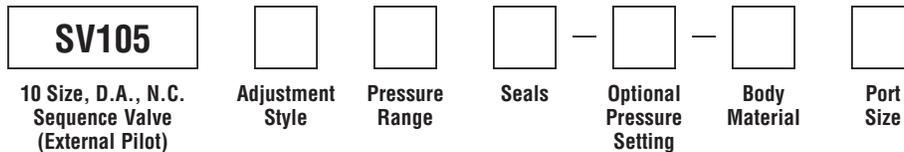
(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, covered adjustment
K	Knob Adjust (717784-10)
N	Non-Adjustable
S	Screw Adjust
T	Tamper Resistant Cap (717943)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-3)
N	Nitrile / (SK10-3N)
V	Fluorocarbon / (SK10-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
02	5.1 - 14 Bar (75 - 200 PSI) Standard Setting: 6.9 Bar (100 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
06	6.9 - 42 Bar (100 - 600 PSI) Standard Setting: 21 Bar (300 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
12	14 - 83 Bar (200 - 1200 PSI) Standard Setting: 42 Bar (600 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
20	28 - 138 Bar (400 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)

Optional Pressure Setting
Pressure ÷ 10 i.e. 150 = 1500 PSI (Omit if standard setting is used) Setting Range: 100 to 2000 PSI All settings at crack pressure, approximately .95 LPM (.25 GPM)

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

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

Technical Information

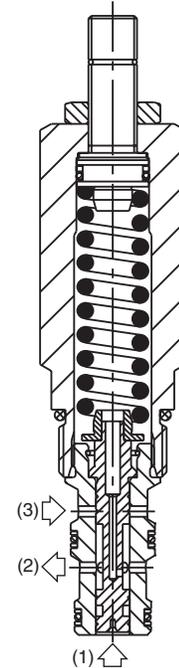
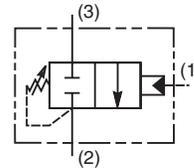
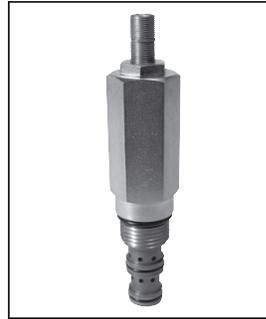
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Direct Acting, Normally Closed Sequence Valve with External Pilot and Internal Drain. For additional information see Technical Tips on pages PC1-PC6.

Features

- Sealed pilot option available
- Hardened working parts for maximum durability
- All external parts zinc plated
- Adjustable and tamperproof versions available



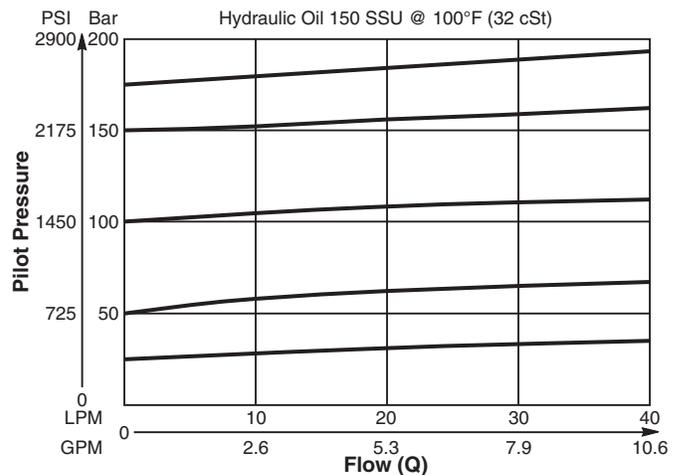
Specifications

Rated Flow	34 LPM (9 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	E - 2-80 Bar (30-1160 PSI) G - 2-166 Bar (30-2400 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	25 ml/min. @ 100 Bar (1450 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	0.30 kg (0.66 lbs.)
Cavity	C10-3 (See BC Section for more details)
Form Tool	Rougher NFT10-3R Finisher NFT10-3F

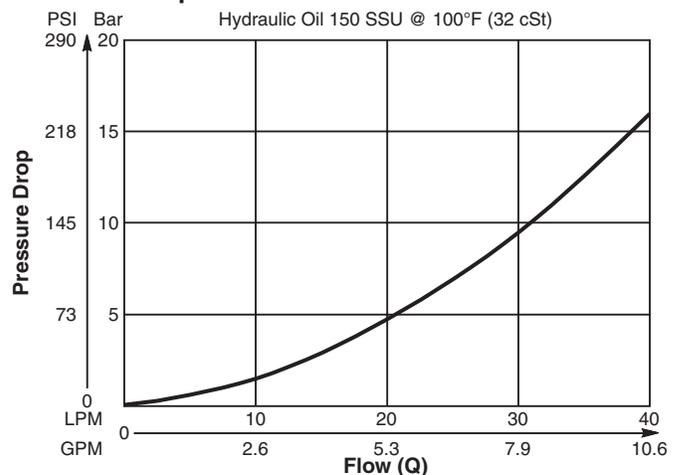
Performance Curves

(Pressure rise through cartridge only)

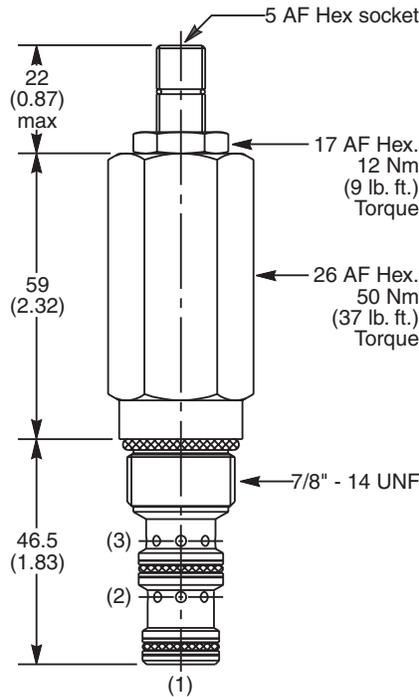
Flow vs. Inlet Pressure 3 to 2



Pressure Drop vs. Flow 3 to 2



Dimensions Millimeters (Inches)



Ordering Information

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10 Size D.A. Sequence Valve (External Pilot & Internal Drain)	Pilot Pressure Adjustment Range	Adjustment Style	Pilot Switching Pressure	Seals	Sealed Pilot	Body Material	Port Size

Code	Pilot Pressure Adjustment Range
E	2 - 80 Bar (30 - 1160 PSI)
G	2 - 166 Bar (30 - 2400 PSI)
J	40 - 240 Bar (580 - 3500 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30505N-1)
V	Fluorocarbon / (SK30505V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Sealed Pilot
Omit	Omit if not required
S	Sealed Pilot

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

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

Code	Pilot Switching Pressure
Omit	Omit for no setting (Std.)
	B04F3E Standard Setting: 40 Bar (580 PSI) @ 5 LPM (1.3 GPM)
	B04F3G Standard Setting: 80 Bar (1160 PSI) @ 5 LPM (1.3 GPM)
	B04F3J Standard Setting: 120 Bar (1750 PSI) @ 5 LPM (1.3 GPM)
	Specify setting if required

- 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

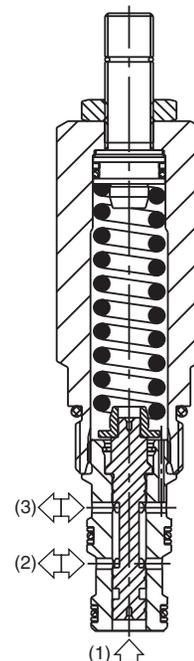
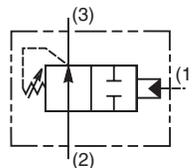
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Direct Acting, Normally Open Sequence Valve with External Pilot and Internal Drain. For additional information see Technical Tips on pages PC1-PC6.

Features

- Sealed pilot option available
- Hardened working parts for maximum durability
- All external parts zinc plated
- Adjustable and tamperproof versions available



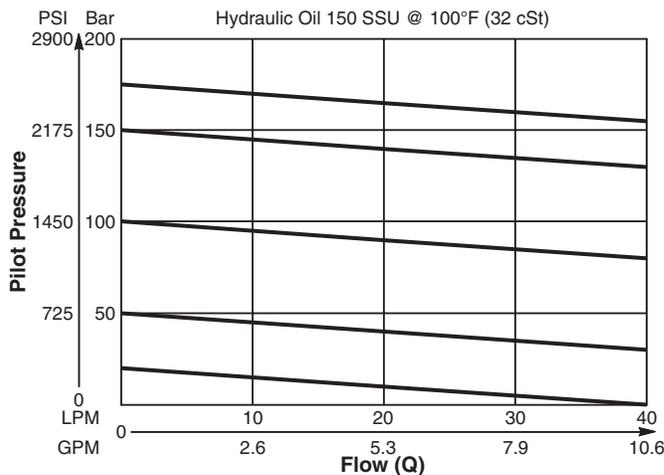
Specifications

Rated Flow	40 LPM (10.6 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	E - 2-80 Bar (30-1160 PSI) G - 2-166 Bar (30-2400 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	25 ml/min. @ 100 Bar (1450 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	0.30 kg (0.66 lbs.)
Cavity	C10-3 (See BC Section for more details)
Form Tool	Rougher NFT10-3R Finisher NFT10-3F

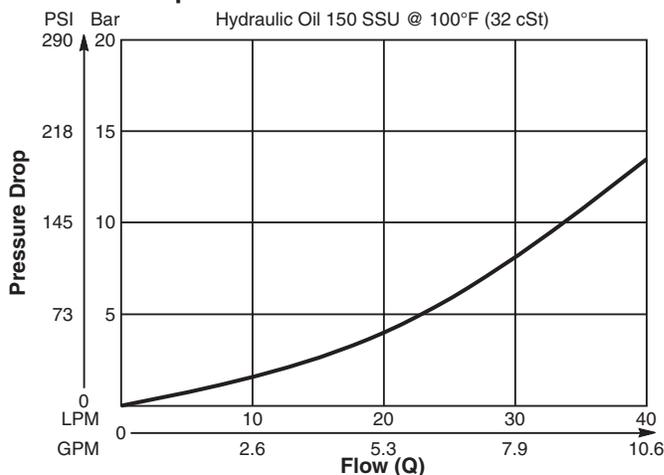
Performance Curves

(Pressure rise through cartridge only)

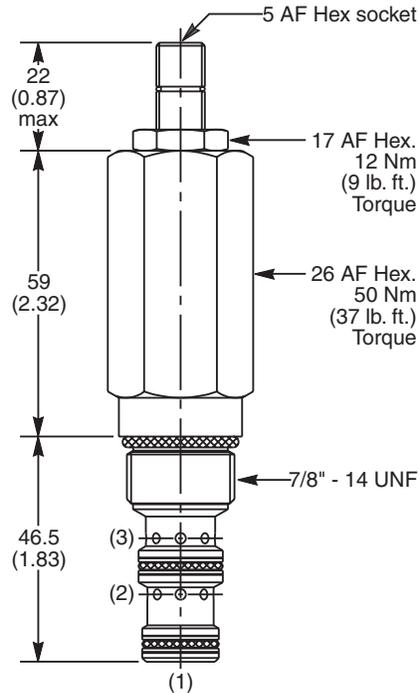
Flow vs. Inlet Pressure 2 to 3



Pressure Drop vs. Flow 2 to 3



Dimensions Millimeters (Inches)



Ordering Information

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10 Size D.A. Sequence Valve (External Pilot & Internal Drain)	Pilot Pressure Adjustment Range	Adjustment Style	Pilot Switching Pressure	Seals	Sealed Pilot	Body Material	Port Size

Code	Pilot Pressure Adjustment Range
E	2 - 80 Bar (30 - 1160 PSI)
G	2 - 166 Bar (30 - 2400 PSI)
J	40 - 240 Bar (580 - 3500 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30505N-1)
V	Fluorocarbon / (SK30505V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Sealed Pilot
Omit	Omit if not required
S	Sealed Pilot

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

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

Code	Pilot Switching Pressure
Omit	Omit for no setting (Std.)
	B04G3E Standard Setting: 40 Bar (580 PSI) @ 5 LPM (1.3 GPM)
	B04G3G Standard Setting: 80 Bar (1160 PSI) @ 5 LPM (1.3 GPM)
	B04G3J Standard Setting: 120 Bar (1750 PSI) @ 5 LPM (1.3 GPM)
	Specify setting if required

- 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
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- BC** Bodies & Cavities
- TD** Technical Data

Technical Information

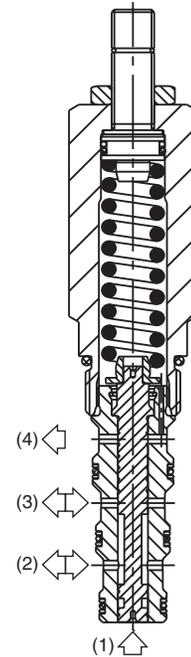
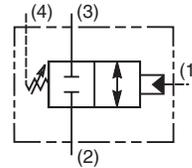
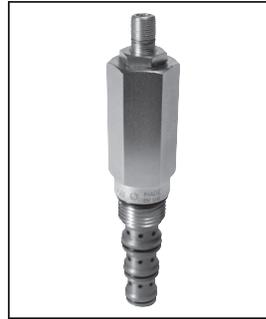
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
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- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies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

General Description

Direct Acting, Normally Closed Sequence Valve with External Pilot and Drain. For additional information see Technical Tips on pages PC1-PC6.

Features

- Sealed pilot option available
- Hardened working parts for maximum durability
- All external parts zinc plated
- Adjustable and tamperproof versions available



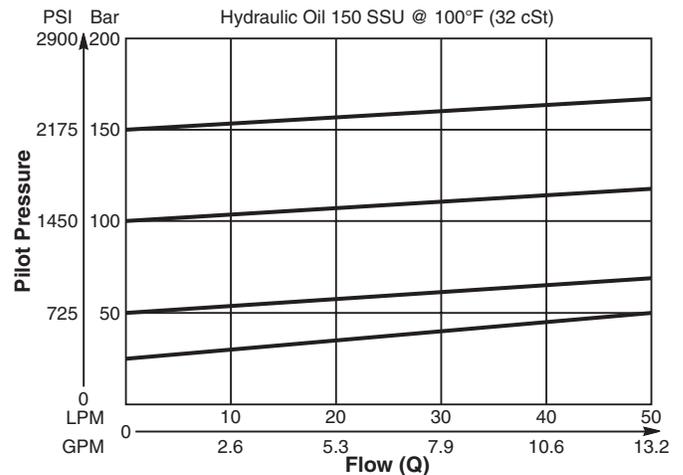
Specifications

Rated Flow	47 LPM (12 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	E - 2-80 Bar (30-1160 PSI) G - 2-166 Bar (30-2400 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	25 ml/min. @ 100 Bar (1450 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	0.33 kg (0.73 lbs.)
Cavity	C10-4 (See BC Section for more details)
Form Tool	Rougher NFT10-4R Finisher NFT10-4F

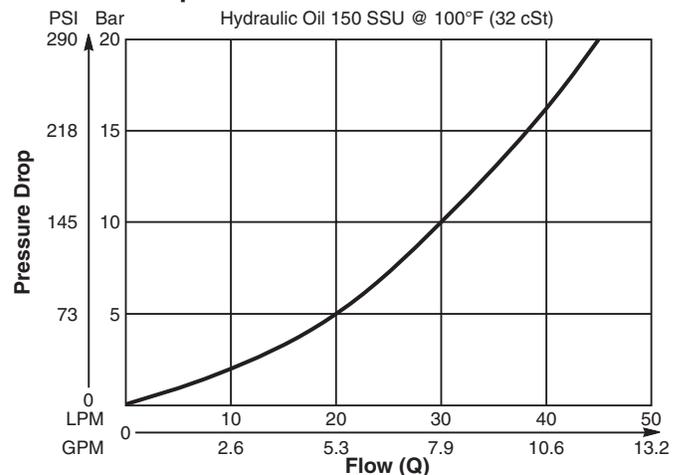
Performance Curves

(Pressure rise through cartridge only)

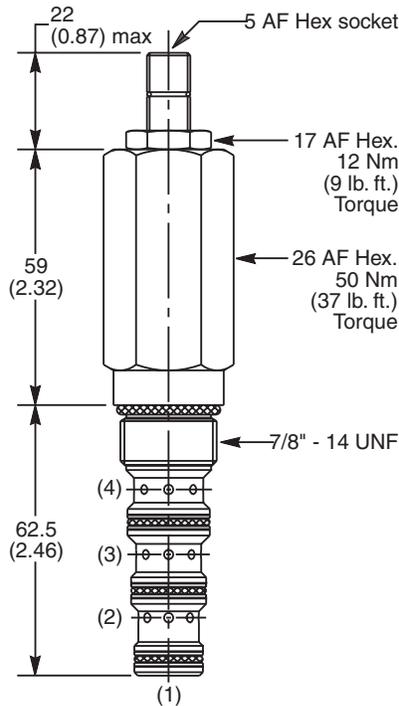
Flow vs. Inlet Pressure 2 to 3



Pressure Drop vs. Flow 3 to 2



Dimensions Millimeters (Inches)



Ordering Information

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10 Size D.A. Sequence Valve (External Pilot and Drain)	Pilot Pressure Adjustment Range	Adjustment Style	Pilot Switching Pressure	Seals	Sealed Pilot	Body Material	Port Size

Code	Pilot Pressure Adjustment Range
E	2 - 80 Bar (30 - 1160 PSI)
G	2 - 166 Bar (30 - 2400 PSI)
J	40 - 240 Bar (580 - 3500 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30506N-1)
V	Fluorocarbon / (SK30506V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Sealed Pilot
Omit	Omit if not required
S	Sealed Pilot

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

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

Code	Pilot Switching Pressure
Omit	Omit for Standard Setting
	B04H4E Standard Setting: 40 Bar (580 PSI) @ 5 LPM (1.3 GPM)
	B04H4G Standard Setting: 80 Bar (1160 PSI) @ 5 LPM (1.3 GPM)
	B04H4J Standard Setting: 120 Bar (1750 PSI) @ 5 LPM (1.3 GPM)
	Specify setting if required

- 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

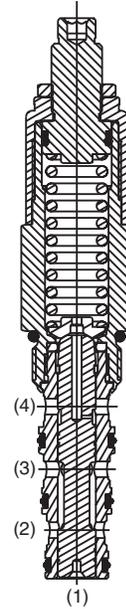
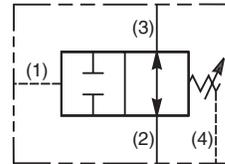
Technical Information

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General Description

Direct Acting, Normally Open Sequence Valve (Externally Piloted, Externally Drained). With no pressure at the pilot port (port 1), bi-directional flow is allowed between port 3 and port 2.

When the pilot pressure at port 1 exceeds the valve setting the spool moves blocking both port 3 and port 2. By externally draining the spring chamber to tank (port 4), the valve is insensitive to back pressure at the sequencing ports.



Features

- Hardened, precision ground parts for durability
- Internal mechanical stop limits spool travel eliminating spring solidification
- “D”-Ring eliminates backup rings
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.
- Fast response

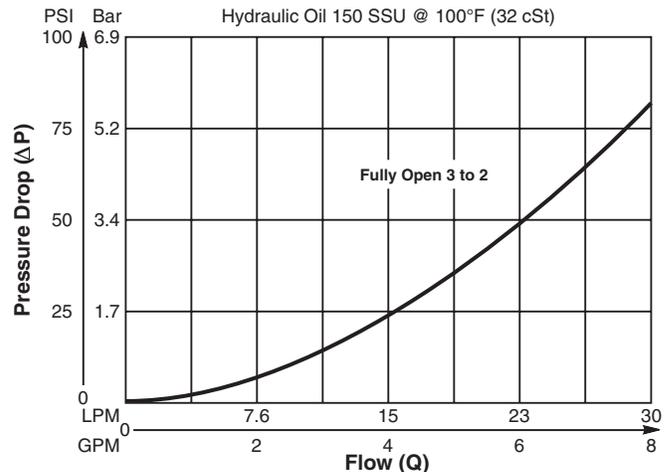
Specifications

Rated Flow	30 LPM (8 GPM)
Maximum Inlet Pressure	250 Bar (3600 PSI)
Maximum Pressure Setting	138 Bar (2000 PSI)
Leakage at 150 SSU (32 cSt)	82 cc/min. (5 cu. in./min.) at 210 Bar (3000 PSI)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C (“D”-Ring) (-50°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	.45 kg (1.0 lbs.)
Cavity	C10-4
Form Tool	Rougher NFT10-4R Finisher NFT10-4F

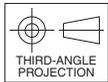
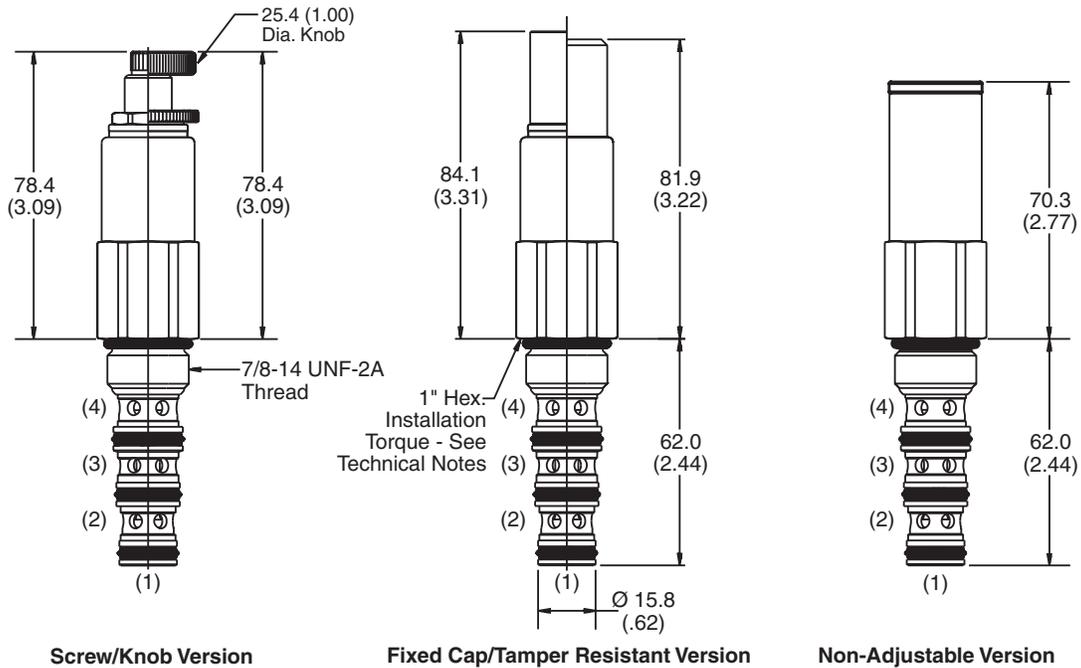
Performance Curve

Flow vs. Inlet Pressure

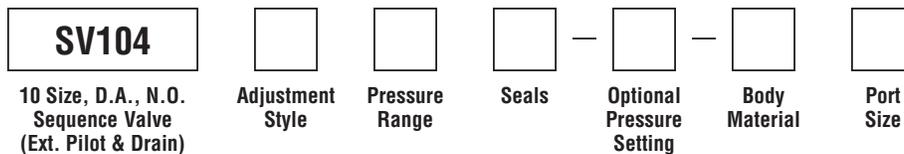
(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, covered adjustment
K	Knob Adjust (717784-10)
N	Non-Adjustable
S	Screw Adjust
T	Tamper Resistant Cap (717943)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-4)
N	Nitrile / (SK10-4N)
V	Fluorocarbon / (SK10-4V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
02	5.1 - 14 Bar (75 - 200 PSI) Standard Setting: 6.9 Bar (100 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
06	6.9 - 42 Bar (100 - 600 PSI) Standard Setting: 21 Bar (300 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
12	14 - 83 Bar (200 - 1200 PSI) Standard Setting: 42 Bar (600 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
20	28 - 138 Bar (400 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)

Optional Pressure Setting
Pressure ÷ 10 i.e. 150 = 1500 PSI (Omit if standard setting is used) Setting Range: 100 to 2000 PSI All settings at crack pressure, approximately .95 LPM (.25 GPM)

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

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



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

Technical Information

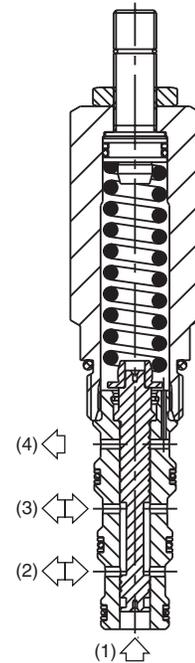
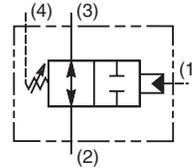
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- TD** Technical Data

General Description

Direct Acting, Normally Open Sequence Valve with External Pilot and Drain. For additional information see Technical Tips on pages PC1-PC6.

Features

- Sealed pilot option available
- Hardened working parts for maximum durability
- All external parts zinc plated
- Adjustable and tamperproof versions available



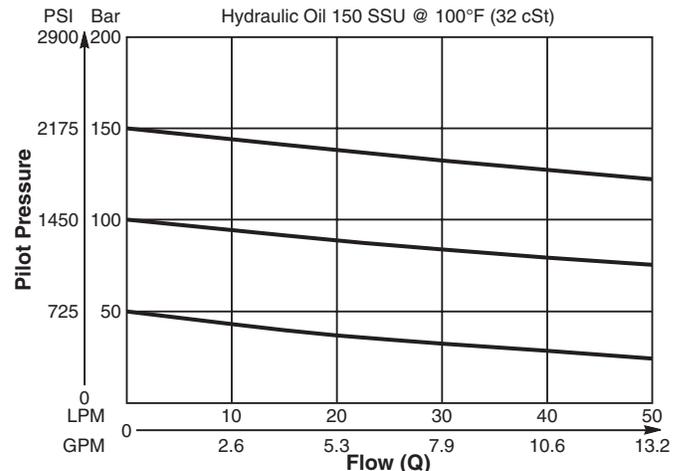
Specifications

Rated Flow	47 LPM (12 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	E - 2-80 Bar (30-1160 PSI) G - 2-166 Bar (30-2400 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	25 ml/min. @ 100 Bar (1450 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	0.33 kg (0.73 lbs.)
Cavity	C10-4 (See BC Section for more details)
Form Tool	Rougher NFT10-4R Finisher NFT10-4F

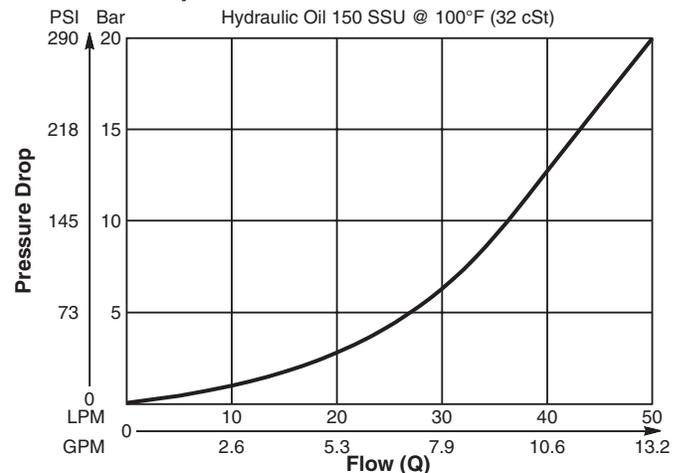
Performance Curves

(Pressure rise through cartridge only)

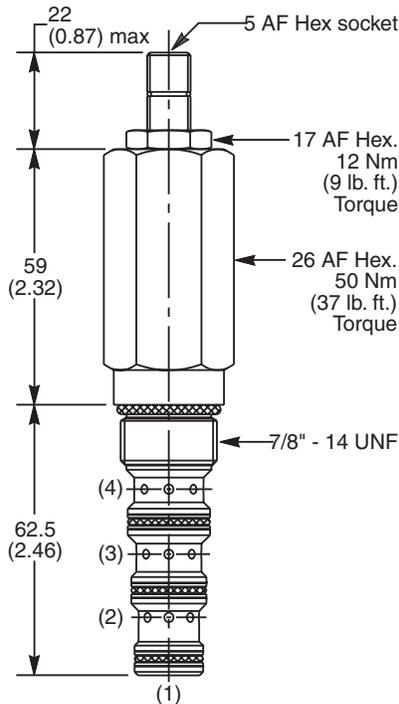
Flow vs. Inlet Pressure 2 to 3 & 3 to 2



Pressure Drop vs. Flow 2 to 3 & 3 to 2



Dimensions Millimeters (Inches)



Ordering Information

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10 Size D.A. Sequence Valve (External Pilot and Drain)	Pilot Pressure Adjustment Range	Adjustment Style	Pilot Switching Pressure	Seals	Sealed Pilot	Body Material	Port Size

Code	Pilot Pressure Adjustment Range
E	2 - 80 Bar (30 - 1160 PSI)
G	2 - 166 Bar (30 - 2400 PSI)
J	40 - 240 Bar (580 - 3500 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30506N-1)
V	Fluorocarbon / (SK30506V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Sealed Pilot
Omit	Omit if not required
S	Sealed Pilot

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

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

Code	Pilot Switching Pressure
Omit	Omit for no setting (Std.)
	B04J4E Standard Setting: 40 Bar (580 PSI) @ 5 LPM (1.3 GPM)
	B04J4G Standard Setting: 80 Bar (1160 PSI) @ 5 LPM (1.3 GPM)
	B04J4J Standard Setting: 120 Bar (1750 PSI) @ 5 LPM (1.3 GPM)
	Specify setting if required

- 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

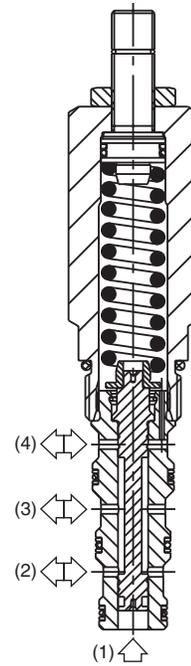
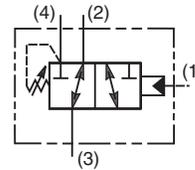
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General Description

Direct Acting, Normally Open, 3 Way Sequence Valve with Internal Pilot and External Drain. For additional information see Technical Tips on pages PC1-PC6.

Features

- Sealed pilot option available
- Hardened working parts for maximum durability
- All external parts zinc plated
- Adjustable and tamperproof versions available



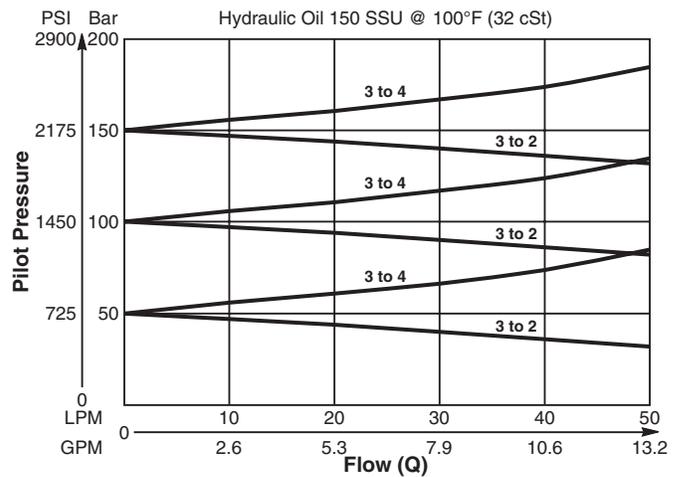
Specifications

Rated Flow	42 LPM (11 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	E - 2-80 Bar (30-1160 PSI) G - 2-166 Bar (30-2400 PSI)
Maximum Tank Pressure	420 Bar (6000 PSI)
Leakage at 150 SSU (32 cSt)	40 ml/min. @ 100 Bar (1450 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	0.33 kg (0.73 lbs.)
Cavity	C10-4 (See BC Section for more details)
Form Tool	Rougher NFT10-4R Finisher NFT10-4F

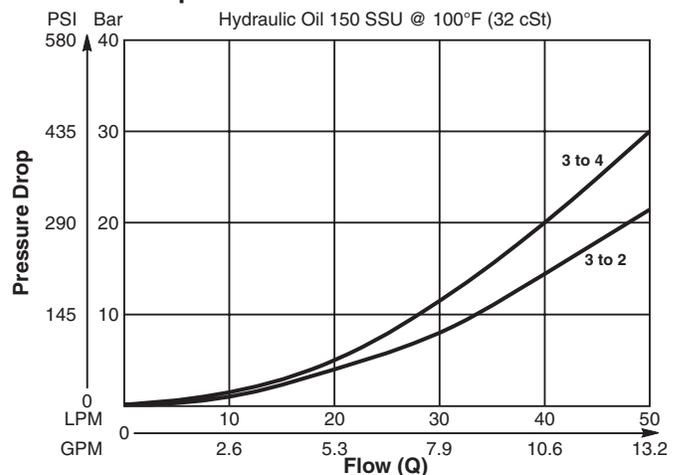
Performance Curves

(Pressure rise through cartridge only)

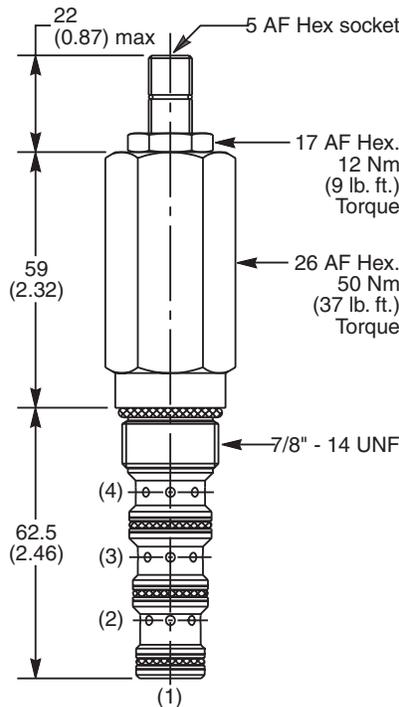
Flow vs. Inlet Pressure



Pressure Drop vs. Flow



Dimensions Millimeters (Inches)



Ordering Information

B04K4							
10 Size D.A. Sequence Valve (Internal Pilot & External Drain)	Pilot Pressure Adjustment Range	Adjustment Style	Pilot Switching Pressure	Seals	Sealed Pilot	Body Material	Port Size

Code	Pilot Pressure Adjustment Range
E	2 - 80 Bar (30 - 1160 PSI)
G	2 - 166 Bar (30 - 2400 PSI)
J	40 - 240 Bar (580 - 3500 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30506N-1)
V	Fluorocarbon / (SK30506V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

Code	Sealed Pilot
Omit	Omit if not required
S	Sealed Pilot

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

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

Code	Pilot Switching Pressure
Omit	Omit for Standard Setting
	B04K4E Standard Setting: 40 Bar (580 PSI) @ 5 LPM (1.3 GPM)
	B04K4G Standard Setting: 80 Bar (1160 PSI) @ 5 LPM (1.3 GPM)
	B04K4J Standard Setting: 120 Bar (1750 PSI) @ 5 LPM (1.3 GPM)
	Specify setting if required

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

Technical Information

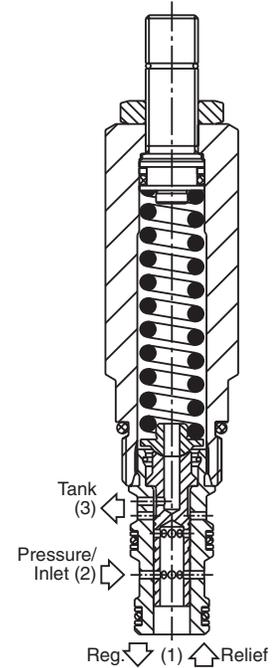
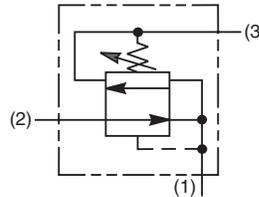
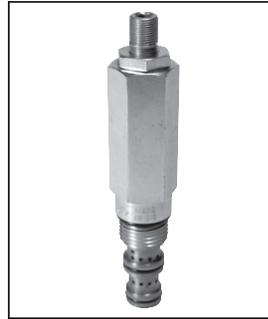
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General Description

Direct Acting Pressure Reducing/Relieving Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Maximum pressure setting up to 150 Bar, 2175 PSI
- Three pressure ranges available for more accurate pressure control
- Partial reverse flow capability
- Hardened working parts for maximum durability
- Adjustable and tamperproof versions available
- All external parts zinc plated



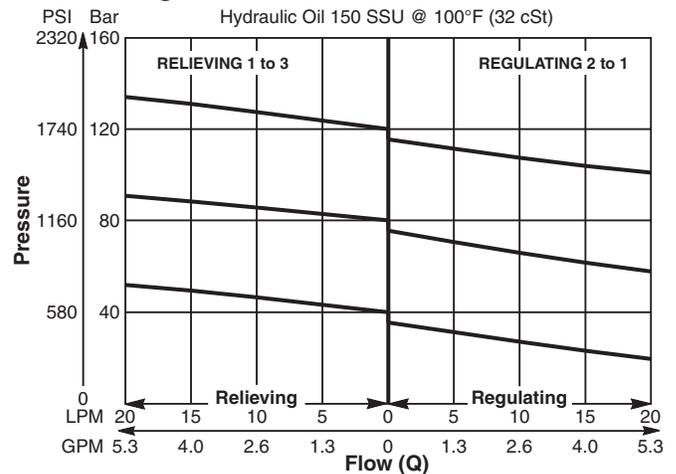
Specifications

Rated Flow	20 LPM (5 GPM)
Maximum Inlet Pressure	420 Bar (6000 PSI)
Maximum Pressure Setting	C - 5-40 Bar (73-580 PSI) E - 25-75 Bar (363-1088 PSI) G - 50-150 Bar (725-2175 PSI)
Maximum Tank 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	0.20 kg (0.44 lbs.)
Cavity	C08-3 (See BC Section for more details)
Form Tool	Rougher NFT08-3R Finisher NFT08-3F

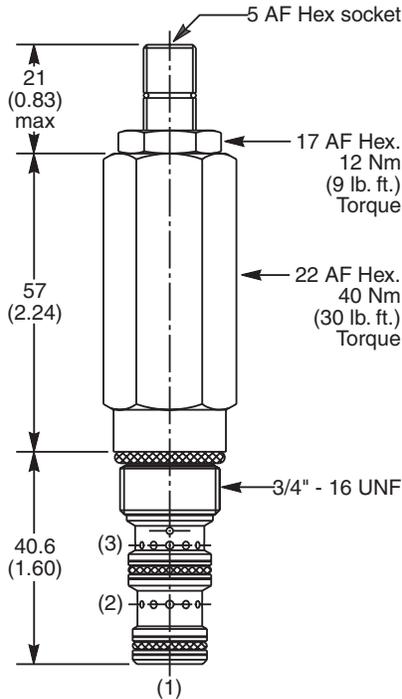
Performance Curve

(Pressure rise through cartridge only)

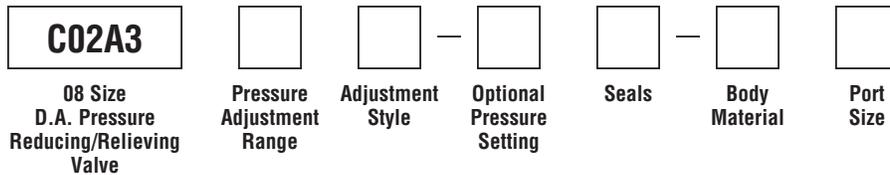
Flow vs. Regulated Pressure



Dimensions Millimeters (Inches)



Ordering Information



Code	Pressure Adjustment Range
C	5 - 40 Bar (73 - 580 PSI)
E	25 - 75 Bar (363 - 1088 PSI)
G	50 - 150 Bar (725 - 2175 PSI)

Code	Seals / Kit No.
N	Nitrile, Buna-N (Std.) / (SK30501N-1)
V	Fluorocarbon / (SK30501V-1)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Adjustment Style / Kit No.
Z	Screw Adjust (Std.)
W	Knob Adjust
T	Tamper Resistant Cap (TC1130)

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

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

Optional Pressure Setting	
Specify setting if required (Bar)	
C02A3C	Standard Setting: 20 Bar (290 PSI)
C02A3E	Standard Setting: 38 Bar (551 PSI)
C02A3G	Standard Setting: 75 Bar (1088 PSI)

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Technical Information

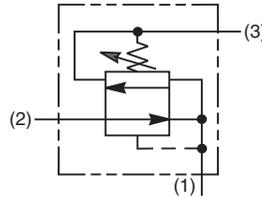
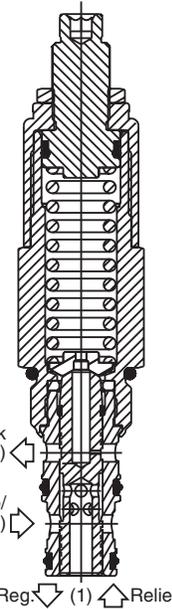
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General Description

Direct Acting Pressure Reducing/Relieving Valve. For additional information see Technical Tips on pages PC1-PC6.



Note: The differential between system pressure and pressure setting of the valve can greatly affect the stability of this valve. For best performance, the inlet pressure setting should not exceed 69 Bar (1000 PSI) above the reducing valve setting.



Features

- Hardened, precision ground parts for durability
- Internal mechanical stop limits spool travel eliminating spring solidification
- “D”-Ring eliminates backup rings
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.

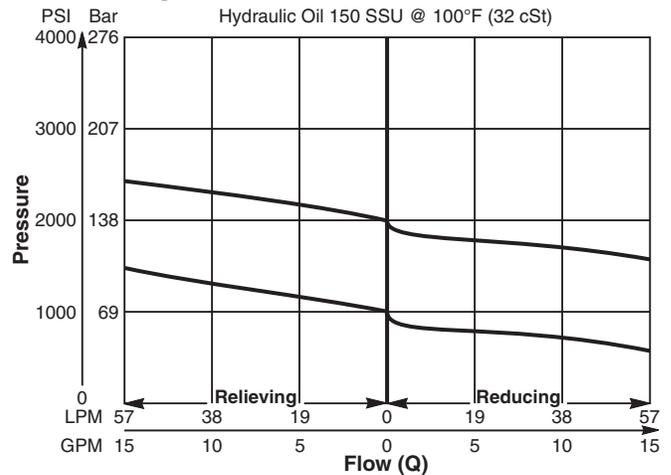
Specifications

Rated Flow	56 LPM (15 GPM)
Maximum Inlet Pressure	210 Bar (3000 PSI) 69 Bar (1000 PSI) maximum differential above valve setting for best stability
Maximum Pressure Setting	124 Bar (1800 PSI)
Maximum Tank Pressure	124 Bar (1800 PSI)
Maximum Drain Flow	120 mL/min. (0.03 GPM)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C (“D”-Ring) (-50°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	C10-3 (See BC Section for more details)
Form Tool	Rougher NTF10-3R Finisher NFT10-3F

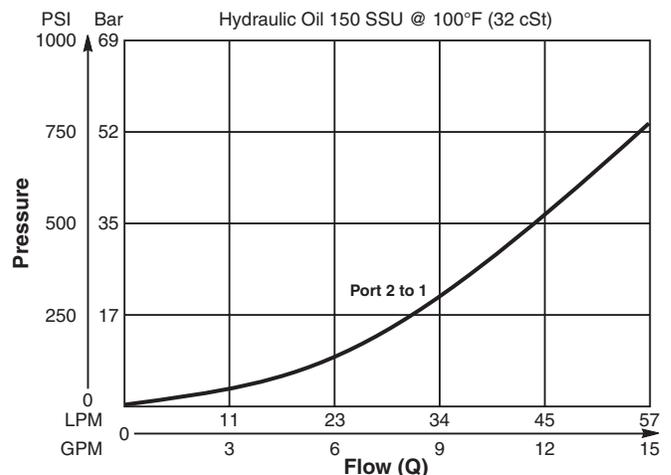
Performance Curves

(Pressure rise through cartridge only)

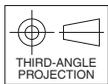
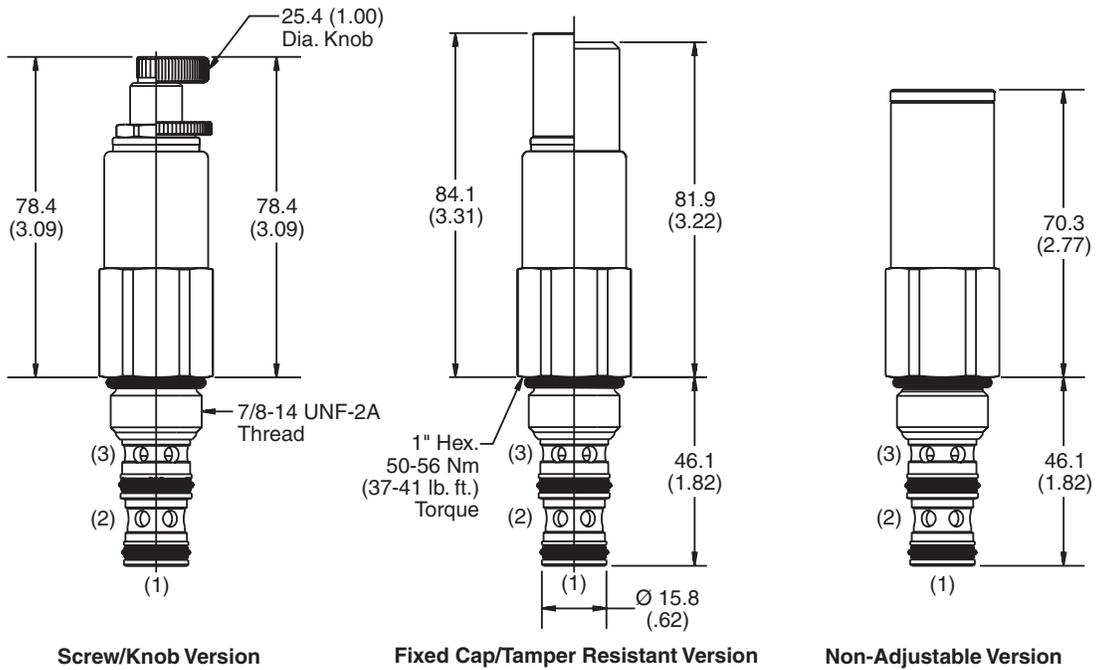
Flow vs. Regulated Pressure



Pressure vs. Flow



Dimensions Millimeters (Inches)

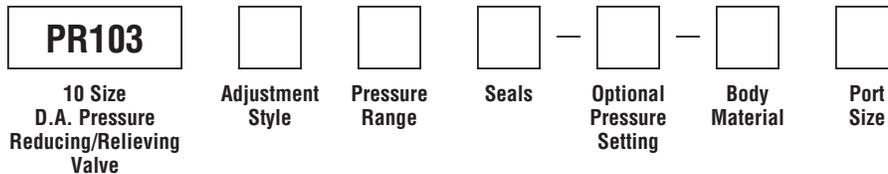


Screw/Knob Version

Fixed Cap/Tamper Resistant Version

Non-Adjustable Version

Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
N	Non-Adjustable
S	Screw Adjust
T	Tamper Resistant Cap (717943)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-3)
N	Nitrile / (SK10-3N)
V	Fluorocarbon / (SK10-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
02	5.2 - 13.8 Bar (75 - 200 PSI) Standard Setting: 6.9 Bar (100 PSI) @ .95 LPM (.25 GPM)
06	17.2 - 41.4 Bar (250 - 600 PSI) Standard Setting: 20.7 Bar (300 PSI) @ .95 LPM (.25 GPM)
12	39.3 - 83 Bar (570 - 1200 PSI) Standard Setting: 41.4 Bar (600 PSI) @ .95 LPM (.25 GPM)
21	41.4 - 124.1 Bar (600 - 1800 PSI) Standard Setting: 69 Bar (1000 PSI) @ .95 LPM (.25 GPM)

Optional Pressure Setting
Pressure \div 10 i.e. 150 = 1500 PSI (Omit if standard setting is used) Setting Range: 50 to 2100 PSI All settings at .95 LPM (.25 GPM)

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

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

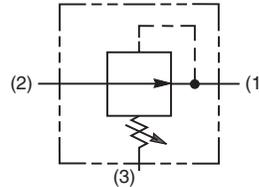
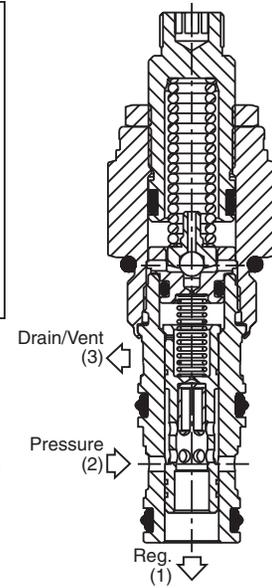
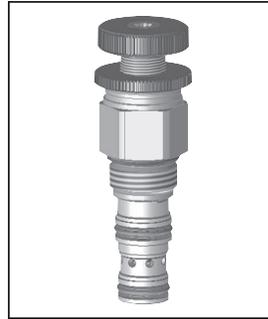
General Description

Pilot Operated Pressure Reducing Valve. For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided pilot for more consistent reset
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis
- Internal screening protects pilot spring from debris

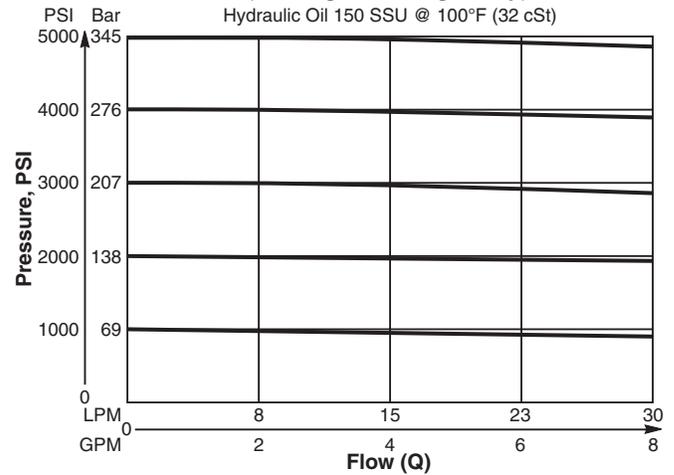


Specifications

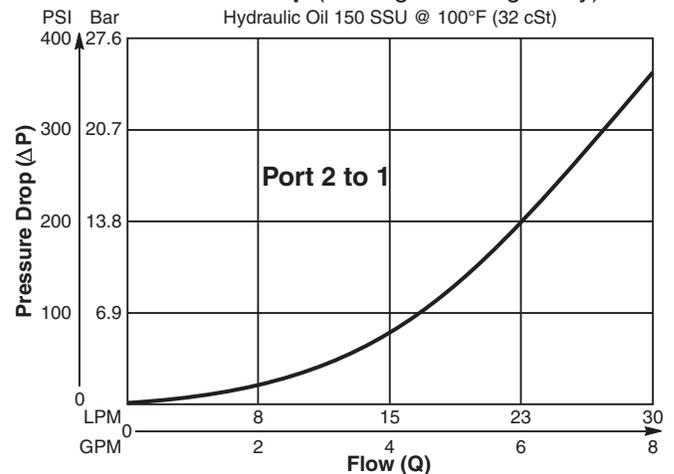
Rated Flow	30 LPM (8 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	0.56 LPM (0.15 GPM)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	.11 kg (.25 lbs.)
Cavity	C08-3 (See BC Section for more details)
Form Tool	Rougher NTF08-3R Finisher NFT08-3F

Performance Curves

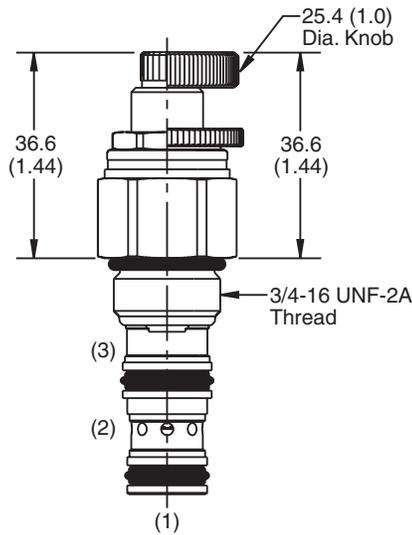
Flow vs. Pressure (Through cartridge only)



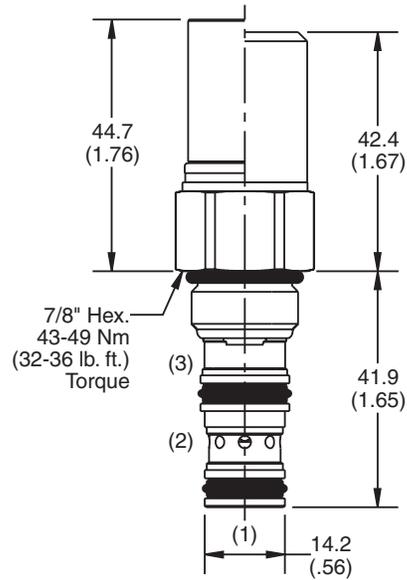
Flow vs. Pressure Drop (Through cartridge only)



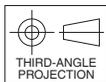
Dimensions Millimeters (Inches)



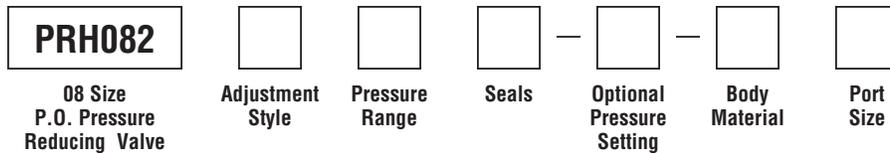
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (717943)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK08-3)
N	Nitrile / (SK08-3N)
V	Fluorocarbon / (SK08-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI)

Optional Pressure Setting	
Pressure	± 10 i.e. 235 = 2350 PSI (Omit if standard setting is used)
Setting Range:	100 to 5000 PSI

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

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

NOTE: For settings below 20.7 Bar (300 PSI), flow rating is limited to 11.3 LPM (3 GPM).

- 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
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- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical Data

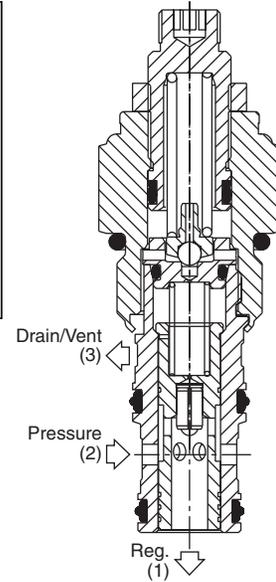
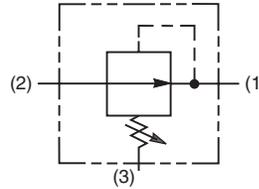
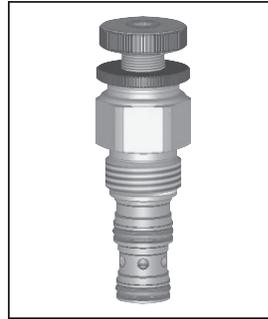
General Description

Pilot Operated Pressure Reducing Valve. For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided poppet for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis
- Internal screening protects pilot spring from debris

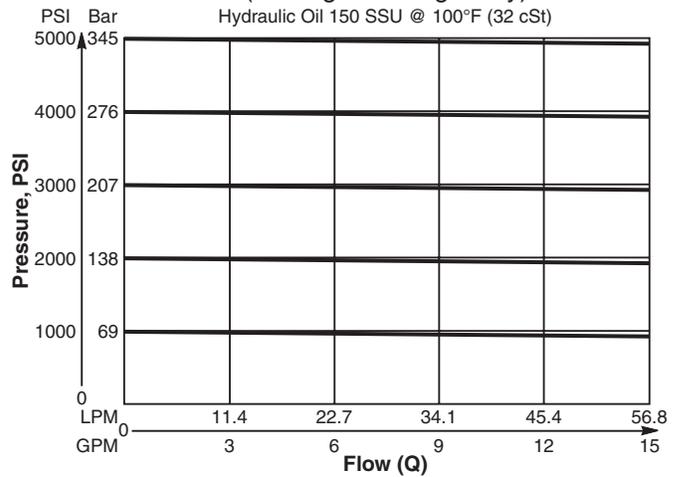


Specifications

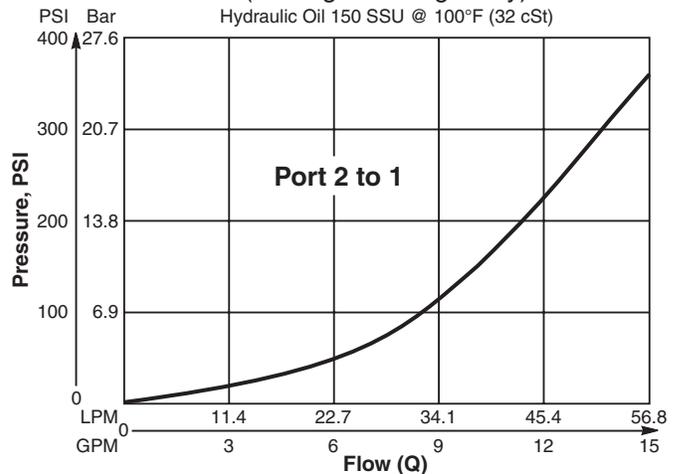
Rated Flow	56.3 LPM (15 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	0.94 LPM (0.25 GPM)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	C10-3 (See BC Section for more details)
Form Tool	Rougher NTF10-3R Finisher NFT10-3F

Performance Curves

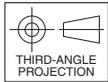
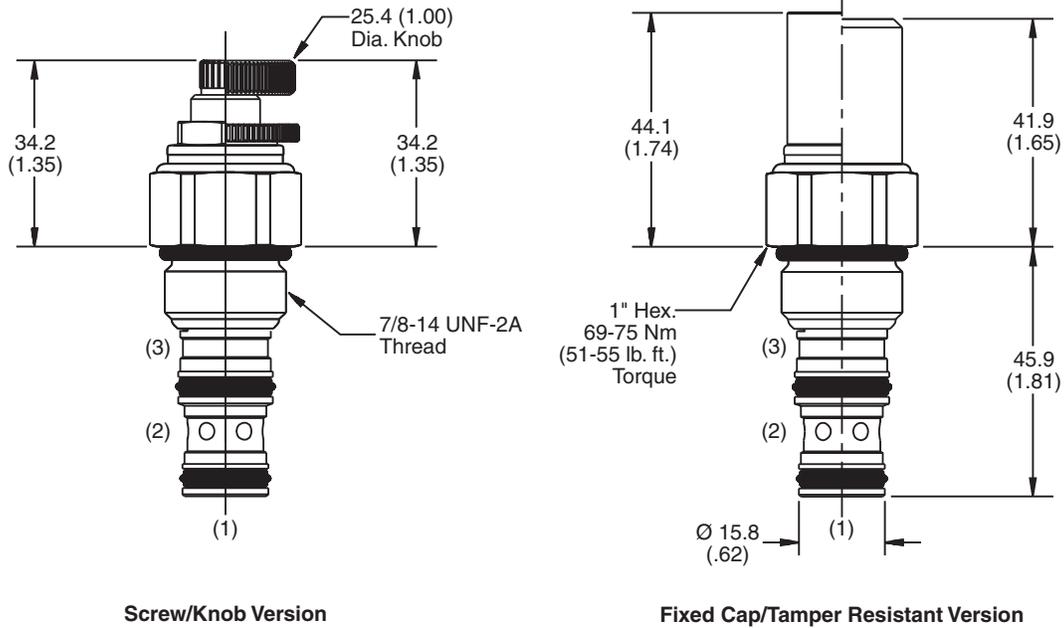
Flow vs. Pressure (Through cartridge only)



Pressure vs. Flow (Through cartridge only)



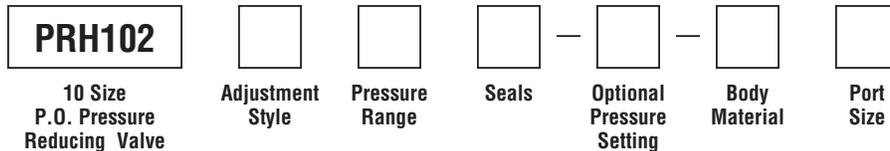
Dimensions Millimeters (Inches)



Screw/Knob Version

Fixed Cap/Tamper Resistant Version

Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (718083)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-3)
N	Nitrile / (SK10-3N)
V	Fluorocarbon / (SK10-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
03	6.9 - 34.5 Bar (100 - 500 PSI) Standard Setting: 17.2 Bar (250 PSI)
10	13.7 - 69 Bar (200 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI)
20	27 - 138 Bar (400 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI)
30	41.4 - 207 Bar (600 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI)
50	82.8 - 345 Bar (1200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI

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

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

NOTE: For settings below 20.7 Bar (300 PSI), flow rating is limited to 11.3 LPM (3 GPM).

Technical Information

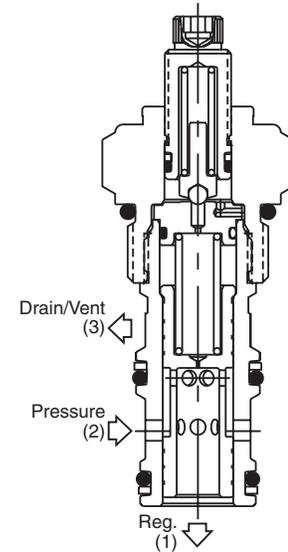
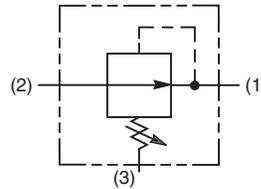
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated Pressure Reducing Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened, precision ground parts for durability
- High accuracy, pilot operation design
- Ball-type pilot for added stability
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



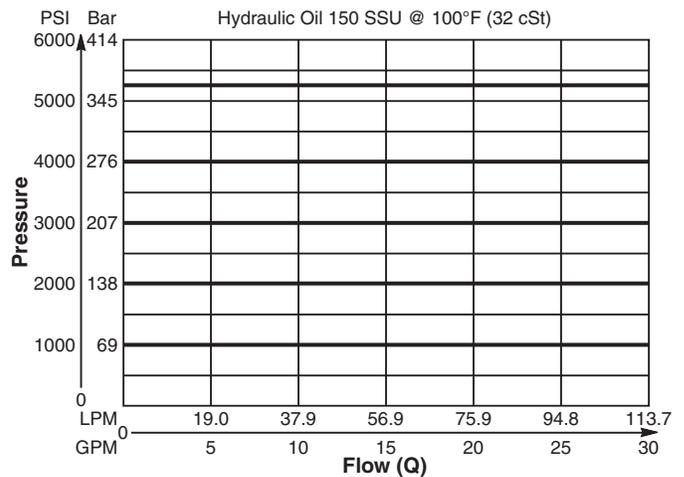
Specifications

Rated Flow	113.7 LPM (30 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	1.9 LPM (0.50 GPM)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range (Ambient)	-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	.27 kg (0.6 lbs.)
Cavity	C12-3 (See BC Section for more details)
Form Tool	Rougher NFT12-3R Finisher NFT12-3F

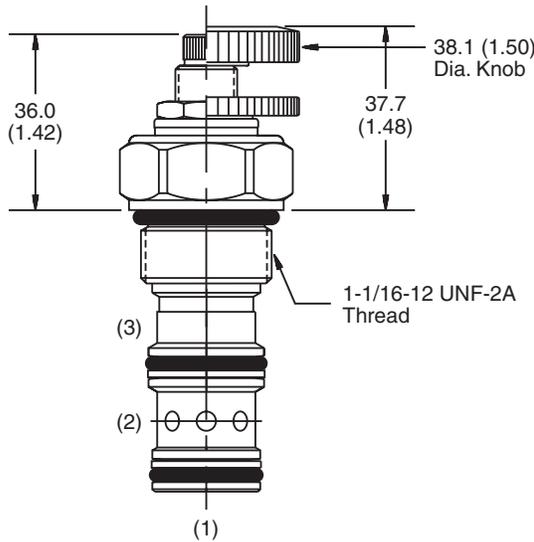
Performance Curve

Flow vs. Pressure

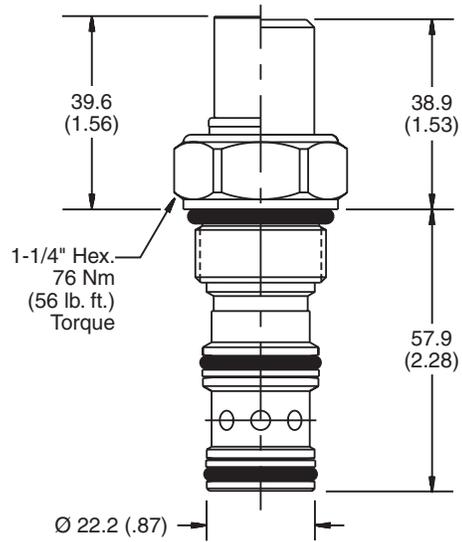
(Pressure rise through cartridge only)



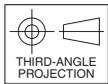
Dimensions Millimeters (Inches)



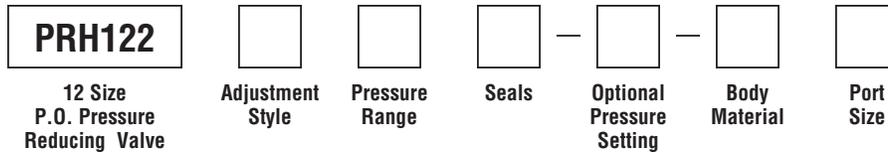
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-15)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

Code	Seals / Kit No.
Omit	Nitrile / (SK12-3)
V	Fluorocarbon / (SK12-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI)
20	13.8 - 138 Bar (200 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI)
30	20.7 - 207 Bar (300 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit is standard setting is used) Setting Range: 100 to 5000 PSI

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12T	SAE-12	(B12-3-*12T)
8B	1/2" BSPG	(B12-3-8B)†

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

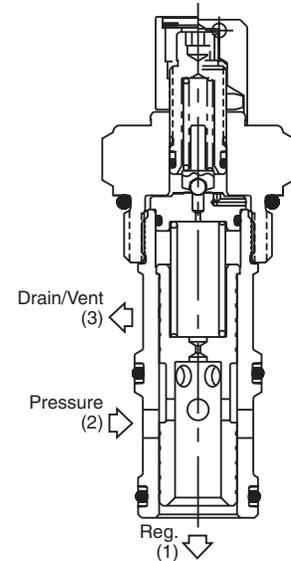
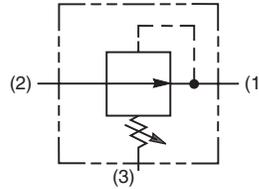
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated Pressure Reducing Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened, precision ground parts for durability
- High accuracy, pilot operation design
- Ball-type pilot for added stability
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



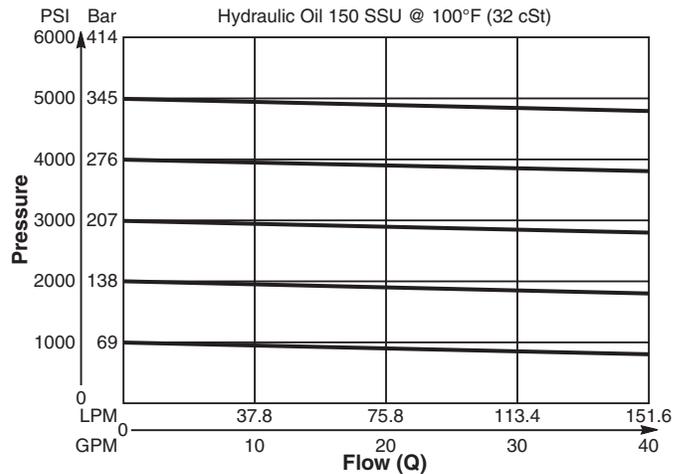
Specifications

Rated Flow	150 LPM (40 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	0.94 LPM (0.25 GPM)
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	0.9 kg (2.0 lbs.)
Cavity	C16-3 (See BC Section for more details)
Form Tool	Rougher NTF16-3R Finisher NFT16-3F

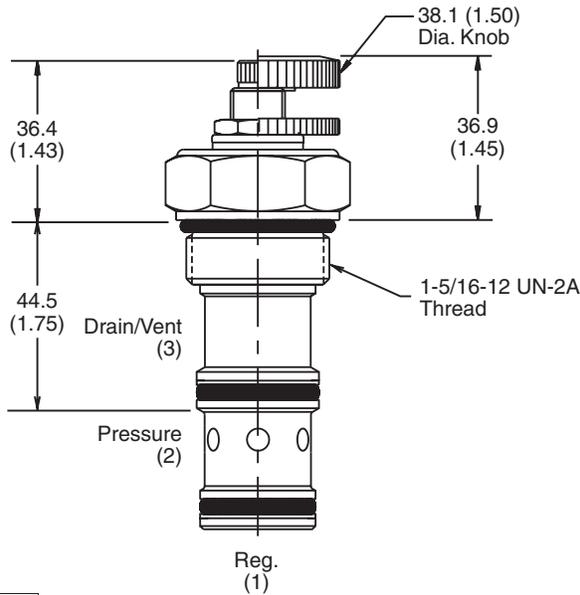
Performance Curve

Flow vs. Pressure

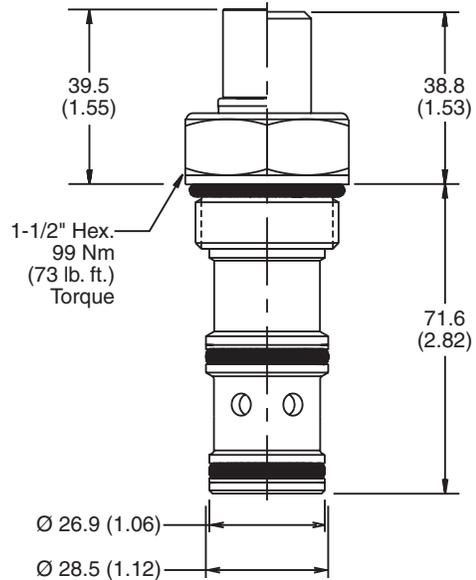
(Pressure rise through cartridge only)



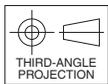
Dimensions Millimeters (Inches)



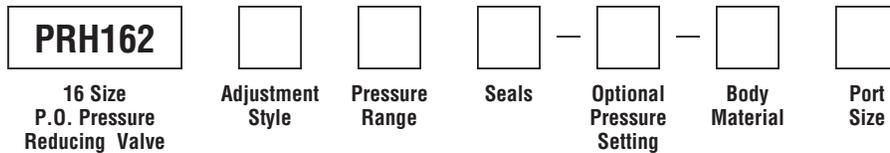
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-15)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

Code	Seals / Kit No.
Omit	Nitrile / (SK16-3)
V	Fluorocarbon / (SK16-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI)
20	13.8 - 138 Bar (200 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI)
30	20.7 - 207 Bar (300 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12T	SAE-12	(B16-3-*12T)
16T	SAE-16	(B16-3-*16T)

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

- 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
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Coils & Electronics
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Bodies & Cavities
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Technical Data

Technical Information

- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
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- CE** Coils & Electronics
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- TD** Technical Data

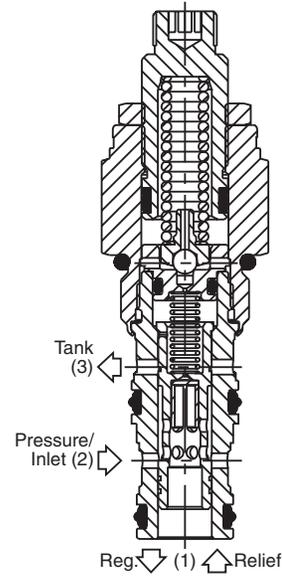
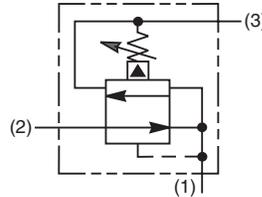
General Description

Pilot Operated Pressure Reducing/Relieving Valve. For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided pilot for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis
- Internal screening protects pilot spring from debris

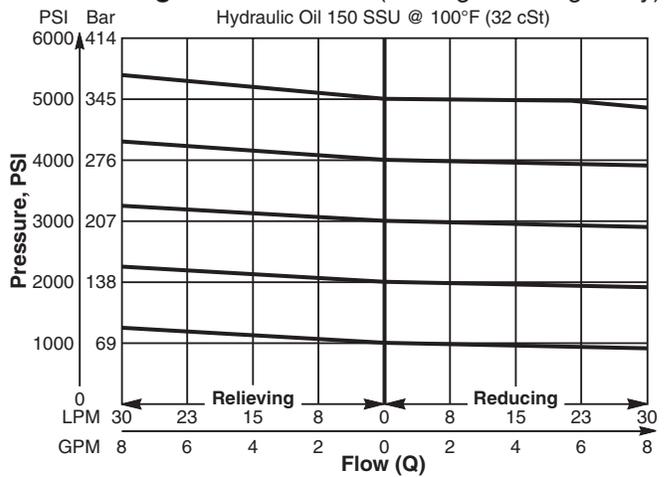


Specifications

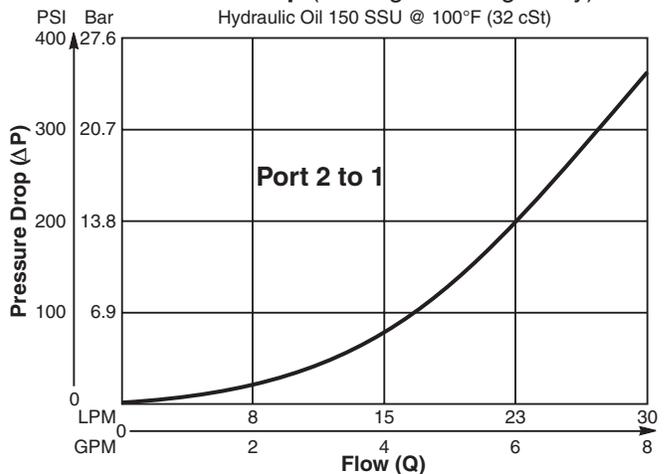
Rated Flow	30 LPM (8 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	0.56 LPM (0.15 GPM)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	.11 kg (.25 lbs.)
Cavity	C08-3 (See BC Section for more details)
Form Tool	Rougher NTF08-3R Finisher NFT08-3F

Performance Curves

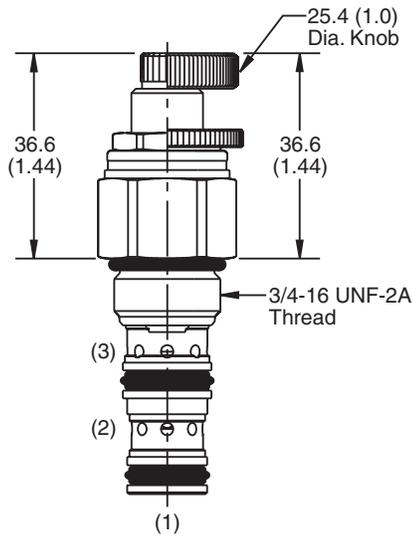
Flow vs. Regulated Pressure (Through cartridge only)



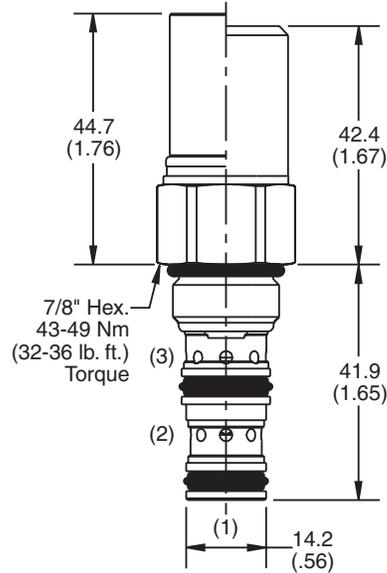
Flow vs. Pressure Drop (Through cartridge only)



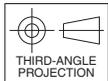
Dimensions Millimeters (Inches)



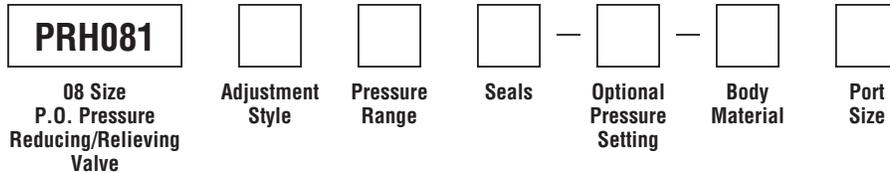
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (717943)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK08-3)
N	Nitrile / (SK08-3N)
V	Fluorocarbon / (SK08-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI

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

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

NOTE: For settings below 20.7 Bar (300 PSI), flow rating is limited to 11.3 LPM (3 GPM).

- 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

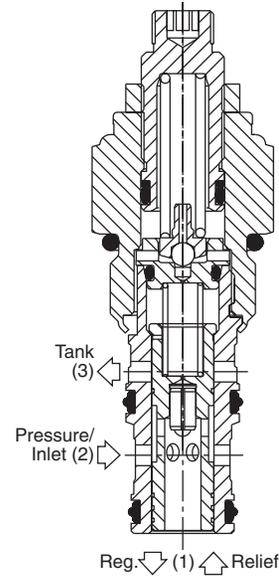
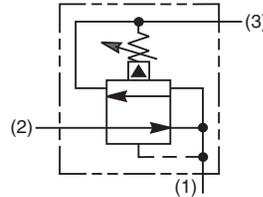
General Description

Pilot Operated Pressure Reducing/Relieving Valve. For additional information see Technical Tips on pages PC1-PC6.



Features

- Hardened, precision ground parts for durability
- Low profile adapter for minimal space requirements
- Fully guided poppet for more consistent reseal
- Steel adapters are coated with yellow zinc dichromate for protection from salt spray
- Polyurethane "D"-Ring eliminates backup rings and prevents hydrolysis
- Internal screening protects pilot spring from debris

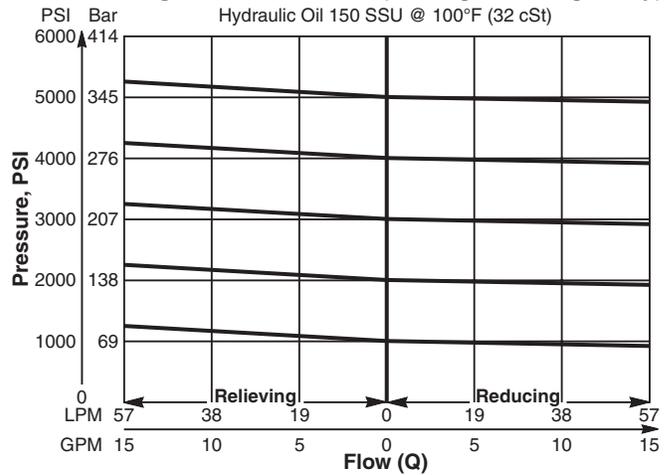


Specifications

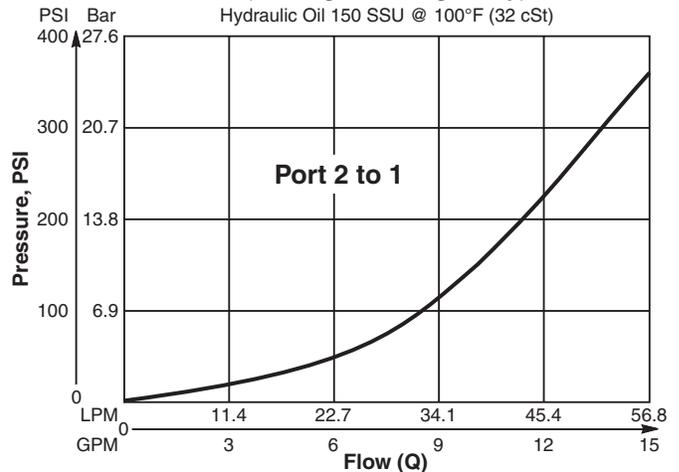
Rated Flow	56.3 LPM (15 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	0.94 LPM (0.25 GPM)
Cartridge Material	All parts steel. All operating parts hardened steel.
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring) (-50°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	C10-3 (See BC Section for more details)
Form Tool	Rougher NTF10-3R Finisher NFT10-3F

Performance Curves

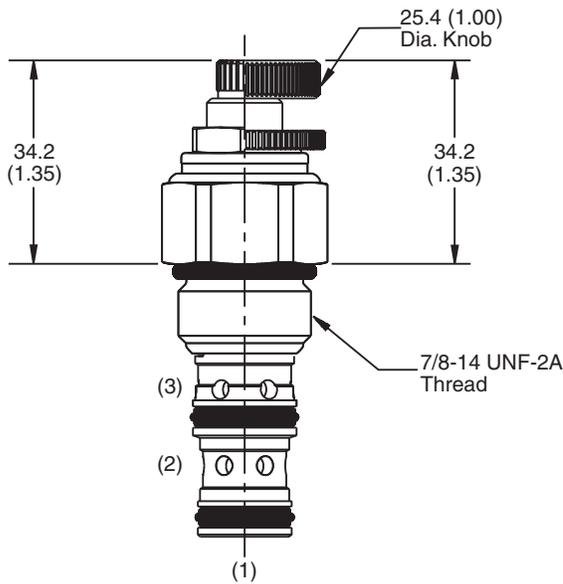
Flow vs. Regulated Pressure (Through cartridge only)



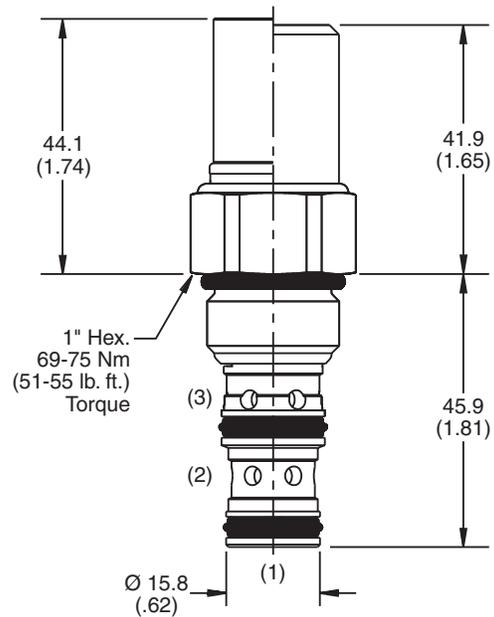
Pressure vs. Flow (Through cartridge only)



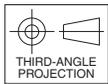
Dimensions Millimeters (Inches)



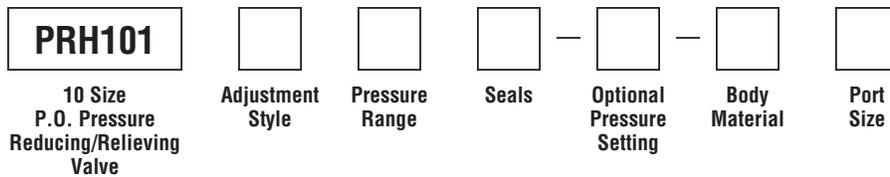
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (718083)

Code	Seals / Kit No.
Omit	"D"-Ring / (SK10-3)
N	Nitirle / (SK10-3N)
V	Fluorocarbon / (SK10-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
03	6.9 - 34.5 Bar (100 - 500 PSI) Standard Setting: 17.2 Bar (250 PSI)
10	13.7 - 69 Bar (200 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI)
20	27 - 138 Bar (400 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI)
30	41.4 - 207 Bar (600 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI)
50	82.8 - 345 Bar (1200 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI)

Optional Pressure Setting
Pressure ÷ 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI

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

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

NOTE: For settings below 20.7 Bar (300 PSI), flow rating is limited to 11.3 LPM (3 GPM).

- 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

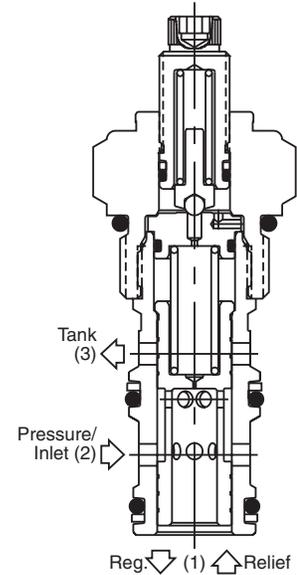
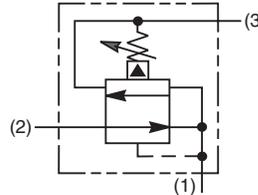
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated Pressure Reducing/Relieving Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened, precision ground parts for durability
- Ball-type pilot for added stability
- Full capacity reducing/relieving
- Performs job of two separate valves in one
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



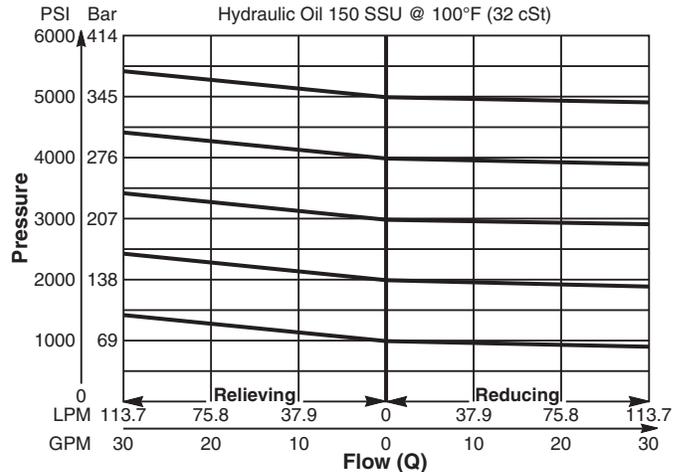
Specifications

Rated Flow	113.7 LPM (30 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	0.94 LPM (0.25 GPM)
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	.27 kg (0.6 lbs.)
Cavity	C12-3 (See BC Section for more details)
Form Tool	Rougher NTF12-3R Finisher NFT12-3F

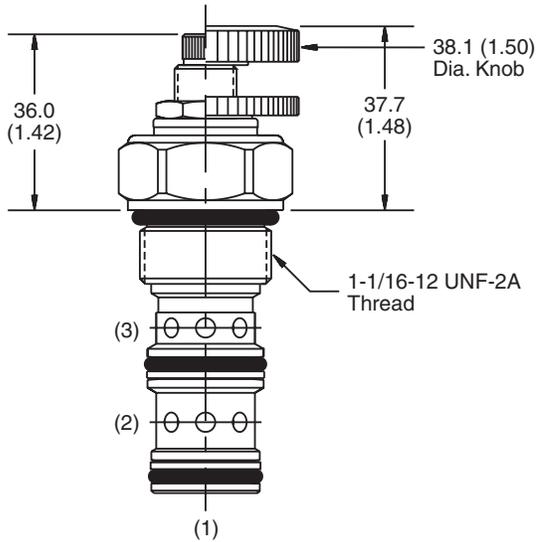
Performance Curve

Flow vs. Regulated Pressure

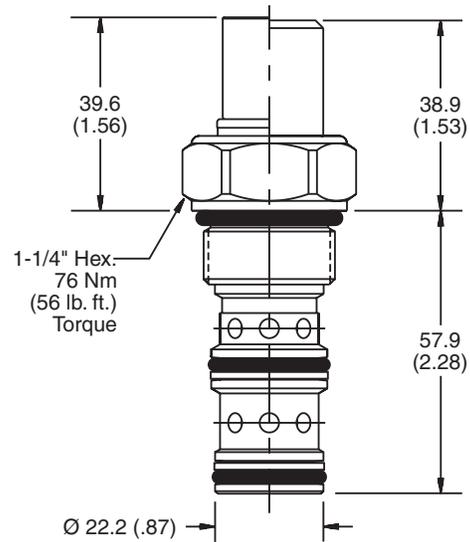
(Pressure rise through cartridge only)



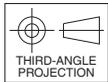
Dimensions Millimeters (Inches)



Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information

PRH121 — —

12 Size P.O. Pressure Reducing/Relieving Valve **Adjustment Style** **Pressure Range** **Seals** **Optional Pressure Setting** **Body Material** **Port Size**

Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-15)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

Code	Seals / Kit No.
Omit	Nitrile / (SK12-3)
V	Fluorocarbon / (SK12-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI)
20	13.8 - 138 Bar (200 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI)
30	20.7 - 207 Bar (300 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI)

Optional Pressure Setting
Pressure ± 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI

Code	Port Size	Body Part No.
Omit	Cartridge Only	
8T	SAE-8	(B12-3-*8T)
12T	SAE-12	(B12-3-*12T)
8B	1/2" BSPG	(B12-3-8B)†

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

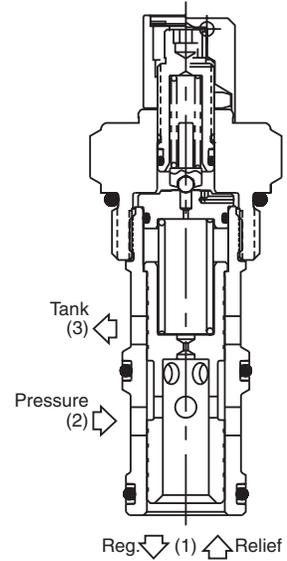
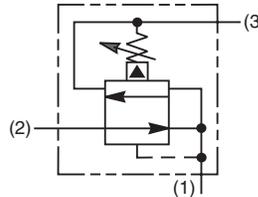
- CV** Check Valves
- SH** Shuttle Valves
- LM** Load/Motor Controls
- FC** Flow Controls
- PC** Pressure Controls
- LE** Logic Elements
- DC** Directional Controls
- MV** Manual Valves
- SV** Solenoid Valves
- PV** Proportional Valves
- CE** Coils & Electronics
- BC** Bodies & Cavities
- TD** Technical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

General Description

Pilot Operated Pressure Reducing/Relieving Valve. For additional information see Technical Tips on pages PC1-PC6.

Features

- Hardened, precision ground parts for durability
- Ball-type pilot for added stability
- Full capacity reducing/relieving
- Performs job of two separate valves in one
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.



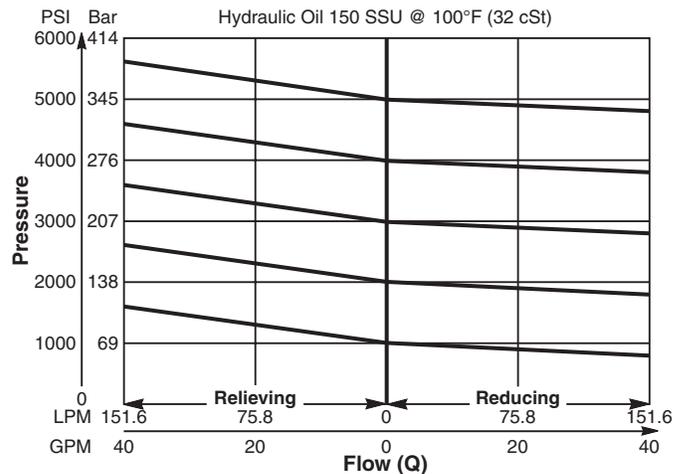
Specifications

Rated Flow	150 LPM (40 GPM)
Maximum Inlet Pressure	380 Bar (5500 PSI)
Maximum Pressure Setting	350 Bar (5000 PSI)
Maximum Tank Pressure	350 Bar (5000 PSI)
Maximum Drain Flow	1.9 LPM (0.5 GPM)
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	0.9 kg (2.0 lbs.)
Cavity	C16-3 (See BC Section for more details)
Form Tool	Rougher NTF16-3R Finisher NFT16-3F

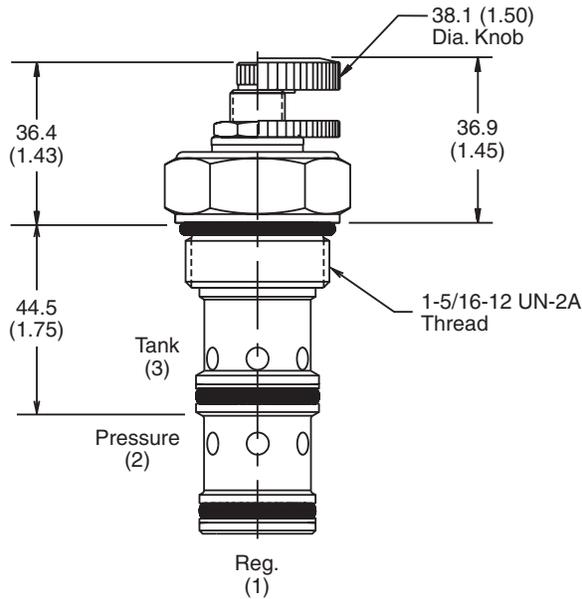
Performance Curve

Flow vs. Regulated Pressure

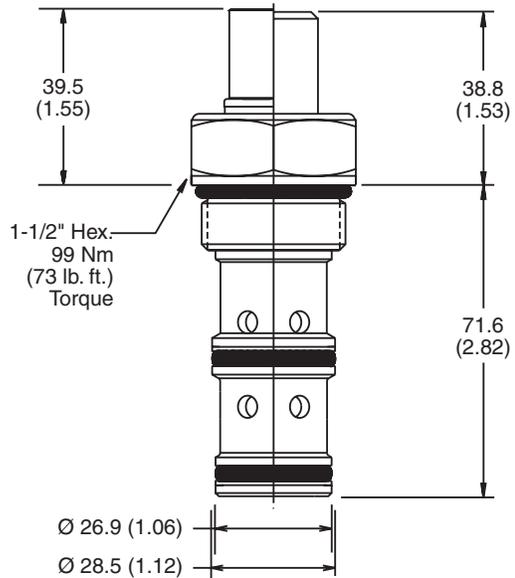
(Pressure rise through cartridge only)



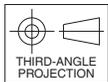
Dimensions Millimeters (Inches)



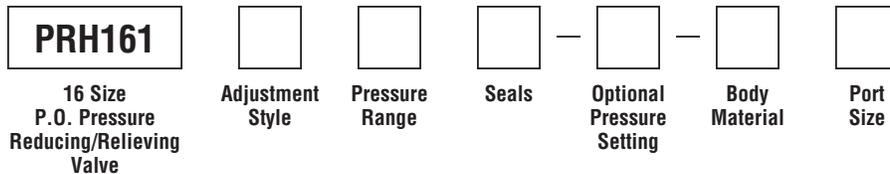
Screw/Knob Version



Fixed Cap/Tamper Resistant Version



Ordering Information



Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-15)
S	Screw Adjust
T	Tamper Resistant Cap (717785)

Code	Seals / Kit No.
Omit	Nitrile / (SK16-3)
V	Fluorocarbon / (SK16-3V)

Code	Body Material
Omit	Steel
A	Aluminum

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI)
20	13.8 - 138 Bar (200 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI)
30	20.7 - 207 Bar (300 - 3000 PSI) Standard Setting: 103.5 Bar (1500 PSI)
50	34.5 - 345 Bar (500 - 5000 PSI) Standard Setting: 172.4 Bar (2500 PSI)

Optional Pressure Setting
Pressure \pm 10 i.e. 235 = 2350 PSI (Omit if standard setting is used) Setting Range: 100 to 5000 PSI

Code	Port Size	Body Part No.
Omit	Cartridge Only	
12T	SAE-12	(B16-3-*12T)
16T	SAE-16	(B16-3-*16T)

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

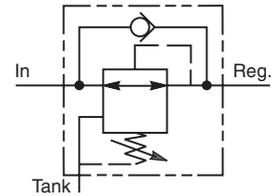
- CV**
Check Valves
- SH**
Shuttle Valves
- LM**
Load/Motor Controls
- FC**
Flow Controls
- PC**
Pressure Controls
- LE**
Logic Elements
- DC**
Directional Controls
- MV**
Manual Valves
- SV**
Solenoid Valves
- PV**
Proportional Valves
- CE**
Coils & Electronics
- BC**
Bodies & Cavities
- TD**
Technical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

Pilot Operated Pressure Reducing/Relieving Valve with Reverse Flow Check Valve. For additional information see Technical Tips on pages PC1-PC6.

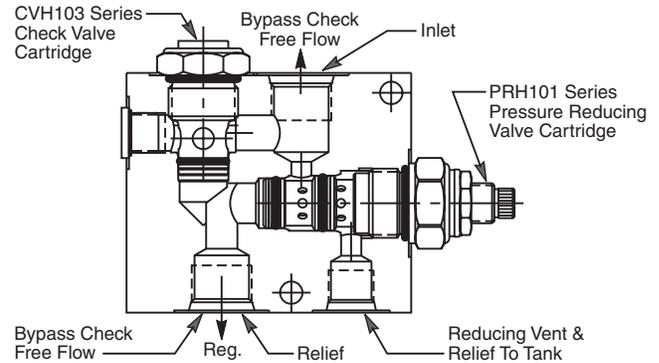


Features

- Hardened, precision ground parts for durability
- Built-in reverse flow check reduces plumbing
- Cartridge design
- All external parts have yellow zinc dichromate. This coating is ideal for salt spray applications.

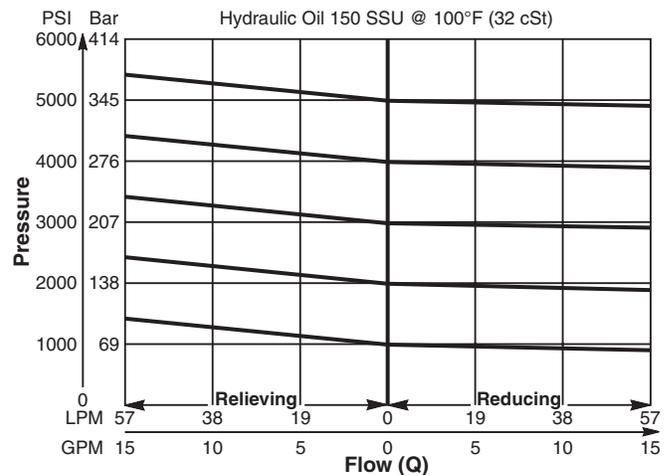
Specifications

Rated Flow	56.3 LPM (15 GPM)
Maximum Inlet Press. (Reducing/Relieving mode)	380 Bar (5500 PSI)
Maximum Setting Press. (Reducing/Relieving mode)	350 Bar (5000 PSI)
Maximum Inlet Press. (Free Flow Check mode)	380 Bar (5500 PSI)
Maximum Drain Flow	0.94 LPM (0.25 GPM)
Cartridge Material	All parts steel. All operating parts hardened steel.
Body Material	Steel
Operating Temp. Range/Seals	-45°C to +93.3°C ("D"-Ring (-50°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	1.0 kg (2.2 lbs.)

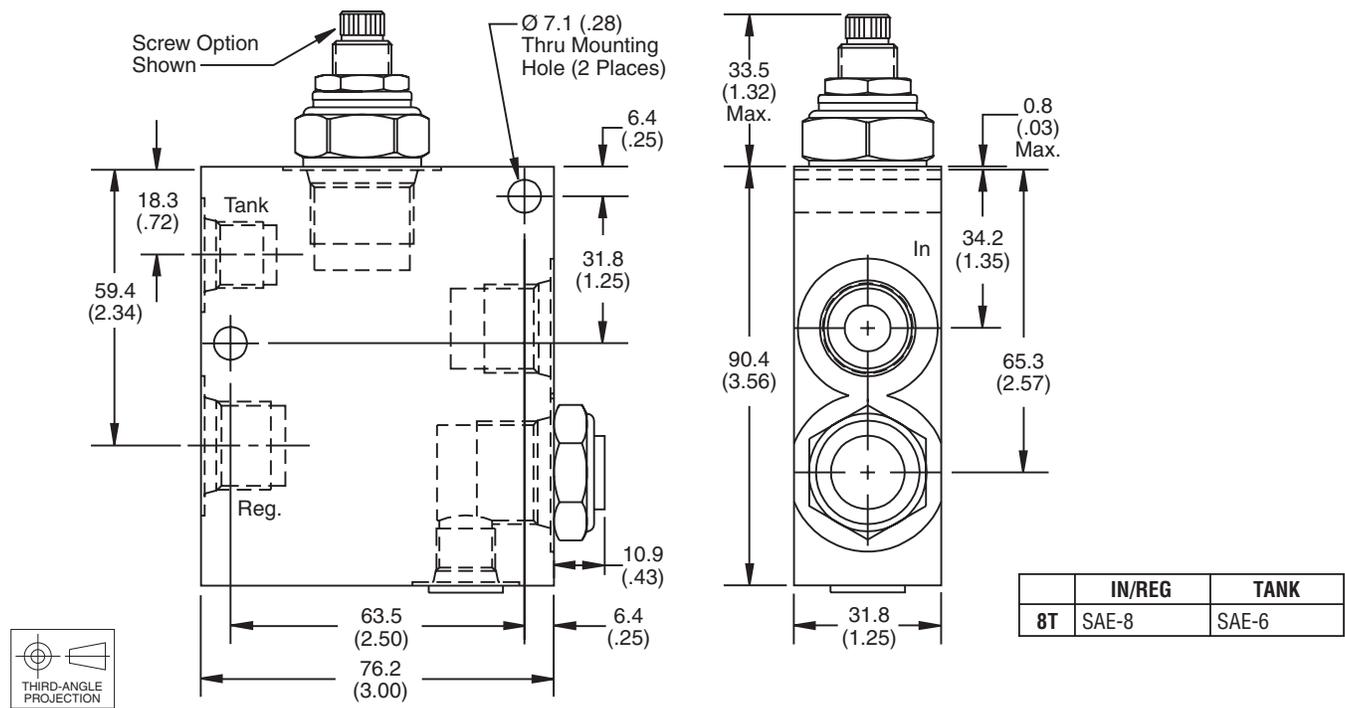


Performance Curve
Flow vs. Inlet Pressure

(Pressure rise through cartridge only)



Dimensions Millimeters (Inches)



Ordering Information

PRCH101 -

10 Size
 P.O. Pressure Reducing/
 Relieving Valve
 w/Reverse Flow Check

Adjustment Style **Pressure Range** **Optional Pressure Setting** **Check Valve Cracking Pressure** **Seals** **Port Size**

Code	Adjustment Style / Kit No.
F	Fixed style, preset at factory.
K	Knob Adjust (717784-10)
S	Screw Adjust
T	Tamper Resistant Cap (718083)

Optional Pressure Setting	
Pressure	± 10 i.e. 235 = 2350 PSI (Omit if standard setting is used)
Setting Range:	100 to 5000 PSI
All settings at crack pressure,	approximately .95 LPM (.25 GPM)

Code	Seals
Omit	"D"-Ring
N	Nitrile
V	Fluorocarbon

Code	Pressure Range
10	6.9 - 69 Bar (100 - 1000 PSI) Standard Setting: 34.5 Bar (500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
20	6.9 - 138 Bar (100 - 2000 PSI) Standard Setting: 69 Bar (1000 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
30	13.8 - 207 Bar (200 - 3000 PSI) Standard Setting: 172.4 Bar (2500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)
50	13.8 - 345 Bar (200 - 5000 PSI) Standard Setting: 241.4 Bar (3500 PSI) @ crack pressure, approximately .95 LPM (.25 GPM)

Code	Cracking Pressure
Omit	0.3 Bar (5 PSI)
P15	1.0 Bar (15 PSI)
P20	1.4 Bar (20 PSI)
P40	2.8 Bar (40 PSI)
P50	3.5 Bar (50 PSI)
P65	4.5 Bar (65 PSI)
P80	5.5 Bar (80 PSI)

Code	Port Size	Part No.
8T	SAE-8	830349

*Individual body requires 1 SAE 5 plug.
 Part number 5 HP50N-S.*

- 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
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Technical Data