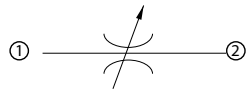
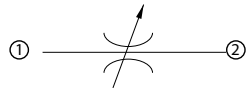
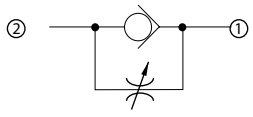
Flow Control Valves Technical Information
Quick Reference

Needle Valves	Model No	Cavity	Description	Flow*	Pressure	Page
	**CP618-6**	**SDC08-2**	Needle Valve, Bi-Directional, Fine Metering	10 l/min [3 US gal/min]	310 bar [4500 psi]	**FC - 8**

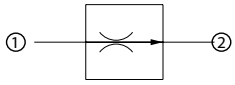
Needle Valves	Model No.	Cavity	Description	Flow*	Pressure	Page
	**CP618-1**	**SDC08-2**	Needle Valve, Bi-Directional	25 l/min [7 US gal/min]	210 bar [3000 psi]	**FC - 9**
	CP618-2	**SDC08-2**		45 l/min [12 US gal/min]	210 bar [3000 psi]	**FC - 10**
	CP610-1	**SDC10-2**		50 l/min [13 US gal/min]	210 bar [3000 psi]	**FC - 11**
	CP610-2	**SDC10-2**		50 l/min [13 US gal/min]	210 bar [3000 psi]	**FC - 12**
	CP611-2	**CP12-2**		115 l/min [30 US gal/min]	210 bar [3000 psi]	**FC - 13**
	CP612-1	**SDC16-2**		190 l/min [50 US gal/min]	210 bar [3000 psi]	**FC - 14**
	CP612-2	**SDC16-2**		190 l/min [50 US gal/min]	210 bar [3000 psi]	**FC - 15**
	CP613-1	**SDC20-2**		380 l/min [100 US gal/min]	210 bar [3000 psi]	**FC - 16**

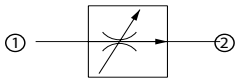
Needle Valves	Model No.	Cavity	Description	Flow*	Pressure	Page
	**CP610-7**	**SDC10-2**	Needle Valve, Bi-Directional, Fine Metering, Reverse Free Flow	55 l/min [15 US gal/min]	350 bar [5075 psi]	**FC - 17**

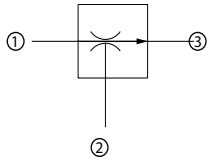
* Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.

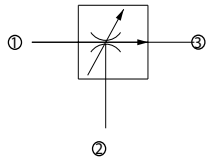
Flow Control Valves Technical Information

Quick Reference

Pressure-Compensated, Restrictive Flow Control	Model No.	Cavity	Description	Flow*	Pressure	Page
	**CP308-1**	**SDC08-2**	Flow Control Valve, Fixed Setting, Restrictive Type	15 l/min [4 US gal/min]	210 bar [3000 psi]	**FC - 18**
	CP300-1	**SDC10-2**		23 l/min [6 US gal/min]	210 bar [3000 psi]	**FC - 19**
	CP301-1	**CP12-2**		57 l/min [15 US gal/min]	210 bar [3000 psi]	**FC - 20**

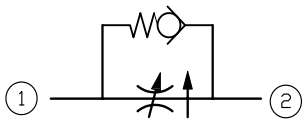
Pressure-Compensated, Restrictive Flow Control	Model No.	Cavity	Description	Flow*	Pressure	Page
	**CP308-2**	**SDC08-2**	Flow Control Valve, Adjustable, Restrictive Type	15 l/min [4 US gal/min]	210 bar [3000 psi]	**FC - 21**
	CP300-2	**SDC10-2**		23 l/min [6 US gal/min]	210 bar [3000 psi]	**FC - 22**
	VR 06	**NCS06/2**		30 l/min [8 US gal/min]	315 bar [4500 psi]	**FC - 23**
	VR 12	**NCS12/2**		60 l/min [16 US gal/min]	315 bar [4500 psi]	**FC - 24**

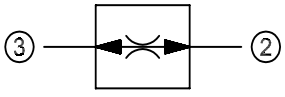
Pressure-Compensated, Priority Flow Control	Model No.	Cavity	Description	Flow*	Pressure	Page
	**CP310-1**	**SDC10-3**	Flow Control Valve, Fixed Setting, Priority Type	23 l/min [6 US gal/min]	210 bar [3000 psi]	**FC - 27**
	VRF 06	**NCS06/3**		30 l/min [8 US gal/min]	315 bar [4500 psi]	**FC - 28**
	CP311-1	**CP12-3**		45 l/min [12 US gal/min]	210 bar [3000 psi]	**FC - 29**
	CP312-1	**SDC16-3**		65 l/min [17 US gal/min]	210 bar [3000 psi]	**FC - 30**

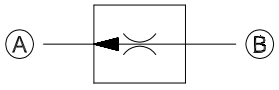
Pressure-Compensated, Priority Flow Control	Model No.	Cavity	Description	Flow*	Pressure	Page
	**CP310-2**	**SDC10-3**	Flow Control Valve, Adjustable, Priority Type	23 l/min [6 US gal/min]	210 bar [3000 psi]	**FC - 31**
	VRC 06	**NCS06/3**		50 l/min [13 US gal/min]	315 bar [4500 psi]	**FC - 32**
	VRC 12	**NCS12/3**		100 l/min [26 US gal/min]	315 bar [4500 psi]	**FC - 33**

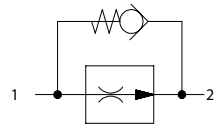
* Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.

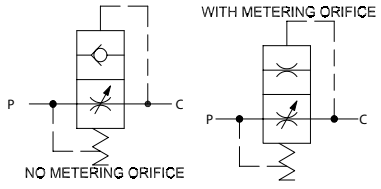
Flow Control Valves Technical Information
Quick Reference

In-line	Model No.	Cavity	Description	Flow*	Pressure	Page
	**HFCV10-RT**	**SDC10-2**	Pressure compensated, restrictive-type flow control.	0.38-11.4 l/min [0.1-3.0 US gal/min]	350 bar [5075 psi]	**FC - 25**

Pressure-Compensated, Priority Flow Control	Model No.	Cavity	Description	Flow*	Pressure	Page
	**CP300-6**	**SDC10-3**	Flow Control Valve, Fixed Setting, Bi-Directional	23 l/min [6 US gal/min]	210 bar [3000 psi]	**FC - 34**
	FCH10-BD	**SDC10-3**		23 l/min [6 US gal/min]	350 bar [5075 psi]	**FC - 35**

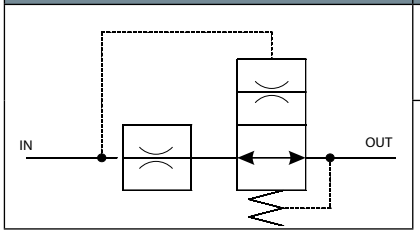
In-line	Model No.	Cavity	Description	Flow*	Pressure	Page
	**SC 10**	none	Flow Control Valve, In-line	16 l/min [4 US gal/min]	210 bar [3000 psi]	**FC - 36**
	SC 13	none		47 l/min [12 US gal/min]	210 bar [3000 psi]	**FC - 37**

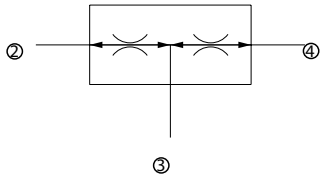
In-line	Model No.	Cavity	Description	Flow*	Pressure	Page
	**CP9014-1**	none	Load Lowering Valve	113 l/min [30 US gal/min]	210 bar [3000 psi]	**FC - 38**

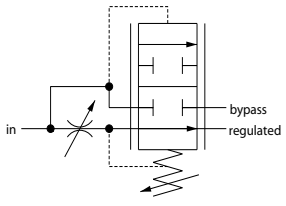
In-line	Model No.	Cavity	Description	Flow*	Pressure	Page
	**BC 06**	none	Velocity Fuse	30 l/min [8 US gal/min]	210 bar [3000 psi]	**FC - 39**
	BC 10	none		60 l/min [16 US gal/min]	210 bar [3000 psi]	**FC - 40**
	BC 13	none		85 l/min [22 US gal/min]	210 bar [3000 psi]	**FC - 41**

* Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.

Flow Control Valves Technical Information
Quick Reference

In-line	Model No.	Cavity	Description	Flow*	Pressure	Page
	**CP330-3**	#10 SAE Port	Velocity Fuse	110 l/min [29 US gal/min]	207 bar [3000 psi]	**FC - 42**

Flow Divider/Combiner	Model No.	Cavity	Description	Flow*	Pressure	Page
	**CP340-1**	**SDC10-4**	Flow Divider, Divider/Combiner	45 l/min [12 US gal/min]	210 bar [3000 psi]	**FC - 43**
	VDF 06	**NCS06/4**		45 l/min [12 US gal/min]	210 bar [3000 psi]	**FC - 44**
	CP341-1	**CP12-4**		75 l/min [20 US gal/min]	210 bar [3000 psi]	**FC - 45**
	CP342-1	**CP16-4**		150 l/min [40 US gal/min]	210 bar [3000 psi]	**FC - 46**
	CP342-3	**CP16-4**		150 l/min [40 US gal/min]	450 bar [6500 psi]	**FC - 47**
	CP343-1	**SDC20-4**		340 l/min [90 US gal/min]	210 bar [3000 psi]	**FC - 48**

Pressure-Compensated, Priority Flow Control	Model No.	Cavity	Description	Flow*	Pressure	Page
	**2F94-01**	none	Flow Control Valve, Catalog HIC	30 l/min [8 US gal/min]	210 bar [3000 psi]	**FC - 49**
	2F95-01	none		60 l/min [16 US gal/min]	210 bar [3000 psi]	**FC - 50**
	2F96-01	none		95 l/min [25 US gal/min]	210 bar [3000 psi]	**FC - 51**
	2F97-01	none		190 l/min [50 US gal/min]	210 bar [3000 psi]	**FC - 52**

* Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.

OVERVIEW

Pressure compensated flow control valves are used to limit or regulate flow. Three basic types of cartridges are available; restrictive-type, priority-type, and divider/combiner type. Combination valves in manifolds for additional features such as fully adjustable flow or free reverse flow are also available.

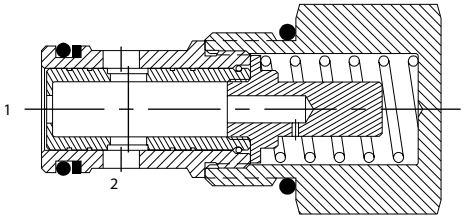
Flow control valves

RESTRICTED-TYPE PRESSURE COMPENSATED

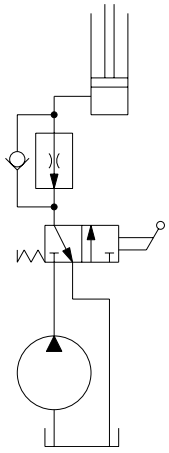
Restrictive-type pressure compensated flow control valves are two-ported valves that maintain a constant flow rate from 1 to 2 regardless of load pressure changes in the circuit downstream of 2. The control orifice in the spool is factory set to the flow specification. The valve begins to respond to load changes when flow through the valve creates a pressure differential across the control orifice of approximately 7 bar 100 psi, and accurately maintains flow within +/- 10% across the range of 35-207 bar 500-3000 psi. Reverse flow from 2 to 1 returns through the control orifice and is non-compensated.

Restrictive-type flow control valves can be used in meter-in or meter-out applications to control actuator speeds.

Restricted-type pressure compensated flow control valve



Actuator speed control circuit



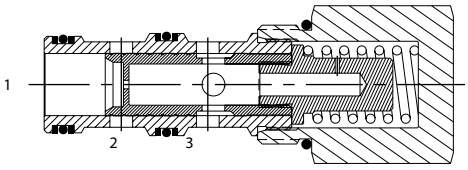
PRIORITY-TYPE PRESSURE COMPENSATED

Priority-type pressure compensated flow control valves are three-ported valves that maintain a constant flow rate from 1 to 3 regardless of load pressure changes in the priority circuit downstream of 3 or in the bypass circuit downstream of 2. The control orifice in the spool is factory set to the flow specification. The valve begins to respond to load pressure changes when flow to 3 creates a pressure differential across the control orifice of approximately 7 bar 100 psi The valve accurately maintains flow to the priority circuit across the range of 35-207 bar 500-3000 psi, with any excess inlet flow bypassing to 2. Note that both 2 and 3 may be fully and independently pressurized. Also note that if 2 is blocked, the valve will function as a restrictive-type flow control.

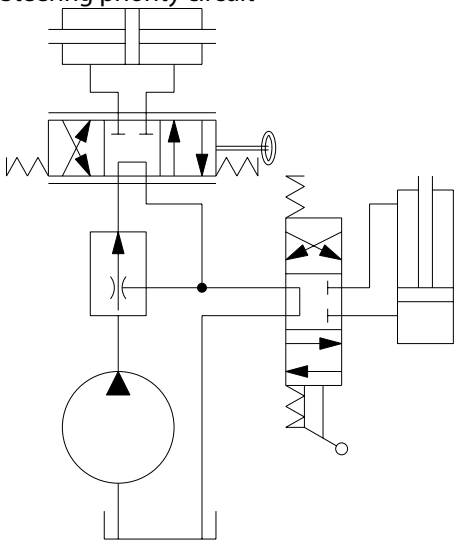
Priority-type flow control valves are used in meter-in applications. A common application is to direct a fixed flow rate to a priority function, such as steering, while secondary flow is available to other intermittent functions.

Flow divider/combiners are pressure

Priority-type pressure compensated flow control valve



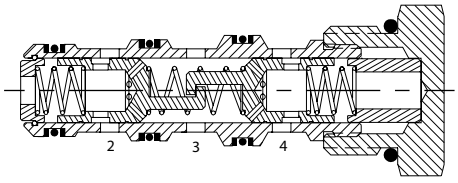
Steering priority circuit



FLOW DIVIDER / COMBINER

compensated valves. When the valve is functioning as a divider, it will divide input flow from 3 to the two outputs at 2 and 4 according to a preset ratio. This ratio is unaffected by pressure. When the valve is functioning as a combiner, it will combine the flow from the two inputs from 2 and 4 into one output at 3. Note that a flow divider/combiner is specified with a nominal flow rate for each leg. When operating with flow rates higher than specified, the dividing and combining ratios will be maintained, but at a cost of higher pressure drop and associated heat generation. When operating with lower flow rates than specified, the dividing and combining ratios are also maintained, but at a cost of accuracy. For example, a 22 l/min 5.8 US gal/min : 22 l/min 5.8 US gal/min flow divider will divide flow in a 50:50 ratio with an accuracy of ±10% (±2.2 l/min ±0.58 US gal/min) per leg. With an input flow of 8.0 l/min 2.1 US gal/min, the flow division will be 4.0±2.2 l/min 1.1±0.58 US gal/min per leg.

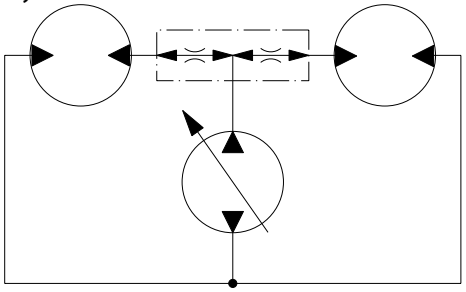
Flow divider / combiner



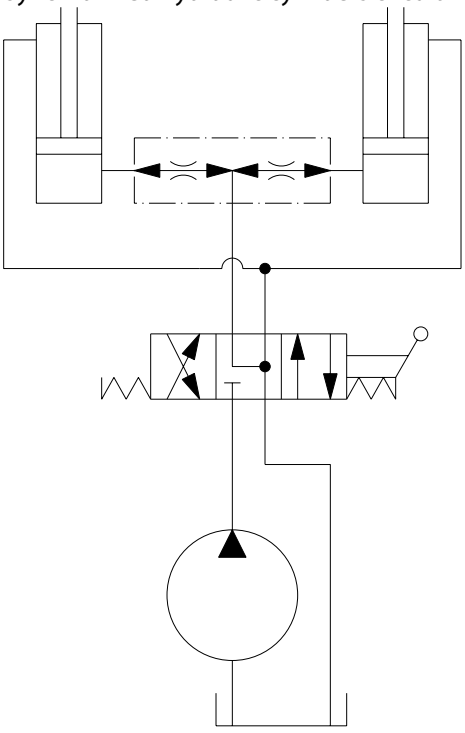
Common applications for flow divider/combiners include:

- Combining flow (forward) or dividing flow (reverse) to hydraulic wheel motors for vehicle drive application. Note that an external orifice is added to allow more flow to one motor than the other while turning a corner (not shown).
- Synchronizing motion of hydraulic cylinders. Note that if circuit operation results in a blockage of one cylinder port, the other port will also close. Consult factory for details.

Hydraulic wheel motor circuit



Synchronized hydraulic cylinders circuit



ENGINEERING
TOMORROW

Flow Control Valves Technical Information

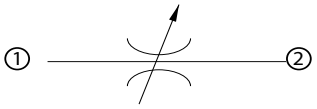
Needle Valve, Bi-Directional

CP618-6

OPERATION

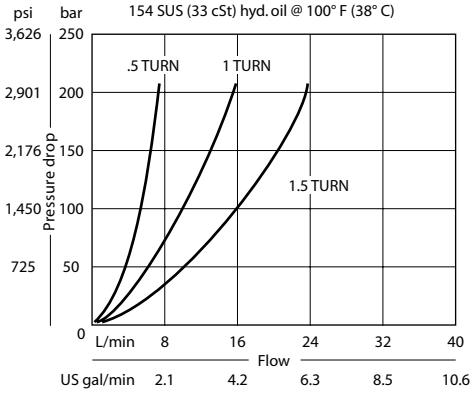
This valve is a non-pressure compensated, fine-metering, adjustable flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



Specifications

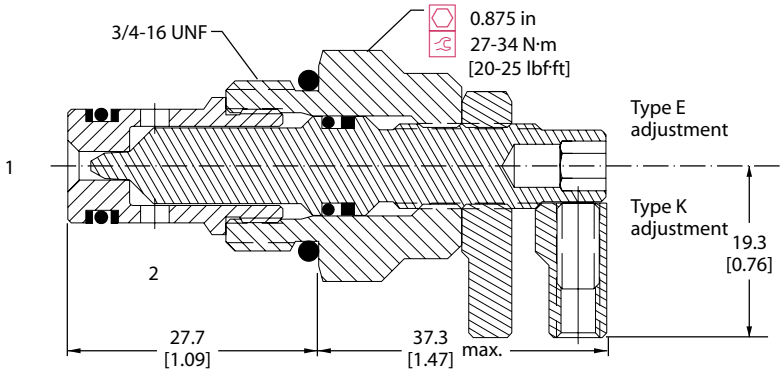
Rated pressure	310 bar [4500 psi]*
Rated flow at 7 bar [100 psi]	10 l/min [3 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	0.12 kg 0.26 lb
Cavity	**SDC08-2**

*Updated Pressure Rating

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP618 - 6 - B - 6S - K

Seals

B = Buna-N
V = Viton

Housing and ports

0 = No Housing
DG2B = AL,1/4 BSP
DG3B = AL,3/8 BSP
DG4S = AL, #4 SAE
DG6S = AL, #6 SAE
Other housings available

Seal kit
120227
120228

Housing P/N

No Housing
SDC08-2-DG-2B
SDC08-2-DG-3B
CP08-2-4S
CP08-2-6S

Adjustment option

E = External
K = Knob

ENGINEERING TOMORROW

Flow Control Valves Technical Information

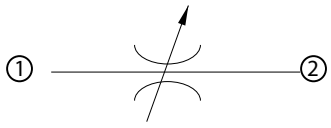
Needle Valve, Bi-Directional

CP618-1

OPERATION

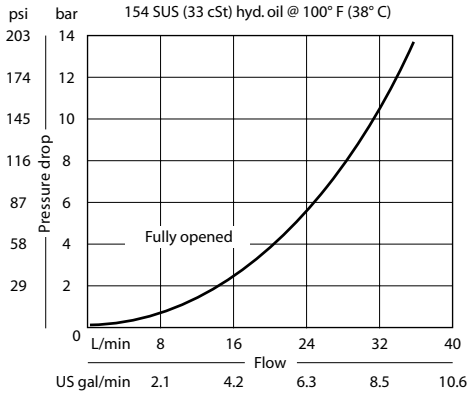
This valve is a non-pressure compensated, adjustable flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



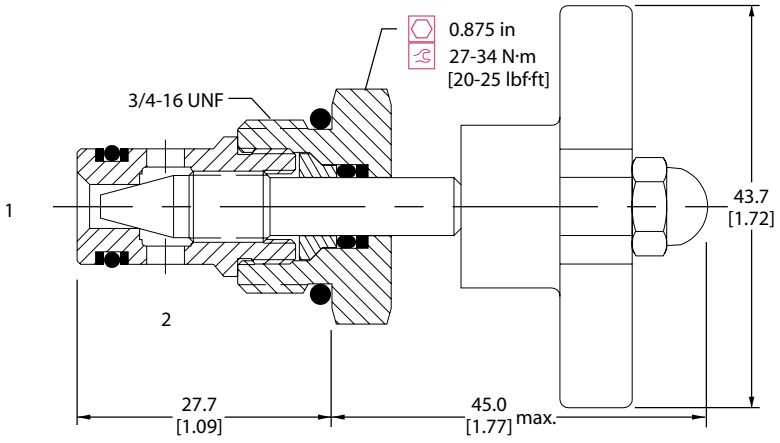
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar [100 psi]	25 l/min [7 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	0.07 kg [0.15 lb]
Cavity	**SDC08-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP618 - 1 - B - 6S - B

Seals

B = Buna-N
V = Viton

Seal kit
120227
120228

Housing and ports

0 = No Housing
DG2B = AL,1/4 BSP
DG3B = AL,3/8 BSP
DG4S = AL, #4 SAE
DG6S = AL, #6 SAE
Other housings available

Housing P/N

No Housing
SDC08-2-DG-2B
SDC08-2-DG-2B
CP08-2-4S
CP08-2-6S

Knob option

B = Black
R = Red

ENGINEERING
TOMORROW

Flow Control Valves Technical Information

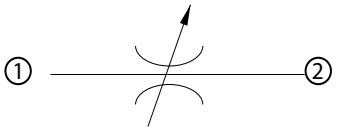
Needle Valve, Bi-Directional

CP618-2

OPERATION

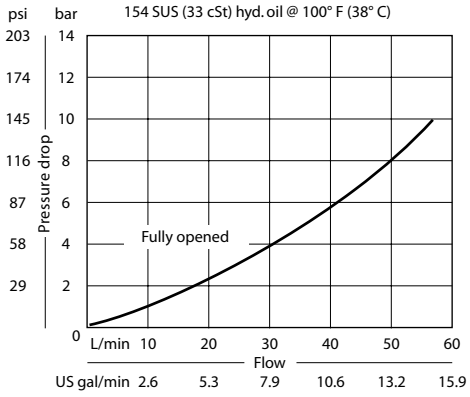
This valve is a non-pressure compensated, adjustable flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



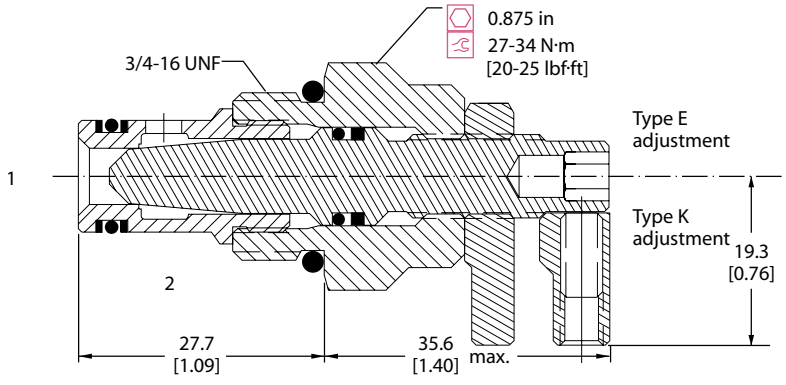
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar [100 psi]	45 l/min [12 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	0.09 kg [0.20 lb]
Cavity	**SDC08-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP618 - 2 - B - 6S - K

Seals

B = Buna-N
V = Viton

Housing and ports	**Housing P/N**	Seal kit
0 = No Housing	No Housing	120227
DG2B = AL,1/4 BSP	SDC08-2-DG-2B	120228
DG3B = AL,3/8 BSP	SDC08-2-DG-2B	
DG4S = AL, #4 SAE	CP08-2-4S	
DG6S = AL, #6 SAE	CP08-2-6S	

Other housings available

Adjustment option

E = External adjustment
K = Knob adjustment

ENGINEERING TOMORROW

Flow Control Valves Technical Information

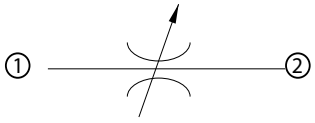
Needle Valve, Bi-Directional

CP610-1

OPERATION

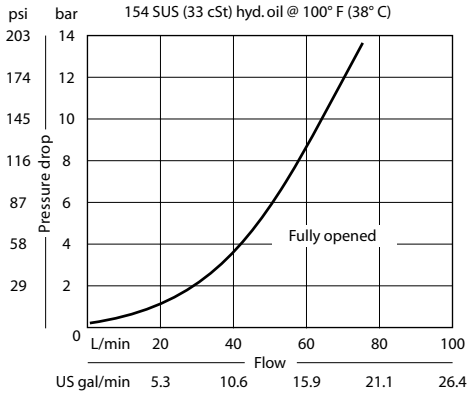
This valve is a non-pressure compensated, adjustable flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



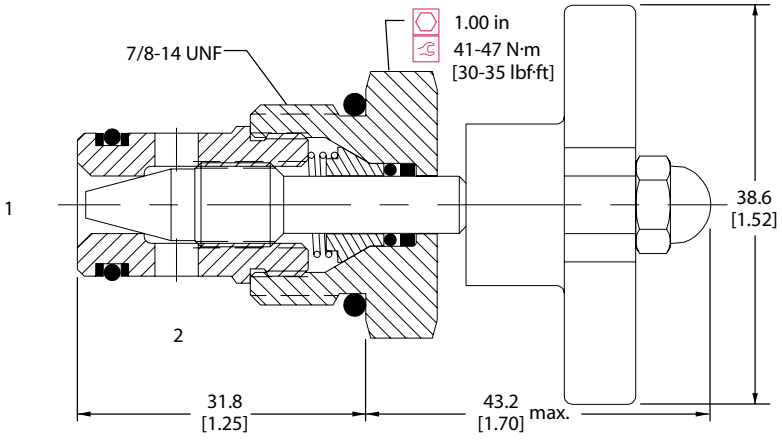
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar [100 psi]	50 l/min [13 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	0.10 kg [0.22 lb]
Cavity	**SDC10-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP610 - 1 - B - 8S - B

Seals

B = Buna-N
V = Viton

Seal kit
120073
120074

Housing and ports

0 = No Housing
DG3B = AL,3/8 BSP
DG4B = AL, 1/2 BSP
6S = AL, #6 SAE
8S = AL, #8 SAE
Other housings available

Housing P/N

No Housing
SDC10-2-DG-3B
SDC10-2-DG-4B
CP10-2-6S
CP10-2-8S

Knob option

B = Black
R = Red

ENGINEERING
TOMORROW

Flow Control Valves Technical Information

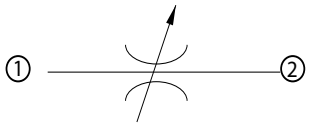
Needle Valve, Bi-Directional

CP610-2

OPERATION

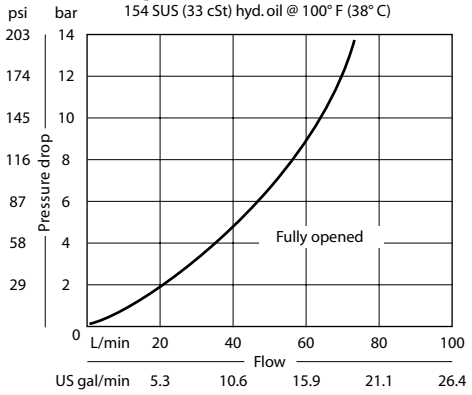
This valve is a non-pressure compensated, adjustable flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



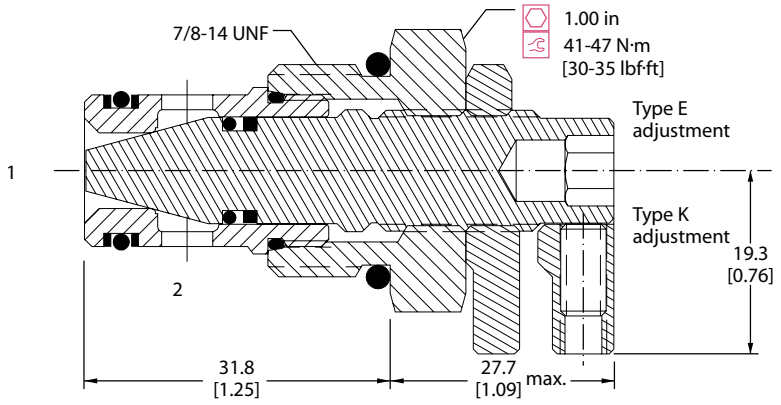
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar [100 psi]	50 l/min [13 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	0.13 kg [0.29 lb]
Cavity	**SDC10-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP610 - 2 - B - 8S - K

Seals

B = Buna-N
V = Viton

Seal kit
120073
120074

Housing and ports

0 = No Housing
DG3B = AL,3/8 BSP
DG4B = AL, 1/2 BSP
6S = AL, #6 SAE
8S = AL, #8 SAE
Other housings available

Housing P/N

No Housing
SDC10-2-DG-3B
SDC10-2-DG-4B
CP10-2-6S
CP10-2-8S

Adjustment option

E = External
K = Knob

ENGINEERING TOMORROW

Flow Control Valves Technical Information

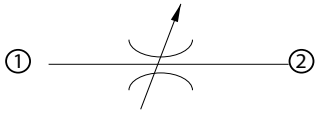
Needle Valve, Bi-Directional

CP611-2

OPERATION

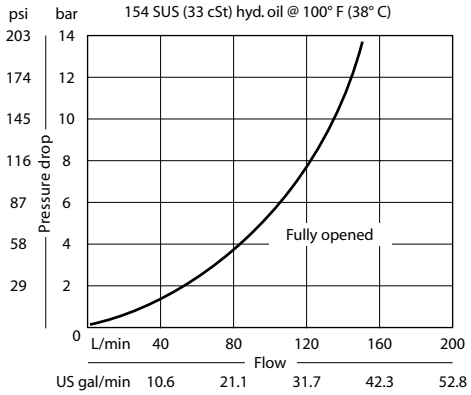
This valve is a non-pressure compensated, adjustable flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



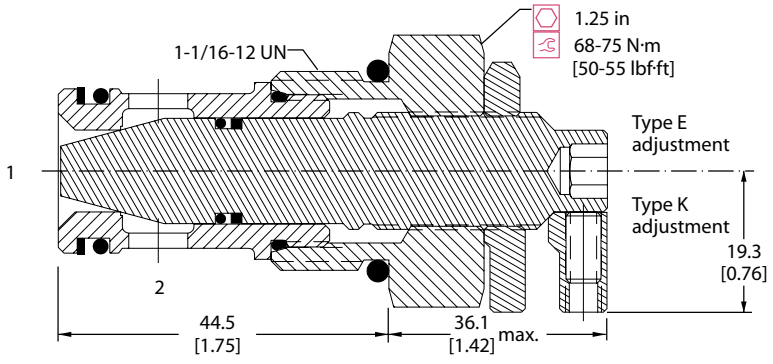
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar [100 psi]	115 l/min [30 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	0.26 kg [0.57 lb]
Cavity	**CP12-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP611 - 2 - B - 12S - K

Seals

	Seal kit
B = Buna-N	120017
V = Viton	120018

Housing and ports

	Housing P/N
0 = No housing	No housing
4B = Al, 1/2 BSP	CP12-2-4B
6B = Al, 3/4 BSP	CP12-2-6B
10S = Al, #10 SAE	CP12-2-10S
12S = Al, #12 SAE	CP12-2-12S

Adjustment option

E = External
K = Knob

ENGINEERING
TOMORROW

Flow Control Valves Technical Information

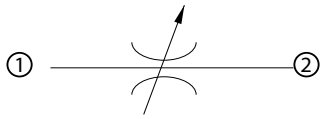
Needle Valve, Bi-Directional

CP612-1

OPERATION

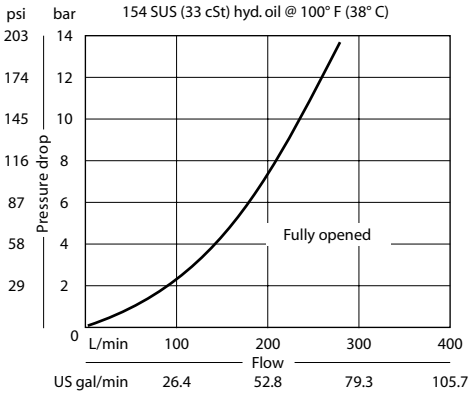
This valve is a non-pressure compensated, adjustable flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



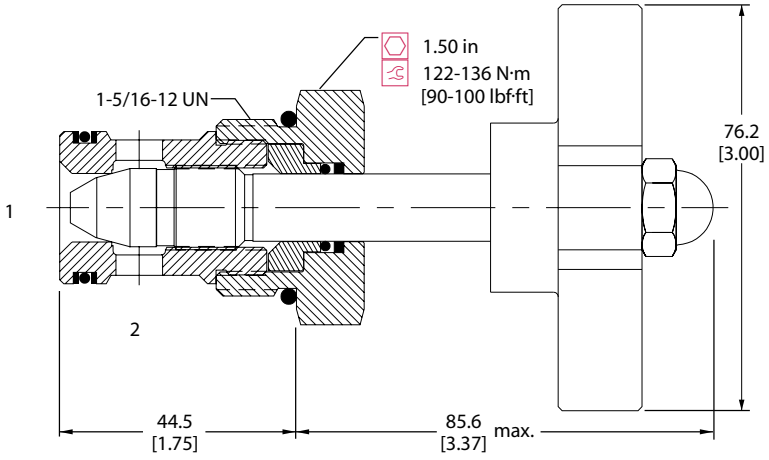
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar [100 psi]	190 l/min [50 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	0.31 kg [0.68 lb]
Cavity	**SDC16-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP612 - 1 - B - 16S

Seals

	Seal kit
B = Buna-N	120567
V = Viton	120568

Housing and ports	**Housing P/N**
0 = No Housing	No Housing
DG6B = AL,3/4 BSP	SDC16-2-DG-6B
DG8B = AL, 1 BSP	SDC16-2-DG-8B
12S = AL, #12 SAE	SDC16-2-12S
16S = AL, #16 SAE	SDC16-2-16S

Other housings available

ENGINEERING
TOMORROW

Flow Control Valves Technical Information

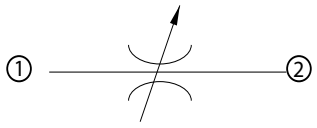
Needle Valve, Bi-Directional

CP612-2

OPERATION

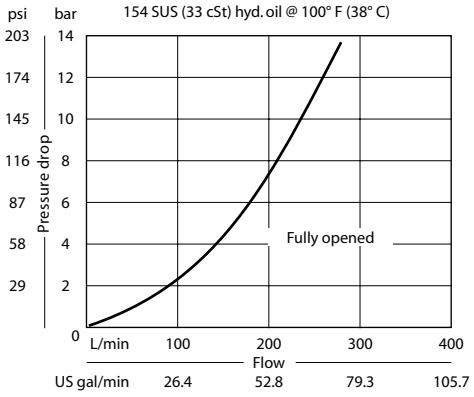
This valve is a non-pressure compensated, adjustable flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



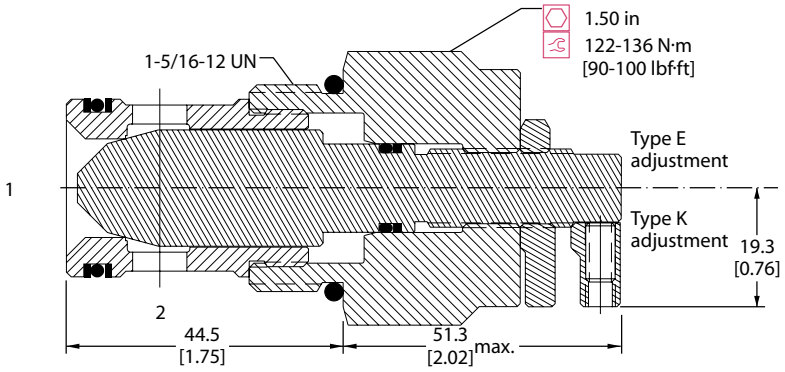
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar [100 psi]	190 l/min [50 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	0.48 kg [1.06 lb]
Cavity	**SDC16-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP612 - 2 - B - 16S - K

Seals

	Seal kit
B = Buna-N	120567
V = Viton	120568

Housing and ports

	Housing P/N
0 = No Housing	No Housing
DG6B = AL,3/4 BSP	SDC16-2-DG-6B
DG8B = AL, 1 BSP	SDC16-2-DG-8B
12S = AL, #12 SAE	SDC16-2-12S
16S = AL, #16 SAE	SDC16-2-16S

Other housings available

Adjustment option

E = External
K = Knob

ENGINEERING
TOMORROW

Flow Control Valves Technical Information

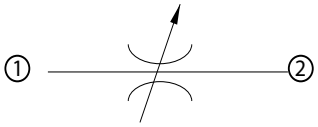
Needle Valve, Bi-Directional

CP613-1

OPERATION

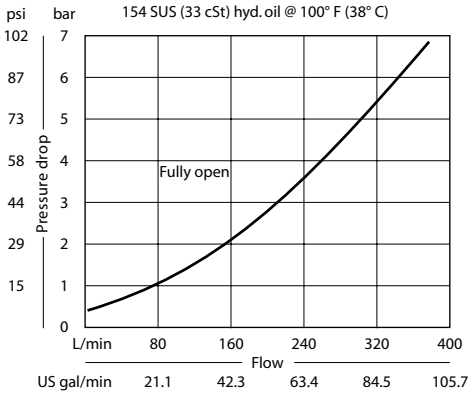
This valve is a non-pressure compensated, adjustable flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



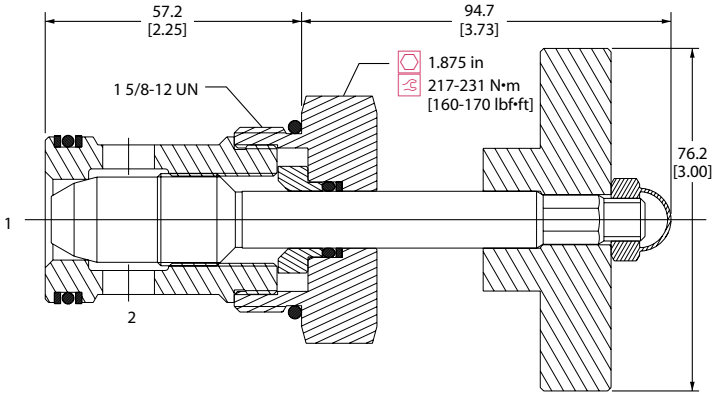
Specifications

Rated pressure	210 bar 3000 psi
Rated flow at 7 bar [100 psi]	380 l/min [100 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	0.85 kg [1.87 lb]
Cavity	**SDC20-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP613-1-B-16S

Housing and ports

			Housing P/N
0	=	No Housing	No Housing
8B	=	AL,1 BSP	CP20-2-8B
10B	=	AL, 1-1/4 BSP	CP20-2-10B
16S	=	AL, #16 SAE	CP20-2-16S
20S	=	AL, #20 SAE	CP20-2-20S

Other housings available

Seals

	Seal kits
B = Buna-N	120172
V = Viton	120173

ENGINEERING TOMORROW

Flow Control Valves Technical Information

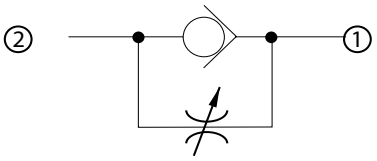
Needle Valve, Bi-Directional, Fine Metering, Reverse Free Flow

CP610-7

OPERATION

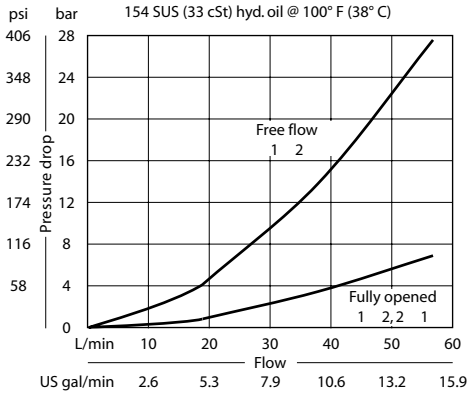
This valve is an adjustable orifice with free reverse flow.

Schematic



SPECIFICATIONS

Theoretical performance



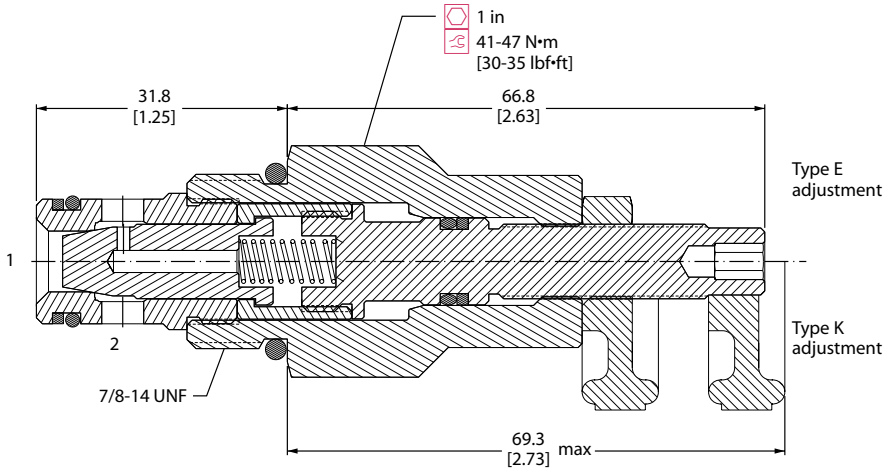
Specifications

Rated pressure	350 bar [5075 psi]
Rated flow at 7 bar [100 psi]	55 l/min [15 US gal/min]
Leakage	30 drops/min @ Rated pressure
Weight	0.18 kg [0.40 lb]
Cavity	**SDC10-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP610 - 7 - B - 8S - K

Seals

	Seal kit
B = Buna-N	120015
V = Viton	120016

Housing and ports / **Housing P/N**

0 = No Housing	No Housing
DG3B = AL,3/8 BSP	SDC10-2-DG-3B
DG4B = AL, 1/2 BSP	SDC10-2-DG-4B
6S = AL, #6 SAE	CP10-2-6S
8S = AL, #8 SAE	CP10-2-8S

Other housings available

Adjustment option

E = External
K = Knob

ENGINEERING TOMORROW

Flow Control Valves Technical Information

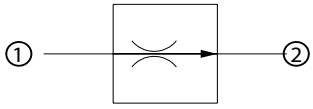
Fixed Setting, Restrictive Type

CP308-1

OPERATION

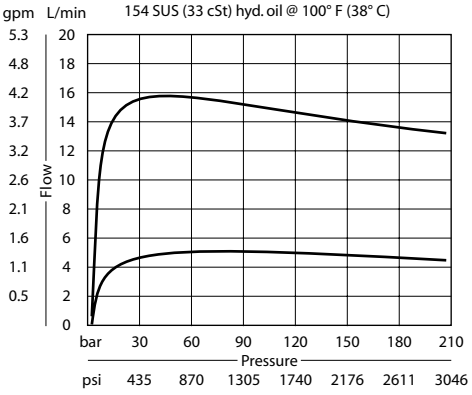
This valve is a fixed pressure compensated flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



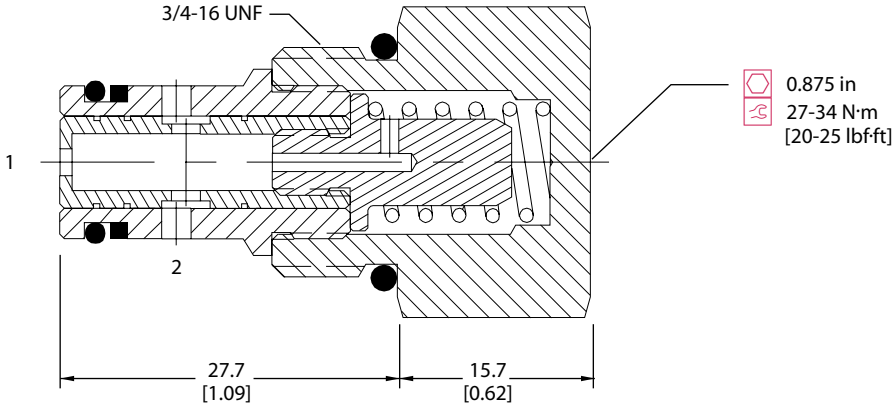
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	15 l/min [4 US gal/min]
Weight	0.08 kg [0.17 lb]
Accuracy ± 20%	0.4-1.88 l/min [0.1-0.49 US gal/min]
± 15%	1.89-5.67 l/min [0.5-1.49 US gal/min]
± 10%	5.68-15.1 l/min [1.5-4.0 US gal/min]
Cavity	**SDC08-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP308 - 1 - B - 6S - 1.0

Seals

B	=	Buna-N
V	=	Viton

Seal kit

120221	
120022	

Housing and ports

			Housing P/N
0	=	No Housing	No Housing
DG2B	=	Al, 1/4 BSP	SDC08-2-DG-2B
DG3B	=	Al, 3/8 BSP	SDC08-2-DG-3B
4S	=	Al, #4 SAE	CP08-2-4S
6S	=	Al, #6 SAE	CP08-2-6S

Other housings available

Regulated Flow

		L/min	[US gal/min]
0.1	=	.4	[0.1]
		To	
4.0	=	15.1	[4.0]

ENGINEERING TOMORROW

Flow Control Valves Technical Information

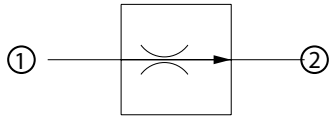
Fixed Setting, Restrictive Type

CP300-1

OPERATION

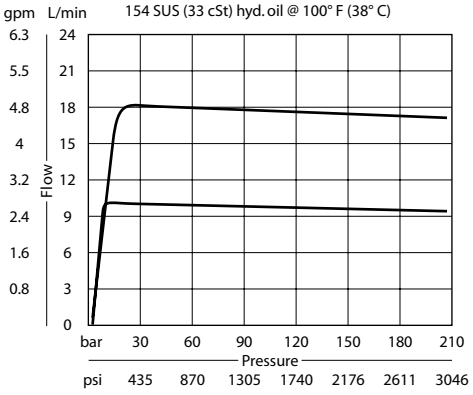
This valve is a fixed pressure compensated flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



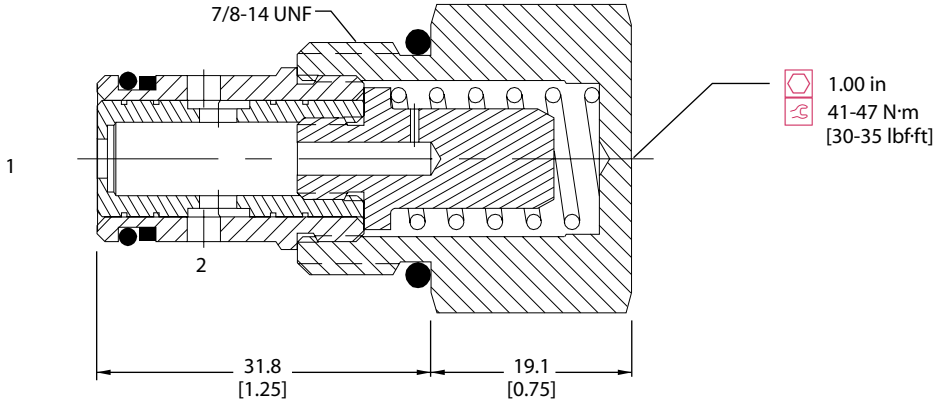
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	23 l/min [6 US gal/min]
Weight	0.12 kg [0.26 lb]
Accuracy ± 20%	0.4-1.88 l/min [0.1-0.49 US gal/min]
± 15%	1.89-5.67 l/min [0.5-1.49 US gal/min]
± 10%	5.68-22.7 l/min [1.5-6.0 US gal/min]
Cavity	**SDC10-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP300 - 1 - B - 8S - 2.5

Seals

B	= Buna-N	
V	= Viton	

Seal kit

120015	
120016	

Housing and ports

0	=	No Housing
DG3B	=	Al, 3/8 BSP
DG4B	=	Al, 1/2 BSP
6S	=	Al, #6 SAE
8S	=	Al, #8 SAE

Other housings available

Housing P/N

No Housing
SDC10-2-DG-3B
SDC10-2-DG-4B
CP10-2-6S
CP10-2-8S

Regulated Flow

	L/min	[US gal/min]
0.5	= 1	[0.5]
	to	
6.0	= 22.7	[6.0]

ENGINEERING TOMORROW

Flow Control Valves Technical Information

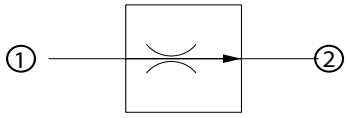
Fixed Setting, Restrictive Type

CP301-1

OPERATION

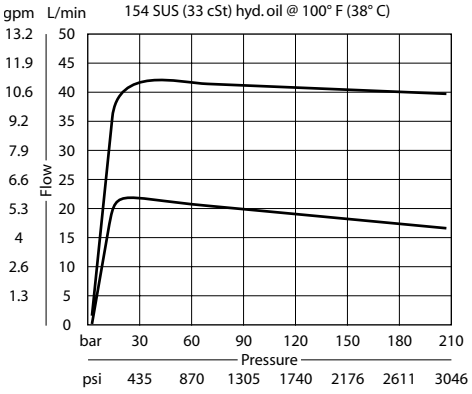
This valve is a fixed pressure compensated flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



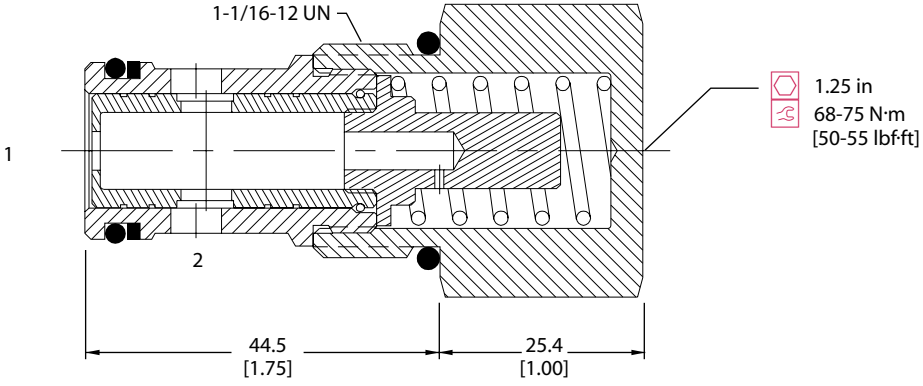
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	56.8 l/min [15 US gal/min]
Weight	0.24 kg [0.52 lb]
Accuracy ± 20%	1.9-7.5 l/min [0.5-1.99 US gal/min]
± 15%	7.6-56.8 l/min [2-15 US gal/min]
Cavity	**CP12-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP301 - 1 - B - 12S - 10.0

Seals

		Seal kit
B	= Buna-N	120017
V	= Viton	120018

Housing and ports

		Housing P/N
0	= No Housing	No Housing
4B	= Al, 1/2 BSP	CP12-2-4B
6B	= Al, 3/4 BSP	CP12-2-6B
10S	= Al, #10 SAE	CP12-2-10S
12S	= Al, #12 SAE	CP12-2-12S

Other housings available

Regulated Flow

	L/min	[US gal/min]
0.5	= 1.9	[0.5]
	to	
15.0	= 56.8	[15.0]

ENGINEERING TOMORROW

Flow Control Valves Technical Information

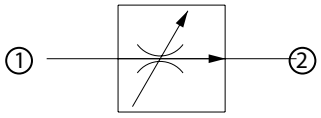
Adjustable, Restrictive Type

CP308-2

OPERATION

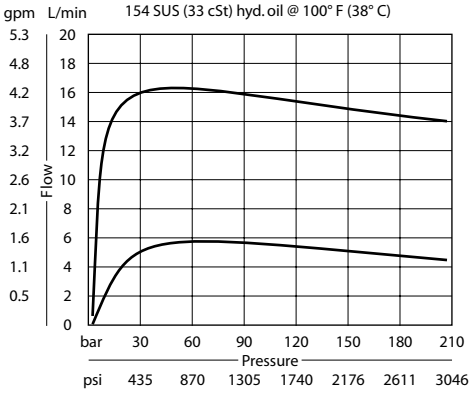
This valve is a limited adjustment pressure compensated flow control valve. To increase the flow, turn the adjustment screw clockwise. To decrease the flow, turn the adjustment screw counter-clockwise.

Schematic



SPECIFICATIONS

Theoretical performance



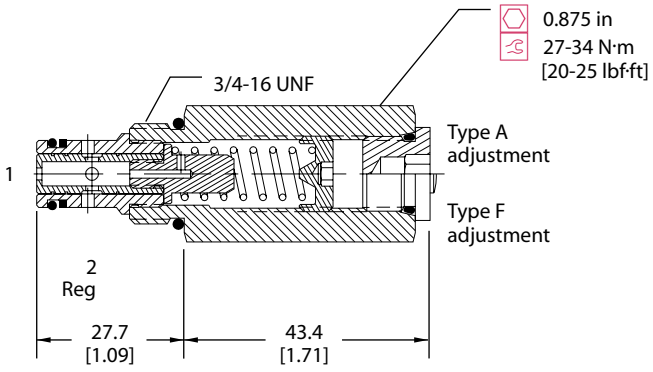
Specifications

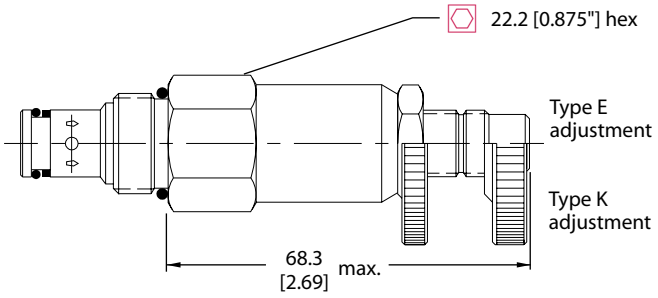
Rated pressure	210 bar [3000 psi]
Max regulated flow	15 l/min [4 US gal/min]
Weight	0.15 kg [0.32 lb]
Accuracy ± 20%	0.4-1.88 l/min [0.1-0.49 US gal/min]
± 15%	1.89-5.67 l/min [0.5-1.49 US gal/min]
± 10%	5.68-15.1 l/min [1.5-4.0 US gal/min]
Flow Adjustment Range	± 25% of normal setting
Cavity	**SDC08-2**

DIMENSIONS

mm in

Cross-sectional view





ORDERING INFORMATION

CP308 - 2 - B - 6S - A - 1.0

Seals

B	=	Buna-N
V	=	Viton

Seal kit

120221	
120222	

Housing and ports

			Housing P/N
0	=	No Housing	No Housing
DG2B	=	Al, 1/4 BSP	SDC08-2-DG-2B
DG3B	=	Al, 3/8 BSP	SDC08-2-DG-3B
4S	=	Al, #4 SAE	CP08-2-4S
6S	=	Al, #6 SAE	CP08-2-6S

Other housings available

Regulated Flow

		L/min	[US gal/min]
0.1	=	.4	[0.1]
		To	
4.0	=	15.1	[4.0]

Adjustment option

A	=	Internal
E	=	External
F	=	Tamper resistant
K	=	Knob

ENGINEERING TOMORROW

Flow Control Valves Technical Information

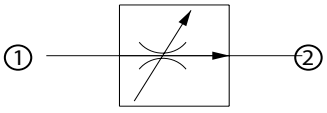
Adjustable, Restrictive Type

CP300-2

OPERATION

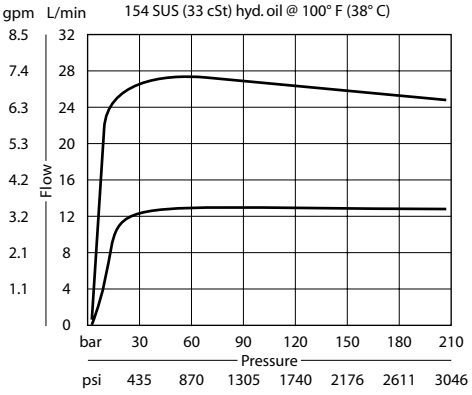
This valve is a limited adjustment pressure compensated flow control valve. To increase the flow, turn the adjustment screw clockwise. To decrease the flow, turn the adjustment screw counter-clockwise.

Schematic



SPECIFICATIONS

Theoretical performance



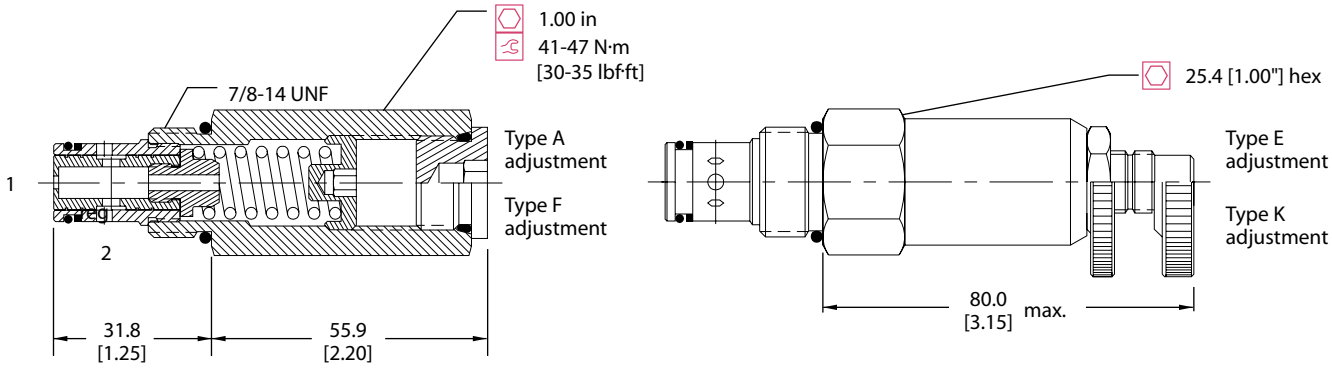
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	22.7 l/min [6 US gal/min]
Weight	0.24 kg [0.52 lb]
Accuracy ± 20%	0.4-1.88 l/min [0.1-0.49 US gal/min]
± 15%	1.89-5.67 l/min [0.5-1.49 US gal/min]
± 10%	5.68-22.7 l/min [1.5-6.0 US gal/min]
Flow Adjustment Range	± 25% of normal setting
Cavity	**SDC10-2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP300 - 2 - B - 8S - A - 2.5

Seals
B = Buna-N
V = Viton

Seal kit
120015
120016

Housing and ports

			Housing P/N
0	=	No Housing	No Housing
DG3B	=	Al, 3/8 BSP	SDC10-2-DG-3B
DG4B	=	Al, 1/2 BSP	SDC10-2-DG-4B
6S	=	Al, #6 SAE	CP10-2-6S
8S	=	Al, #8 SAE	CP10-2-8S

Other housings available

Regulated Flow

L/min		[US gal/min]
0.5	= 2.4	[0.5]
To		
6.0	= 22.7	[6.0]

Adjustment option
A = Internal
E = External
F = Tamper resistant
K = Knob

ENGINEERING TOMORROW

Flow Control Valves Technical Information

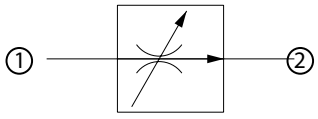
Adjustable, Restrictive Type

VR 06

OPERATION

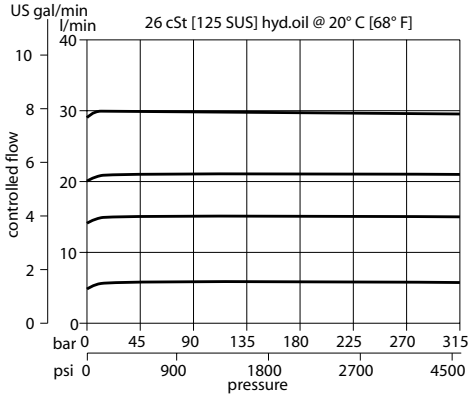
This valve is a limited adjustment, pressure compensated, restrictive-type flow control valve. To increase the flow, turn the adjustment screw clockwise. To decrease the flow, turn the adjustment screw counter-clockwise.

Schematic



SPECIFICATIONS

Theoretical performance



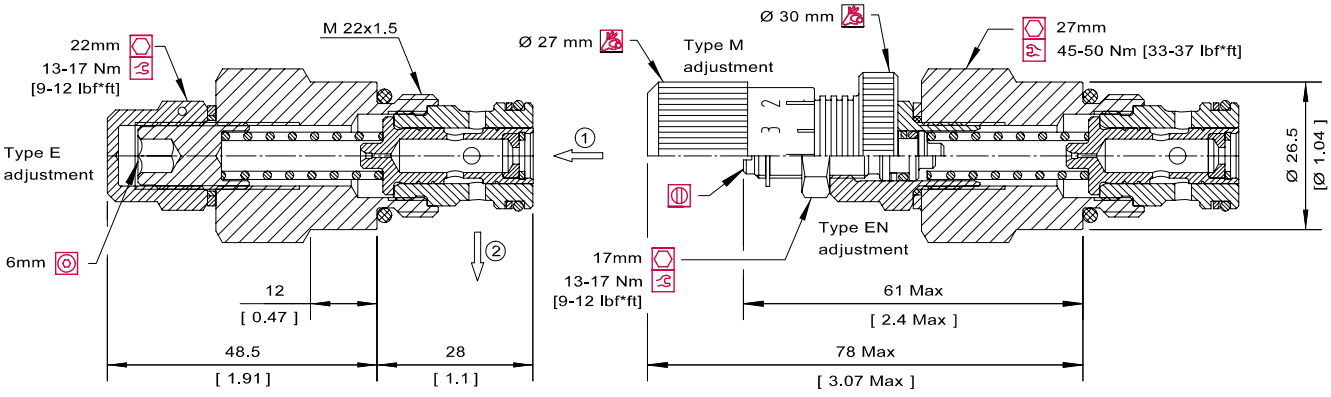
Specifications

Rated pressure	315 bar [4500 psi]
Max regulated flow	30 l/min [8 US gal/min]
Weight	0.19 kg [0.42 lb]
Cavity	**NCS06/2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

VR 06 - EN-1.25 - 00 - V

Adjustment
E = Internal screw
EN = External screw
M = Handwheel

Orifice size

mm		L/min	[US gal/m]
1.25	=	1-3	[0.3-0.8]
2.00	=	3-7	[0.8-1.8]
3.00	=	6-18	[1.6-4.8]
3.50	=	10-30	[2.6-7.9]

Other orifices available consult factory

Seals
V = Viton
Omit = Buna-N

Seal kit
230000380
230000060

Housing and ports

		Housing P/N
00	= No Housing	No Housing
DG3/8	= AL, 3/8 BSP	NCS06/2-DG-3/8
DG1/2	= AL, 1/2 BSP	NCS06/2-DG-1/2
DG6S	= AL, #6 SAE	NCS06/2-DG-6S
DG8S	= AL, #8 SAE	NCS06/2-DG-8S

Other housings available

ENGINEERING TOMORROW

Flow Control Valves Technical Information

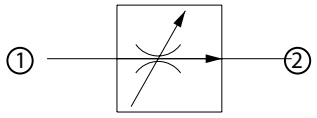
Adjustable, Restrictive Type

VR 12

OPERATION

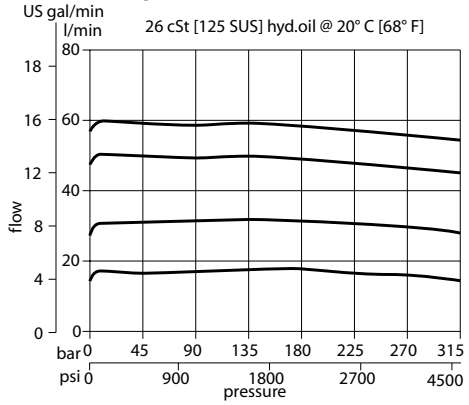
This valve is a limited adjustment, pressure compensated, restrictive-type flow control valve. To increase the flow, turn the adjustment screw clockwise. To decrease the flow, turn the adjustment screw counter-clockwise.

Schematic



SPECIFICATIONS

Theoretical performance



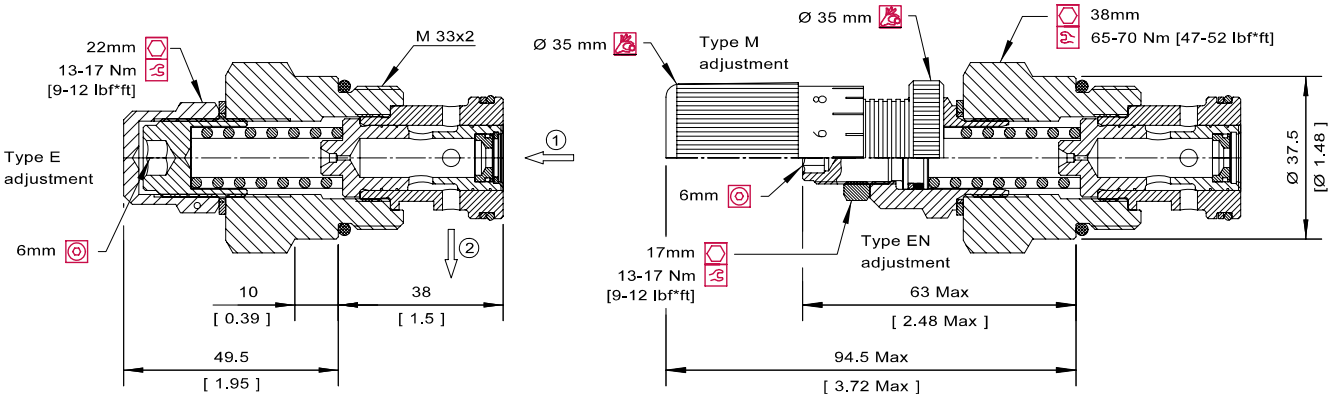
Specifications

Rated pressure	315 bar [4500 psi]
Max regulated flow	60 l/min [16 US gal/min]
Weight	0.44 kg [0.97 lb]
Cavity	**NCS12/2**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

VR 12 - EN-1.25 - 00 - V

Adjustment
E = Internal screw
EN = External screw
M = Handwheel

Orifice size

mm		L/min	[US gal/m]
1.50	=	2.5-6.5	[0.7-1.7]
2.50	=	6-16	[1.6-4.2]
4.00	=	16-40	[4.2-10.6]
5.00	=	25-60	[6.6-15.8]

Seals
V = Viton
Omit = Buna-N

Seal kit
230000470
230000120

Housing and ports

			Housing P/N
00	=	No Housing	No Housing
DG1/2	=	AL, 1/2 BSP	NCS12/2-DG-1/2
DG3/4	=	AL, 3/4 BSP	NCS12/2-DG-3/4
DG8S	=	AL, #8 SAE	NCS12/2-DG-8S
DG12S	=	AL, #12 SAE	NCS12/2-DG-12S

Other housings available

Flow Control Valves Technical Information
High Pressure Flow Control - Pressure Compensated
HFCV10-RT

OPERATION

The HFCV10-RT is a high pressure, fully adjustable, pressure compensated, restrictive-type flow control. This valve maintains a constant flow rate out of port 2 regardless of pressure variations at port 2 or port 1. An integral check valve allows unrestricted flow from port 2 to port 1.

The valve can be adjusted from closed to fully open (5 turns) with counter-clockwise rotation of the adjustment screw. Regulated flow ranges are available pre-set from the factory in 1 LPM increments between 1-11 LPM (0.26-2.9 US gal/min) and also at flows of 0.38 LPM (0.1 US gal/min) and 11.4 LPM (3.0 US gal/min).

APPLICATIONS

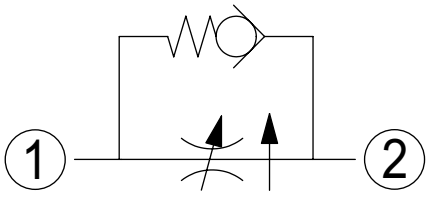
The HFCV10-RT features fine adjustability and can be used for meter-in, meter-out applications to control actuator speeds.

SPECIFICATIONS

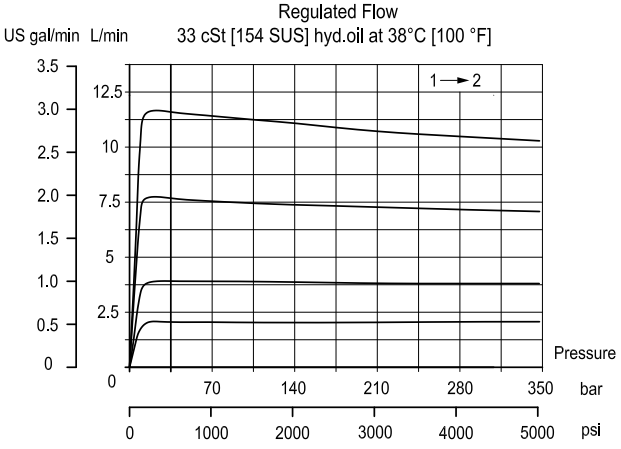
Rated Pressure*	350 bar [5075 psi]
Min Regulated Flow	0.38 lpm (0.1 US gal/min)
Max Regulated Flow	11.4 lpm (3.0 US gal/min)
Accuracy	+/- 12%
Leakage	40 ml/min @ rated pressure
Weight	0.17 kg 0.37 lbs
Cavity	**SDC10-2**

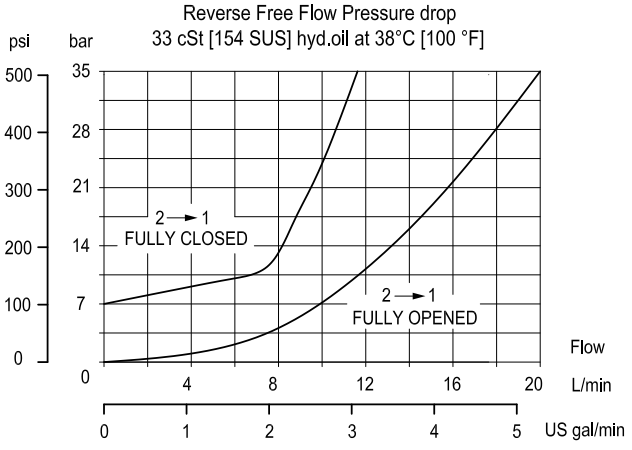
* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

SCHEMATIC



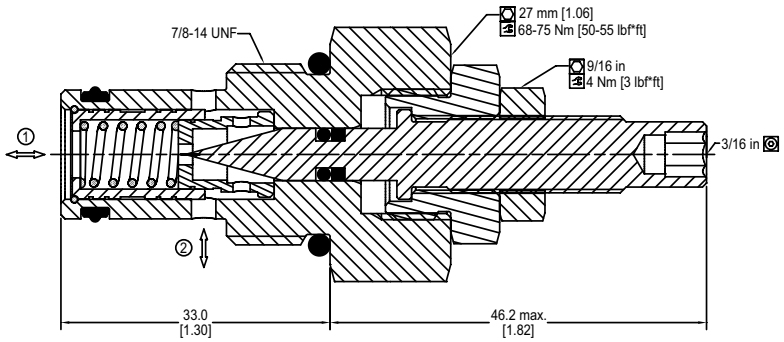
PERFORMANCE CURVES





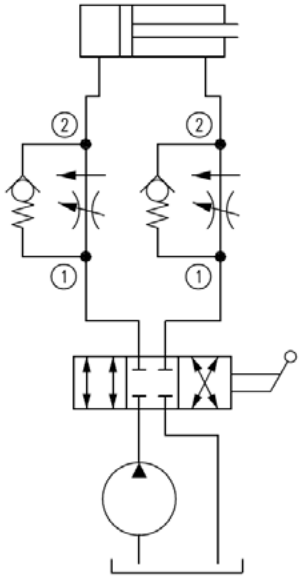
Flow Control Valves Technical Information
High Pressure Flow Control - Pressure Compensated
HFCV10-RT

DIMENSIONS
mm in

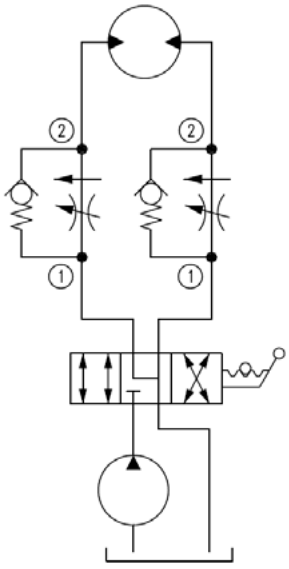


EXAMPLE CIRCUITS

Compensated Flow Control, Meter-In Cylinder



Compensated Flow Control, Meter-In Motor



ORDERING INFORMATION

HFCV10 - RT - P - E - 1.0 - 00

High Pressure Flow Control, Pressure Compensated, Variable Orifice, 10 Size, Restrictive Type

Seal Option

Code	Seal Material	Seal kit
P	Polyurethane Single Seal	11132135
V	Viton	354000819

Adjustment Type

Code	Adjustment Type
E	External
K	Hand Knob

Regulated Flow L/min [US gal/min]

0.38 [0.1]
1.0-11.0 [0.26-2.9]*
11.4 [3.0]
*Factory settings in 1 LPM increments

Housings & Ports	Housing P/N
00 = Cartridge Only	No Body
DG3B = 3/8 BSP, AL	SDC10-2-DG3B
DG4B = 1/2 BSP, AL	SDC10-2-DG4B
S4B = 1/2 BSP, DUCTILE	CP10-2-S4B
6S = #6 SAE, AL	CP10-2-6S
8S = #8 SAE, AL	CP10-2-8S
S8S = #8 SAE, DUCTILE	CP10-2-S8S

ENGINEERING TOMORROW

Flow Control Valves Technical Information

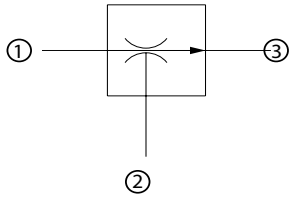
Fixed Setting, Priority Type

CP310-1

OPERATION

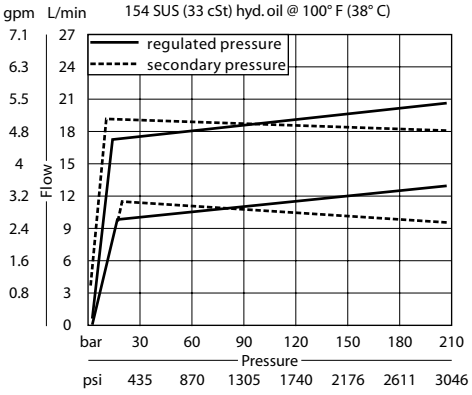
This valve is a fixed, pressure compensated priority-type flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



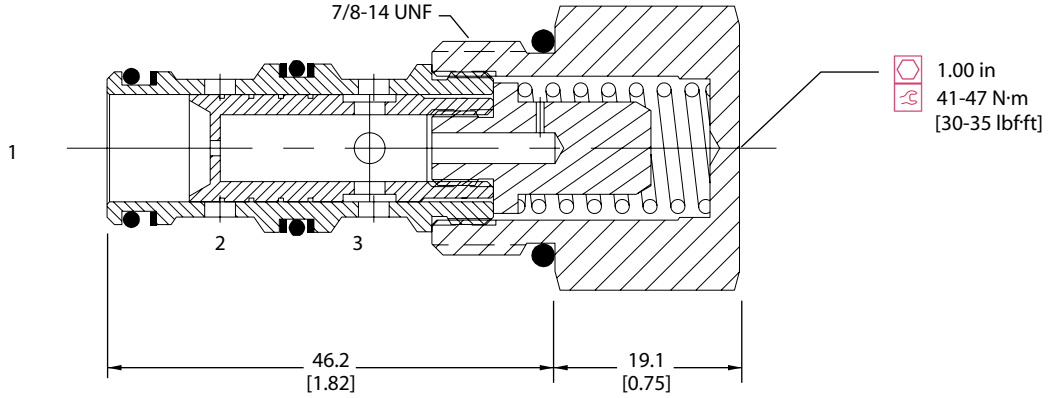
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	23 l/min [6 US gal/min]
Max inlet flow	38 l/min [10 US gal/min]
Weight	0.13 kg [0.29 lb]
Accuracy ± 20%	0.4- 1.88 l/min [0.1-0.49 US gal/min]
± 15%	1.89-5.67 l/min [0.5-1.49 US gal/min]
± 10%	5.68-22.7 l/min [1.5-6 US gal/min]
Cavity	**SDC10-3**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP31 0 - 1 - B - 8 S - 2.5

Seals
B = Buna-N
V = Viton

Seal kit
120240
11043064

Housing and ports

			Housing P/N
00	=	No Housing	No Housing
SE3B	=	Al, 3/8 BSP	SDC10-3-SE-3B
SE4B	=	Al, 1/2 BSP	SDC10-3-SE-4B
6S	=	Al, #6 SAE	CP10-3-6S
8S	=	Al, #8 SAE	CP10-3-8S

Other housings available

Regulated Flow

	L/min	[US gal/m]
0.1	= 0.4	[0.1]
6.0	= 22.7	[6.0]

ENGINEERING
TOMORROW

Flow Control Valves Technical Information

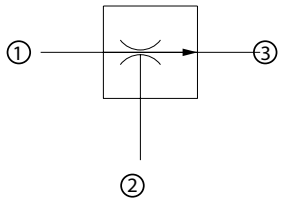
Fixed Setting, Priority Type

VRF 06

OPERATION

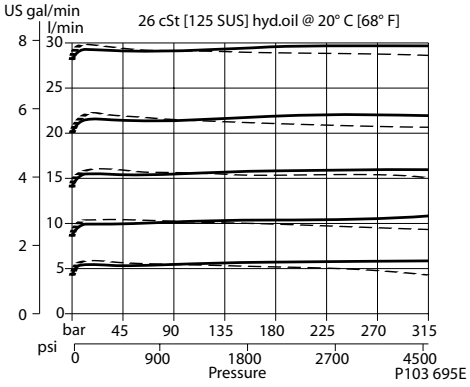
This valve is a fixed, pressure compensated, priority-type flow control.

Schematic



SPECIFICATIONS

Theoretical performance



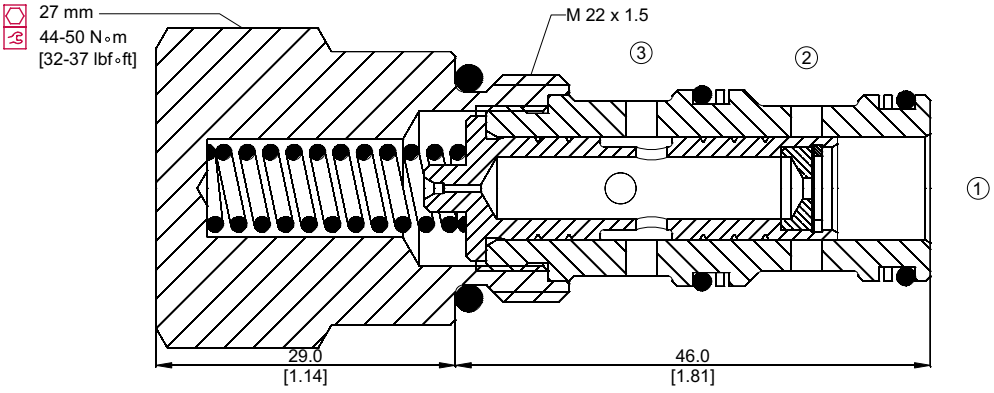
Specifications

Rated pressure	315 bar [4500 psi]
Max regulated flow	26 l/min [7 US gal/min]
Max inlet flow	50 l/min [13 US gal/min]
Weight	0.19 kg [0.42 lb]
Accuracy ± 10%	2.3-25.5 l/min [0.5-6.8 US gal/min]
Cavity	**NCS06/3**

DIMENSIONS

mm in

Cross-sectional view



P103 667

ORDERING INFORMATION

VRF 06 - 1.5 - SE3/8 - V

Orifice size

Orifice		flow L/min	[US gal/min]
0.75	=	1.5	[0.4]
1.00	=	2.0	[0.53]
1.25	=	3.5	[0.92]
1.50	=	4.5	[1.19]
1.75	=	6	[1.58]
2.00	=	9.0	[1.38]
2.25	=	10	[2.64]
2.50	=	12	[3.30]
2.75	=	15	[3.96]
3.00	=	18	[4.75]
3.25	=	21.5	[5.68]
3.50	=	25	[6.73]

Seals

	Seal kit
V = Viton	230000110
Omit = Buna-N	230000070

Housing and ports

			Housing P/N
00	=	No Housing	No Housing
SE3/8	=	AL, 3/8 BSP	NCS06/3-SE-3/8
SE1/2	=	AL, 1/2 BSP	NCS06/3-SE-1/2
SE6S	=	AL, #6 SAE	NCS06/3-SE-6S
SE8S	=	AL, #8 SAE	NCS06/3-SE-8S

Other housings available

P103 722E

ENGINEERING TOMORROW

Flow Control Valves Technical Information

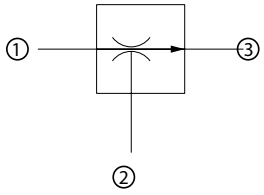
Fixed Setting, Priority Type

CP311-1

OPERATION

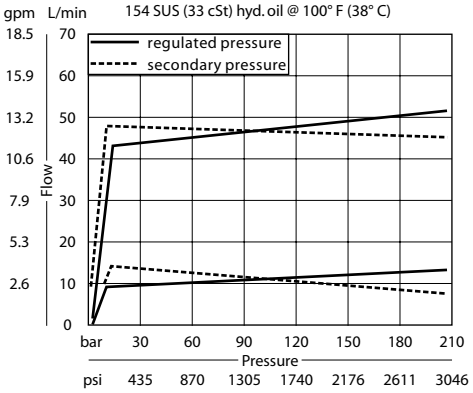
This valve is a fixed, pressure compensated priority-type flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



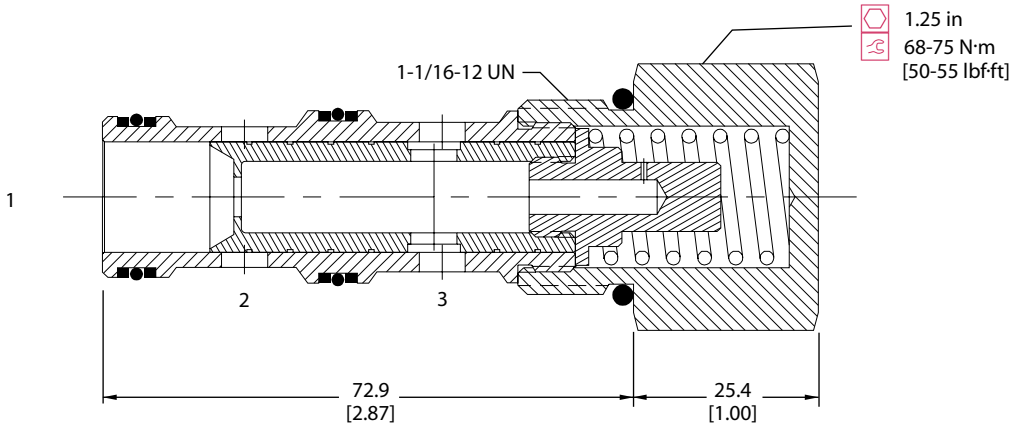
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	45 l/min [12 US gal/min]
Max inlet flow	95 l/min [25 US gal/min]
Weight	0.28 kg [0.61 lb]
Accuracy ± 15% **± 10%**	1.9-7.5 l/min [0.5-1.99 US gal/min] 7.6-45.4 l/min [2-12 US gal/min]
Cavity	**CP12-3**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP311 - 1 - B - 12S - 10.0

Seals
B = Buna-N
V = Viton

Seal kit
120053
120052

Housing and ports

0	=	No Housing
4B	=	Al, 1/2 BSP
6B	=	Al, 3/4 BSP
10S	=	Al, #10 SAE
12S	=	Al, #12 SAE

Other housings available

Housing P/N

No Housing
CP12-3-4B
CP12-3-6B
CP12-3-10S
CP12-3-12S

Regulated Flow

	L/min	[US gal/min]
0.5	= 1.9	[0.5]
12.0	= 45.4	[12.0]

ENGINEERING TOMORROW

Flow Control Valves Technical Information

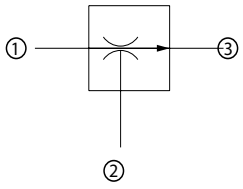
Fixed Setting, Priority Type

CP312-1

OPERATION

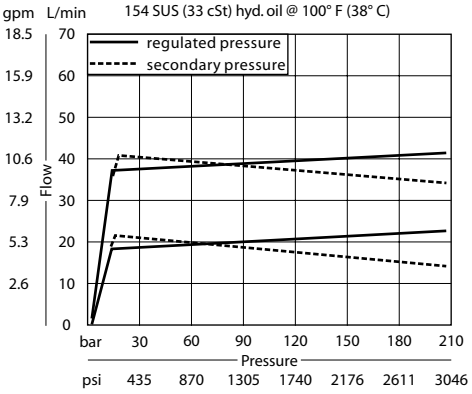
This valve is a fixed, pressure compensated priority-type flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



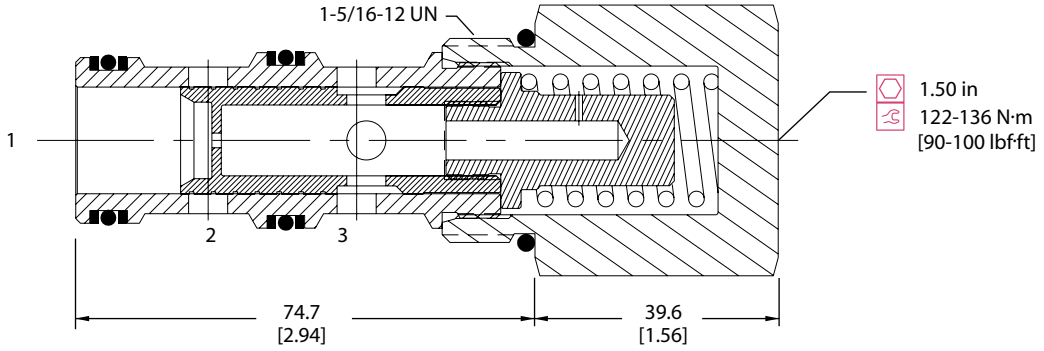
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	64 l/min [17 US gal/min]
Max inlet flow	130 l/min [34 US gal/min]
Weight	0.53 kg [1.17 lb]
Accuracy ± 15% **± 10%**	1.9-7.5 l/min [0.5-2 US gal/min] 7.6-64.3 l/min [2-17 US gal/min]
Cavity	**SDC16-3**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP312-1 - B - 16S - 10.0

Seal Option

Code	Seal Material	Seal kit
B	Buna	120202
V	Viton	120203

Housings & Ports	Housing P/N
0: Cartridge Only	No Housing
SE6B: 3/4 BSP, AL	SDC16-3-SE-6B
SE8B: 1 BSP, AL	SDC16-3-SE-8B
12S: #12 SAE, AL	CP16-3-12S
16S: #16 SAE, AL	CP16-3-16S

Other Housings available

Regulated Flow

Code		L/min	[US gal/min]
0.5	=	1.9	[0.5]
		To	
17.0	=	64.3	[17.0]

ENGINEERING TOMORROW

Flow Control Valves Technical Information

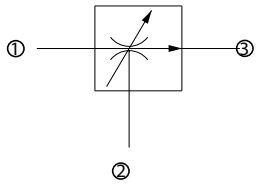
Adjustable, Priority Type

CP310-2

OPERATION

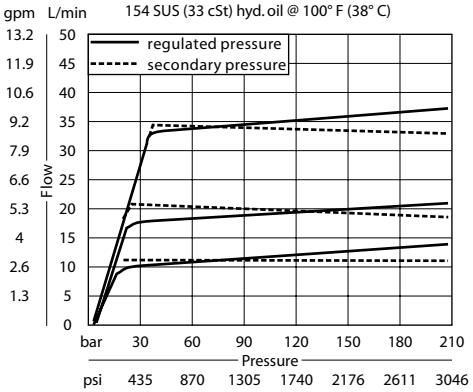
This valve is a limited adjustment, pressure compensated, priority-type flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



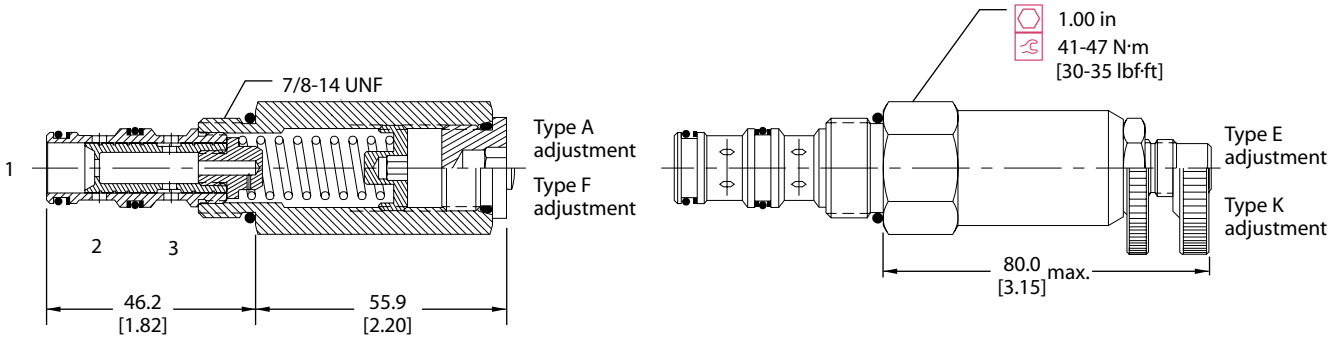
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	22.7 l/min [6 US gal/min]
Max inlet flow	38 l/min [10 US gal/min]
Weight	0.24 kg [0.52 lb]
Accuracy ± 20%	0.4- 1.88 l/min [0.1-0.49 US gal/min]
± 15%	1.89-5.67 l/min [0.5-1.49 US gal/min]
± 10%	5.68-22.7 l/min [1.5-6 US gal/min]
Flow Adjustment Range	± 25% of normal setting
Cavity	**SDC10-3**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP310 - 2 - B - 8S - A - 2.5

Seals
B = Buna-N
V = Viton

Seal kit
120240
11043064

Housing and ports

			Housing P/N
0	=	No Housing	No Housing
SE3B	=	Al, 3/8 BSP	SDC10-3-SE-3B
SE4B	=	Al, 1/2 BSP	SDC10-3-SE-4B
6S	=	Al, #6 SAE	CP10-3-6S
8S	=	Al, #8 SAE	CP10-3-8S

Other housings available

Regulated Flow

		L/min	[US gal/min]
0.1	=	.4	[0.1]
		To	
6.0	=	22.7	[6.0]

Adjustment option
A = Internal
E = External
F = Tamper resistant
K = Knob

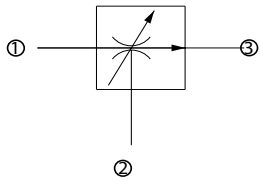
ENGINEERING
TOMORROW

Flow Control Valves Technical Information
Adjustable, Priority Type
VRC 06

OPERATION

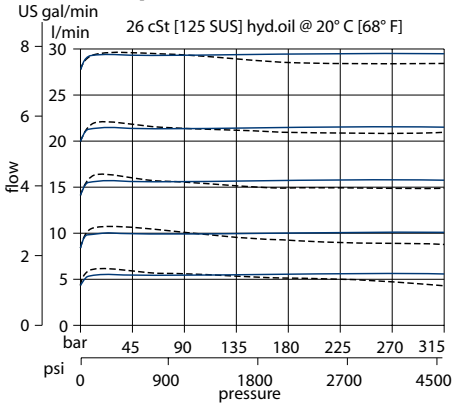
This valve is a limited adjustment, pressure compensated, priority-type flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



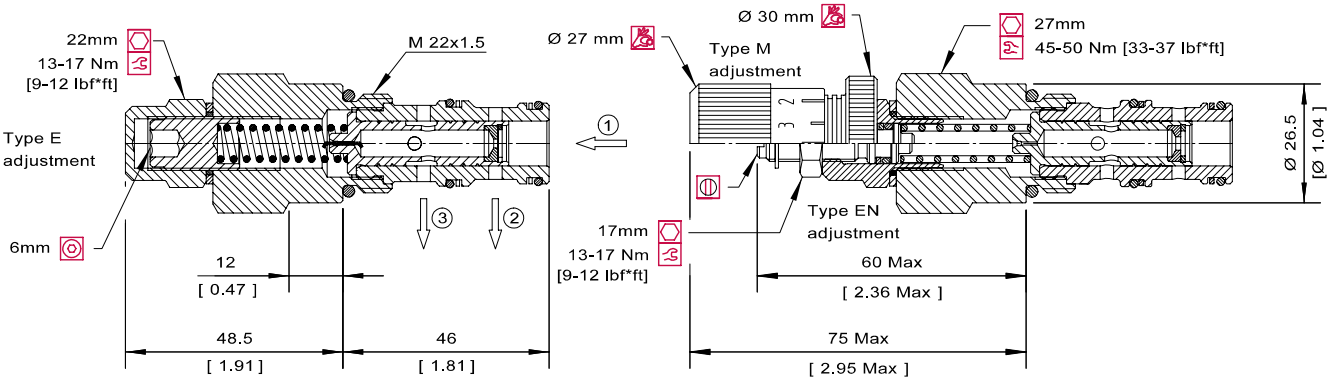
Specifications

Rated pressure	315 bar [4500 psi]
Max regulated flow	30 l/min [8 US gal/min]
Max inlet flow	50 l/min [13 US gal/min]
Weight	0.21 kg [0.46 lb]
Cavity	**NCS06/3**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

VRC 06 - EN-2.0 - SE3/8 - V

Type of adjustment
E = Internal screw
EN = External screw
M = Handwheel

Orifice size

mm		L/min	[US gal/m]
1.25	=	1-4	[0.3-1.1]
2.0	=	3-10	[0.8-2.5]
3.0	=	6-20	[1.6-5.3]
3.5	=	10-30	[2.6-7.9]

other orifices available
consult factory

Seals
V = Viton
Omit = Buna-N

Seal kit
230000110
230000070

Housing and ports

00	=	No Housing
SE3/8	=	AL, 3/8 BSP
SE1/2	=	AL, ½ BSP
SE6S	=	AL, #6 SAE
SE8S	=	AL, #8 SAE

Other housings available

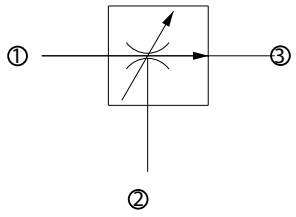
Housing P/N
No Housing
NCS06/3-SE-3/8
NCS06/3-SE-1/2
NCS06/3-SE-6S
NCS06/3-SE-8S

Flow Control Valves Technical Information
Adjustable, Priority Type
VRC 12

OPERATION

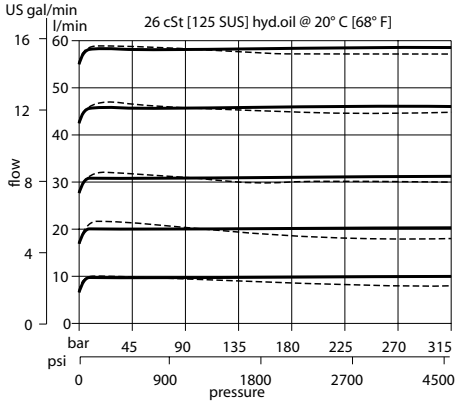
This valve is a limited adjustment, pressure compensated, priority-type flow control valve.

Schematic



SPECIFICATIONS

Theoretical performance



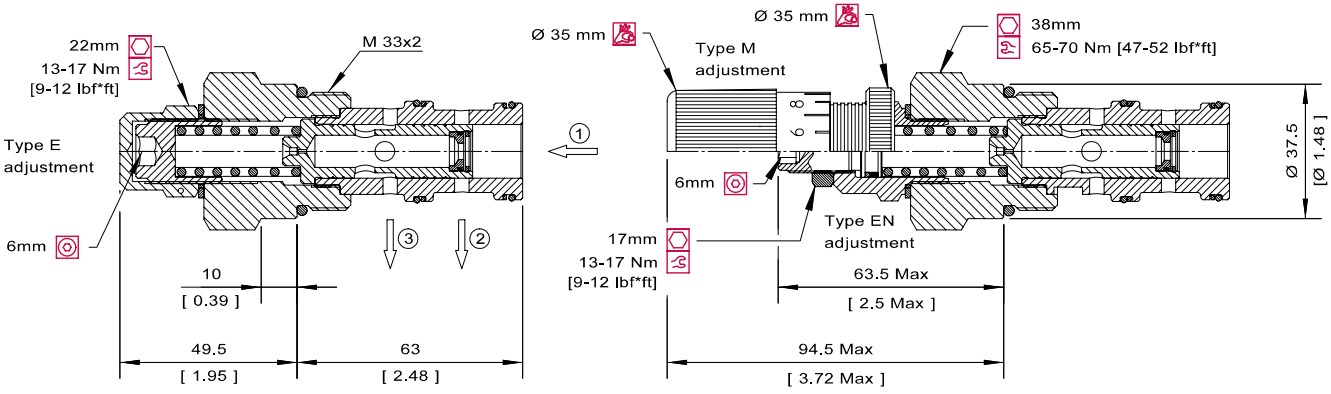
Specifications

Rated pressure	315 bar [4500 psi]
Max regulated flow	73 l/min [19 US gal/min]
Max inlet flow	100 l/min [26 US gal/min]
Weight	0.50 kg [1.10 lb]
Cavity	**NCS12/3**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

VRC 12 - EN-1.5 - SE1/2 - V

Adjustment

E = Internal screw
EN = External screw
M = Handwheel

Orifice size

mm		L/min	[US gal/min]
1.50	=	2.5-6.5	[0.7-1.7]
2.50	=	6-16	[1.6-4.2]
3.50	=	9-32	[2.4-8.4]
4.00	=	16-40	[4.2-10.6]
5.00	=	25-60	[6.6-15.8]
5.75	=	30-73	[7.9-19.3]

Seals

V = Viton
Omit = Buna-N

Seal kit

230000360
230000130

Housing and ports

00	=	No Housing
SE1/2	=	AL, 1/2 BSP
SE3/4	=	AL, 3/4 BSP
SE8S	=	AL, #8 SAE
SE12S	=	AL, #12 SAE

Other housings available

Housing P/N

No Housing
NCS12/3-SE-1/2
NCS12/3-SE-3/4
NCS12/3-SE-8S
NCS12/3-SE-12S

ENGINEERING TOMORROW

Flow Control Valves Technical Information

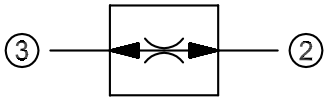
Fixed Setting, Bi-Directional

CP300-6

OPERATION

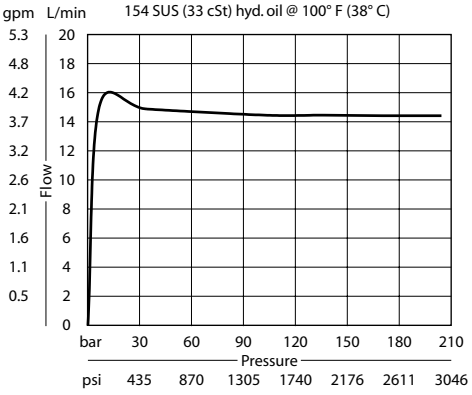
This valve is a fixed setting, pressure compensated, bi-directional flow control valve. NOTE: Port 1 must be blocked for proper operation.

Schematic



SPECIFICATIONS

Theoretical performance



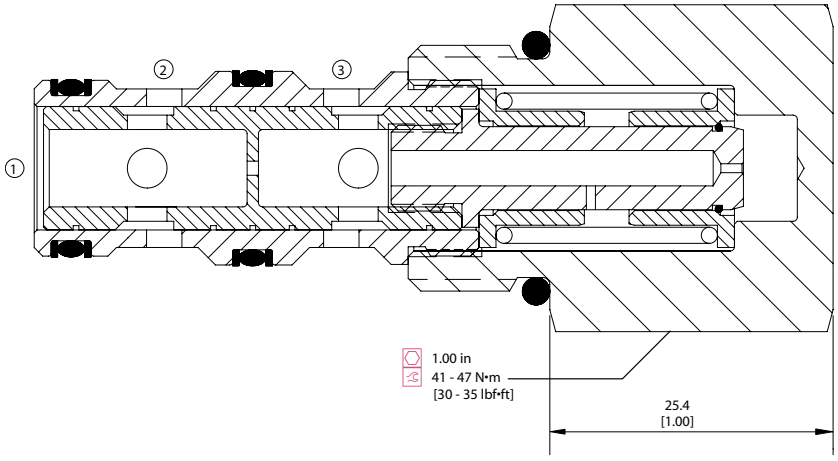
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	22.7 l/min [6 US gal/min]
Weight	0.13 kg [0.29 lb]
Accuracy ± 20%	0.4-1.88 l/min [0.1-0.49 US gal/min]
± 15%	1.89-22.7 l/min [0.49-6.0 US gal/min]
Cavity	**SDC10-3**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP300 - 6 - B - 8S - 2.5

Seals

B	= Buna-N	**Seal kit** 120009
V	= Viton	120010

Housing and ports

			Housing P/N
0	=	No Housing	No Housing
SE3B	=	Al, 3/8 BSP	SDC10-3-SE-3B
SE4B	=	Al, 1/2 BSP	SDC10-3-SE-4B
6S	=	Al, #6 SAE	CP10-3-6S
8S	=	Al, #8 SAE	CP10-3-8S

Other housings available

Regulated Flow

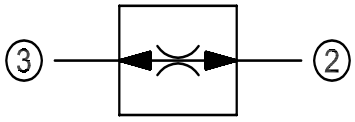
L/min		[US gal/min]
0.1	= 0.4	[0.1]
6.0	= 23.0	[6.0]

Flow Control Valves Technical Information
Fixed Setting, Bi-Directional
FCH10-BD

OPERATION

This valve is a fixed setting, pressure compensated, bi-directional flow control valve. NOTE: Port 1 must be blocked for proper operation.

Schematic

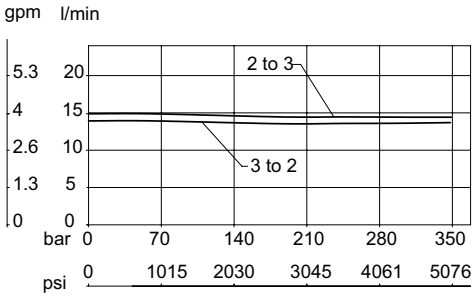


SPECIFICATIONS

Theoretical performance

Performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



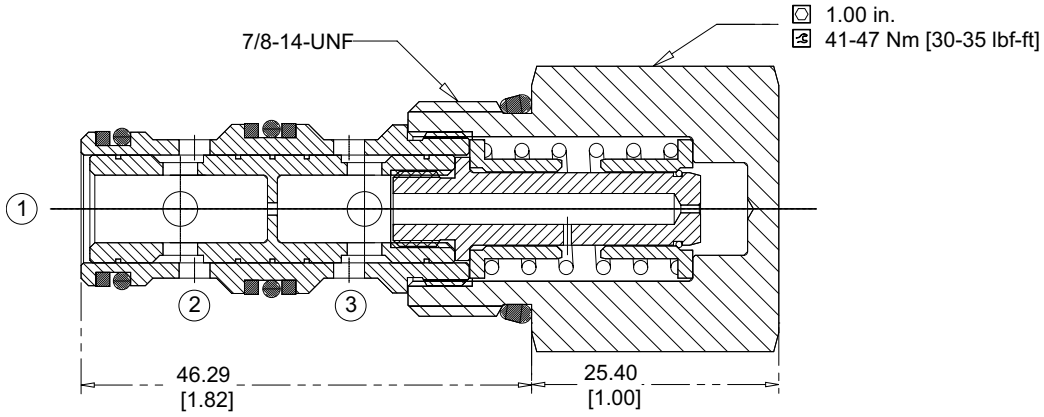
Specifications

Rated pressure	350 bar [5075 psi]
Max regulated flow	23 l/min [6 US gal/min]
Weight	0.14 kg [0.34 lb]
Accuracy ± 20% **± 15%**	0.4-1.88 l/min [0.1-0.49 US gal/min] 1.89-22.7 l/min [0.49-6.0 US gal/min]
Cavity	**SDC10-3**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

FCH10-BD-3.8-U-00

Regulated Flow
0.4 = 0.4 lpm [0.1 gpm]
to
22.7 = 22.7 lpm [6.0 gpm]

Housing and ports	Housing Part #
00 = No Housing	No Housing
DG-3B = Al, 3/8 BSP	SDC10-3-DG-3B
DG-4B = Al, 1/2 BSP	SDC10-3-DG-4B
6S = Al, #6 SAE	CP10-3-6S
8S = Al, #8 SAE	CP10-3-8S

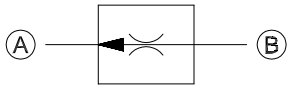
Seals	Seal Kit
U = Urethane	120726

Flow Control Valves Technical Information
In-line
SC 10

OPERATION

This is an in-line restrictive type flow control valve.

Schematic



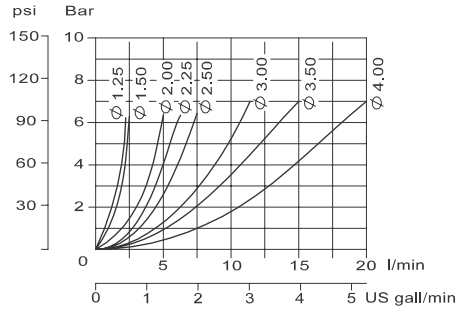
SPECIFICATIONS

Specifications

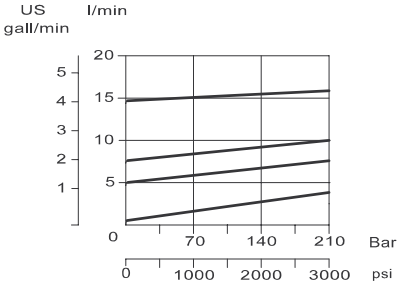
Pressure rating	210 bar [3000 psi]
Max regulated flow	16 l/min [4.2 US gal/min]
Cavity	Consult factory

Theoretical performance

Pressure drop from A⟹B according to orifice diameter
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]

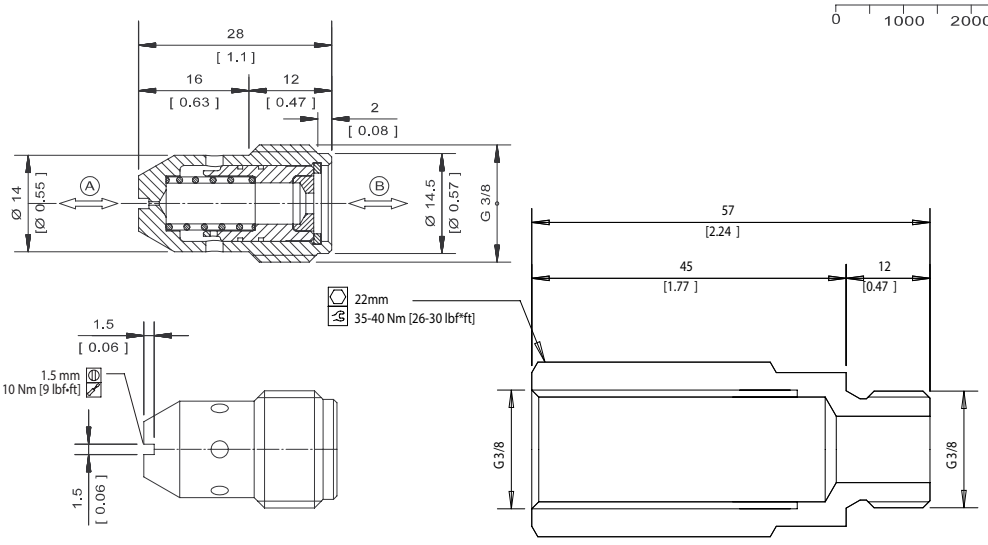


Variation in controlled flow from B⟹A according to pressure
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]



DIMENSIONS

mm in



ORDERING INFORMATION

SC10 - 1.25 - G - 00

- 1.25 = Orifice diameter mm
- G = Flow at 100 bar [1450 psi] l/min [US gal/min]
- 00 = Cartridge only; L = 3/8 BSP

Orifice diameter mm		Flow at 100 bar [1450 psi] l/min [US gal/min]
1.25	=	2.0[0.53]
1.50	=	3.0[0.79]
2.00	=	4.0[1.06]
2.25	=	5.0[1.32]
2.50	=	6.0[1.59]
3.00	=	9.0[2.38]
3.50	=	11.0[2.91]
4.00	=	16.0[4.23]

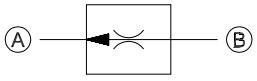
ENGINEERING TOMORROW

Flow Control Valves Technical Information
In-line
SC 13

OPERATION

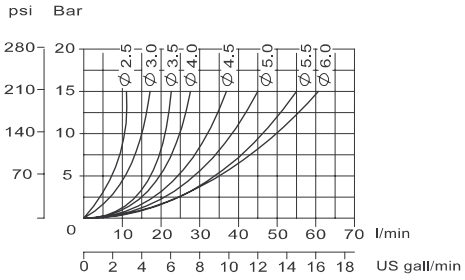
This is an in-line restrictive type flow control valve.

Schematic



Theoretical performance

Pressure drop from A⇒B according to orifice diameter
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]

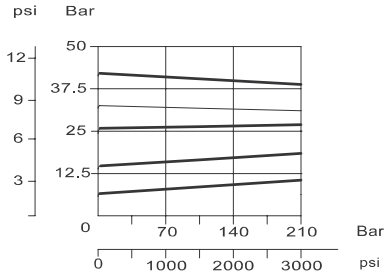


SPECIFICATIONS

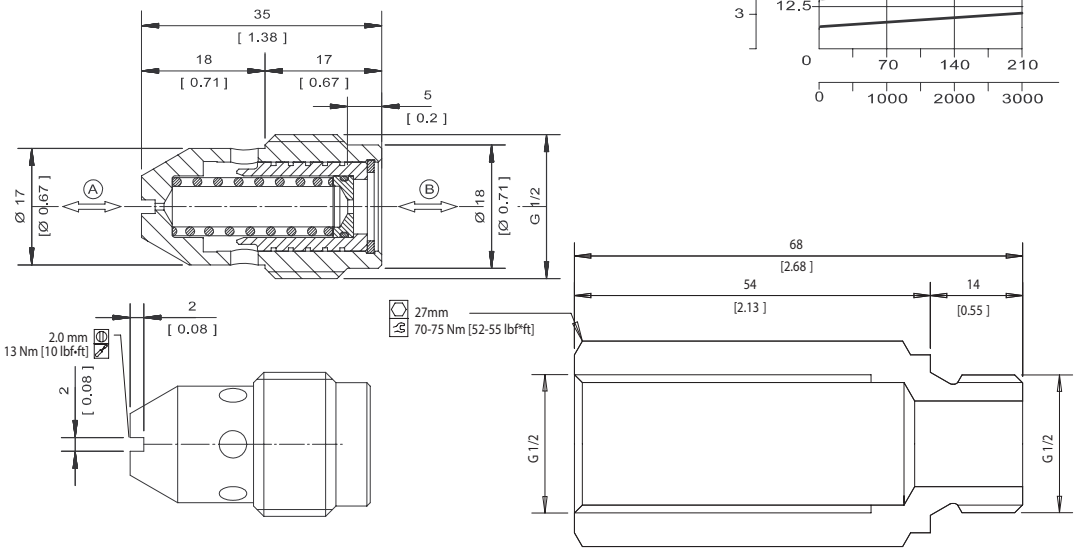
Specifications

Pressure rating	207 bar [3000 psi]
Max regulated flow	47 l/min [12 US gal/min]
Cavity	Consult factory

Variation in controlled flow from B⇒A according to pressure
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]



DIMENSIONS



ORDERING INFORMATION

SC13/4.5 - G - 00

Orifice flow — 00 = Cartridge only; L = 1/2 BSP

Orifice diameter mm		Flow at 100 bar [1450 psi] l/min [US gal/min
2.50	=	9 [2.38]
3.00	=	12 [3.17]
3.50	=	17 [4.49]
4.00	=	21 [5.55]
4.50	=	27 [7.13]
5.00	=	32 [8.45]
5.50	=	40 [10.57]
6.00	=	47 [12.42]

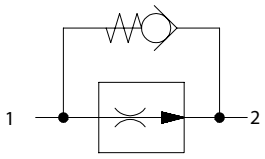
Flow Control Valves Technical Information
In-line
CP9014-1

OPERATION

This is an in-line restrictive type flow control valve with free reverse flow.

SPECIFICATIONS

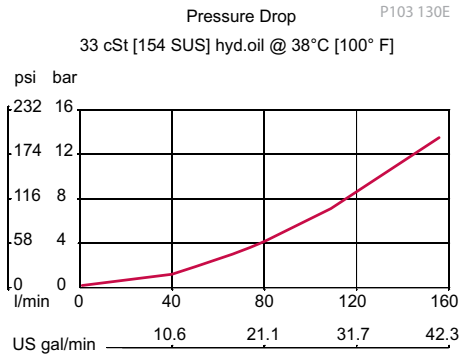
Schematic

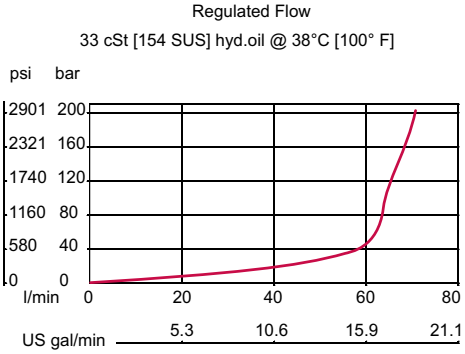


Specifications

Pressure rating	207 bar [3000 psi]
Rated Free Flow at 7 bar [100 psi]	113 l/min [30 US gal/min]
Max regulated flow	106 l/min [28 US gal/min]
Cavity	Modified SAE #14 port

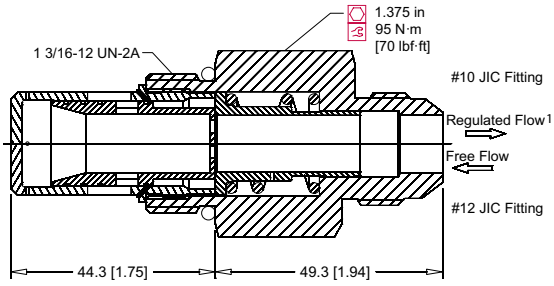
Theoretical performance

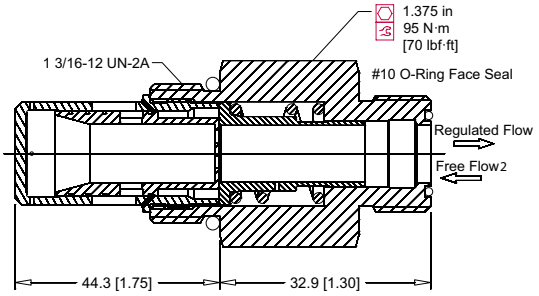




DIMENSIONS

mm [in]





ORDERING INFORMATION

CP9014-1-B-10 - 24

Seals

	Seal kit
B = Buna-N	720025
V = Viton	720363

Flow Setting

	l/min	USgal/min
18 =	68.1	18
24 =	90.8	24
28 =	106.0	28

Consult factory for complete list of flows.

Connection(Port2)

10 = #10SAE37° JIC Fitting	7/8-14UNC-2A
12 = #12SAE37° JIC Fitting	11/16-12UN-2A
FS10 = #10SAEO-Ring Face Seal	17/16-12UN-2A

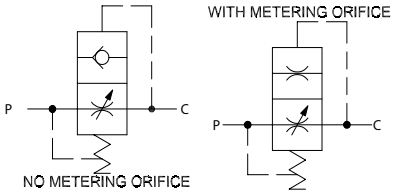
Flow Control Valves Technical Information
Velocity Fuse
BC 06

OPERATION

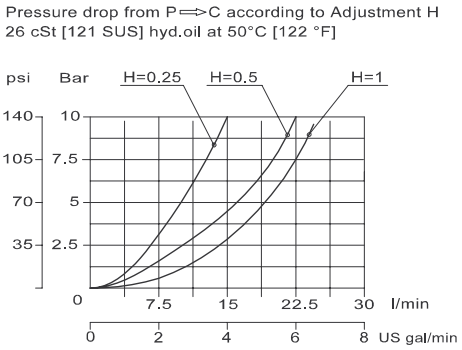
This is an in-line flow limiter that closes and then provides non-compensated restricted flow when the specified flow setting is exceeded. The valve provides free reverse flow when operated in the opposite direction.

SPECIFICATIONS

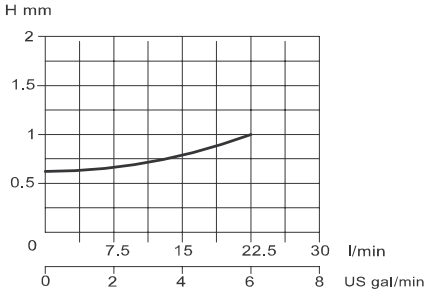
Schematic



Theoretical performance



Values for adjustment H are guideline only, being conditioned by a variety of factors (oil temperature and viscosity, volume and flexibility of circuits).

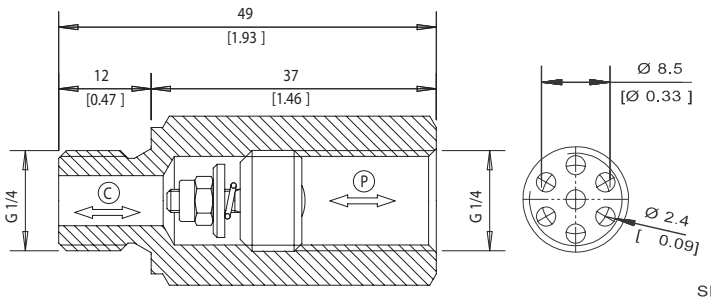


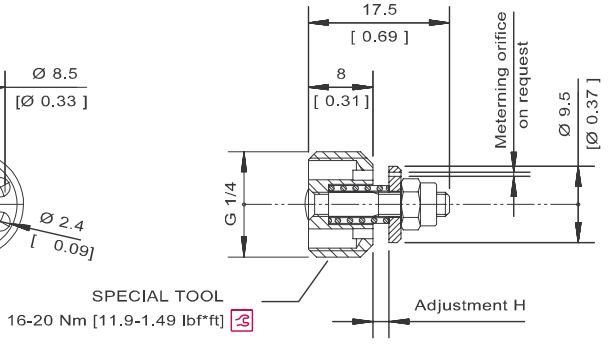
Specifications

Pressure rating	210 bar [3000 psi]
Rated Free Flow at 7 bar [100 psi]	30 l/min [8 US gal/min]
Cavity	Consult factory

DIMENSIONS

mm [in]





ORDERING INFORMATION

BC 06 - 1.0 - G - 00 - S1.5

Adjustment H

00 = No factory adjustment
0.25 = 0.25 mm [in]
0.5 = 0.5 mm [in]
1.0 = 1.0 mm [in]
1.5 = 1.5mm [in]
2.0 = 2.0mm [in]

Metering orifice

Omit = No orifice
S0.5 = 0.5 mm [in]
S0.7 = 0.7 mm [in]
S1.0 = 1.0 mm [in]
S1.5 = 1.5 mm [in]
S2.0 = 2.0 mm [in]

00 = Cartridge only
L = 1/4 BSP

Flow Control Valves Technical Information

Velocity Fuse

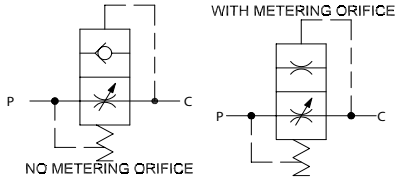
BC 10

OPERATION

This is an in-line flow limiter that closes and then provides non-compensated restricted flow when the specified flow setting is exceeded. The valve provides free reverse flow when operated in the opposite direction.

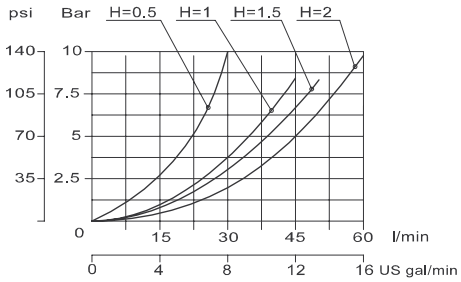
SPECIFICATIONS

Schematic



Theoretical performance

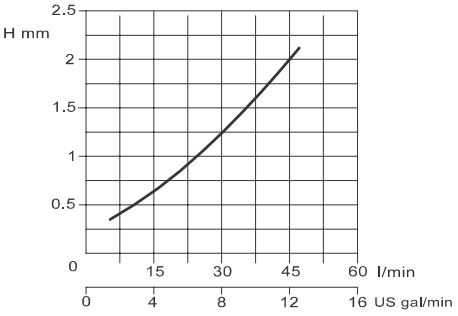
Pressure drop from P⇒C according to Adjustment H
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]



Specifications

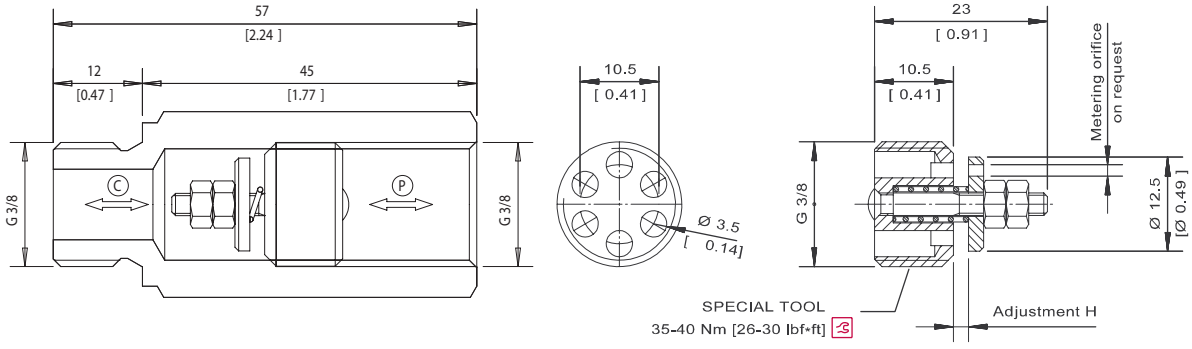
Pressure rating	210 bar [3000 psi]
Rated Free Flow at 7 bar [100 psi]	60 l/min [16 US gal/min]
Cavity	Consult factory

Values for adjustment H are guideline only, being conditioned by a variety of factors (oil temperature and viscosity, volume and flexibility of circuits).



DIMENSIONS

mm [in]



ORDERING INFORMATION

BC 10 - 1.0 - G - 00 - S1.5

Adjustment H
- 00 = No factory adjustment
- 0.25 = 0.25 mm [in]
- 0.5 = 0.5 mm [in]
- 1.0 = 1.0 mm [in]
- 1.5 = 1.5mm [in]
- 2.0 = 2.0mm [in]

Metering orifice
- Omit = No orifice
- S0.5 = 0.5 mm [in]
- S0.7 = 0.7 mm [in]
- S1.0 = 1.0 mm [in]
- S1.5 = 1.5 mm [in]
- S2.0 = 2.0 mm [in]

Coupling
- 00 = Cartridge only
- L = 3/8 BSP

ENGINEERING TOMORROW

Flow Control Valves Technical Information

Velocity Fuse

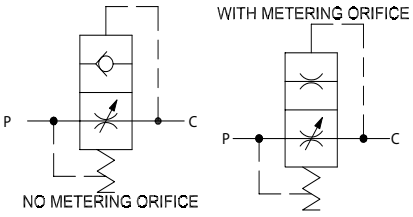
BC 13

OPERATION

This is an in-line flow limiter that closes and then provides non-compensated restricted flow when the specified flow setting is exceeded. The valve provides free reverse flow when operated in the opposite direction.

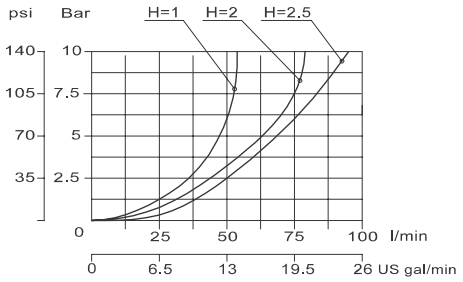
SPECIFICATIONS

Schematic

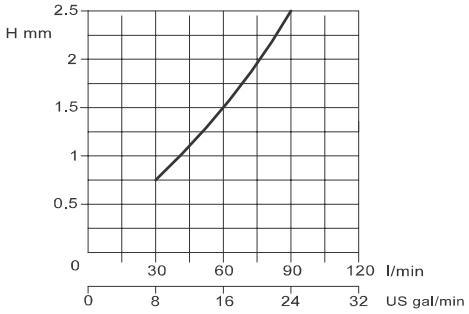


Theoretical performance

Pressure drop from P ⇨ C according to Adjustment H
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]



Values for adjustment H are guideline only, being conditioned by a variety of factors (oil temperature and viscosity, volume and flexibility of circuits).

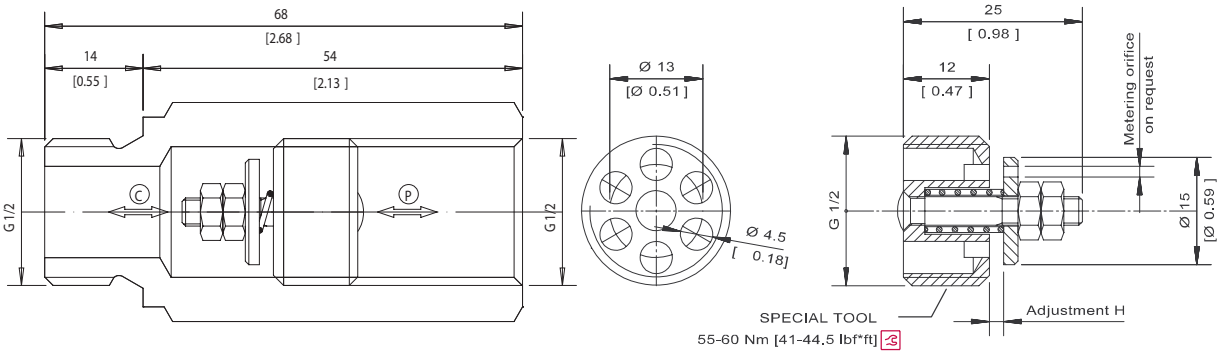


Specifications

Pressure rating	210 bar [3000 psi]
Rated Free Flow at 7 bar [100 psi]	85 l/min [30 US gal/min]
Cavity	Consult factory

DIMENSIONS

mm in



ORDERING INFORMATION

BC 13 - 1.0 - G - 00 - S1.5

Adjustment H
- 00 = No factory adjustment
- 0.25 = 0.25 mm [in]
- 0.5 = 0.5 mm [in]
- 1.0 = 1.0 mm [in]
- 1.5 = 1.5mm
- 2.0 = 2.0mm

Coupling
- 00 = Cartridge only
- L = 3/8 BSP

Metering orifice
- Omit = No orifice
- S0.5 = 0.5 mm [in]
- S0.7 = 0.7 mm [in]
- S1.0 = 1.0 mm [in]
- S1.5 = 1.5 mm [in]
- S2.0 = 2.0 mm [in]

Flow Control Valves Technical Information

Velocity Fuse

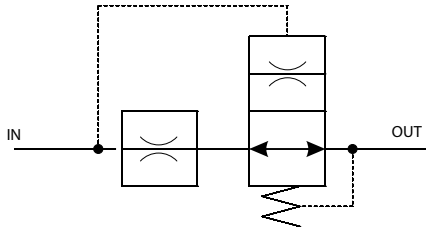
CP330-3

OPERATION

This is an in-line flow limiter that closes and then provides non-compensated restricted flow when the specified flow setting is exceeded. The valve provides free reverse flow when operated in the opposite direction.

SPECIFICATIONS

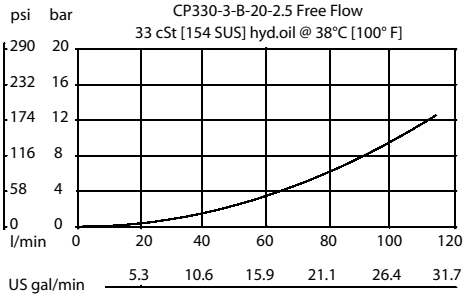
Schematic



Specifications

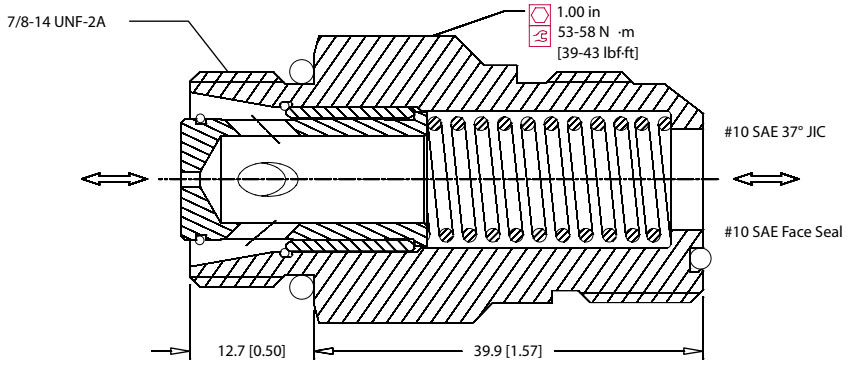
Pressure rating	207 bar [3000 psi]
Max Trip Flow	110 l/min [29 US gal/min]
Bypass Flow	9.5 lpm [2.5 gal/min]
Weight	0.12 kg [0.26 lbs]
Cavity	#10 SAE Port

Theoretical performance



DIMENSIONS

mm in



ORDERING INFORMATION

CP330-3-B-FS10-17-2.5

Seals
B = BUNA-N
V = VITON

Fitting Type
Omit = #10SAE37°JIC
FS10 = #10SAE face seal

Bypass Flow @ 48 bar [700 psi]

	l/min	USgal/min
2.5 =	9.5	2.5

Flow Setting

	l/min	USgal/min
17 =	64.4	17
20 =	75.7	20
23 =	87.1	23
26 =	98.4	26
29 =	109.8	29

Flow Control Valves Technical Information

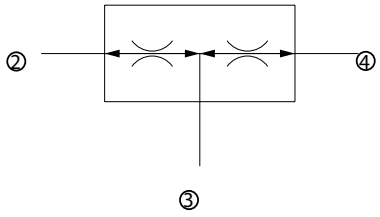
Flow Divider/Combiner

CP340-1

OPERATION

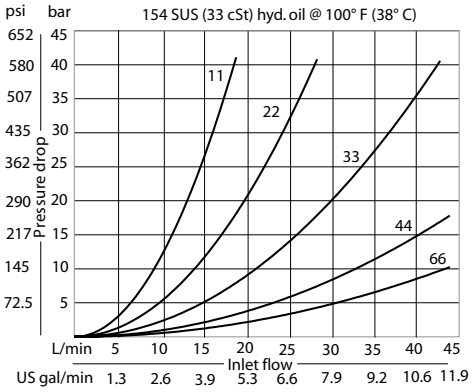
This valve is a fixed ratio, pressure compensated flow divider/combiner.

Schematic



SPECIFICATIONS

Theoretical performance



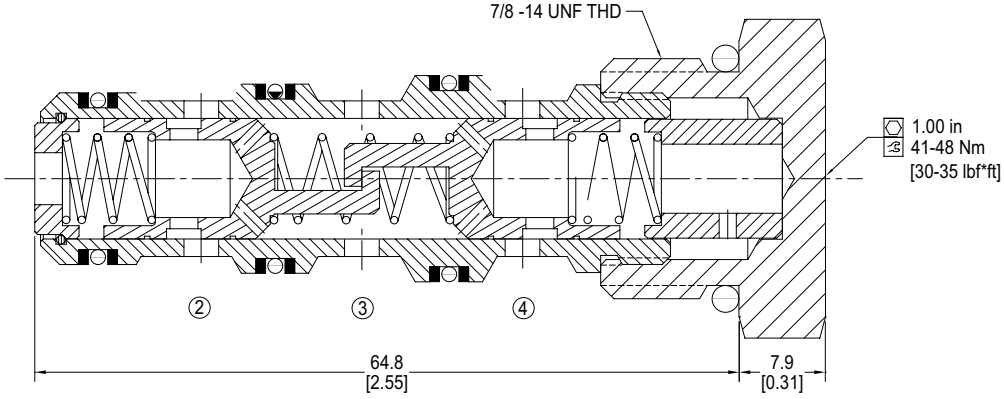
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow [See Performance Chart]	45 l/min [12 US gal/min]
Weight	0.11 kg [0.24 lb]
Cavity	**SDC10-4**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

CP340-1 - B - 6S - 44

Seal Option

Code	Seal Material	Seal kit
B	Buna	120023
V	Viton	120024

Housings & Ports	Housing P/N
0: Cartridge Only	No Housing
3B: 3/8 BSP, AL	CP10-4-2B-X1
4B: 1/2 BSP, AL	CP10-4-3B-X1
6S: #6 SAE, AL	CP10-4-6S-X1
8S: #8 SAE, AL	CP10-4-8S-X1

Other Housings available

Flow Settings

Code	Flow Ratio Port 2: Port 4	Total Flow
11	**1:1**	7.6 L/min [2 gpm]
22	**1:1**	15 L/min [4 gpm]
33	**1:1**	23 L/min [6 gpm]
36	**1:2**	34 L/min [9 gpm]
44	**1:1**	30 L/min [8 gpm]
46	**2:3**	38 L/min [10 gpm]
63	**2:1**	34 L/min [9 gpm]
64	**3:2**	38 L/min [10 gpm]
66	**1:1**	45 L/min [12 gpm]

ENGINEERING
TOMORROW

Flow Control Valves Technical Information

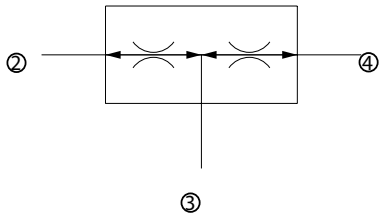
Flow Divider/Combiner

VDF 06

OPERATION

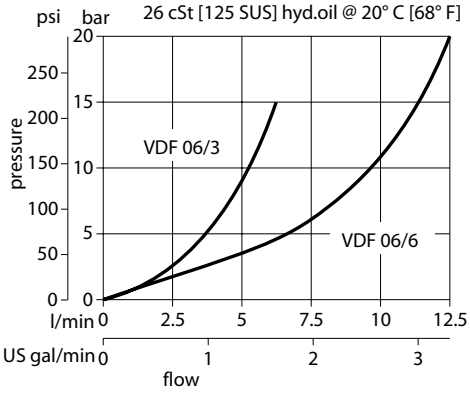
This valve is a fixed ratio, pressure compensated flow divider/combiner.

Schematic



SPECIFICATIONS

Theoretical performance



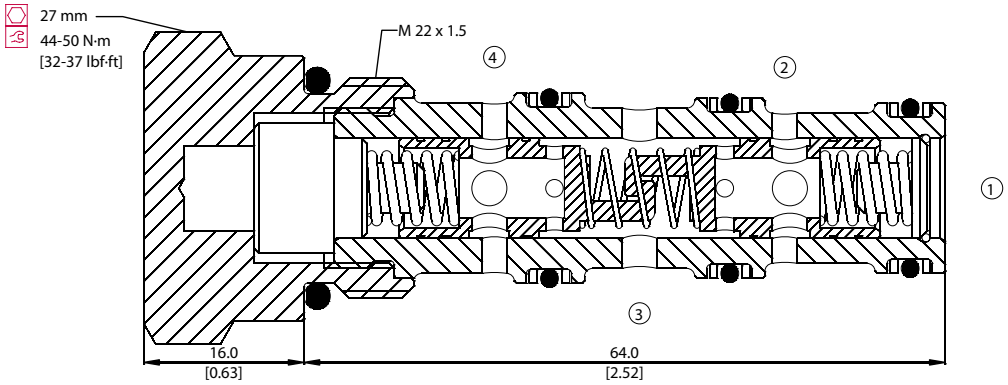
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow [See Performance Chart]	45 l/min [12 US gal/min]
Weight	0.15 kg [0.33 lb]
Cavity	**NCS06/4**

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

VDF 06 - 10 - 00 - V

Seals

	Seal kit
V = Viton	230000350
Omit = Buna-N	230000610

Flow rate
l/min [US gal/min]
3 = Min 3 [0.8] Max 6.5 [1.7]
6 = Min 6 [1.6] Max 12.5 [3.3]
10 = Min 10 [2.6] Max 25 [6.6]
25 = Min 22 [5.8] Max 45 [11.9]

Housing and ports

	Housing P/N
00 = No Housing	No Housing
L3/8 = AL, 3/8 BSP	NCS06/4-L-3/8
L3/4 = AL, 3/4 BSP	NCS06/4-L-3/4
L6S = AL, #6 SAE	NCS06/4-L-6S
L8S = AL, #8 SAE	NCS06/4-L-8S

Other housings available

ENGINEERING
TOMORROW

Flow Control Valves Technical Information

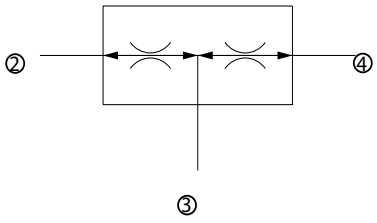
Flow Divider/Combiner

CP341-1

OPERATION

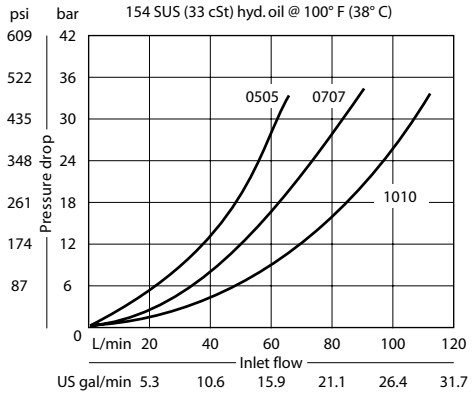
This valve is a fixed ratio, pressure compensated flow divider/combiner.

Schematic



SPECIFICATIONS

Theoretical performance

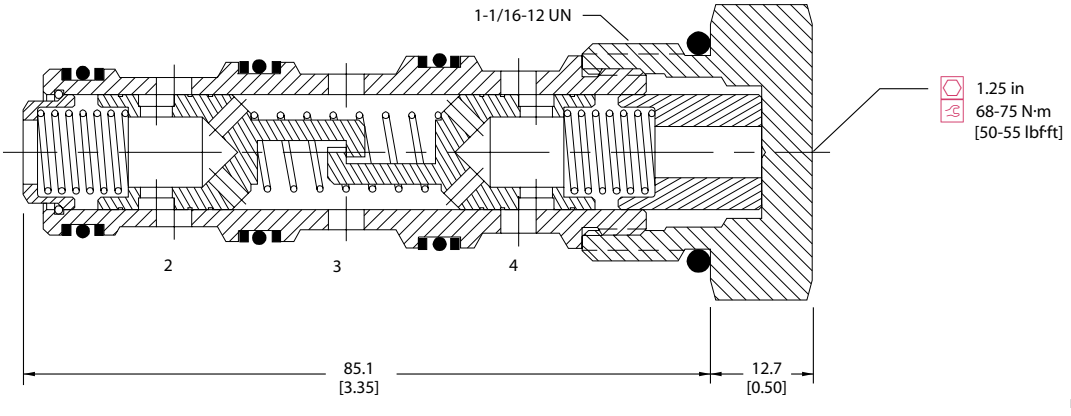


Specifications

Rated pressure	210 bar [3000 psi]
Rated flow [See Performance Chart]	75 l/min [20 US gal/min]
Weight	0.23 kg [0.50 lb]
Cavity	**CP12-4**

DIMENSIONS

Cross-sectional view



E

ORDERING INFORMATION

CP341 - 1 - B - 10S - 0707

Seals
B = Buna-N
V = Viton

Seal kit
120262
120263

Housing and ports

			Housing P/N
0	=	No Housing	No Housing
4B	=	Al, 1/2 BSP	CP12-4-4B-X1
6B	=	Al, 3/4 BSP	CP12-4-6B-X1
10S	=	Al, #10 SAE	CP12-4-10S-X1
12S	=	Al, #12 SAE	CP12-4-12S-X1

Other housings available

Flow settings

Code	Flow ratio Port 2:Port 4	Total flow
0505	1:1	38 L/min [10 gpm]
0507	5:7	45 L/min [12 gpm]
0510	1:2	57 L/min [15 gpm]
0707	1:1	53 L/min [14 gpm]
0710	7:10	64 L/min [17 gpm]
1010	1:1	76 L/min [20 gpm]

ENGINEERING
TOMORROW

Flow Control Valves Technical Information

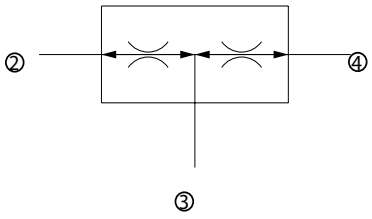
Flow Divider/Combiner

CP342-1

OPERATION

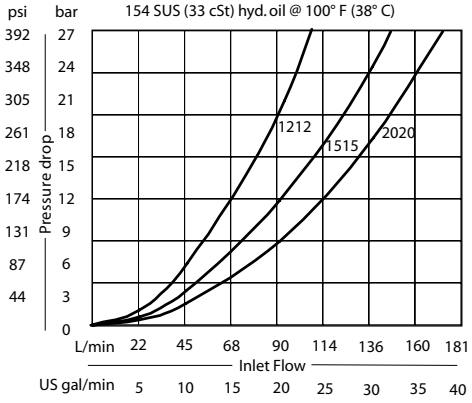
This valve is a fixed ratio, pressure compensated flow divider/combiner.

Schematic



SPECIFICATIONS

Theoretical performance

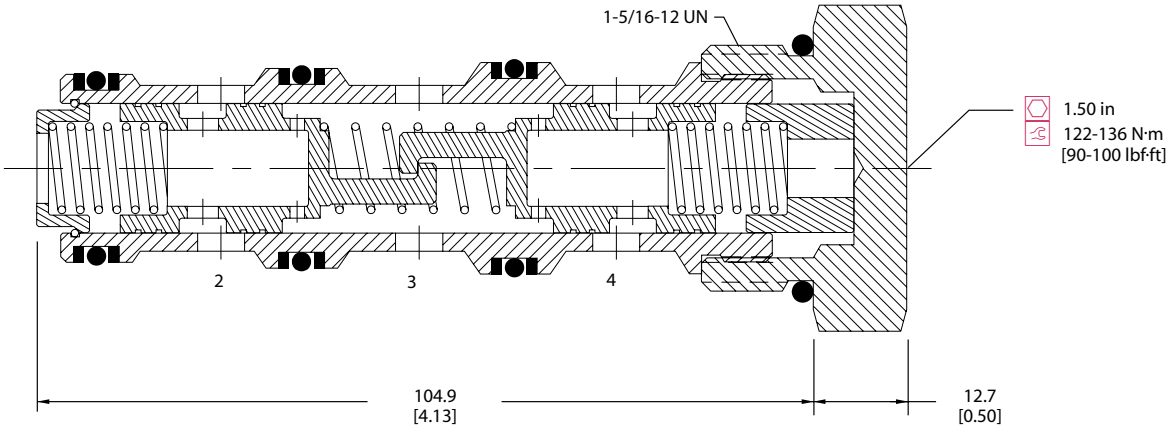


Specifications

Rated pressure	210 bar [3000 psi]
Rated flow [See Performance Chart]	150 l/min [40 US gal/min]
Weight	0.37 kg [0.81 lb]
Cavity	**CP16-4**

DIMENSIONS

Cross-sectional view



ORDERING INFORMATION

CP342 - 1 - B - 16S - 1515

Seals
B = Buna-N
V = Viton

Seal kit
120025
120026

Housing and ports

			Housing P/N
0	=	No Housing	No Housing
6B	=	Al, 3/4 BSP	CP16-4-6B-X1
8B	=	Al, 1 BSP	CP16-4-8B-X1
12S	=	Al, #12 SAE	CP16-4-12S-X1
16S	=	Al, #16 SAE	CP16-4-16S-X1

Other housings available

Flow settings

Code	Flow ratio Port 2:Port 4	Total flow
1020	1:2	30 gpm [114 L/min]
1212	1:1	24 gpm [91 L/min]
1215	4:5	27 gpm [102 L/min]
1220	3:5	32 gpm [121 L/min]
1512	5:4	27 gpm [102 L/min]
1515	1:1	30 gpm [114 L/min]
1520	3:4	35 gpm [132 L/min]
2012	5:3	32 gpm [121 L/min]
2015	4:3	35 gpm [132 L/min]
2020	1:1	40 gpm [151 L/min]

Flow Control Valves Technical Information

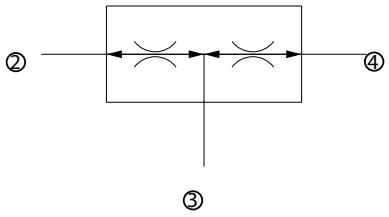
Flow Divider/Combiner

CP342-3

OPERATION

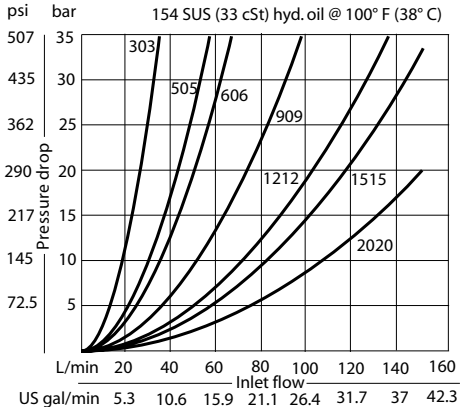
This valve is a fixed ratio, pressure compensated flow divider/combiner.

Schematic



SPECIFICATIONS

Theoretical performance

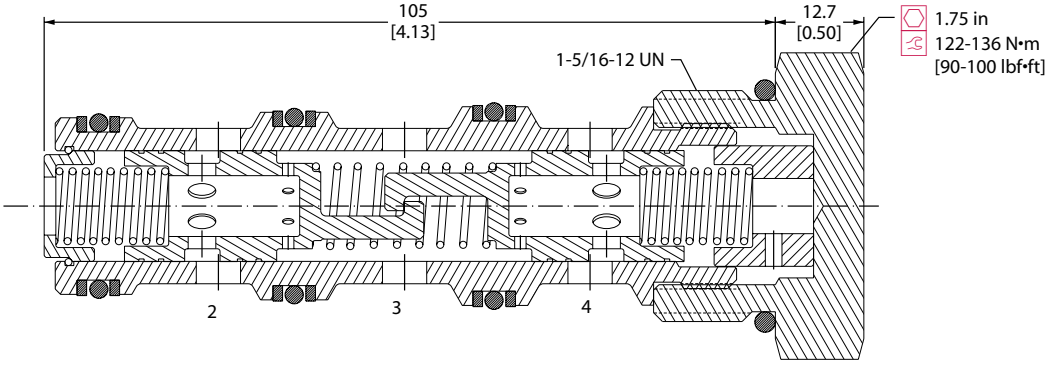


Specifications

Rated pressure	450 bar [6500 psi]
Rated flow [See Performance Chart]	150 l/min [40 US gal/min]
Weight	0.37 kg [0.81 lb]
Cavity	**CP16-4**

DIMENSIONS

Cross-sectional view



ORDERING INFORMATION

CP342-3-U-16S-0505

Flow settings

Code	Flow ratio Port 2:Port 4	Total flow
0303	1:1	23 L/min [6 gpm]
0505	1:1	38 L/min [10 gpm]
0606	1:1	45 L/min [12 gpm]
0909	1:1	68 L/min [18 gpm]
1212	1:1	91 L/min [24 gpm]
1515	1:1	114 L/min [30 gpm]
2020	1:1	151 L/min [40 gpm]
1220	3:5	121 L/min [32 gpm]
1215	4:5	102 L/min [27 gpm]
1520	3:4	132 L/min [35 gpm]
2012	5:3	121 L/min [32 gpm]
1512	5:4	102 L/min [27 gpm]
2015	4:3	132 L/min [35 gpm]
1020	1:2	114 L/min [30 gpm]

Seals
U = Urethane

Seal kit
120677

Housing and ports

			Housing P/N
0	=	No Housing	No Housing
S6B	=	Steel, 3/4 BSP	CP16-4-S6B-X1
S8B	=	Steel, 1 BSP	CP16-4-S8B-X1
S12S	=	Steel, #12 SAE	CP16-4-S12S-X1
S16S	=	Steel, #16 SAE	CP16-4-S16S-X1

Other housings available

Flow Control Valves Technical Information

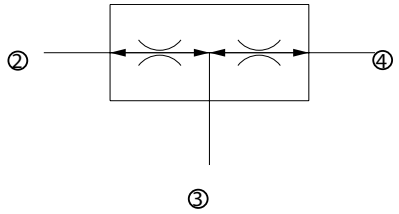
Flow Divider/Combiner

CP343-1

OPERATION

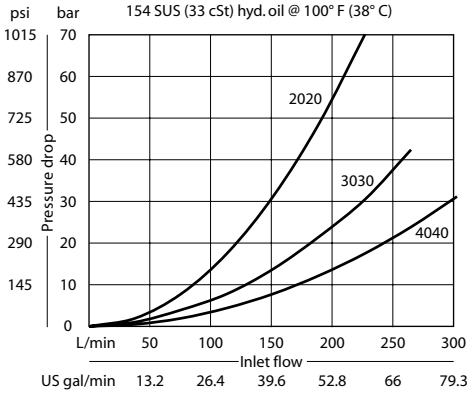
This valve is a fixed ratio, pressure compensated flow divider/combiner.

Schematic



SPECIFICATIONS

Theoretical performance

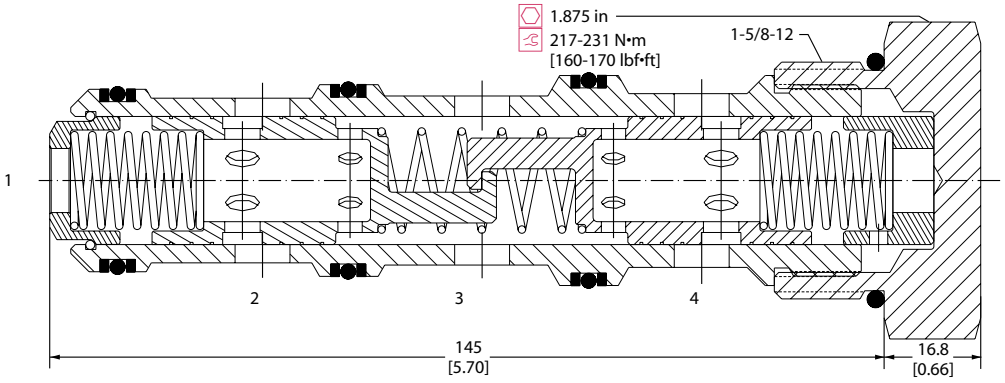


Specifications

Rated pressure	210 bar [3000 psi]
Rated flow [See Performance Chart]	340 l/min [90 US gal/min]
Weight	1.13 kg [2.50 lb]
Cavity	**SDC20-4**

DIMENSIONS

Cross-sectional view



ORDERING INFORMATION

CP343-1-B-16S-4545

Housing and ports

			Housing P/N
0	=	No Housing	No Housing
8B	=	Al, 1 BSP	SDC20-4-8B-X1
10B	=	Al, 1-1/4 BSP	SDC20-4-10B-X1
16S	=	Al, #16 SAE	SDC20-4-16S-X1
20S	=	Al, #20 SAE	SDC20-4-20S-X1

Other housings available

Seals

	Seal kit
B = Buna-N	120181
V = Viton	120182

Flow settings

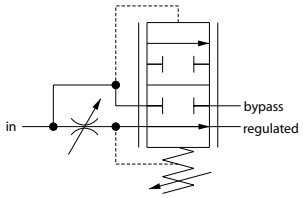
Code	Flow ratio Port 2:Port 4	Total flow
2020	1:1	151 L/min [40 gpm]
2525	1:1	189 L/min [50 gpm]
3030	1:1	227 L/min [60 gpm]
3535	1:1	265 L/min [70 gpm]
4020	2:1	227 L/min [60 gpm]
4040	1:1	303 L/min [80 gpm]
4530	3:2	284 L/min [75 gpm]
4545	1:1	341 L/min [90 gpm]

Flow Control Valves Technical Information
Catalog HIC
2F94-01

OPERATION

This valve is an adjustable, priority-type, pressure compensated flow control valve.

Schematic



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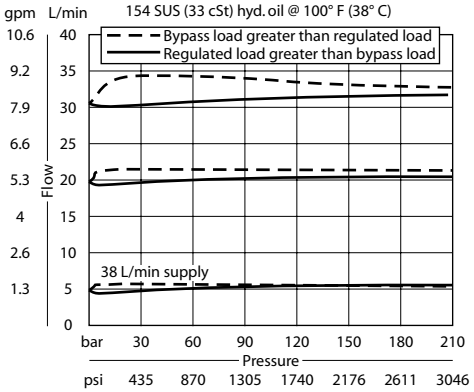
SPECIFICATIONS

Theoretical performance



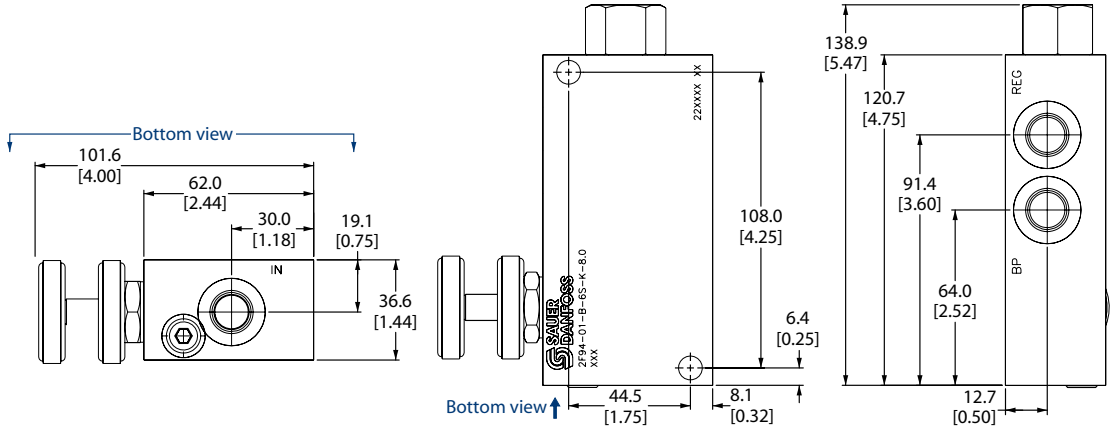
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	30 l/min [8 US gal/min]
Max inlet flow	60 l/min [16 US gal/min]
Weight	1.00 kg [2.20 lb]
Cavity	none

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

2F94-01-B-6S-E-8.0

Adjustment range
Code = 0-8 gpm

Adjustment options
E = External adjustment
K = Knob adjustment

Body and ports
6S = Aluminum, #6 SAE

Seals

	Seal kits
B = Buna-N	Consult Factory
V = Viton	Consult Factory

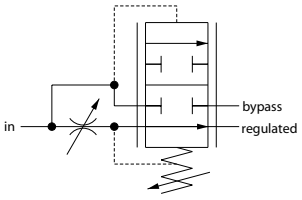
Flow Control Valves Technical Information

Catalog HIC
2F95-01

OPERATION

This valve is an adjustable, priority-type, pressure compensated flow control valve.

Schematic



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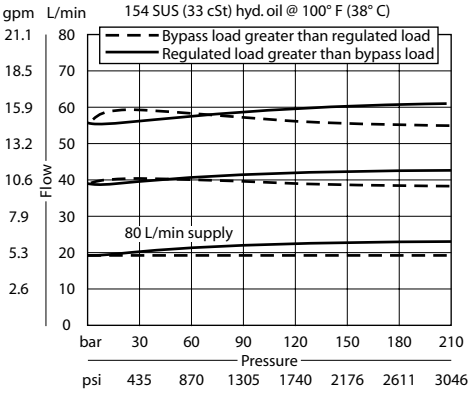
SPECIFICATIONS

Theoretical performance



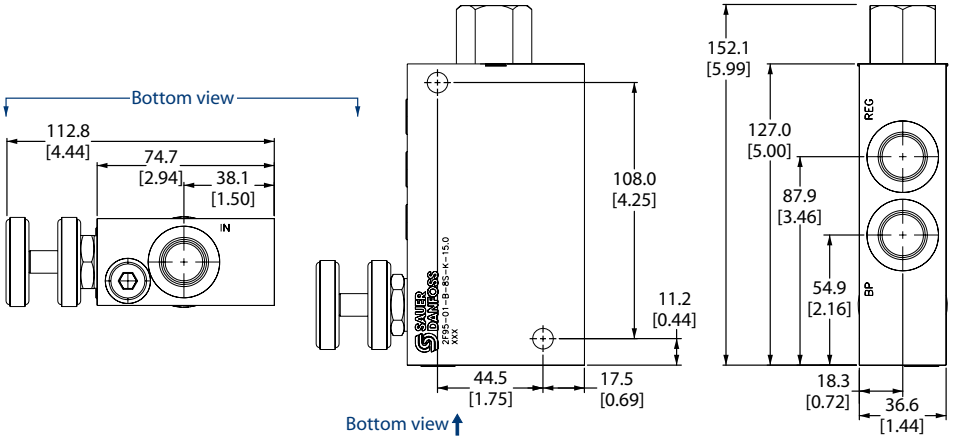
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	60 l/min [16 US gal/min]
Max inlet flow	95 l/min [25 US gal/min]
Weight	1.00 kg [2.20 lb]
Cavity	none

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

2F95-01-B-8S-E-15

Adjustment range
Code = 0-15 gpm

Adjustment options
E = External adjustment
K = Knob adjustment

Body and ports
8S = Aluminum, #8 SAE

Seals

	Seal kits
B = Buna-N	Consult Factory
V = Viton	Consult Factory

Flow Control Valves Technical Information

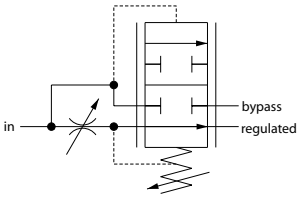
Catalog HIC

2F96-01

OPERATION

This valve is an adjustable, priority-type, pressure compensated flow control valve.

Schematic



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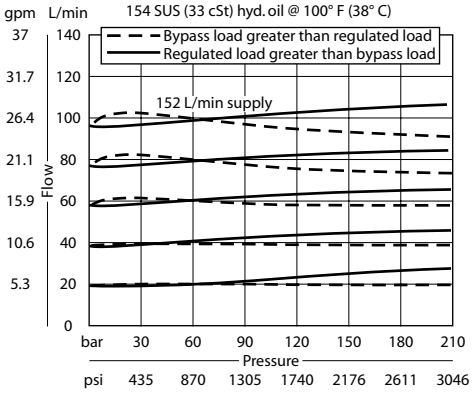
SPECIFICATIONS

Theoretical performance



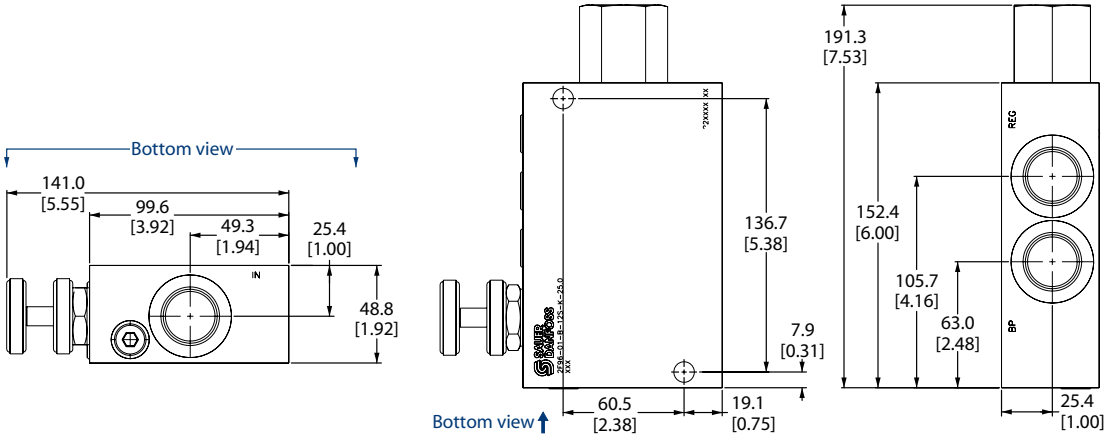
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	95 l/min [25 US gal/min]
Max inlet flow	150 l/min [40 US gal/min]
Weight	1.77 kg [3.90 lb]
Cavity	none

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

2F96-01-B-12S-E-25

Adjustment range
Code = 0-25 gpm

Adjustment options
E = External adjustment
K = Knob adjustment

Body and ports
12S = Aluminum, #12 SAE

Seals

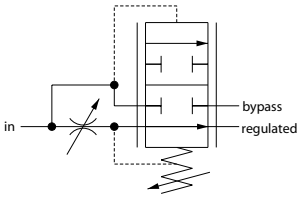
	Seal kits
B = Buna-N	Consult Factory
V = Viton	Consult Factory

Flow Control Valves Technical Information
Catalog HIC
2F97-01

OPERATION

This valve is an adjustable, priority-type, pressure compensated flow control valve.

Schematic



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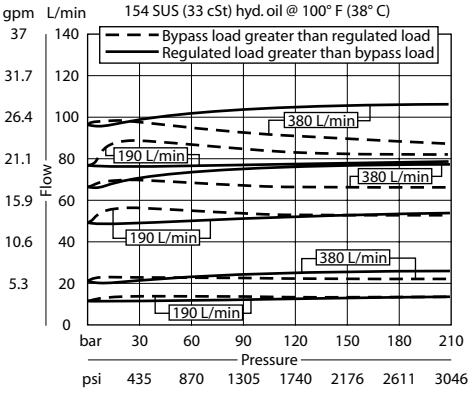
SPECIFICATIONS

Theoretical performance



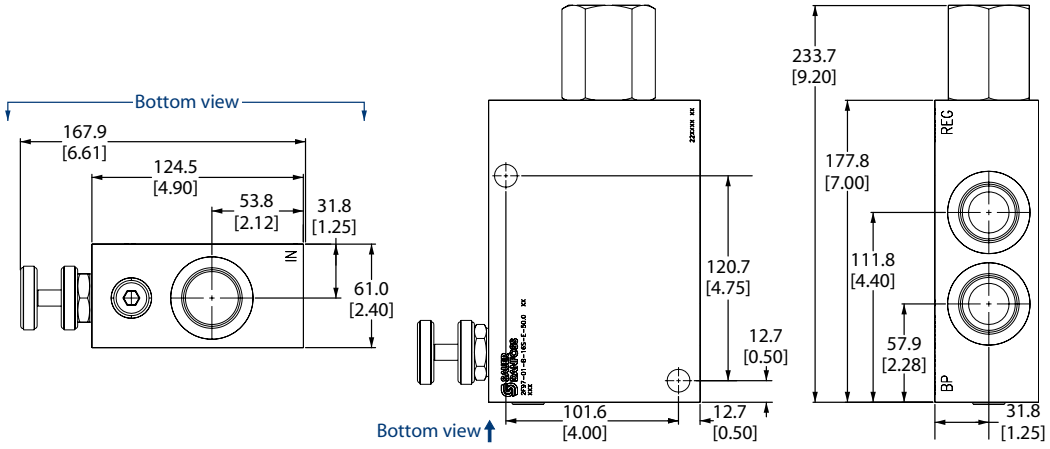
Specifications

Rated pressure	210 bar [3000 psi]
Max regulated flow	190 l/min [50 US gal/min]
Max inlet flow	380 l/min [100 US gal/min]
Weight	3.81 kg [8.40 lb]
Cavity	none

DIMENSIONS

mm in

Cross-sectional view



ORDERING INFORMATION

2F97-01-B-16S-E-50

Adjustment range
Code = 0-50 gpm

Adjustment options
E = External adjustment
K = Knob adjustment

Body and ports
16S = Aluminum, #16 SAE

Seals

	Seal kits
B = Buna-N	Consult Factory
V = Viton	Consult Factory