

General Description

Series 6C check valves provide free flow in one direction and dependable shut-off in the reverse direction.

Operation

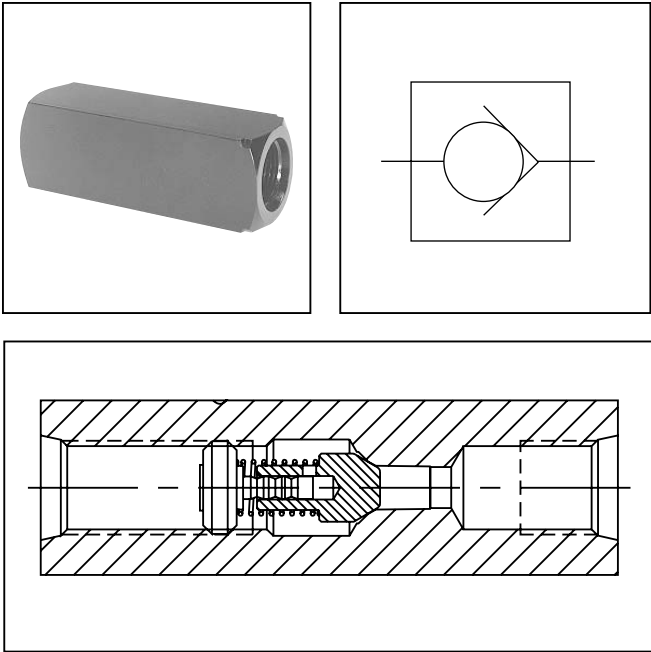
When pressure going through the valve is increased to the cracking level, the valve opens. When the pressure is reduced to below the cracking level, the valve closes.

Features

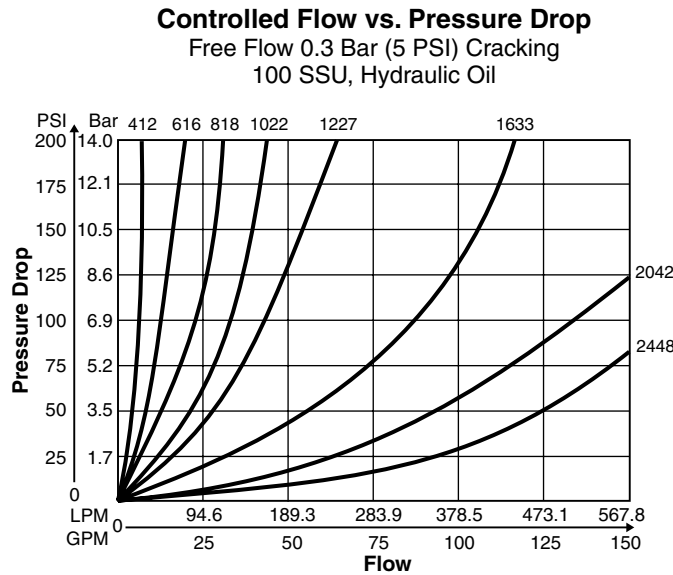
- Meets ISO 6149 standards.
- Hard metric dimensions.
- Reliable leak-free performance — straight thread port with O-Ring sealing.
- Global interchangeability.

Specifications

Maximum Operating Pressure	345 Bar (5000 PSI)		
Maximum Flow	M12 x 1.5	11 LPM (3 GPM)	
	M16 x 1.5	19 LPM (5 GPM)	
	M18 x 1.5	30 LPM (8 GPM)	
	M22 x 1.5	57 LPM (15 GPM)	
	M27 x 2.0	95 LPM (25 GPM)	
	M33 x 2.0	151 LPM (40 GPM)	
	M42 x 2.0	265 LPM (70 GPM)	
	M48 x 2.0	379 LPM (100 GPM)	
Cracking Pressure	Standard: 0.3 Bar (5 PSI) Optional: 0.1 Bar (1 PSI) 4.5 Bar (65 PSI)		
Material	Body	ASTM 12L14	Carbon Steel
	Poppet	ASTM 416	Stainless Steel
	Retainer	ASTM 416	Stainless Steel
	Spring	ASTM 316	Stainless Steel
Seals	Standard: Nitrile Optional: Fluorocarbon		



Performance Curves



Ordering Information

6

Ports

Code	Description
6	ISO 6149 ports

C

Style

Code	Description
C	Check Valve

Size

Code	Ratio
412	M12 X 1.5
616	M16 x 1.5
818	M18 x 1.5
1022	M22 x 1.5
1227	M27 x 2.0
1633	M33 x 2.0
2042	M42 x 2.0
2448	M48 x 2.0

S

Material

Code	Description
S	Steel

Design Series

NOTE:  
Not required when ordering.

Model Number	Weight kg (lbs.)
6C412	0.1 (0.3)
6C616	0.2 (0.5)
6C818	0.3 (0.7)
6C1022	0.6 (1.3)
6C1227	0.9 (2.0)
6C1633	1.5 (3.3)
6C2042	2.8 (6.2)
6C2448	3.8 (8.4)

Dimensions

Inch equivalents for millimeter dimensions are shown in (\*\*)

The diagram shows two views of a check valve. The left view is a cross-section showing the internal check valve mechanism with a central stem and two side ports. Dimensions B and C are indicated: B is the distance from the center of the valve to the side port, and C is the square of the valve body. The right view is a side view of the valve body, showing a cylindrical shape with a flange at one end. Dimension A is the thickness of the flange (both ends), and D is the overall length of the valve body. Arrows indicate the direction of 'Free Flow' from right to left.

Model Number	Weight kg (lbs.)	A	B	C	D
6C412	0.1 (0.3)	M12 x 1.5	10.4 (0.41)	20.6 (0.81)	68.3 (2.69)
6C616	0.2 (0.5)	M16 x 1.5	12.7 (0.50)	25.4 (1.00)	79.2 (3.12)
6C818	0.3 (0.7)	M18 x 1.5	14.2 (0.56)	28.4 (1.12)	88.9 (3.50)
6C1022	0.6 (1.3)	M22 x 1.5	15.7 (0.62)	31.8 (1.25)	101.6 (4.00)
6C1227	0.9 (2.0)	M27 x 2.0	19.1 (0.75)	38.1 (1.50)	117.3 (4.62)
6C1633	1.5 (3.3)	M33 x 2.0	22.4 (0.88)	44.5 (1.75)	127.0 (5.00)
6C2042	2.8 (6.2)	M42 x 2.0	28.7 (1.13)	57.2 (2.25)	132.8 (5.23)
6C2448	3.8 (8.4)	M48 x 2.0	35.1 (1.38)	69.9 (2.75)	143.0 (5.63)

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