

General Description

Series C5V direct operated check valves provide free flow in one direction and block the flow in the counter direction.

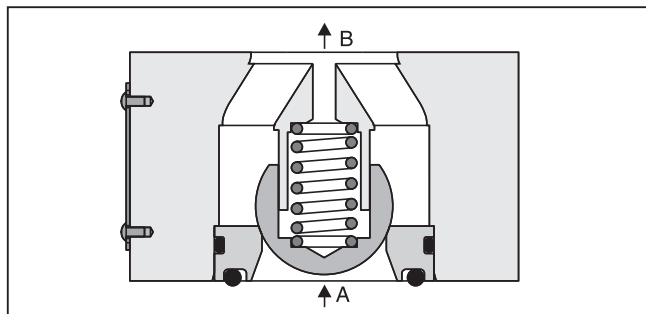
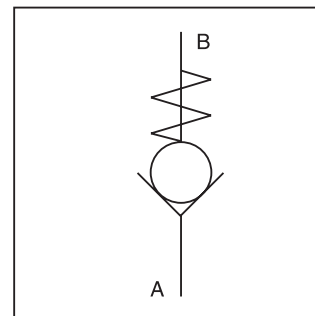
The SAE flanges allow to mount the C5V directly on the pressure port of pumps for protection against pressure shocks from the system.

Operation

The ball is held on its seat by a spring under zero pressure condition. When flow is increased to the cracking pressure, free flow is allowed from port A to port B. Blocked flow is created when operating pressure and spring on Port B exceed pressure on port A.

Features

- Direct operated check valve
- SAE 61 and SAE 62 flanges
- 4 sizes (SAE 3/4", 1", 1 1/4", 1 1/2")
- 3 springs
- 2 different seal configurations



Ordering Information

| C5V Direct Operated Check Valve | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | B Design Series | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | |
|---|--|--|--|--------------------------|--------------------------|---------------------------|---|---|---|-------------|-------------------|----------|--------------------|-------------------------------|---------------------------|-------|-------------------|--|--|
| | Size | Flange | Body Sealing | Cracking Pressure | | | Seal | Options | | | | | | | | | | | |
| | <table border="1"> <thead> <tr><th>Code</th><th>Description</th></tr> </thead> <tbody> <tr><td>06</td><td>SAE 3/4"</td></tr> <tr><td>08</td><td>SAE 1"</td></tr> <tr><td>10</td><td>SAE 1 1/4"</td></tr> <tr><td>12</td><td>SAE 1 1/2"</td></tr> </tbody> </table> | Code | Description | 06 | SAE 3/4" | 08 | SAE 1" | 10 | SAE 1 1/4" | 12 | SAE 1 1/2" | | | | | | | | |
| Code | Description | | | | | | | | | | | | | | | | | | |
| 06 | SAE 3/4" | | | | | | | | | | | | | | | | | | |
| 08 | SAE 1" | | | | | | | | | | | | | | | | | | |
| 10 | SAE 1 1/4" | | | | | | | | | | | | | | | | | | |
| 12 | SAE 1 1/2" | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr><th>Code</th><th>Description</th></tr> </thead> <tbody> <tr><td>3</td><td>SAE 61</td></tr> <tr><td>6</td><td>SAE 62</td></tr> </tbody> </table> | Code | Description | 3 | SAE 61 | 6 | SAE 62 | | | | | | | | | | | |
| Code | Description | | | | | | | | | | | | | | | | | | |
| 3 | SAE 61 | | | | | | | | | | | | | | | | | | |
| 6 | SAE 62 | | | | | | | | | | | | | | | | | | |
| | | | <table border="1"> <thead> <tr><th>Code</th><th>Description</th></tr> </thead> <tbody> <tr><td>0</td><td>0.5 Bar (7 PSI)</td></tr> <tr><td>1</td><td>1.0 Bar (15 PSI)</td></tr> <tr><td>2</td><td>2.0 Bar (29 PSI)</td></tr> </tbody> </table> | Code | Description | 0 | 0.5 Bar (7 PSI) | 1 | 1.0 Bar (15 PSI) | 2 | 2.0 Bar (29 PSI) | | | | | | | | |
| Code | Description | | | | | | | | | | | | | | | | | | |
| 0 | 0.5 Bar (7 PSI) | | | | | | | | | | | | | | | | | | |
| 1 | 1.0 Bar (15 PSI) | | | | | | | | | | | | | | | | | | |
| 2 | 2.0 Bar (29 PSI) | | | | | | | | | | | | | | | | | | |
| | | | | | | | | <table border="1"> <thead> <tr><th>Code</th><th>Description</th></tr> </thead> <tbody> <tr><td>Omit</td><td>Standard</td></tr> <tr><td>019*</td><td>C5V10 for M14 Mounting Screws</td></tr> </tbody> </table> <p>* For SAE 62 only.</p> | Code | Description | Omit | Standard | 019* | C5V10 for M14 Mounting Screws | | | | | |
| Code | Description | | | | | | | | | | | | | | | | | | |
| Omit | Standard | | | | | | | | | | | | | | | | | | |
| 019* | C5V10 for M14 Mounting Screws | | | | | | | | | | | | | | | | | | |
| | | | | | | | <table border="1"> <thead> <tr><th>Code</th><th>Description</th></tr> </thead> <tbody> <tr><td>1</td><td>Nitrile</td></tr> <tr><td>5</td><td>Fluorocarbon</td></tr> </tbody> </table> | Code | Description | 1 | Nitrile | 5 | Fluorocarbon | | | | | | |
| Code | Description | | | | | | | | | | | | | | | | | | |
| 1 | Nitrile | | | | | | | | | | | | | | | | | | |
| 5 | Fluorocarbon | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | <table border="1"> <thead> <tr><th>Code</th><th>Description</th></tr> </thead> <tbody> <tr><td>1</td><td>Sealing for Port A</td></tr> <tr><td>2*</td><td>Sealing for Ports A and X</td></tr> <tr><td>3</td><td>Without Sealing</td></tr> </tbody> </table> <p>* For combination with R5U Unloading Valve (SAE 61 only).</p> | Code | Description | 1 | Sealing for Port A | 2* | Sealing for Ports A and X | 3 | Without Sealing | | |
| Code | Description | | | | | | | | | | | | | | | | | | |
| 1 | Sealing for Port A | | | | | | | | | | | | | | | | | | |
| 2* | Sealing for Ports A and X | | | | | | | | | | | | | | | | | | |
| 3 | Without Sealing | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | <p>Weight:</p> <table border="1"> <tbody> <tr><td>C5V06</td><td>0.6 kg (1.3 lbs.)</td></tr> <tr><td>C5V08</td><td>0.9 kg (2.0 lbs.)</td></tr> <tr><td>C5V10</td><td>1.3 kg (2.9 lbs.)</td></tr> <tr><td>C5V12</td><td>1.8 kg (4.0 lbs.)</td></tr> </tbody> </table> | C5V06 | 0.6 kg (1.3 lbs.) | C5V08 | 0.9 kg (2.0 lbs.) | C5V10 | 1.3 kg (2.9 lbs.) | C5V12 | 1.8 kg (4.0 lbs.) | | |
| C5V06 | 0.6 kg (1.3 lbs.) | | | | | | | | | | | | | | | | | | |
| C5V08 | 0.9 kg (2.0 lbs.) | | | | | | | | | | | | | | | | | | |
| C5V10 | 1.3 kg (2.9 lbs.) | | | | | | | | | | | | | | | | | | |
| C5V12 | 1.8 kg (4.0 lbs.) | | | | | | | | | | | | | | | | | | |

WARNING: This product can expose you to chemicals including Lead, Nickel (Metallic), or 1,3-Butadiene which are known to the State of California to cause cancer, and Lead or 1,3-Butadiene which is known to the State of California to cause birth defects and other reproductive harm. For more information go to www.P65Warnings.ca.gov.

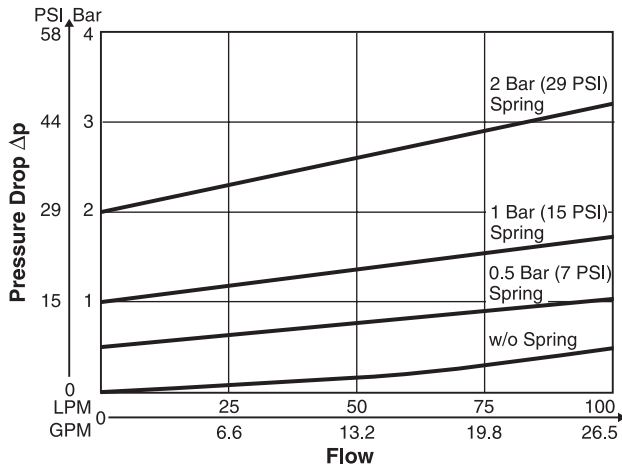


Specifications

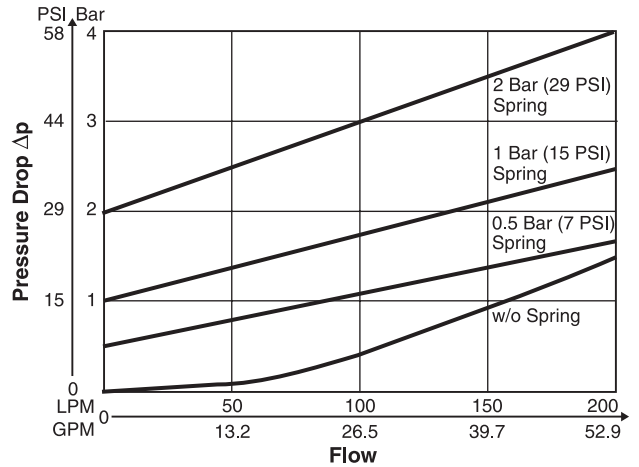
| General | | | | |
|------------------------------------|--|--|--|--|
| Size | 06 (3/4") | 08 (1") | 10 (1 1/4") | 12 (1 1/2") |
| Mounting | 2-port in-line flange SAE 61 and SAE 62 | | | |
| Mounting Position | Unrestricted | | | |
| Ambient Temperature | -20°C to +50°C (-4°F to +122°F) | | | |
| Hydraulic | | | | |
| Maximum Operating Pressure | SAE 61 SAE 62 350 Bar (5075 PSI) 420 Bar (6090 PSI) | 350 Bar (5075 PSI) 420 Bar (6090 PSI) | 280 Bar (4060 PSI) 420 Bar (6090 PSI) | 210 Bar (3045 PSI) 420 Bar (6090 PSI) |
| Nominal Flow | 100 LPM (26.5 GPM) | 200 LPM (52.9 GPM) | 400 LPM (105.8 GPM) | 750 LPM (198.4 GPM) |
| Fluid | Hydraulic oil in accordance with DIN 51524...51525 | | | |
| Fluid Temperature | -20°C to +80°C (-4°F to +176°F) | | | |
| Viscosity Permitted Recommended | 10 to 650 cSt / mm ² /s (46 to 3013 SSU) 30 cSt / mm ² /s (139 SSU) | | | |
| Filtration | ISO 4406 (1999) 18/16/13 (acc. NAS 1638:7) | | | |

Performance Curves

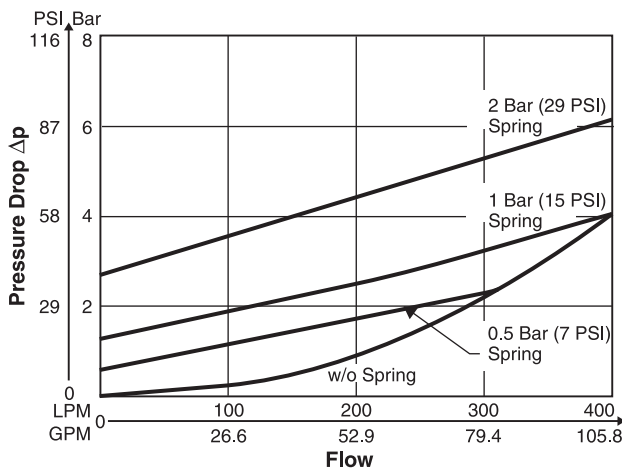
C5V06



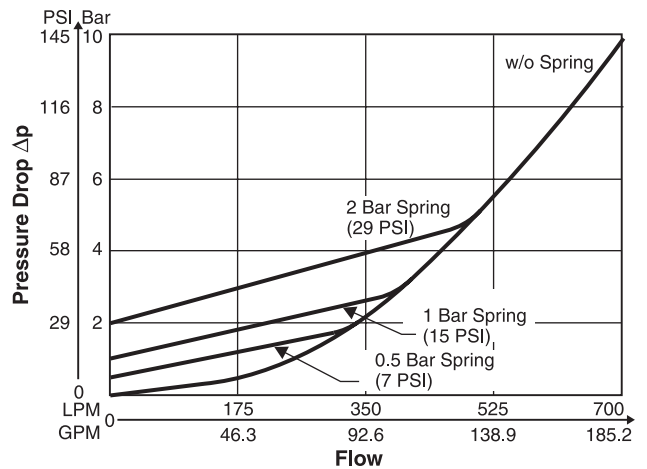
C5V08



C5V10

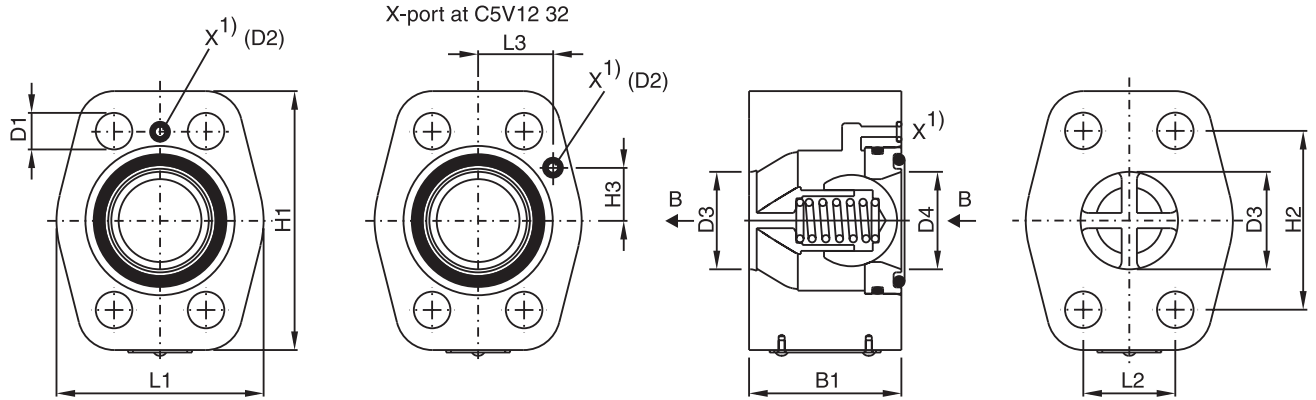


C5V12



Dimensions

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



Position of O-ring seal according to ordering information

1) X1 port for C5V*32* (for use with Unloading Valve R5U)

| Series | Nominal Size | | L1 | L2 | L3 | H1 | H2 | H3 | B1 | D1 | D2 | D3 + 0.8 | D4 |
|--------|--------------|--------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|
| C5V06 | 3/4" | SAE 61 | 48.0 (1.89) | 22.2 (0.87) | 27.2 (1.07) | 64.0 (2.52) | 47.6 (1.87) | 22.4 (0.88) | 45.0 (1.77) | 10.5 (0.41) | Ø3.0 (0.12) | 19.0 (0.75) | 19.0 (0.75) |
| | | SAE 62 | 48.0 (1.89) | 23.8 (0.94) | 27.2 (1.07) | 64.0 (2.52) | 50.8 (2.00) | 22.4 (0.88) | 45.0 (1.77) | 10.5 (0.41) | - | 19.0 (0.75) | 19.0 (0.75) |
| C5V08 | 1" | SAE 61 | 60.0 (2.36) | 26.2 (1.03) | 27.2 (1.07) | 74.0 (2.91) | 52.4 (2.06) | 22.4 (0.88) | 45.0 (1.77) | 10.5 (0.41) | Ø3.0 (0.12) | 25.0 (0.98) | 25.0 (0.98) |
| | | SAE 62 | 60.0 (2.36) | 27.8 (1.09) | 27.2 (1.07) | 74.0 (2.91) | 57.2 (2.25) | 22.4 (0.88) | 45.0 (1.77) | 12.5 (0.49) | - | 25.0 (0.98) | 25.0 (0.98) |
| C5V10 | 1 1/4" | SAE 61 | 68.0 (2.68) | 30.2 (1.19) | 27.2 (1.07) | 85.0 (3.35) | 58.7 (2.31) | 22.4 (0.88) | 50.0 (1.97) | 12.5 (0.49) | Ø3.0 (0.12) | 32.0 (1.26) | 32.0 (1.26) |
| | | SAE 62 | 68.0 (2.68) | 31.8 (1.25) | 27.2 (1.07) | 85.0 (3.35) | 66.7 (2.63) | 22.4 (0.88) | 50.0 (1.97) | 13.5* (0.53) | - | 32.0 (1.26) | 32.0 (1.26) |
| C5V12 | 1 1/2" | SAE 61 | 80.0 (3.15) | 35.7 (1.41) | 27.2 (1.07) | 104.0 (4.09) | 69.8 (2.75) | 22.4 (0.88) | 50.0 (1.97) | 13.5 (0.53) | Ø3.0 (0.12) | 42.0 (1.65) | 38.0 (1.50) |
| | | SAE 62 | 80.0 (3.15) | 36.5 (1.44) | 27.2 (1.07) | 104.0 (4.09) | 79.4 (3.13) | 22.4 (0.88) | 50.0 (1.97) | 17.0 (0.67) | - | 42.0 (1.65) | 38.0 (1.50) |

* D1 = 15 (0.59) at option code 019 for M14 mounting screws.

| Seal Kits | | |
|-----------|-------------|--------------|
| NG | Nitrile | Fluorocarbon |
| 3 | S26-75409-0 | S26-75409-5 |
| 6 | S26-75410-0 | S26-75410-5 |
| 10 | S26-75411-0 | S26-75411-5 |
| 12 | S26-75412-0 | S26-75412-5 |