

# Load Holding, Pilot-to-open Check Cartridges

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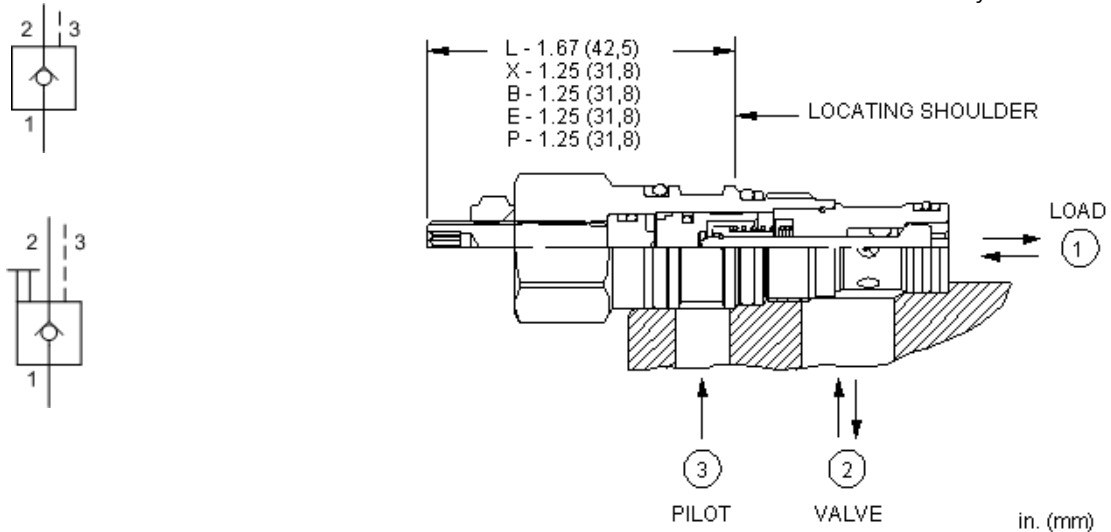
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|      |                                                                |    |
|------|----------------------------------------------------------------|----|
| CKBB | Pilot-to-open check valve with standard pilot                  | 1  |
| CKBG | Flush mount pilot-to-open check valve with sealed pilot        | 2  |
| CKCB | Pilot-to-open check valve with standard pilot                  | 3  |
| CKEB | Pilot-to-open check valve with standard pilot                  | 4  |
| CKGB | Pilot-to-open check valve with standard pilot                  | 5  |
| CKIB | Pilot-to-open check valve with standard pilot                  | 6  |
| CKBD | Pilot-to-open check valve with sealed pilot                    | 7  |
| CKCD | Pilot-to-open check valve with sealed pilot                    | 8  |
| CKED | Pilot-to-open check valve with sealed pilot                    | 9  |
| CKGD | Pilot-to-open check valve with sealed pilot                    | 10 |
| CKID | Pilot-to-open check valve with sealed pilot                    | 11 |
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| CKCS | 5:1 pilot ratio, pilot-to-open check valve with sealed pilot | .....24 |
|------|--------------------------------------------------------------|---------|

| Series                                                                                                                                                    | Ports                                                                                               | Cavities                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>Series Z Cartridges</b><br>3/8-24 UNF Cartridge Thread<br>5 mm Valve Hex Size<br>11 - 14 Nm Valve Installation Torque                                  | 3-Port                                                                                              | T-382A                                                             |
| <b>Series P Cartridges</b><br>M16 Cartridge Thread<br>22,2 mm Valve Hex Size<br>27 - 33 Nm Valve Installation Torque                                      | 2-Port<br>2-Port (Deep)<br>3-Port                                                                   | T-8A<br>T-8DP<br>T-9A                                              |
| <b>Series 0 Cartridges</b><br>M16 Cartridge Thread<br>19,1 mm Valve Hex Size<br>25,4 mm Valve Hex Size<br>27 - 33 Nm Valve Installation Torque            | 2-Port<br>2-Port (Deep)<br>3-Port<br>3-Port<br>4-Port<br>4-Port                                     | T-162A<br>T-162DP<br>T-150A<br>T-163A<br>T-20A<br>T-30A            |
| <b>Series 0C Cartridges</b><br>3/4-16 UNF Cartridge Thread<br>22,2 mm Valve Hex Size<br>19 - 22 lbf ft Valve Installation Torque                          | 2-Port (Common)<br>3-Port (Common)<br>4-Port (Common)                                               | SC-08-02<br>SC-08-03<br>SC-08-04                                   |
| <b>Series 1 Cartridges</b><br>M20 Cartridge Thread<br>22,2 mm Valve Hex Size<br>41 - 47 Nm Valve Installation Torque                                      | 2-Port<br>2-Port<br>3-Port<br>4-Port<br>4-Port<br>6-Port                                            | T-10A<br>T-13A<br>T-11A<br>T-21A<br>T-31A<br>T-61A                 |
| <b>Series 1C Cartridges</b><br>7/8-14 UNF Cartridge Thread<br>1 1/16 in. Valve Hex Size<br>25,4 mm Valve Hex Size<br>31 - 35 Nm Valve Installation Torque | 2-Port (Common)<br>3-Port (Common)<br>4-Port (Common)<br>5-Port (Common)                            | SC-10-02<br>SC-10-03<br>SC-10-04<br>SC-10-05                       |
| <b>Series 2 Cartridges</b><br>1"-14 UNS Cartridge Thread<br>28,6 mm Valve Hex Size<br>61 - 68 Nm Valve Installation Torque                                | 2-Port<br>2-Port<br>3-Port<br>4-Port<br>4-Port<br>4-Port (Dual path)<br>6-Port<br>6-Port            | T-3A<br>T-5A<br>T-2A<br>T-22A<br>T-32A<br>T-52AD<br>T-52A<br>T-62A |
| <b>Series 3 Cartridges</b><br>M36 Cartridge Thread<br>31,8 mm Valve Hex Size<br>203 - 217 Nm Valve Installation Torque                                    | 2-Port<br>3-Port<br>4-Port<br>4-Port<br>4-Port (Dual path)<br>6-Port<br>6-Port                      | T-16A<br>T-17A<br>T-23A<br>T-33A<br>T-53AD<br>T-53A<br>T-63A       |
| <b>Series 4 Cartridges</b><br>M48 Cartridge Thread<br>41,3 mm Valve Hex Size<br>474 - 508 Nm Valve Installation Torque                                    | 2-Port<br>2-Port (Undercut)<br>3-Port<br>3-Port (Undercut)<br>4-Port<br>4-Port (Undercut)<br>4-Port | T-18A<br>T-18AU<br>T-19A<br>T-19AU<br>T-24A<br>T-24AU<br>T-34A     |

|                    |        |
|--------------------|--------|
| 4-Port (Dual path) | T-54AD |
| 6-Port             | T-54A  |
| 6-Port             | T-64A  |



This valve is a pilot to open check valve. It has a non-sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes pilot pressure.

#### TECHNICAL DATA

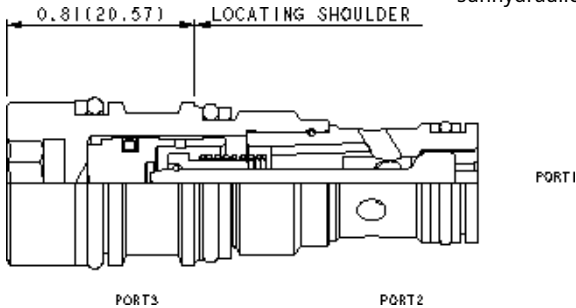
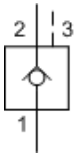
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Seal kit - Cartridge                      | Buna: 990163007         |
| Seal kit - Cartridge                      | EPDM: 990163014         |
| Seal kit - Cartridge                      | Polyurethane: 990163002 |
| Seal kit - Cartridge                      | Viton: 990163006        |

#### CONFIGURATION OPTIONS

#### Model Code Example: CKBBXC�

| CONTROL                 | (X) CRACKING PRESSURE   | (C) SEAL MATERIAL | (N) MATERIAL/COATING            |
|-------------------------|-------------------------|-------------------|---------------------------------|
| <b>X</b> Standard Pilot | <b>C</b> 30 psi (2 bar) | <b>N</b> Buna-N   | Standard Material/Coating       |
| L Manual Load Release   | E 75 psi (5 bar)        | E EPDM            | /AP Stainless Steel, Passivated |
|                         |                         | V Viton           | /LH Mild Steel, Zinc-Nickel     |



This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes pilot pressure.

**TECHNICAL DATA** NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

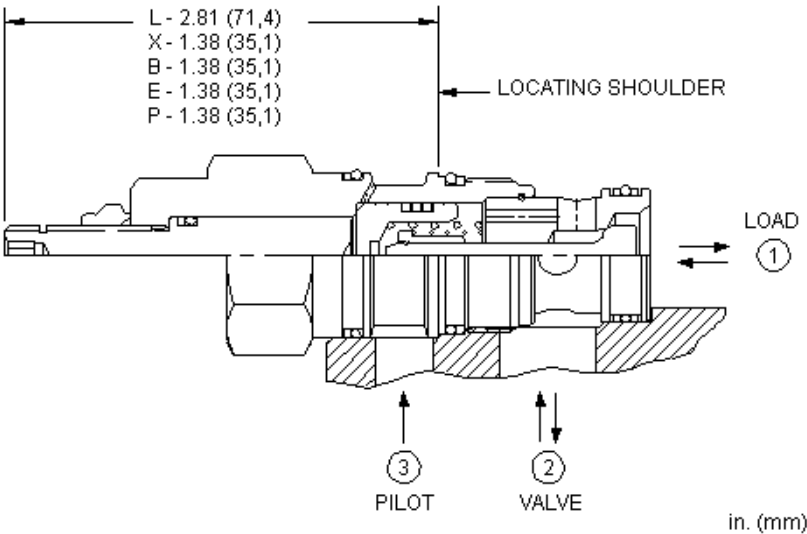
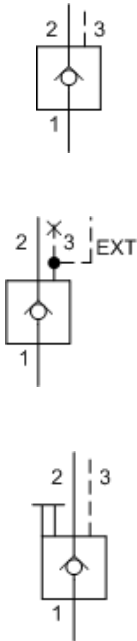
|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Valve Internal Hex Size                   | 5/16 in.                |
| Seal kit - Cartridge                      | Buna: 990163007         |
| Seal kit - Cartridge                      | Polyurethane: 990163002 |
| Seal kit - Cartridge                      | Viton: 990163006        |

**CONFIGURATION OPTIONS**

**Model Code Example: CKBGXCN**

| CONTROL                                           | (X) BIAS PRESSURE                           | (C) SEAL MATERIAL          | (N) MATERIAL/COATING                                                                        |
|---------------------------------------------------|---------------------------------------------|----------------------------|---------------------------------------------------------------------------------------------|
| <b>X</b> Not Adjustable, Standard Hydraulic Pilot | <b>C</b> 30 psi (2 bar)<br>E 75 psi (5 bar) | <b>N</b> Buna-N<br>V Viton | Standard Material/Coating<br>/AP Stainless Steel, Passivated<br>/LH Mild Steel, Zinc-Nickel |





This valve is a pilot to open check valve. It has a non-sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes pilot pressure.

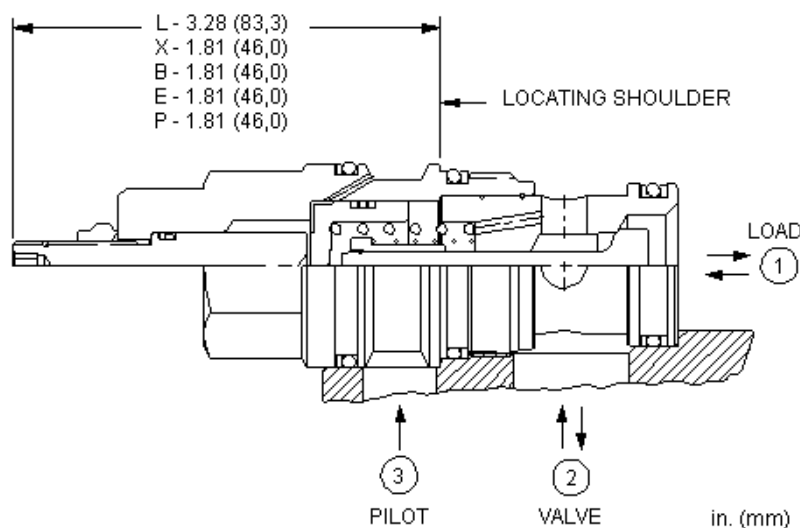
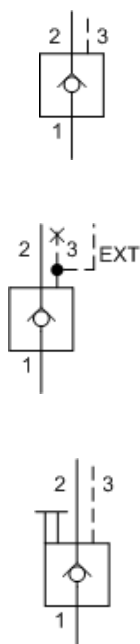
**TECHNICAL DATA** NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Seal kit - Cartridge                      | Buna: 990202007         |
| Seal kit - Cartridge                      | EPDM: 990202014         |
| Seal kit - Cartridge                      | Polyurethane: 990002002 |
| Seal kit - Cartridge                      | Viton: 990202006        |

**CONFIGURATION OPTIONS**

**Model Code Example: CKEBXCN**

| CONTROL                 | (X) CRACKING PRESSURE   | (C) SEAL MATERIAL | (N) MATERIAL/COATING            |
|-------------------------|-------------------------|-------------------|---------------------------------|
| <b>X</b> Standard Pilot | <b>C</b> 30 psi (2 bar) | <b>N</b> Buna-N   | Standard Material/Coating       |
| L Manual Load Release   | A 4 psi (0,3 bar)       | E EPDM            | /AP Stainless Steel, Passivated |
|                         | B 15 psi (1 bar)        | V Viton           | /LH Mild Steel, Zinc-Nickel     |
|                         | D 50 psi (3,5 bar)      |                   |                                 |
|                         | E 75 psi (5 bar)        |                   |                                 |
|                         | F 100 psi (7 bar)       |                   |                                 |



This valve is a pilot to open check valve. It has a non-sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes pilot pressure.

#### TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

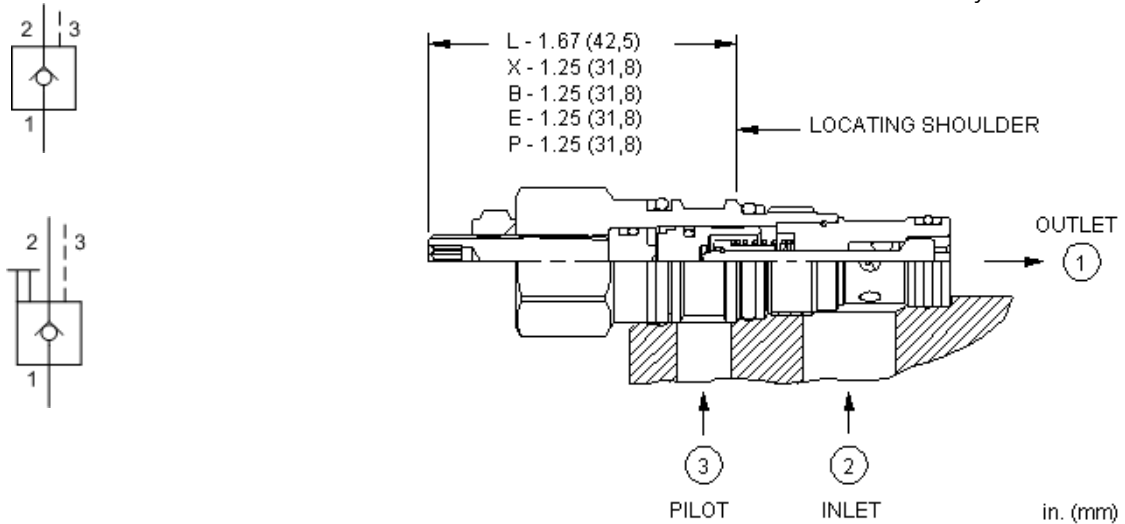
|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Seal kit - Cartridge                      | Buna: 990017007         |
| Seal kit - Cartridge                      | EPDM: 990017014         |
| Seal kit - Cartridge                      | Polyurethane: 990017002 |
| Seal kit - Cartridge                      | Viton: 990017006        |

#### CONFIGURATION OPTIONS

Model Code Example: CKGBXC�

| CONTROL                 | (X) CRACKING PRESSURE   | (C) SEAL MATERIAL | (N) MATERIAL/COATING            |
|-------------------------|-------------------------|-------------------|---------------------------------|
| <b>X</b> Standard Pilot | <b>C</b> 30 psi (2 bar) | <b>N</b> Buna-N   | Standard Material/Coating       |
| L Manual Load Release   | A 4 psi (0,3 bar)       | E EPDM            | /AP Stainless Steel, Passivated |
|                         | B 15 psi (1 bar)        | V Viton           | /LH Mild Steel, Zinc-Nickel     |
|                         | D 50 psi (3,5 bar)      |                   |                                 |
|                         | E 75 psi (5 bar)        |                   |                                 |
|                         | F 100 psi (7 bar)       |                   |                                 |





This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes pilot pressure.

#### TECHNICAL DATA

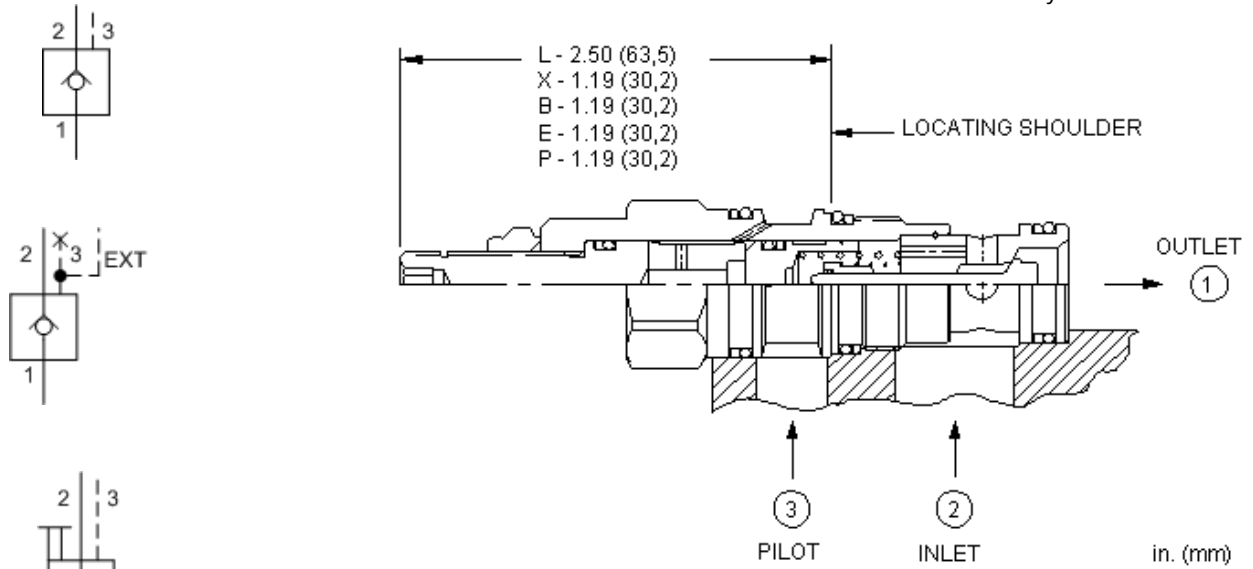
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Seal kit - Cartridge                      | Buna: 990163007         |
| Seal kit - Cartridge                      | EPDM: 990163014         |
| Seal kit - Cartridge                      | Polyurethane: 990163002 |
| Seal kit - Cartridge                      | Viton: 990163006        |

#### CONFIGURATION OPTIONS

Model Code Example: CKBDXCN

| CONTROL                 | (X) | CRACKING PRESSURE       | (C) | SEAL MATERIAL   | (N) | MATERIAL/COATING                |
|-------------------------|-----|-------------------------|-----|-----------------|-----|---------------------------------|
| <b>X</b> Standard Pilot |     | <b>C</b> 30 psi (2 bar) |     | <b>N</b> Buna-N |     | Standard Material/Coating       |
| L Manual Load Release   |     | E 75 psi (5 bar)        |     | E EPDM          |     | /AP Stainless Steel, Passivated |
|                         |     |                         |     | V Viton         |     | /LH Mild Steel, Zinc-Nickel     |



This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes pilot pressure.

#### TECHNICAL DATA

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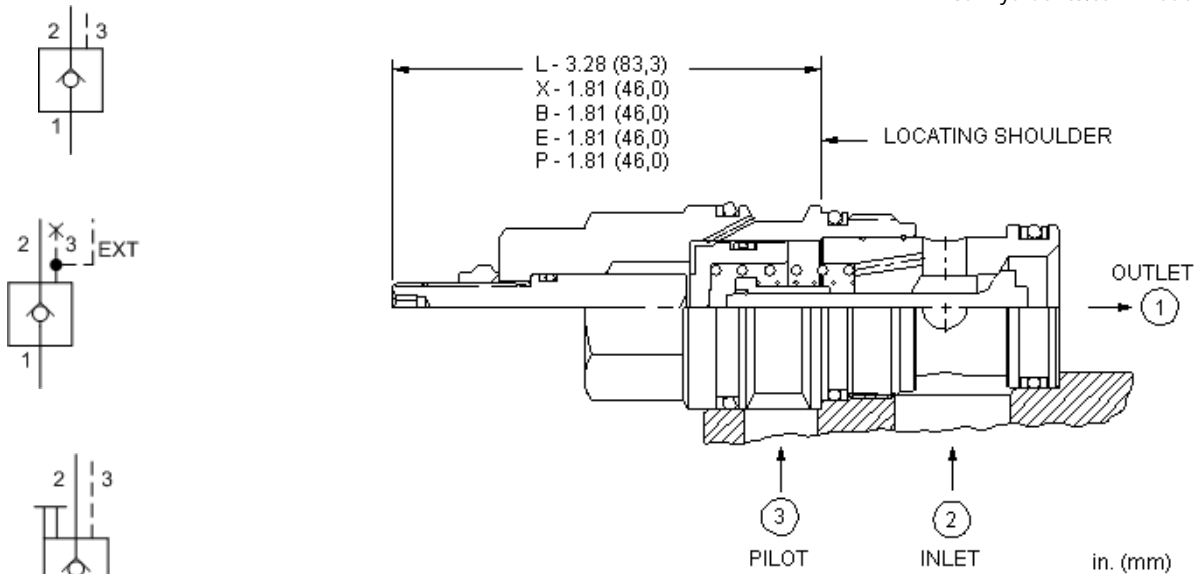
|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Seal kit - Cartridge                      | Buna: 990011007         |
| Seal kit - Cartridge                      | EPDM: 990011014         |
| Seal kit - Cartridge                      | Polyurethane: 990011002 |
| Seal kit - Cartridge                      | Viton: 990011006        |

#### CONFIGURATION OPTIONS

#### Model Code Example: CKCDXCN

| CONTROL                 | (X) CRACKING PRESSURE   | (C) SEAL MATERIAL | (N) MATERIAL/COATING            |
|-------------------------|-------------------------|-------------------|---------------------------------|
| <b>X</b> Standard Pilot | <b>C</b> 30 psi (2 bar) | <b>N</b> Buna-N   | Standard Material/Coating       |
| L Manual Load Release   | A 4 psi (0,3 bar)       | E EPDM            | /AP Stainless Steel, Passivated |
|                         | B 15 psi (1 bar)        | V Viton           | /LH Mild Steel, Zinc-Nickel     |
|                         | D 50 psi (3,5 bar)      |                   |                                 |
|                         | E 75 psi (5 bar)        |                   |                                 |
|                         | F 100 psi (7 bar)       |                   |                                 |
|                         | G 150 psi (10,5 bar)    |                   |                                 |





This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes pilot pressure.

#### TECHNICAL DATA

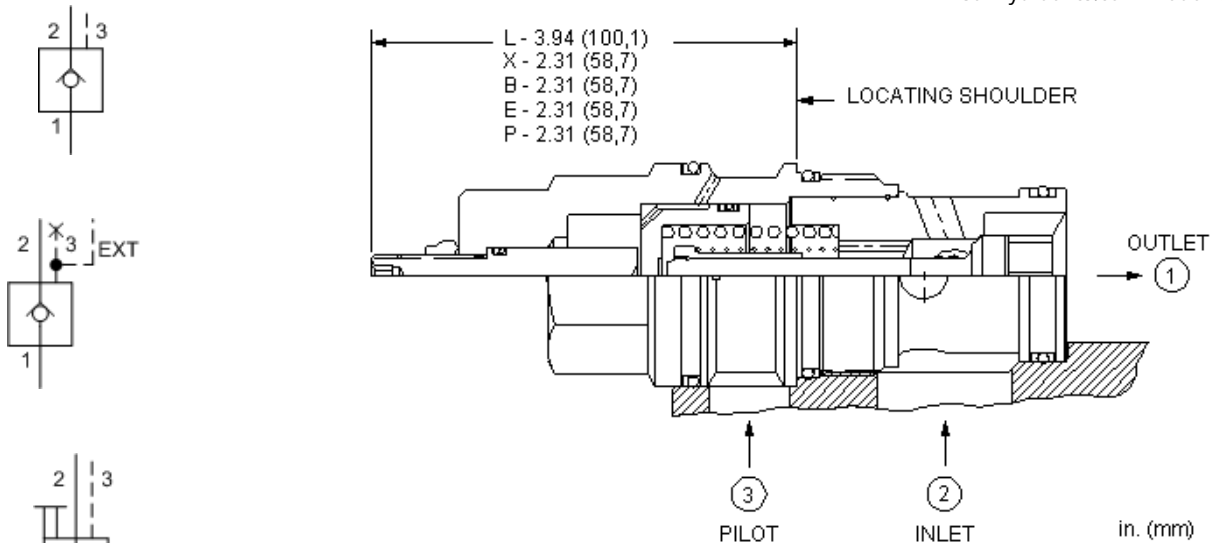
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Seal kit - Cartridge                      | Buna: 990017007         |
| Seal kit - Cartridge                      | EPDM: 990017014         |
| Seal kit - Cartridge                      | Polyurethane: 990017002 |
| Seal kit - Cartridge                      | Viton: 990017006        |

#### CONFIGURATION OPTIONS

Model Code Example: CKGDXCN

| CONTROL                 | (X) CRACKING PRESSURE   | (C) SEAL MATERIAL | (N) MATERIAL/COATING            |
|-------------------------|-------------------------|-------------------|---------------------------------|
| <b>X</b> Standard Pilot | <b>C</b> 30 psi (2 bar) | <b>N</b> Buna-N   | Standard Material/Coating       |
| L Manual Load Release   | A 4 psi (0,3 bar)       | E EPDM            | /AP Stainless Steel, Passivated |
|                         | B 15 psi (1 bar)        | V Viton           | /LH Mild Steel, Zinc-Nickel     |
|                         | D 50 psi (3,5 bar)      |                   |                                 |
|                         | E 75 psi (5 bar)        |                   |                                 |
|                         | F 100 psi (7 bar)       |                   |                                 |



This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes pilot pressure.

#### TECHNICAL DATA

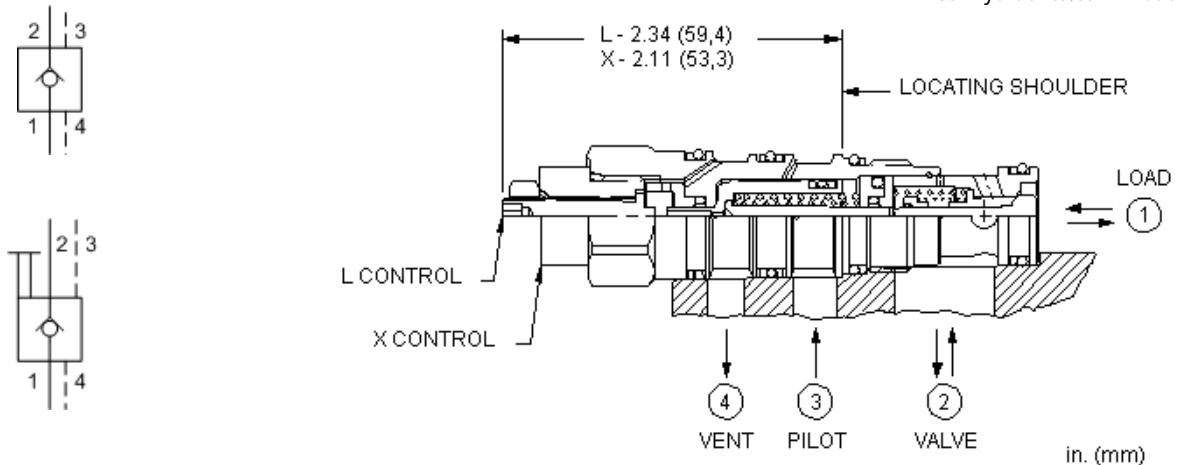
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Seal kit - Cartridge                      | Buna: 990019007         |
| Seal kit - Cartridge                      | Polyurethane: 990019002 |
| Seal kit - Cartridge                      | Viton: 990019006        |

#### CONFIGURATION OPTIONS

#### Model Code Example: CKIDArray

| CONTROL                 | (X) CRACKING PRESSURE   | (C) SEAL MATERIAL | (N) MATERIAL/COATING            |
|-------------------------|-------------------------|-------------------|---------------------------------|
| <b>X</b> Standard Pilot | <b>C</b> 30 psi (2 bar) | <b>N</b> Buna-N   | Standard Material/Coating       |
| L Manual Load Release   | A 4 psi (0,3 bar)       | V Viton           | /AP Stainless Steel, Passivated |
|                         | B 15 psi (1 bar)        |                   | /LH Mild Steel, Zinc-Nickel     |
|                         | D 50 psi (3,5 bar)      |                   |                                 |
|                         | E 75 psi (5 bar)        |                   |                                 |
|                         | F 100 psi (7 bar)       |                   |                                 |



This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed to open the valve is directly proportional to the load pressure at port 1. The valve is insensitive to pressure at port 2 because the spring chamber is referenced to the vent (port 4).

#### TECHNICAL DATA

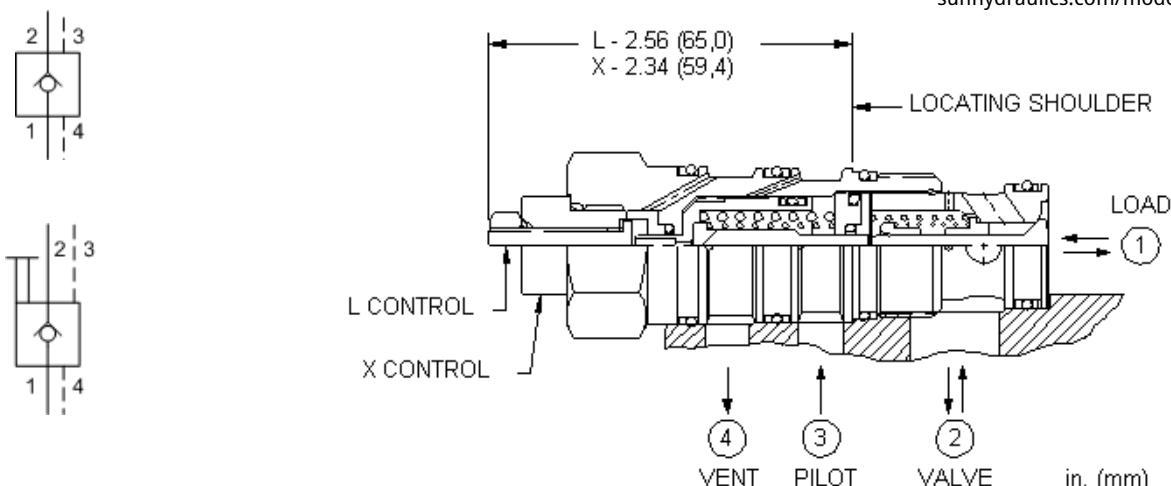
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Locknut Hex Size                          | 7/16 in.                |
| Seal kit - Cartridge                      | Buna: 990021007         |
| Seal kit - Cartridge                      | EPDM: 990021014         |
| Seal kit - Cartridge                      | Polyurethane: 990021002 |
| Seal kit - Cartridge                      | Viton: 990021006        |

#### CONFIGURATION OPTIONS

#### Model Code Example: CVCVXCN

| CONTROL                 | (X) | CRACKING PRESSURE       | (C) | SEAL MATERIAL   | (N) | MATERIAL/COATING                |
|-------------------------|-----|-------------------------|-----|-----------------|-----|---------------------------------|
| <b>X</b> Standard Pilot |     | <b>C</b> 30 psi (2 bar) |     | <b>N</b> Buna-N |     | Standard Material/Coating       |
| L Manual Load Release   |     | A 4 psi (0,3 bar)       |     | E EPDM          |     | /AP Stainless Steel, Passivated |
|                         |     | B 15 psi (1 bar)        |     | V Viton         |     | /LH Mild Steel, Zinc-Nickel     |
|                         |     | D 50 psi (3,5 bar)      |     |                 |     |                                 |
|                         |     | E 75 psi (5 bar)        |     |                 |     |                                 |
|                         |     | F 100 psi (7 bar)       |     |                 |     |                                 |



This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed to open the valve is directly proportional to the load pressure at port 1. The valve is insensitive to pressure at port 2 because the spring chamber is referenced to the vent (port 4).

#### TECHNICAL DATA

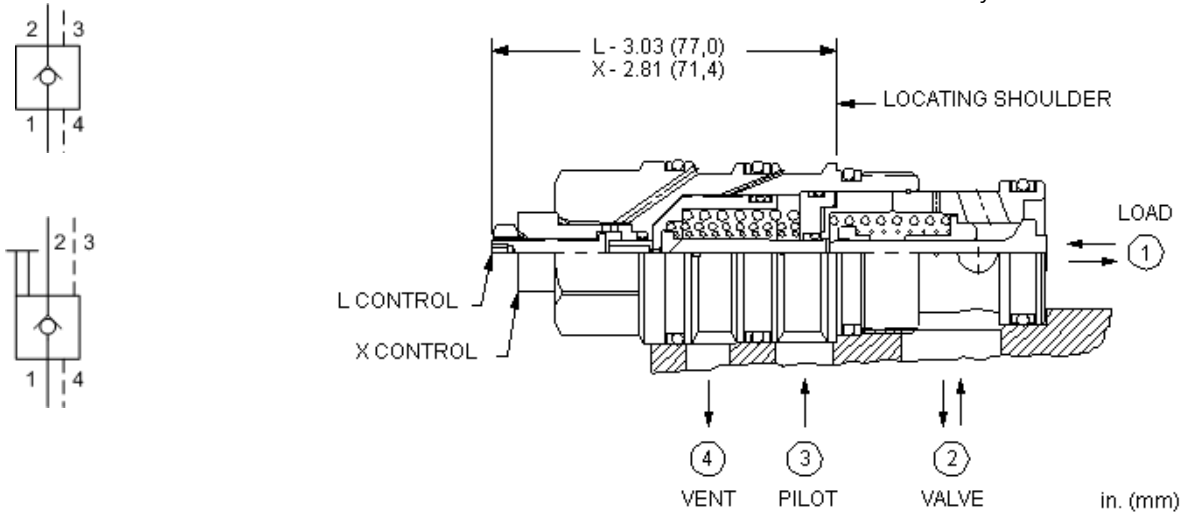
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Locknut Hex Size                          | 7/16 in.                |
| Seal kit - Cartridge                      | Buna: 990022007         |
| Seal kit - Cartridge                      | Polyurethane: 990022002 |
| Seal kit - Cartridge                      | Viton: 990022006        |

#### CONFIGURATION OPTIONS

Model Code Example: CVEVXC�

| CONTROL                 | (X) CRACKING PRESSURE   | (C) SEAL MATERIAL | (N) MATERIAL/COATING            |
|-------------------------|-------------------------|-------------------|---------------------------------|
| <b>X</b> Standard Pilot | <b>C</b> 30 psi (2 bar) | <b>N</b> Buna-N   | Standard Material/Coating       |
| L Manual Load Release   | A 4 psi (0,3 bar)       | E EPDM            | /AP Stainless Steel, Passivated |
|                         | B 15 psi (1 bar)        | V Viton           | /LH Mild Steel, Zinc-Nickel     |
|                         | D 50 psi (3,5 bar)      |                   |                                 |
|                         | E 75 psi (5 bar)        |                   |                                 |
|                         | F 100 psi (7 bar)       |                   |                                 |



This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed to open the valve is directly proportional to the load pressure at port 1. The valve is insensitive to pressure at port 2 because the spring chamber is referenced to the vent (port 4).

**TECHNICAL DATA** NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

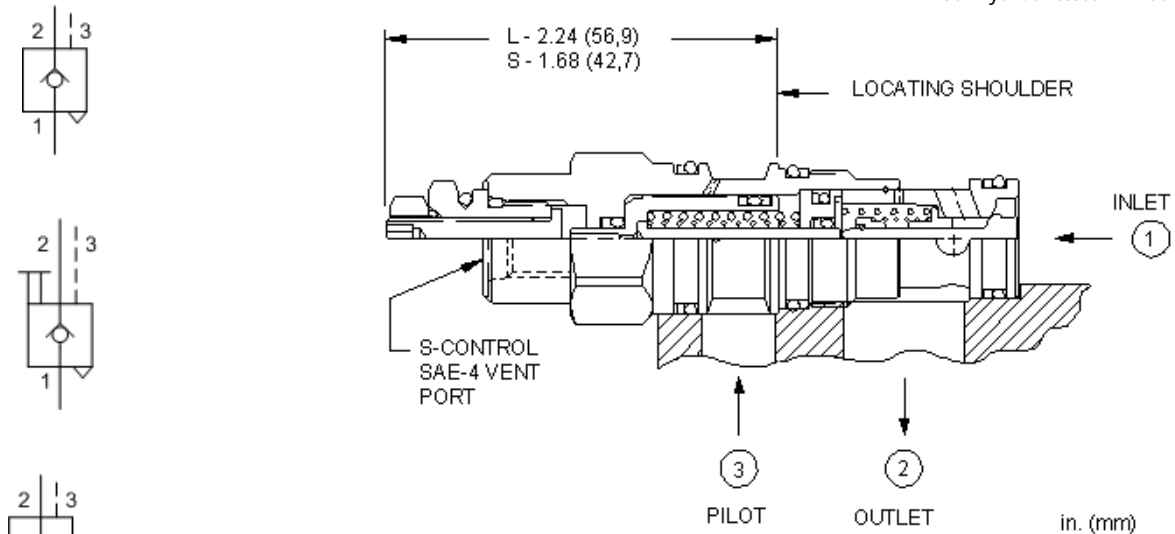
|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Locknut Hex Size                          | 7/16 in.                |
| Seal kit - Cartridge                      | Buna: 990023007         |
| Seal kit - Cartridge                      | Polyurethane: 990023002 |
| Seal kit - Cartridge                      | Viton: 990023006        |

**CONFIGURATION OPTIONS**

Model Code Example: CVGVXCN

| CONTROL                 | (X) | CRACKING PRESSURE       | (C) | SEAL MATERIAL   | (N) | MATERIAL/COATING                |
|-------------------------|-----|-------------------------|-----|-----------------|-----|---------------------------------|
| <b>X</b> Standard Pilot |     | <b>C</b> 30 psi (2 bar) |     | <b>N</b> Buna-N |     | Standard Material/Coating       |
| L Manual Load Release   |     | A 4 psi (0,3 bar)       |     | E EPDM          |     | /AP Stainless Steel, Passivated |
|                         |     | B 15 psi (1 bar)        |     | V Viton         |     | /LH Mild Steel, Zinc-Nickel     |
|                         |     | D 50 psi (3,5 bar)      |     |                 |     |                                 |
|                         |     | E 75 psi (5 bar)        |     |                 |     |                                 |
|                         |     | F 100 psi (7 bar)       |     |                 |     |                                 |





This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) pilot port will open the valve from port 1 to port 2. Pilot pressure needed to open the valve is directly proportional to the load pressure at port 1. The valve is insensitive to pressure at port 2 because the spring chamber is referenced out the back of the hex body.

#### TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

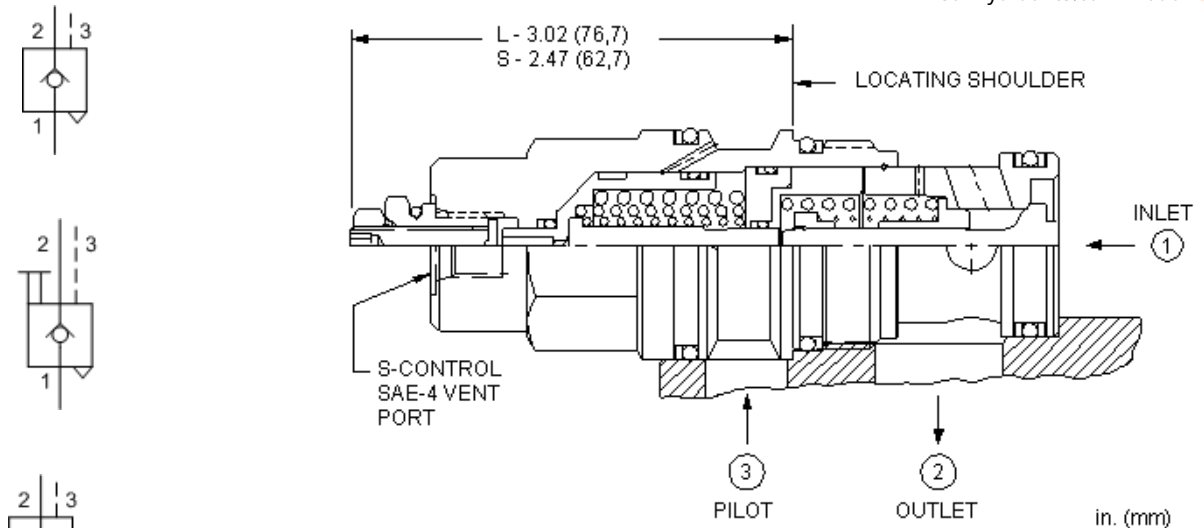
|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Locknut Hex Size                          | 7/16 in.                |
| Seal kit - Cartridge                      | Buna: 990311007         |
| Seal kit - Cartridge                      | Polyurethane: 990011002 |
| Seal kit - Cartridge                      | Viton: 990311006        |

#### CONFIGURATION OPTIONS

#### Model Code Example: CKCVXCN

| CONTROL                                   | (X) | CRACKING PRESSURE         | (C) | SEAL MATERIAL   | (N) | MATERIAL/COATING                |
|-------------------------------------------|-----|---------------------------|-----|-----------------|-----|---------------------------------|
| <b>X</b> Standard Pilot, Atmospheric Vent |     | <b>C</b> 30 psi (2 bar)   |     | <b>N</b> Buna-N |     | Standard Material/Coating       |
| <b>S</b> External 4-SAE Vent Port         |     | <b>A</b> 4 psi (0,3 bar)  |     | <b>V</b> Viton  |     | /AP Stainless Steel, Passivated |
|                                           |     | <b>B</b> 15 psi (1 bar)   |     |                 |     | /LH Mild Steel, Zinc-Nickel     |
|                                           |     | <b>D</b> 50 psi (3,5 bar) |     |                 |     |                                 |
|                                           |     | <b>E</b> 75 psi (5 bar)   |     |                 |     |                                 |
|                                           |     | <b>F</b> 100 psi (7 bar)  |     |                 |     |                                 |





This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) pilot port will open the valve from port 1 to port 2. Pilot pressure needed to open the valve is directly proportional to the load pressure at port 1. The valve is insensitive to pressure at port 2 because the spring chamber is referenced out the back of the hex body.

#### TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

|                                           |                         |
|-------------------------------------------|-------------------------|
| Maximum Operating Pressure                | 5000 psi                |
| Pilot Ratio                               | 3:1                     |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.            |
| Locknut Hex Size                          | 7/16 in.                |
| Seal kit - Cartridge                      | Buna: 990017007         |
| Seal kit - Cartridge                      | Polyurethane: 990017002 |
| Seal kit - Cartridge                      | Viton: 990017006        |

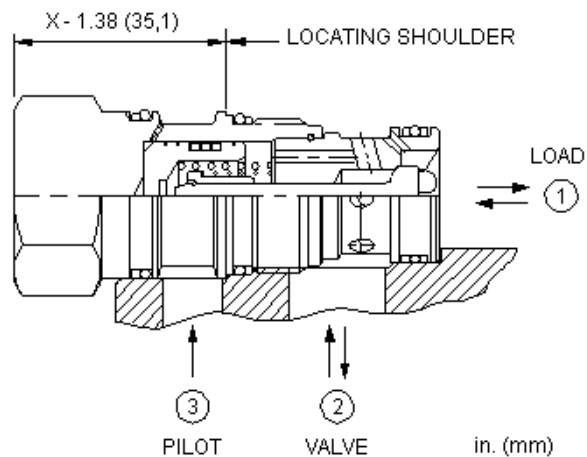
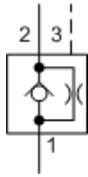
#### CONFIGURATION OPTIONS

Model Code Example: CKGVXC�

| CONTROL                                   | (X) | CRACKING PRESSURE         | (C) | SEAL MATERIAL   | (N) | MATERIAL/COATING                |
|-------------------------------------------|-----|---------------------------|-----|-----------------|-----|---------------------------------|
| <b>X</b> Standard Pilot, Atmospheric Vent |     | <b>C</b> 30 psi (2 bar)   |     | <b>N</b> Buna-N |     | Standard Material/Coating       |
| <b>S</b> External 4-SAE Vent Port         |     | <b>A</b> 4 psi (0,3 bar)  |     | <b>V</b> Viton  |     | /AP Stainless Steel, Passivated |
|                                           |     | <b>B</b> 15 psi (1 bar)   |     |                 |     |                                 |
|                                           |     | <b>D</b> 50 psi (3,5 bar) |     |                 |     |                                 |
|                                           |     | <b>E</b> 75 psi (5 bar)   |     |                 |     |                                 |
|                                           |     | <b>F</b> 100 psi (7 bar)  |     |                 |     |                                 |







This valve is a pilot to open check valve with a bypass orifice. It incorporates a sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and restricts flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. The pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes the pilot pressure. Note: The bypass orifice diameter is specified by the customer. See Technical Data below for the allowable orifice range.

#### TECHNICAL DATA

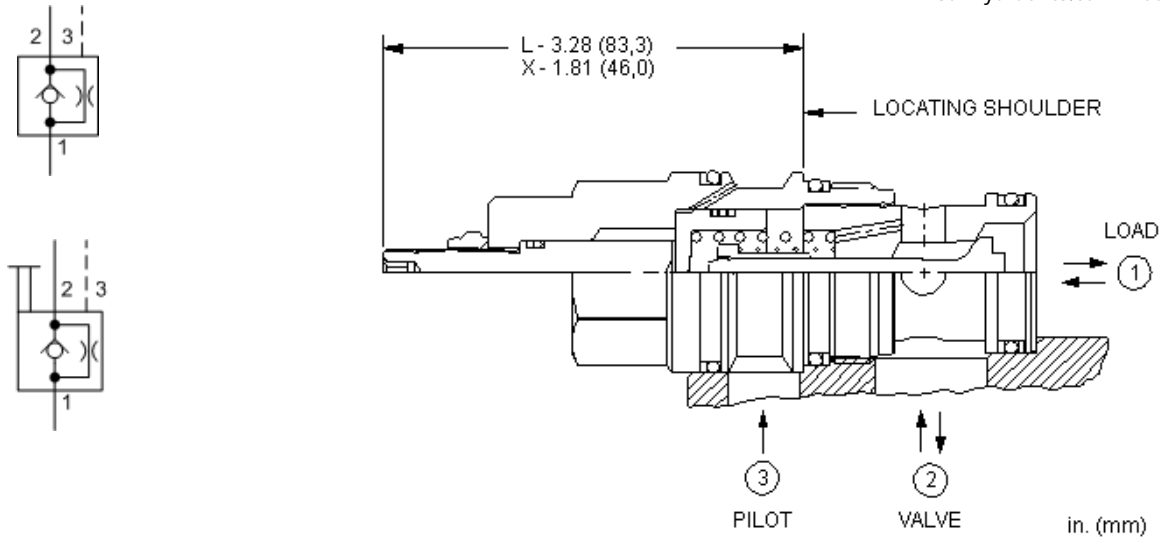
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

|                            |                         |
|----------------------------|-------------------------|
| Maximum Operating Pressure | 5000 psi                |
| Pilot Ratio                | 3:1                     |
| Orifice Range              | .016 - .135 in.         |
| Seal kit - Cartridge       | Buna: 990202007         |
| Seal kit - Cartridge       | Polyurethane: 990002002 |
| Seal kit - Cartridge       | Viton: 990202006        |

#### CONFIGURATION OPTIONS

#### Model Code Example: CNEEXCN

| CONTROL                 | (X) SETTING RANGE                                                           | (C) SEAL MATERIAL | (N)            |
|-------------------------|-----------------------------------------------------------------------------|-------------------|----------------|
| <b>X</b> Not Adjustable | <b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .135 in. (0,4 - 3,4 mm)   | <b>N</b> Buna-N   | <b>V</b> Viton |
|                         | <b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .135 in. (0,4 - 3,4 mm)  |                   |                |
|                         | <b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .135 in. (0,4 - 3,4 mm)   |                   |                |
|                         | <b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .135 in. (0,4 - 3,4 mm) |                   |                |
|                         | <b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .135 in. (0,4 - 3,4 mm)   |                   |                |
|                         | <b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .135 in. (0,4 - 3,4 mm)  |                   |                |



This valve is a pilot to open check valve with a bypass orifice. It incorporates a sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and restricts flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. The pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes the pilot pressure. Note: The bypass orifice diameter is specified by the customer. See Technical Data below for the allowable orifice range. An 'L' control option is available to manually release the load. See Option Selection below.

#### TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

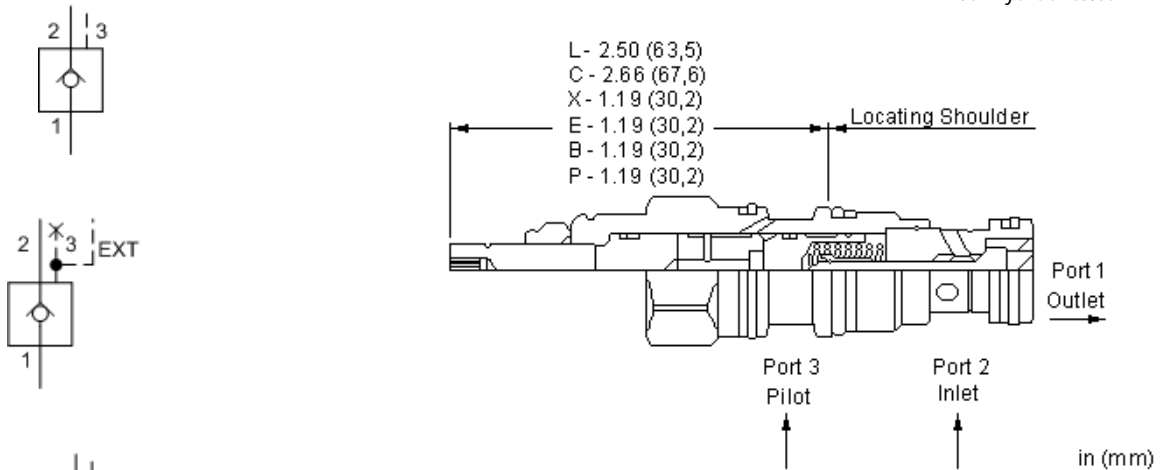
|                            |                         |
|----------------------------|-------------------------|
| Maximum Operating Pressure | 5000 psi                |
| Pilot Ratio                | 3:1                     |
| Orifice Range              | .016 - .218 in.         |
| Seal kit - Cartridge       | Buna: 990017007         |
| Seal kit - Cartridge       | Polyurethane: 990017002 |
| Seal kit - Cartridge       | Viton: 990017006        |

#### CONFIGURATION OPTIONS

#### Model Code Example: CNGEArray

| CONTROL                 | (X) | SETTING RANGE                                                               | (C) | SEAL MATERIAL   | (N) |
|-------------------------|-----|-----------------------------------------------------------------------------|-----|-----------------|-----|
| <b>X</b> Not Adjustable |     | <b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)   |     | <b>N</b> Buna-N |     |
|                         |     | <b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)  |     | <b>V</b> Viton  |     |
|                         |     | <b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)   |     |                 |     |
|                         |     | <b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm) |     |                 |     |
|                         |     | <b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)   |     |                 |     |
|                         |     | <b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm)  |     |                 |     |





This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes pilot pressure.

#### TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

|                                           |                  |
|-------------------------------------------|------------------|
| Maximum Operating Pressure                | 5000 psi         |
| Pilot Ratio                               | 5:1              |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 1 drops/min.     |
| Seal kit - Cartridge                      | Buna: 990011007  |
| Seal kit - Cartridge                      | Viton: 990011006 |

#### CONFIGURATION OPTIONS

#### Model Code Example: CKCSXCN

| CONTROL                                               | (X) | CRACKING PRESSURE         | (C) | SEAL MATERIAL   | (N) |
|-------------------------------------------------------|-----|---------------------------|-----|-----------------|-----|
| <b>X</b> Standard Pilot                               |     | <b>C</b> 30 psi (2 bar)   |     | <b>N</b> Buna-N |     |
| <b>B</b> External 1/4 BSPP Pilot Port, Port 3 blocked |     | <b>A</b> 4 psi (0,3 bar)  |     | <b>V</b> Viton  |     |
| <b>C</b> Manual Load Release - Tamper Resistant       |     | <b>B</b> 15 psi (1 bar)   |     |                 |     |
| <b>E</b> External 4-SAE Pilot Port, Port 3 Blocked    |     | <b>D</b> 50 psi (3,5 bar) |     |                 |     |
| <b>L</b> Manual Load Release                          |     | <b>E</b> 75 psi (5 bar)   |     |                 |     |
| <b>P</b> External 1/4 NPTF Port, Port 3 blocked       |     | <b>F</b> 100 psi (7 bar)  |     |                 |     |
|                                                       |     | <b>Z</b> 1 psi (0,07 bar) |     |                 |     |

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