

# Directional, Check Cartridges

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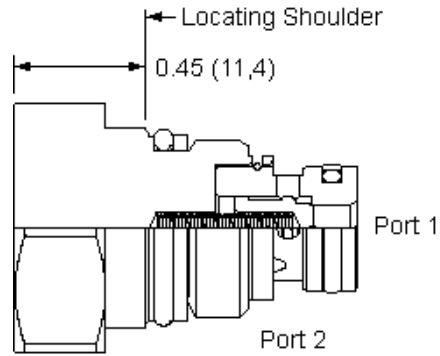
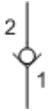
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Series	Ports	Cavities
<b>Series Z Cartridges</b> 3/8-24 UNF Cartridge Thread 5 mm Valve Hex Size 11 - 14 Nm Valve Installation Torque	3-Port	T-382A
<b>Series P Cartridges</b> M16 Cartridge Thread 22,2 mm Valve Hex Size 27 - 33 Nm Valve Installation Torque	2-Port 2-Port (Deep) 3-Port	T-8A T-8DP T-9A
<b>Series 0 Cartridges</b> M16 Cartridge Thread 19,1 mm Valve Hex Size 25,4 mm Valve Hex Size 27 - 33 Nm Valve Installation Torque	2-Port 2-Port (Deep) 3-Port 3-Port 4-Port	T-162A T-162DP T-150A T-163A T-30A
<b>Series 1 Cartridges</b> M20 Cartridge Thread 22,2 mm Valve Hex Size 41 - 47 Nm Valve Installation Torque	2-Port 2-Port 3-Port 4-Port 4-Port 6-Port	T-10A T-13A T-11A T-21A T-31A T-61A
<b>Series 2 Cartridges</b> 1"-14 UNS Cartridge Thread 28,6 mm Valve Hex Size 61 - 68 Nm Valve Installation Torque	2-Port 2-Port 3-Port 4-Port 4-Port 4-Port (Dual path) 6-Port 6-Port	T-3A T-5A T-2A T-22A T-32A T-52AD T-52A T-62A
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<b>Series 4 Cartridges</b> M48 Cartridge Thread 41,3 mm Valve Hex Size 474 - 508 Nm Valve Installation Torque	2-Port 2-Port (Undercut) 3-Port 3-Port (Undercut) 4-Port 4-Port (Undercut) 4-Port 4-Port (Dual path) 6-Port 6-Port	T-18A T-18AU T-19A T-19AU T-24A T-24AU T-34A T-54AD T-54A T-64A



Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

**TECHNICAL DATA**

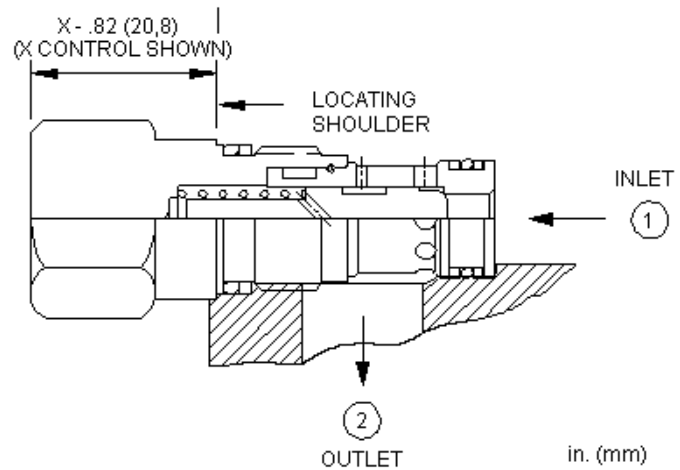
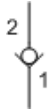
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Seal kit - Cartridge	Buna: 990608007
Seal kit - Cartridge	EPDM: 990608014
Seal kit - Cartridge	Viton: 990608006

**CONFIGURATION OPTIONS**

Model Code Example: CXAAXBN

CONTROL	(X) CRACKING PRESSURE	(B) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>B</b> 15 psi (1 bar)	<b>N</b> Buna-N	Standard Material/Coating
	<b>F</b> 100 psi (7 bar)	<b>E</b> EPDM	/AP Stainless Steel, Passivated
	<b>Z</b> 1 psi (0,07 bar)	<b>V</b> Viton	/LH Mild Steel, Zinc-Nickel



Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

**TECHNICAL DATA**

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

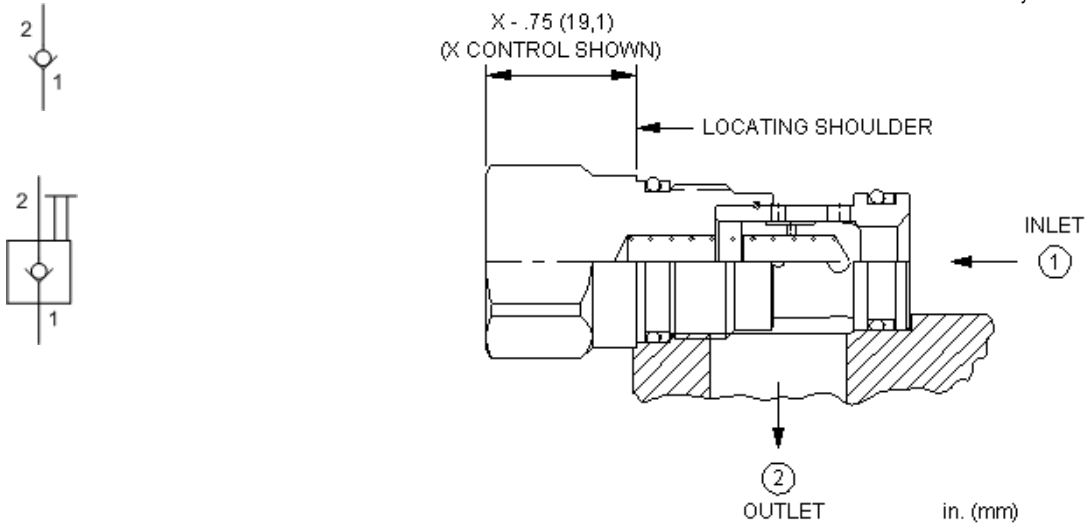
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990162007
Seal kit - Cartridge	EPDM: 990162014
Seal kit - Cartridge	Polyurethane: 990162002
Seal kit - Cartridge	Viton: 990162006

**CONFIGURATION OPTIONS**

**Model Code Example: CXBAXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	Standard Material/Coating
	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)		





Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

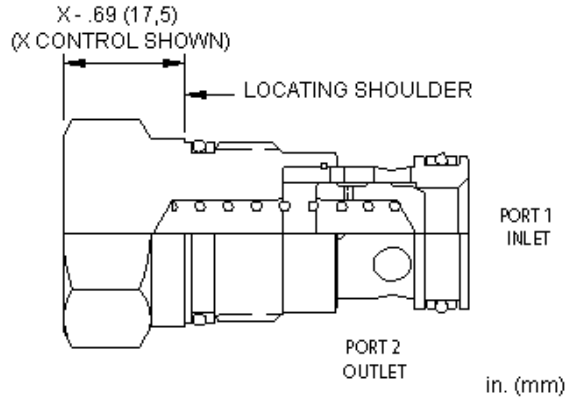
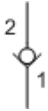
**TECHNICAL DATA**

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

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990010007
Seal kit - Cartridge	EPDM: 990010014
Seal kit - Cartridge	Polyurethane: 990010002
Seal kit - Cartridge	Viton: 990010006

**CONFIGURATION OPTIONS**
**Model Code Example: CXDAXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	Standard Material/Coating
	<b>A</b> 4 psi (0,3 bar)	<b>E</b> EPDM	/AP Stainless Steel, Passivated
	<b>B</b> 15 psi (1 bar)	<b>V</b> Viton	/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)		



Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

**TECHNICAL DATA**

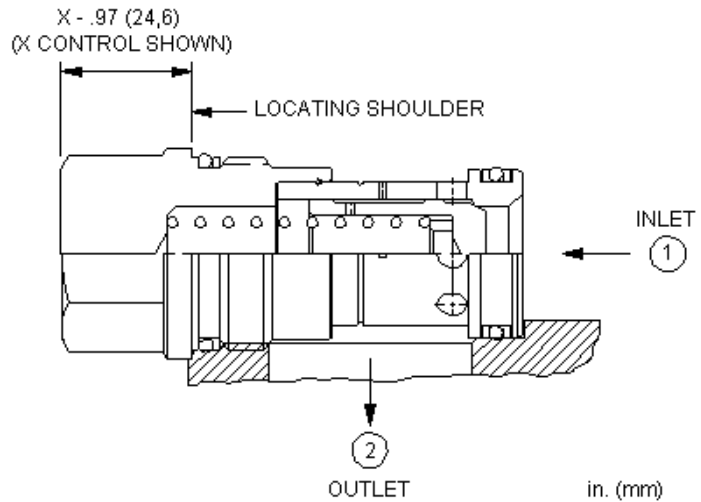
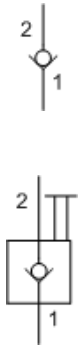
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990203007
Seal kit - Cartridge	EPDM: 990203014
Seal kit - Cartridge	Viton: 990203006

**CONFIGURATION OPTIONS**

**Model Code Example: CXFAXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	<b>N</b> Buna-N E EPDM V Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

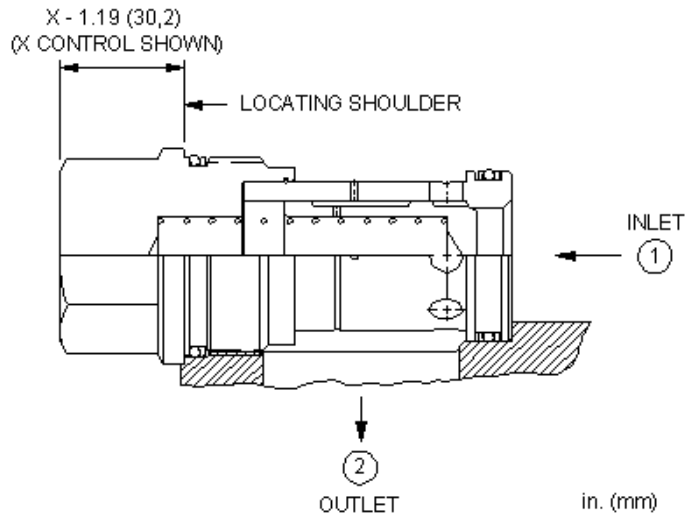
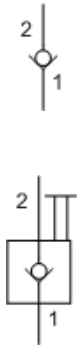
**TECHNICAL DATA**

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

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990016007
Seal kit - Cartridge	EPDM: 990016014
Seal kit - Cartridge	Polyurethane: 990016002
Seal kit - Cartridge	Viton: 990016006

**CONFIGURATION OPTIONS**
**Model Code Example: CXHAXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	Standard Material/Coating
L Manual Override	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)		



Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

**TECHNICAL DATA**

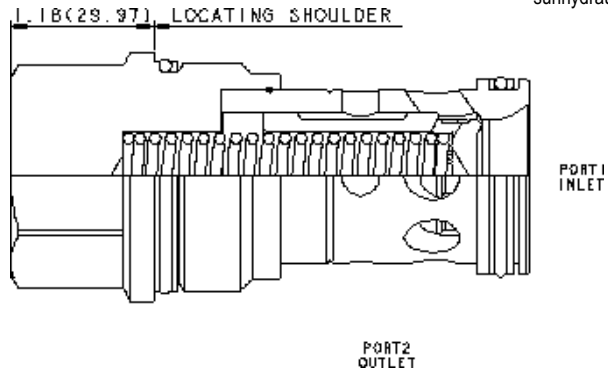
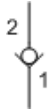
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990018007
Seal kit - Cartridge	EPDM: 990018014
Seal kit - Cartridge	Polyurethane: 990018002
Seal kit - Cartridge	Viton: 990018006

**CONFIGURATION OPTIONS**

**Model Code Example: CXJAXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar) G 150 psi (10,5 bar)	<b>N</b> Buna-N E EPDM V Viton	<b>Standard Material/Coating</b> /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

**TECHNICAL DATA**

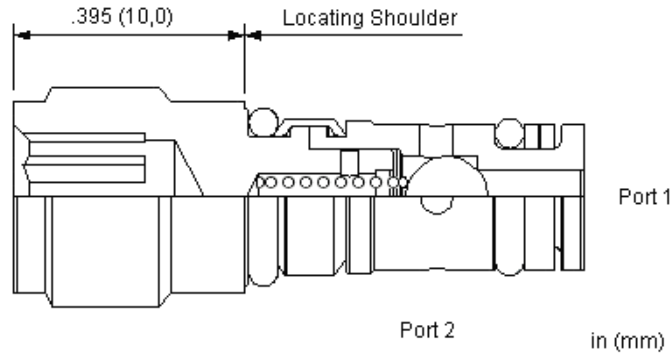
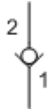
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990018007
Seal kit - Cartridge	EPDM: 990018014
Seal kit - Cartridge	Viton: 990018006

**CONFIGURATION OPTIONS**

Model Code Example: **CXKAXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar) G 150 psi (10,5 bar)	<b>N</b> Buna-N E EPDM V Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Shown to depict scale

Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

**TECHNICAL DATA**

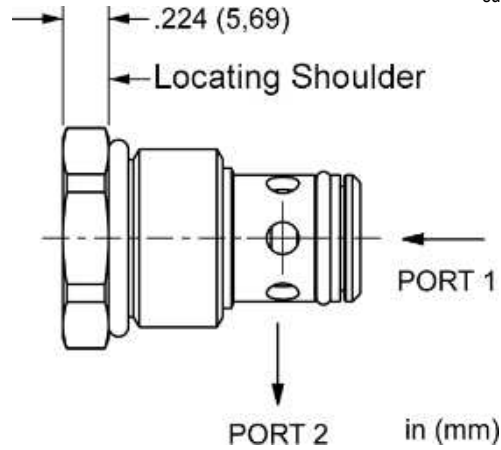
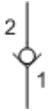
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Valve Internal Hex Size	5 mm
Seal kit - Cartridge	Buna: 990382007
Seal kit - Cartridge	EPDM: 990382014
Seal kit - Cartridge	Viton: 990382006

**CONFIGURATION OPTIONS**

Model Code Example: **CXZAXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar)	<b>N</b> Buna-N E EPDM V Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

**TECHNICAL DATA**

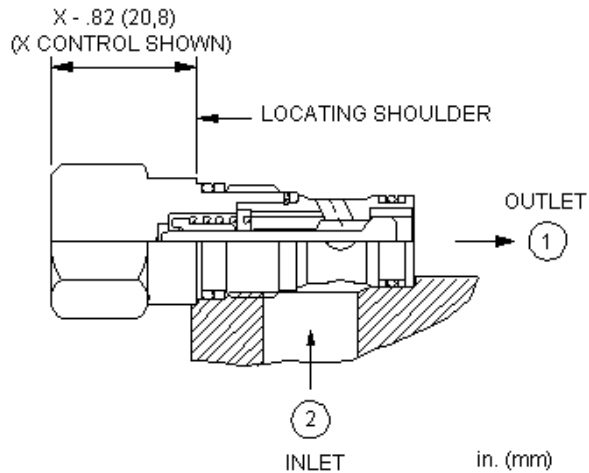
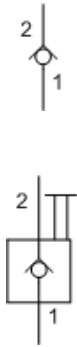
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	250 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,3 cc/min.
Seal kit - Cartridge	Buna: 99C102007
Seal kit - Cartridge	Viton: 99C102006

**CONFIGURATION OPTIONS**

Model Code Example: CXUTXCN

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N)
X -	C 29 psi (2.0 bar) A 7 psi (.5 bar)	N Buna-N V Viton	



Free-flow, side-to-nose check valves are on/off circuit components that allow free flow from the inlet (port 2) to the outlet (port 1) and block flow in the opposite direction.

**TECHNICAL DATA**

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

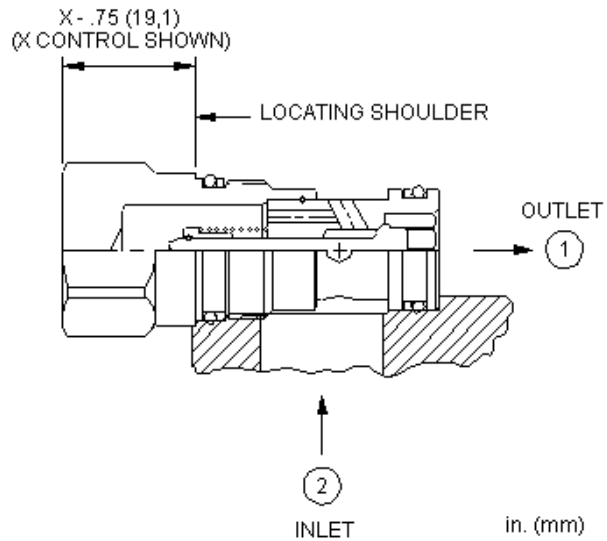
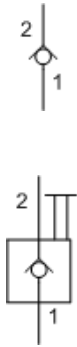
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990162007
Seal kit - Cartridge	EPDM: 990162014
Seal kit - Cartridge	Polyurethane: 990162002
Seal kit - Cartridge	Viton: 990162006

**CONFIGURATION OPTIONS**

Model Code Example: **CXADXCN**

CONTROL	(X) NOMINAL CONTROL PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) Z 1 psi (0,07 bar)	<b>N</b> Buna-N E EPDM V Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel





Free-flow, side-to-nose check valves are on/off circuit components that allow free flow from the inlet (port 2) to the outlet (port 1) and block flow in the opposite direction.

**TECHNICAL DATA**

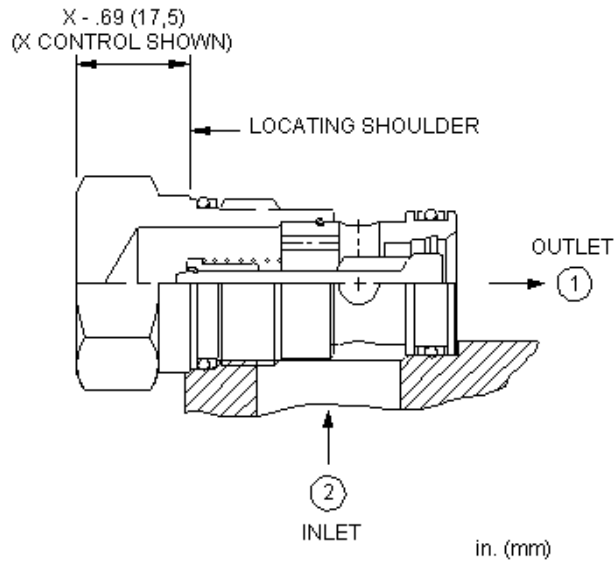
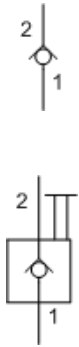
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990010007
Seal kit - Cartridge	EPDM: 990010014
Seal kit - Cartridge	Polyurethane: 990010002
Seal kit - Cartridge	Viton: 990010006

**CONFIGURATION OPTIONS**

**Model Code Example: CXCDXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	Standard Material/Coating
<b>L</b> Manual Override	<b>A</b> 4 psi (0,3 bar)	<b>E</b> EPDM	/AP Stainless Steel, Passivated
	<b>B</b> 15 psi (1 bar)	<b>V</b> Viton	/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)		



Free-flow, side-to-nose check valves are on/off circuit components that allow free flow from the inlet (port 2) to the outlet (port 1) and block flow in the opposite direction.

**TECHNICAL DATA**

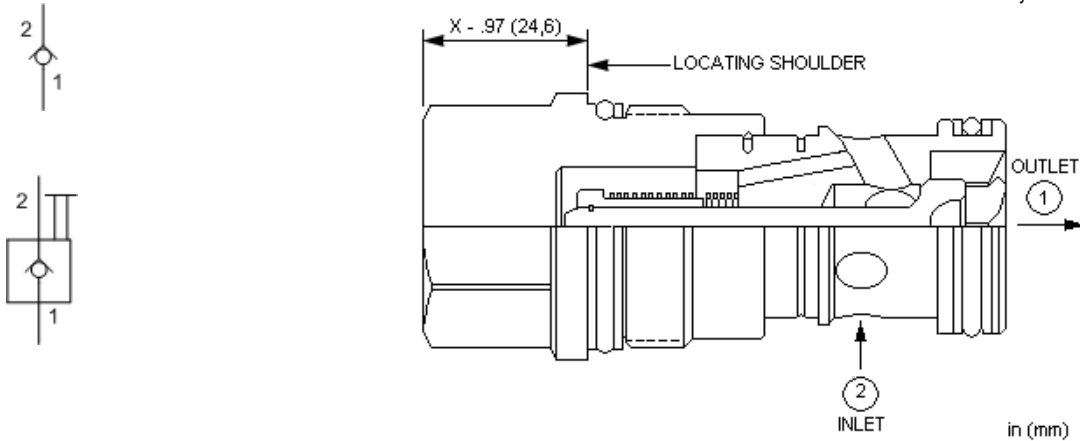
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990203007
Seal kit - Cartridge	Viton: 990203006

**CONFIGURATION OPTIONS**

**Model Code Example: CXEDXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	<b>N</b> Buna-N E EPDM V Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, side-to-nose check valves are on/off circuit components that allow free flow from the inlet (port 2) to the outlet (port 1) and block flow in the opposite direction.

**TECHNICAL DATA**

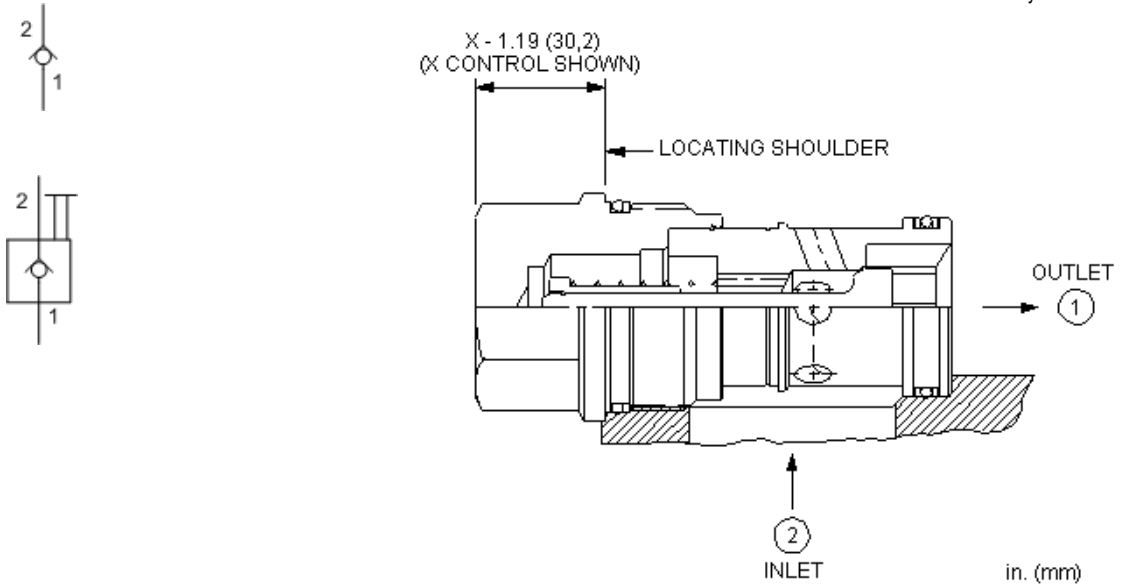
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990016007
Seal kit - Cartridge	EPDM: 990016014
Seal kit - Cartridge	Polyurethane: 990016002
Seal kit - Cartridge	Viton: 990016006

**CONFIGURATION OPTIONS**

**Model Code Example: CXGDXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	<b>N</b> Buna-N E EPDM V Viton	<b>N</b> Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, side-to-nose check valves are on/off circuit components that allow free flow from the inlet (port 2) to the outlet (port 1) and block flow in the opposite direction.

**TECHNICAL DATA**

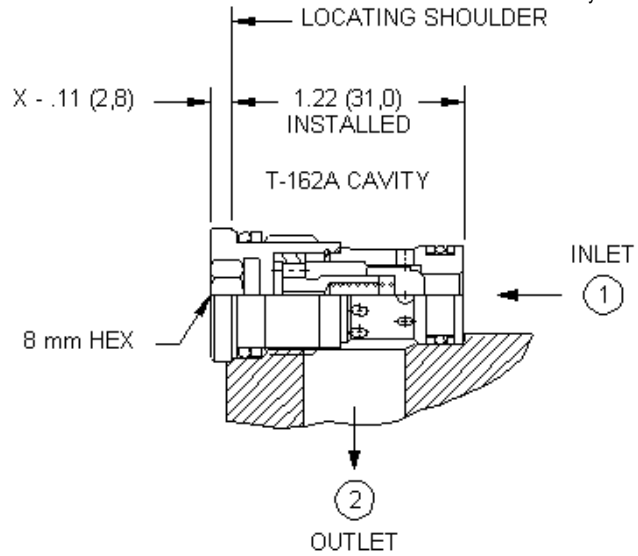
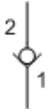
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990018007
Seal kit - Cartridge	EPDM: 990018014
Seal kit - Cartridge	Polyurethane: 990018002
Seal kit - Cartridge	Viton: 990018006

**CONFIGURATION OPTIONS**

Model Code Example: **CXIDXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	<b>N</b> Buna-N E EPDM V Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



in. (mm)

Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

**TECHNICAL DATA**

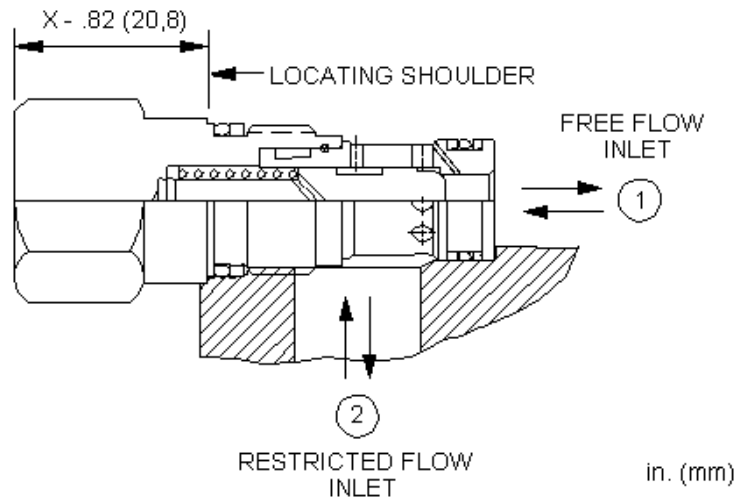
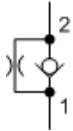
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Valve Internal Hex Size	8 mm
Seal kit - Cartridge	Buna: 990162007
Seal kit - Cartridge	Polyurethane: 990162002
Seal kit - Cartridge	Viton: 990162006

**CONFIGURATION OPTIONS**

**Model Code Example: CXBGXAN**

CONTROL	(X) CRACKING PRESSURE	(A) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>A</b> 4 psi (0,3 bar) B 15 psi (1 bar) C 30 psi (2 bar) D 50 psi (3,5 bar)	<b>N</b> Buna-N V Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, nose-to-side check valves with a bypass orifice allow free flow from port 1 to port 2. A customer specified orifice is included to restrict flow from port 2 to port 1. See technical data below for orifice range.

**TECHNICAL DATA**

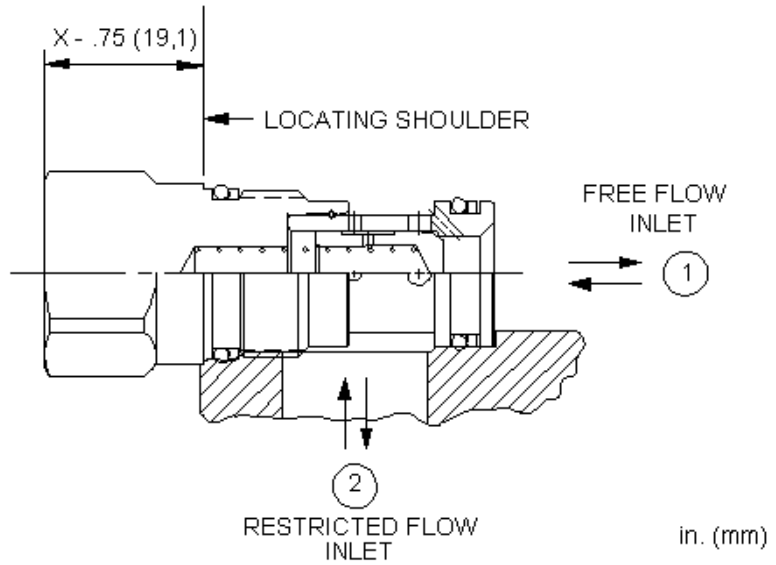
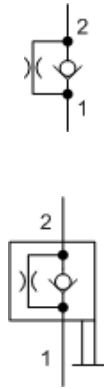
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 1,6 mm
Seal kit - Cartridge	Buna: 990162007
Seal kit - Cartridge	EPDM: 990162014
Seal kit - Cartridge	Polyurethane: 990162002
Seal kit - Cartridge	Viton: 990162006

**CONFIGURATION OPTIONS**

**Model Code Example: CNBCXCN**

CONTROL	(X) SETTING RANGE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .062 in. (0,4 - 1,6 mm) <b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .062 in. (0,4 - 1,6 mm) <b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .062 in. (0,4 - 1,6 mm) <b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .062 in. (0,4 - 1,6 mm) <b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .062 in. (0,4 - 1,6 mm) <b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .062 in. (0,4 - 1,6 mm)	<b>N</b> Buna-N <b>E</b> EPDM <b>V</b> Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, nose-to-side check valves with a bypass orifice allow free flow from port 1 to port 2. A customer specified orifice is included to restrict flow from port 2 to port 1. See technical data below for orifice range.

**TECHNICAL DATA**

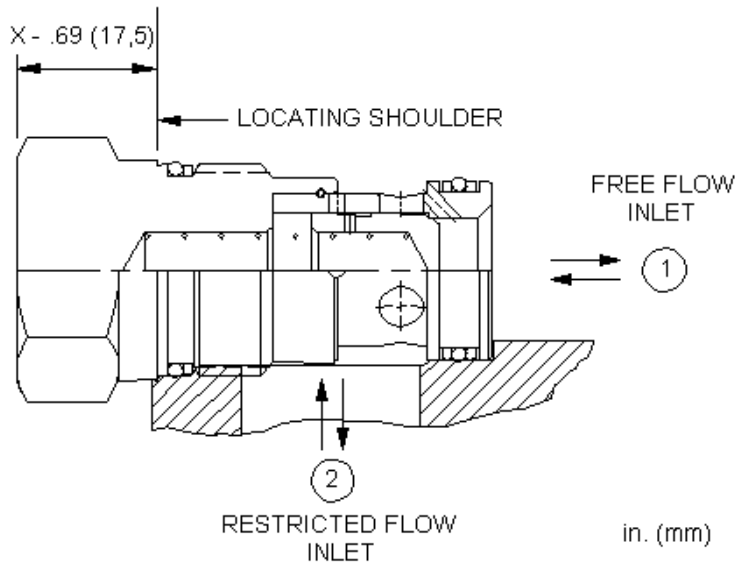
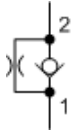
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 2,7 mm
Seal kit - Cartridge	Buna: 990010007
Seal kit - Cartridge	Polyurethane: 990010002
Seal kit - Cartridge	Viton: 990010006

**CONFIGURATION OPTIONS**

**Model Code Example: CNDCXCN**

CONTROL	(X) SETTING RANGE	(C)	SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .107 in. (0,4 - 2,7 mm)		<b>N</b> Buna-N	Standard Material/Coating
<b>L</b> Manual Load Release	<b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .107 in. (0,4 - 2,7 mm)		<b>V</b> Viton	/AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel
	<b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .107 in. (0,4 - 2,7 mm)			
	<b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .107 in. (0,4 - 2,7 mm)			
	<b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .107 in. (0,4 - 2,7 mm)			
	<b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .107 in. (0,4 - 2,7 mm)			



Free-flow, nose-to-side check valves with a bypass orifice allow free flow from port 1 to port 2. A customer specified orifice is included to restrict flow from port 2 to port 1. See technical data below for orifice range.

**TECHNICAL DATA**

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

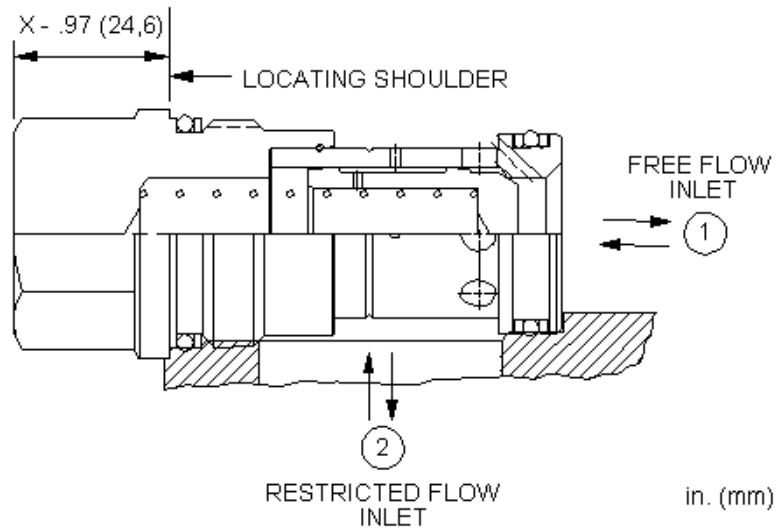
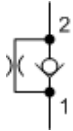
Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 3,2 mm
Seal kit - Cartridge	Buna: 990203007
Seal kit - Cartridge	Viton: 990203006

**CONFIGURATION OPTIONS**

**Model Code Example: CNFCXCN**

<b>CONTROL</b>	<b>(X) SETTING RANGE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm) <b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm) <b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm) <b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm) <b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm) <b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm)	<b>N</b> Buna-N <b>V</b> Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel





Free-flow, nose-to-side check valves with a bypass orifice allow free flow from port 1 to port 2. A customer specified orifice is included to restrict flow from port 2 to port 1. See technical data below for orifice range.

**TECHNICAL DATA**

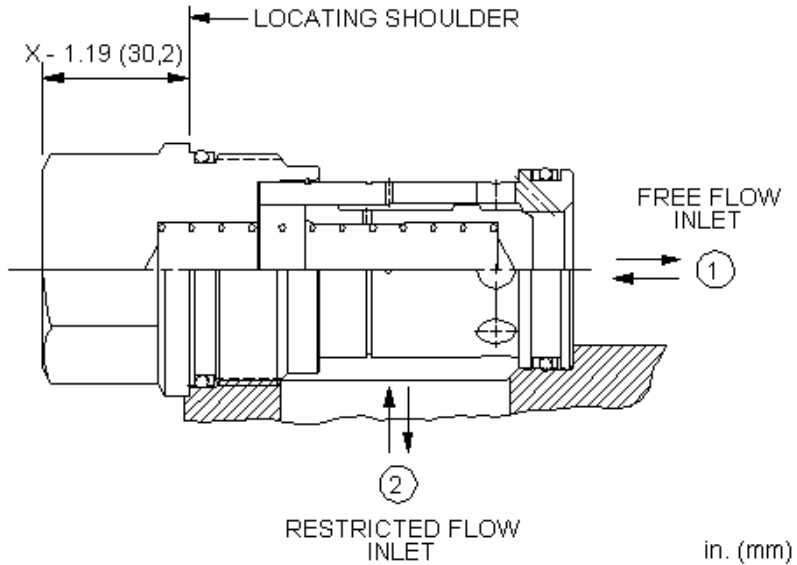
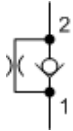
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 6,4 mm
Seal kit - Cartridge	Buna: 990016007
Seal kit - Cartridge	EPDM: 990016014
Seal kit - Cartridge	Polyurethane: 990016002
Seal kit - Cartridge	Viton: 990016006

**CONFIGURATION OPTIONS**

**Model Code Example: CNHCXCN**

CONTROL	(X) SETTING RANGE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm) <b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm) <b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm) <b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm) <b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm) <b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm)	<b>N</b> Buna-N <b>E</b> EPDM <b>V</b> Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, nose-to-side check valves with a bypass orifice allow free flow from port 1 to port 2. A customer specified orifice is included to restrict flow from port 2 to port 1. See technical data below for orifice range.

**TECHNICAL DATA**

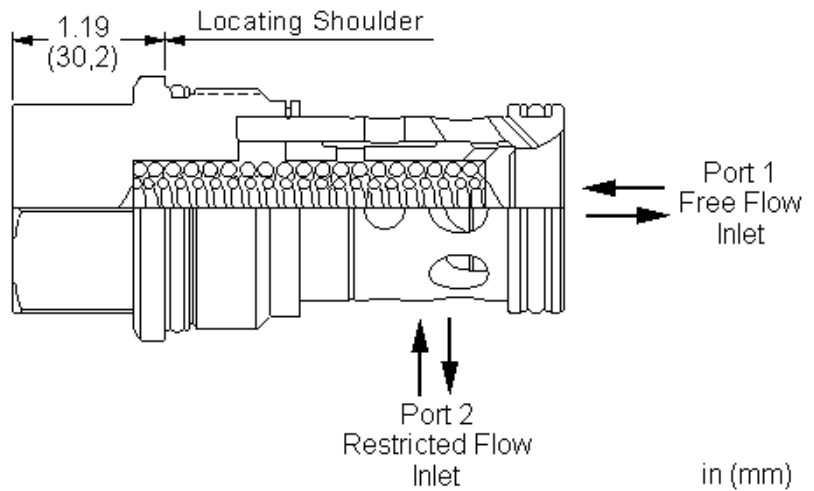
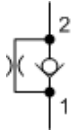
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 9 mm
Seal kit - Cartridge	Buna: 990018007
Seal kit - Cartridge	Polyurethane: 990018002
Seal kit - Cartridge	Viton: 990018006

**CONFIGURATION OPTIONS**

Model Code Example: **CNJCXCN**

CONTROL	(X) SETTING RANGE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm) <b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm) <b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm) <b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm) <b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm) <b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm) <b>G</b> 150 psi (10 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)	<b>N</b> Buna-N <b>V</b> Viton	Standard Material/Coating /AP Stainless Steel, Passivated



Free-flow, nose-to-side check valves with a bypass orifice allow free flow from port 1 to port 2. A customer specified orifice is included to restrict flow from port 2 to port 1. See technical data below for orifice range.

**TECHNICAL DATA**

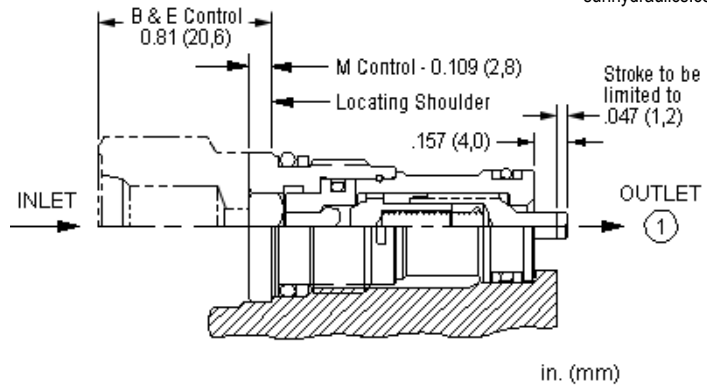
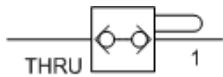
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 9 mm
Seal kit - Cartridge	Buna: 990018007
Seal kit - Cartridge	Viton: 990018006

**CONFIGURATION OPTIONS**

**Model Code Example: CNKCXAN**

CONTROL	(X)	SETTING RANGE	(A)	SEAL MATERIAL	(N)
<b>X</b> Not Adjustable		<b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)		<b>N</b> Buna-N	
		<b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)		<b>V</b> Viton	
		<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)			
		<b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)			
		<b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)			
		<b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)			
		<b>G</b> 150 psi (10 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)			
		<b>Z</b> 1 psi (0,07 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)			



The phaser check is a pair of checks, back-to-back, with the poppet at port 1 mechanically actuated. The valve is meant to be installed into the piston of a cylinder. When the cylinder reaches the end of its stroke the poppet in the phaser check is shoved off its seat allowing flow through the piston. This allows two cylinders to get back into phase.

**TECHNICAL DATA**

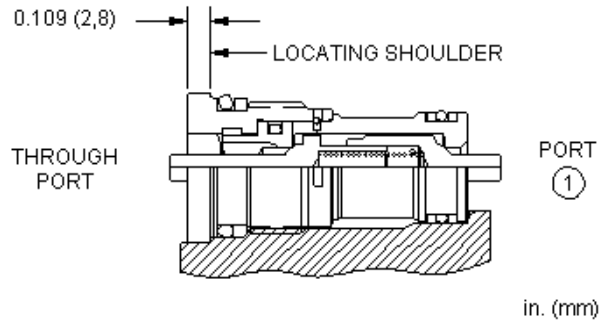
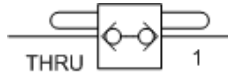
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Valve Internal Hex Size	8 mm
Seal kit - Cartridge	Buna: 990162007
Seal kit - Cartridge	Viton: 990162006

**CONFIGURATION OPTIONS**

**Model Code Example: CDAPMCN**

CONTROL	(M)	CRACKING PRESSURE	(C)	SEAL MATERIAL	(N)
M Mechanical Actuation		C 30 psi (2 bar)		N Buna-N	
B External 1/4 BSPP Port				V Viton	
E External 4-SAE Port					



The phaser check is a pair of checks, back-to-back, with both poppets mechanically actuated. The valve is meant to be installed into the piston or rod of a cylinder. When the cylinder reaches the end of its stroke the poppet in the phaser check is shoved off its seat allowing flow through the piston. This allows two cylinders to get back into phase.

**TECHNICAL DATA**

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

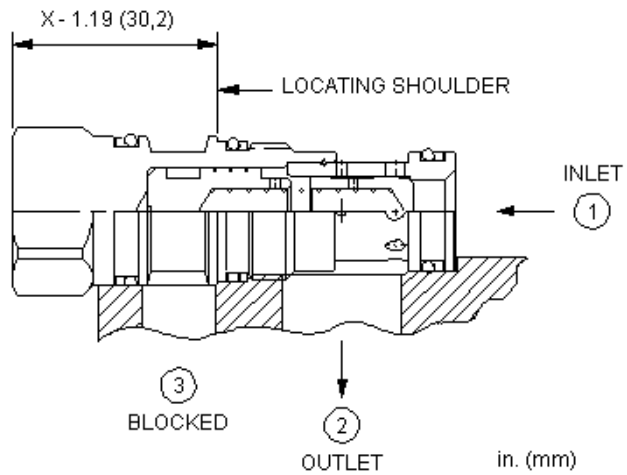
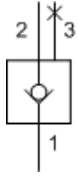
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Valve Internal Hex Size	8 mm
Seal kit - Cartridge	Buna: 990162007
Seal kit - Cartridge	Polyurethane: 990162002
Seal kit - Cartridge	Viton: 990162006

**NOTES** A special tool is required to install this cartridge. Use part number 998-101 to order this tool.

**CONFIGURATION OPTIONS**

**Model Code Example: CDAQMCN**

<b>CONTROL</b>	<b>(M)</b>	<b>CRACKING PRESSURE</b>	<b>(C)</b>	<b>SEAL MATERIAL</b>	<b>(N)</b>
<b>M</b> Mechanical Actuation		<b>C</b> 30 psi (2 bar)		<b>N</b> Buna-N	
				<b>V</b> Viton	



Free-flow, nose-to-side cheater check valves function as a standard 2-port check valve in a 3-port cavity with port 3 of the cartridge blocked off. These valves are useful in circuits where a check valve is required in an existing three port cavity.

**TECHNICAL DATA**

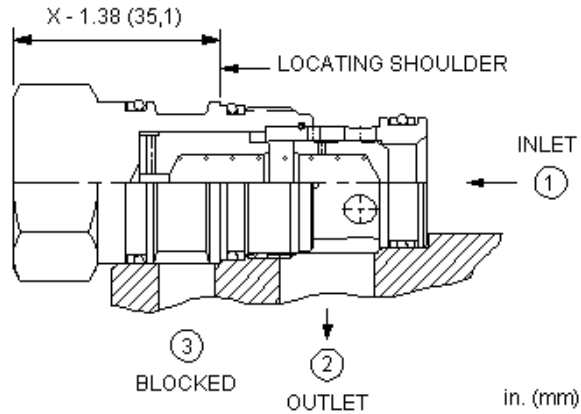
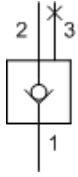
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990011007
Seal kit - Cartridge	Polyurethane: 990011002
Seal kit - Cartridge	Viton: 990011006

**CONFIGURATION OPTIONS**

Model Code Example: CXDCXCN

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	Standard Material/Coating
	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)		
	Z 1 psi (0,07 bar)		



Free-flow, nose-to-side cheater check valves function as a standard 2-port check valve in a 3-port cavity with port 3 of the cartridge blocked off. These valves are useful in circuits where a check valve is required in an existing three port cavity.

**TECHNICAL DATA**

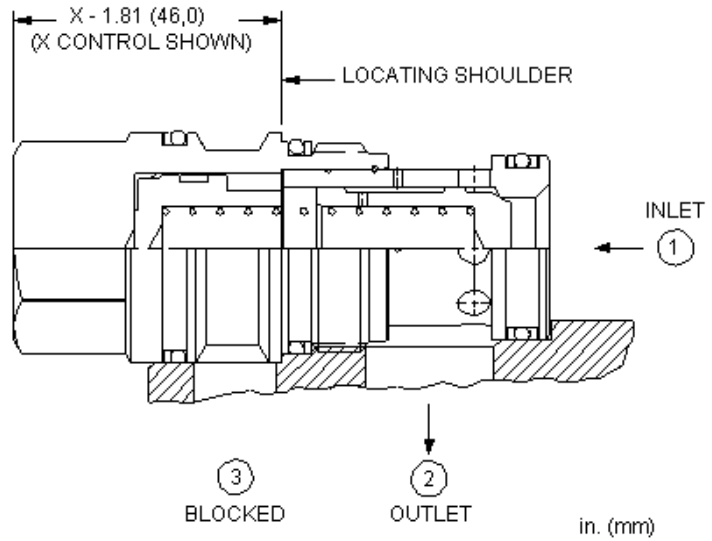
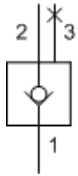
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006

**CONFIGURATION OPTIONS**

**Model Code Example: CXFCXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar) Z 1 psi (0,07 bar)	<b>N</b> Buna-N V Viton	Standard Material/Coating /LH Mild Steel, Zinc-Nickel



Free-flow, nose-to-side cheater check valves function as a standard 2-port check valve in a 3-port cavity with port 3 of the cartridge blocked off. These valves are useful in circuits where a check valve is required in an existing three port cavity.

**TECHNICAL DATA**

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

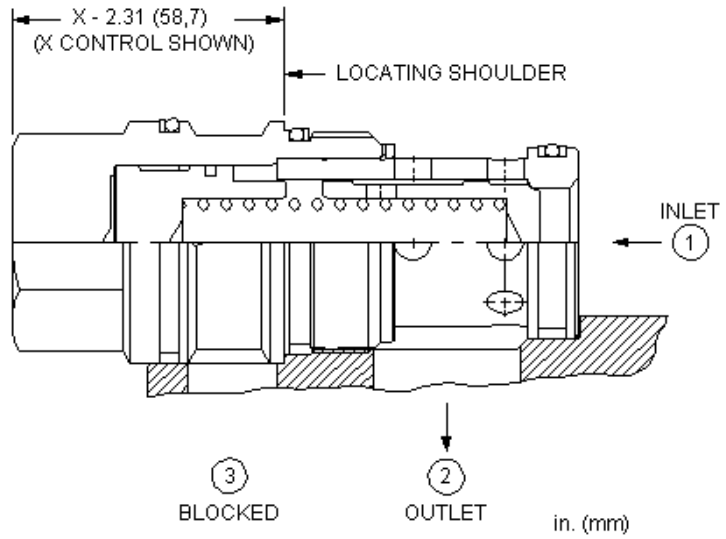
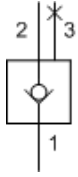
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

**CONFIGURATION OPTIONS**

**Model Code Example: CXHCXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar) Z 1 psi (0,07 bar)	<b>N</b> Buna-N V Viton	Standard Material/Coating /LH Mild Steel, Zinc-Nickel





Free-flow, nose-to-side cheater check valves function as a standard 2-port check valve in a 3-port cavity with port 3 of the cartridge blocked off. These valves are useful in circuits where a check valve is required in an existing three port cavity.

**TECHNICAL DATA**

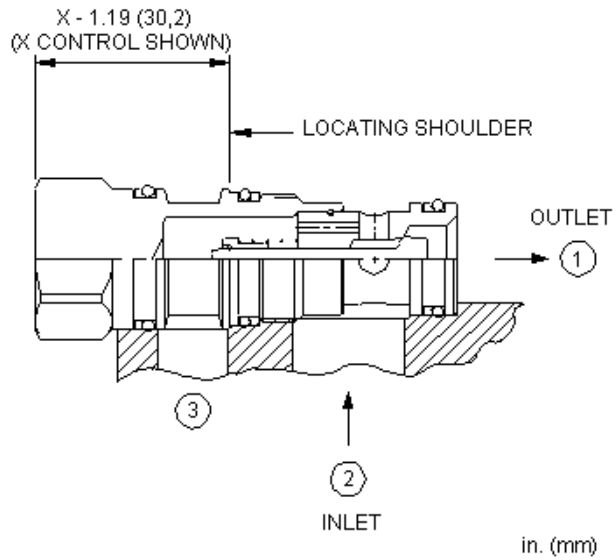
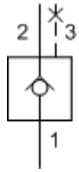
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

**CONFIGURATION OPTIONS**

**Model Code Example: CXJCXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N)
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	
	A 4 psi (0,3 bar)	V Viton	
	B 15 psi (1 bar)		
	D 50 psi (3,5 bar)		
	E 75 psi (5 bar)		
	F 100 psi (7 bar)		
	Z 1 psi (0,07 bar)		



Free-flow, side-to-nose cheater check valves function as a standard 2-port check valve in a 3-port cavity with port 3 of the cartridge blocked off. These valves are useful in circuits where a check valve is required in an existing three port cavity.

**TECHNICAL DATA**

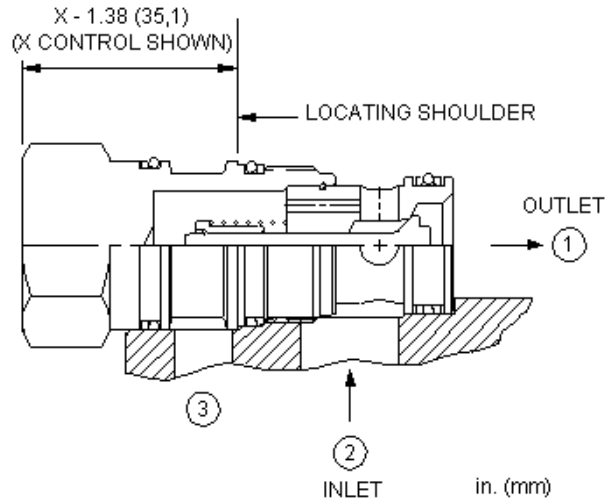
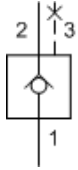
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990011007
Seal kit - Cartridge	Polyurethane: 990011002
Seal kit - Cartridge	Viton: 990011006

**CONFIGURATION OPTIONS**

**Model Code Example: CXCEXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	<b>N</b> Buna-N V Viton	Standard Material/Coating /LH Mild Steel, Zinc-Nickel



Free-flow, side-to-nose cheater check valves function as a standard 2-port check valve in a 3-port cavity with port 3 of the cartridge blocked off. These valves are useful in circuits where a check valve is required in an existing three port cavity.

**TECHNICAL DATA**

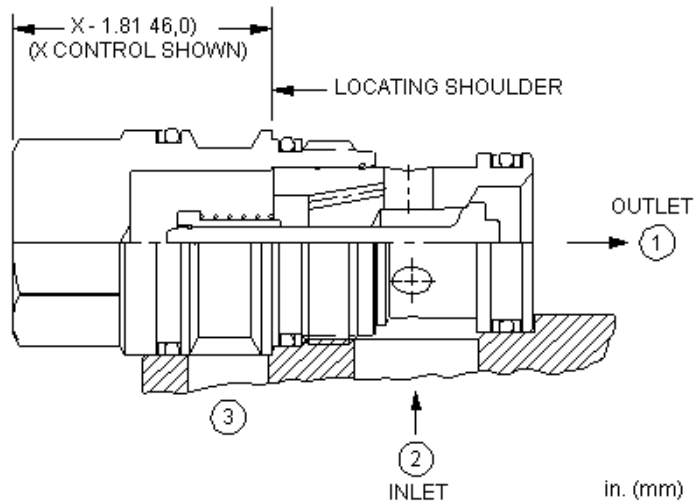
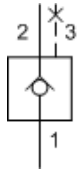
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006

**CONFIGURATION OPTIONS**

**Model Code Example: CXEEXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	<b>N</b> Buna-N V Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, side-to-nose cheater check valves function as a standard 2-port check valve in a 3-port cavity with port 3 of the cartridge blocked off. These valves are useful in circuits where a check valve is required in an existing three port cavity.

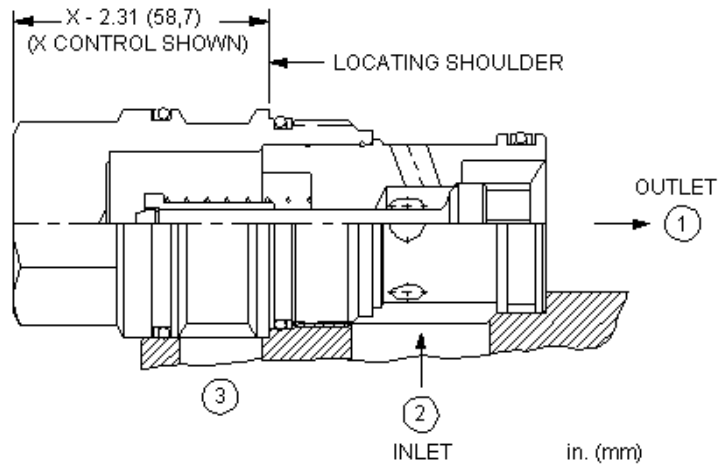
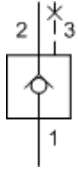
**TECHNICAL DATA**

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

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

**CONFIGURATION OPTIONS**
**Model Code Example: CXGEXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	Standard Material/Coating
	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)		



Free-flow, side-to-nose cheater check valves function as a standard 2-port check valve in a 3-port cavity with port 3 of the cartridge blocked off. These valves are useful in circuits where a check valve is required in an existing three port cavity.

**TECHNICAL DATA**

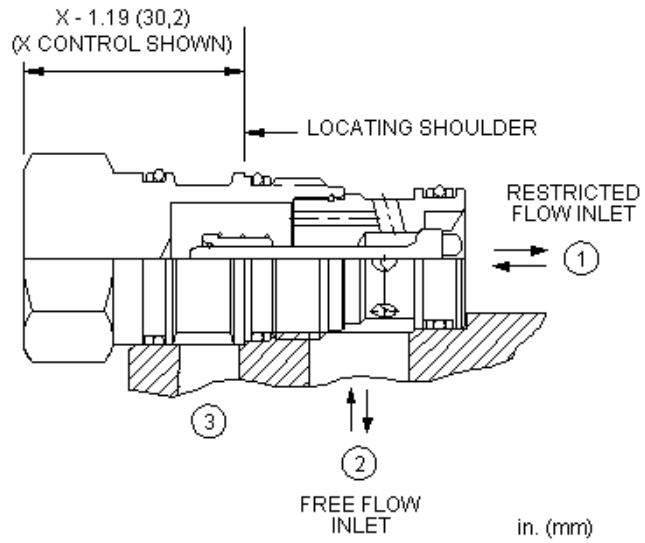
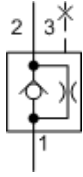
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

**CONFIGURATION OPTIONS**

**Model Code Example: CXIEXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	<b>N</b> Buna-N V Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, side-to-nose cheater check valves with a bypass orifice function as a 2-port check valve in a 3-port cavity. They allow free flow from port 2 to port 1 with a customer specified orifice that controls flow from port 1 to port 2. Port 3 of the cartridge is blocked off.

**TECHNICAL DATA**

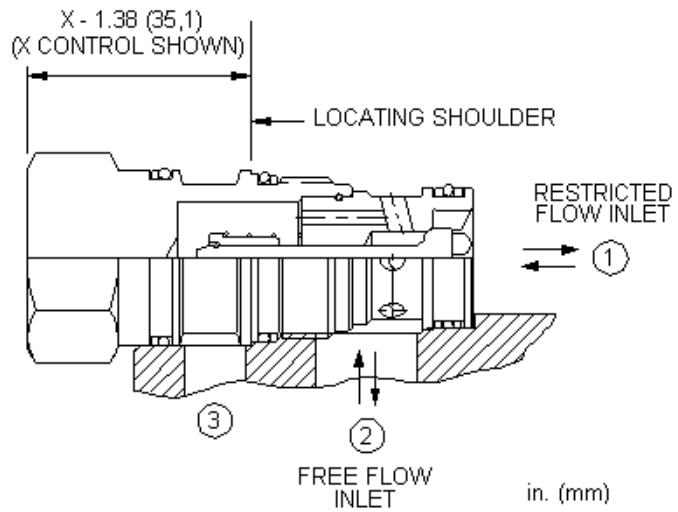
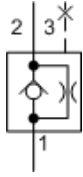
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 3,9 mm
Seal kit - Cartridge	Buna: 990011007
Seal kit - Cartridge	Polyurethane: 990011002
Seal kit - Cartridge	Viton: 990011006

**CONFIGURATION OPTIONS**

Model Code Example: **CNCDXCN**

<b>CONTROL</b>	<b>(X) SETTING RANGE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .153 in. (0,4 - 3,9 mm)	<b>N</b> Buna-N <b>V</b> Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, side-to-nose cheater check valves with a bypass orifice function as a 2-port check valve in a 3-port cavity. They allow free flow from port 2 to port 1 with a customer specified orifice that controls flow from port 1 to port 2. Port 3 of the cartridge is blocked off.

**TECHNICAL DATA**

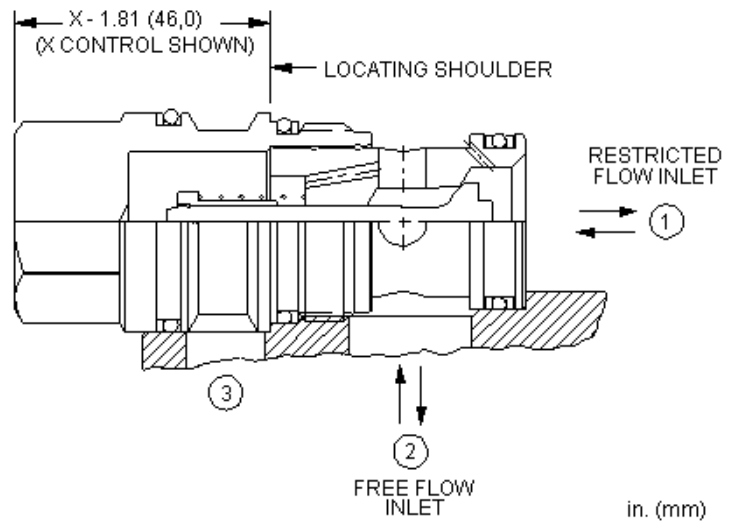
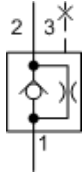
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 3,4 mm
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006

**CONFIGURATION OPTIONS**

Model Code Example: **CNEDXCN**

CONTROL	(X) SETTING RANGE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<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	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



Free-flow, side-to-nose cheater check valves with a bypass orifice function as a 2-port check valve in a 3-port cavity. They allow free flow from port 2 to port 1 with a customer specified orifice that controls flow from port 1 to port 2. Port 3 of the cartridge is blocked off.

**TECHNICAL DATA**

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

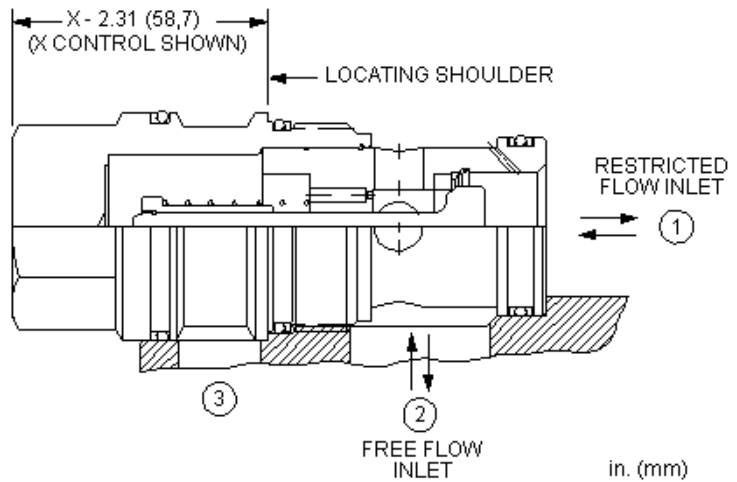
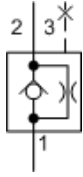
Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 5,5 mm
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

**CONFIGURATION OPTIONS**

Model Code Example: **CNGDXCN**

CONTROL	(X) SETTING RANGE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm) <b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .218 in. (0,4 - 5,5 mm) <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)	<b>N</b> Buna-N <b>V</b> Viton	Standard Material/Coating /AP Stainless Steel, Passivated





Free-flow, side-to-nose cheater check valves with a bypass orifice function as a 2-port check valve in a 3-port cavity. They allow free flow from port 2 to port 1 with a customer specified orifice that controls flow from port 1 to port 2. Port 3 of the cartridge is blocked off.

**TECHNICAL DATA**

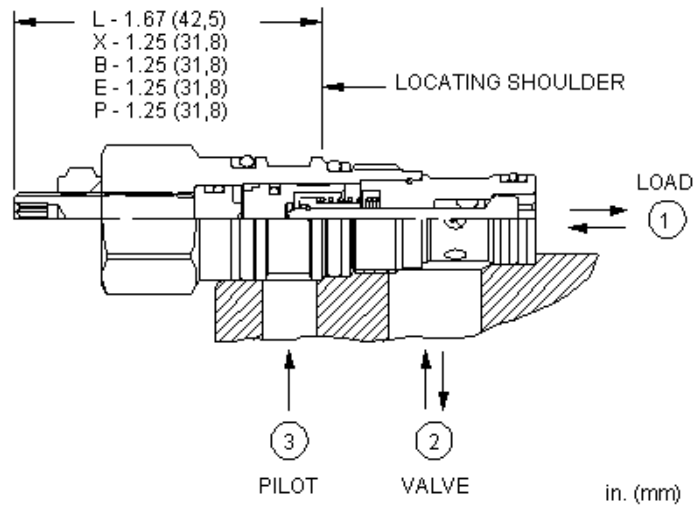
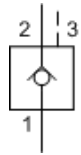
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 5,5 mm
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

**CONFIGURATION OPTIONS**

**Model Code Example: CNIDXCN**

CONTROL	(X) SETTING RANGE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<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>V</b> Viton	Standard Material/Coating /AP Stainless Steel, Passivated



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.

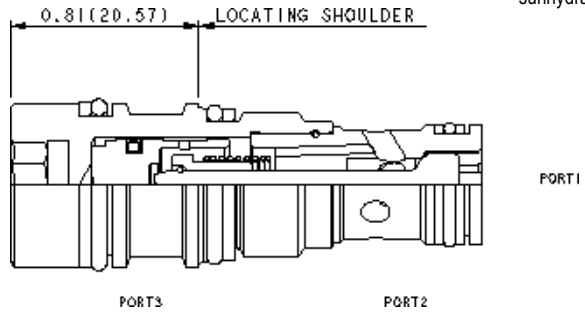
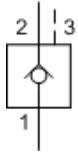
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/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: CKBBXCN**

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**

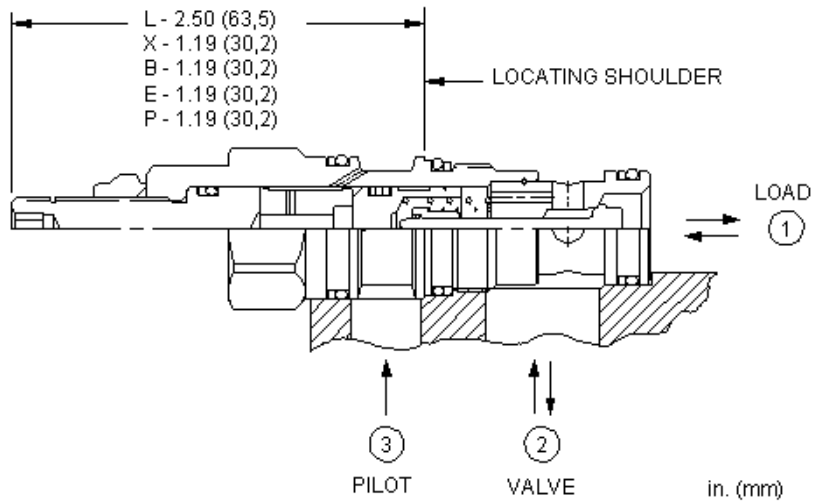
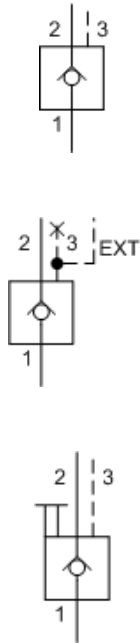
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Valve Internal Hex Size	8 mm
Seal kit - Cartridge	Buna: 990163007
Seal kit - Cartridge	Polyurethane: 990163002
Seal kit - Cartridge	Viton: 990163006

**CONFIGURATION OPTIONS**

**Model Code Example: CKBGXCN**

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



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.

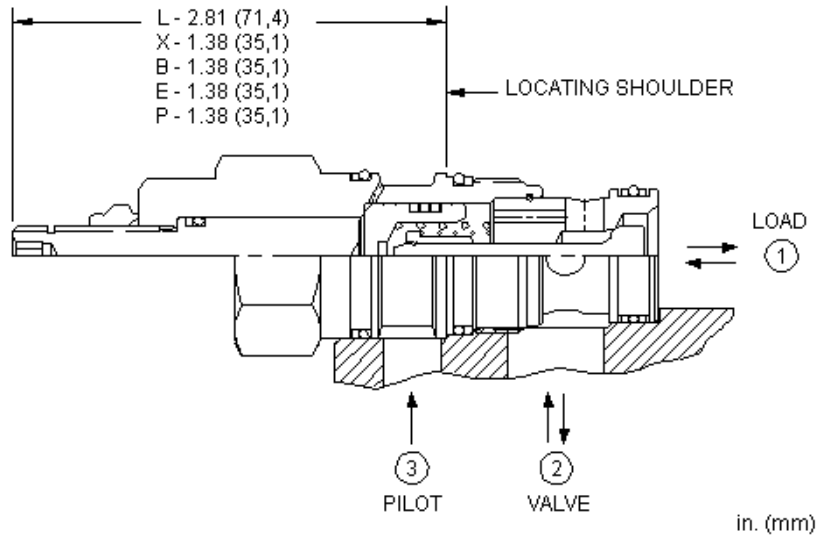
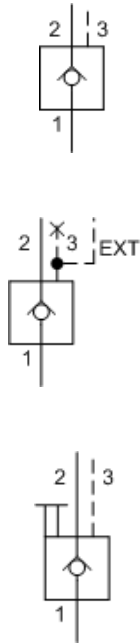
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/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: CKCBXCN**

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**

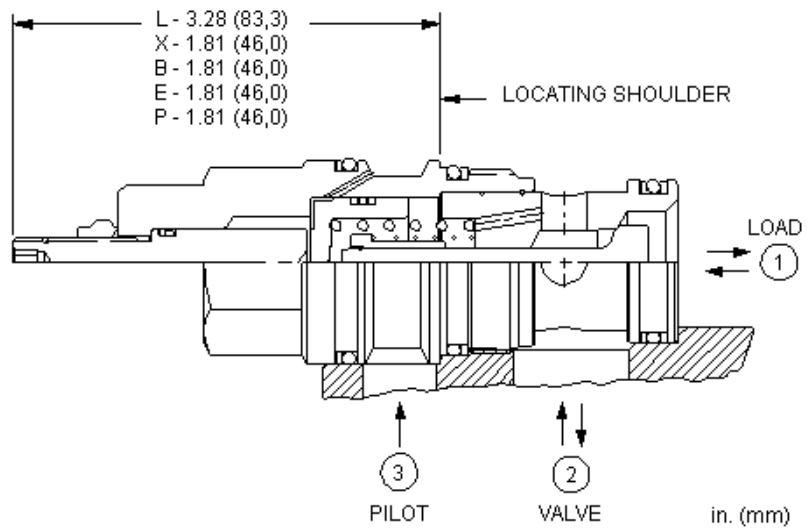
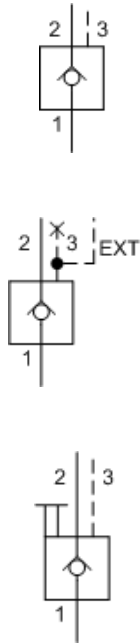
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/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.

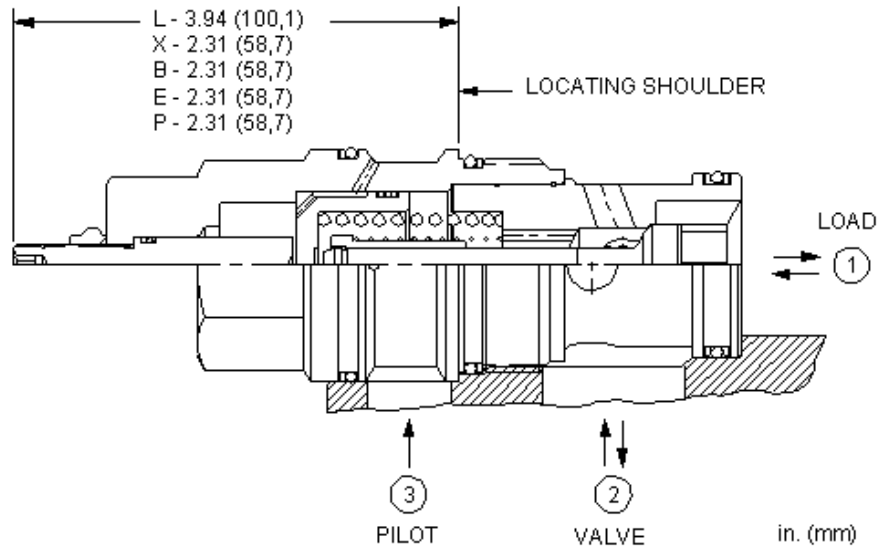
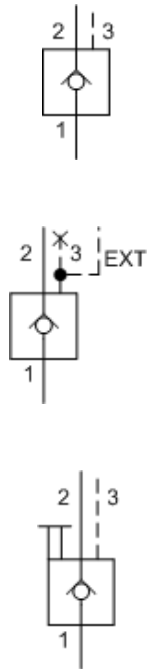
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/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: CKGBXCN**

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.

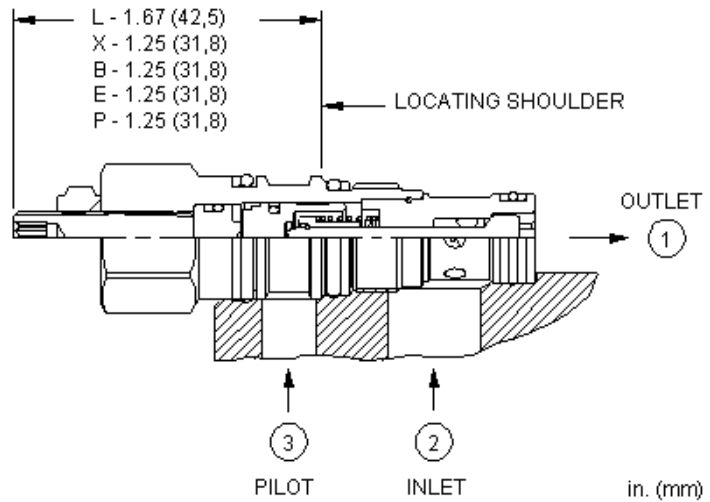
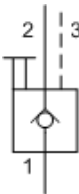
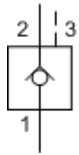
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	EPDM: 990019014
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

**CONFIGURATION OPTIONS**
**Model Code Example: CKIBXCN**

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.

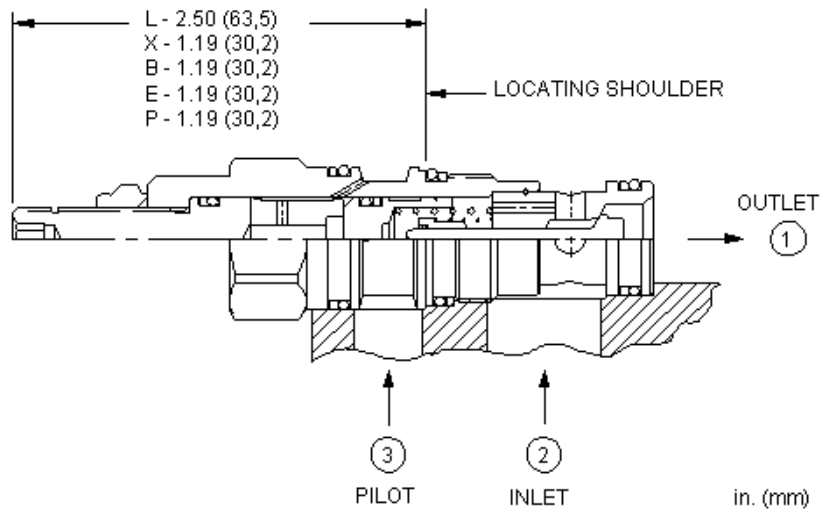
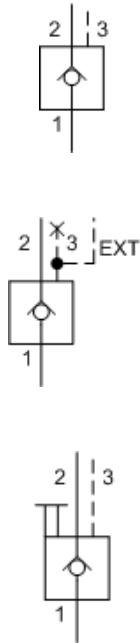
Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990163007
Seal kit - Cartridge	EPDM: 990163014
Seal kit - Cartridge	Polyurethane: 990163002
Seal kit - Cartridge	Viton: 990163006

**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.

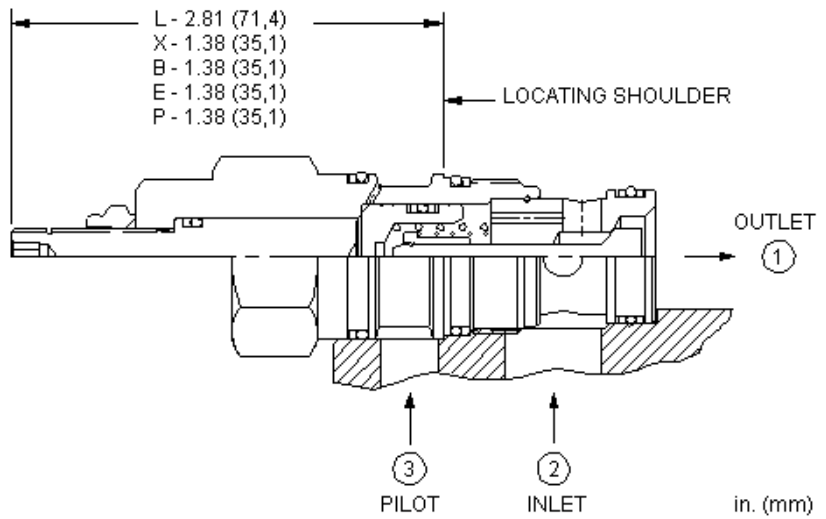
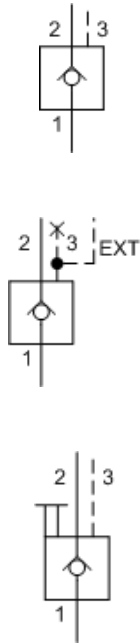
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/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**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Standard Pilot	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	Standard Material/Coating
<b>L</b> Manual Load Release	<b>A</b> 4 psi (0,3 bar)	<b>E</b> EPDM	/AP Stainless Steel, Passivated
	<b>B</b> 15 psi (1 bar)	<b>V</b> Viton	/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)		
	<b>G</b> 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.

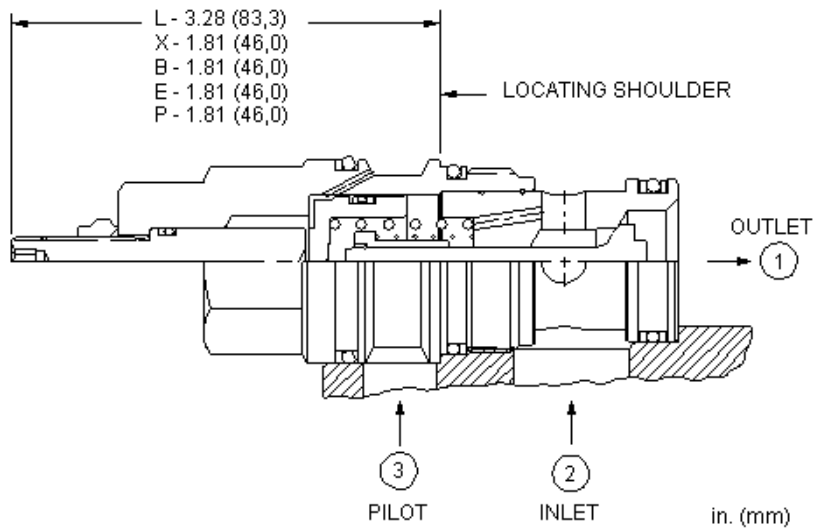
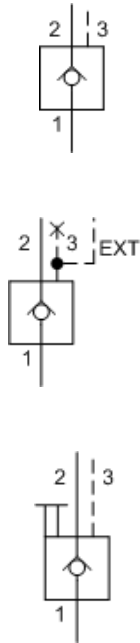
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006

**CONFIGURATION OPTIONS**
**Model Code Example: CKEDXCN**

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 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.

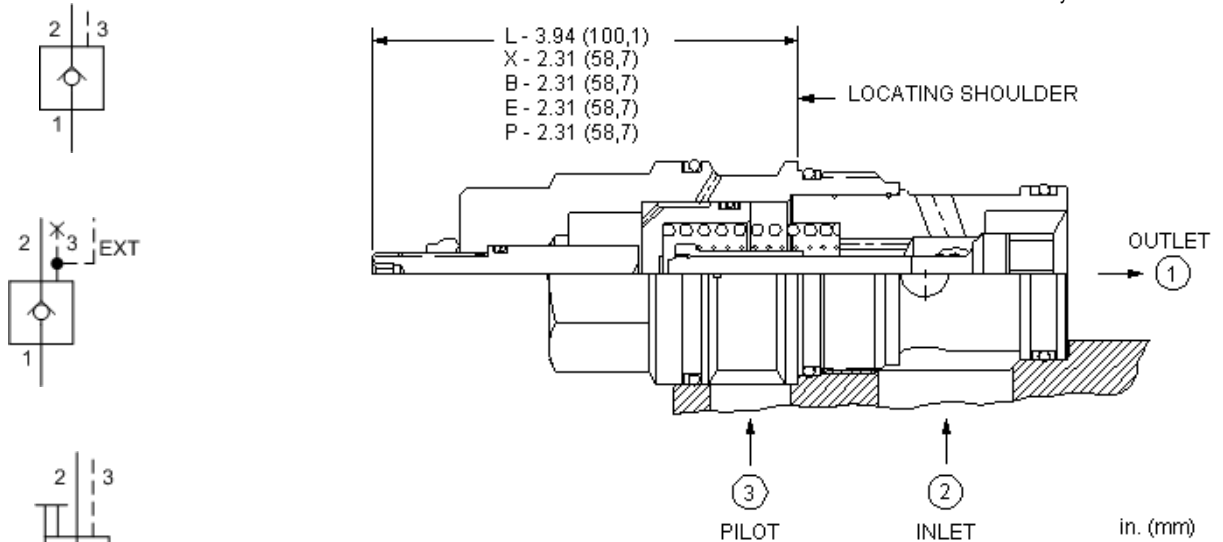
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/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.

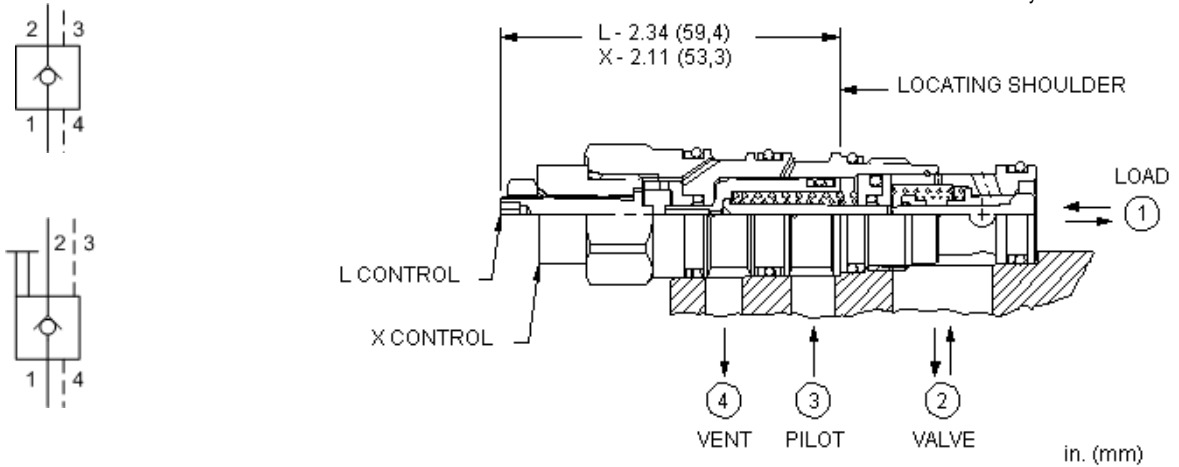
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

**CONFIGURATION OPTIONS**
**Model Code Example: CKIDXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<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**

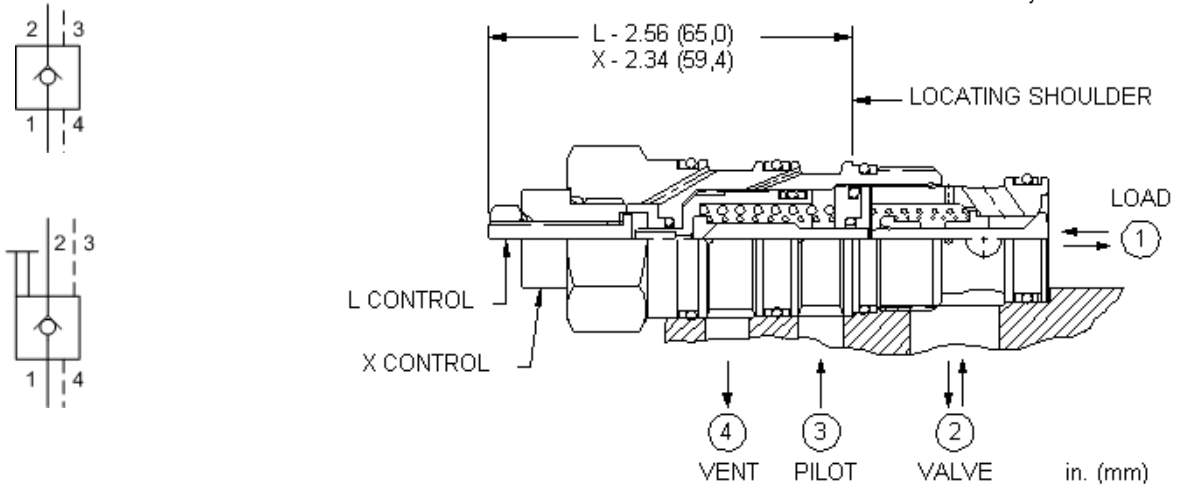
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
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).

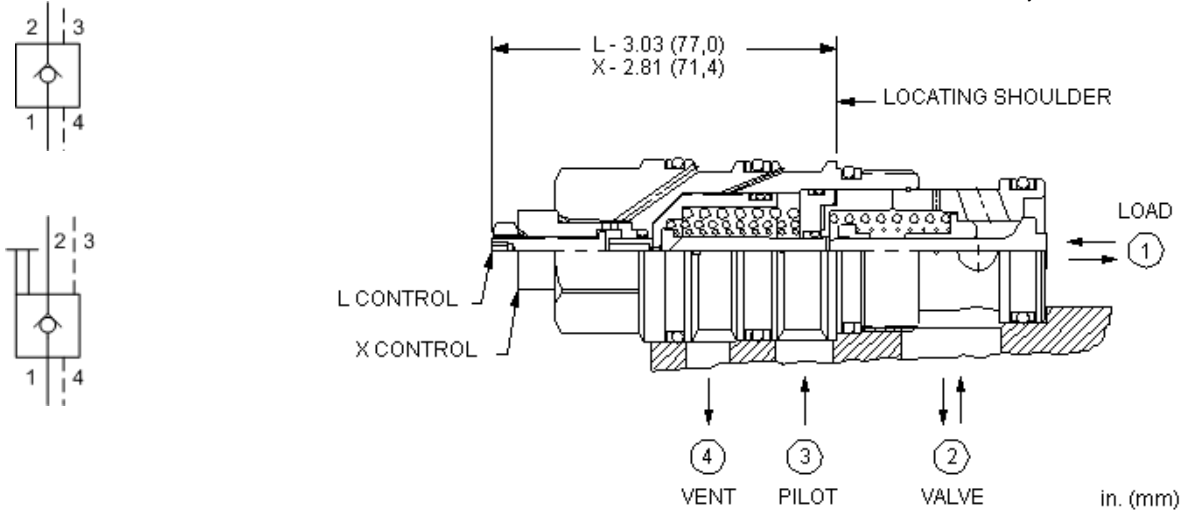
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990022007
Seal kit - Cartridge	Polyurethane: 990022002
Seal kit - Cartridge	Viton: 990022006

**CONFIGURATION OPTIONS**
**Model Code Example: CVEVXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<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**

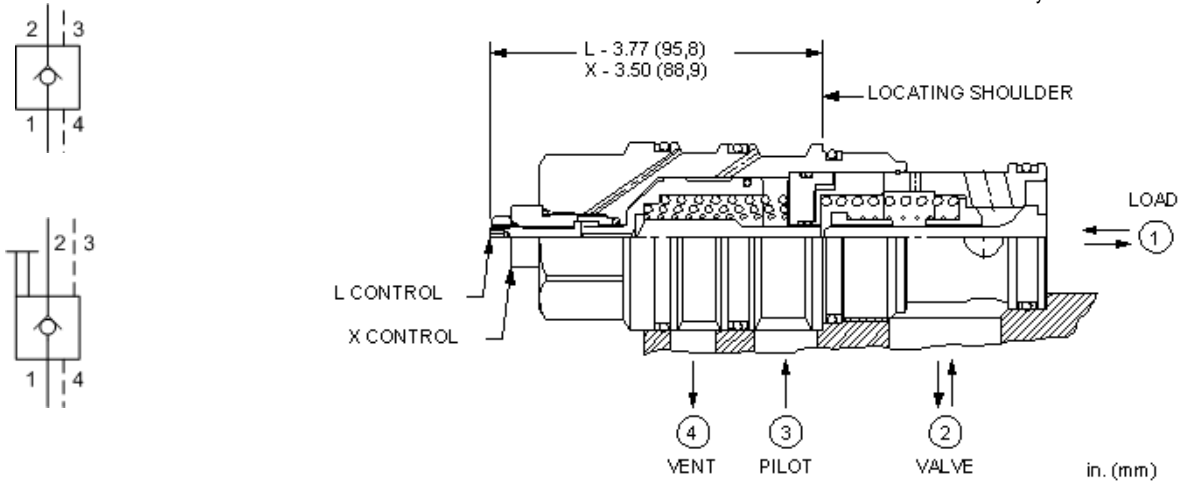
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
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) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	V Viton	/AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



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.

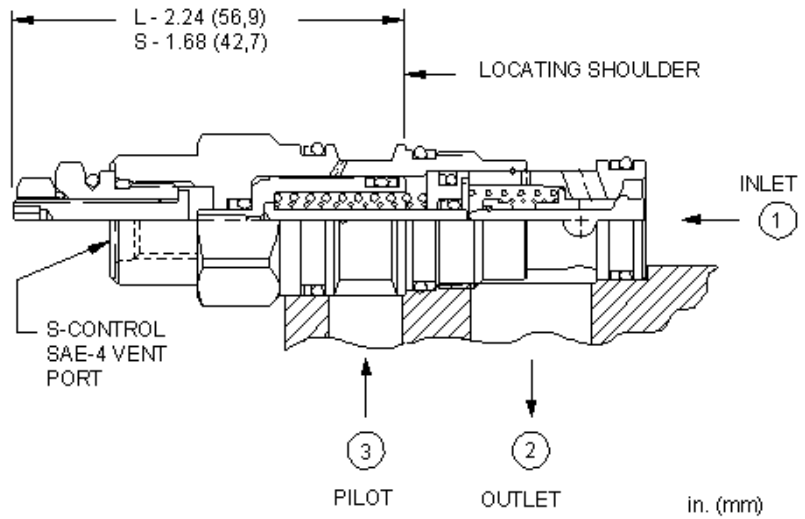
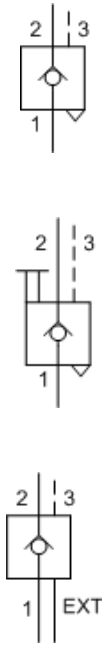
Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Pilot Volume Displacement	4,9 cc
Pilot Passage into Valve	2,3 mm
Seal kit - Cartridge	Buna: 990024007
Seal kit - Cartridge	EPDM: 990024014
Seal kit - Cartridge	Polyurethane: 990024002
Seal kit - Cartridge	Viton: 990024006

**CONFIGURATION OPTIONS**

**Model Code Example: CVIVXCN**

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) 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**

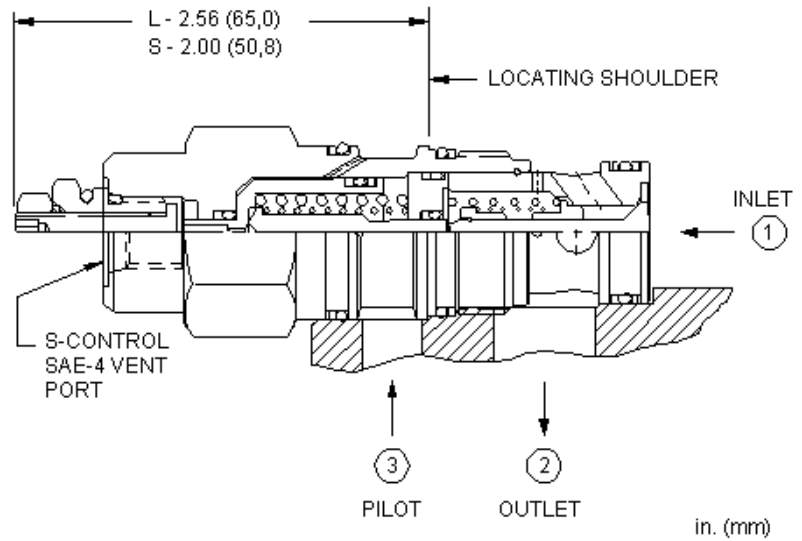
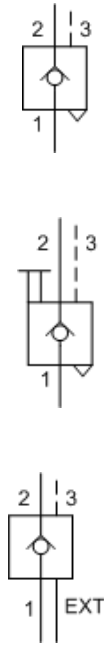
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
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- <i>SAE</i> Vent Port		<b>A</b> 4 psi (0,3 bar)		<b>V</b> Viton		<b>/AP</b> Stainless Steel, Passivated
		<b>B</b> 15 psi (1 bar)				<b>/LH</b> 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.

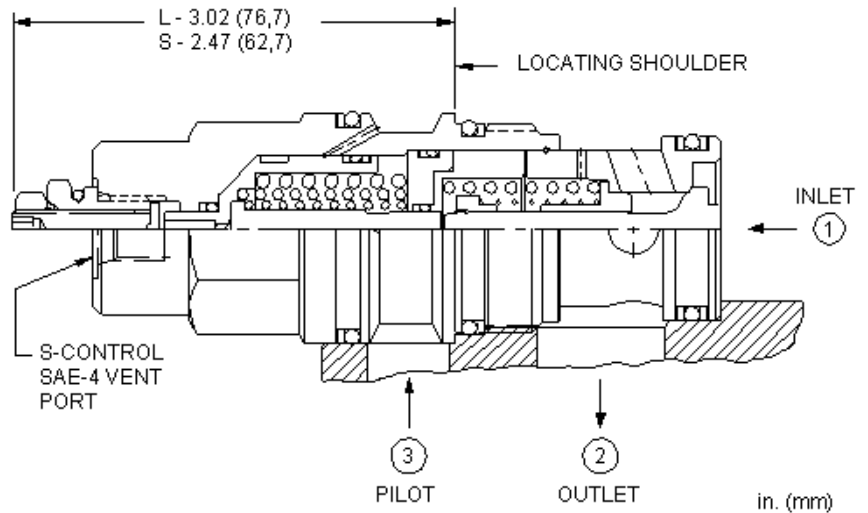
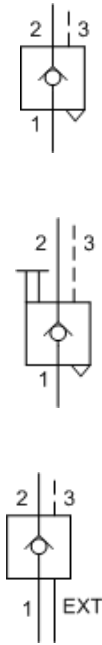
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006

**CONFIGURATION OPTIONS**
**Model Code Example: CKEVXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N)</b>
<b>X</b> Standard Pilot, Atmospheric Vent	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	
<b>S</b> External 4- <i>SAE</i> Vent Port	<b>A</b> 4 psi (0,3 bar)	<b>V</b> Viton	
	<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. 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**

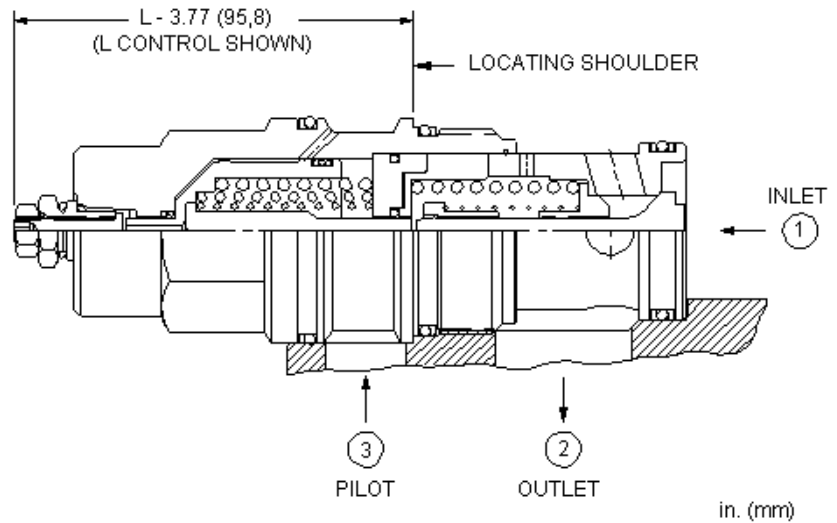
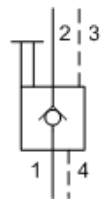
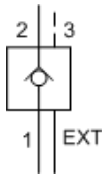
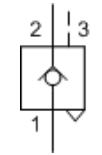
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

**CONFIGURATION OPTIONS**

**Model Code Example: CKGVXCN**

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- <i>SAE</i> Vent Port		<b>A</b> 4 psi (0,3 bar)		<b>V</b> Viton		<i>IAP</i> 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. 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.

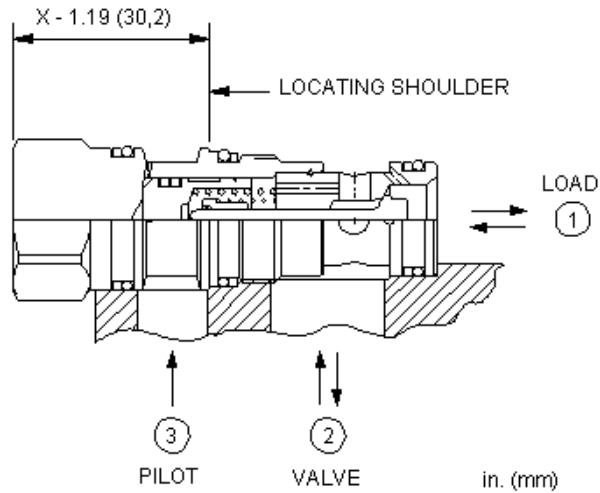
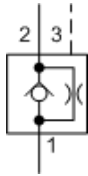
**TECHNICAL DATA**

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

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

**CONFIGURATION OPTIONS**
**Model Code Example: CKIVXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<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**

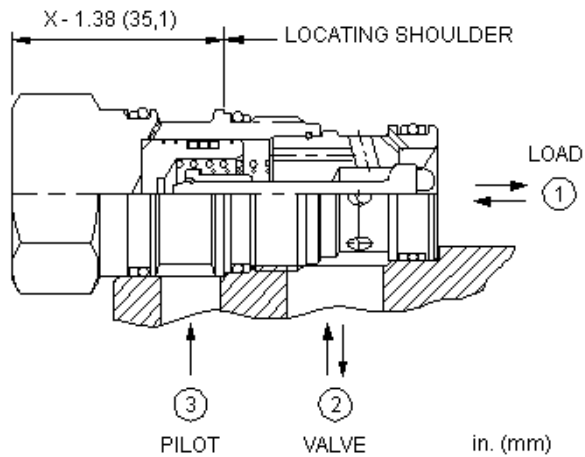
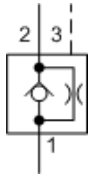
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 3,9 mm
Seal kit - Cartridge	Buna: 990011007
Seal kit - Cartridge	Polyurethane: 990011002
Seal kit - Cartridge	Viton: 990011006

**CONFIGURATION OPTIONS**

**Model Code Example: CNCEXCN**

CONTROL	(X) SETTING RANGE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .153 in. (0,4 - 3,9 mm) <b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .153 in. (0,4 - 3,9 mm) <b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .153 in. (0,4 - 3,9 mm) <b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .153 in. (0,4 - 3,9 mm) <b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .153 in. (0,4 - 3,9 mm) <b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .153 in. (0,4 - 3,9 mm)	<b>N</b> Buna-N <b>V</b> Viton	Standard Material/Coating /AP Stainless Steel, Passivated /LH Mild Steel, Zinc-Nickel



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**

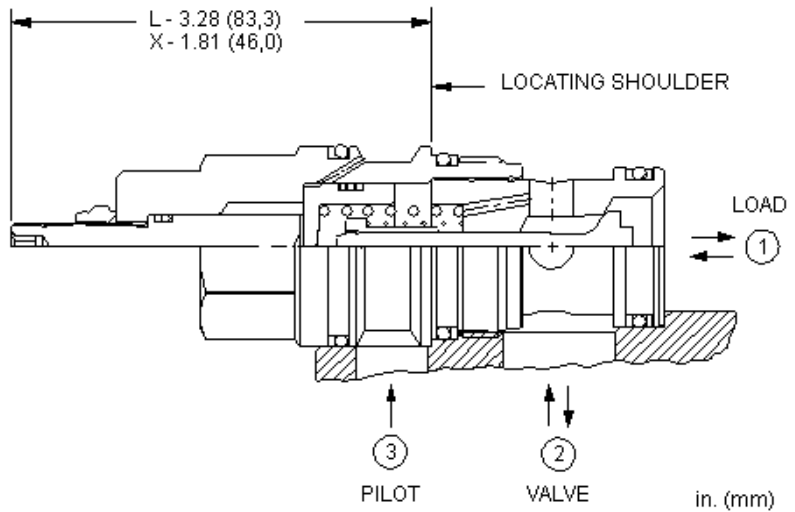
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 3,4 mm
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>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .135 in. (0,4 - 3,4 mm)		<b>V</b> Viton	
	<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**

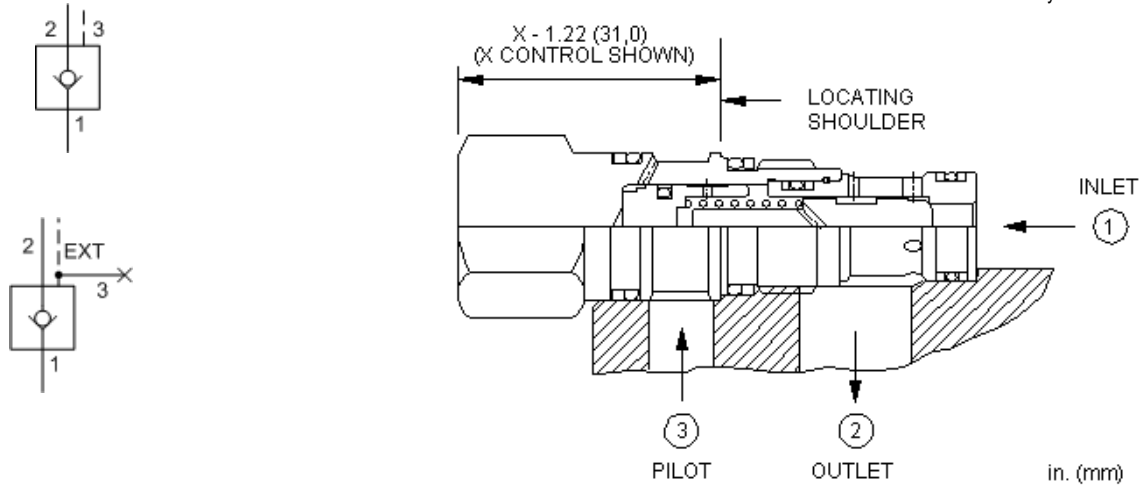
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Orifice Range	0,4 - 5,5 mm
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

**CONFIGURATION OPTIONS**

**Model Code Example: CNGEXCN**

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 spring biased closed, pilot-to-close check cartridge that has a 3:1 pilot ratio. The valve allows flow from port 1 to port 2 and blocks reverse flow. Pressure at the pilot port opposes pressure at port 1 at a ratio of 3:1. This valve is most often used in regeneration circuits.

**TECHNICAL DATA**

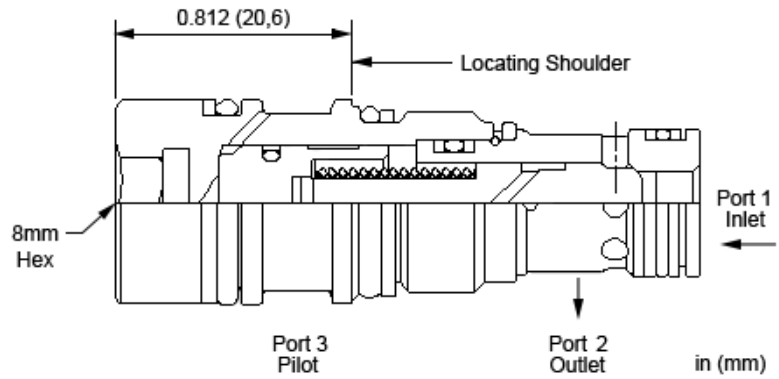
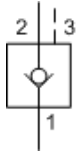
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/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: COBAXCN**

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





This valve is a spring biased closed, pilot-to-close check cartridge that has a 1.8:1 pilot ratio. The valve allows flow from port 1 to port 2 and blocks reverse flow. Pressure at the pilot port opposes pressure at port 1 at a ratio of 1.8:1. This valve is most often used in regeneration circuits.

**TECHNICAL DATA**

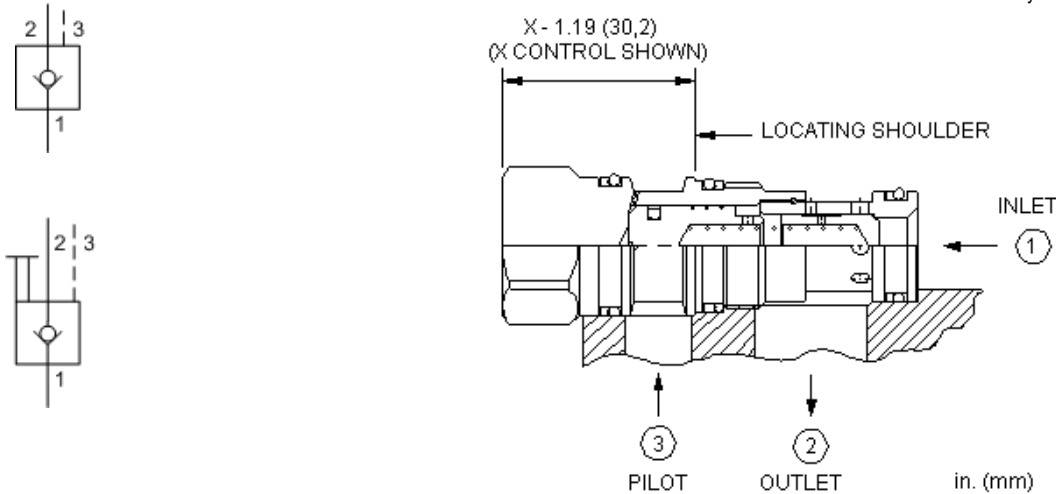
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	3.4:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Valve Internal Hex Size	8 mm
Seal kit - Cartridge	Buna: 990163007
Seal kit - Cartridge	Polyurethane: 990163002
Seal kit - Cartridge	Viton: 990163006

**CONFIGURATION OPTIONS**

**Model Code Example: COBGXCN**

CONTROL	(X) CRACKING PRESSURE	(C) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Not Adjustable, Standard Hydraulic Pilot	<b>C</b> 30 psi (2 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	<b>N</b> Buna-N V Viton	Standard Material/Coating JAP Stainless Steel, Passivated



This valve is a spring biased closed, pilot-to-close check cartridge that has a 1.8:1 pilot ratio. The valve allows flow from port 1 to port 2 and blocks reverse flow. Pressure at the pilot port opposes pressure at port 1 at a ratio of 1.8:1. This valve is most often used in regeneration circuits.

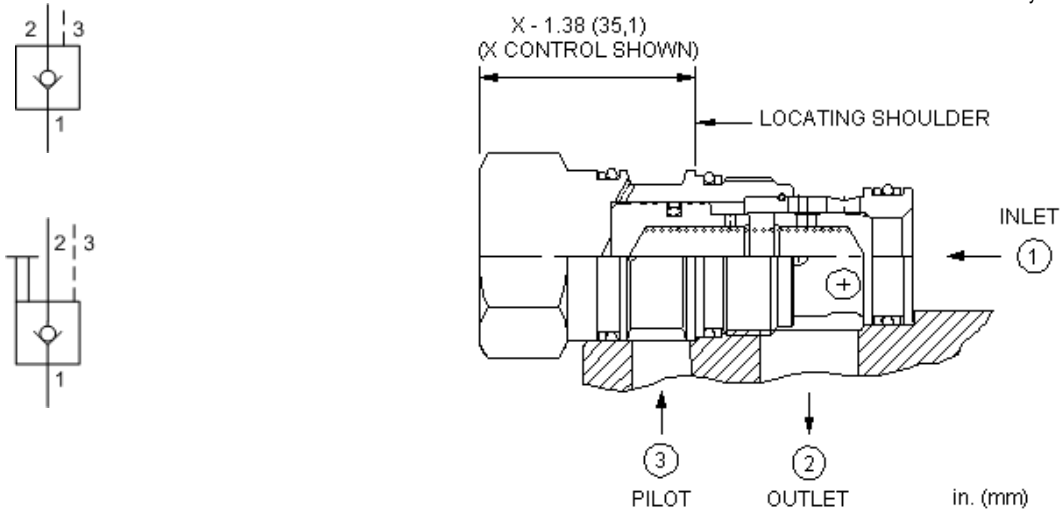
**TECHNICAL DATA**

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

Pilot Ratio	1.8:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/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: CODAXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Standard Pilot	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	Standard Material/Coating
	<b>A</b> 4 psi (0,3 bar)	<b>E</b> EPDM	/AP Stainless Steel, Passivated
	<b>B</b> 15 psi (1 bar)	<b>V</b> Viton	/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)		
	<b>G</b> 150 psi (10,5 bar)		



This valve is a spring biased closed, pilot-to-close check cartridge that has a 1.8:1 pilot ratio. The valve allows flow from port 1 to port 2 and blocks reverse flow. Pressure at the pilot port opposes pressure at port 1 at a ratio of 1.8:1. This valve is most often used in regeneration circuits.

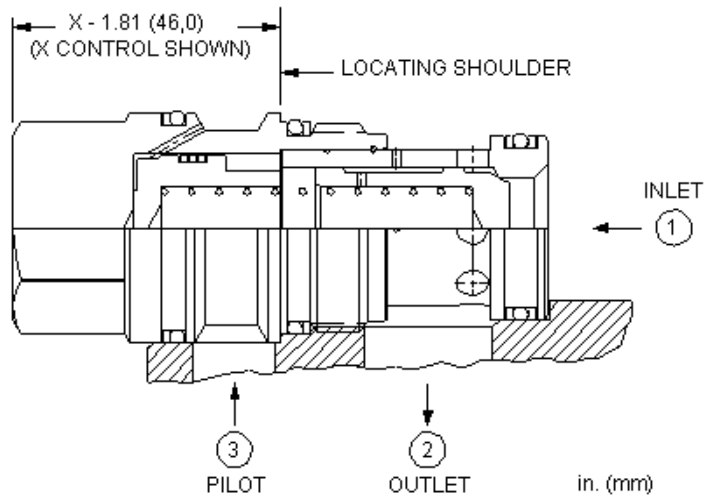
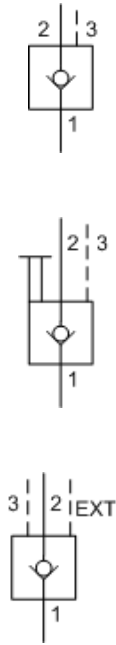
**TECHNICAL DATA**

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

Pilot Ratio	1.8:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/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: COFAXCN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(C) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Standard Pilot	<b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N	Standard Material/Coating
	<b>A</b> 4 psi (0,3 bar)	<b>E</b> EPDM	/AP Stainless Steel, Passivated
	<b>B</b> 15 psi (1 bar)	<b>V</b> Viton	/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)		
	<b>J</b> 135 psi (9,5 bar)		



This valve is a spring biased closed, pilot-to-close check cartridge that has a 1.8:1 pilot ratio. The valve allows flow from port 1 to port 2 and blocks reverse flow. Pressure at the pilot port opposes pressure at port 1 at a ratio of 1.8:1. This valve is most often used in regeneration circuits.

**TECHNICAL DATA**

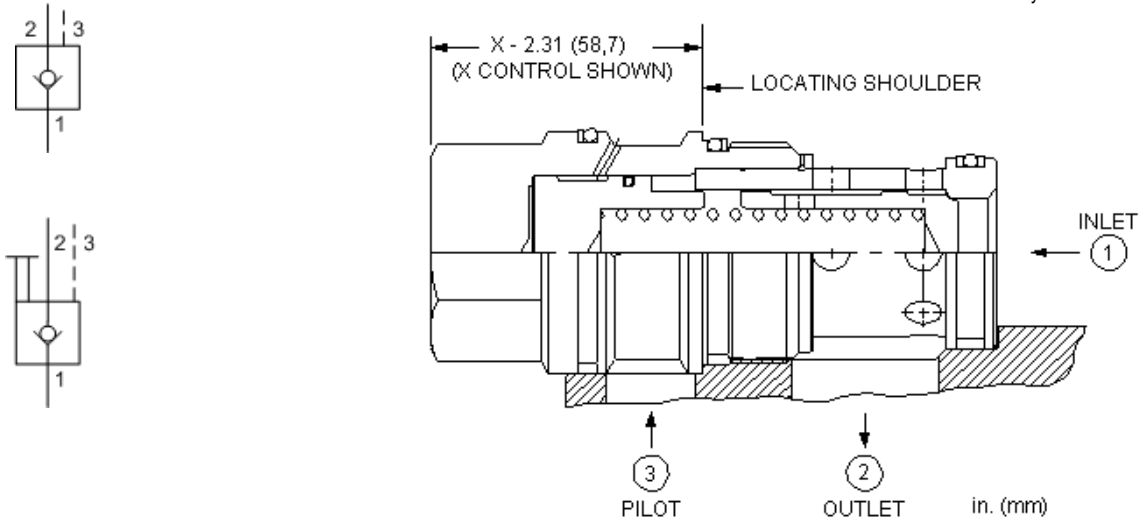
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	1.8:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

**CONFIGURATION OPTIONS**

**Model Code Example: COHAXCN**

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
	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 spring biased closed, pilot-to-close check cartridge that has a 1.8:1 pilot ratio. The valve allows flow from port 1 to port 2 and blocks reverse flow. Pressure at the pilot port opposes pressure at port 1 at a ratio of 1.8:1. This valve is most often used in regeneration circuits.

**TECHNICAL DATA**

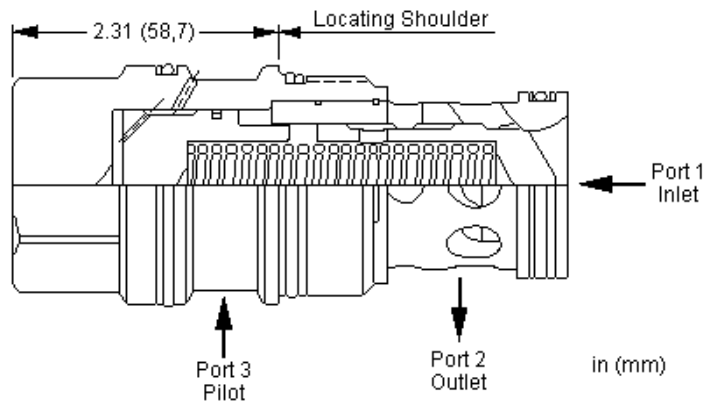
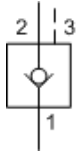
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	1.8:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	EPDM: 990019014
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

**CONFIGURATION OPTIONS**

**Model Code Example: COJAXCN**

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



This valve is a spring biased closed, pilot-to-close check cartridge that has a 1.8:1 pilot ratio. The valve allows flow from port 1 to port 2 and blocks reverse flow. Pressure at the pilot port opposes pressure at port 1 at a ratio of 1.8:1. This valve is most often used in regeneration circuits.

**TECHNICAL DATA**

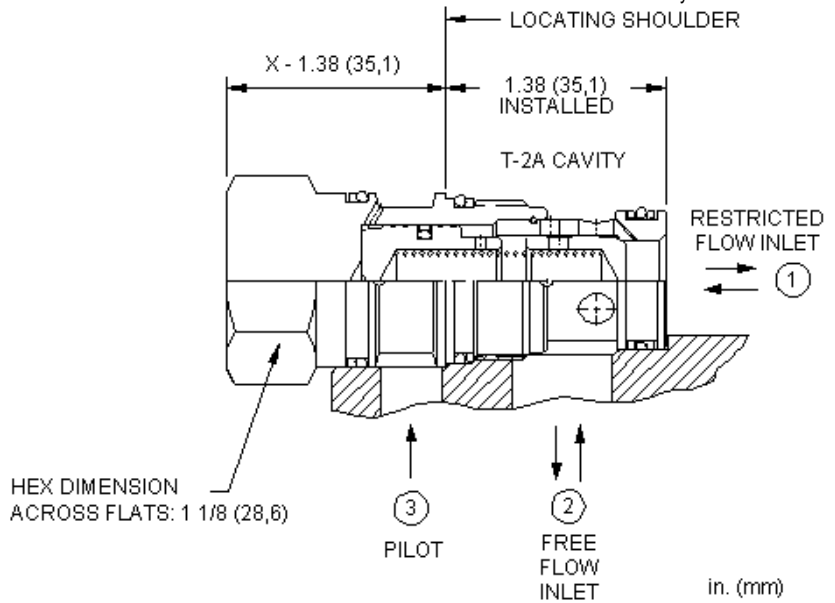
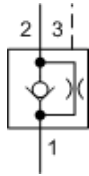
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	1.8:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

**CONFIGURATION OPTIONS**

**Model Code Example: COKAXAN**

<b>CONTROL</b>	<b>(X) CRACKING PRESSURE</b>	<b>(A) SEAL MATERIAL</b>	<b>(N) MATERIAL/COATING</b>
<b>X</b> Not Adjustable	<b>A</b> 4 psi (0,3 bar) B 15 psi (1 bar) C 30 psi (2 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	<b>N</b> Buna-N V Viton	Standard Material/Coating /LH Mild Steel, Zinc-Nickel



This valve is a spring biased closed, pilot-to-close check cartridge with a bypass orifice. It incorporates a steel seat and is non-vented. The valve allows flow from port 1 to port 2 and restricts flow from port 2 to port 1. Pressure at the pilot (port 3) opposes pressure at port 1 at a ratio of 1.8:1. 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**

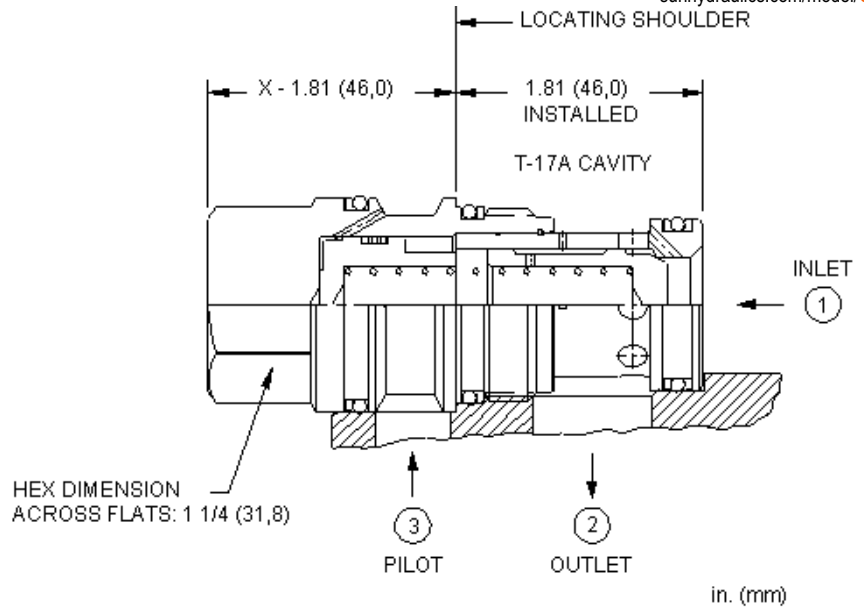
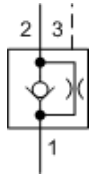
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Pilot Ratio	1.8:1
Orifice Range	0,4 - 3,2 mm
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006

**CONFIGURATION OPTIONS**

**Model Code Example: CNFEXCN**

CONTROL	(X) SETTING RANGE	(C)	SEAL MATERIAL	(N)
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm)		<b>N</b> Buna-N	
	<b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm)		<b>V</b> Viton	
	<b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm)			
	<b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm)			
	<b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm)			
	<b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .127 in. (0,4 - 3,2 mm)			



This valve is a spring biased closed, pilot-to-close check cartridge with a bypass orifice. It incorporates a steel seat and is non-vented. The valve allows flow from port 1 to port 2 and restricts flow from port 2 to port 1. Pressure at the pilot (port 3) opposes pressure at port 1 at a ratio of 1.8:1. 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.

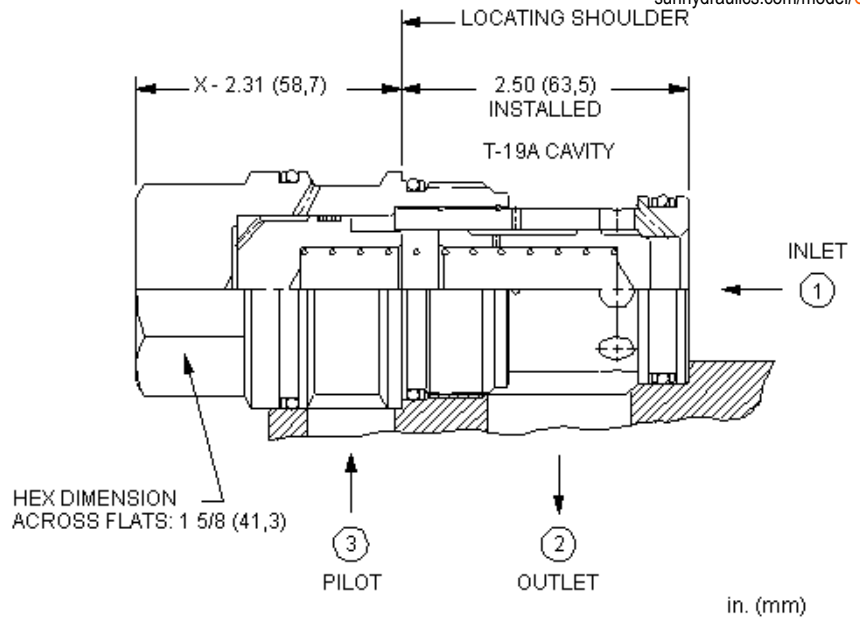
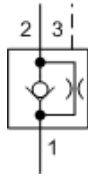
Orifice Range	0,4 - 6,4 mm
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006

**CONFIGURATION OPTIONS**

**Model Code Example: CNHEXCN**

CONTROL	(X) SETTING RANGE	(C)	SEAL MATERIAL	(N)
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm)		<b>N</b> Buna-N	
	<b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm)		<b>V</b> Viton	
	<b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm)			
	<b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm)			
	<b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm)			
	<b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .252 in. (0,4 - 6,4 mm)			





This valve is a spring biased closed, pilot-to-close check cartridge with a bypass orifice. It incorporates a steel seat and is non-vented. The valve allows flow from port 1 to port 2 and restricts flow from port 2 to port 1. Pressure at the pilot (port 3) opposes pressure at port 1 at a ratio of 1.8:1. 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**

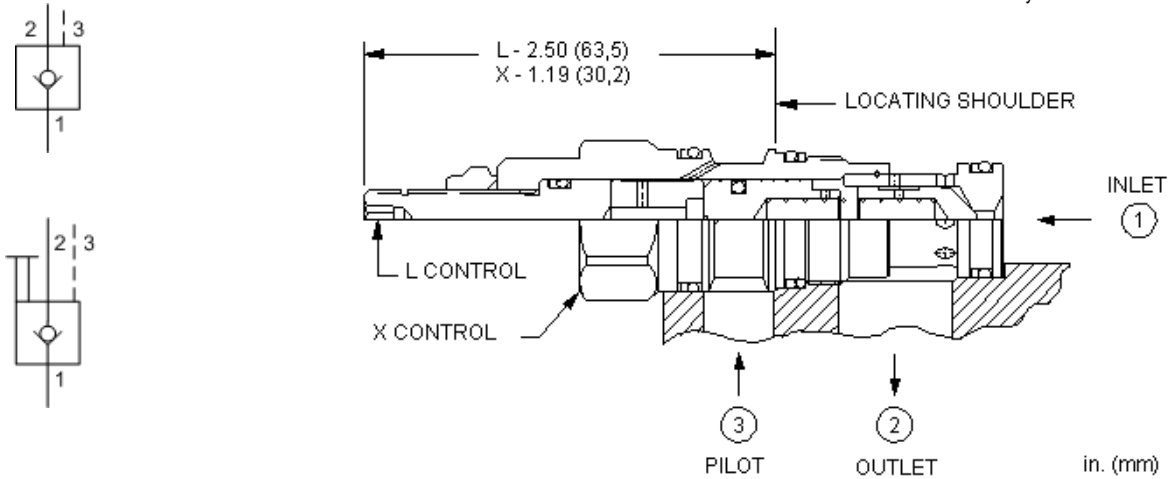
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Orifice Range	0,4 - 9 mm
Seal kit - Cartridge	Buna: 990019007
Seal kit - Cartridge	Polyurethane: 990019002
Seal kit - Cartridge	Viton: 990019006

**CONFIGURATION OPTIONS**

Model Code Example: **CNJEXCN**

CONTROL	(X) SETTING RANGE	(C) SEAL MATERIAL	(N)
<b>X</b> Not Adjustable	<b>C</b> 30 psi (2 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)	<b>N</b> Buna-N	<b>V</b> Viton
	<b>A</b> 4 psi (0,3 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)		
	<b>B</b> 15 psi (1 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)		
	<b>D</b> 50 psi (3,5 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)		
	<b>E</b> 75 psi (5 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)		
	<b>F</b> 100 psi (7 bar) Cracking Pressure, .016 - .354 in. (0,4 - 9 mm)		



This valve is a spring biased closed, pilot-to-close check cartridge that has a 20:1 pilot ratio. The valve allows flow from port 1 to port 2 and blocks reverse flow. Pressure at the pilot (port 3) opposes pressure at port 1 at a ratio of 20:1.

**TECHNICAL DATA**

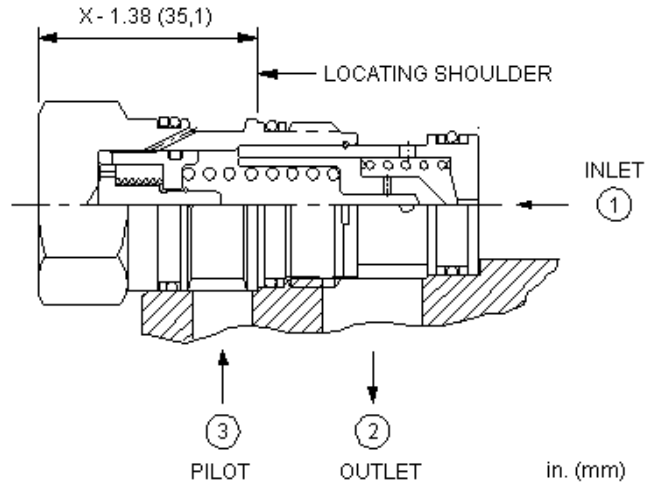
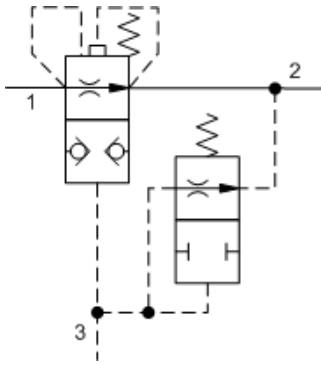
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/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: CODDXDN**

CONTROL	(X) CRACKING PRESSURE	(D) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Standard Pilot	<b>D</b> 50 psi (3,5 bar) H 200 psi (14 bar)	<b>N</b> Buna-N E EPDM V Viton	Standard Material/Coating /AP Stainless Steel, Passivated



This valve is a pilot-to-close check cartridge that has a 120:1 pilot ratio. The valve is designed specifically to discharge an accumulator when the pump is turned off. With no pressure at the pump port (port 3), the valve is open between the accumulator (port 1) and tank (port 2). 60 psi (4 bar) at port 3 will close the valve for accumulator pressures up to 5000 psi (350 bar). When pump pressure at port 3 is below 300 psi (20 bar) there is a leak path from port 3 to tank (port 2) to ensure accumulator discharge when the pump is turned off. When pump pressure is above 300 psi (20 bar) the leak path closes for efficiency.

**TECHNICAL DATA**

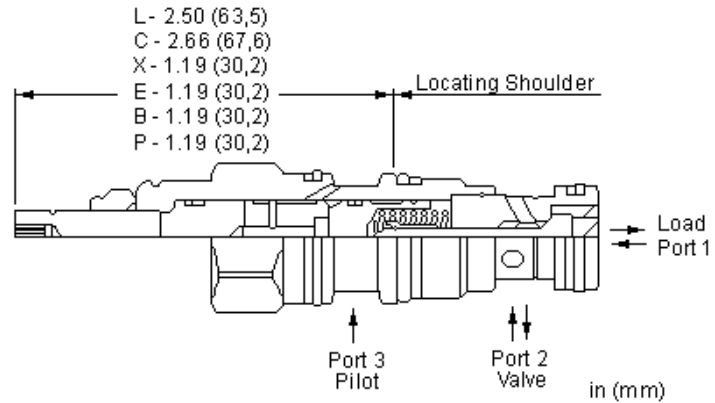
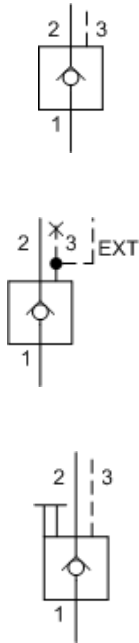
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,3 cc/min.
Seal kit - Cartridge	Buna: 990202007
Seal kit - Cartridge	Polyurethane: 990002002
Seal kit - Cartridge	Viton: 990202006

**CONFIGURATION OPTIONS**

**Model Code Example: COFOXDN**

<b>CONTROL</b>	<b>(X) MINIMUM PILOT PRESSURE</b>	<b>(D) SEAL MATERIAL</b>	<b>(N)</b>
<b>X</b> Standard Pilot	<b>D</b> 60 psi (4 bar)	<b>N</b> Buna-N	<b>V</b> Viton



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.

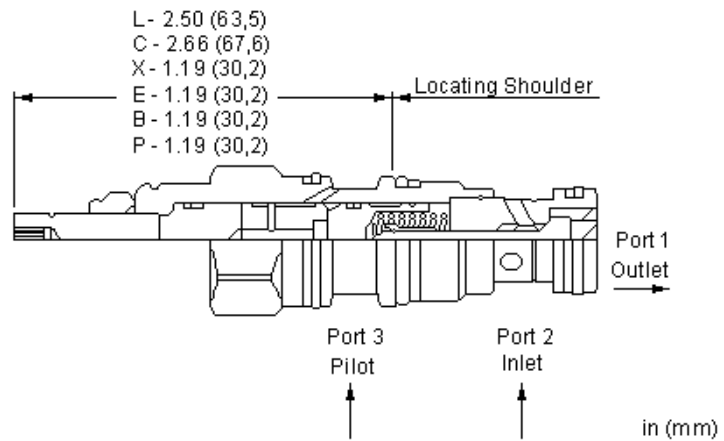
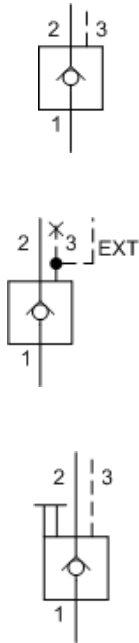
**TECHNICAL DATA**

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

Pilot Ratio	5:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990011007
Seal kit - Cartridge	Polyurethane: 990011002
Seal kit - Cartridge	Viton: 990011006

**CONFIGURATION OPTIONS**
**Model Code Example: CKCRXCN**

<b>CONTROL</b>	<b>(X)</b>	<b>CRACKING PRESSURE</b>	<b>(C)</b>	<b>SEAL MATERIAL</b>	<b>(N)</b>	<b>MATERIAL/COATING</b>
<b>X</b> Standard Pilot		<b>C</b> 30 psi (2 bar)		<b>N</b> Buna-N		Standard Material/Coating
<b>B</b> External 1/4 BSPP Pilot Port, Port 3 blocked		<b>A</b> 4 psi (0,3 bar)		<b>V</b> Viton		/AP Stainless Steel, Passivated
<b>C</b> Manual Load Release - Tamper Resistant		<b>B</b> 15 psi (1 bar)				/LH Mild Steel, Zinc-Nickel
<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 Pilot Port, Port 3 Blocked		<b>F</b> 100 psi (7 bar)				
		<b>Z</b> 1 psi (0,07 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.

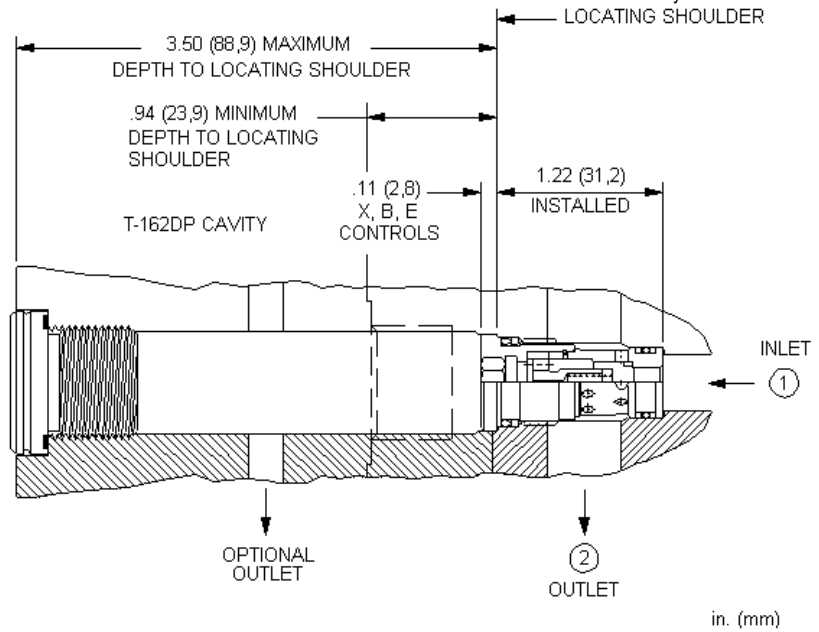
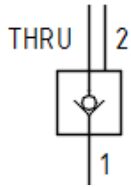
**TECHNICAL DATA**

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

Pilot Ratio	5:1
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Seal kit - Cartridge	Buna: 990011007
Seal kit - Cartridge	Viton: 990011006

**CONFIGURATION OPTIONS**
**Model Code Example: CKCSXCN**

<b>CONTROL</b>	<b>(X)</b>	<b>CRACKING PRESSURE</b>	<b>(C)</b>	<b>SEAL MATERIAL</b>	<b>(N)</b>
<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- <b>SAE</b> 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)			



Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

**TECHNICAL DATA**

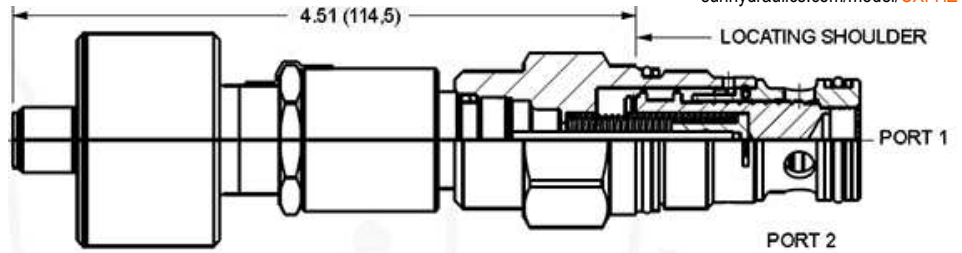
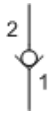
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Valve Internal Hex Size	8 mm
Seal kit - Cartridge	Buna: 990162007
Seal kit - Cartridge	EPDM: 990162014
Seal kit - Cartridge	Polyurethane: 990162002
Seal kit - Cartridge	Viton: 990162006

**CONFIGURATION OPTIONS**

**Model Code Example: CXBMXAN**

CONTROL	(X) CRACKING PRESSURE	(A) SEAL MATERIAL	(N)
<b>X</b> Not Adjustable	<b>A</b> 4 psi (0,3 bar) <b>B</b> 15 psi (1 bar) <b>C</b> 30 psi (2 bar)	<b>N</b> Buna-N <b>E</b> EPDM <b>V</b> Viton	



Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

This valve incorporates a position switch to provide confirmation that the valve is in the transition position or seated (closed).

**TECHNICAL DATA**

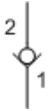
NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Transition leakage at 110 SUS (24 cSt)	30 cc/min.@70 bar
Seal kit - Cartridge	Buna: 990203007
Seal kit - Cartridge	Viton: 990203006

**CONFIGURATION OPTIONS**

**Model Code Example: CXFHZCN**

CRACKING PRESSURE	(C)	SEAL MATERIAL	(N)
<b>C</b> 30 psi (2 bar)		<b>N</b> Buna-N	
A 4 psi (0,3 bar)		V Viton	



Free-flow, nose-to-side check valves are on/off circuit components that allow free flow from the inlet (port 1) to the outlet (port 2) and block flow in the opposite direction.

This valve incorporates a position switch to provide confirmation that the valve is in the transition position or seated (closed).

### TECHNICAL DATA

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

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	0,07 cc/min.
Transition leakage at 110 SUS (24 cSt)	30 cc/min.@70 bar
Seal kit - Cartridge	Buna: 990016007
Seal kit - Cartridge	Polyurethane: 990016002
Seal kit - Cartridge	Viton: 990016006

### CONFIGURATION OPTIONS

Model Code Example: CXHHZCN

CRACKING PRESSURE	(C)	SEAL MATERIAL	(N)
<b>C</b> 30 psi (2 bar)		<b>N</b> Buna-N	
A 4 psi (0,3 bar)		V Viton	



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[www.sunhydraulics.com](http://www.sunhydraulics.com)

Sun Hydraulics Headquarters  
Sarasota, Florida USA  
(1) 941 362 1200  
[suninfo@sunhydraulics.com](mailto:suninfo@sunhydraulics.com)

Sun Hydraulics Limited  
Coventry England  
+44 2476 217 400  
[sales@sunuk.com](mailto:sales@sunuk.com)

Sun Hydraulik GmbH  
Erkelenz Germany  
+49 2431 80910  
[sales@sunhydraulik.de](mailto:sales@sunhydraulik.de)

Enovation Controls, LLC  
A Sun Hydraulics Company  
Tulsa, OK USA  
Ph: (1) 918-317-4100

Sun Hydraulics Korea Corp.  
Incheon Korea  
+82 3281 31350  
[sales@sunhydraulics.co.kr](mailto:sales@sunhydraulics.co.kr)

Sun Hydraulics China Co. Ltd.  
Shanghai P.R. China  
+86 2151 162862  
[sunchinainfo@sunhydraulics.com](mailto:sunchinainfo@sunhydraulics.com)

Sun Hydraulics Corp. (India)  
Bangalore India  
+91 8028 456325  
[sunindiainfo@sunhydraulics.com](mailto:sunindiainfo@sunhydraulics.com)

High Country Tek, Inc  
A Sun Hydraulics Company  
Nevada City, California USA  
(1) 530 265 3236  
[info@HCTcontrols.com](mailto:info@HCTcontrols.com)