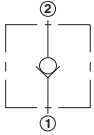
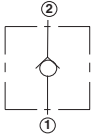
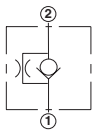
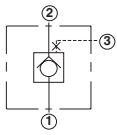
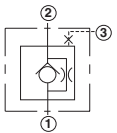
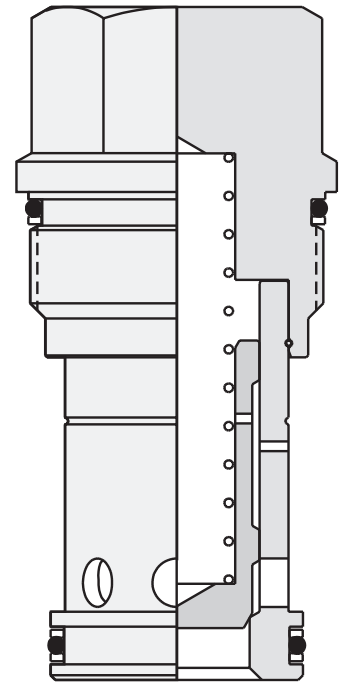


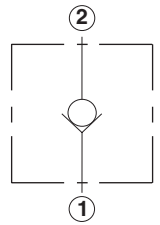
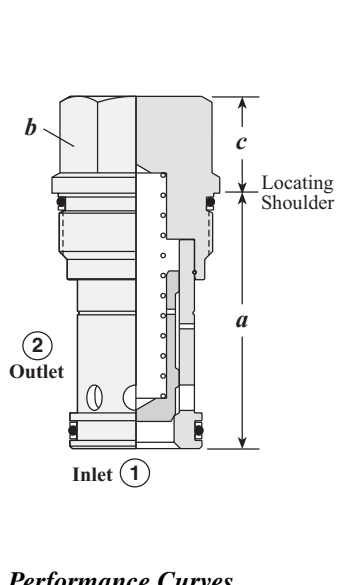
Check Cartridge Valves

	<i>Cartridge Type</i>	<i>Page</i>
	Free Flow, Nose-to-Side	74
	Free Flow, Side-to-Nose	75
	Free Flow, Nose-to-Side with Bypass Orifice	76
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	Free Flow, Side-to-Nose with Bypass Orifice, Port 3 Blocked	78



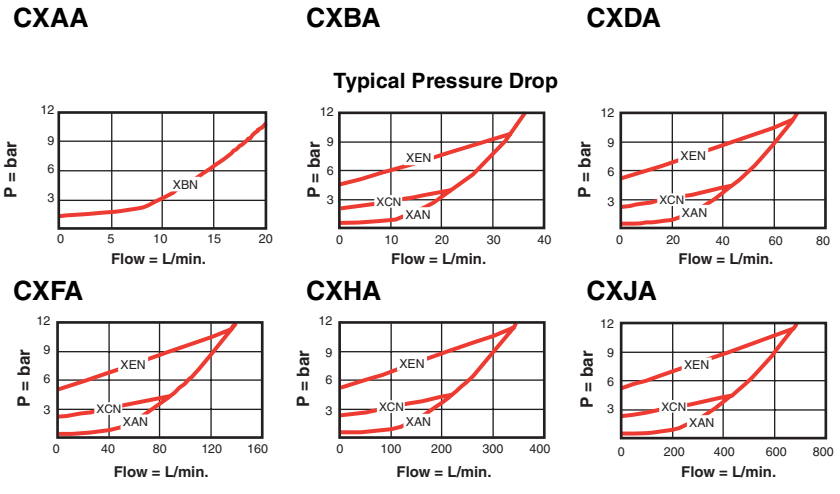
Check Valves

FREE FLOW, NOSE-TO-SIDE



Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
20 L/min.	CXAA – XBN	T - 8A	19,1	22,2	11,4	35 - 40
40 L/min.	CXBA – XCN	T - 162A	31,0	19,1	20,8	35 - 40
80 L/min.	CXDA – XCN	T - 13A	35,1	22,2	19,1	45 - 50
160 L/min.	CXFA – XCN	T - 5A	41,1	28,6	17,5	60 - 70
320 L/min.	CXHA – XCN	T - 16A	62,0	31,8	24,6	200 - 215
640 L/min.	CXJA – XCN	T - 18A	79,5	41,3	30,2	465 - 500

Performance Curves



- Maximum operating pressure = 350 bar.
- Maximum valve leakage at 24 cSt = 0,07 cc/min.
- Will accept 350 bar at ports 1 and 2.
- Caution: CX*A two port nose-to-side check valves and CX*D side-to-nose valves (shown in this catalogue section) share the same cavities and are mechanically interchangeable, but have opposite flow paths.

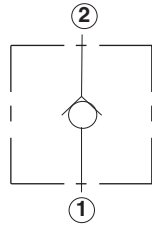
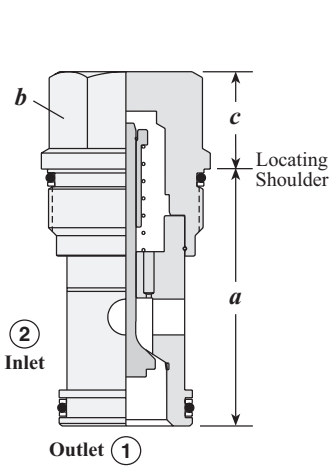
OPTION ORDERING INFORMATION

CX * A - * * *

<p><i>Nominal Capacity</i></p> <p>A 20 L/min.</p> <p>B 40 L/min.</p> <p>D 80 L/min.</p> <p>F 160 L/min.</p> <p>H 320 L/min.</p> <p>J 640 L/min.</p>	<p><i>Control</i></p> <p>X Not Adjustable</p>	<p><i>Cracking Pressure</i></p> <p>A 0,3 bar</p> <p>B 1 bar</p> <p>C 2 bar</p> <p>D 3,5 bar</p> <p>E 5 bar</p> <p>F 7 bar</p> <p><i>Only Available Cracking Pressure for CXAA:</i></p> <p>B 1 bar</p>	<p><i>Seal Material</i></p> <p>N Buna-N</p> <p>V Viton</p> <p><i>Consult the Sun website for our most recent and complete information on the full Corrosion Resistant line of products.</i></p>
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FREE FLOW, SIDE-TO-NOSE



Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
30 L/min.	CXAD – XCN	T - 162A	31,0	19,1	20,8	35 - 40
60 L/min.	CXCD – XCN	T - 13A	35,1	22,2	19,1	45 - 50
120 L/min.	CXED – XCN	T - 5A	41,1	28,6	17,5	60 - 70
240 L/min.	CXGD – XCN	T - 16A	62,0	31,8	24,6	200 - 215
480 L/min.	CXID – XCN	T - 18A	79,5	41,3	30,2	465 - 500

Performance Curves

CXAD

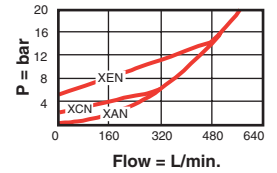
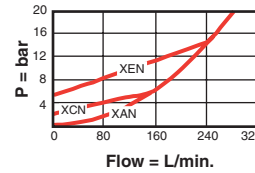
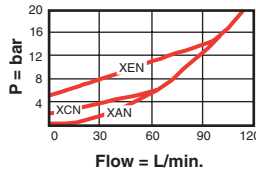
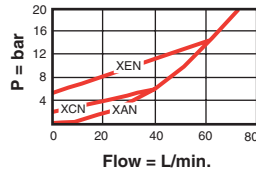
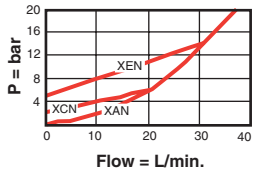
CXCD

CXED

CXGD

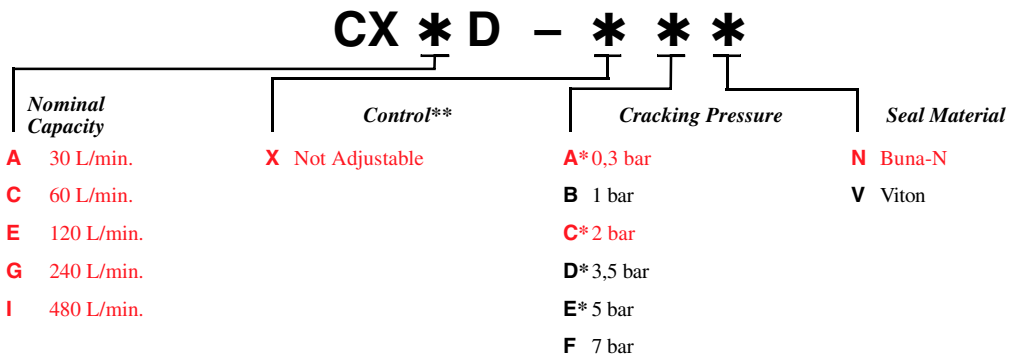
CXID

Typical Pressure Drop



- Maximum operating pressure = 350 bar.
- Maximum valve leakage at 24 cSt = 0,07 cc/min.
- Will accept 350 bar at ports 1 and 2.
- Caution: CX*A two port nose-to-side check valves and CX*D side-to-nose valves (shown in this catalogue section) share the same cavities and are mechanically interchangeable, but have opposite flow paths.

OPTION ORDERING INFORMATION



* CXAD available with A, C, D, E Cracking Pressures Only.

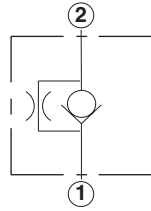
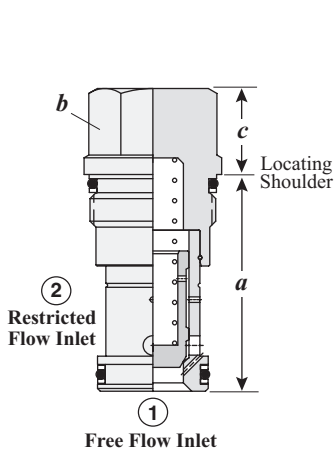
** See page 178 for information on Control Options

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Check Valves

FREE FLOW, NOSE-TO-SIDE WITH BYPASS ORIFICE



Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
30 L/min.	CNBC – XCN	T - 162A	31,0	19,1	20,8	35 - 40
60 L/min.	CNDC – XCN	T - 13A	35,1	22,2	19,1	45 - 50
120 L/min.	CNFC – XCN	T - 5A	41,4	28,6	17,5	60 - 70
240 L/min.	CNHC – XCN	T - 16A	61,7	31,8	24,6	200 - 215
480 L/min.	CNJC – XCN	T - 18A	79,5	41,3	30,2	465 - 500

Performance Curves

CNBC

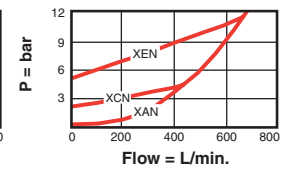
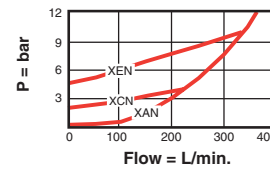
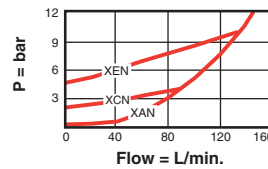
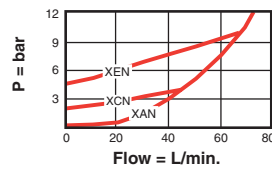
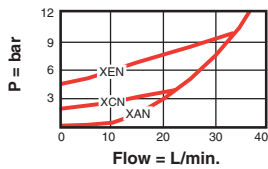
CNDC

CNFC

CNHC

CNJC

Typical Pressure Drop
Performance Data Shown Reflects Blocked Orifice



- Maximum operating pressure = 350 bar.
- Will accept 350 bar at ports 1 and 2.
- Two port check valves share the same cavity for a given frame size; however, pay close attention as flow paths may be in opposite directions.

OPTION ORDERING INFORMATION

CN * C		* * *		
Nominal Capacity	Control**	Cracking Pressure*		Seal Material
B 30 L/min.	X Not Adjustable	A 0,3 bar	N Buna-N	
D 60 L/min.		B 1 bar	V Viton	
F 120 L/min.		C 2 bar		
H 240 L/min.		D 3,5 bar		
J 480 L/min.		E 5 bar		
		F 7 bar		

* Customer specified orifice setting stamped on hex:

Orifice Setting:

CNBC: 0,4 - 1,6 mm.

CNDC: 0,4 - 2,7 mm.

CNFC: 0,4 - 3,2 mm.

CNHC: 0,4 - 6,4 mm.

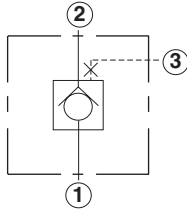
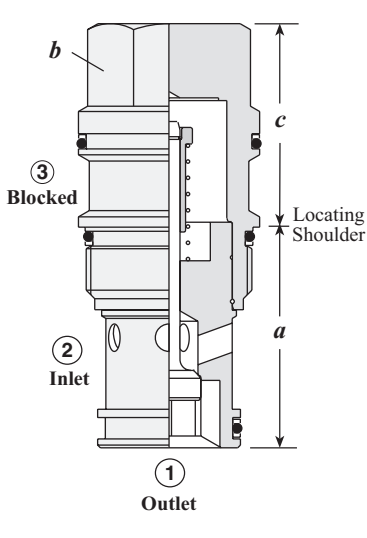
CNJC: 0,4 - 9,0 mm.

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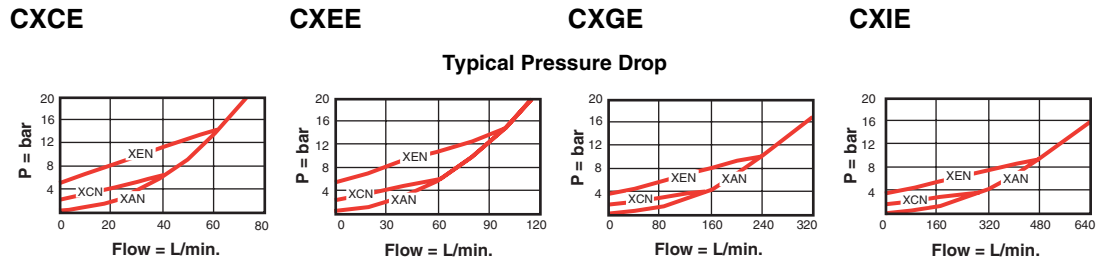
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FREE FLOW, SIDE-TO-NOSE, PORT 3 BLOCKED



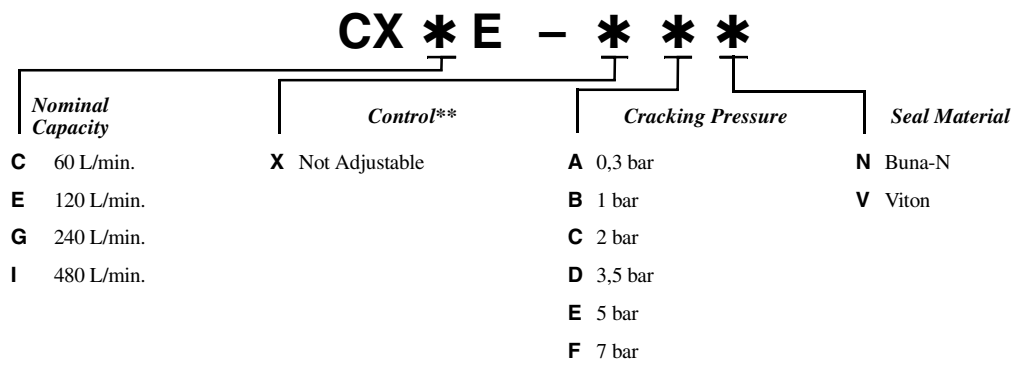
Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
60 L/min.	CXCE – XCN	T - 11A	35,1	22,2	30,2	45 - 50
120 L/min.	CXEE – XCN	T - 2A	35,1	28,6	35,1	60 - 70
240 L/min.	CXGE – XCN	T - 17A	46,0	31,8	46,0	200 - 215
480 L/min.	CXIE – XCN	T - 19A	63,5	41,3	58,7	465 - 500

Performance Curves



- Maximum operating pressure = 350 bar.
- Maximum valve leakage at 24 cSt = 0,07 cc/min.
- Will accept 350 bar at ports 1 and 2.
- Caution:** CX*A two port nose-to-side check valves and CX*D side-to-nose valves (shown in this catalogue section) share the same cavities and are mechanically interchangeable, but have opposite flow paths.

OPTION ORDERING INFORMATION



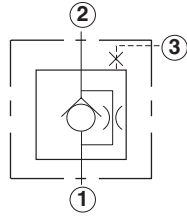
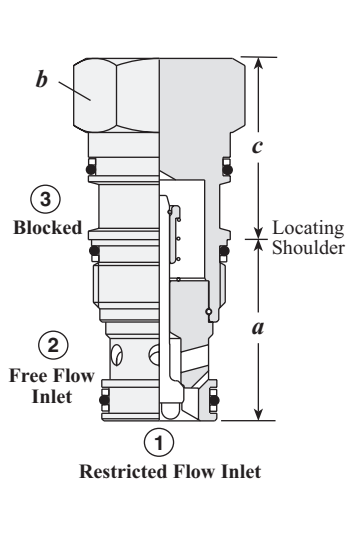
** See page 178 for information on Control Options

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Check Valves

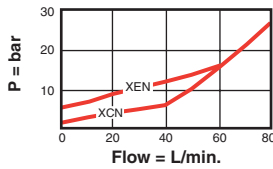
FREE FLOW, SIDE-TO-NOSE, WITH BYPASS ORIFICE, PORT 3 BLOCKED



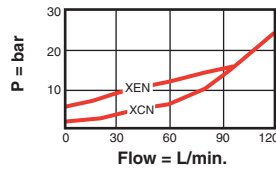
Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
60 L/min.	CNCD - XCN	T - 11A	35,1	22,2	30,2	45 - 50
120 L/min.	CNED - XCN	T - 2A	35,1	28,6	35,1	60 - 70
240 L/min.	CNGD - XCN	T - 17A	46,0	31,8	46,0	200 - 215
480 L/min.	CNID - XCN	T - 19A	63,5	41,3	58,7	465 - 500

Performance Curves

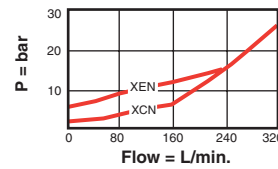
CNCD



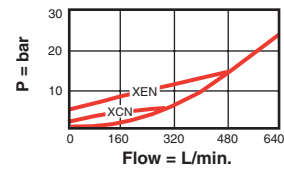
CNED



CNGD



CNID



Typical Pressure Drop

- Maximum operating pressure = 350 bar.
- Will accept 350 bar at ports 1 and 2.
- When used in a full time regeneration circuit, these valves allow full force to be developed by the cylinder when it comes to a stop. The bypass orifice drops the rod end pressure to zero when flow out of the rod stops.

OPTION ORDERING INFORMATION

Nominal Capacity		Control**	Cracking Pressure*			Seal Material
C	60 L/min.	X Not Adjustable	A	0,3 bar	N	Buna-N
E	120 L/min.		B	1 bar	V	Viton
G	240 L/min.		C	2 bar		
I	480 L/min.		D	3,5 bar		
			E	5 bar		
			F	7 bar		

* Customer specified orifice effective diameter stamped on hex:

Orifice Diameter Range:

CNCD: 0,4 - 3,9 mm

CNED: 0,4 - 3,4 mm

CNGD: 0,4 - 5,5 mm

CNID: 0,4 - 5,5 mm

** See page 178 for information on Control Options

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