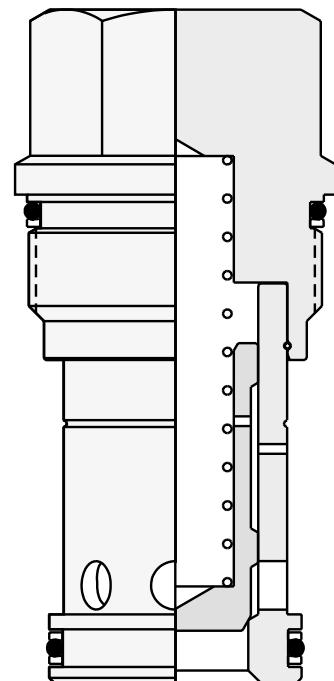
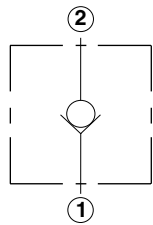
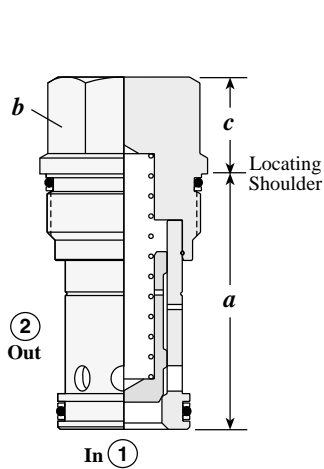


Check Cartridge Valves

	<i>Cartridge Type</i>	<i>Page</i>
	Free Flow Nose to Side	60
	Free Flow Side to Nose	61
	Free Flow Side to Nose, Port 3 Blocked	62
	Free Flow Nose to Side with Bypass Orifice	63
	2 To 1 Free Flow, with Customer Specified Orifice, Port 3 Blocked, 3 Port Cavity	64



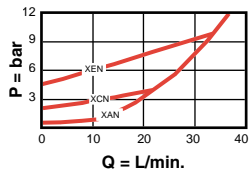
FREE FLOW NOSE TO SIDE



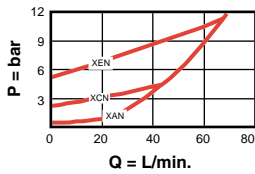
Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
40 L/min.	CXBA – XCN	T - 162A	31	19,1	21	35/40
80 L/min.	CXDA – XCN	T - 13A	34,9	22,2	19	40/50
160 L/min.	CXFA – XCN	T - 5A	41,1	28,6	18	60/70
320 L/min.	CXHA – XCN	T - 16A	61,9	31,8	25	200/215
640 L/min.	CXJA – XCN	T - 18A	79,4	41,3	31	465/500

Performance Curves

CXBA

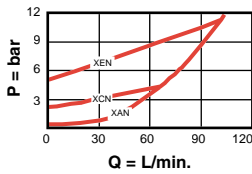


CXDA

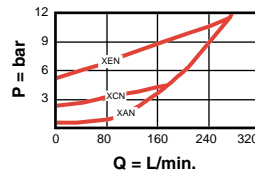


CXFA

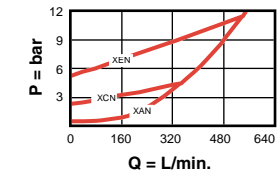
Typical Pressure Drop



CXHA



CXJA



- Maximum operating pressure = 350 bar
- Maximum valve leakage = 0,07 cc/min.
- Will accept 350 bar at ports 1 and 2.

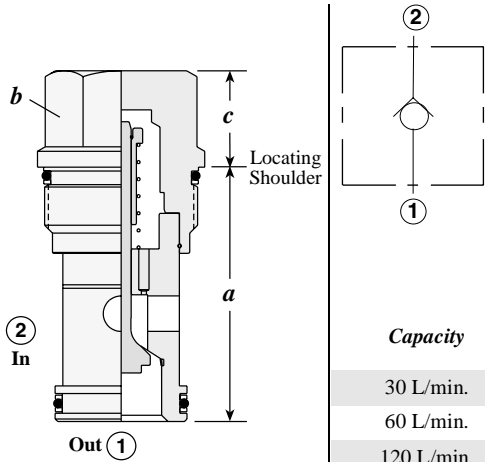
CX * A - * * *

Nominal Capacity	Control**	Cracking Pressure	Seal
B 40 L/min.	X Non-adjustable	A 0,3 bar	N Buna-N
D 80 L/min.		B 1,0 bar	V Viton
F 160 L/min.		C 2,0 bar	
H 320 L/min.		D 3,5 bar	
J 640 L/min.		E 5,0 bar	
		F 7,0 bar	

** See page 162 for information on Control Options

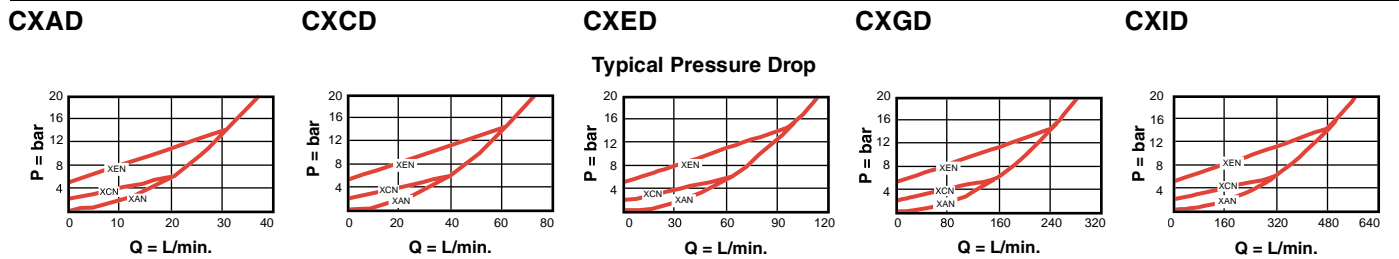
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FREE FLOW SIDE TO NOSE



Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
30 L/min.	CXAD – XCN	T - 162A	31	19,1	21	35/40
60 L/min.	CXCD – XCN	T - 13A	34,9	22,2	19	40/50
120 L/min.	CXED – XCN	T - 5A	41,1	28,6	18	60/70
240 L/min.	CXGD – XCN	T - 16A	61,9	31,8	25	200/215
480 L/min.	CXID – XCN	T - 18A	79,4	41,3	31	465/500

Performance Curves



- Maximum operating pressure = 350 bar
- Maximum valve leakage = 0,07 cc/min.
- Will accept 350 bar at ports 1 and 2.
- CXAD only available with 0,3, 2 and 5 bar cracking pressures.

CX * D - * * *

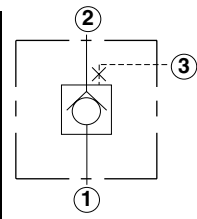
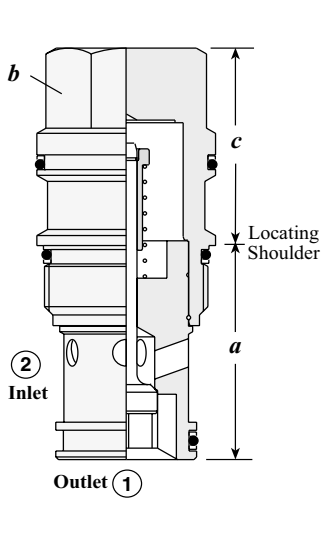
Nominal Capacity	Control**	Cracking Pressure	Seal
A* 30 L/min.	X Non-adjustable	A 0,3 bar	N Buna-N
C 60 L/min.		B 1,0 bar	V Viton
E 120 L/min.		C 2,0 bar	
G 240 L/min.		D 3,5 bar	
I 480 L/min.		E 5,0 bar	
		F 7,0 bar	

** See page 162 for information on Control Options

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

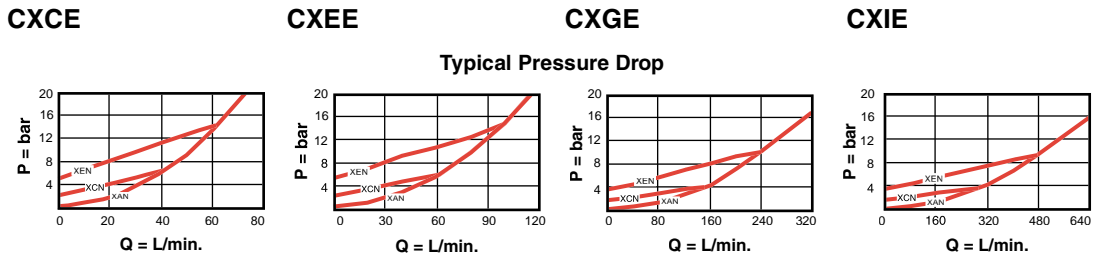
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FREE FLOW SIDE TO NOSE, PORT 3 BLOCKED



Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c	
60 L/min.	CXCE – XCN	T - 11A	34,9	22,2	31	40/50
120 L/min.	CXEE – XCN	T - 2A	34,9	28,6	35	60/70
240 L/min.	CXGE – XCN	T - 17A	46	31,8	46	200/215
480 L/min.	CXIE – XCN	T - 19A	63,5	41,3	59	465/500

Performance Curves



- Maximum operating pressure = 350 bar
- Maximum valve leakage = 0,07 cc/min.
- Will accept 350 bar at ports 1 and 2.

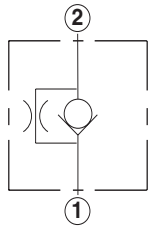
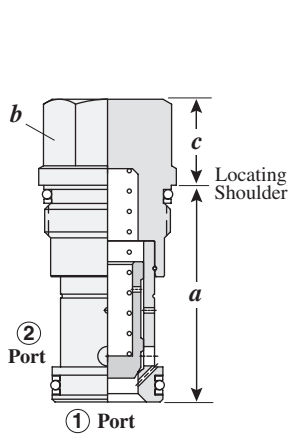
CX * E - * * *

Nominal Capacity	Control**	Cracking Pressure	Seal
C 60 L/min.	X Non-adjustable	A 0,3 bar	N Buna-N
E 120 L/min.		B 1,0 bar	V Viton
G 240 L/min.		C 2,0 bar	
I 480 L/min.		D 3,5 bar	
		E 5,0 bar	
		F 7,0 bar	

** See page 162 for information on Control Options

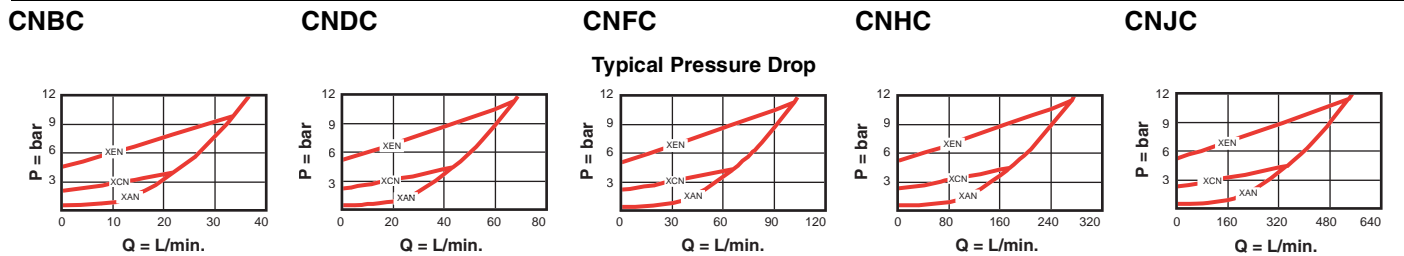
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FREE FLOW NOSE TO SIDE WITH BYPASS ORIFICE



Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c X	
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



- Maximum operating pressure = 350 bar
- Will accept 350 bar at ports 1 and 2.
- Orifice range = CNBC, CNDC: 0,4 - 1,6 mm, CNFC: 0,4 - 2,0 mm, CNHC: 0,4 - 2,4 mm, CNJC: 0,4 - 3,2 mm.

CN * C - * * *

Nominal Capacity	Control**	Cracking Pressure	Seal
B 30 L/min.	X Non-adjustable	A 0,3 bar	N Buna-N
D 60 L/min.		B 1,0 bar	V Viton
F 120 L/min.		C 2,0 bar	
H 240 L/min.		D 3,5 bar	
J 480 L/min.		E 5,0 bar	
		F 7,0 bar	

**See page 162 for information on Control Options

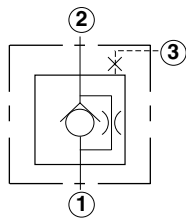
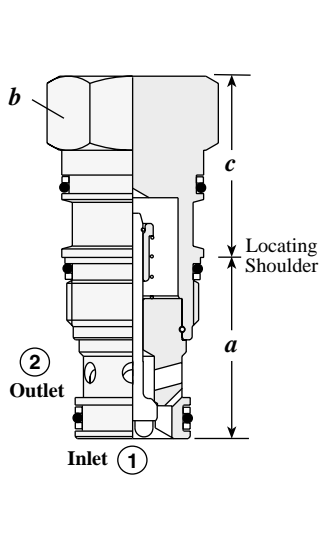
Customer specified orifice setting range:

- CNBC: 0,4 - 1,6 mm
- CNDC: 0,4 - 1,6 mm
- CNFC: 0,4 - 2,0 mm
- CNHC: 0,4 - 2,4 mm
- CNJC: 0,4 - 3,2 mm

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Free Flow Check Valves

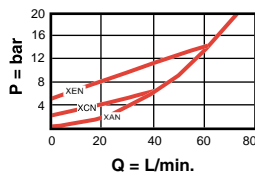
2 TO 1 FREE FLOW, WITH CUSTOMER SPECIFIED ORIFICE, PORT 3 BLOCKED, 3 PORT CAVITY



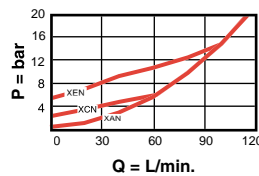
Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions			Installation Torque (Nm)
			a	b	c X	
60 L/min.	CNCD – XCN	T - 11A	34,9	22,2	31	40/50
120 L/min.	CNED – XCN	T - 2A	34,9	28,6	35	60/70
240 L/min.	CNGD – XCN	T - 17A	46	31,8	46	200/215
480 L/min.	CNID – XCN	T - 19A	63,5	41,3	59	465/500

Performance Curves

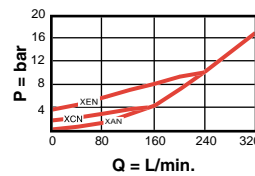
CNCD



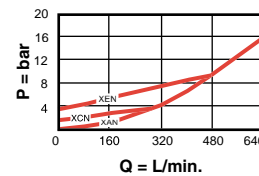
CNED



CNGD



CNID



Typical Pressure Drop

- Maximum operating pressure = 350 bar
- Will accept 350 bar at ports 1 and 2
- Orifice range = CNCD: 0,4 - 1,6 mm, CNED: 0,4 - 2,0 mm, CNGD: 0,4 - 2,4 mm, CNID: 0,4 - 3,2 mm

CN ★ D – ★ ★ ★

Nominal Capacity	Control**	Cracking Pressure	Seal
C 60 L/min.	X Non-adjustable	A 0,3 bar	N Buna-N
E 120 L/min.		B 1,0 bar	V Viton
G 240 L/min.		C 2,0 bar	
I 480 L/min.		D 3,5 bar	
		E 5,0 bar	
		F 7,0 bar	

** See page 162 for information on Control Options

Customer specified orifice setting range:

CNCD: 0,4 - 1,6 mm
 CNED: 0,4 - 2,0 mm
 CNGD: 0,4 - 2,4 mm
 CNID: 0,4 - 3,2 mm

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