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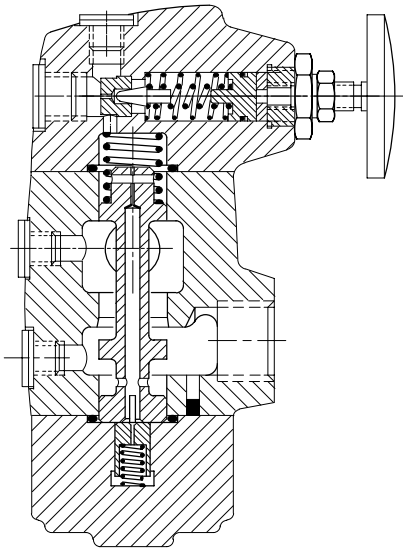
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Pressure Reducing Valves for Line Mounting

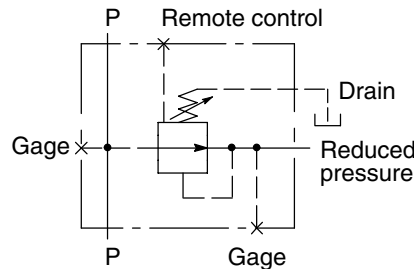
XT-03, 20 Series
 X(C)T-06/10, 20 Series

Typical Section

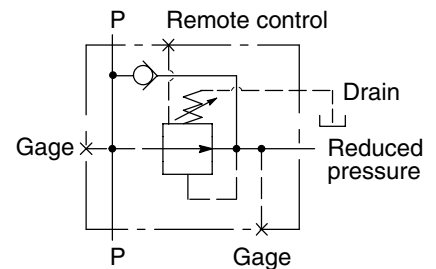


Functional Symbols

XT

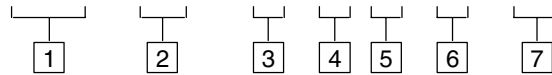


XCT



Model Code

(F3-) X (C) T- ** - * * - 2* - UB



Basic Characteristics

Maximum supply pressure 210 bar
 (3000 psi)
 Maximum flow 284 l/min
 (75 USgpm)

General Description

Pressure reducing valves are used to reduce system pressure to a constant reduced outlet pressure regardless of fluctuations in the main system above the selected pressure.

The XCT models have an integral check valve that allows free flow from the outlet connection to inlet connection.

1 Special seals for phosphate ester fluids
 Omit if not required

2 Reverse free flow check valve, 06 and 10 sizes only
 Omit if not required

3 Nominal size
 03 = 3/8"
 06 = 3/4"
 10 = 1 1/4"

4 Maximum adjustable reduced pressure
 1 = 70 bar (1000 psi)
 2 = 140 bar (2000 psi)
 3 = 200 bar (2850 psi)

5 Flow rate/min. reduced pressure combinations

For use of, and performance data for symbols B or F at this location, see table "Max. Flow Rate and Min. Reduced Pressures" on next page.

6 Design number, 20 series
 Subject to change. Installation dimensions unaltered for design numbers 20 to 29 inclusive.

7 Port threads
 UB = G (BSPF) thread to ISO 228/1

Operating Data

Maximum Pressure

Inlet ports 210 bar (3000 psi)

Drain ports 1,7 bar (25 psi)

Note: Drain ports must be piped direct to reservoir. Any back pressure at this port will increase the effective pressure setting of the valve by the same amount.

Max. Flow Rate and Min. Reduced Pressures

Typical with petroleum oil at 21 cSt (102 SUS) and at 50°C (122°F).

Model type	Reduced pressure range				Max. flow rate	
	Maximum bar	(psi)	Minimum bar	(psi)	L/min	(USgpm)
XT-03-1B	70	(1000)	5,25	(76)	26	(6.7)
			10,4	(150)	53	(14)
-2B	140	(2000)	5,25	(76)	26	(6.7)
			10,4	(150)	53	(14)
-3B▲	200	(2850)	10,4	(150)	53	(14)
			-3F			
X(C)T-06-1B	70	(1000)	5,6	(81)	57	(15)
			13,8	(200)	114	(30)
-2B	140	(2000)	5,6	(81)	57	(15)
			13,8	(200)	114	(30)
-3B	200	(2850)	5,6	(81)	57	(15)
			13,8	(200)	114	(30)
X(C)T-10-1B	70	(1000)	6,9	(100)	95	(25)
			11,4	(165)	190	(50)
-1B■	140	(2000)	15,5	(225)	284	(75)
			-1F			
-2B	140	(2000)	6,9	(100)	95	(25)
			11,4	(165)	190	(50)
-2B■	200	(2850)	15,5	(225)	284	(75)
			-2F			
-3B	200	(2850)	6,9	(100)	95	(25)
			11,4	(165)	190	(50)
-3B■	200	(2850)	15,5	(225)	284	(75)
			-3F			

▲ XT-03-3B combination not recommended. If max. inlet pressure is required with min. rated reduced pressure, consult your Vickers representative.

■ Alternative data giving max. flow for -*B- combinations.

Inlet Pressure Setting

For proper functioning the inlet pressure must be maintained at least 10 bar (150 psi) above the setting of the reduced outlet pressure.

Remote Pressure Control

Reduced pressure may be adjusted remotely by connecting the remote control connection to the inlet port of a C-175 relief valve (catalog 411) or a CGR-02 relief valve (catalog 409).

Pressure setting of the X(C)T valve must be higher than that of the remote control valve.

Hydraulic Fluids

X(C)T valves are suitable for use with hydraulic oils, oil-in-water emulsions and water glycols.

When fitted with special seals (specify "F3" in model code [1]) these valves are suitable for use with phosphate esters (not alkyl-based).

The extreme operating range is from 500 to 13 cSt (2270 to 70 SUS) but the recommended running range is 54 to 13 cSt (245 to 70 SUS).

Temperature Limits

Ambient:

Minimum -20°C (-4°F)

Maximum +70°C (+158°F)

Fluid Temperature

	Petroleum oil	Water-containing
Min.	-20°C (-4°F)	+10°C (+50°F)
Max.*	+80°C (+176°F)	+54°C (+130°F)

* To obtain optimum service life from both fluid and hydraulic system, 65°C (150°F) is the recommended maximum fluid temperature, except for water-containing fluids.

For synthetic fluids consult the fluid manufacturer or Vickers where limits are outside those for petroleum oil.

Contamination Control Requirements

Recommendations on contamination control methods and the selection of products to control fluid condition are included in Vickers publication 9132 or 561, "Vickers Guide to Systemic Contamination Control". The book also includes information on the Vickers concept of "ProActive Maintenance". The following recommendations are based on ISO cleanliness levels at 2 µm, 5 µm and 15 µm. For products in this catalog the recommended levels are:

Up to 210 bar (3000 psi) 19/17/14

Mounting Attitude

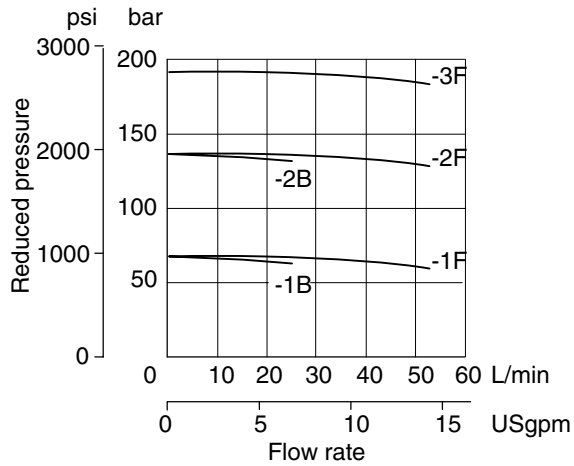
Unrestricted.

Performance Data

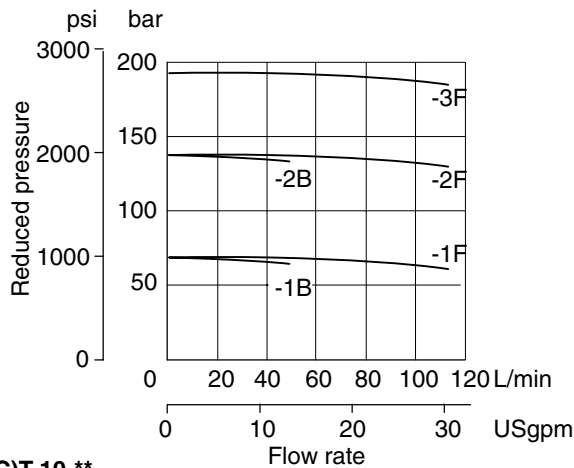
Typical with petroleum oil at 21 cSt (102 SUS) and at 50°C (122°F).

Reduced Pressure Override

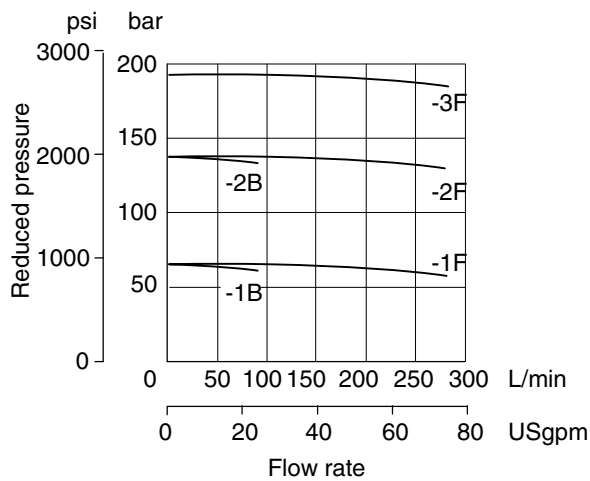
XT-03-**



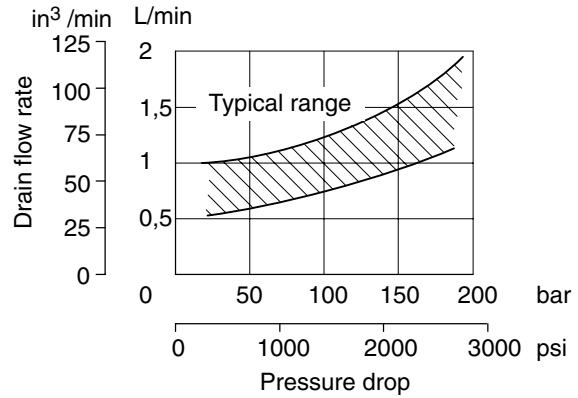
X(C)T-06-**



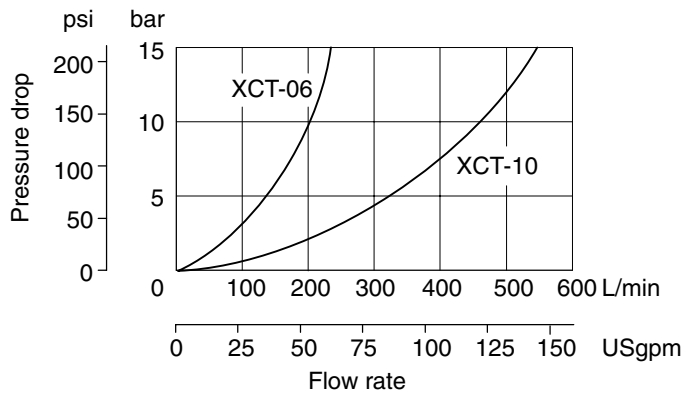
X(C)T-10-**



Pilot Control (Drain) Flow

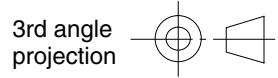


Pressure Drop



Installation Dimensions in mm (inches)

4CS-03 and 4CT(1)-06/10, Pipe-Mounted Models



- Optional positions of adjustment control obtained by rotating cover assembly

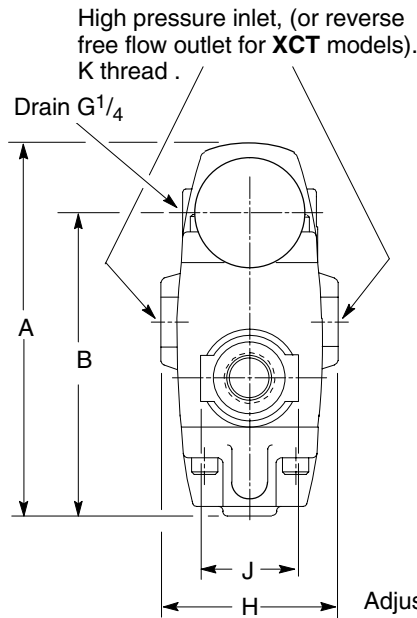
14 (0.6) A/F locknut.
Torque to 15-25 Nm
(20-34 lbf ft)

95,5
(3.8)
max.

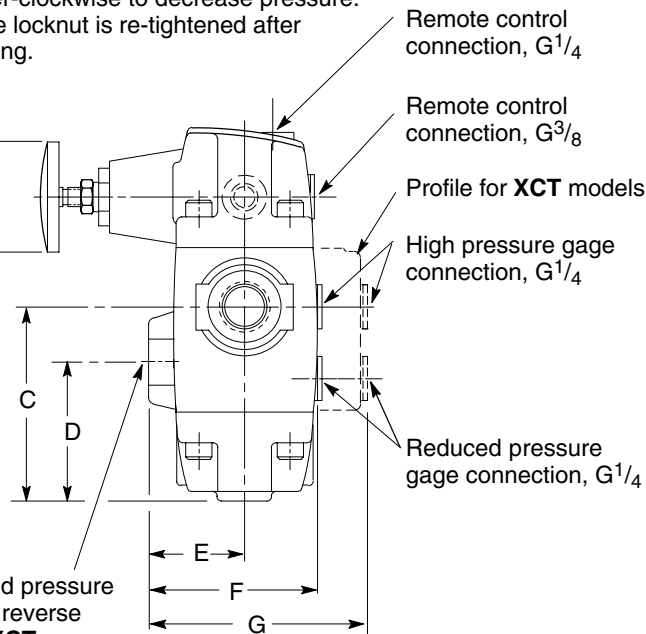
Not for **XT-10**

Cover fixing screws:
03 size:
5/16" -18 UNC soc. hd. cap screw
Torque to 27-33 Nm (37-45 lbf ft)
06 size:
3/8" -16 UNC soc. hd. cap screw
Torque to 48-58 Nm (65-77 lbf ft)
10 size:
3/8" -16 UNC soc. hd. cap screw
Torque to 48-58 Nm (65-77 lbf ft)

Pressure adjustment control.
Turn clockwise to increase pressure,
counter-clockwise to decrease pressure.
Ensure locknut is re-tightened after
adjusting.



Ø47,8
(1.9 dia)



Adjustable reduced pressure
outlet, (or reverse reverse
free flow inlet for **XCT**
models). K thread.

Model	A	B	C	D	E	F	G	H	J	K
XT-03	142,2 (5.6)	116,8 (4.6)	69,1 (2.7)	46 (1.8)	39,6 (1.6)	69,4 (2.7)	–	69,9 (0.27)	35,1 (1.4)	G ^{3/8} "
X(C)T-06	176,5 (7)	151,1 (5.9)	96,8 (3.8)	69,9 (2.75)	39,6 (1.6)	87,2 (3.4)	106,4 (4.2)	92,2 (3.6)	50,8 (2)	G ^{3/4} "
X(C)T-10	211,2 (8.3)	182,6 (7.2)	109,7 (4.3)	81 (3.2)	68,3 (2.7)	117,3 (4.6)	147,6 (5.8)	117,3 (4.6)	86,4 (3.4)	G ^{1 1/4} "

Mass

- XT-03 3,2 kg (7 lb)
- XT-06 5,6 kg (12.3 lb)
- XT-10 12,1 kg (26.6 lb)
- XCT-06 5,9 kg (13 lb)
- XCT-10 13,0 kg (28.6 lb)

Ordering Procedure

Specify full Model Code.

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