

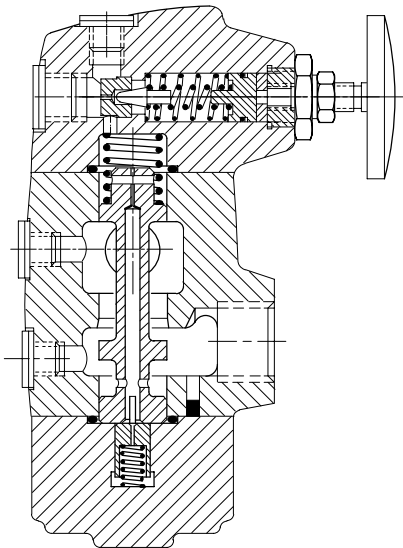


Pressure Reducing Valves for Line Mounting

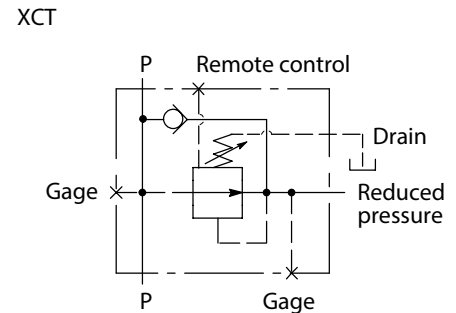
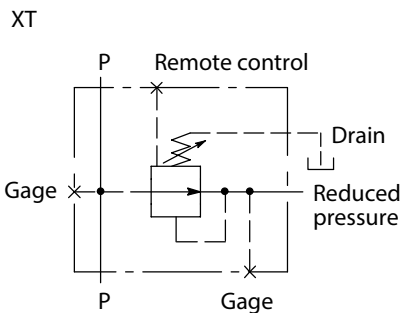
XT-03, 20 Series

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

Typical Section

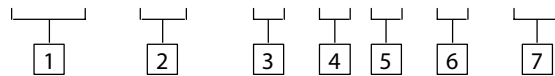


Functional Symbols



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 = $\frac{3}{8}$ "
06 = $\frac{3}{4}$ "
10 = $1\frac{1}{4}$ "

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)
-1F			10,4	(150)	53	(14)
-2B	140	(2000)	5,25	(76)	26	(6.7)
-2F			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)
-1F			13,8	(200)	114	(30)
-2B	140	(2000)	5,6	(81)	57	(15)
-2F			13,8	(200)	114	(30)
-3B	200	(2850)	5,6	(81)	57	(15)
-3F			13,8	(200)	114	(30)
X(C)T-10-1B	70	(1000)	6,9	(100)	95	(25)
-1B ■			11,4	(165)	190	(50)
-1F	140	(2000)	15,5	(225)	284	(75)
-2B			6,9	(100)	95	(25)
-2B ■	200	(2850)	11,4	(165)	190	(50)
-2F			15,5	(225)	284	(75)
-3B	200	(2850)	6,9	(100)	95	(25)
-3B ■			11,4	(165)	190	(50)
-3F			15,5	(225)	284	(75)

▲ XT-03- 3B combination not recommended. If max. inlet pressure is required with min. rated reduced pressure, consult your Danfoss 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 by Danfoss publication 9132 or 561, "Vickers By Danfoss Guide to Systemic Contamination Control ". The book also includes information on the Vickers by Danfoss 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

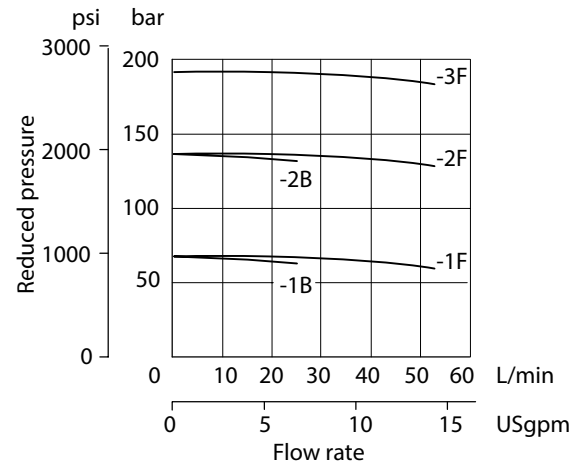
Unrestricted.

Performance Data

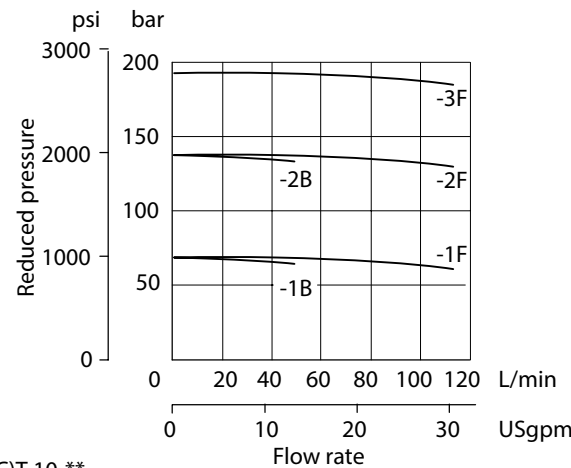
Typical with petroleum oil at 21 cSt (102 SUS) and at 50 °C (122 °F).

Reduced Pressure Override

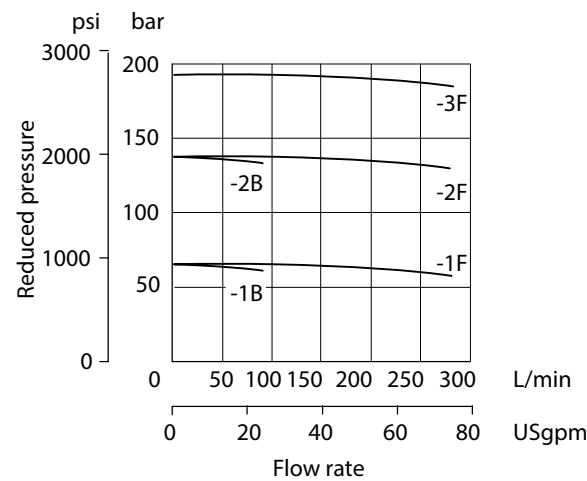
XT-03-**



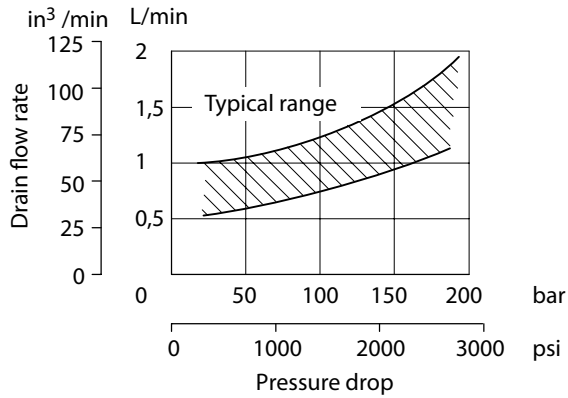
X(C)T-06-**



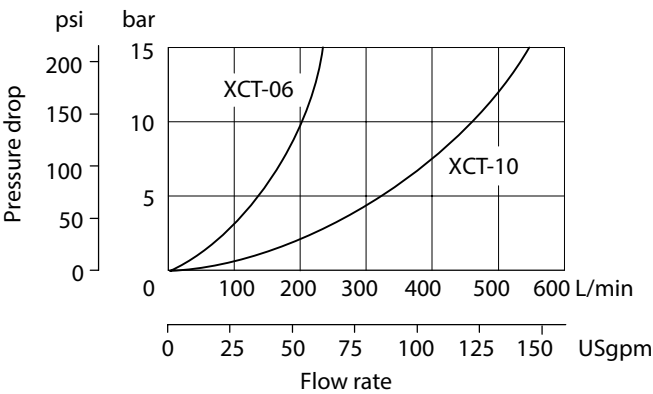
X(C)T-10-**



Pilot Control (Drain) Flow



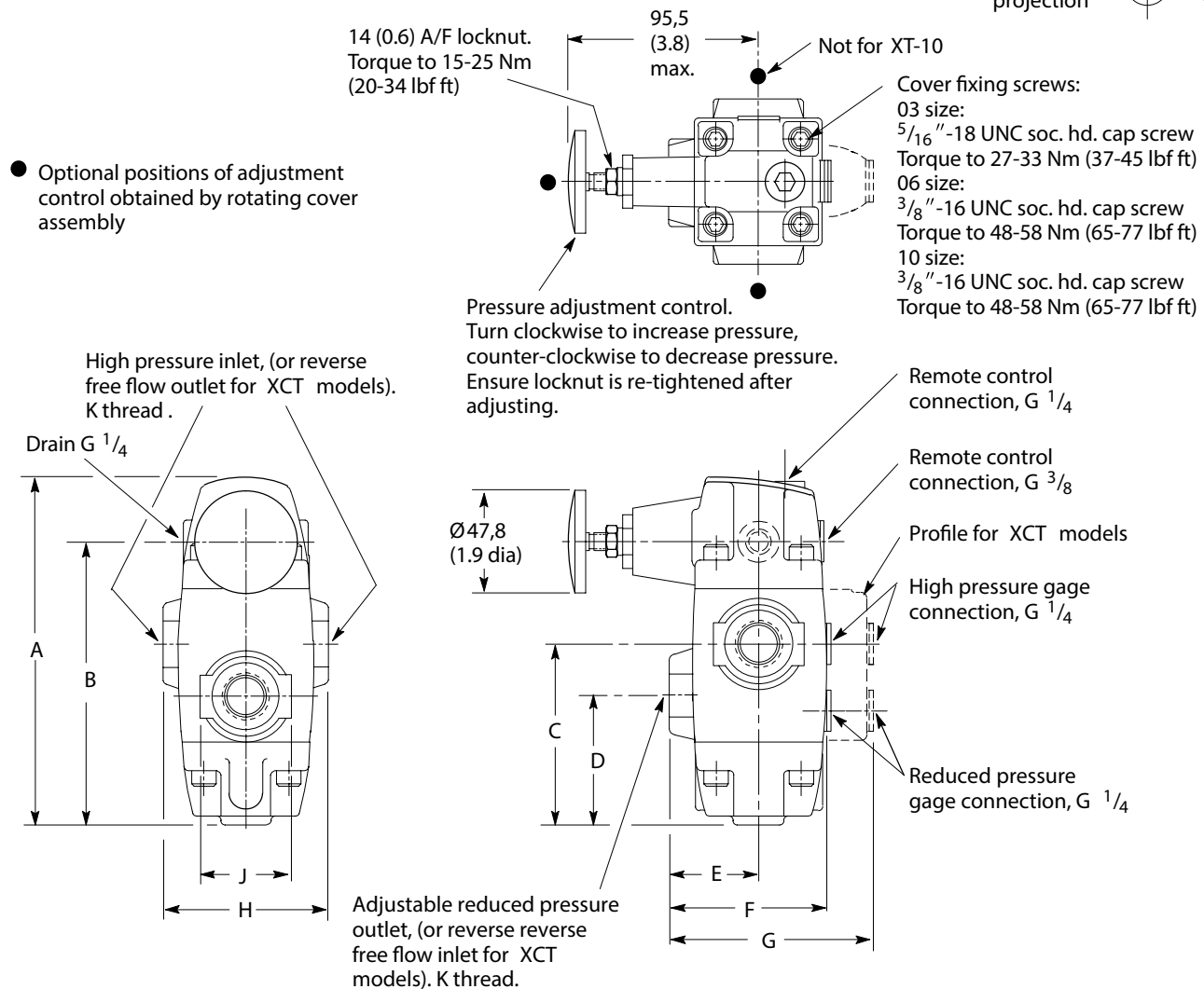
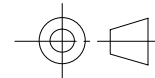
Pressure Drop



Installation Dimensions in mm (inches)

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

3rd angle
projection



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.

Products we offer:

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Local address:

**Danfoss
Power Solutions (US) Company**
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

**Danfoss
Power Solutions GmbH & Co. OHG**
Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

**Danfoss
Power Solutions ApS**
Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

**Danfoss
Power Solutions Trading
(Shanghai) Co., Ltd.**
Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 2080 6201

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