

SOLENOID OPERATING PROPORTIONAL CONTROL BANKABLE VALVES



Connector to be ordered separately, see page 105.

ORDERING CODE

CX

Proportional control bankable valve

3

Size

*

- **A** = Single solenoid
- **C** = Double solenoid

*

Body type:

- A = Ports G3/8" parallel
- **B** = Ports 9/16" 18UNF parallel
- **G** = Presetting for modular valves (parallel)
- L = Ports G3/8" parallel (LS version)

**

Type of spool

03 = ____

Ν

Symmetrical flow path control (see symbols table)

*

Nominal flow with Dp 5 bar from P to A,B

- **1** = 3 l/min
 - **2** = 10 l/min
 - **3** = 15 l/min
 - **4** = 20 l/min
- *

Max. current at solenoid (1):

E = 2.35 A - Special coil (9 VDC)

F = 1.76 A (12 VDC)

G = 0.88 A (24 VDC)

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Variants (1-2):

 $\mathbf{S1} = \text{No variant}$

SV = Viton

ES = Emergency button (3)

P2 = Rotary emergency (3)

R5 = Rotary emergency 180° (3)

AJ = Coil with AMP Junior connection (1)

 \mathbf{CZ} = Coil with Deutsch connection DT04-2P (1)

2

Serial No.

- (1) Coils technical data, see page 111.
 - Voltage codes are not stamped on the plate, their are readable on the coils
- (2) Connector to be ordered separately, see page 105;
- (3) Emergency (see page 42)

Proportional control bankable valves CX3 with single or double solenoid.

- Emergency control.
- Body for parallel connections
- Threaded ports sizes G3/8" or 9/16"-18UNF (SAE 6), with or without LS line.
- Coils protection IP66
- Standard connectors DIN 43650 ISO 4400, AMP Junior, flying leads and Deutsch
- Regulated flow rate 3 / 10 / 15 / 20 I/min
- Cast iron zinc plated body.

FEATURES

Max. operating pressure ports P/A/B	310 bar
Max. operating pressure ports T (Pressure dynamic allowed for 2 millions of cycles)	250 bar
Nominal flow with Dp 5 bar from P to A,B	3 / 10 / 15 / 20 I/min
Relative duty cycle	Continuous 100% ED
Type of protection (Hirschmann coil)	IP 66
Fluid viscosity	10 ÷ 500 mm ² /s
Fluid temperature	-20°C ÷ 75° C
Ambient temperature	-20°C ÷ 60°C
Max. contamination level (filter $\Omega_{10} \ge 75$)	ISO 4406:1999: class 19/17/14 NAS 1638: class 8
Weight with single solenoid (CX3A)	1.389 kg
Weight with double solenoid (CX3C)	1.778 kg

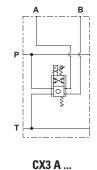
Solenoid	@ 9Vdc	@ 12Vdc	@ 24Vdc
Current supply	PWM (pulse width modulation)		
Max. current solenoid	2.35 A	1.76 A	0.88 A
Solenoid coil resistance at 25°C (77°F)	2.25 Ohm	4.0 Ohm	16.0 Ohm
PWM or superimposed dither frequency	100 ÷ 150 Hz		

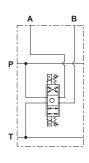
Operating specifications are valid for fluid with 46 mm 2 /s viscosity at 40 $^{\circ}$ C, using the specified Dana electronic control units.

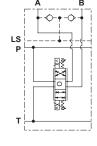
Accessories

REMSRA REMDRA	Card type control for single and double solenoid
CEPS	Electronic amplifier plug version for signle solenoid
MAV	Electronic module for integrate control of proportional
	valves and ON/OFF
JMPEI0M700101	Joystick with standard handle
JMPIU0M700138	Joystick Person present handle

HYDRAULIC SYMBOLS







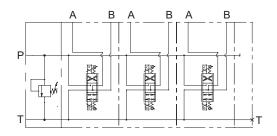
CX3 C ...

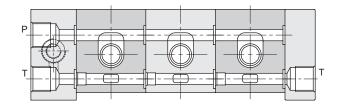
CX3 CL ...



HYDRAULIC SYMBOLS AND INSTRUCTION OF CONNECTION

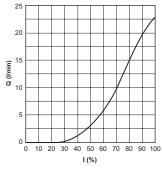
PARALLEL CONNECTION



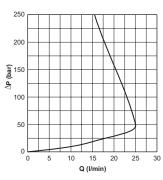


DIAGRAMS

INPUT SIGNAL CX3.01N4...



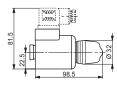
POWER LIMITS TRANSMITTED CX3.01N4...



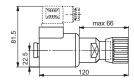
The fluid used is a mineral based oil with a viscosity of 46 mm 2 /s at 40 $^{\circ}$ C. The tests have been carried out at with a fluid of a 40 $^{\circ}$ C.

VARIANTS

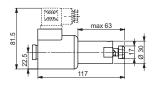
"ES"Manual emergency



"P2" Rotary emergency



"R5" Rotary emergency 180°

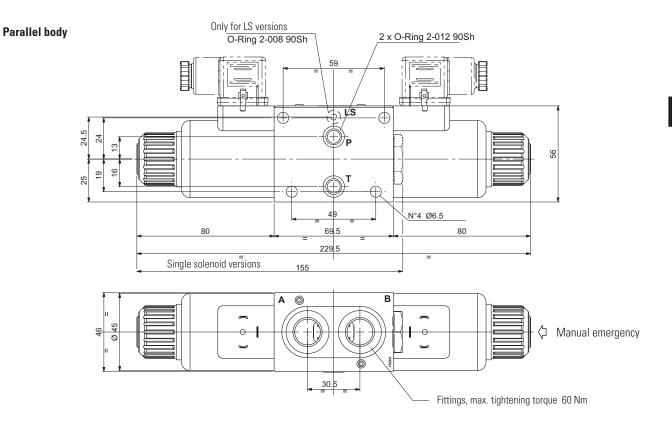


Emergency P2 and P5, tightening torque max. 6÷9 Nm (CH n. 22)

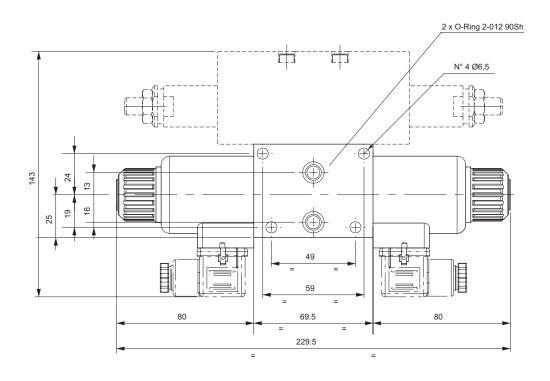




OVERALL DIMENSIONS



Parallel body Presetting for modular valves



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