

## XD2A... / XD2C... SOLENOID OPERATING PROPORTIONAL VALVES CETOP 2



XD2A../XD2C... series valves are used for controlling fluid direction and flow rate as a function of the supply current to the proportional control solenoid.

Any valve  $\Delta p$  variation causes a change in the set flow rate; however the valve itself ensure a high level internal compensation maintaining constant a regulated flow..

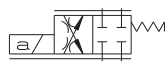
The XD2 cetop valve could be used for accurate proportional controls with compact sizes, reducing weights.

These valves can be also combined with Mini Powerpacks type MR/MC/FP creating compact solutions. Could be also used on a Cetop 3 interface using a reduction plate type BS32001.

### XD2...

STANDARD CONNECTORS	CAP. I • 20
DC SOLENOID A09	CAP. I • 4
REMSRA...	CAP. IX • 4
REMDRA...	CAP. IX • 7
CEPS	CAP. IX • 2
AM3H...	CAP. VIII • 15
BS32001	CAP. VII • 3

XD2A01N..



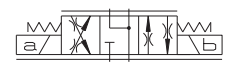
XD2A03N..



XD2C01N..



XD2C03N..



### ORDERING CODE

<b>XD</b>	Proportional valve
<b>2</b>	CETOP 2/NG04
<b>*</b>	<b>A</b> = Single solenoid <b>C</b> = Double solenoid
<b>**</b>	Type of spool (null position)
<b>01</b>	
<b>03</b>	
<b>*</b>	Flow path control (see symbols table) <b>N</b> = symmetrical
<b>*</b>	Flow rating l/min ( $\Delta p$ 5 bar) <b>1</b> = 1.5 l/min <b>6</b> = 6 l/min
<b>*</b>	Max. spool current <b>F</b> = 1.4 A <b>G</b> = 0.7 A
<b>**</b>	Variant: see Tab.1
<b>1</b>	Serial No.

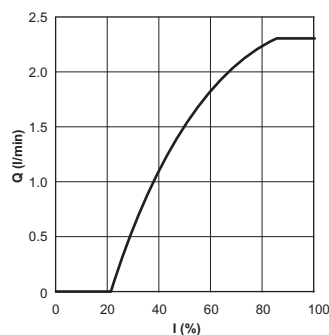
TAB.1 - VARIANTS

No variant (without connectors)	S1(*)
Viton	SV(*)
AMP Junior connection	AJ(*)
Coil with flying leads (250 mm)	FL
Coil with flying leads (130 mm) with diode	LD
Deutsch connection with bidirectional diode	CX

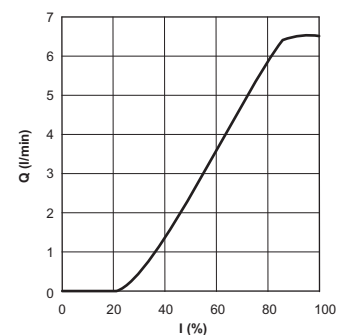
(\*) Coils with Hirschmann and AMP Junior connection supplied without connectors. The connectors can be ordered separately, Cap. I • 20.

### INPUT SIGNAL CURVES - FLOW RATE

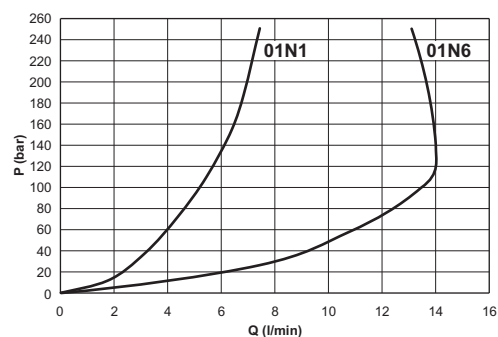
XD2\*01N  
(1.5 l/min P → A/B)



XD2\*01N  
(6 l/min P → A/B)



### POWER LIMITS TRANSMITTED P → A/B → T o P → B/A → T



The fluid used was a mineral oil with a viscosity of 46 mm<sup>2</sup>/s at 40°C. The tests have been carried out at with a fluid of 40°C.

Performances shown in this catalogue are guaranteed only using a pressure compensator of 5 bar.

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## OPERATING SPECIFICATIONS

Max. operating pressure ports P/A/B	250 bar
Max. operating pressure ports T - for dynamic pressure see note (*)	250 bar
Regulated flow rate	1.5 / 6 l/min
Relative duty cycle	Continuous 100% ED
Type of protection	IP 65
Flow rate gain	See diagrams
Hysteresis with connection P/A/B/T $\Delta p = 5$ bar (P/A)	$\leq 13\%$ of max. flow rate
Fluid viscosity	$10 \div 500 \text{ mm}^2/\text{s}$
Fluid temperature	$-20^\circ\text{C} \div 75^\circ\text{C}$
Max. contamination level	class 8 in accordance with NAS 1638 with filter $\beta_{10} \geq 75$
Weight XD.2.A... (single solenoid)	0.88 Kg
Weight XD.2.C... (double solenoid)	1.1 Kg
Max. current (voltage)	1.4A (a 12V) 0.7A (a 24V)
Solenoid coil resistance at $25^\circ\text{C}$ ( $77^\circ\text{F}$ )	5.3 Ohm 21.3 Ohm

(\*) Pressure dynamic allowed for 500000 cycles

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

## ELECTRONIC CONTROL UNIT

### REMSRA\*\* and REMDRA\*\*

Card type control for single and double solenoid.  
Recommended dither frequency 100 Hz.

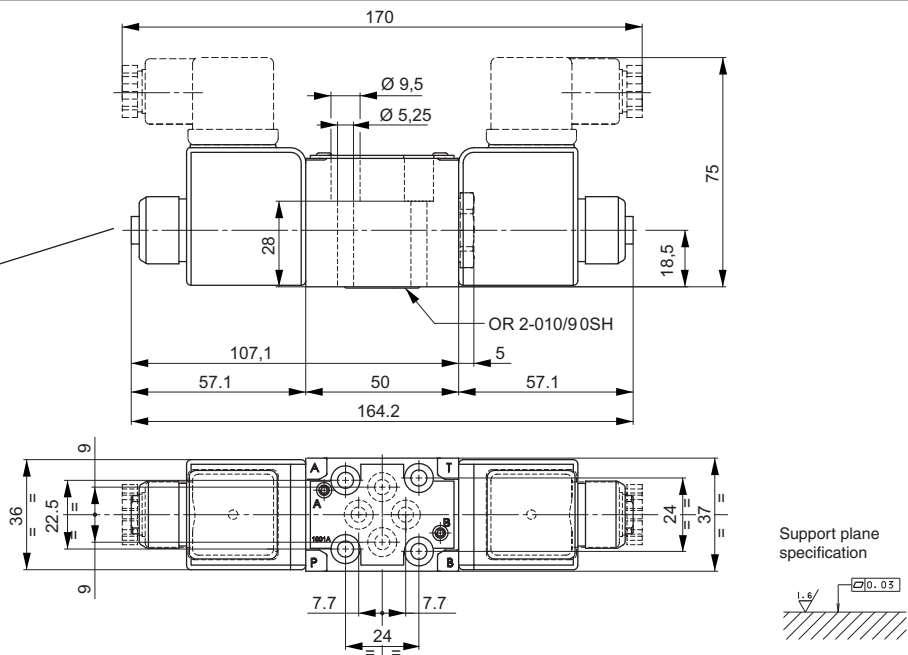
### CEPS

Electronic amplifier plug version  
for single solenoid proportional valve (150Hz  
PWM frequency setting)

## OVERALL DIMENSIONS

Manual emergency: if necessary, use a tool that does not damage the brass button.

Fixing screws UNI 5931 M5x35  
(min. 8.8 material screws are recommended)  
Tightening torque 5 Nm / 0.5 Kg



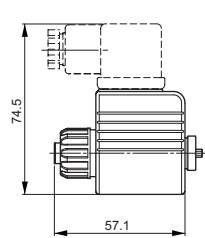
8

## PROPORTIONAL SOLENOID

Type of protection (in relation to connector used)	IP 65
Number of cycle	18.000/h
Supply tolerance	$\pm 10\%$
Ambient temperature	$-30^\circ\text{C} \div 60^\circ\text{C}$
Duty cycle	100% ED
Insulation class wire	H
Weight	0,215 Kg



AMP JUNIOR (AJ)



FLYING LEADS (FL)  
LEADS + DIODE (LD)

DEUTSCH COIL + BIDIR. DIODE (CX)  
DT04 - 2P

