

# XD.3.A... / XD.3.C... SOLENOID OPERATING PROPORTIONAL VALVES CETOP 3



XD.3.A./XD.3.C.. series valves are used for controlling fluid direction and flow rate as a function of the supply current to the proportional control solenoid.

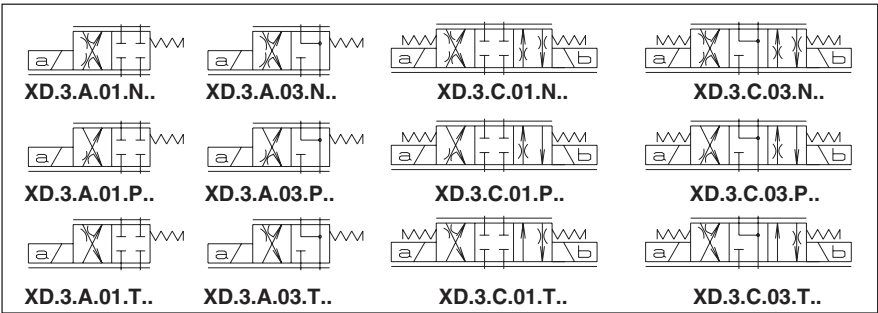
Any valve  $\Delta p$  variation causes a change in the set flow rate; however the valve itself ensure a high level internal compensation by limiting the controlled flow rate.

2 or 3 way modular assembly pressure regulators type AM.3.H... are available for a more accurate flow rate regulation.

The shown flow rates are typical for one line operation ( e.g. from P to B), while higher flow rates are obtainable by using the valve with our flow rate doubling sub-base type BC.3.07 ( see diagram next page). This type of configuration extends considerably the flow rate limit.

### XD.3...

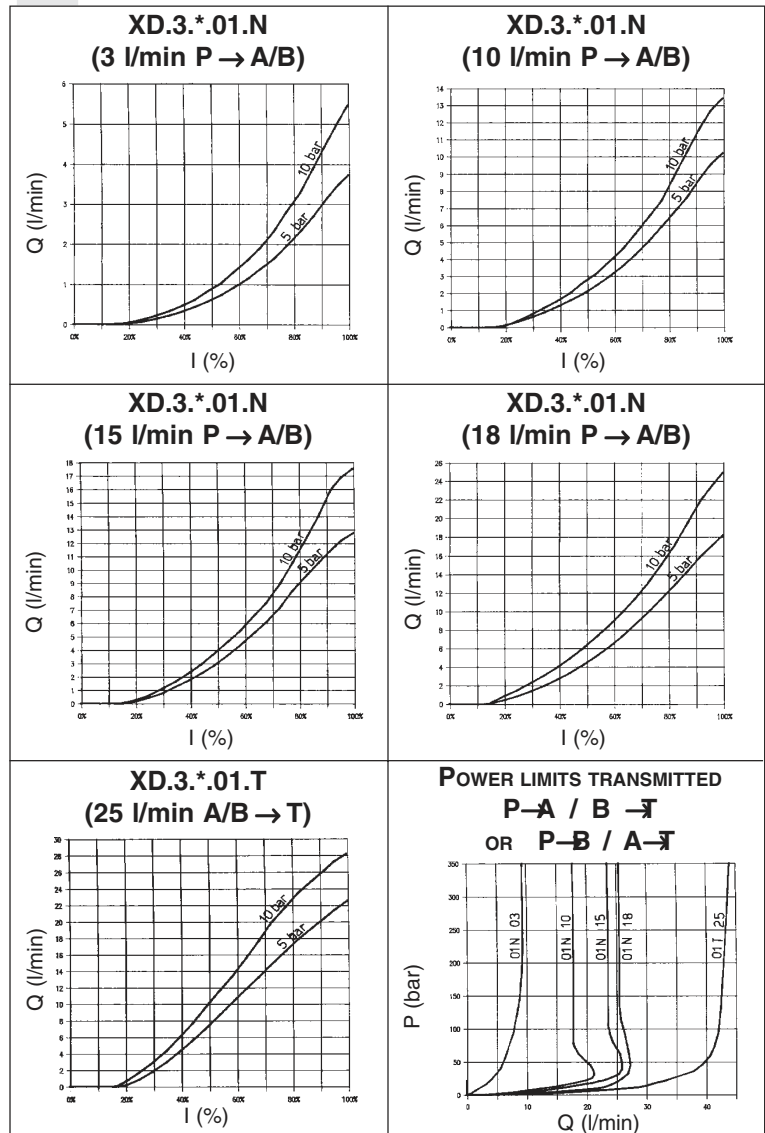
"D15P" PROPORT. SOLENOIDS	CH. VIII PAGE 3
REM.S.RA...	CH. IX PAGE 4
REM.D.RA...	CH. IX PAGE 7
SE.3.AN21.00...	CH. IX PAGE 11
AM.3.H...	CH. VIII PAGE 10
BC.3.07...	CH. VII PAGE 12



### ORDERING CODE

XD	Proportional valve
3	CETOP 3/NG6
*	<b>A</b> = Single solenoid <b>C</b> = Double solenoid
**	Type of spool  01 =  03 =
*	Flow path control (see symbols table) <b>N</b> = symmetrical <b>P</b> = meter in <b>T</b> = meter out
*	Flow rating l/min ( $\Delta p$ 5 bar) <b>1</b> = 3 l/min <b>2</b> = 10 l/min <b>3</b> = 15 l/min <b>4</b> = 18 l/min <b>5</b> = 25 l/min (at port T)
*	<b>E</b> = 9VDC (2.35 A) <b>F</b> = 12VDC (1.76 A) <b>G</b> = 24VDC (0.88 A)
**	<b>00</b> = No variant <b>V1</b> = Viton <b>P1</b> = Rotary emergency <b>P5</b> = Rotary emergency 180°
2	Serial No.

### INPUT SIGNAL CURVES - FLOW RATE



The fluid used is a mineral based 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 a 40°C.

**OPERATING SPECIFICATIONS**

Max. operating pressure ports P/A/B	350 bar		
Max. operating pressure ports T - for dynamic pressure see note (*)	250 bar		
Regulated flow rate	3 / 10 / 15 / 20 / 25 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)	$\approx 7\%$ of max. flow rate		
Fluid viscosity	10 ÷ 500 mm <sup>2</sup> /s		
Fluid temperature	-20°C ÷ 75°C		
Max. contamination level	class 8 in accordance with NAS 1638 with filter $\beta_{10} \geq 75$		
Weight XD.3.A... (single solenoid)	1,5 Kg		
Weight XD.3.C... (double solenoid)	1,7 Kg		
Type of voltage	9V	12V	24V
Max. current	2.35A	1.76 A	0.88 A
Solenoid coil resistance at 25°C (77°F)	2.25 Ohm	4.0 Ohm	16.0 Ohm

(\*) Pressure dynamic allowed for 2 millions of cycles.

• Operating specifications are valid for fluid with 46 mm<sup>2</sup>/s viscosity at 40°C, using the specified ARON electronic control units.

**ELECTRONIC CONTROL UNIT**

**REM.S.RA.\*\* and REM.D.RA.\*\***

Card type control for single and double solenoid

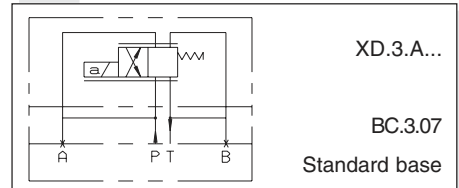
**SE.3.AN.21.00...**

EUROCARD type control for single and double solenoid

**AM.3.H.2V.P1 and AM.3.H.3V.P1**

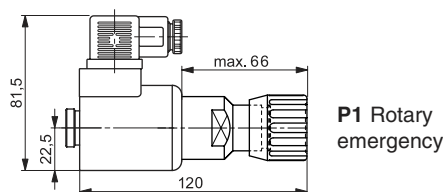
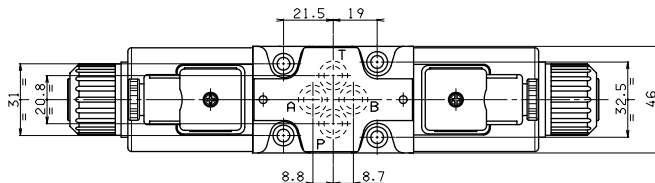
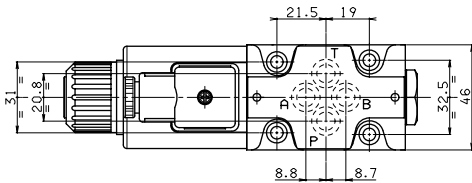
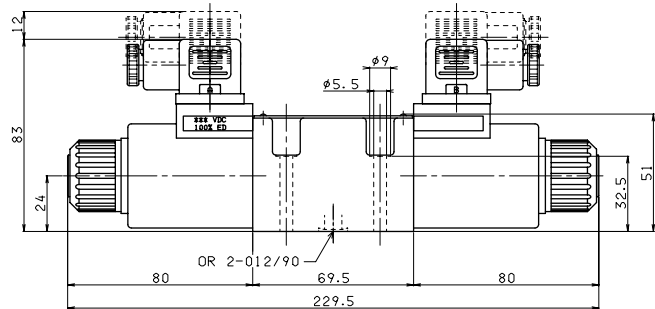
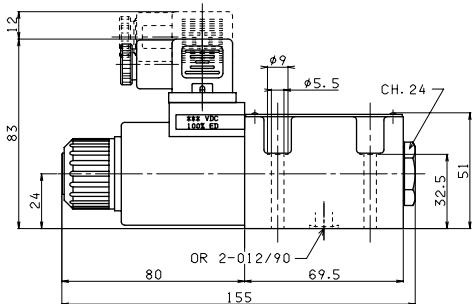
Hydrostats 2 or 3 way.

**SCHEMA FOR DOUBLE FLOW RATE**

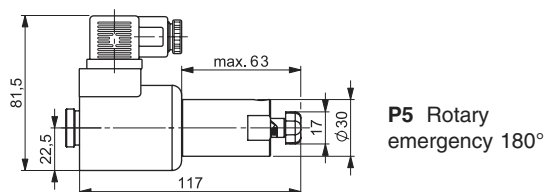


**XD.3.A... OVERALL DIMENSIONS**

**XD.3.C... OVERALL DIMENSIONS**



**P1 Rotary emergency**

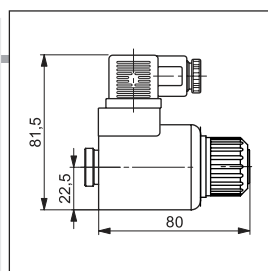


**P5 Rotary emergency 180°**

Fixing screws UNI 5931 M5x40 (min. 8.8 material screws are recommended)  
Tightening torque 4 ÷ 5 Nm / 0.4 ÷ 0.5 Kgm



**8**



**"D15P" PROPORTIONAL SOLENOIDS**

Type of protection (in relation to connector used)	IP 66
Duty cycle	100% ED
Insulation class	H
Weight (coil)	0,354 Kg
Weight (solenoid)	0,608 Kg

ETD15P - 01/2002/e