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

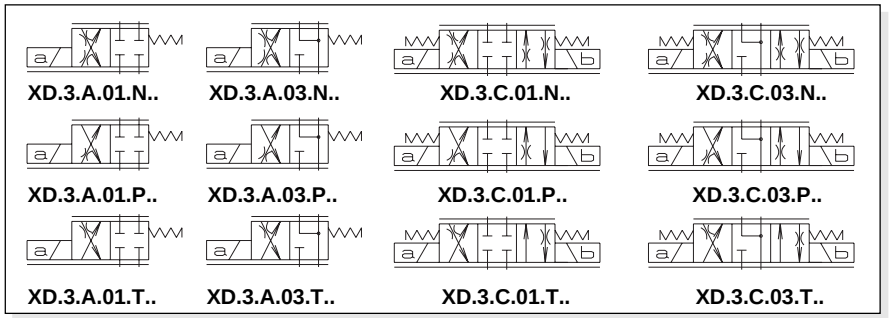
XD.3.A../XD.3.C.. series valves are used for controlling fluid direction and flow rate as a function of the supply current to the proportional control solenoid.

Any valve Δp 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...	
PROPORTIONAL SOLENOID D15P	CH.VIII PAGE 3
REM.S.RA...	CH. IX PAGE 2
REM.D.RA...	CH. IX PAGE 4
SE.3.AN209...	CH. IX PAGE 7
SE.3.AN204...	CH. IX PAGE 9
AM.3.H...	CH. VIII PAGE 10
BC.3.07...	CH. VII PAGE 12

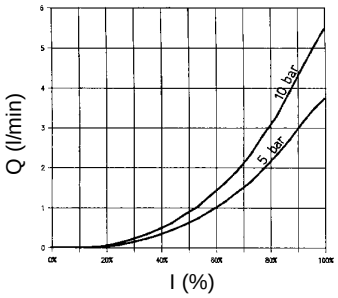


ORDERING CODE

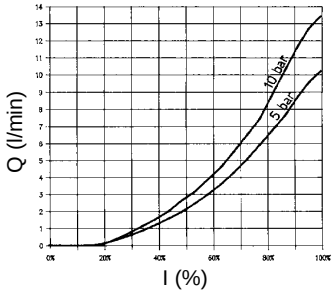
XD	Proportional valve
3	CETOP 3/NG6
*	**A** = Single solenoid **C** = Double solenoid
**	Type of spool 01 =  03 = 
*	Flow path control (see symbols table) **N** = symmetrical **P** = meter in **T** = meter out
*	Flow rating l/min (Δp 5 bar) **1** = 3 l/min **2** = 10 l/min **3** = 15 l/min **4** = 20 l/min **5** = 25 l/min (at port T)
*	**E** = 9VDC (2.35 A) **F** = 12VDC (1.76 A) **G** = 24VDC (0.88 A)
**	**00** = No variant **V1** = Viton **P1** = Rotary emergency
2	Serial No.

INPUT SIGNAL CURVES - FLOW RATE

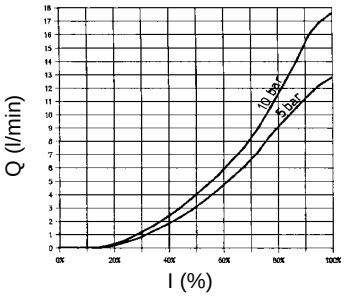
XD.3.*.01.N (3 l/min P → A/B)



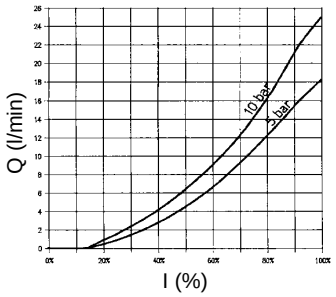
XD.3.*.01.N (10 l/min P → A/B)



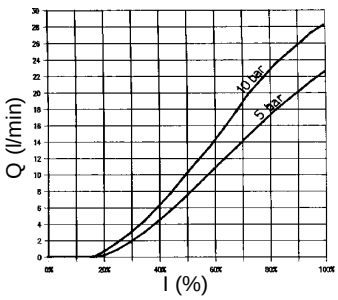
XD.3.*.01.N (15 l/min P → A/B)



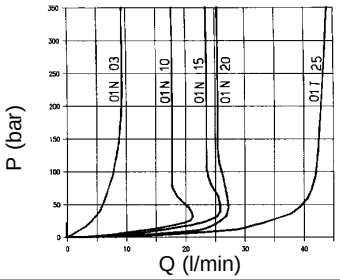
XD.3.*.01.N (20 l/min P → A/B)



XD.3.*.01.T (25 l/min A/B → T)



POWER LIMITS TRANSMITTED
P→A / B →T
OR P→B / A→T



The fluid used is a mineral based oil with a viscosity of 46 mm²/s at 40°C.
The tests have been carried out at with a fluid of a 40°C.

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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 Δp = 5 bar (P/A)	≤4% of max. flow rate
Fluid viscosity	10 ÷ 500 mm²/s
Fluid temperature	-20°C ÷ 75°C
Max. contamination level	class 8 in accordance with NAS 1638 with filter $ß_{10}≥75$
Weight XD.3.A... (single solenoid)	1,5 Kg
Weight XD.3.C... (double solenoid)	1,7 Kg

Type of voltages	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 mm²/s viscosity at 40°C, using the specified ARON electronic control units.

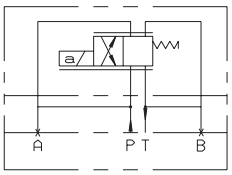
ELECTRONIC CONTROL UNIT

REM.S.RA.*.*. and REM.D.RA.*.*.
Card type control for single and double solenoid

SE.3.AN.209.16.. and SE.3.AN.204.16..
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

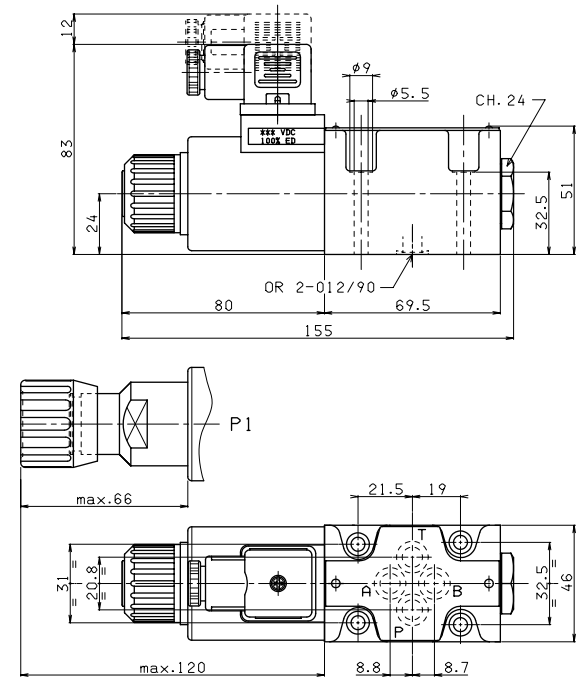


XD.3.A...

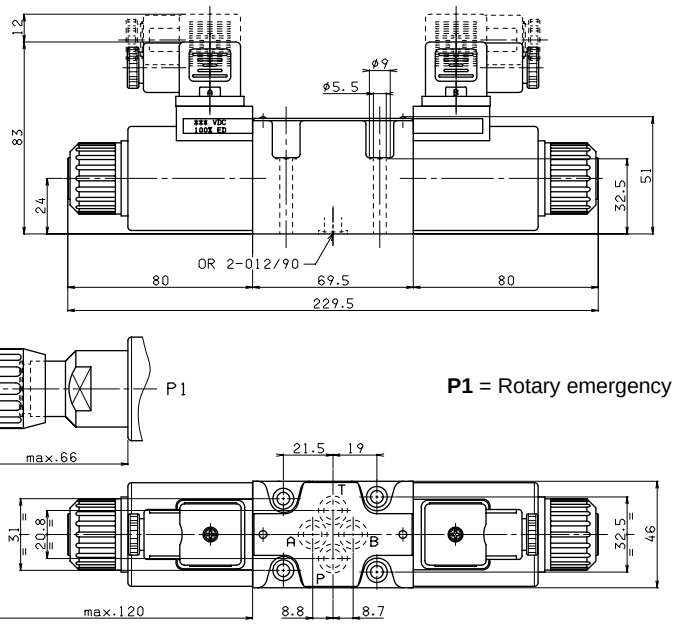
BC.3.07

Standard base

XD.3.A... OVERALL DIMENSIONS



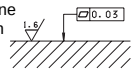
XD.3.C... OVERALL DIMENSIONS



P1 = Rotary emergency

Fixing screws UNI 5931 M5x40 (12.9 material screws are recommended)
Tightening torque 4 ÷ 5 Nm / 0.4 ÷ 0.5 Kgm

Support plane specification



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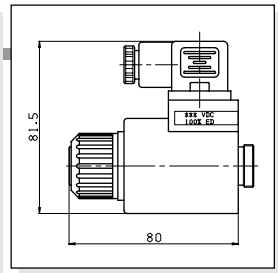

PROPORZIONAL SOLENOID D15P

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