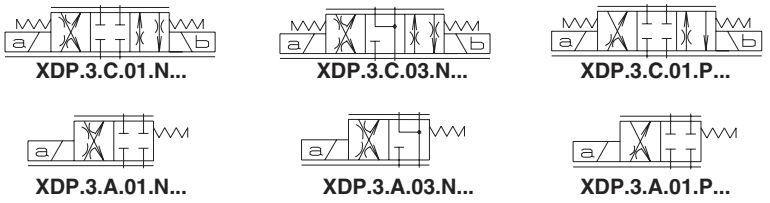
XDP.3.A... / XDP.3.C ...

PROPORTIONAL DIRECTIONAL VALVES OPEN LOOP

The open loop valves of series XDP... control the direction and the volume of the flow according to the feeding current to the proportional solenoid. By using a valve body equipped with increased passage channels it is possible to reach the highest capacity of its dimensions at a parity of pressure drops, (40 l/min with Δp of 10 bar).

Each Δp variation on the valve leads to the variation of the capacity which has been set, anyway the valve guarantees an high inner compensation grade and limits the adjustment capacity.

For a more accurate capacity control, 2 or 3-way hydrostats for modular plate design are available. The shown flow rates are typical for one line operation (e.g. from P to B). By using the valve with the base for capacity doubling type BC.3.07 (see next page) a greater capacity cam be obtained.



XDP.3...	
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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
AM.5.H...	CH. VIII PAGE 11
BC.3.07...	CH. VII PAGE 12

ORDERING CODE

XDP — Open loop proportional directional valve

3 — CETOP 3/NG6

***** — **A** = Single solenoid; **C** = Double solenoid

****** — Type of spool (null position)

01 =  **03** = 

***** — Flow path control (see hydraulic symbols table)
N = symmetrical
P = meter in (only with 01 spool)

***** — Flow rating l/min (Δp 10 bar)
1 = 8 l/min
2 = 15 l/min
3 = 25 l/min
6 = 40 l/min

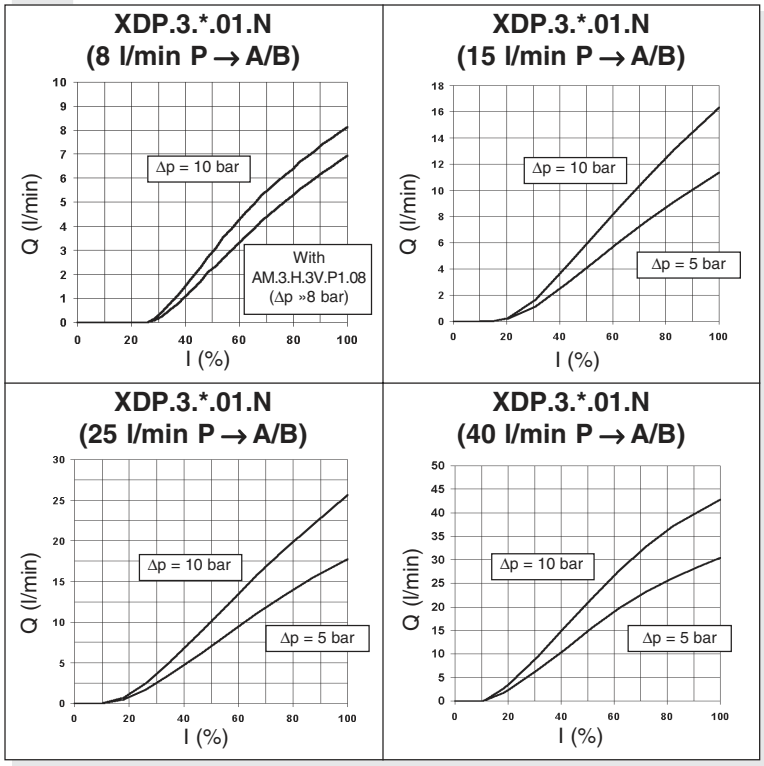
In order to reduced the unloading pressure for rated flow version at 40 l/min we advise to use the 3 way type AM.5.H.3V... hydrostat.

***** — Max. current to solenoid
E = 2.35 A
F = 1.76 A
G = 0.88 A

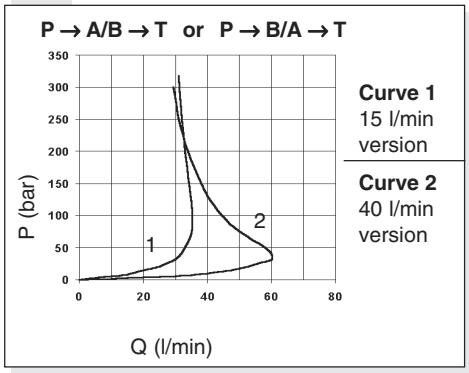
****** — **00** = No variant
P1 = Rotary emergency
P5 = Rotary emergency 180°
V1 = Viton

2 — Serial No.

INPUT SIGNAL CURVES - FLOW RATE



POWER LIMITS TRANSMITTED



8

OPERATING SPECIFICATIONS

Max. operating pressure ports P/A/B	350 bar
Max. pressure port T - for dynamic pressure see note (*)	250 bar
Nominal flow	8 / 15 / 25 / 40 l/min
Duty cycle	Continuous 100% ED
Type of protection (depending on the connector used)	IP 65
Flow rate gain	See diagram
Power limits curves transmitted	See diagram
Fluid viscosity	10 ÷ 500 mm²/s
Fluid temperature	-20°C ÷ 75°C
Ambient temperature	-20°C ÷ 70°C
Max. contamination level	from class 7 at 9 in accordance with NAS 1638 with filter $\beta_{10} \geq 75$
Weight XDP.3.A... (single solenoid)	1,7 Kg
Weight XDP.3.C... (double solenoid)	2,9 Kg

	2.35A	**1.76 A**	**0.88 A**
Max. current			
Solenoid coil resistance 25°C (77°F)	2.25 Ohm	4.0 Ohm	16.0 Ohm
Hysteresis P / A / B / T with a pressure compensator AM.3.H.3V...	≤5 %	<5%	<8%
Response to step Δp = 5 bar (P/A)			
0 ÷ 100%	32 ms	40 ms	85 ms
100% ÷ 0	33 ms	33 ms	33 ms
Frequency response -3db (Input signal 50% ±25% Vmax)	22Hz	22Hz	12Hz

(*) Pressure dynamic allowed for 2 millions of cycles

Operating specifications are valid for fluids with 46 mm²/s viscosity at 40°C, using the specified ARON electronic control units. Performance data carried out using the specified Aron power amplifier SE.3.AN... serie 1 - EUROCARD format.

AMPLIFIER UNIT AND CONTROL

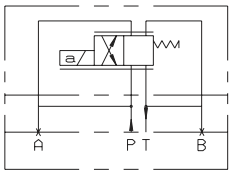
REM.S.RA.*.*. and REM.D.RA.*.*.
Electronic card control single and double proportional solenoid valve.

SE.3.AN.21.00...
Electronic card format EUROCARD for control and double proportional solenoid valve

AM.3.H.2V.P1 / AM.3.H.3V.P1 and AM.5.H.3V.P1 (*)

Hydrostats 2 or 3 way
(*) for rated flow XDP3 version at 40 l/min only

CONFIGURATION FOR DOUBLE FLOW RATE

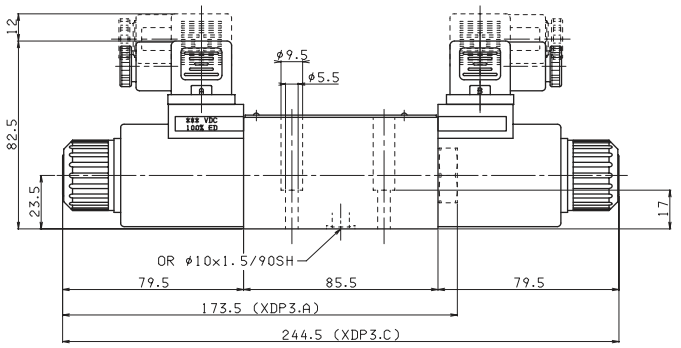


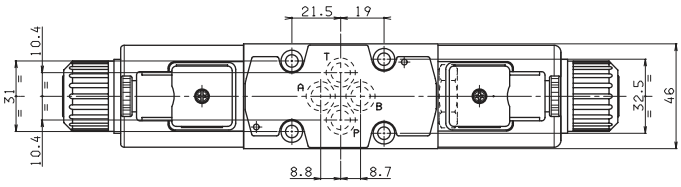
XDP.3.A...

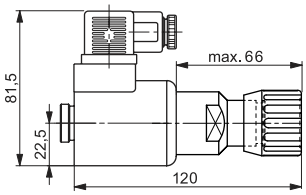
BC.3.07

Standard subplate

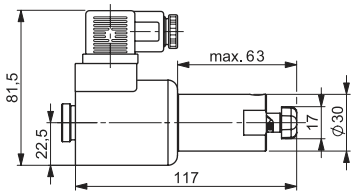
OVERALL DIMENSIONS







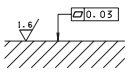
P1 Rotary emergency

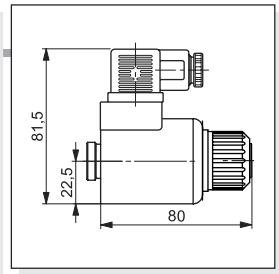


P5 Rotary emergency 180°

Fixing screws UNI 5931 M5x25
(min. 8.8 material screws are recommended)
Tightening torque 4 ÷ 5 Nm / 0.4 ÷ 0.5 Kgm

Support plane specifications





"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