

XDP3A... / XDP3C ...

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.

Performances shown in this catalogue are guaranteed only using 2 or 3 way modular assembly hydrostats type AM3H. ... By using the valve with the base for capacity doubling type BC307 (see next page) a greater capacity can be obtained.

XDP3...

STANDARD CONNECTORS	CAP. I • 20
D15P PROPORTIONAL SOLENOIDS	CAP. VIII • 7
REMSRA...	CAP. IX • 4
REMDRA...	CAP. IX • 7
AM3H...	CAP. VIII • 15
AM5H...	CAP. VIII • 16
BC307...	CAP. VII • 12

XDP3C01N...



XDP3A01N...



XDP3C03N...



XDP3A03N...



XDP3C01P...



XDP3A01P...



ORDERING CODE

XDP

Open loop proportional directional valve

3

CETOP 3/NG06

A = Single solenoid
C = Double solenoid

Type of spool (null position)



Flow path control (see hydraulic symbols table)
N = simmetrico
P = in mandata (solo con cursori 01)

Flow rating l/min (Δp 10 bar)

A = 4 l/min
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 AM5H3V... hydrostat

Max. current to solenoid

E = 2.35 A
F = 1.76 A
G = 0.88 A

Varianti: see Table 1

2

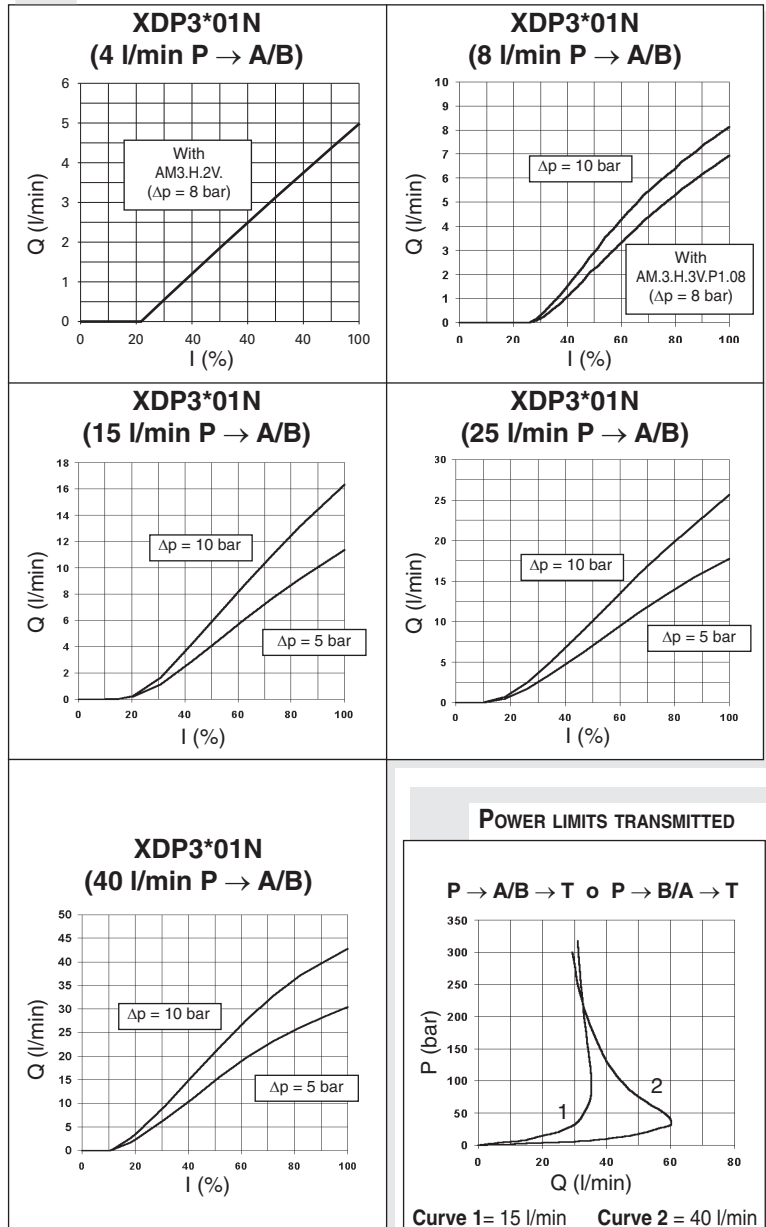
Serial No.

TABLE 1 - VARIANTS (*)

No variant (without connectors)	S1
Viton	SV
Rotary emergency	P2
Rotary emergency 180° 180°	R5

(*) All variants are considered without connectors. The connectors must be order separately. See Cap. I • 20.

INPUT SIGNAL CURVES - FLOW RATE



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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 mm ² /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 XDP3A... (single solenoid)	1,7 Kg		
Weight XDP3C... (double solenoid)	2,9 Kg		

Max. current	2.35A	1.76 A	0.88 A
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 $\Delta p = 5$ 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 electronic control units. Performance data carried out using the specified power amplifier SE3AN... serie 1 - EUROCARD format - powered to 24V.

AMPLIFIER UNIT AND CONTROL

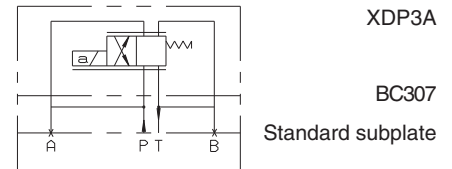
REMSRA** and REMDRA**

Electronic card control single and double proportional solenoid valve.
Recommended dither frequency 100 Hz.

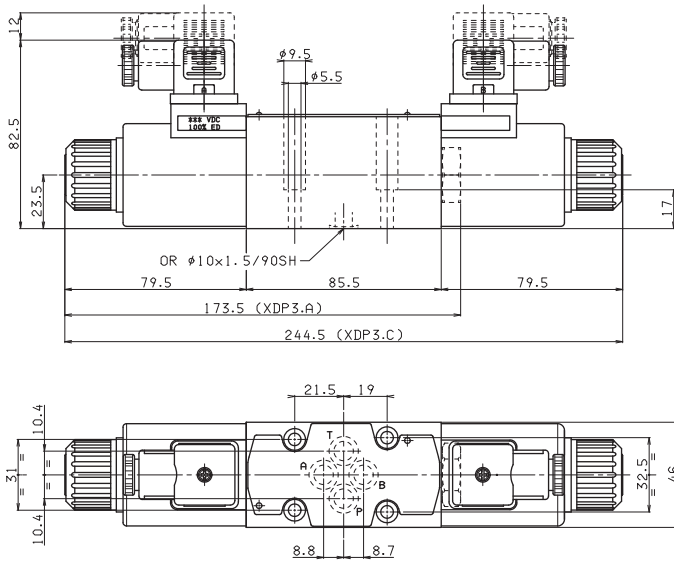
AM3H2VP1 / AM3H3VP1 and AM5H3VP1 (*)

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

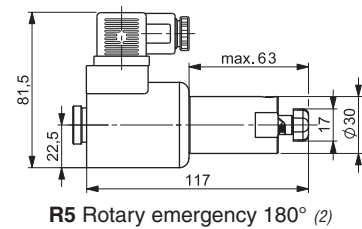
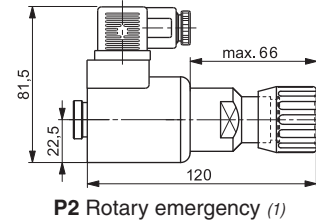
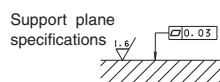
CONFIGURATION FOR DOUBLE FLOW RATE



OVERALL DIMENSIONS



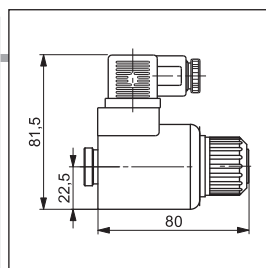
Fixing screws UNI 5931 M5x25
(min. 8.8 material screws are recommended)
Tightening torque 4 ÷ 5 Nm / 0.4 ÷ 0.5 Kgm



- (1) P2 - Adjustable hand emergency.
(2) R5 - Two positions hand emergency. The regulated flow with emergency actuated can be less than nominal value.

8

"D15P" PROPORTIONAL SOLENOIDS



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