

XDP5A... / XDP5C ...

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.

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 AM5H. ... (see note below in ordering code).

S5 variant - This variant that consists of a solenoid chamber drainage separated from the T line and obtained on CETOP RO5 interface allows operation with up to 320 bar max. back pressure on the T line. To ensure maximum solenoid valve mounting safety and supplementary drainage, only 12.9 material fixing screws must be used with it.



XDP5...

STANDARD CONNECTORS	CAP. I • 20
"D19P" PROPORT. SOLENOIDS	CAP. VIII • 9
REMSRA...	CAP. IX • 4
REMDRA...	CAP. IX • 7
AM5H...	CAP. VIII • 16

ORDERING CODE

XDP

Open loop proportional directional valve

5

CETOP 5/NG10

A = Single solenoid
C = Double solenoid

Type of spool (null position)

01 =  **03** = 

N

Symmetrical flow path control
(see hydraulic symbols table)

Flow rating (*) Δp 10 bar
2 = 45 l/min
3 = 60 l/min
5 = 100 l/min

Max. current to solenoid
F = 2.5 A
G = 1.25 A

Variants: see table 1

1

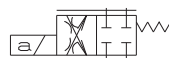
Serial No.



XDP5C01N...



XDP5C03N...

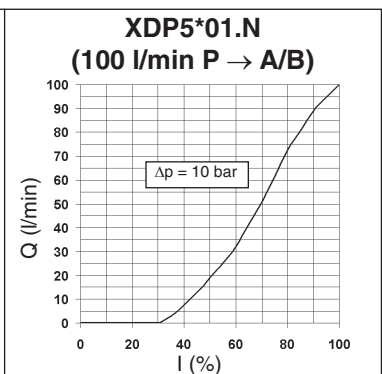
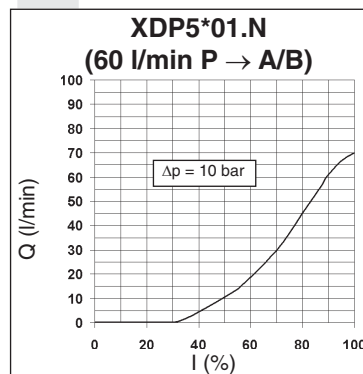


XDP5A01N...

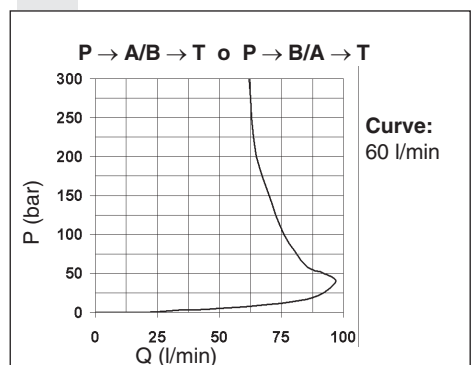


XDP5A03N...

INPUT SIGNAL CURVES - FLOW RATE



POWER LIMITS TRANSMITTED



TAB.1 - VARIANTS (**)

No variant (without connectors)	S1
Viton	SV
Rotary emergency	P2
External drainage	S5

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

XDP5A... / XDP5C ... PROPORTIONAL DIRECTIONAL VALVES OPEN LOOP

OPERATING SPECIFICATIONS

Max. operating pressure ports P/A/B	320 bar
Max. pressure port T - for dynamic pressure see note (*)	250 bar
Max. pressure port T (with external drainage - S5 variant)	320 bar
Nominal flow	45 / 60 / 100 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 XDP5A... (single solenoid)	4,97 Kg
Weight XDP5C... (double solenoid)	6,55 Kg

Max. current	2.5 A	1.25 A
Solenoid coil resistance 20°C (68°F)	2.85 Ohm	11.4 Ohm
Hysteresis P/A/B/T		
with a pressure compensator AM.5.H.3V...	<5%	<8%
Response to step $\Delta p = 10$ bar (P/A)		
0 ÷ 100%	56 ms	118 ms
100% ÷ 0	32 ms	32 ms
Frequency response -3db (Input signal 50% \pm 25% Vmax)	10Hz	7Hz

(*) 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 type REMSRA... power supplied at 24V.

AMPLIFIER UNIT AND CONTROL

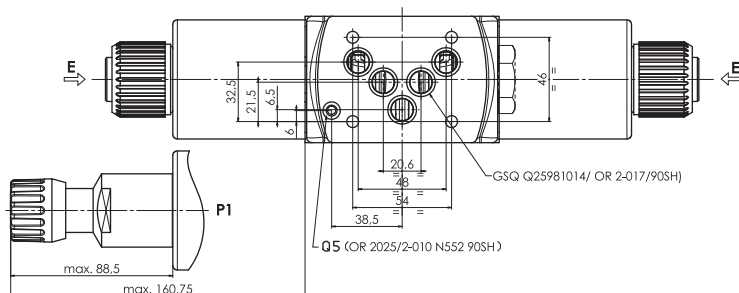
REMSRA.**. and REMDRA.**.

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

AM5H2VP1 / AM5H3VP1 ($\Delta p=10$ bar)

Hydrostats 2 or 3 way.

OVERALL DIMENSIONS



E = Manual override

P2 = Rotary emergency button

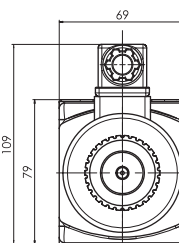
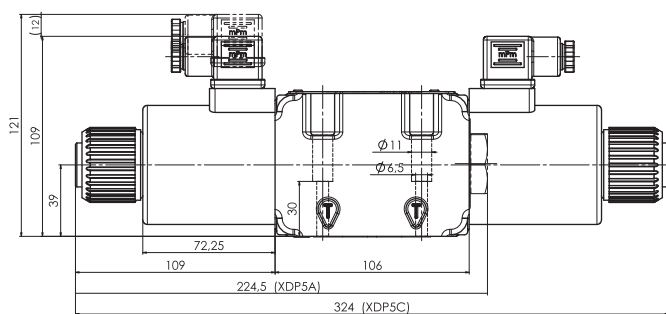
S5 = External draining hole for XDP5 variante S5 only (**Screws: material specifications 12.9 must be used**)

GSQ = Square section seal

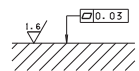
Fixing screws UNI 5931 M6x40

(12.9 material screws are recommended)

Tightening torque 8 ÷ 10 Nm / 0.8 ÷ 1 Kgm



Support plane specifications



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"D19P"

PROPORTIONAL SOLENOIDS

Type of protection (in relation to connector used)	IP 65
Ambient temperature	-25°C ÷ 60°C
Duty cycle	100% ED
Insulation class wire	H
Weight	1,58 Kg

