

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.

| XDP.5... | |
|---------------------------|----------------|
| 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

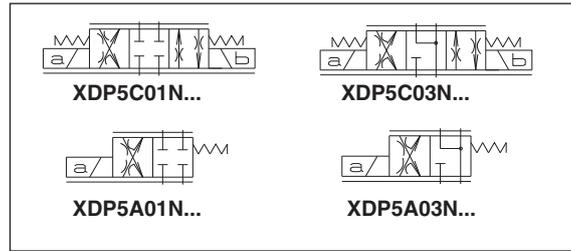
| | |
|------------|--|
| XDP | Open loop proportional directional valve |
| 5 | CETOP 5/NG10 |
| * | A = Single solenoid C = Double solenoid |
| ** | Type of spool (null position) 01 =  03 =  |
| N | Symmetrical flow path control (see hydraulic symbols table) |
| * | Flow rating (*) Δp 10 bar 2 = 45 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. |

(*) Guaranteed with 24Volt, 2.5Amps supply.

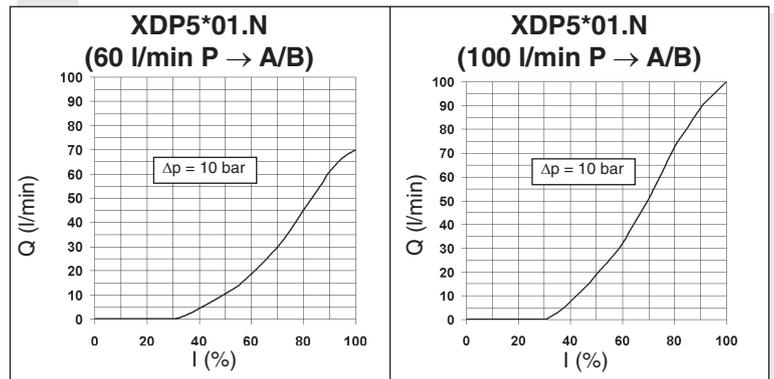
TAB.1 - VARIANTS (**)

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

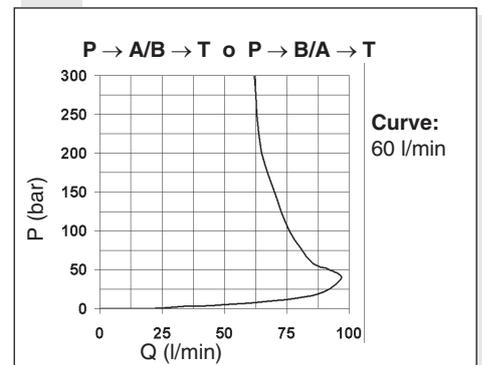
(**) All variants are considered without connectors. The connectors must be order separately. See Cap. I • 20.



INPUT SIGNAL CURVES - FLOW RATE



POWER LIMITS TRANSMITTED



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 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 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

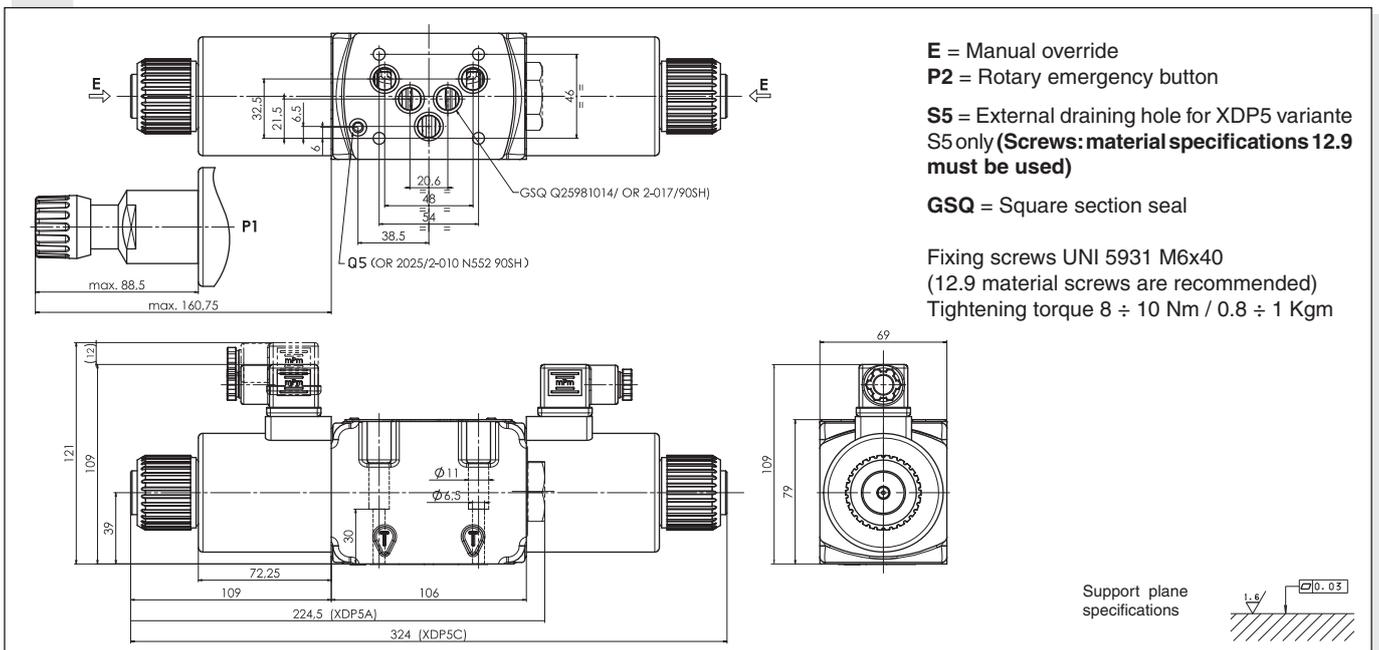
REMSRA.** and REMDRA.**.

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

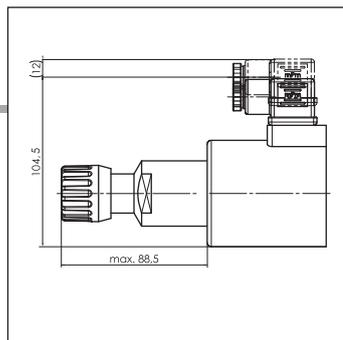
AM5H2VP1 / AM5H3VP1 ($\Delta p=10$ bar)

Hydrostats 2 or 3 way.

OVERALL DIMENSIONS



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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 |