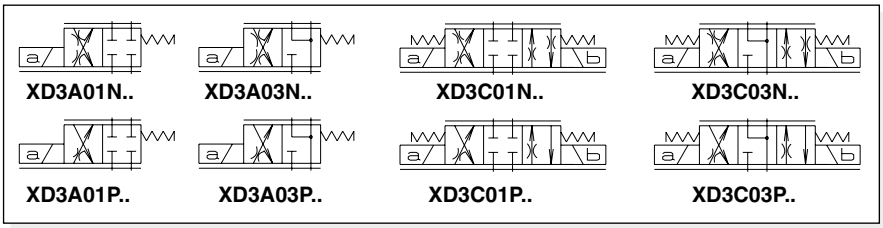
XD3A... / XD3C... Solenoid operating proportional valves Cetop 3

XD3A../XD3C.. 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.
To ensures a constant flow rate and reduce leakage, we recommend to use AM3H2V or AM3H3V hydrostats.

Performances shown in this catalogue are guaranteed only using 2 or 3 way modular assembly hydrostats type AM3H. ...

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 BC307 (see diagram next page). This type of configuration extends considerably the flow rate limit.

XD3...	
Standard connectors	Cap. I • 20
"D15P" Proport. solenoids	Cap. VIII • 5
REMSRA...	Cap. IX • 4
REMRA...	Cap. IX • 7
AM3H...	Cap. VIII • 15
BC307...	Cap. VII • 12



Ordering code

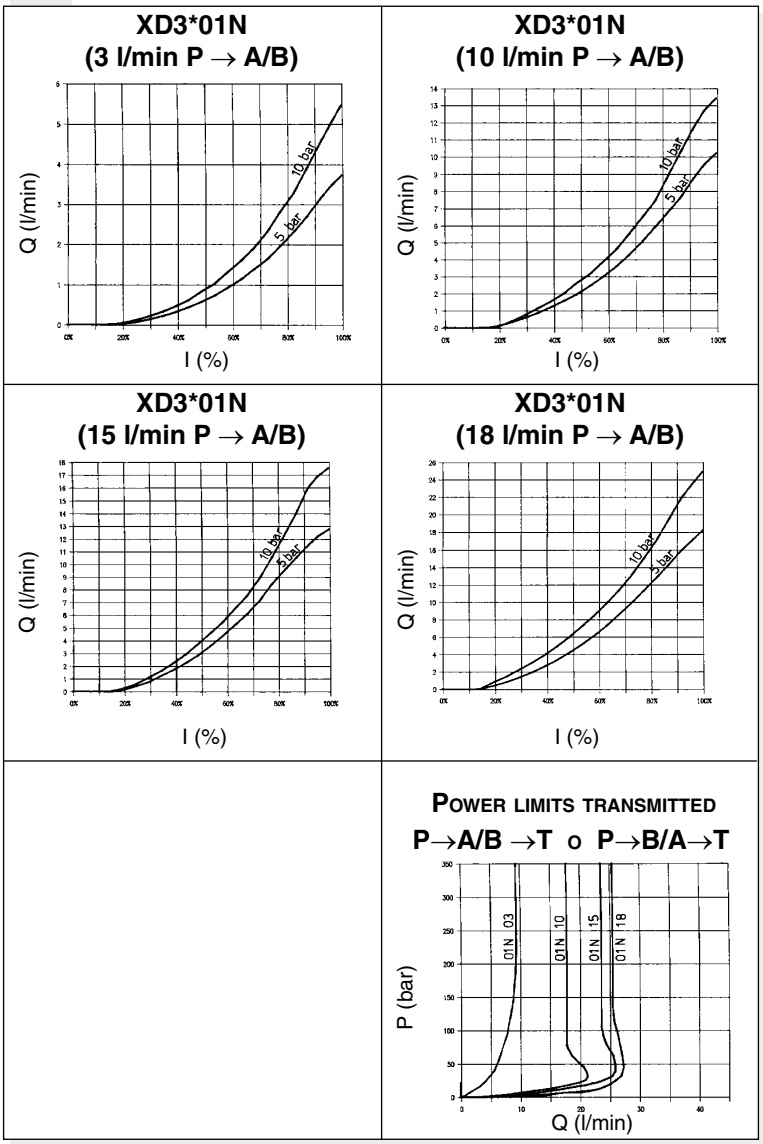
XD	Proportional valve
3	CETOP 3/NG06
*	**A** = Single solenoid **C** = Double solenoid
**	Type of spool (null position) **01** =  **03** = 
*	Flow path control (see symbols table) **N** = symmetrical **P** = meter in
*	Flow rating l/min (Δp 5 bar) **1** = 3 l/min **2** = 10 l/min **3** = 15 l/min **4** = 18 l/min
*	**E** = 2.35 A **F** = 1.76 A **G** = 0.88 A
**	Variant: see Tab.1
2	Serial No.

Tab.1 - Variants (*)

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

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

Input signal curves - flow rate



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.

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 / 18 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)	≤ 7% 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 $\beta_{10}\geq 75$
Weight XD.3.A... (single solenoid)	1,5 Kg
Weight XD.3.C... (double solenoid)	1,7 Kg

Type of voltage	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.

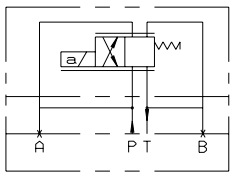
• Operating specifications are valid for fluid with 46 mm²/s viscosity at 40°C, using the specified electronic control units.

ELECTRONIC CONTROL UNIT

REMSRA and REMDRA****
Card type control for single and double solenoid.
Recommended dither frequency 100 Hz.

AM3H2VP1 and AM3H3VP1
Hydrostats 2 or 3 way.

SCHEMA FOR DOUBLE FLOW RATE

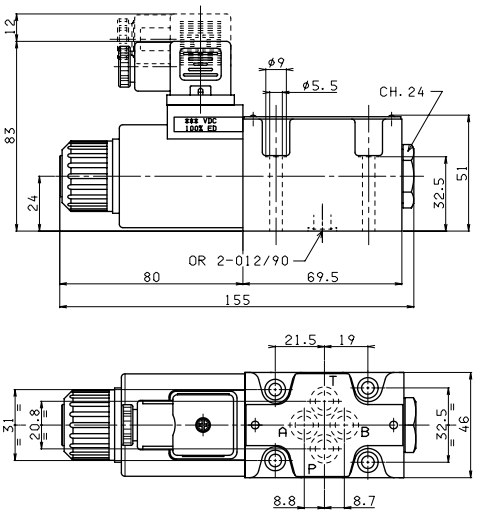


XD3A...

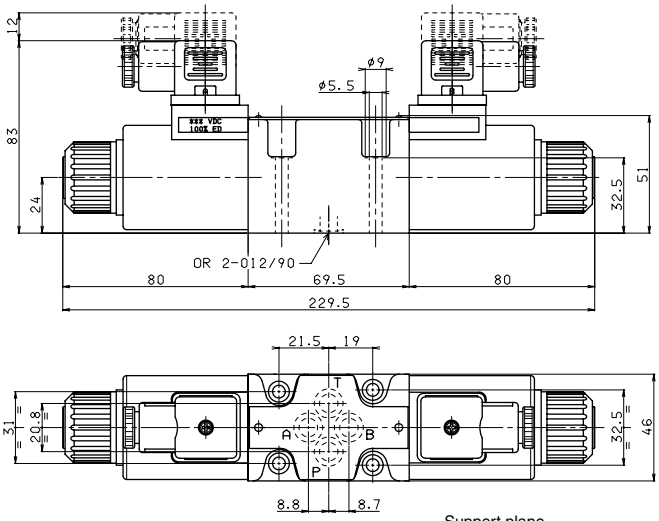
BC307

Standard base

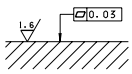
XD3A... OVERALL DIMENSIONS



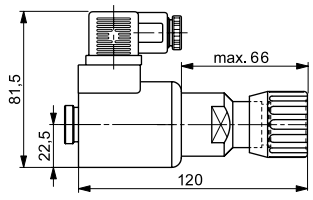
XD3C... OVERALL DIMENSIONS



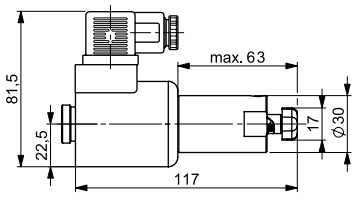
Support plane specification



Fixing screws UNI 5931 M5x40 (min. 8.8 material screws are recommended)
Tightening torque 4 ÷ 5 Nm / 0.4 ÷ 0.5 Kgm



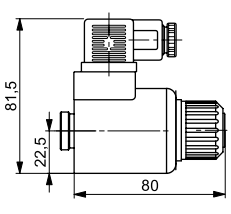
P2 Rotary emergency *(1)*



R5 Rotary emergency 180° *(2)*

(1) **P2** - Adjustable hand emergency.

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



"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