

# ADP.5.V... WITH PROXIMITY SENSOR L.V.D.T. CETOP 5/NG10

# 1



ADP.5.V...	
"D19" DC SOLENOIDS	CH. I PAGE 39
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The ARON NG10 directional control valves are designed for subplate mounting with an interface in accordance with UNI ISO 4401 - 05 - 04 - 0 - 94 standard (ex CETOP R 35 H 4.2-4-05).

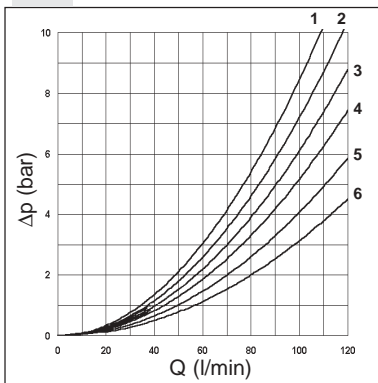
The single solenoid directional valves type ADP5V are used in applications where the monitoring of the position of the spool inside the valve is requested to manage the machine safety cycles in according with the accident prevention legislation. These directional valves are equipped with an horizontal positioned inductive sensor on the opposite side of the solenoid, which is capable of providing the first movement of the valve when the passage of a minimum flow is allowed. Integrated in safety systems, these valves intercept actuator movements that could be dangerous for the operators and for the machine.

Max. operating pressure: ports P/A/B	350 bar
Max. operating pressure: port T (*)	250 bar
Max. flow	120 l/min
Max. excitation frequency	3 Hz
Duty cycle	100% ED
Fluid viscosity	10 ÷ 500 mm <sup>2</sup> /s
Fluid temperature	-25°C ÷ 75°C
Ambient temperature	-25°C ÷ 60°C
Max. contamination level	class 10 in accordance with NAS 1638 with filter β <sub>25</sub> ≥ 75
Type of protection (in relation to connector used)	IP 66
Weight	6,2 Kg

(\*) Pressure dynamic allowed for 2 millions of cycles

- Possible mountings: E / F
- The solenoid is in DC voltage only

### PRESSURE DROPS



The diagram at the side shows the pressure drop curves for spools during normal usage. The fluid used is a mineral oil with a viscosity of 46 mm<sup>2</sup>/s at 40°C; the tests have been carried out at a fluid temperature of 40°C. For higher flow rates than those in the diagram, the losses will be those expressed by the following formula:

$$\Delta p_1 = \Delta p \times (Q_1/Q)^2$$

where Δp will be the value for the losses for a specific flow rate Q which can be obtained from the diagram, Δp<sub>1</sub> will be the value of the losses for the flow rate Q<sub>1</sub> that is used.

Spool type	Connections				
	P→A	P→B	A→T	B→T	P→T
01	3	3	5	5	
02	4	4	6	6	5
66	3	3	6	5	
06	3	3	5	6	
16	1	1	2	2	

Curve No.

### ORDERING CODE

<b>ADP</b>	High performances directional control valve
<b>5</b>	CETOP 5/NG10
<b>V</b>	Directional valve with single solenoid and L.V.D.T. proximity sensor
<b>***</b>	Spool and mounting (table 1)
<b>*</b>	Voltage (table 2)
<b>**</b>	Variants (table 3)
<b>1</b>	Serial No.

### TAB.2 - DC VOLTAGE

DC VOLTAGE	
<b>L</b> 12V	115Vac/50Hz 120Vac/60Hz with rectifier
<b>M</b> 24V	
<b>N</b> 48V*	230Vac/50Hz 240Vac/60Hz with rectifier
<b>P</b> 110V*	
<b>Z</b> 102V*	
<b>X</b> 205V*	
<b>W</b> Without DC coils and connectors	

Voltage codes are not stamped on the plate, their are readable on the coils.  
\* Special voltage

### TAB1 - STANDARD SPOOL

ONE SOLENOID			
Spool type	Diagram	Covering	Transient position
01E		+	
01F		+	
02E		-	
02F		-	
66E		-	
06F		-	
16E		+	
16F		+	
32E		+	

### TAB.3 - VARIANTS

VARIANTS	CODE
No variant (connectors as in the drawing)	00
Pilot light	X1
Rectifier	R1
Rotary emergency button	P1
Solenoid valve without connectors (coils)	S1
Without proximity connector LVDT	S3
Without coils and proximity connector	S4
Cable gland "PG 11"	C1
With solenoid chamber external drainage (Y)	Q5

**CE** registered mark for industrial environment with reference to the electromagnetic compatibility.

- European norms:
- EN50082-2 general safety norm - industrial environment
  - EN 50081-1 emission general norm - residential environment

