



**ELETTROVALVOLE
SOLENOID VALVES**

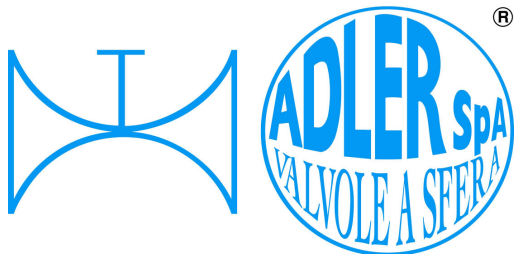
EVJ53

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**ELETTROVALVOLA CON SINGOLO SOLENOIDE ATEX
SINGLE COIL SOLENOID VALVE ATEX**

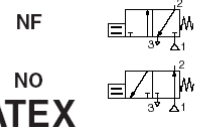
(G551A501+63000045 - internal reference)





ELETTROVALVOLE
SOLENOID VALVES
EVJ53

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3/2

FEATURES

- Miniature, ultra-low power valves for use in potentially explosive atmospheres according to ATEX-Directive 94/9/EC
- N° EC type examination certificate: **IBEx U01 ATEX 1060 X**
- Compliance with the Essential Health and Safety Requirements of the ATEX Directive has been assured by compliance with European Standards **EN 50014**, **EN 50020**, **EN 50281-1-1** and **EN 50284**
- Intrinsically safe design (class **EEx ia**) approved for use in potentially explosive atmospheres of group **IIC** and temperature class **T6**, suitable for oil, gas, paint manufacturing and application industries
- Specially designed for applications where there is a requirement for low power consumption, low weight and low bulk combined with excellent flow/pressure characteristics. They can be used in zone 0, and are also perfectly suitable for other zones. Electrical connection can be made with cable type A or B according to EN 50039

GENERAL

Differential pressure	2 to 8 bar [1 bar = 100 kPa]	
Response time (ms)	NC	NO
6 V	780	-
8 V	650	-
12 V	320	320
24 V	130	130

fluids (*)	temperature range (TS)	seal materials (*)
air or neutral gas, filtered at 5 µm (versions 6 V, 8 V et 12 V) or 25 µm version (24 V), without condensate. Dew point: -20°C	-20°C to +50°C	NBR (nitrile)

CONSTRUCTION

Base Compatible CNOMO E06.36.120N (15x15) or CNOMO E06.05.80 (30x30, with adapter)

MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

Body Polyphenylene sulfide (PPS)
Internal parts Piezo ceramics
Seals NBR
Subbase Brass, polyamide or zinc diecast

ELECTRICAL CHARACTERISTICS OF CNOMO (PILOT) INTERFACE

Connector Spade plug (cable Ø 6 - 7 mm)
Connector specification Size 15 or 2 leads outlet, length 1 m
Electrical safety IEC 335
Standard voltages (2) DC(=) 6V, 8V, 12V, 24V
Duty cycle 100 % (4)



SAFETY CODE

Ex II 1 GD IP65 EEx ia IIC T6

duty cycle											
voltage (U _N) (maximum ripple: 10%) (V)	power rating (P _N)	holding current (I _N) (mA)	typical functional ratings					ambient temperature range (T _S) (°C) ⁽¹⁾	protection (EN 60529)	spare coil	(C) ⁽³⁾
	hot / cold		U ₂ (ON) turn on	U ₂ (OFF) turn off	I _{peak} peak	I _{hold} hold	R ₁ + R ₂ barrier + cable				
	=		(V)	(V)	(mA)	(mA)	(Ω max.)				
Ultra low power											
6	0,003	0,5	6..9	3,0	6,0	0,5	1200	-20 to +50	moulded IP65	-	01
8	0,022	2,9	7,2..12	3,2	10,0	2,8	300	-20 to +50	moulded IP65	-	02
12 (12mW version)	0,012	1,0	10,8..16	3,3	6,8	1,0	1200	-20 to +50	moulded IP65	-	03
12 (32mW version)	0,032	2,7	10,8..16	3,3	8,1	2,7	470	-20 to +50	moulded IP65	-	04
24 (46mW version)	0,046	1,9	21,6..28	5,0	10,0	1,9	1200	-20 to +50	moulded IP65	-	05
24 (125mW version)	0,125	5,2	21,6..28	5,0	14,0	5,2	470	-20 to +50	moulded IP65	-	06

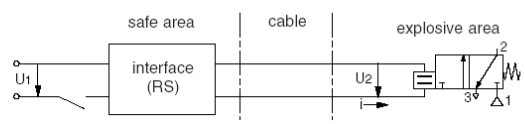
P _N (Watt)	safety parameters				
	U _i (V)	I _i (mA)	P _i (W)	L _i (µF)	C _i (mH)
Ultra low power					
All versions	30	200	0,9	0	0

TEMPERATURE CLASSIFICATION TABLES

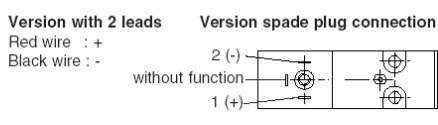
DC (=) Solenoids

P _N (Watt)	maximum ambient temperature surface temperature			
	T6 85°C	T5 100°C	T4 135°C	T3 200°C
Insulation class F (155°C) 100% E.D.(2)				
All	50			

- The minimum allowable ambient temperature is -20°C.
- The piezo-valve is designed for continuous duty within the maximum ambient temperature limits. This intrinsically safe piezo-valve must be connected to a specific, approved power supply (safety barrier or interface) located in a safe area. See list of safety barriers/interfaces on page 2.
- Type of construction, refer to the dimensional drawings on pages 3 and 4.
- Not to be used as a safety valve.



ELECTRICAL CONNECTION
(piezo-valves have polarization)





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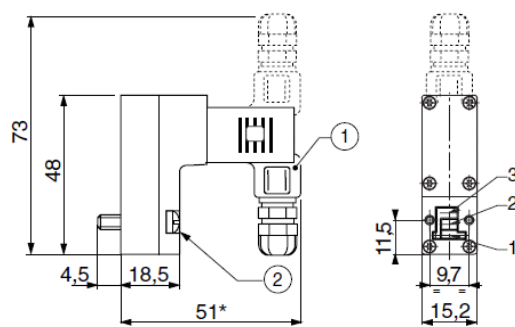
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DIMENSIONS (mm), WEIGHT (kg)



TYPE 01 to 06
Piezo-valves
Ultra low power
EN50020
II 1GD EEx ia IIC
IP65
Weight: 0,031 kg

630 00 061/059/091/083/051/053/095/097/043/
045/099/101/052/054/044/046



- ① Plug connector size 15, rotatable by 90°, cable Ø 6-7 mm
- ② Secured by two screws CM3x20
- ③ 2 leads, length 1 m
- ④ Secured by two screws CM4x10
- (*) +10 mm for connector removal