

## AM modular rotary type electric actuator

Macro Electric actuators



### features

#### TECHNICAL DATA

Electronic control MODULATING Actuator  
Working angle 90° (100° Max.)  
Maximum torque from 20 to 1960 Nm. (see the table)  
Voltage 230 Vac 1Ph 50/60 Hz.  
Input signal 4~20 mA (1~5 Vdc).  
Output signal 4~20 mA (1~5 Vdc AM 20).  
High resolution 1/250 (adjustable 1/200 ~ 1/400).  
Adjustable zero/span.  
Direct/reverse function selector.  
Mode selector without OPEN-CLOSE-STOP signal  
Insulation resistance 100 M /500 Vdc  
Tension insulation 1500 Vac/1 minute  
Motor with Class E insulation  
Working temperature from -25°C to + 55°C (for use in temperatures below 0°C,  
we suggest space heater elements)  
Protection according to NEMA 4,4X rules (IP65)  
Coupling flange for the valve from F03 to F14: ISO 5211.  
Auto-reset thermostatic protection in the motor.  
Open/close limit switches with cams adjustable along the whole stroke  
Limit switches with adjustable cams.  
Safety adjustable mechanical limit switches.  
Graduated visual position indicator  
Detachable lever for manual operation  
Electric connections with screw terminals  
Locking of supply cables by means of cable presses  
Maximum working noise <70 dB (A).

#### OPTIONAL (MUST BE REQUESTED WHEN PLACING THE ORDER)

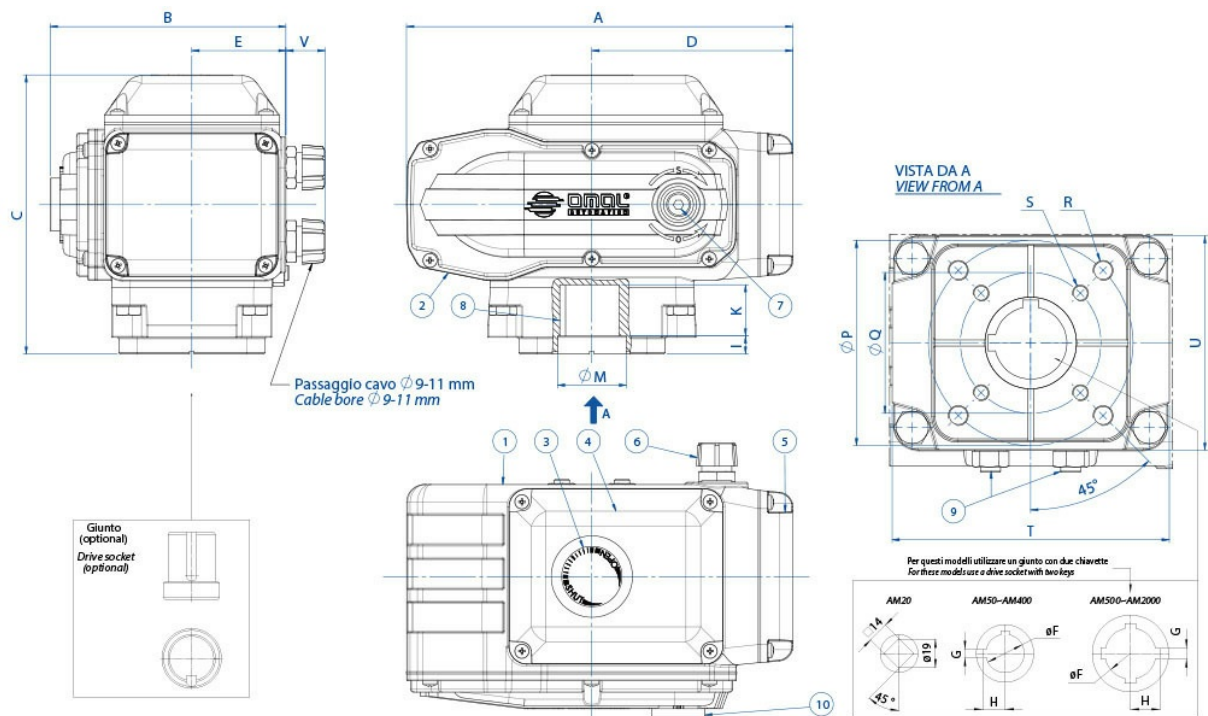
**For availability of options on various models, see optional table:**

Feeding voltage 115 Vac - 24 Vac.  
Input signal 4~12 mA (1~3 Vdc) - 12~20 mA (3~5 Vdc).  
Auxiliary limit switches.  
Torque limiters.  
Space heater.  
Drive socket.  
Emergency gear box.

**DATA SHEET**

MODEL	AM 20	AM 50	AM 100	AM 200	AM 400	AM 500	AM 1000	AM 1500	AM 2000
Torque Nm	20	49	98	196	390	490	980	1470	1960
Time of cycle (50 Hz) sec.	15	15	30	15	30	15	30	45	60
Time of cycle (60 Hz) sec.	12.5	12.5	25	12.5	25	25	25	37.5	50
Power consumption 230Vac 50/60Hz A	0.14	0.3	0.3	0.7	0.7	1.1	1.3	1.6	1.6
Power consumption 115Vac 50/60Hz A	0.29	0.6	0.6	1.6	1.6	2.2	2.6	3.2	3.2
Power consumption 24Vac 50/60Hz A	----	1.8	1.8	----	----	----	----	----	----

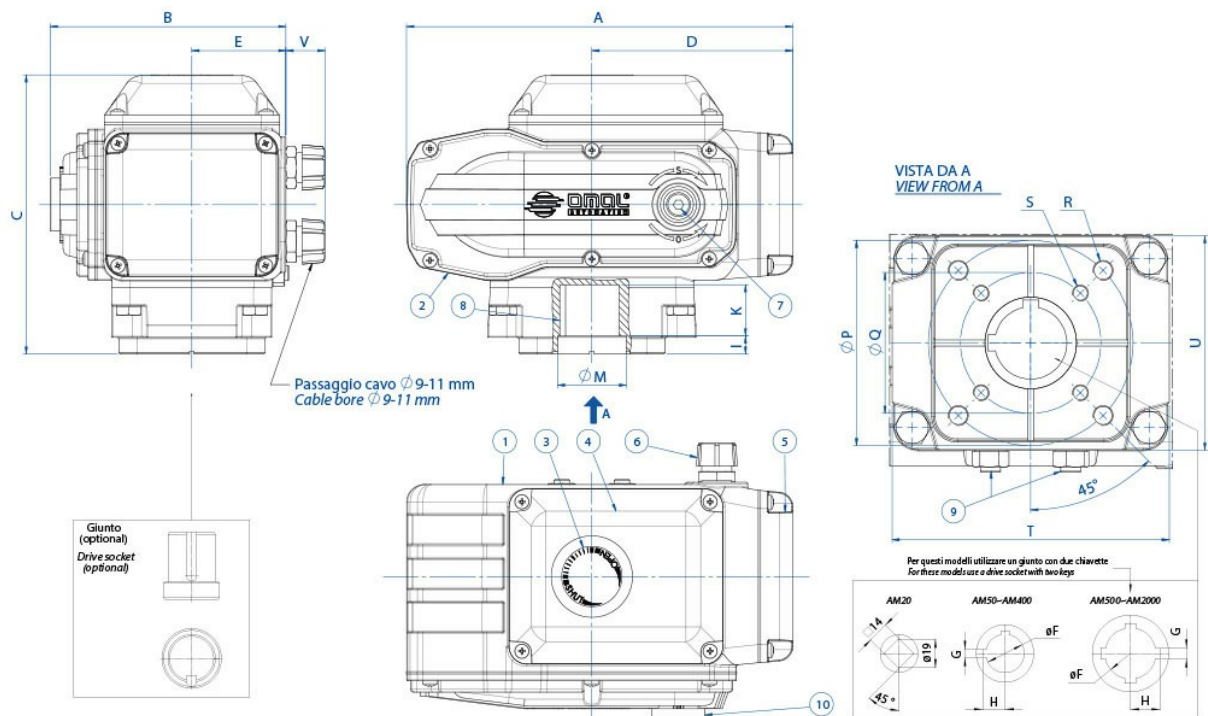
## dimensions



DIMENSIONS									
MODEL	AM 20	AM 50	AM 100	AM 200	AM 400	AM 500	AM 1000	AM 1500	AM 2000
A mm.	165,8	207,5	207,5	256,5	256,5	381	381	381	381
B mm.	114,5	122,5	122,5	156,5	156,5	242	242	253,5	253,5
C mm.	119,5	163,5	163,5	185	185	234	234	234	234
D mm.	83,3	110	110	133,5	133,5	199,5	199,5	199,5	199,5
E mm.	51	54,5	54,5	62,5	62,5	105	105	105	105
ØF mm.	----	28	28	36	36	56	56	56	56
G mm.	----	6	6	8	8	10	10	10	10
H mm.	----	16,5	16,5	21,3	21,3	31,3	31,3	31,3	31,3
I mm.	1	11,5	11,5	12	12	8	8	8	8
K mm.	16	29	29	34	34	54	54	54	54
L mm.	12	40,5	40,5	46	46	62	62	62	62
ØM mm.	26	35	35	40	40	65	65	65	65
ØP mm.	50-F05	70-F07	70-F07	102-F10	102-F10	125-F12*	125-F12*	140-F14	140-F14
ØQ mm.	36-F03	50-F05	50-F05	70-F07	70-F07	102-F10*	102-F10*	----	----
R x prof. depth mm.	M6x12	M8x12	M8x12	M10x16	M10x16	M12x20*	M12x20*	M16x25	M16x25
S x prof. depth mm.	M5x10	M6x10	M6x10	M8x13	M8x13	M10x20*	M10x20*	----	----
T mm.	80	98	98	135	135	160	160	160	160
U mm.	72	86	86	106	106	140	140	140	140
V mm.	40	44	44	44	44	----	----	----	----
Weight Kg.	3,1	4,5	4,5	8,7	8,7	22,8	22,8	22,8	22,8

\*On request the flange is available with M16x25 on Ø100 F14 holes

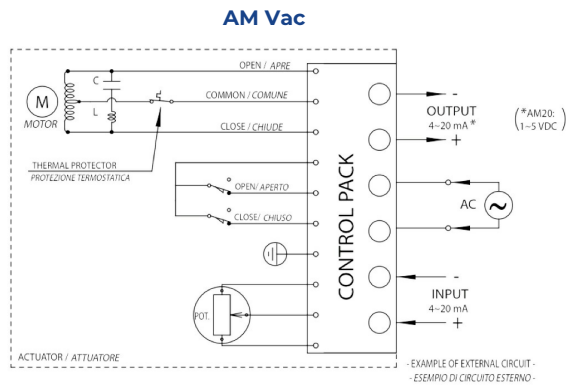
## materials



MATERIALS		
1	Body	Aluminium
2	Gear box cap	Aluminium
3	Position indicator	Glass
4	Electric-set cap	Aluminium
5	Terminal-box cap	Aluminium
6	Cable gland	Zinc alloy
7	Lever connection	Steel
8	Female shaft	Zinc alloy (AM 1500-AM 2000:Steel)
9	Security stops	Stainless steel
10	Protections for lever connection	NBR
11	Lever (not represented)	Stainless steel

## specifications

### ELECTRIC PLAN AND CONNECTION EXAMPLES



#### Electrical actuator Modulating AM type

Example of standard connection circuit with alternative tension feeding.

**accessories**

EXTRA ACCESSORIES FOR ELECTRICAL ACTUATORS AND CORRESPONDANT IDENTIFICATION												
		Rated Voltage				Optional Extra						
		AC			DC	Limit switches (2pcs)	Torque limiter Close		Torque limiter Open/Close		Space heater	Declutch type hand wheel
Model	Torque Nm	230 V	115 V	24 V	24 V		AL2	AT1	AT5	AT2	AT6	ASH
AM 20	19.6	●	●				●				●	
AM 50	49	●	●	●		●(+2)*	●		●		●*	●
AM 100	98	●	●	●		●(+2)*	●		●		●*	●
AM 200	196	●	●			●(+2)	●		●		●	
AM 400	392	●	●			●(+2)	●		●		●	
AM 500	490	●	●			●(+2)		●		●	●	
AM 1000	980	●	●			●(+2)		●		●	●	
AM 1500	1470	●	●			●(+2)		●		●	●	
AM 2000	1960	●	●			●(+2)		●		●	●	

(\*) On AM50 and AM100 actuators not available at the same time.



## documents

### Manuals

[MANUALE 8\\_0246](#)