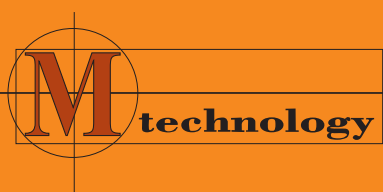




ATTUATORI ELETTRICI ELECTRIC ACTUATORS



Emme technology S.r.l.

CARATTERISTICHE

FEATURES

DESIGN COMPATTO

La serie AE è stata progettata con un design compatto in modo da minimizzare l'ingombro totale del pacchetto valvola più attuatore ed il peso dello stesso, riducendo eventuali costi per supporti.

RANGE DISPONIBILE

6 modelli disponibili da 35 Nm a 610 Nm; a richiesta con controllo proporzionale, fast acting, o duty cycle 100%.

ISO 5211

La serie AE è dotata di multiple forature secondo ISO 5211 per una semplice automazione.

GRADO DI PROTEZIONE

IP67 standard secondo IEC60529.

INTERRUTTORI

Tutti gli attuatori AE sono dotati di serie di n° 2 fine corsa ausiliari, a richiesta è possibile aggiungerne un'altra coppia.

INGRANAGGI

Tutti gli ingranaggi in metallo sinterizzato.

MANUALE D'EMERGENZA

Disponibile standard su tutti gli attuatori AE. Permette una manovra di emergenza in caso di mancanza di corrente.

PROTEZIONE TERMICA

Presente standard su tutti gli attuatori AE per evitare eccessivi surriscaldamenti e conseguente danneggiamento del motore.

TENSIONI DISPONIBILI

Gli attuatori AE sono disponibili con tensione:
Monofase: 12 VDC (solo AE01 e AE02);
24 VDC/AC (AE01 - AE04H); 110 VAC; 220 VAC
Trifase: 220 VAC, 380 VAC (solo per AE03 - AE06H)

CONDIZIONI DI UTILIZZO

Temperatura Ambiente: $-10^{\circ}\text{C} \div +60^{\circ}\text{C}$
Umidità relativa: $30\% \div 95\%$

OPZIONI DISPONIBILI

- Resistenza Anticondensa
- 2 fine corsa aggiuntivi

COMPACT DESIGN

AE series features a compact design, minimizing the complete valve package envelope size and its weight and therefore eliminating the need for pipe supports.

AVAILABLE RANGE

6 different models from 35 Nm to 610 Nm; available on request with proportional control, fast acting motor, and 100% duty cycle.

PROTECTION DEGREE

Water and dust proof IP67 according to IEC60529.

ISO 5211

AE series has standard multiple mounting patterns according to ISO 5211 for easy automation.

ELECTRO MECHANICAL SWITCHES

All AE actuators are equipped as standard with n° 2 auxiliary limit switches, 2 additional ones can be added on request.

GEARS

All gears are made of sinterized material.

MANUAL OVERRIDE

Manual Override is standard on all AE units allowing for emergency operation in case of electricity failure.

THERMAL PROTECTION

Standard on all AE actuators to prevent motor overheating and possible damages.

VOLTAGE OPTION

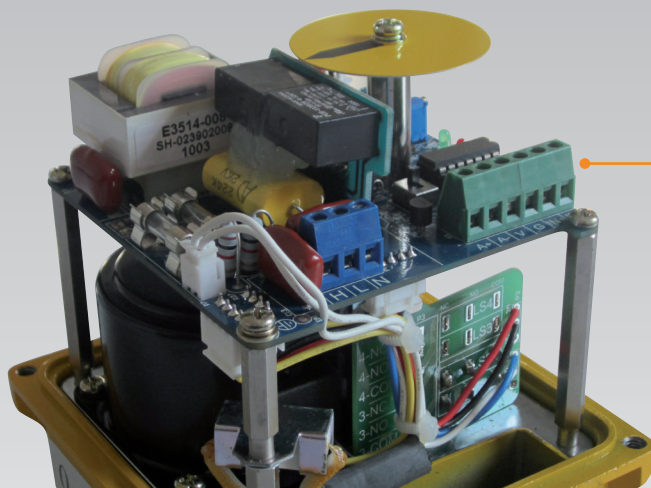
AE actuators are available as:
Monophase: (only AE01 and AE02);
24 VDC/AC (AE01 - AE04H); 110 VAC; 220 VAC
Three Phase: 220 VAC, 380 VAC (only for AE03 - AE06H)

WORKING CONDITIONS

Ambient Temperature: $-10^{\circ}\text{C} \div +60^{\circ}\text{C}$
Relative Humidity Range: $30\% \div 95\%$

AVAILABLE OPTIONS

- Heater/Thermostat
- Additional 2 switches



VERSIONE CON POSIZIONATORE
E RESISTENZA ANTICONDENSA

MODEL WITH POSITIONER
AND HEATER

- Indicatore ON/OFF LED
- **Controller proporzionale (solo per 110 VAC o 220 VAC):** la versione modulante è utilizzata quando l'applicazione richiede che l'attuatore controlli il posizionamento della valvola a seconda di un segnale analogico in ingresso. I seguenti segnali di ingresso possono essere utilizzati:
 - 4-20 mA
 - 0-10 V
 - 1-5 V
- **Potenzimetri:** questi dispositivi opzionali sono utilizzati per fornire continui segnali elettrici in relazione alla posizione della valvola. Il valore di resistenza standard è 5kΩ.

- Built-In ON/OFF LED Indicator
- **Proportional controller (for 110 VAC or 220 VAC only):** modulating control is used when application requires the actuator to position the valve using an analog control signal. The following input signal can be used:
 - 4-20 mA
 - 0-10 V
 - 1-5 V
- **Potentiometers:** These optional devices are used to provide continuous electric signal in relation to valve position. Resistance value of 5kΩ is standard.

STANDARD ON/OFF, 110 & 220 VAC

Model	Coppia/Torque	Duty Cycle *	Peso/Weight	Velocità manovra 90° Operation Speed for 90°	Corrente Nominale/Rated Current (A)	
					120 VAC @ 60 Hz	220 VAC @ 60 Hz
AE01	35 Nm	25%	1.7 Kg	10 s	0.7 A	0.38 A
AE02	50 Nm	25%	1.8 Kg	10 s	0.9 A	0.50 A
AE03	170 Nm	50%	4.4 Kg	8 s	1.2 A	0.72 A
AE03H	200 Nm	50%	7.9 Kg	10 s	1.2 A	0.72 A
AE04H	380 Nm	50%	8.6 Kg	30 s	1.2 A	0.72 A
AE05H	500 Nm	50%	8.8 Kg	30 s	2.0 A	0.75 A
AE06H	600 Nm	50%	9.1 Kg	30 s	2.4 A	0.80 A

STANDARD ON/OFF, 24 VAC/DC

Model	Coppia/Torque	Duty Cycle *	Peso/Weight	Velocità manovra 90° Operation Speed for 90°	Corrente Nominale Rated Current (A)
AE01	35 Nm	100%	1.9 Kg	11 to 16 s	1.2 A
AE02	50 Nm	100%	1.9 Kg	12 to 18 s	1.2 A
AE03	150 Nm	100%	3.9 Kg	8 to 18 s	2.5 A
AE03H	160 Nm	100%	6.9 Kg	10 to 15 s	2.5 A
AE04H	275 Nm	100%	7.6 Kg	27 to 47 s	2.5 A

STANDARD ON/OFF, 12 VDC

Model	Coppia/Torque	Duty Cycle *	Peso/Weight	Velocità manovra 90° Operation Speed for 90°	Corrente Nominale Rated Current (A)
AE01	35 Nm	100%	1.9 Kg	10 to 15 s	2.5 A
AE02	50 Nm	100%	1.9 Kg	10 to 15 s	2.5 A

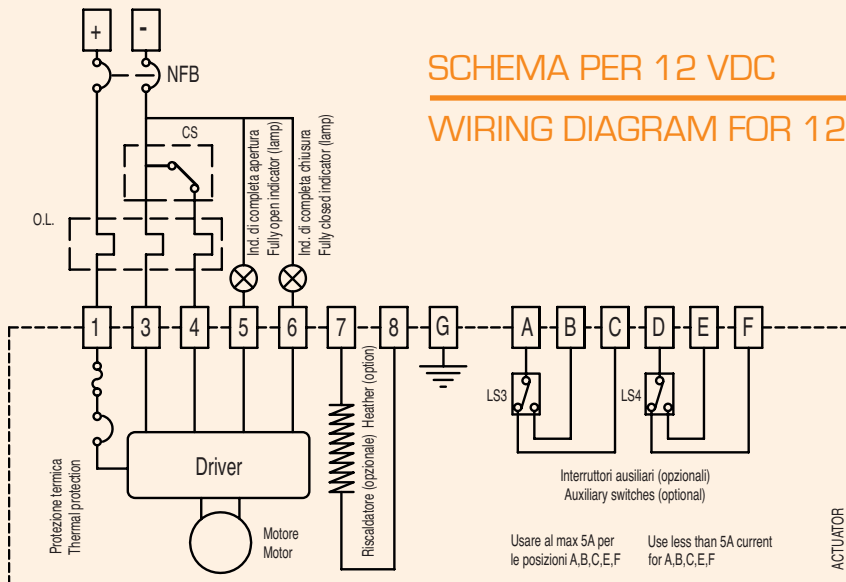
MODULATING UNITS, 110 & 220 VAC

Model	Coppia/Torque	Duty Cycle *	Peso/Weight	Velocità manovra 90° Operation Speed for 90°	Corrente Nominale/Rated Current (A)	
					120 VAC @ 60 Hz	220 VAC @ 60 Hz
AE01-AMD	25 Nm	100% in 30 min	2.1 Kg	16 s	0.2 A	0.10 A
AE02-AMD	50 Nm	100% in 30 min	2.1 Kg	36 s	0.2 A	0.10 A
AE03-BMD	170 Nm	100% in 30 min	4.8 Kg	8 s	1.2 A	0.72 A
AE03H-BMD	200 Nm	100% in 30 min	8.3 Kg	10 s	1.2 A	0.72 A
AE04H-BMD	300 Nm	100% in 30 min	9.0 Kg	30 s	1.2 A	0.72 A
AE05H-BMD	500 Nm	100% in 30 min	9.2 Kg	30 s	2.0 A	0.75 A
AE06H-BMD	600 Nm	100% in 30 min	9.5 Kg	30 s	2.4 A	0.80 A

FAST ACTING UNITS, 12 VDC & 24 VAC/DC

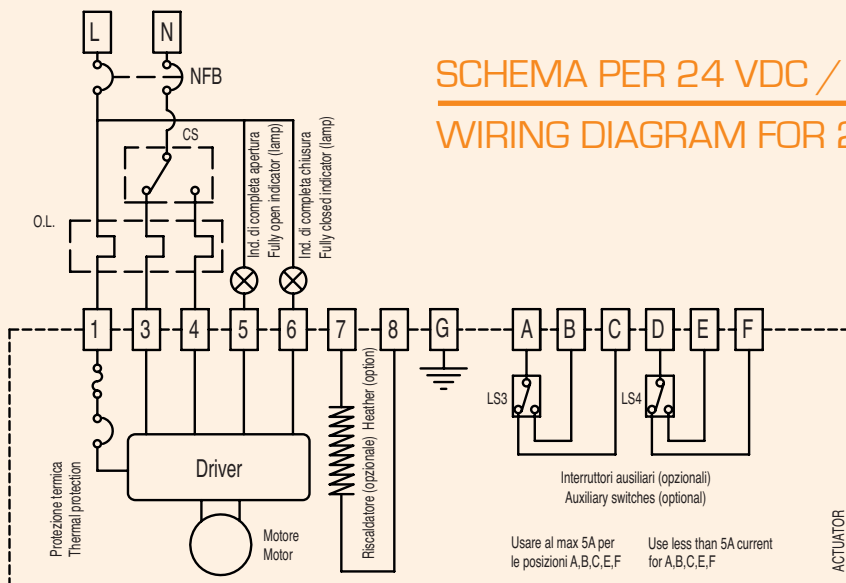
Model	Coppia Torque	Duty Cycle *	Peso Weight	Velocità manovra 90° Operation Speed for 90°	Voltage	Corrente Nominale Rated Current (A)
AE01	10 Nm	100% in 30 min	1.9 Kg	1 to 2 s	12 VDC	2.5 A
AE01	25 Nm	100% in 30 min	1.9 Kg	3 to 6 s	12 VDC	2.5 A
AE01	10 Nm	100% in 30 min	1.9 Kg	1 to 2 s	24 VAC/DC @ 60 Hz	1.2 A
AE01	25 Nm	100% in 30 min	1.9 Kg	3 to 8 s	24 VAC/DC @ 60 Hz	1.2 A
AE03	35 Nm	100% in 30 min	3,9 Kg	1 to 3 s	24 VAC/DC @ 60 Hz	2.5 A
AE03	50 Nm	100% in 30 min	3.9 Kg	3 to 7 s	24 VAC/DC @ 60 Hz	2.5 A

*= Duty Cycle calcolato in accordo alla IEC60034.S4 / The definition of Duty Cycle is in accordance with IEC60034-S4
For the model of 380VAC - 3PH available. Ask our offices for details.



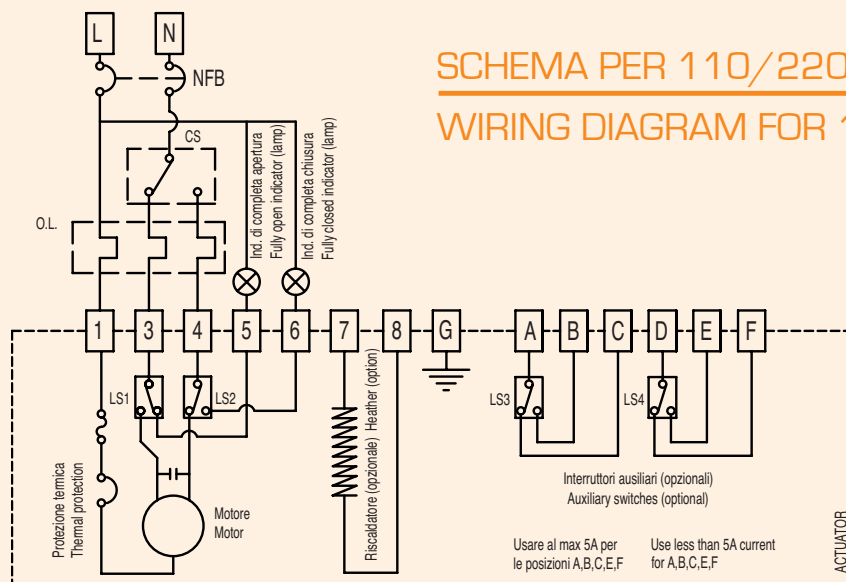
SCHEMA PER 12 VDC

WIRING DIAGRAM FOR 12 VDC



SCHEMA PER 24 VDC / VAC

WIRING DIAGRAM FOR 24 VDC/VAC

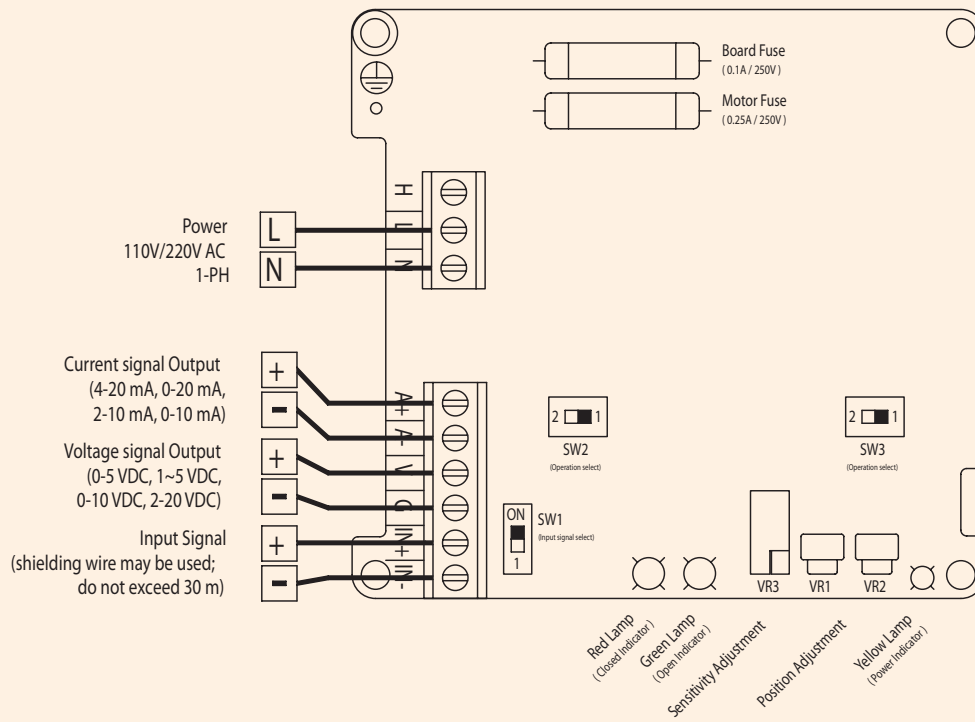


SCHEMA PER 110/220 VAC

WIRING DIAGRAM FOR 110/220 VAC

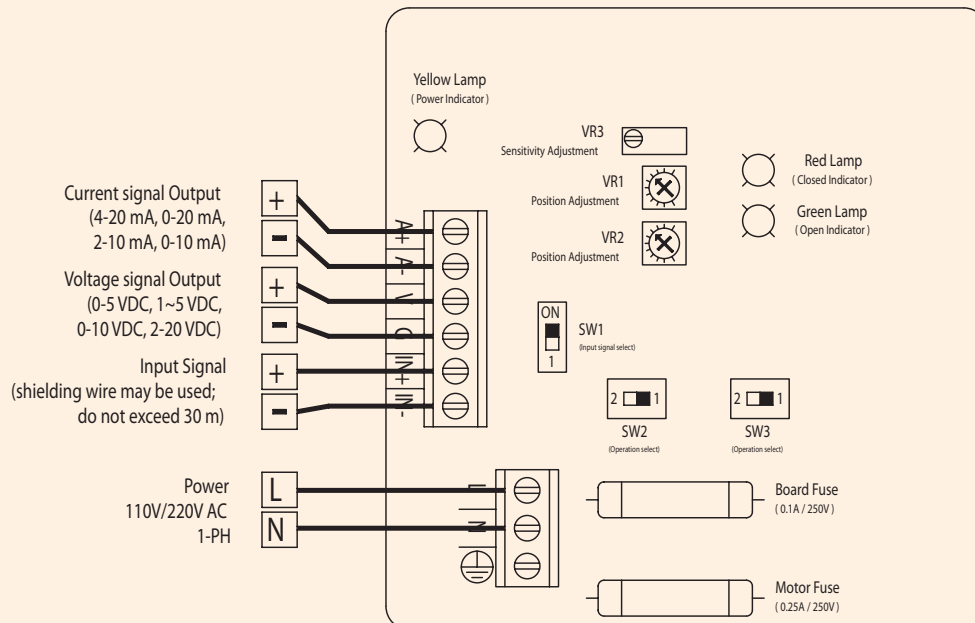
SCHEMA CONNESSIONI, SCHEDA AMD

CONNECTION DIAGRAM AMD BOARD



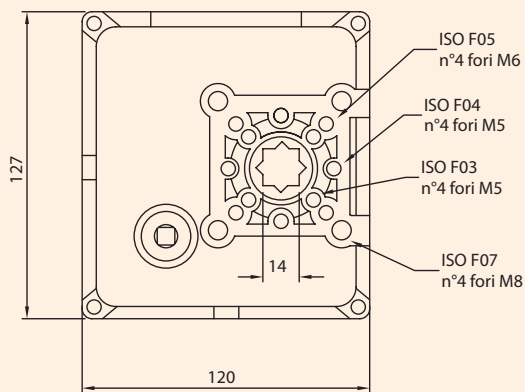
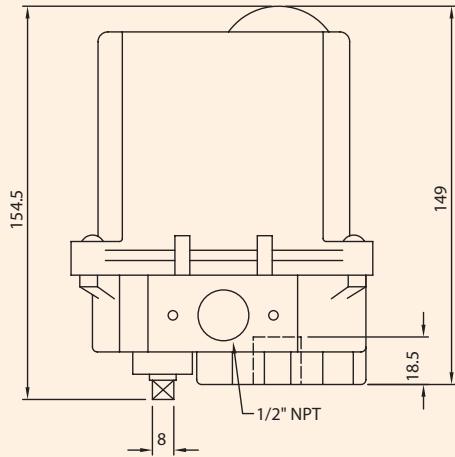
SCHEMA CONNESSIONI, SCHEDA BMD

CONNECTION DIAGRAM BMD BOARD

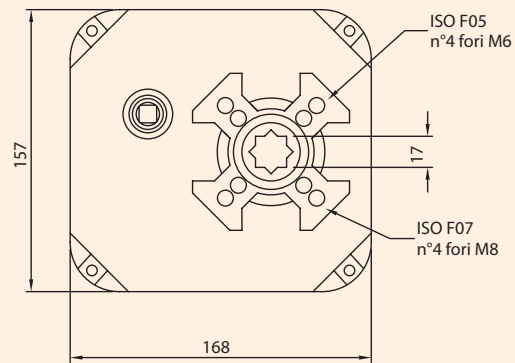
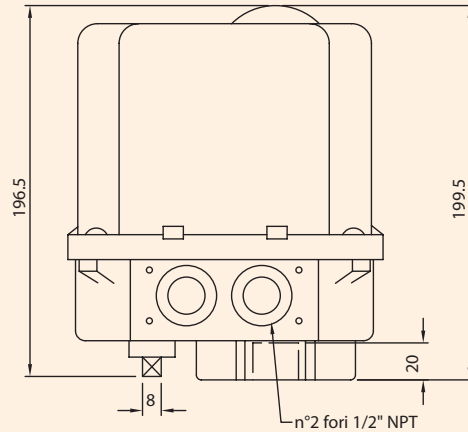


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DIMENSIONS

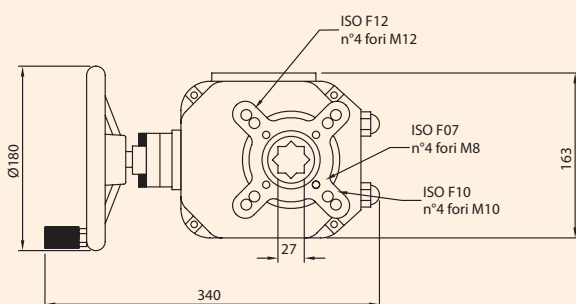
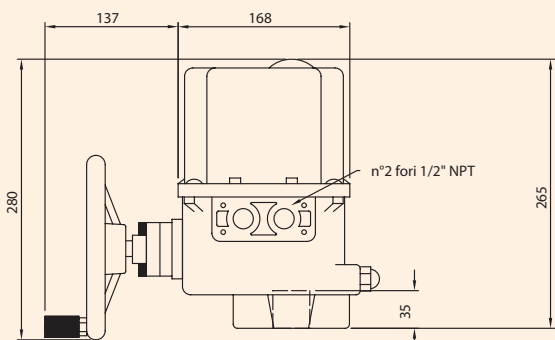
AE01 - AE02



AE03



AE03H - AE06H



ESPLOSO

EXPLODED VIEW

COPERCHIO - Policarbonato
COVER - Polycarbonate

VITI COPERCHIO - Acciaio inox
COVER SCREWS - Stainless steel

INDICATORE - Policarbonato
INDICATOR - Polycarbonate

CIRCUITO STAMPATO CON FINE CORSA - FR
CIRCUIT BOARD WITH LIMIT SWITCHES - FR

STELO - Acciaio Inox (AE01 - AE02)
Acciaio nichelato (AE03 - AE06)

STEM - Stainless Steel (AE01 - AE02)
Plated Steel (AE03 - AE06)

MOTORE
MOTOR

CAMME - Metallo
CAMS - Metal

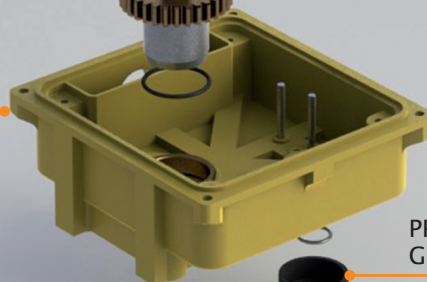
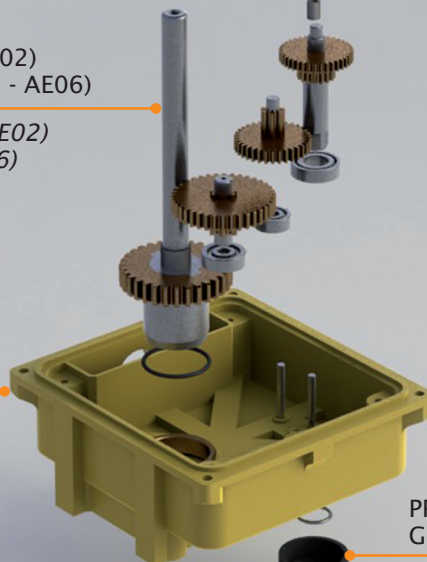
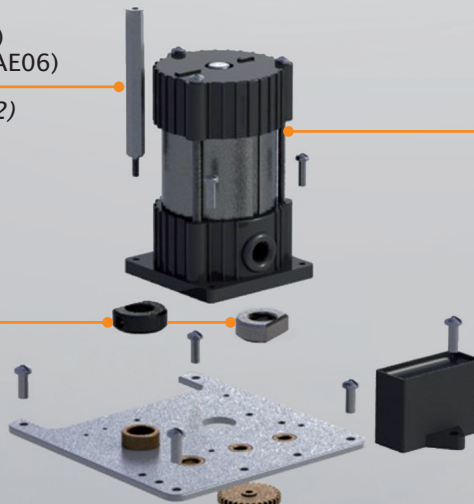
INGRANAGGI - Metallo sinterizzato
GEARS - Sinterized metal

STELO - Acciaio Inox (AE01 - AE02)
Acciaio nichelato (AE03 - AE06)

STEM - Stainless Steel (AE01 - AE02)
Plated Steel (AE03 - AE06)

SCATOLA - Alluminio
LOWER BOX - Aluminum

PROTEZIONE COMANDO MANUALE
Gomma
*PROTECTION FOR MANUAL LEVER
Rubber*



THE BEST WAY TO AUTOMATE YOUR PROCESS



ATTUATORI IN ALLUMINIO
ALUMINUM ACTUATORS

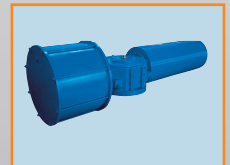


ATTUATORI IN ACCIAIO INOX
STAINLESS STEEL ACTUATORS

ATTUATORI IN TECNOPOLIMERO & POLIPROPILENE
TECHNOPOLYMER & POLYPROPYLENE ACTUATORS



ATTUATORI A GLIFO
SCOTCH YOKE ACTUATORS



ELETTROVALVOLE
SOLENOID VALVES



APPLICAZIONI SPECIALI
SPECIAL APPLICATIONS

POSIZIONATORI
POSITIONERS



BOX FINE CORSA
LIMIT SWITCH BOXES



RIDUZIONI & FILTRI
ADAPTERS & FILTERS



RIDUTTORI
GEAR BOXES

