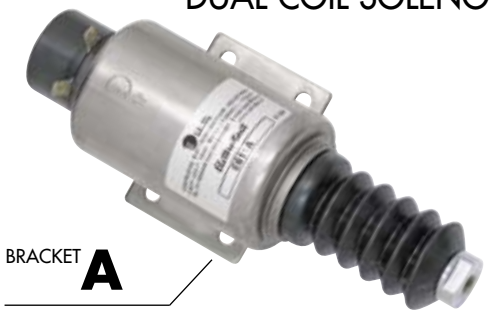
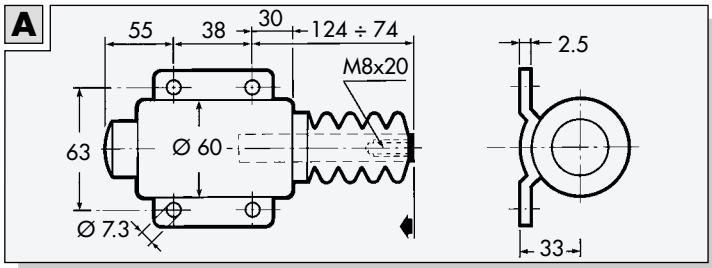
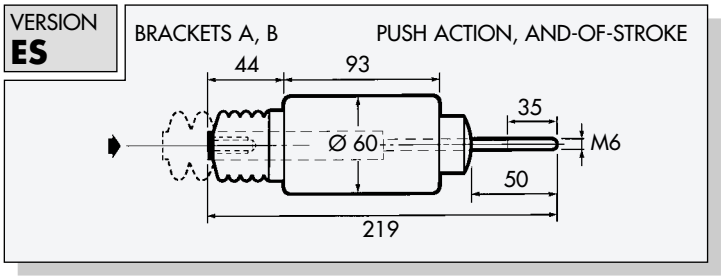
Elettrostart

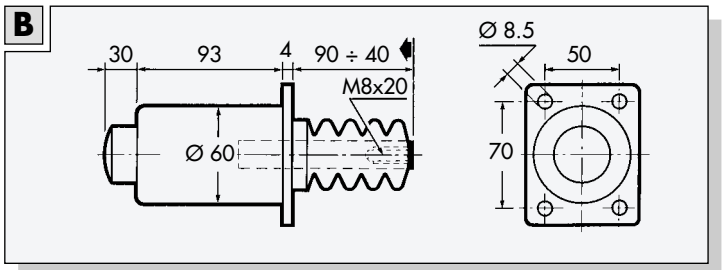
FAMILY E - ES 60

DUAL COIL SOLENOID FOR PULL ACTION OR PULL-PUSH ACTION



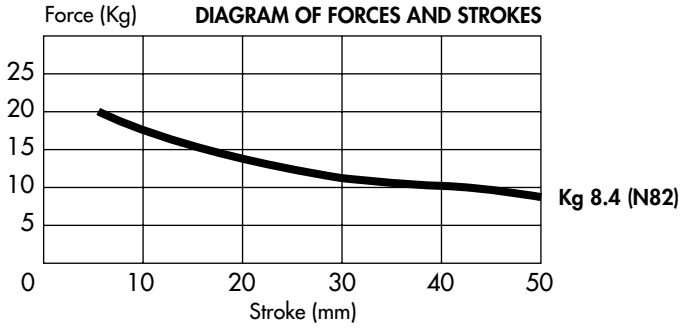






SPECIFICATIONS

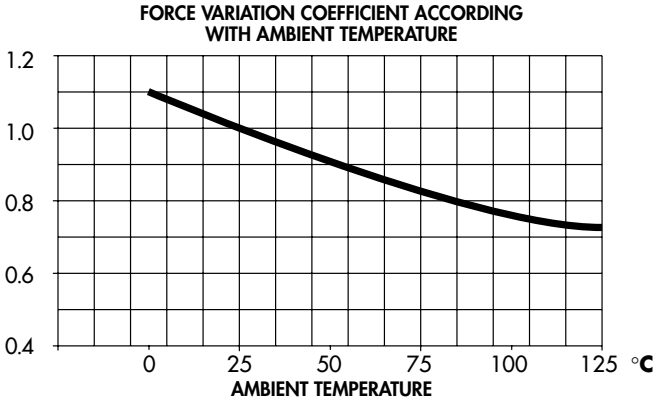
Rated voltage	*12 V DC*	*24 V DC*
Pull current	*47 A*	*24.5 A*
Hold current	*0.65 A*	*0.30 A*
Duty service	*Continuous (100%)*	
Stroke	*50 mm*	
Force at starting	*8.4 Kg*	
Windings insulation class	*H (180° C)*	
Ambient temperature	*-40° C ÷ 120° C*	
Weight	*1.95 Kg*	



1 Kg = 9.81 Newtons

OPERATION

The solenoid has two windings:
An intermittent-service pulling winding involved in the initial phase for approximately 150 ms, with the function of moving the plunger.
A continuous-service holding winding, with the function of maintaining the plunger in position.
For a proper operation of the solenoid, it is indispensable for the plunger to reach end of travel and to obtain the perfect adherence to the bottom.



AVAILABLE OPTIONS

The desired model has to be defined choosing one option in every column, building in this way the solenoid code.

Versions	Voltages	Circuits	Brackets	Optional Springs	Electrical connections
E6 pull action	**1** = 12 V DC	**1** = Series 1	**A**	**M1**	Standard Faston
ES6 pull-push action	**2** = 24 V DC	**2** = Series 2	**B**	**M3** (external)	**F** = Cables
		3 = Series 3			**V** = Faston - screws

C.E.I. srl

COSTRUZIONI ELETTROMAGNETICHE INDUSTRIALI

CORSO PRIMO LEVI, 7 - 10090 CASCINE VICA - RIVOLI - TORINO (ITALY) - TEL. 0039 0119594446 - FAX. 0039 0119591357

e-mail: ceisrl@tin.it www.cei-italy.it

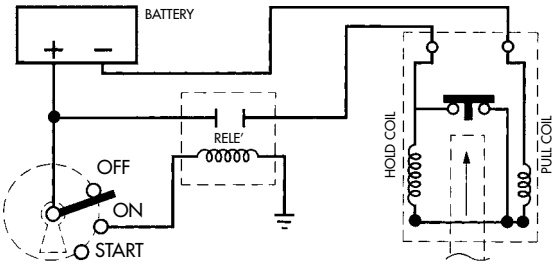
Elettrostart

FAMILY E - ES 60

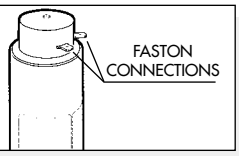
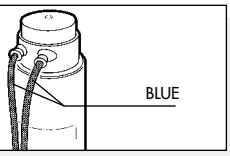
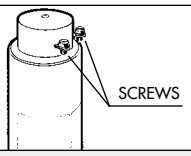
DUAL COIL SOLENOID FOR PULL ACTION OR PULL-PUSH ACTION

ELECTRIC CIRCUITS FOR DIESEL ENGINES

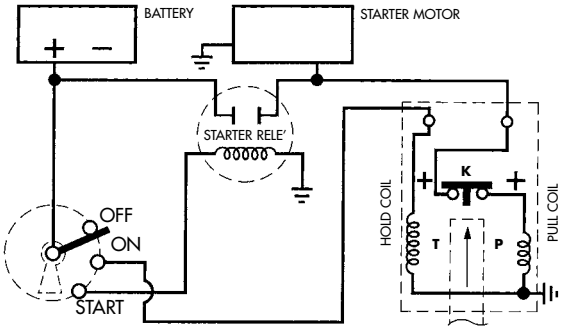
SERIES 1 — WITH INTERNAL SWITCH



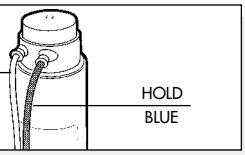
DIRECT ELECTRIC CIRCUIT
The solenoid connection is not conditioned by the polarity (+ and -)
In the version with cables these are blue.

ELECTRICAL CONNECTIONS	BY FASTON	BY CABLES **F**	BY SCREWS **V**
			

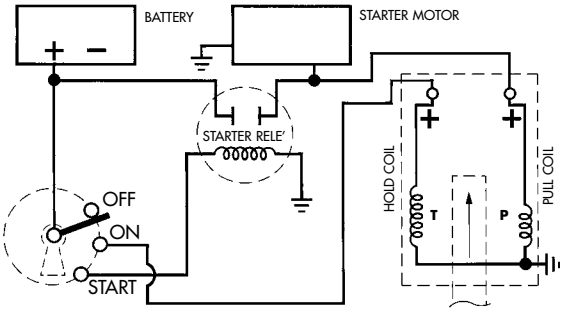
SERIES 2 — WITH INTERNAL SWITCH



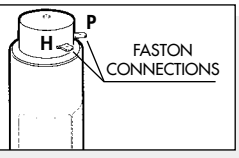
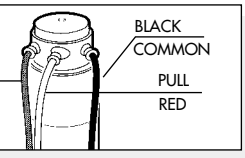
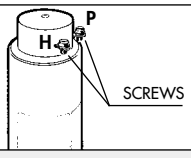
ELECTRIC CIRCUIT COMBINED WITH STARTER MOTOR
The solenoid connection feeding the pull coil P and the hold coil T is marked with the indication PULL (red cable) and HOLD (blue cable). The body is connected to ground. The pull coil P is fed in parallel with the starter motor: the red cable connected to the positive of the starter motor and the blue cable connected to the positive of the key switch. The auxiliary switch K ensures disconnection of the coil P and prevents the possible damaging return of parasitic currents.

ELECTRICAL CONNECTIONS		BY CABLES **F**	
			

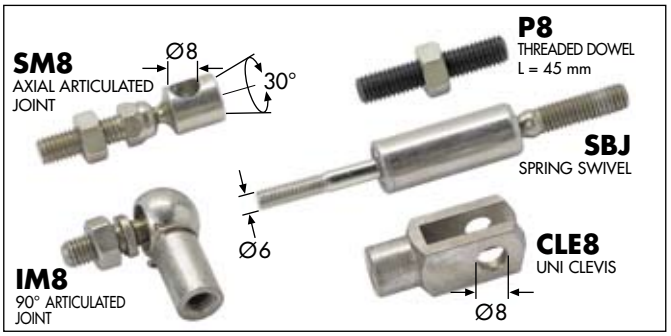
SERIES 3 — WITHOUT INTERNAL SWITCH



The connection of the solenoid is the same as for the Series 2. The pull coil P and the hold coil T are respectively marked PULL and HOLD.
The negative common in the version with faston is at ground.
- Designed for coupling with starter motor.
- Designed for external switch (Code CEI IE04 - timed static electronic switch ideal for dusty or saline environments and in applications with repeated accelerations).

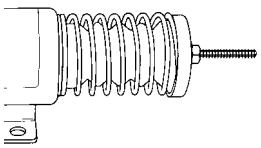
ELECTRICAL CONNECTIONS	BY FASTON SMALL AND LARGE	BY CABLES **F**	BY SCREWS **V**
	 H = HOLD P = PULL		 H = HOLD P = PULL

ACCESSORIES WITH M8 THREAD



OPTIONAL SPRINGS

INTERNAL SPRING **6M1**		EXTERNAL SPRING **6M3**	
			
Kg 0.500	Kg 1.5	Kg 5.000	Kg12.05



COSTRUZIONI ELETTROMAGNETICHE INDUSTRIALI
C.E.I. srl
CORSO PRIMO LEVI, 7 - 10090 CASCINE VICA - RIVOLI - TORINO (ITALY) - TEL. 0039 0119594446 - FAX. 0039 0119591357
e-mail: ceisrl@tin.it www.cei-italy.it