

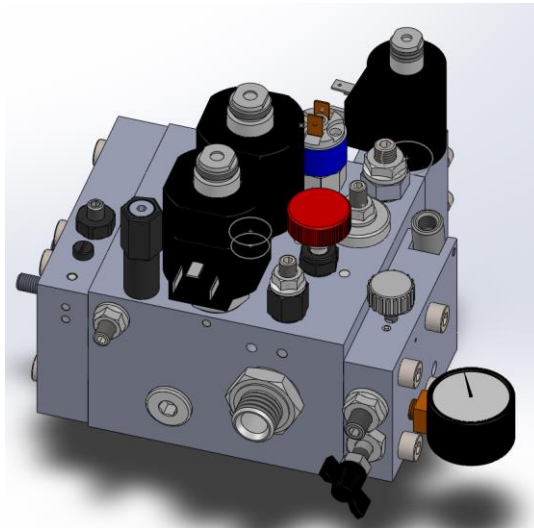


**START
ELEVATOR**
OLEODINAMIC COMPONENTS FOR LIFTS

OPERATING INSTRUCTION

PUMP UNIT

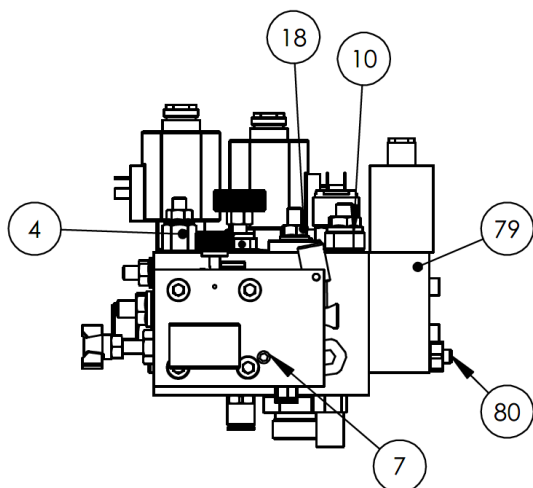
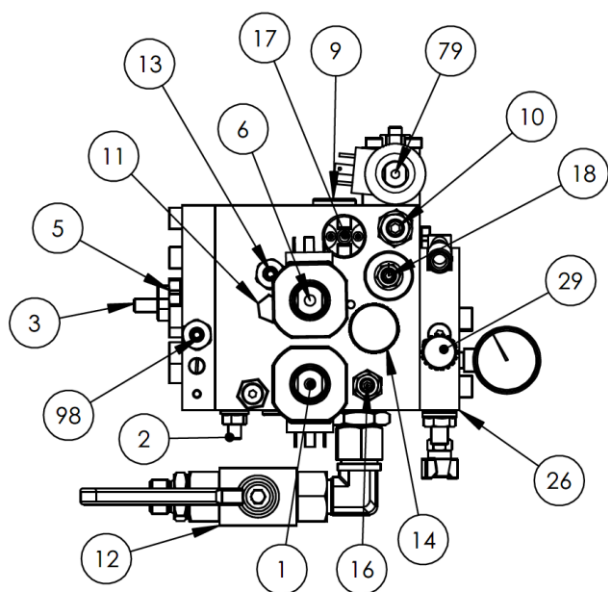
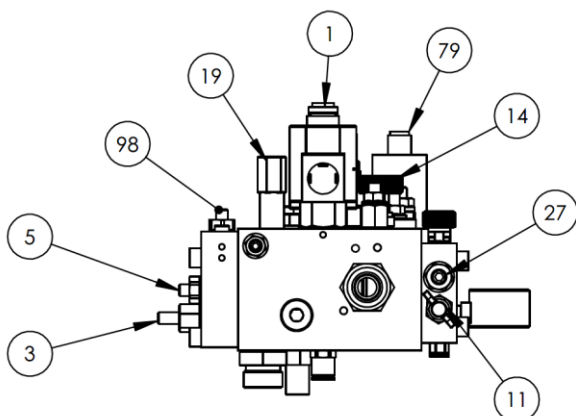
99/E



GB

29010 Incrociata di Calendasco (PIACENZA) - ITALIA
Tel. 0523 771131 - 0523 772774 Fax 0523 771632
e-mail: startelevador@stratelevador.it - Internet: <http://www.startelevador.it>

C.F. e P.I. 01410730335 - C.I. IT 01410730335
R.I. PC 01410730335 - R.E.A. 160057
Cap. Soc. Euro 40.000 i.v



- 1 Downstroke solenoid valve
- 2 Drop test fastening
- 3 Downstroke and upward low speed adjusting screw
 - Clockwise decrease (-)
 - Anticlockwise increase (+)
- 5 Deceleration time adjusting screw
 - Clockwise increase (+)
 - Anticlockwise decrease (-)
- 6 High speed solenoid valve
- 7 High speed adjusting screw (*)
- 10 Maximum pressure valve adjusting screw
 - Clockwise increase (+)
 - Anticlockwise decrease (-)
- 11 Gauge cut-out cock
- 12 Valve cut-out cock
- 13 Upward start throttle adjusting screw
 - Clockwise increase (+)
 - Anticlockwise decrease (-)
- 14 Emergency downstroke button
- 16 Remaining pressure adjustment screw
 - Clockwise increase (+)
 - Anticlockwise decrease (-)

Only in the indirect execution 2:1

- (17) Pressure switches
- 18 Calibrate of the motor start time
 - Clockwise decrease (-)
 - Anticlockwise increase (+)
- 19 Calibrate downstroke speed
 - Clockwise increase (+)
 - Anticlockwise decrease (-)
- (26) Hand pump
- (27) Hand pump safety valve adjusting screw
 - Clockwise increase (+)
 - Anticlockwise decrease (-)
- (28) Hand pump no-return valve
- (29) Air bleed (Hand pump)
- (79) Soft Stop valve
- (80) Soft stop time adjusting screw
 - Clockwise increase (+)
 - Anticlockwise decrease (-)
- 98 Downstroke starting time adjusting screw
 - Clockwise increase (+)
 - Anticlockwise decrease (-)

77-99 Regulation throttle (fixed) (*)

(*) These elements are factory set
Adjustment should only be carried out via
manufacture's technical specifications

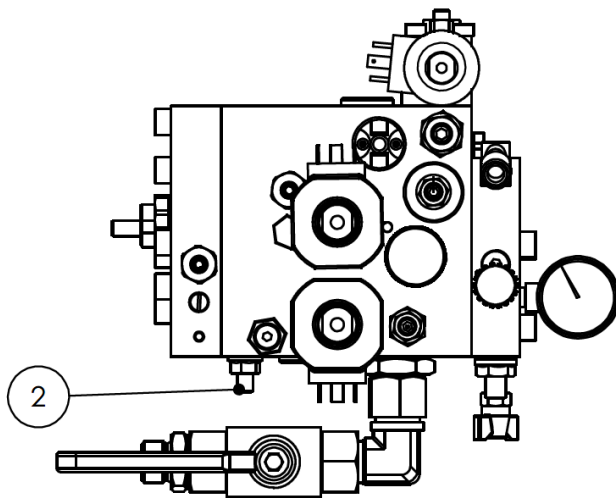
() OPTIONAL

Valve group operating limits

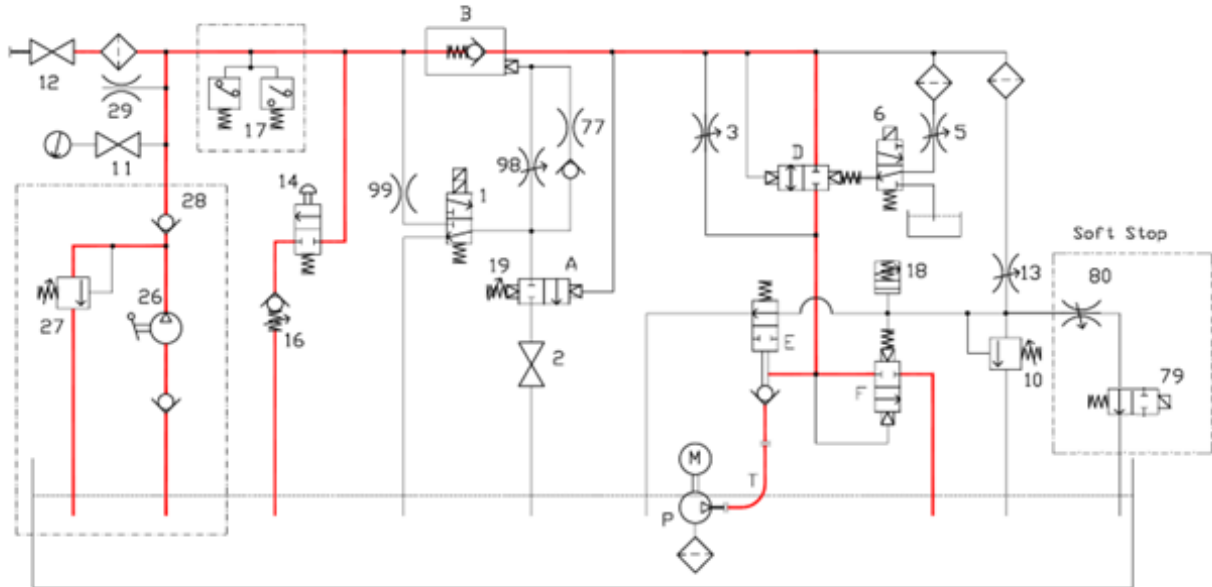
- Flow :8-75 Lt/min
- Maximum static pressure : 70 bar
- Maximum operating pressure : 75 bar
- Minimum static pressure : 10 bar
- Maximum pressure of the overpressure valve setting : 85 bar
- Maximum oil temperature : 60 °C
- Engine room temperature : 5- 40 °C

Drop test

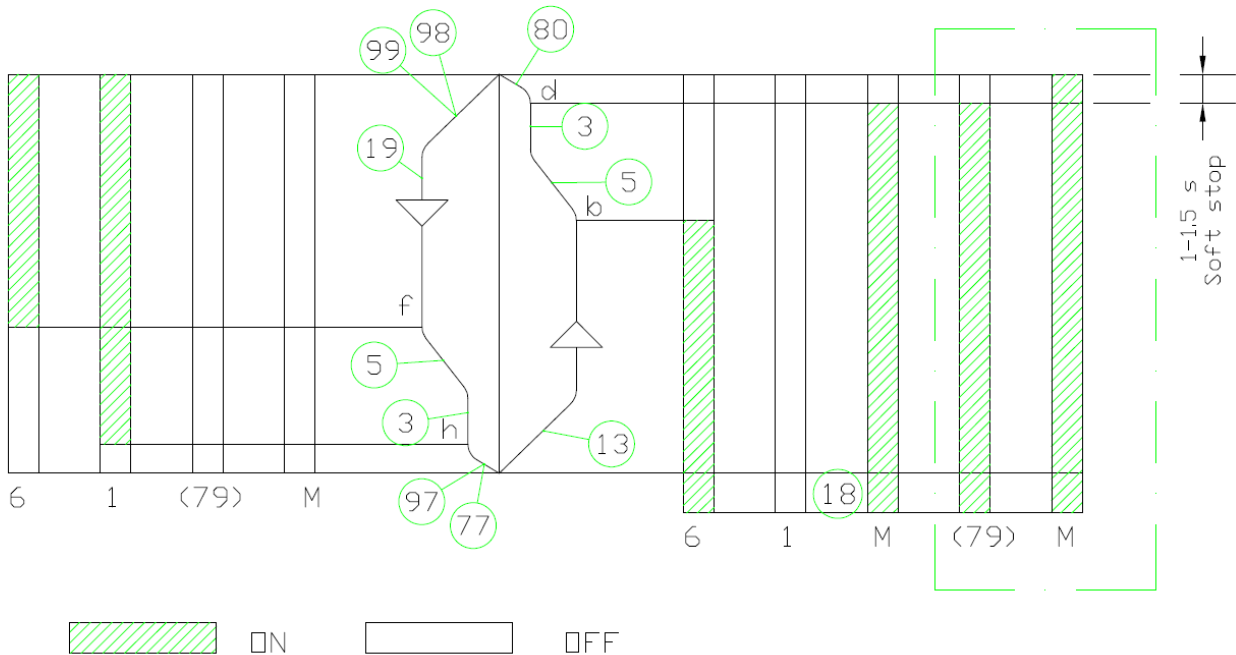
- Clockwise adjust the screw <2> (counting the turns) and block the seal nut.
- Send the cabin full load to the top floor and start the downstroke¹
- The safety valve must operate.
- Then anticlockwise adjusting screw <2> and take it to the original position.
- Make sure that the pressure in the pump, during upstroke, hasn't changed.



Hydraulic scheme



- | | | | |
|----|------------------------------------|---|----------------------------------|
| A | Pressure regulation assembly | B | Pilot-operated non-return valve |
| D | Speed shift valve | E | Pump no-return distributor valve |
| F | Upward starting and safety valve | M | Motor |
| P | Pump | T | Flexible pipe |
| 16 | Only in the indirect execution 2:1 | | |

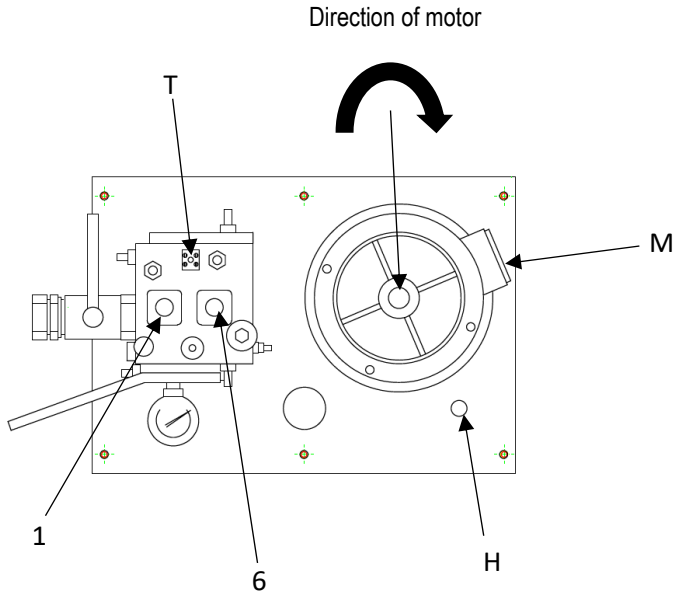


h - Downward stop contact
d - Upward stop contact

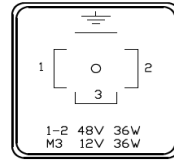
f - Downward starting reducing speed contact
b - Upward starting reducing speed contact

Electrical connection

External motor



- 1a Downstroke coil 12-24-48 V 45W
- 1b Downstroke coil 48/12 cc 36 W
- 6 High speed coil 12-24-48 V 45 W
- M Terminal board
- (H) Oil heater sesistance 70W
- (T) Oil thermostat 70 °C opening
- (S) NC bimetalic motorprotection

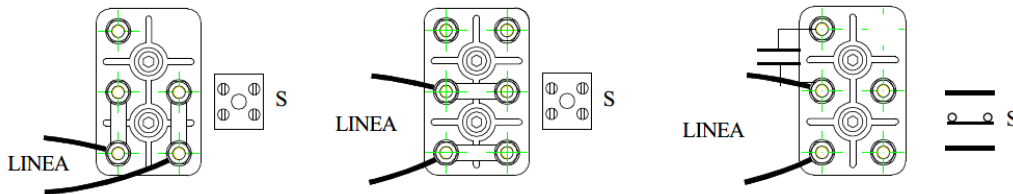


Solenoid connection

Motor Connection

Connect the line input in accordance with the original motor terminal board configuration:

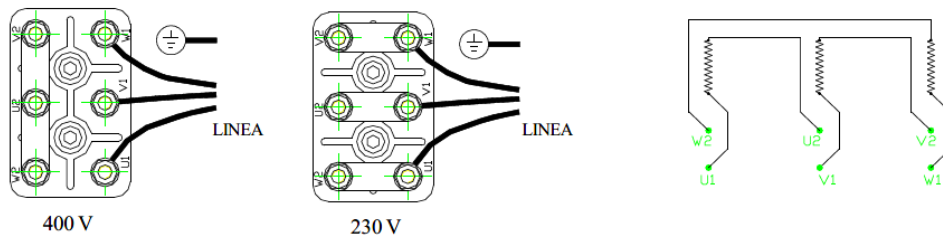
Single – Phase



For other configuration than those above, refer to the istration sheet attached to the motor.

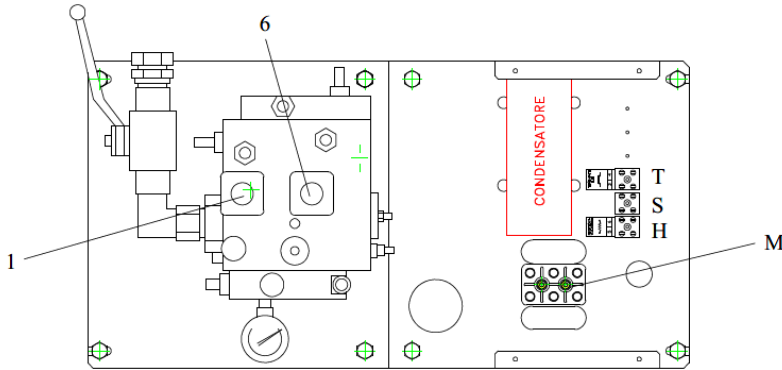
For all motor with the power cable already present, connect the cables marked with V-W the cables marked with T are the thermal protection of the motor.

Three – Phase

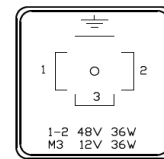


For all motor with the power cable already present, connect the cables marked with V-W-U the cables marked with T are the thermal protection of the motor

Inside motor



- 1a Downstroke coil 12-24-48 V 45W
- 1b Downstroke coil 48/12 cc 36 W
- 6 High speed coil 12-24-48 V 45 W
- (H) Oil heater sesistance 70W
- (T) Oil termostat 70 °C opening
- (S) NC bimetalic motorprotection

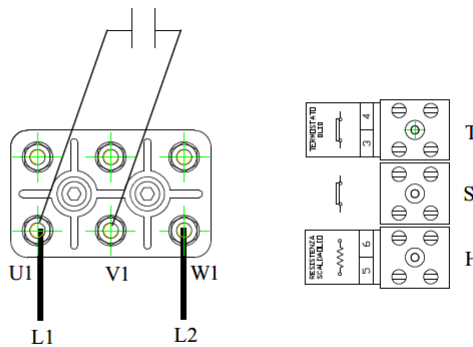


Solenoid connection

Motor Connection

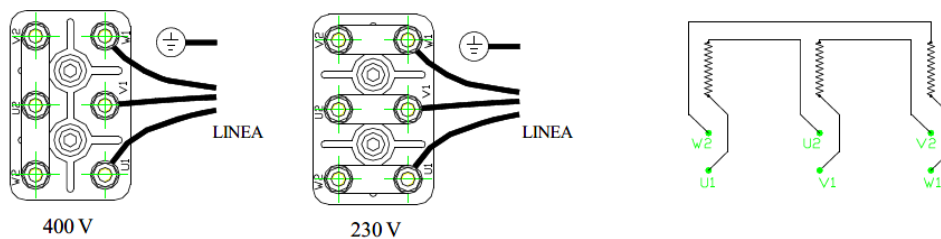
Connect the line input in accordance with the original motor terminal board configuration:

Single – Phase



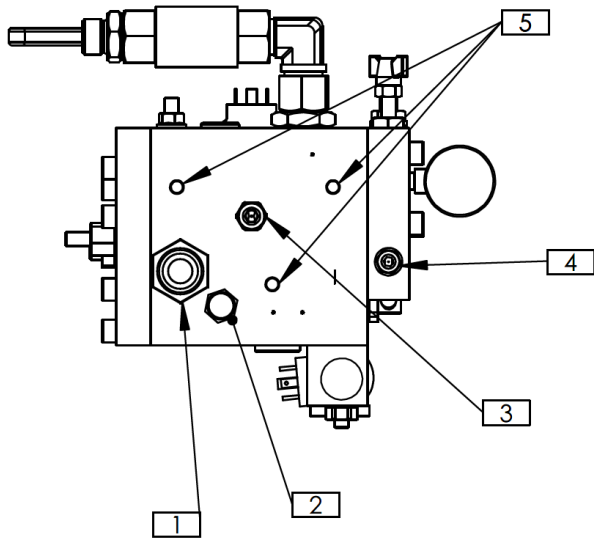
For all motor with the power cable already present, connect the cables marked with V-W the cables marked with T are the thermal protection of the motor

Three – Phase



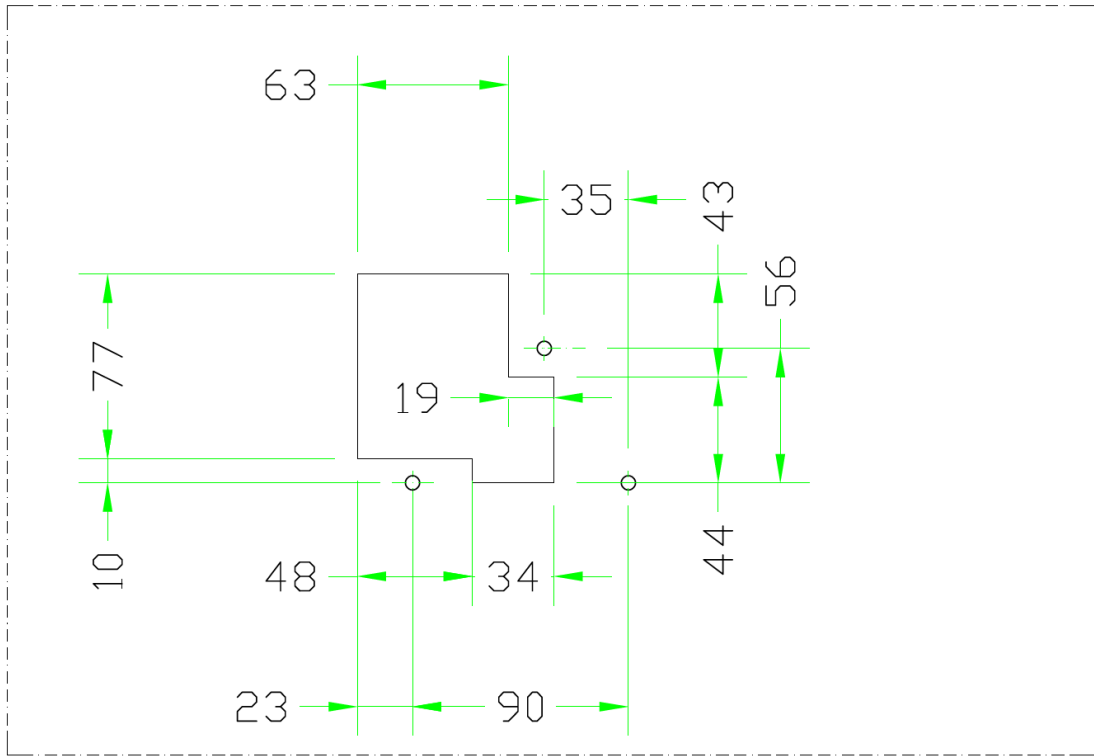
For all motor with the power cable already present, connect the cables marked with V-W-U the cables marked with T are the thermal protection of the motor

Pump and Drain connection

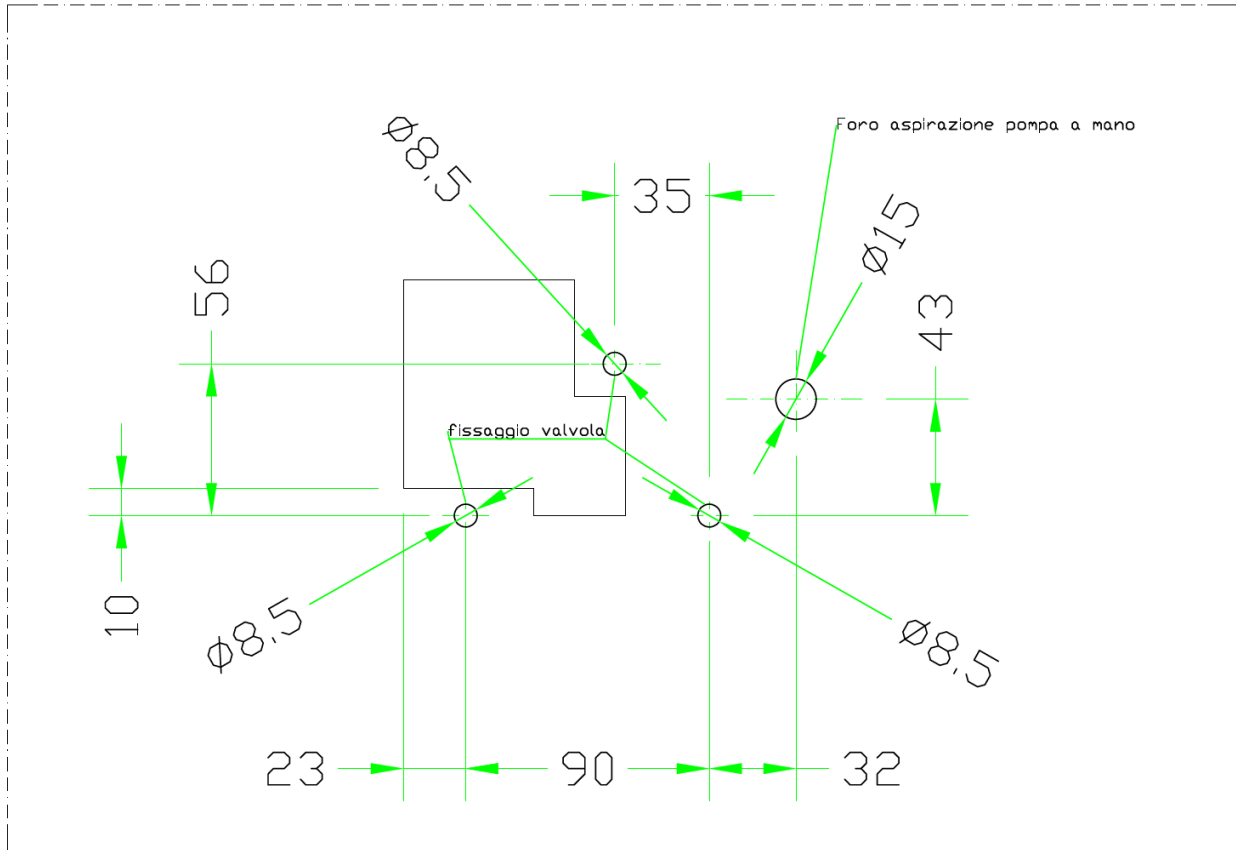


1. Pump connection
 - Gas 1/2"
 - Gas 3/4"
2. Main drain
3. Solenoid drain
4. Hand pump suction
5. Fixing holes M8

Valve support plate - cut dimensions



Fixing hole dimensions



The external dimensions of the plate are not indicated, as they vary from the type of tank where they are mounted

BY TECHNICAL OFFICE

99/E – 2024 rev.02



START
ELEVATOR
OLEODINAMIC COMPONENTS FOR LIFTS
