







The AV hatch lifters are electromechanical products, especially designed for marine use on pleasure boats. They allow full or partial opening and closing of heavy engine hatches, peak tanks, hatch beams etc. By activating a switch, it is possible to lift the hatch to any desired position from closed to full open; an internal self-locking mechanism will maintain the position preventing any accidental hatch closing. In case of a power failure an emergency device allows for manual opening.

According to the load required, the AV hatch lifters can be mounted individually, or in twin cylinder installation for heavier loads. It is also possible to install more then two AV actuators in multiple applications.

The AV hatch lifters do not require any maintenance, are easy to install, and are made of materials resistant to corrosion.

With the kind cooperation of Gobbi S.p.A. and Sessa Marine S.p.A.





## **AV HATCH LIFTERS**

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#### **TECHNICAL FEATURES**

- According to the load required, the AV hatch lifter can be mounted individually, or in twin cylinder installation for heavier loads. It is also possible to install more then two AV actuators in multiple applications.
- Maximum load for single installations: 1200N (120 kg 265 lbs.)
- Maximum load for dual installations: 2400N (240 kg 530 lbs.)
- Supplied with all mounting hardware.
- Stainless steel telescopic ram for manual operation in case of emergency.
- Circuit breaker to stop accidental overloading of the system and electronic stop at closed or full open position.
- IP 65 protection rated
- Speed: 25 mm/sec with no load applied
- Current absorption in single installations: 10A at 12V
- Current absorption in dual installations: 20A at 12V
- Meets ISO 8846 MARINE anti-deflagration requirements.

## **AV SERIES - SINGLE ACTION**

**AV 3012** - 40671 C 12V, stroke 12" (300 mm) **AV 4512** - 40582 D 12V, stroke 18" (450 mm) **AV 6012** - 40584 H 12V, stroke 24" (600 mm)

#### **AV-L SERIES - LOCKING - DUAL ACTION**

**AV-L 3012** - 40703 P 12V, stroke 12" (300 mm) **AV-L 4512** - 40590 D 12V, stroke 18" (450 mm) **AV-L 6012** - 40592 G 12V, stroke 24" (600 mm)

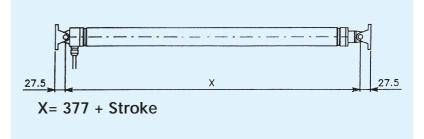
#### **OPTIONAL COMPONENTS**

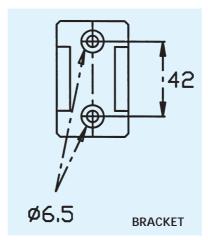
**RB 12** - 40738 Y Relay box 12V It contains the relays needed for cycle revertion.

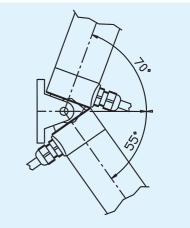
**SW20** - 61103 V 1X3 way single pole momentary switch.

WARNING: The AV Series hatch lifters can be opened freely in the event of a power failure, and can therefore open while underway. The AV Series hatch lifters are not intended for use on high performance boats or in applications where the hatch may open unintentionally. For these applications we recommend the AV-L series hatch lifters, which stay locked when the actuator is in the closed position.





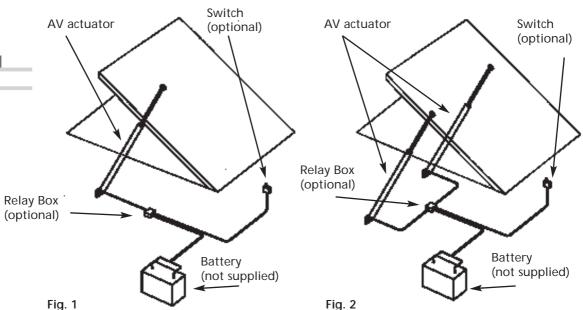




The rear bracket allows a 125° oscillation range of the actuator







# COMPONENTS DESCRIPTION AV Hatch Lifter

- n° 1 AV actuator for single installation (Fig.1); n° 2 AV actuators for dual installation (Fig.2)
- External diameter: 1.9" (48 mm)
- Length in the closed position: 14.8" (377 mm) + stroke
- Maximum oscillation range: 125°

## Voltage supply cable:

- AV actuator is supplied with 5 ft (1.5 m) of cable.
- Warning: in case of longer cable length required, do not substitute the existing harness, but make a junction following the instructions supplied with the product.

Relay Box: 12V (optional)

**Two way push-button** with central off position (optional)

Fuse (not supplied)

Battery (not supplied)

### INSTALLATION

 The following equation will help you to calculate the maximum strength (Fmax) required from the hatch lifter to open your hatch, knowing the dimensions and weight of the hatch and the position of the mounting brackets.

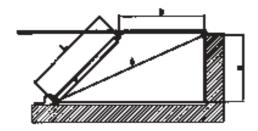
Fmax = 
$$\frac{P}{2} \times \frac{d}{b} \times \frac{L}{a}$$

P = weight of the hatch in Newton c, a, b = dimensions in metres indicated in Fig. 3 and Fig. 4

L = hatch lifter length when in closed position

**Warning:** Maximum load (Fmax) for the AV actuator in single installation: 1200 N, in dual installation: 2400 N.

NOTE: WHEN THE LOAD EXCEEDS 2400 N (240 kg - 530 lbs) IT IS POSSIBLE TO INSTALL MORE THAN TWO AV ACTUATORS.





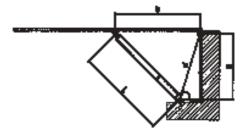


Fig. 4