

TRIM TABS

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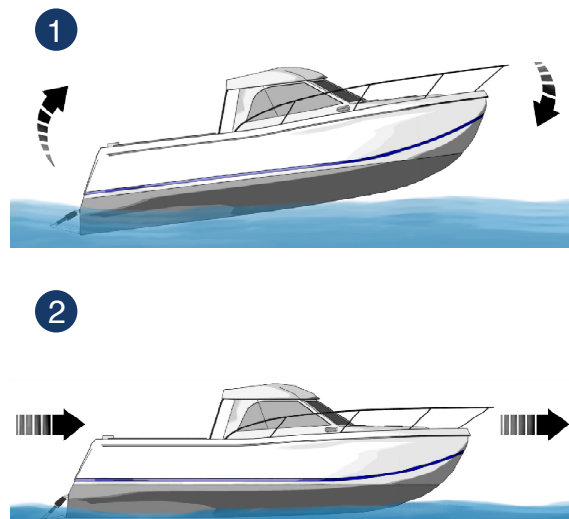
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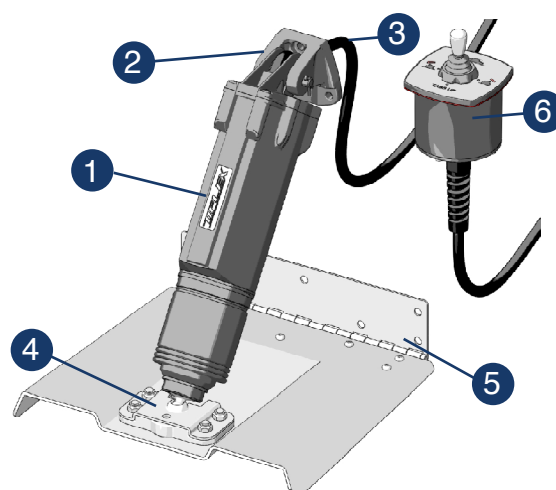
The use of the tabs allows the boat to maintain an adequate trim according to the different navigation conditions, optimizing the performance. If necessary (1), the tab drive rectifies and rebalances the boat trim (2), ensuring a higher engine efficiency and speed, a considerable fuel saving and navigation safety. The tabs fixed to the lower edge of the transom act as a movable extension of the boat hull, increasing the stability in several conditions.

Their **working principle** is the following: the water, flowing on the tab surface, causes the stern lifting as the tab is lowered. According to this principle, it is possible to change the tab lowering up to reaching a trim that can ensure an optimal performance for each situation.



TRIM TABS COMPONENTS

1	Actuator
2	Connection bracket to the transom
3	Electrical cable (2 m - 6.6 ft)
4	Connection bracket to the tab
5	Tab + hinge
6	Joystick - Control system



OPERATION

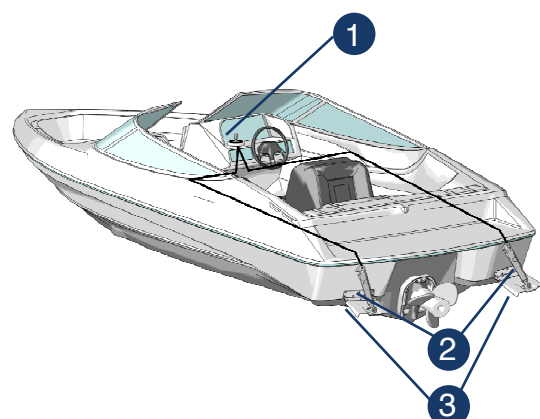
The **joystick** allows an easy use of the Trim Tab system. Thanks to this control system, the user can focus on the boat trim, regardless of the tab position.

The **electromechanical actuators** (2) that allow changing the **inclination angle of tab** (3) are controlled by means of the **joystick** (1) that is located on the dashboard or on the fly-bridge.

Joystick function description:

- By jogging the lever forward, the boat bow goes down;
- By jogging the lever backward, the boat bow goes up;
- By jogging the lever rightward, the boat tilts to starboard
- By jogging the lever leftward, the boat tilts to port

When running at idle or when the engine turns off, the electronic system enables the **AUTO LINE-UP** function automatically. It allows putting the tabs in rest position.



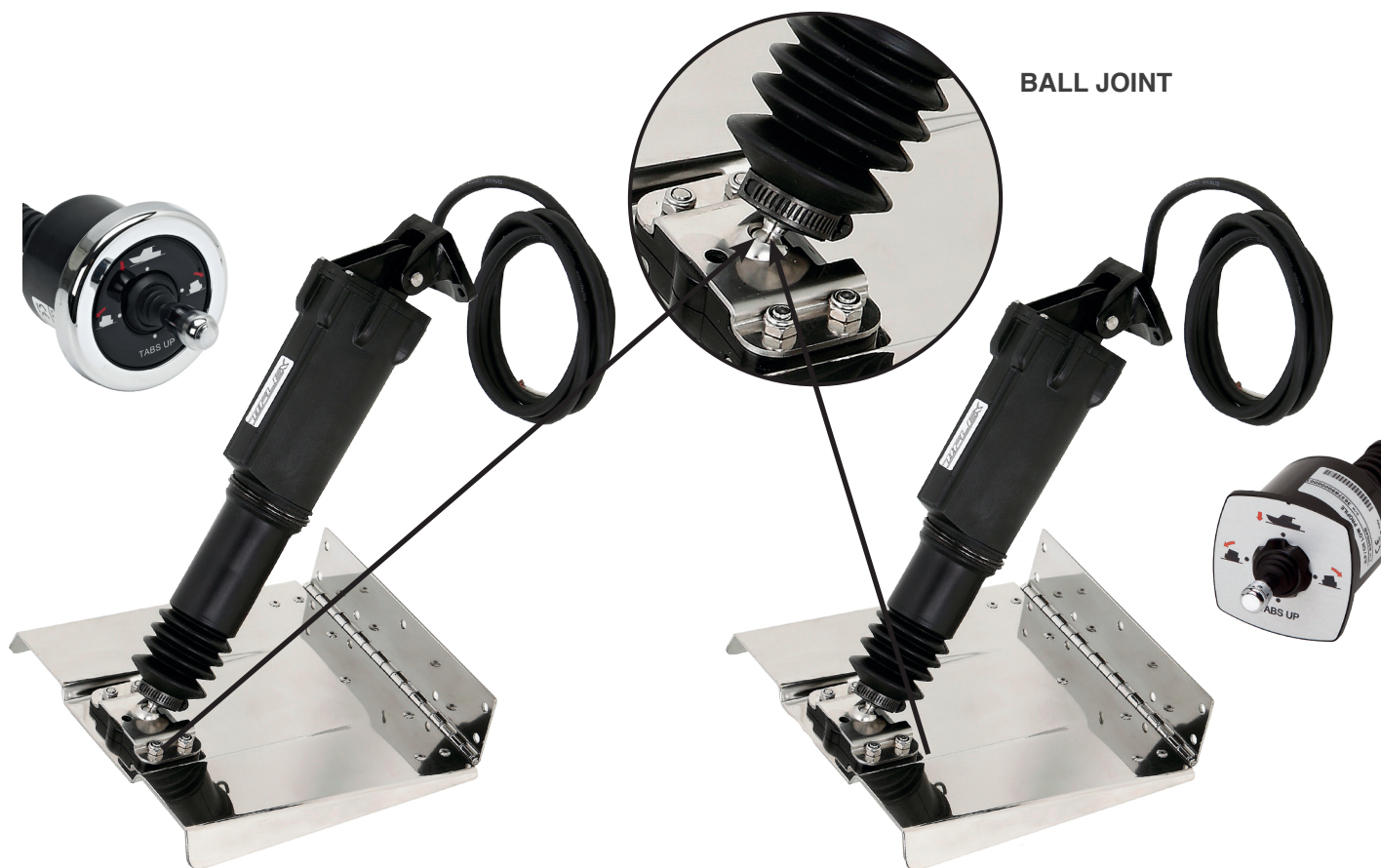
Improve fuel economy and passenger comfort with Uflex electromechanical trim tabs.

Featuring **electropolished stainless steel planes** and **low consumption, high speed, composite actuators**, these tabs are built to last in the most demanding sea conditions.

Uflex trim tabs have been specifically designed for **easy installation** using a quick connect bracket-actuator, requiring only one small hole per tab through the transom. The patented transom mounting bracket encapsulates the wiring to ensure protection against any wiring damage.

Uflex trim tab systems are available in **2 versions**:

- **MTT systems for standard installations**
- **MTC systems for compact installations**



MTT 12-CH + MIRROR POLISHED SS TABS

MTC 12-CH-LP + MIRROR POLISHED SS TABS

MTT AND MTC SYSTEMS - FEATURES AND BENEFITS

- Tab bracket with **ball joint**
- Operating system with hardened steel ballscrew, suitable to withstand high push loads.
- Prompt and easy control with the innovative use of our patented **Joystick** control
- **Auto Line-Up**: automatic flap re-alignment function
- Completely sealed thermoplastic resin tab actuators: maximum protection guaranteed by dual seals and a rubber bellow (patented)
- Stainless steel rod and tabs
- Innovative profile of the tabs increases the efficiency of the system
- Non polished stainless steel tabs also available (standard tabs only).
- Top of stainless steel tabs are mirror polished for higher resistance to marine environment.
- Patented hole hinge design allows for precise retrofit replacement with Lenco® and Bennett® same size tabs
- Fully maintenance free
- Voltage: 12V DC
- IP68 waterproof protection
- CE Certification
- Meets with the EN 60945 standards

Improve fuel economy and passenger comfort with Uflex electromechanical trim tabs.

Boats often become unbalanced to port or starboard due to wind, sea conditions, and weight transfer within the boat.

The innovative joystick by Uflex takes all the guesswork out of realigning the boat. A simple push of the joystick lever in the opposite direction of the “lean” of the boat is all you need to do.

Gone are the days of having to think about the current positions of the tabs and then push two rocker switches, hoping that you have the correct sequence, i.e. port up and starboard down or vice versa.

The Uflex joystick let's you drive like a pro!

- Makes adjusting the position of the boat more intuitive than traditional rocker switches
- Both trim actuators move simultaneously in opposite directions when pushing the joystick to port or to starboard

REALIGNING LEAN TO PORT OR STARBOARD

Because the joystick simultaneously activates both tabs in opposite directions when adjusting for a lean to port or starboard, the realignment of the boat occurs very quickly, and with optimal tab positioning in terms of efficiency.

REALIGNING BOW LIFT

Pushing the joystick up or down moves the tabs in the same direction. This changes the attitude of the boat bow up or down.

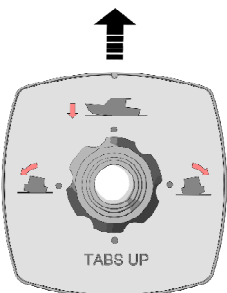
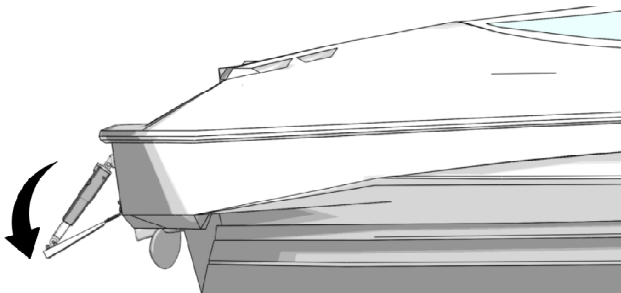

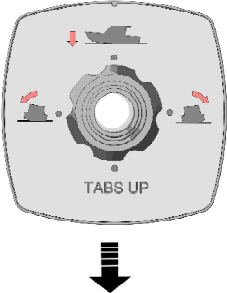
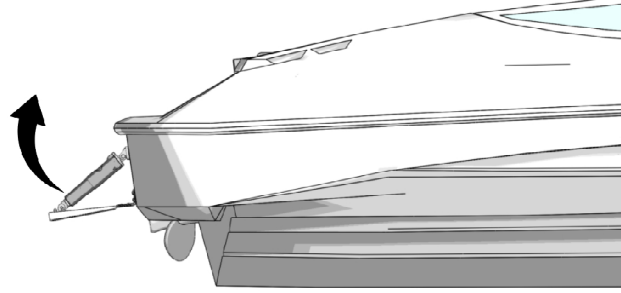
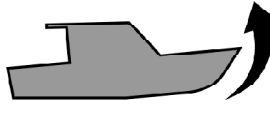
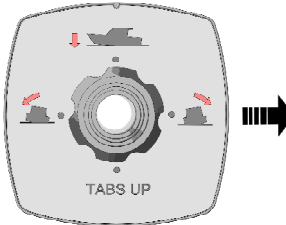
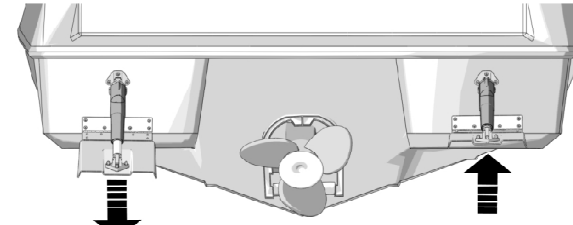
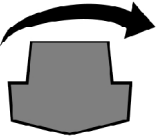
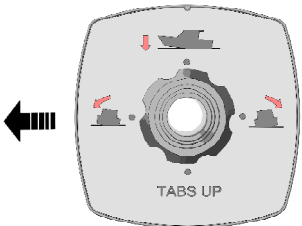
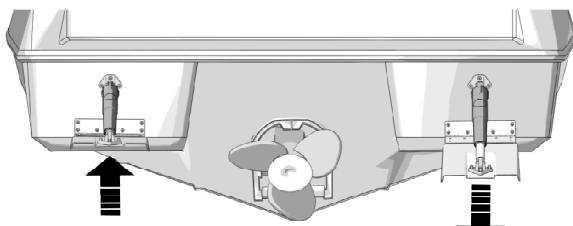
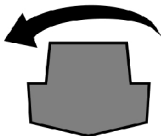
The unique profile of the Uflex planes offers greater efficiency and stern lift than traditional flat planes, often providing the opportunity to use a smaller size tab with the same performance of a larger flat plane.

Keep the boat on plane with lower engine RPM

IP68-rated, triple sealed 12VDC electro-mechanical actuators provide:

- One-piece actuator housing reduces the possibility of water intrusion
- Exclusive rubber boot protects internal primary seals from sea growth and high-pressure water
- Planetary gear actuator gearbox provides high efficiency and low amp consumption
- Tempered stainless-steel trapezoidal screw gives peak resistance to impact and high-torque loads
- The actuator upper bracket is prepared to route electrical cable through the transom



CHANGE WITH THE JOYSTICK	TAB MOVEMENT	CHANGE
		 <p>PLANING</p>
		
		
		

The electronic system can automatically enable an important function named **“Auto line-up”** which allows aligning the tabs at rest, without using the joystick.

Two different types of installation are available: engine key control or neutral safety switch control.

This function is provided with an inhibition device that prevent it from being enabled again for five minutes; after this time has passed, the “Auto line-up” function is available again.

- **Engine key**

When the engine key is turned and the control panel is switched off, the system enables the “Auto line-up” function, putting the tabs in rest position.

- **Neutral safety switch**

When the lever is put in engine neutral condition, the Neutral safety switch connected to the lever sends a signal that enables the “Auto line-up” function, so that the actuators close and the tabs return to the rest position.

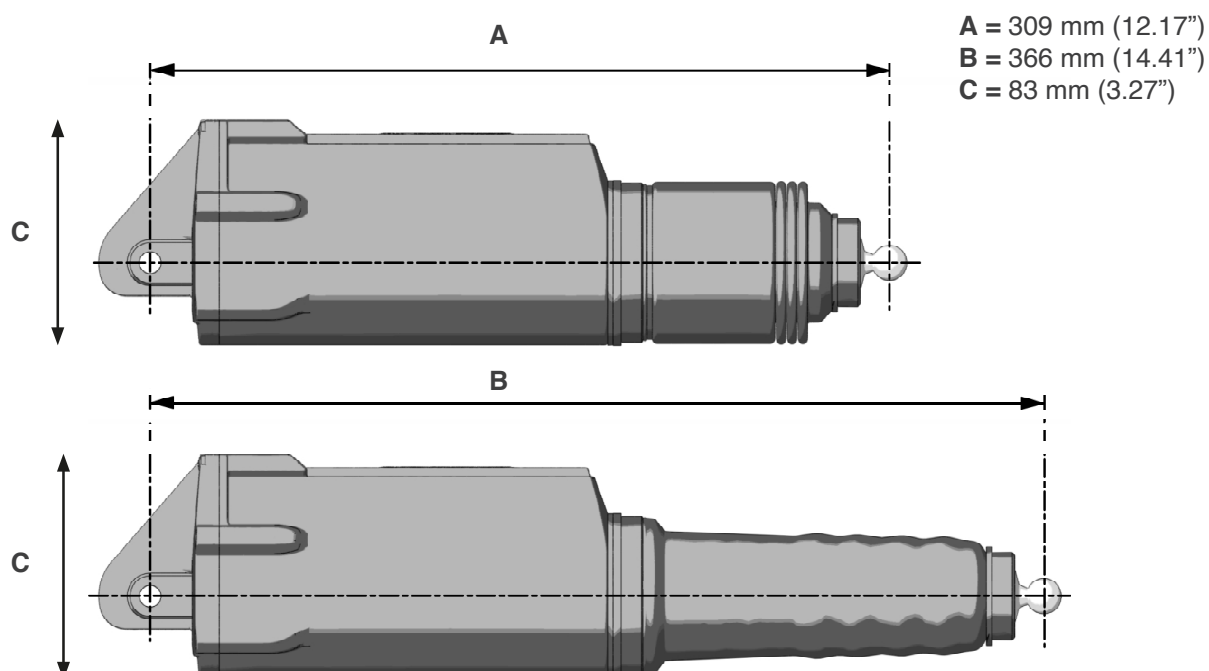


AT12 - 43160S

FEATURES

- 12 VDC Black actuator and brackets
- 1 m (3.28') wiring harness with Deutsch crimped pins included
- Stroke: 57 mm (2.25")

AT ACTUATOR FULLY CLOSED/OPEN



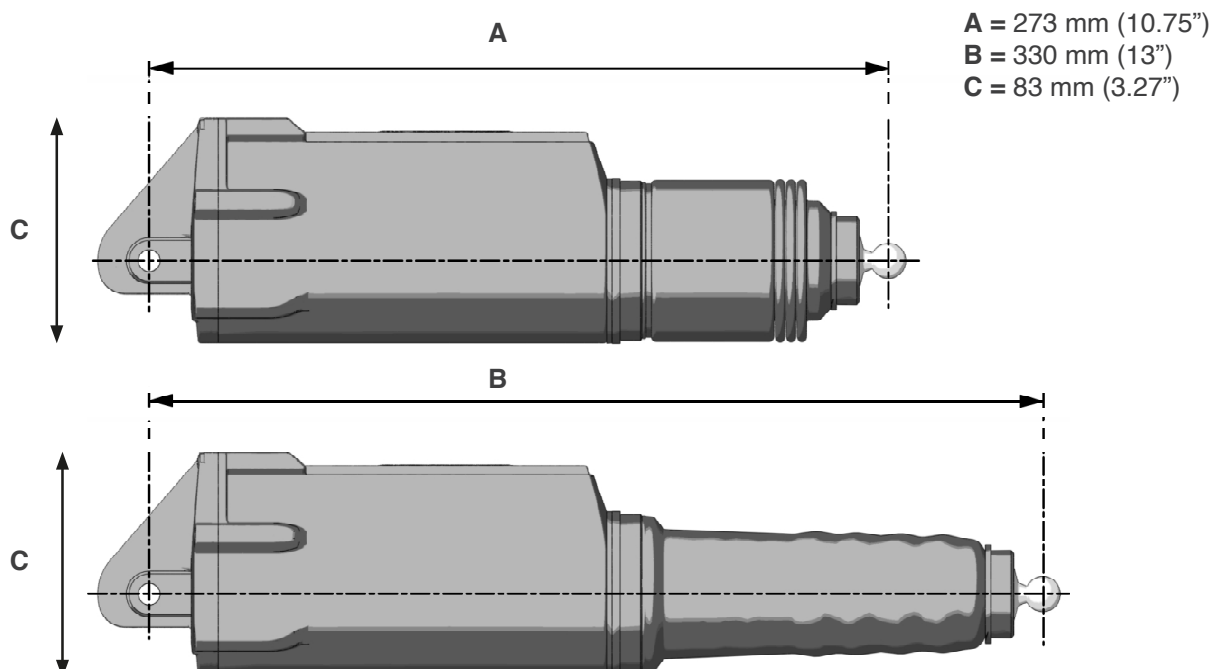


AC12 - 43001V

FEATURES

- 12 VDC Black actuator and brackets
- 1 m (3.28') wiring harness with Deutsch crimped pins included
- Stroke: 57 mm (2.25")

AC ACTUATOR FULLY CLOSED/OPEN



JOYSTICK CONTROL UNITS FOR SINGLE AND DUAL STATION



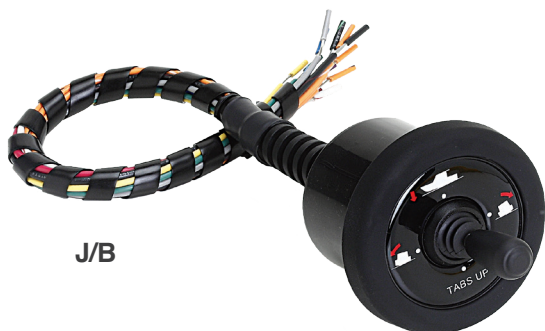
J/CH



JLP/CH



J/B



JLP/B



JOYSTICK CONTROL UNITS FOR SINGLE STATION:

J/CH - 41849Z chrome

J/B - 42855Z black (optional)

JLP/CH - 43004B chrome, low profile

JLP/B - 43005D black, low profile (optional)

J/B-LED - 43416B joystick control with led indicators

JOYSTICK CONTROL UNITS FOR DUAL STATION:

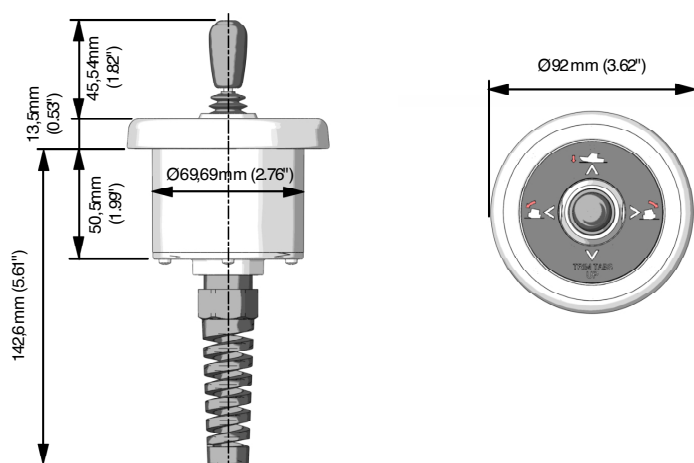
J/CH-2 - 42306 N chrome

J/B-2 - 42856 B black (optional)

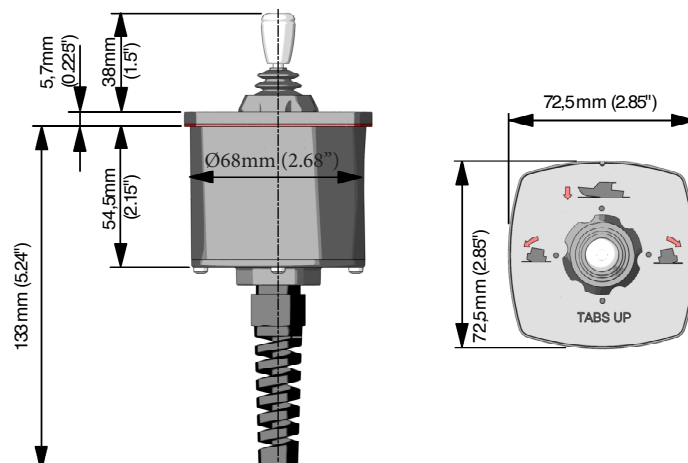
JLP/CH-2 - 43080 U chrome, low profile

JLP/B-2 - 43081 W black, low profile (optional)

- 70 mm (2.76") hole size
- 6 m and 9 m (19.7' and 29.6') extension wiring harness available with deutsch plugs included (optional)



J/CH and J/B dimensions



JLP/CH and JLP/B dimensions

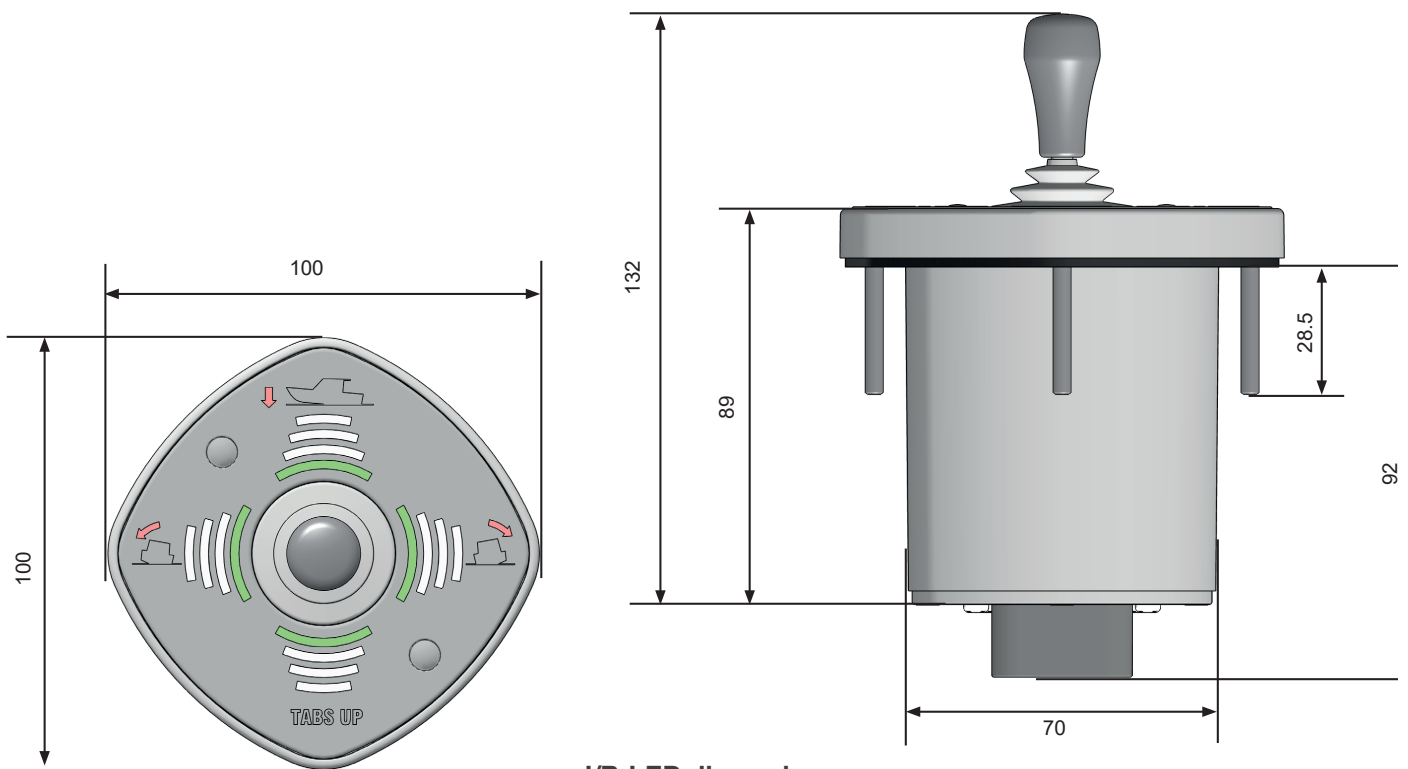


J/B-LED

JOYSTICK CONTROL WITH LED INDICATORS

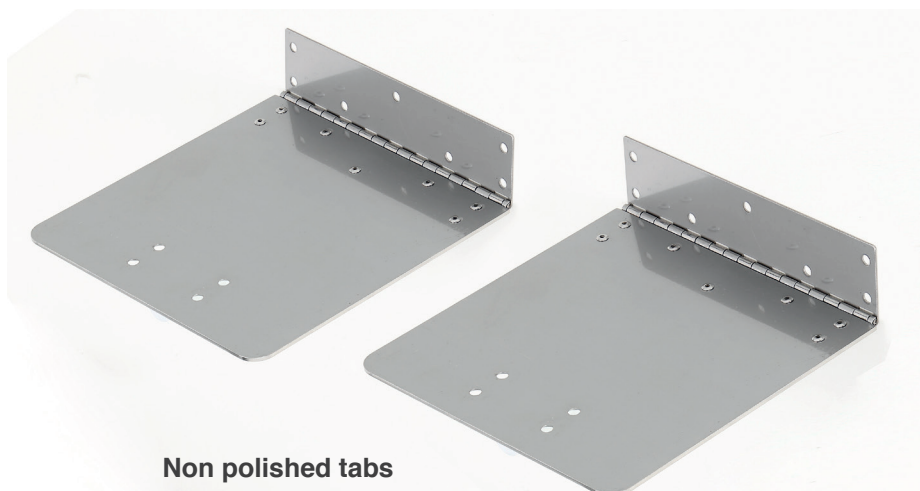
J/B-LED - 43416B joystick control with led indicators

- Main station compact control unit with joystick (PATENTED), **auto-line-up** function included (automatic flap re-alignment)
- 0.50 m (1.64") wiring harness included
- 70 mm (2.76") hole size



J/B-LED dimensions

STANDARD NON POLISHED TABS

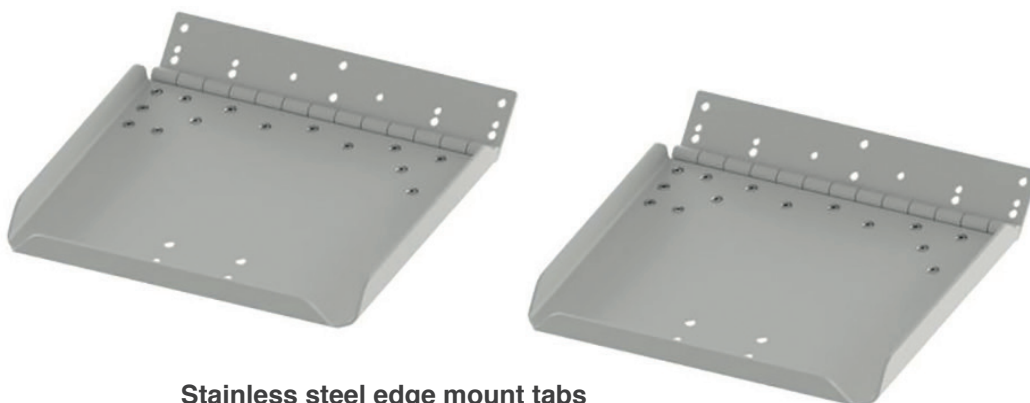


Non polished tabs

No need for new holes in case of Lenco® or Bennett® same size replacements.
They are not designed for use in racing applications.

MODEL	PART No.	DESCRIPTION	WEIGHT PER PAIR
NP99	42650E	Stainless steel tab pair 228,6 x 228,6 mm (9"x9")	3,3 kg (7.3 lbs)
NP129	42653L	Stainless steel tab pair 304,8 x 228,6 mm (12"x9")	4,0 kg (8.8 lbs)
NP1212	42651G	Stainless steel tab pair 304,8 x 304,8 mm (12"x12")	5,0 kg (11.0 lbs)
NP1218	42652J	Stainless steel tab pair 304,8 x 457,2 mm (12"x18")	7,4 kg (16.3 lbs)

STAINLESS STEEL EDGE MOUNT TABS



Stainless steel edge mount tabs

Stainless steel non polished trim tabs blades.
No need for new holes in case of Lenco® or Bennett® same size replacements.
The installation requires less transom height than standard and high performance blades.
They are not designed for use in racing applications.

MODEL	PART No.	DESCRIPTION	WEIGHT PER PAIR
NPE912	43630D	Stainless steel tab pair 228,6 x 304,8 mm (9"x12")	5,8 kg (12.8 lbs)
NPE129	43631F	Stainless steel tab pair 304,8 x 228,6 mm (12"x9")	5,6 kg (12.3 lbs)
NPE1212	43632H	Stainless steel tab pair 304,8 x 304,8 mm (12"x12")	7,2 kg (15.9 lbs)
NPE1218	43633K	Stainless steel tab pair 304,8 x 457,2 mm (12"x18")	10,8 kg (23.8 lbs)



Mirror polished stainless steel tabs

Stainless steel, mirror electro-polished trim tab blades.
No need for new holes in case of Lenco® or Bennett® same size replacements.
They are not designed for use in racing applications.

MODEL	PART No.	DESCRIPTION	WEIGHT PER PAIR
P99	41844N	Stainless steel tab pair 228,6 x 228,6 mm (9"x9")	2,8 kg (6.2 lbs)
P129	41845R	Stainless steel tab pair 304,8 x 228,6 mm (12"x9")	3,6 kg (7.9 lbs)
P1212	41846T	Stainless steel tab pair 304,8 x 304,8 mm (12"x12")	4,6 kg (10.1 lbs)
P1218	41847V	Stainless steel tab pair 304,8 x 457,2 mm (12"x18")	6,7 kg (14.8 lbs)

OPTIONAL COMPONENTS

KE20 - 42378R - Extension Wiring Harness Kit

Kit includes:

- one 16.4' (5,0 m) length wiring harness extension for the power cable
- two 19.7' (6,0 m) length wiring harness extensions for the actuator cables
- Deutsch plugs included

KE30 - 42379T - Extension Wiring Harness kit

Kit includes:

- one 16.4' (5,0 m) length wiring harness extension for the power cable
- two 29.5' (9,0 m) length wiring harness extensions for the actuator cables
- Deutsch plugs included

KEJ2-20 - 41853P

19.7' (6,0 m) extension wiring harness for a second station.
Deutsch connectors included.

KEJ2-30 - 42375J

29.5' (9,0 m) extension wiring harness for a second station.
Deutsch connectors included.

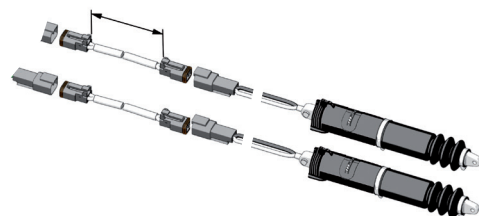
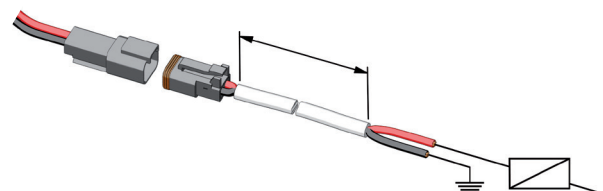
KEK-7- 42376L

6.6' (2,0 m) auto-line up extension wiring harness key frame.
Deutsch connectors included.

KENS-7 - 42377N

6.6' (2,0 m) auto-line up extension wiring harness neutral safety.
Deutsch connectors included.
Not suitable for systems with joystick control with led indicators (J/B-LED).

**Extension for
power cable**



**Extension
for actuator cables**



The prepackaged UFLEX set includes:

- 1 pair of actuators complete with brackets
- 1 joystick.

The tabs are not included and sold separately: selected model has to be specified when ordering.

Not intended for use in racing applications.

CE Certification
Waterproof: IP68
EN60945 Certification

MODEL	PART No.	VOLT	DESCRIPTION
MTT 12-CH	43250T	12V DC	2 AT12 actuators, 12V DC + 1 chrome joystick
MTT 12-CH-LP	43251V	12V DC	2 AT12 actuators, 12V DC + 1 chrome low profile joystick
MTC 12-CH	43043M	12V DC	2 AC12 actuators, 12V DC + 1 chrome joystick
MTC 12-CH-LP	43044P	12V DC	2 AC12 actuators, 12V DC + 1 chrome low profile joystick

SPARE PARTS

MODEL	PART No.	DESCRIPTION
BRS-C	43039X	Bracket kit - Connection between AT or AC actuators and boat
BRT-C	43040F	Bracket kit - Connection between AT or AC actuators and tab
EP 5	42440T	Wiring harness extension for power cable 5,0 m (16.4')
EP 6	42302E	Wiring harness extension for actuator cable 6,0 m (19.7')
EP 9	42439J	Wiring harness extension for actuator cable 9,0 m (29.5')

ACTUATOR PART No.	BELLOWS KIT PART No.	BRACKET KIT PART No. (TAB SIDE)	BRACKET KIT PART No. (TRANSOM SIDE)
41839W	43094F	42296N	42298T
42937B	43094F	42296N	42298T
43001V	43724N	43040F	43039X / 43220H (Retrofit)*
43160S	43725R	43040F	43039X / 43220H (Retrofit)*
43276M	43724N	43040F	43220H
43280C	43094F	42296N	42298T
43302K	43725R	43040F	43220H
43432Z	43724N	43040F	43039X
43507E	43725R	43040F	43220H
42608F	43094F	42296N	42298T
43272D	43724N	43040F	43220H

* Part No. 43220H - see retrofit bracket explanation

RETROFIT BRACKET

BRS-T bracket will adapt AT12-AS12 actuator to pre-existing mounting holes on transom, in case of AS12 or of Lenco® replacement (until 2007).

BRS-T - 43220H - black bracket



ANODE KIT

Zinc alloy anode kit neutralizes the galvanic currents endangering the trim tabs. 2 anode kits are necessary for every 1 pair tab installation.

KA70 - 42441V

Ø 2.8" (70 mm) sacrificial anode kit for tab up to 12" x 12" size

KA90 - 42442X

Ø 3.5" (90 mm) sacrificial anode kit for tab 12" x 18" size

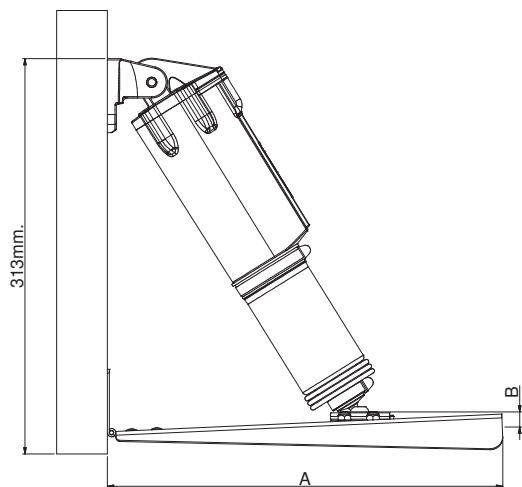


KA70



KA90

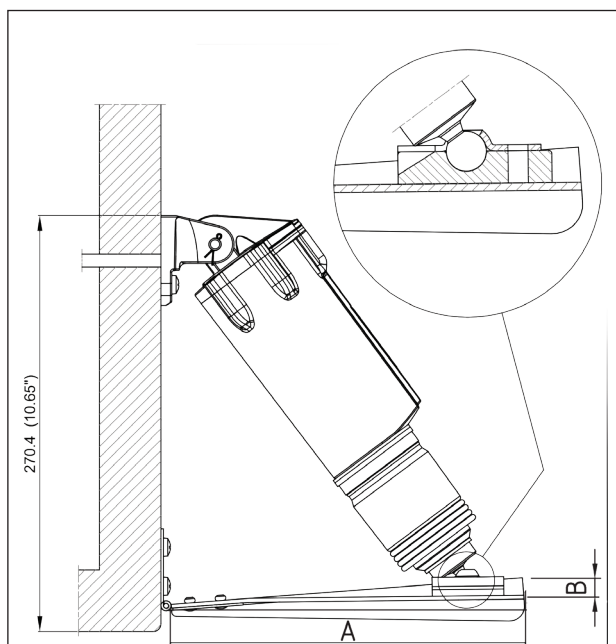
MTT INSTALLATION



A: 228.6 mm - 9"

B: 19.5 mm - 0.77"

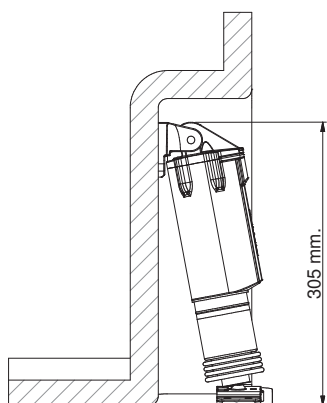
MTC TILTED INSTALLATION



A: 228.6 mm - 9"

B: 19.5 mm - 0.77"

MTC VERTICAL INSTALLATION



NOTE: dimensions could change in case of raked transom

MTT SYSTEMS - APPLICATION

BOAT LENGTH	BOAT LENGTH (m)	TAB SIZE L x I (")	TAB SIZE L x I (cm)	TRANSOM MINIMUM HEIGHT
14' - 18'	4,5 - 5,5	9" x 9"	22,8 x 22,8	31.03 cm (12.22")
16' - 25'	5,0 - 8,0	12"x 9"	30,5 x 22,8	31.03 cm (12.22")
18' - 30'	5,5 - 9,0	12" x 12"	30,5 x 30,5	31.03 cm (12.22")
26' - 36'	8,0 - 11,0	12" x 18"	30,5 x 45,7	31.03 cm (12.22")

MTC SYSTEMS - APPLICATION

BOAT LENGTH	BOAT LENGTH (m)	TAB SIZE L x I (")	TAB SIZE L x I (cm)	TRANSOM MINIMUM HEIGHT	
				TILTED INSTALLATION	VERTICAL INSTALLATION
14' - 18'	4,5 - 5,5	9" x 9"	22,8 x 22,8	27.04 cm (10.65")	30.5 cm (12")
16' - 25'	5,0 - 8,0	12"x 9"	30,5 x 22,8	27.04 cm (10.65")	30.5 cm (12")
18' - 30'	5,5 - 9,0	12" x 12"	30,5 x 30,5	27.04 cm (10.65")	30.5 cm (12")
26' - 36'	8,0 - 11,0	12" x 18"	30,5 x 45,7	27.04 cm (10.65")	30.5 cm (12")

NOTE: L= Tab length, I= Transom side.

These recommendations should be used as a general reference only. Final selection should be made with the assistance of a qualified installation technician. For any further information please contact our Technical Service

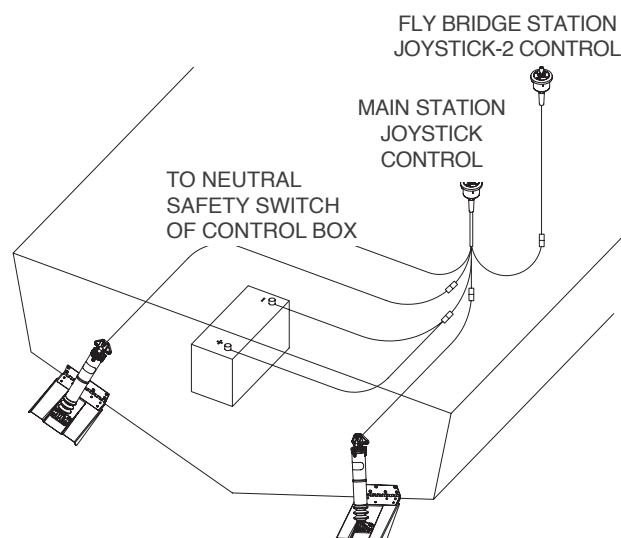
WARNING: The systems are not intended for use in racing applications

STANDARD COMPONENTS (SINGLE ACTUATOR PER TAB)

- 1 pair of electromechanical actuator complete with connection brackets and 2 m (6.56') wiring harness.
- 1 joystick control unit with 0.50 m (1.64') wiring harness
- 1 pair of stainless steel tabs. Tabs are sold separately: specify selected size when ordering

OPTIONAL COMPONENTS

- 1 extension wiring harness kit for the power cable and the actuator cables. Deutsch plugs included
- 1 second station joystick-2 control unit with 0.50 m (1.64') wiring harness
- 1 extension wiring harness (6 m and 9 m for second station). Deutsch plugs included.
- 1 extension wiring harness (2 m for auto-line up). Deutsch plugs included.
- 1 zinc alloy sacrificial anode kit to neutralize the galvanic currents on tabs (2 anode kits for every 1 pair tab installation)





Uflex Trim tabs are a safe choice. Uflex products reliability is also guaranteed by an excellent technical assistance, with pre and after sales support, managed directly from our offices in Italy and in the United States and supplied all over the world, through our official network of distributors, workshops and affiliated centers, able to provide spare parts and immediate assistance. For further information, please contact our After-Sales Service.



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