

## Steering wheels

### Delfino Steering wheels

Anodized aluminium spokes, soft TANEGUM UV resistant crown, universal central hub.

Code	Crown	External Ø mm
45.158.10	Black	310



### Manta Steering wheels



Anodized aluminium spokes and soft polyurethane crown.

Code	Crown	Spokes	Crown Ø mm
45.157.97	White	Silver	355
45.157.98	Black	Black	355

### Steering wheels fitted with anatomically designed hand grip



Fitted with 3 spokes, central hub with universal cone, external Ø 355 mm.

Code	Colour	Ø mm
45.158.05	Black	355
45.158.06	White	355

### Technic series steering wheels



Central hub fitted with universal cone, anodized aluminium spokes, soft polyurethane crown.

Code	Soft wheel	Spokes	External Ø mm
45.163.01	- Root coated	Black	350
45.163.02	- Carbon coated	Silver	350
45.163.03	Black	Silver	350

### Technic series steering wheels



Fitted with mirror polished stainless steel spokes, hub and soft polyurethane crown.

Code	Crown	Inserts	Ø mm
45.163.26	Black	Root coated	350

### Skipper steering wheels

Made of soft polyurethane with silver color spokes and chromed cao. Equipped with universal central hub.

Code	Crown	Spokes	Ø mm
45.158.40	Black	Silver	350
45.158.41	Black + silver	Silver	350





### Pegaso steering wheels

Soft polyurethane crown, mirror-polished stainless steel spokes and central hub, Universal cone.

Code	Crown	Spokes	Ø mm
45.158.45	■ Black	SS	300



### Ghost black steering wheel

Steering wheel covered in hand-sewn black leather. Stainless steel spikes and hub coated in black satin paint, Universal connection.

Code	Crown	Spokes	Ø mm
45.155.01	■ Black leather	painted SS	350



▲ 45.158.30



▲ 45.158.31

### Baltic steering wheels

Made of soft polyurethane, glazed + chromed aluminium spokes. Fitted with universal central hub.

Code	Crown	Spokes	Ø mm
45.158.30	■ Black	chrome + silver aluminium	320
45.158.31	□ White	chrome + silver aluminium	320



▲ 45.138.01



▲ 45.138.02

### Tender steering wheel

Mirror-polished stainless steel spokes. Soft polyurethane crown. Universal cone hub.

Code	Crown	Spokes	Ø mm
45.138.01	■ black	polished SS	300
45.138.02	■ grey	polished SS	300
45.138.03	□ white	polished SS	300



▲ 45.138.03



### Mahogany polyurethane lacquered steering wheel

Fitted with mirror polished stainless steel spokes and hub; universal central hub cone, steering wheel central adjustment.

Code	Ø mm
45.160.00	350



### Polyurethane steering wheels

Made of stainless steel, fitted with external soft polyurethane crown, universal cone: Ultraflex, Morse and Teleflex.

Code	Crown colour	Ø mm
45.139.33	■ Black	340
45.139.40	■ Black	400

**Steering wheels with stainless steel spokes**

Universal cone Ultraflex/Morse/Teleflex.

Ø mm			Color
320	350	400	
-	45.130.35	-	Carbon coated
-	45.132.35	-	Root coated
45.133.32	45.133.35	-	White soft polyurethane
45.131.32	45.131.35	45.131.40	Grey soft polyurethane
45.129.32	45.129.35	45.129.40	Black soft polyurethane



**Soft polyurethane steering wheels fitted with stainless steel spokes**

Universal cone Ultraflex/Morse/Teleflex.

white	cream	grey	black	Ø mm	Suitable for
45.128.03	45.128.04	45.128.02	45.128.01	350	-
45.127.03	-	45.127.02	45.127.01	280	Tenders



**Mirror polished SS steering wheels**

Central hub with universal cone, **adjustable** to allow **centering** the steering wheel. Diameter: 350mm.

Code	Crown	Color	Code	Crown	Color
45.171.35	Leather effect (polyurethane)	■ black	45.176.35	Polished stainless steel	■ stainless steel
45.172.35	Leather effect (polyurethane)	■ grey	45.175.35	Soft carbon effect polyurethane	■ black
45.173.35	Leather effect (polyurethane)	■ white	45.152.01*	Polyurethane	■ black
45.173.36	Leather effect (polyurethane)	■ cream	45.152.02*	Polyurethane	■ grey
45.174.35	Wood with polyurethane lacquer	■ mahogany	45.152.05*	Mahogany	■ mahogany

\* Without helm position gauge







▲45.178.11



▲45.178.12

**Apollo steering wheel**

Polished stainless steel frame, Universal cone.

Code	Ø mm	Rim	Rim colour
45.178.11	350	Soft polyurethane	Black
45.178.12	350	Soft polyurethane	Grey
45.178.13	350	Soft polyurethane	White
45.178.17	350	Soft polyurethane	Ivory



▲45.178.17



▲45.178.13



▲45.169.00



▲45.169.01

**Bliz steering wheel**

Polished stainless steel frame, universal cone.

Code	Ø mm	Crown	Finish
45.169.00*	350	SS	Polished
45.169.01**	350	Soft polyurethane	Black
45.169.02**	350	Soft polyurethane	Grey
45.169.03**	350	Soft polyurethane	White
45.169.04	350	Matt wood	Teak
45.169.05	350	Matt wood	Mahogany
45.169.06	350	Carbon	Carbon look

\* Anatomic handle

\*\* Leather-like finish with internal seam



▲45.169.02



▲45.169.03



▲45.169.04



▲45.169.05



▲45.169.06

**Steering wheels with stainless steel spokes**

Universal cone Ultraflex/Morse/Teleflex.

Code	Ø mm	Crown	Wheel color
45.136.02	350	Soft polyurethane	Grey
45.151.04	350	Soft polyurethane	Cream
45.151.05	350	Real wood with inserts	Mahogany and black
45.151.01	350	Soft polyurethane	Black
45.151.03	350	Soft polyurethane	White



▲45.136.02



▲45.151.04



▲45.151.05



▲45.151.03



▲45.151.01



### Steering wheels with stainless steel spokes

Universal cone Ultraflex/Morse/Teleflex.

Code	Ø mm	Crown	Rim Color
45.137.01	350	Soft polyurethane	Black
45.137.02	350	Soft polyurethane	Grey
45.137.03	350	Soft polyurethane	White
45.137.05	350	Lacquered	Carbon
45.137.06	350	Lacquered	Briar Root



▲ 45.137.02



▲ 45.137.03



▲ 45.137.05



▲ 45.137.06



▲ 45.137.01

### Impact steering wheels with stainless steel spokes

Universal cone Ultraflex/Morse/Teleflex.

Code	Ø mm	Crown	Wheel color
45.141.01	350	Soft polyurethane	Black
45.141.03	350	Soft polyurethane	White
45.141.04	350	Soft polyurethane	Carbon Look



▲ 45.141.04



▲ 45.141.03



▲ 45.141.01

### Steering wheel with stainless steel spikes

Mirror-polished stainless steel spikes and hub.

Code	Ø mm	Crown	Crown colour
45.125.01	350	Leather sewn by hand	Black
45.125.02	350	Carbon Look	Black
45.125.03 <b>New</b>	350	Wood	Teak



▲ 45.125.01



▲ 45.125.02



▲ 45.125.03



▲ 45.125.02



▲ 45.125.01

### Magnifico wheel with oval spokes

Stainless steel metal frame. Universal cone.

Code	Ø mm	Crown	Spokes
45.177.01	350	Polyurethane - black	3
45.177.03	350	Polyurethane - white	3
45.177.04	350	Teak - matt finish	3
45.177.05	350	Carbon fibre	3



▲ 45.177.03



▲ 45.177.04



▲ 45.177.05

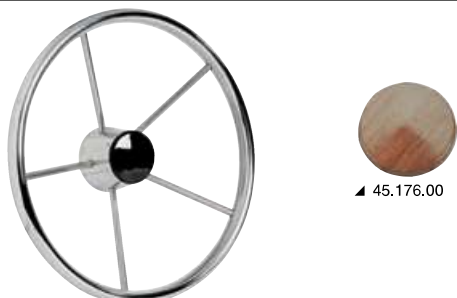


▲ 45.177.01

**Steering wheel with teak crown.**

Stainless steel spokes, crown with rear anatomic design for better gripping.

Code	External Ø mm	Dishing
45.168.01	350	15°
45.168.02	400	15°



▲ 45.176.00

**Mirror polished stainless steel steering wheels fitted with 5 spokes**

Oval boxed crown for better grip. Universal central cone (Ultraflex, Morse, Teleflex, Tx, Mancini etc.); stainless steel central hub, fine finish, supplied with central black plastic cap.

Code	Ø mm	Central teak plug OPTIONAL
45.165.32	320	45.176.00
45.165.37	380	45.176.00
45.165.41	420	45.176.00

**Mirror polished stainless steel steering wheels**

Suitable for sail boats, no embrasure, fitted with central hub (17-19-mm taper) fully made of stainless steel.

Compatible with Ultraflex, Tx, Teleflex, Mancini etc.

Code	Ø mm	Spoke
45.164.60	600	6
45.164.75	700	6
45.164.90	900	6

**Steering wheels with teak external wheel rim**

Stainless steel tapered spokes.

Code	External Ø mm
45.167.03	500
45.167.07	900



▲ 45.135.01

**Steering wheels with stainless steel spokes**

Universal cone Ultraflex/Morse/Teleflex.

Code	Ø mm	Rim made of
45.135.01	350	Soft black polyurethane
45.135.02	350	Soft grey polyurethane
45.135.04	350	Carbon
45.135.05	350	Real wood



▲ 45.135.02



▲ 45.135.05



▲ 45.135.04

### Steering wheels with mahogany polyurethane lacquered crown



Made of mirror polished **stainless steel**. 16° spoke inclination.

Code	Ø mm
45.168.35	350
45.168.40	400

### Steering wheel with external teak wheel rim, thick diameter



**Stainless steel** spokes, anatomically designed grasp crown for better gripping.

Code	Outer Ø mm	Spike inclination
45.165.02	400	28°
45.165.03	350	28°

### Steering wheels with external teak wheel rim and spokes coated with teak



Stainless steel hub and spokes, central cone "Ultraflex, Morse".

Code	external Ø mm
45.167.40	400
45.167.50	500

### Hand grip

Fitting on steering wheel crowns to provide a quick rotation, universal size.

Code	Color
45.134.01	Black
45.134.02	Grey
45.134.03	White
45.134.04	- Wood color



▲ 45.134.01

### Helm Indicator

45.130.01 For application at the centre of the wheel. Universal and self-adhesive. Once applied it can be adjusted for perfect centering.



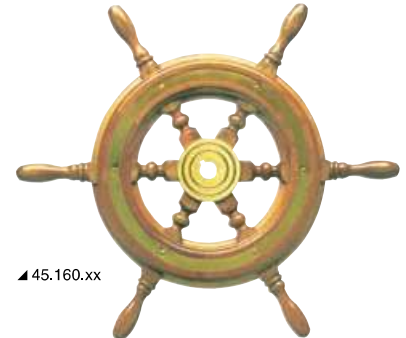
### Classic steering wheels

Genovese type with 6 or 8 spokes, fitted with perimetrical **brass** bands, central hub in just one piece, polyurethane lacquered with 8 coats, sealed spokes, very sturdy, all with standard hole size 18 mm, or with Ultraflex.


Code	Ø mm
45.160.37	370
45.160.42	420
45.160.49	490
45.160.52	520
45.160.60	600
45.160.70	700



▲ 45.176.01



▲ 45.160.xx

 45.176.01/02 Central brass plug

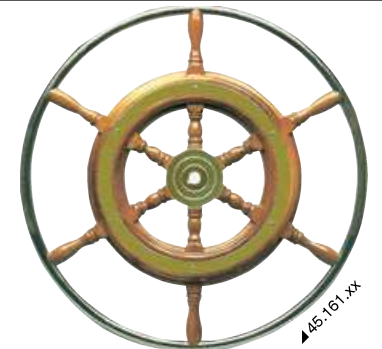
### Classic steering wheel with stainless steel external rim

Technical features are the same of steering wheel model 45.160.xx. The external rim is mounted with a special system without screws. The hub and band are made of **chromed brass**. Fitted with universal cone.

Code	Ø mm	Spare cover
45.161.42	420	45.176.03
45.161.52	520	45.176.04
45.161.62	620	-



▲ 45.176.03



▲ 45.161.xx

### Rear cable steering shaft

Made of **plastic and metal**.

Code	Angle
45.145.01	normal 90°
45.145.02	inclined 20°



▲ 45.145.01

▲ 45.145.02



## ULTRAFLEX Steering wheels




▲45.383.30



▲45.383.34

## ULTRAFLEX Corsica steering wheels

Soft PVC crown, aluminium spokes.

Code	Crown	Spokes	Ø mm
45.383.30	■ Black	■ Silver	350
45.383.34	□ White	■ Silver	350

45.601.51 *OPTIONAL* Central hub with button and Ultraflex emblem.

▲45.601.51

## ULTRAFLEX Nisida and Spargi steering wheel

Soft polyurethane crown, aluminium spokes.



Code	Model	Ø mm	Crown	Spokes
45.384.01	NISIDA	350	■ Black	■ Black

45.601.51 *OPTIONAL* Central hub with button and Ultraflex emblem

▲45.601.50

## ULTRAFLEX Morosini wheel

Leather crown and chromed hub.



Code	Crown	Spokes	Ø mm
45.389.00	■ Black	SS 304	350

## ULTRAFLEX Pianosa wheel

Polyurethane crown and chromed spokes.



Code	Crown	Spokes	Ø mm
45.385.01	■ Black	Chromed	350

45.601.51 *OPTIONAL* Central hub with button and Ultraflex emblem

## ULTRAFLEX Portofino wheel

Shock-resistant thermoplastic crown, soft grip.



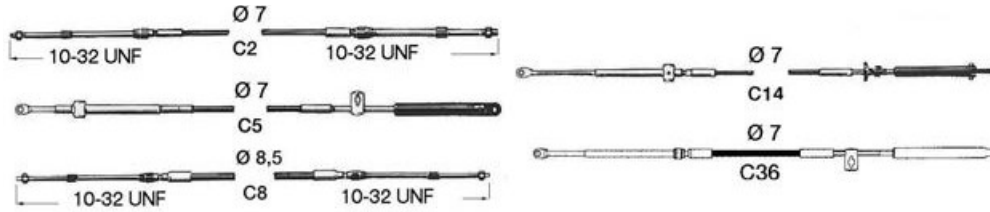
Code	Crown	Spokes	Ø mm
45.388.01	■ Black	Black/Chromed	350

## Engine control cables

### Engine control cables

Flexible for engine control.

Tipo	For engines
C2	for all Suzuki, Mariner, Yamaha, Tohatsu, Selva and Honda outboard and inboard engines
C5	Mercury and Mercruiser inboard and outboard engines
C8	inboard engines and stern drives (heavy duty reinforced cable)
C14	Johnson, Evinrude engines with stiff terminal, OMC from 1979 to now
C36	for all Mercury/Mercruiser engines equipped with Generation II (year 2004) radio remote control box



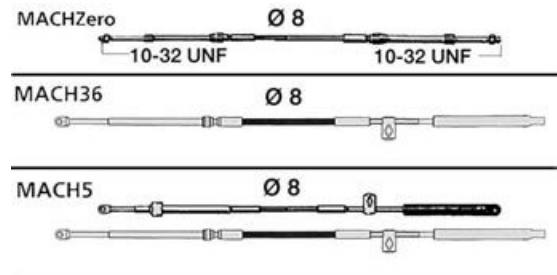
Length in feet	C2	C5	C8	C14	C36
05'	45.002.05	-	-	-	-
06'	45.002.06	45.005.06	-	45.014.06	-
07'	45.002.07	45.005.07	-	45.014.07	45.003.07
08'	45.002.08	45.005.08	45.008.08	45.014.08	45.003.08
09'	45.002.09	45.005.09	45.008.09	45.014.09	45.003.09
10'	45.002.10	45.005.10	45.008.10	45.014.10	45.003.10
11'	45.002.11	45.005.11	45.008.11	45.014.11	45.003.11
12'	45.002.12	45.005.12	45.008.12	45.014.12	45.003.12
13'	45.002.13	45.005.13	45.008.13	45.014.13	45.003.13
14'	45.002.14	45.005.14	45.008.14	45.014.14	45.003.14
15'	45.002.15	45.005.15	45.008.15	45.014.15	45.003.15
16'	45.002.16	45.005.16	45.008.16	45.014.16	45.003.16
17'	45.002.17	45.005.17	45.008.17	45.014.17	45.003.17
18'	45.002.18	45.005.18	45.008.18	45.014.18	45.003.18
19'	45.002.19	45.005.19	45.008.19	45.014.19	45.003.19
20'	45.002.20	45.005.20	45.008.20	45.014.20	45.003.20
21'	45.002.21	45.005.21	45.008.21	-	45.003.21
22'	45.002.22	45.005.22	45.008.22	45.014.22	45.003.22
23'	45.002.23	-	45.008.23	-	-
24'	45.002.24	45.005.24	45.008.24	45.014.24	45.003.24
25'	-	-	45.008.25	-	-
26'	-	-	45.008.26	-	-
27'	-	-	45.008.27	-	-
28'	-	-	45.008.28	-	-
29'	-	-	45.008.29	-	-
30'	-	-	45.008.30	-	-
31'	-	-	45.008.31	-	-
32'	-	-	45.008.32	-	-
33'	-	-	45.008.33	-	-
34'	-	-	45.008.34	-	-
35'	-	-	45.008.35	-	-
36'	-	-	45.008.36	-	-
38'	-	-	45.008.38	-	-
40'	-	-	45.008.40	-	-

### Patented cables series ULTRAFLEX Mach™

High efficiency and flexibility.

Model	Type
MACHZero	universal (as C2/C8)
MACH36	Mercury GEN II (as C36)
MACH5	Mercury (as C5)

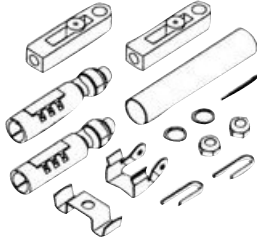
Length in feet	MACH36	MACH5	MACHZero
10'	45.010.10	45.009.10	45.000.10
11'	45.010.11	45.009.11	45.000.11
12'	45.010.12	45.009.12	45.000.12
13'	45.010.13	45.009.13	45.000.13
14'	45.010.14	45.009.14	45.000.14
15'	45.010.15	45.009.15	45.000.15
16'	45.010.16	45.009.16	45.000.16
17'	45.010.17	45.009.17	45.000.17
18'	45.010.18	45.009.18	45.000.18
19'	45.010.19	45.009.19	45.000.19
20'	45.010.20	45.009.20	45.000.20
22'	45.010.22	45.009.22	45.000.22
24'	45.010.24	45.009.24	45.000.24
26'	45.010.26	-	45.000.26
28'	45.010.28	-	45.000.28
30'	45.010.30	-	45.000.30
32'	-	-	45.000.32
34'	-	-	45.000.34
36'	-	-	45.000.36
38'	-	-	45.000.38
40'	-	-	45.000.40



# Steering cable connectors and remote control adapter kits

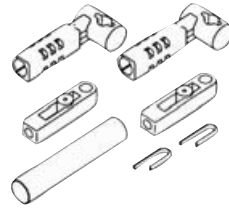


## K57 kit for cable connection



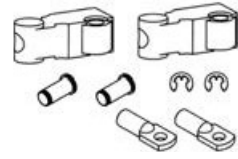
45.057.00 For cables C2/C8/C0 on engines Johnson/Evinrude

## K 56 kit for cable connection



45.056.00 For adapting cables C2/C8/C0 on Mercury engines

## K61 kit for cable connection



45.100.13 For adapting cable C22 to boxes B301 and B302

## "A.310" kit for cable connection



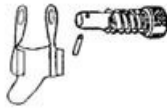
45.255.09 For mounting cables C2 on engines Yamaha/Mariner

## K35 kit for cable connection



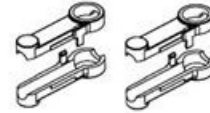
45.252.35 Needed to use cables C5/C16 with single-lever box B183/184/185/B310B-BR.

## K51 kit for cable connection



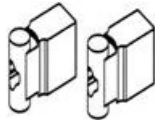
45.051.00 For connecting cables C14 to engines, to be used with single-lever on bulkheads.

## Adjusting kit for K60 cables



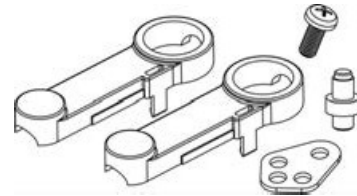
45.100.17 To connect C5/C16/Mach5 cables to B501/B502/B301/B302 control levers.

## K62 kit for cable connection



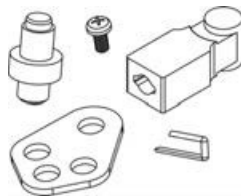
45.100.12 For adapting cables C36 and MACH36 to boxes B301/B302/B501/B502.

## **New** K63 kit for cable connection



45.100.20 For adapting cables C5/C16/MACH5 to boxes B322.

## **New** K65 kit for cable connection



45.100.21 For adapting cables C36/MACH36 to boxes B322.

## K23, K24, K25 kit for cable connection



Code	Kit	To be used on
45.047.23	K23	B47 with C14 OMC 1979 and later
45.047.25	K25	B47 with wire C2/C7/C8/C0



## K67

Code	To adapt cables
45.100.16	C2/C7/C8/MACHZERO to boxes B322/B324



## Fork for fixing radio remote control sheaths.

Made of **stainless steel**, designed for Johnson, Evinrude, Penta, Selva engines.

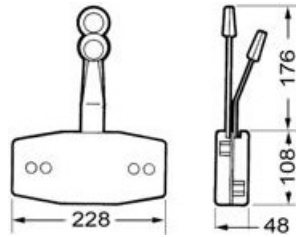
Code	Description
45.255.01	RIGHT painted in black (506001)
45.255.02	LEFT (50621Q)



## Control levers

### Box B47

**45.047.00** This kit is for Mercury engines. Special adapting kits available to connect to other brands engine.



### Single lever control B89/B90

Universal model, designed for side wall mounting either right of left. Recommended for outboard and inboard engines fitted with hydraulic inverter. Compact size, it can be fitted on any type of boat. Equipped with idle lever locking system, sold with **universal Kit**, it uses all types of cables except for C4 and C22. The K35 kit is required if cables C5 and C16 are used. The K51 kit is required if C14/MATCH14 are used.

Code	Type	Color
45.452.02BI	B89	Ivory
45.452.02NE	B90	Black

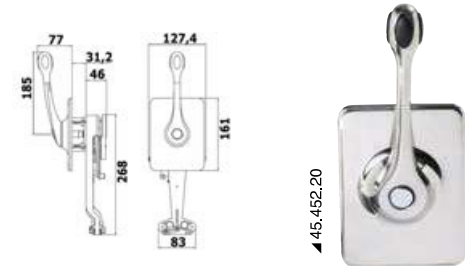


### Low-profile bulkhead single-lever control

Double action: gas + inverter: Modern and simple **smooth low profile** design, making it ideal for sailing boats. Front panel with lever made of AISI 316 stainless steel. Equipped with adjustable clutch. Availability of X41 safety switch to prevent engine ignition when the lever is not in idle position. Matching cables: C2/C8/MACH"0".

Code	Type	Version
45.452.20	B400	Mechanical (both gas and inverter)

45.452.22 X41 safety switch

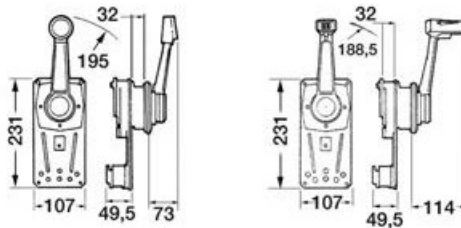


### Single lever control for recess wall mounting

Any cable may be used (except C22/C36/MACH 36). With cables C5 and C16/MACH 5 kit 35 is required. Suitable for any type of engine.

Code	Version	Abbreviation
45.452.04	with neutral lock	B183
45.452.05	with neutral lock and Trim switch	B184
45.452.06	sailboat version	B85
45.452.08	with neutral lock and Trim switch, black knob	B310B
45.452.09	with neutral lock and Trim switch, brier knob	B310BR

OPTION Safety microswitch 45.452.22 allows ignition only when the engine is in neutral position.



### Universal single lever box ULTRAFLEX B65/B77

**Chrome or lacquered** body, chromed lever. Uses cables C2/C7/C8/C14, with kit K35 you can also use cables C5/C16.

Code	Color	Trim control	Model
45.252.00	Painted	-	B73
45.252.02	Painted	x	B77



### Safety microswitch

It can be fitted in all Ultraflex boxes, it ignites the engine only when in neutral gear.

Code	Type	Suitable for
45.012.00	X12	All boxes except those with X41/X43 kits
45.452.22	X41	Boxes B183/B184/B85/B310/B400

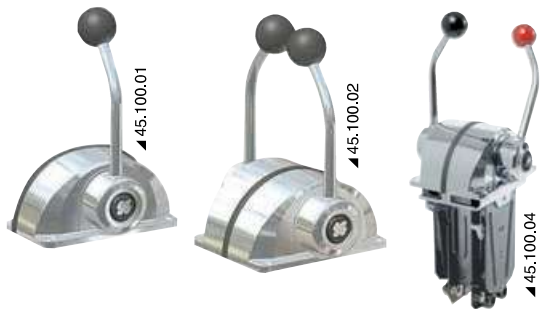




**Diecast and chromed alloy single lever controls**

Designed for panel mounting. Pull the lever outwards to disconnect the inverter during the engine warm up. Fitted with internal friction, they require C2/C8/ MACH0 cables.

Code	Model	Type
45.103.00	B103	Single engine
45.104.00	B104	Twin engine



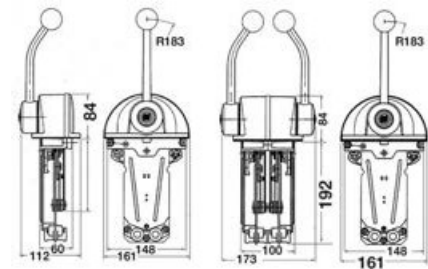
**Low Profile single lever control box**

**Compatible** with any type of engine, gas and inverter control function, very compact size, made of **chromed zamak**. Available in dual-operation version with **push button** inverter disconnection or in single-operation version where each lever controls the gas or inverter cable separately. It accepts any type of cable except for C4. Supplied ready to fit cables C2/C7/C8/MACHZero.

The X12 kit (45.012.00) is an **OPTION** and allows to ignite the engine while in neutral position. Cable connection kit:

- K60 (B301/B302) with cables C5/C16/MACH5;
- K62 (B301/B302) with cables C36/MACH36;
- K63 (B322) with cables C5/C16/MACH5;
- K65 (B322) with cables C36/MACH36;
- K67 (B322) with cables C2/C7/C8/MACH0.

For cables C5/C16/MACH5 ask for kit K60 (45.100.11). For cables C36/MACH36 ask for kit K62 (45.100.12). For cables C22 ask for kit K61 (45.100.13).



Code	Control box	Operation	Description
45.100.04	Dual-lever	Single	Single engine gas + inverter (B322)
45.100.02	Dual-lever	Dual	Twin engine (B302CR)
45.100.01	Single-lever	Dual	Single engine (B301CR)



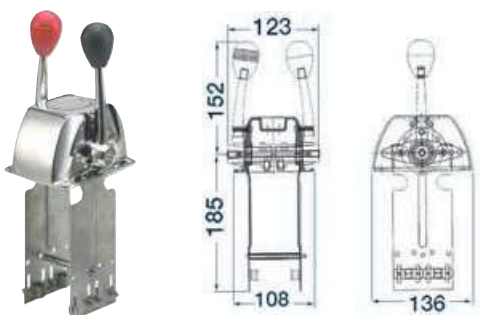
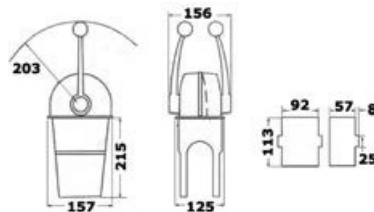
**TELEFLEX Morse single lever, series MT**



The most classical and most used single chromed lever; console mounting, It controls both inverter and idle, while the **idle** can be used without connecting the gearbox.



Code	Version
45.095.00	MT 3 Single, single engine
45.096.00	MT 3 Twin, two engines



**Control box suitable for controlling one engine**

Made of **chromed brass and AISI 316 stainless steel**. Suitable with cables: C2/C7/C8/C14.

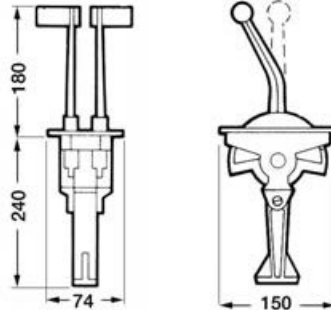
Code	mm
45.340.02	140x120x350

**Twin lever box GEMINI**

Require cables C2/C7/C8/C0 and C22 with adaptor K22.

Straight levers	Angled levers	Hand side
45.350.01-B50	45.350.01-B46	-
45.350.02-B59DX*	45.350.02-B58DX*	right
45.350.02-B59SX*	-	left

\* Safety lock allows to connect gearbox only at min RPM and to throttle only if inverter is fully connected.

**ULTRAFLEX B501 universal single-engine single-lever engine control**

Single-lever/dual-action control to operate the throttle and the reverse gear. Available with or without lock in neutral and with or without trim switches. In the twin engine installation a single switch will operate both levers.

With switch 45.012.00, ignition is only possible in neutral (OPTION).

For use with Ultraflex control cables:

- C14 cables require no connection kit.
- C2-C8-Mach0 cables come with K59 connection kit included.
- C5-C16-Mach5 cables require K60 connection kit (45.100.17) to be purchased separately.
- C36-Mach36 cables require K62 connection kit (45.100.12) to be purchased separately.

Code	Finish	Trim control	Lock in neutral	Model
45.254.00	Black	-	-	B51B
45.254.01	Chromed	-	-	B51CH
45.254.03	Black	x	x	B501BT/L
45.254.04	Chromed	x	x	B501CHT/L

**ULTRAFLEX****ULTRAFLEX B502 universal twin-engine two-lever engine control**

Two-lever/dual-action control to operate the throttle and the reverse gear.

With or without LOCK in neutral, with or without trim.

With switch 45.012.00, ignition is only possible in neutral (OPTION).

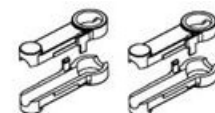
For use with Ultraflex cables:

- C14 cables require no connection kit.
- C2-C8-Mach0 cables come with K59 connection kit included.
- C5-C16-Mach5 cables require K60 connection kit (45.100.17) to be purchased separately.
- C36-Mach36 cables require K62 connection kit (45.100.12) to be purchased separately.

Code	Finish	Trim control	Lock in neutral	Model
45.254.10	Black	-	-	B502B
45.254.11	Chromed	-	-	B502CH
45.254.12	Black	x	x	B502BT/L
45.254.13	Chromed	x	x	B502BHT/L

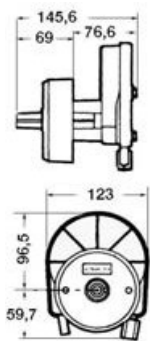
**ULTRAFLEX****Adjusting kit for K60 cables**

45.100.17 To connect C5/C16/Mach5 cables to B501/B502/B301/B302 control levers.





# ULTRAFLEX steering systems - Rotary steering systems



## Rotary steering System T 67

Suitable for outboard engines up to 55 HP, can also be used with Morse C230/231, Teleflex, Compact, TX805.

Box only with clutch and cover 90° black	M58 cable only
45.067.00	45.067.XX *

45.595.13; 45.595.14; 45.595.15; 45.595.16; 45.595.17; 45.595.18; 45.595.19 *Terminals and brackets for any kind of steering wheel from this catalogue (OPTION).*

\* *Pls check the detailed table here below to choose the right product depending on the length needed.*



## Cable M58

For control box (model 45.067.00)

Code	Length	Code	Length	Code	Length
45.067.07	7'	45.067.12	12'	45.067.17	17'
45.067.08	8'	45.067.13	13'	45.067.18	18'
45.067.09	9'	45.067.14	14'	45.067.20	20'
45.067.10	10'	45.067.15	15'	45.067.22	22'
45.067.11	11'	45.067.16	16'		



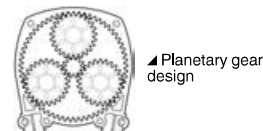
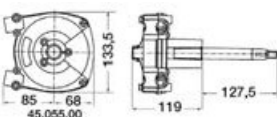
## Rotary steering system T 71

For outboard engines, stern drive engines up to 9/10 meters and speed up to 50 MPH, 4 steering cycle, curve radius minimum cable 200 mm, stroke 228 mm.

Control mech only	M66 cable only	Cover		
		90° black	90° chromed	20° black
45.055.00	45.185.xx*	45.055.02	45.055.05 <b>New</b>	45.055.03

45.595.13; 45.595.14; 45.595.15; 45.595.16; 45.595.17; 45.595.18; 45.595.19 *Engine side terminals and brackets for any kind of steering wheel from this catalogue (OPTION).*

\* *Pls refer to the detailed table at the end of the rotating system range to choose a cable of the right length.*



## Rotary steering system T 85

For outboard, inboard and SX-drive engines up to 9/10 meters and maximum speed of 50 MPH, steering cycle 3, minimum curve radius 200 mm, stroke 228 mm.

Control mech and cover 90°	M66 cable
45.185.00	45.185.XX *

45.595.13; 45.595.14; 45.595.15; 45.595.16; 45.595.17; 45.595.18; 45.595.19 *Terminals and brackets for any kind of steering wheel from this catalogue (OPTION).*

\* *Pls refer to the detailed table at the end of the rotating system range to choose a cable of the right length.*



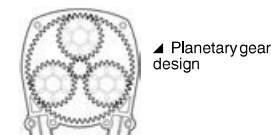
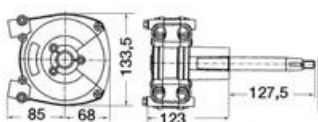
## Rotary steering system T 72

Designed for heavy power, hulls up to 10.50 meters and speed of over 50 MPH. Same features as model T71, but it works with **two** cables M66.

"T 72" control box only	M66 cable only	Cover		
		90° black	90° chromed	20° black
45.072.00	45.185.xx*	45.055.02	45.055.05 <b>New</b>	45.055.03

45.595.13; 45.595.14; 45.595.15; 45.595.16; 45.595.17; 45.595.18; 45.595.19 *Optional terminals and brackets to be chosen 45.595.13; 45.595.14; 45.595.15; 45.595.16; 45.595.17; 45.595.18; 45.595.19. It could be used with any kind of steering wheel from this catalogue (OPTION).*


\* *Pls refer to the detailed table at the end of the rotating system range to choose a cable of the right length.*




**Non reversible rotary steering system T 73**

Designed for hulls up to 9/10 meters and speed up to 50 MPH. This system allows you to leave the steering wheel without having the propeller cause vibration to the hull.

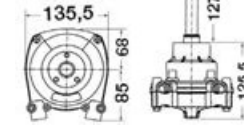
"T 73" control box only	M66 cable only	Cover		
		90° black	90° chromed	20° black
45.073.00	45.185.xx *	45.055.02	45.055.05 <b>New</b>	45.055.03

 45.595.13; 45.595.14; 45.595.15; 45.595.16; 45.595.17; 45.595.18; 45.595.19 Engine side terminals and brackets for any kind of steering wheel from this catalogue (OPTION).

 \* Pls refer to the detailed table at the end of the rotating system range to choose a cable of the right length.





▲ Planetary gear design

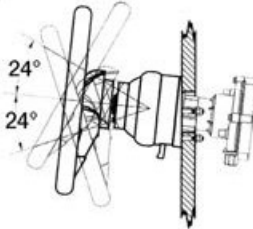


**Rotary steering system with adjustable wheel orientation**

Box	Model	Version	M66 cable only	90° hub for inclination of steering system up to 48°
45.081.00	T 81	Single for boats up to 9/10 metrs	45.185.xx *	45.038.00
45.083.00	T 83	Single non reversible for boats up to 9/10 m	45.185.xx *	45.038.00

 45.595.13; 45.595.14; 45.595.15; 45.595.16; 45.595.17; 45.595.18; 45.595.19 Terminals and brackets for any kind of steering wheel from this catalogue OPTIONAL

 \* Pls refer to the detailed table at the end of the rotating system range to choose a cable of the right length.



▲ Planetary gear design



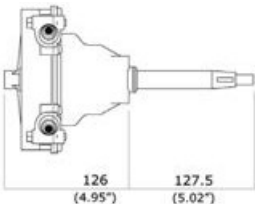
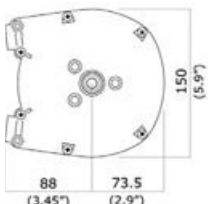
▲ 45.038.00



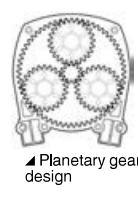
**T91/T93ZT rotary steering systems**

Features: high efficiency; patented M90 Mach quick-coupling cable. **Attention:** M90 Mach cable is also suitable for use with steering wheels using M66 cables but these latter are not fit for T91/T93ZT steering systems; Engine side stainless steel cable with watertight seal; Central shaft for easy installation; 4,2 steering wheel turns, 228-mm cable stroke, 408-mm Ø steering wheel, 200-mm minimum steering cable bend radius. Recommended for boats not faster than 50 MPH. Not to be used on boats equipped with engines that exceed the maximum HP rating of the boat. T93ZT non-reversible version. It isn't necessary to remove the steering wheel since the propeller rotation will not make the boat veer.

Code	Description	M90 MACH cable	Hub cover			Anti-theft device with chromed hub cover
			90° black	90° chromed	20° black	
45.060.00	Single steering system	45.186.xx	45.055.02	45.055.05 <b>New</b>	45.055.03	45.055.06
45.061.00	Non reversible steering system	45.186.xx	45.055.02	45.055.05 <b>New</b>	45.055.03	45.055.06



▲ 45.055.06



▲ Planetary gear design

▲ 45.060.00-45.061.00



▲ 45.060.00



▲ 45.061.00



▲ 45.061.00



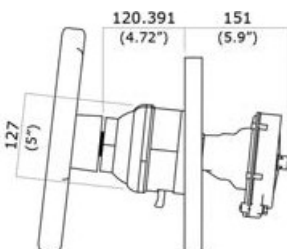
▲ 45.055.02/03

**T101/T103ZT rotary steering systems with adjustable wheel orientation**

M90 Mach patented steering cable. Same technical specification as 45.060.00 and 45.061.00. For max 50 MPH speed. Do not install on boats with more powerful engines.

Code	Description	M90 Mach cable	90° hub for inclination of steering system up to 48°
45.062.00	Single steering system	45.186.xx	45.038.00
45.063.00	Non reversible steering system	45.186.xx	45.038.00

▲ 45.062.00/  
45.063.00-45.038.00



▲ Planetary gear design



▲ 45.062.00



▲ 45.062.00-45.038.00



▲ 45.063.00



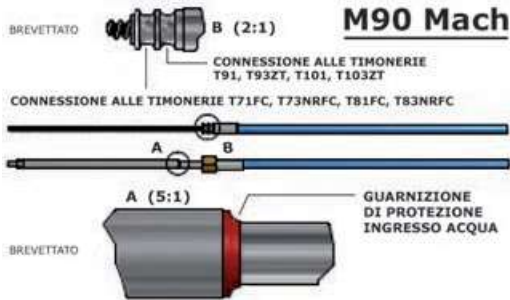
▲ 45.038.00



**Cable M66**

Can also be used as replacement for cables Teleflex SAFE-T

Code	Length	Code	Length	Code	Length
45.185.07	7'	45.185.14	14'	45.185.21	21'
45.185.08	8'	45.185.15	15'	45.185.22	22'
45.185.09	9'	45.185.16	16'	45.185.23	23'
45.185.10	10'	45.185.17	17'	45.185.24	24'
45.185.11	11'	45.185.18	18'	45.185.25	25'
45.185.12	12'	45.185.19	19'		
45.185.13	13'	45.185.20	20'		



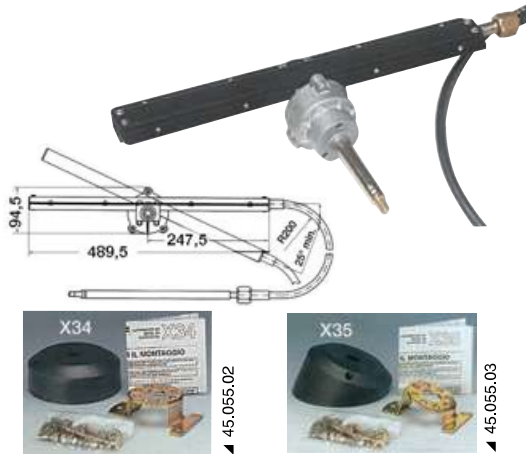
**Mach M90 cable**

Suitable for all Ultraflex steering systems using M90 and M66 cables and for Teleflex SAFE/TQC/NBF SAFE T II°/ NBF 4.2 steering systems.

Code	Length	Code	Length
45.186.07	7'	45.186.17	17'
45.186.08	8'	45.186.18	18'
45.186.09	9'	45.186.19	19'
45.186.10	10'	45.186.20	20'
45.186.11	11'	45.186.21	21'
45.186.12	12'	45.186.22	22'
45.186.13	13'	45.186.23	23'
45.186.14	14'	45.186.24	24'
45.186.15	15'	45.186.25	25'
45.186.16	16'		

For engine terminals see 45.595.13/14/15/16/17/18/19

**Steering systems - Straight line steering system**



**Straight line steering system T86**

Suitable for outboard boats up to 9 mt and inboard boats up to 10,5. The system consists of a steering box already fitted with cable (TM86) and has to be equipped with G86 shaft (45.059.00) and OPTIONAL 90° (45.055.02) or 20° (45.055.03) hub cap.

T86 control mech + different length cables	Cable length	T86 control mech + different length cables	Cable length	T86 control mech + different length cables	Cable length
45.059.13	13'	45.059.18	18'	45.059.23	23'
45.059.14	14'	45.059.19	19'	45.059.24	24'
45.059.15	15'	45.059.20	20'	45.059.25	25'
45.059.16	16'	45.059.21	21'		
45.059.17	17'	45.059.22	22'		

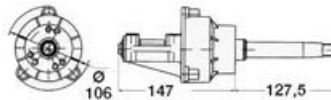
- 45.059.00 G86 shaft unit
- 45.055.02 90° cover OPTION
- 45.055.03 20° cover OPTION

For the complete steering system, order the following items: 45.059.xx+45.059.00+45.055.02/03



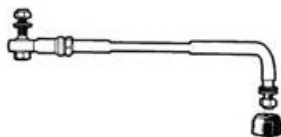
**Shaft unit**

45.059.00 Shaft unit G86



**Steering system accessories**

**Terminal A73**



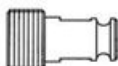
45.595.16 For cables on engines Mercury, Mariner, Yamaha, Suzuki, Tohatsu, Force and Honda

**Coupling A44**



45.044.00 For cables with terminal thread

**Adaptor K46**



45.046.00 For converting cables with threaded terminal (M47), cables with bayonet terminal (M66-45.185.10)

**Adaptor K66**



45.053.00 For convert cables M66 into cables M47 with a threaded terminal

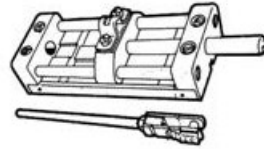


## Plate



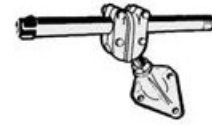
**45.545.03** For fitting steering gear onto engines Yamaha/Mariner

## Selector (L23)



**45.549.00** For double steering station, use to connect cables with single lever boxes as well as with traditional boxes

## Bracket S39



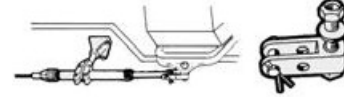
**45.595.13** Stainless steel stern bracket

## Terminal A74SS



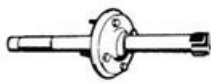
**45.595.17** For single cables on OMC

## Terminal A75



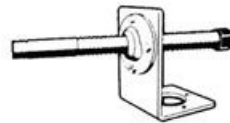
**45.595.18** For engine fitting on cables without passing on the dinghy

## Jointed bracket



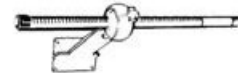
**45.595.14** S40 stainless steel bracket resistant to marine corrosion. For steering system mono-cables.

## Joint plate for steering systems



**45.595.15** S55 stainless steel joint plate for steering system cables.

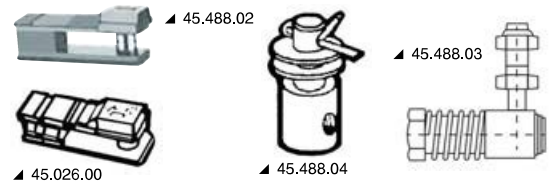
## Painted iron and stainless steel stern bracket



**45.595.19** Painted iron bracket with AISI304 stainless steel bolts and pin. To hold the single cable steering systems.

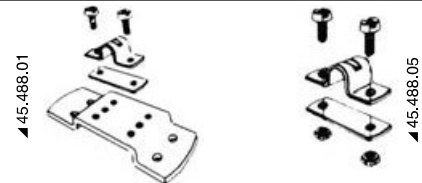
## Terminals for cables C2/C7/C8/C0

Code	Type	Suitable for cables
45.488.02	L25	C2 - C7 - C8 - MACH ZERO
45.488.03	L7	C2 - C7 - C8 - MACH ZERO
45.488.04	L12	C2 - C7 - C8 - MACH ZERO
45.026.00	L26	C22



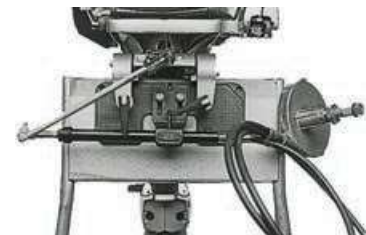
## Cable sheath holder

Code	Type	Suitable for cables
45.488.01	L3 with bracket	C2 - C7 - C8 - MACH ZERO
45.488.05	L14 with fork	C2 - C7 - C8 - MACH ZERO



## Device for mounting single cable steering gears

**45.147.00** Device designed for mounting single cable steering gears on motorized dinghies with outboard engines that are not made-ready to house single cables onto the boat's steering; this device avoids having to mount the steering gear cable onto the dinghy's transom; universal model, made of anodized aluminium, fitted with a plate model 47.763.92 + adjusting clamp + steering gear mounting pipe + small screw-in nylon bushings.



## Transom protective plate

Made of aluminium.

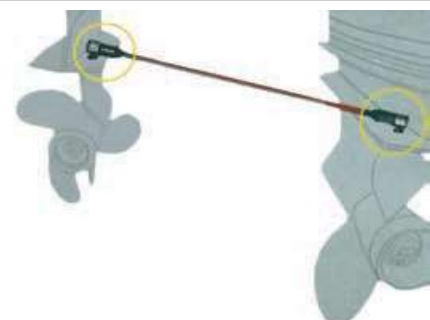
Code	mm
47.763.92	260x110



## Coupling bars

## Coupling rod

**45.560.00** Stainless steel with ball terminal joints, used to connect the main engine with an auxiliary one; the auxiliary steering can be handled with the boat steering system. Adjustable length from 45 to 60cm, easy to remove thanks to its spring ball fitting.



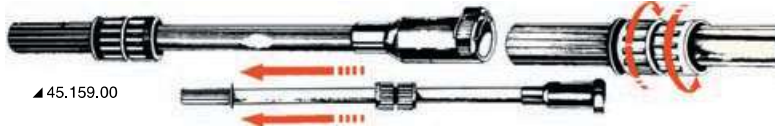


## Outboard tiller extensions

**OSCOLATI**



▲ 45.156.05



▲ 45.159.00

### Snap extension rod for outboard engines

Version fitted with **patented snap-in locking system**; universal model, anodized **aluminium** pipe, rubber hand grip and nylon lock.

Code	Version	Length cm
45.156.05	standard	60
45.159.00	telescopic	55/95



▲ 45.155.80/81



▲ 45.155.86

### Extension rod for outboard engine steering

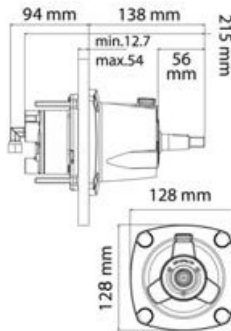
Wing nut mounting. Universal model made of anodized aluminium, equipped with knob and nylon locking system.

Code	Version	Length cm
45.155.80	Fixed	66
45.155.81	Fixed	76
45.155.86	Telescopic	61 / 100

## ULTRAFLEX hydraulic steering kits for outboard engines

**ULTRAFLEX**

**GOTECH**



### ULTRAFLEX Gotech hydraulic steering system for inboard/outboard engines up to 115 HP, supplied in complete kit

In compliance with EU 95/25 and ISO 10592 standards.  
 Supplied in kit containing:  
 - UP18 semi-recessed pump with check valve and relief valve. 18CC/revolution delivery, 5 pistons, 55-bar pressure, max 508-mm Ø wheel.  
 - hydraulic cylinder (see below).  
 - 2 x 6-m 1/4" hoses (that can be shortened if necessary). Complete with reusable terminal connectors  
 - 2 litres of hydraulic oil.

Code	Installation	Description	Wheel rev.	Thrust kg	Stroke mm
45.273.00	Front outboard	Gotech kit with UC81-OBF cylinder, 81-cc volume.	4,5	222	186
45.273.03	Front outboard	Gotech kit with UC68-OBS cylinder, 81-cc volume. Non-balanced side mounting.	3,7/5,5	-	203
45.273.01	Inboard	Gotech kit with UC69-I cylinder, 69-cc volume.	3,8	168	150

Engine	Model	Year	Engine.	Model.	Year.
MERCURY and MARINER	50-75-90 2S; 115 EFI 2S; 75-90-115 OPTIMAX 2S and 40-50-60 EFI 4S; 75-80-90 EFI 4S; 100-115 EFI 4S.	1990-2008; 1990-2007; 2004-2018; 2004-2018; 2000-up to now; 2007-up to now	SUZUKI	DF40-50-60-70-80-90 4S; DF100-115 4S*; DF100-115 4S.	1998-up to now; 1998-2008; 2008-up to now
ENVIRUDE	E40-E50-E55-E60 2S and E75-E90 2S; E115 2S V4.	2004-2020; 2004-2020; 1995-2020	TOHATSU-NISSAN	75-115-120-140 2S; 40-50-60-70-90-115 TLDI 4S; BFT 60-75-80-90-100 4S; BFT 115-150 4S; 40-50-60-70-90 2S; MFS 50-60-75-90-100-115 4S.	2004-up to now; 2004-up to now; 2015-up to now; 2015-up to now; 2004-up to now; 2018-up to now
YAMAHA	60-70 2S; 75C-90 2S; 115C 2S; F40G-F70 4S; F30-F40-F60-F75-F80 EFI 4S; F90-F100-F115 EFI 4S; F115; F80-F100 4S; F40D-F50F-F60C EFI 4S.	1984-2008; 1998-2008; 1990-2008; 2010-up to now; 1999-2007; 1999-2007; 2004-up to now; 1999-2007; 2000-up to now	SELVA	40XS-50 Madeira 2S; 40XS-50 Bull shark 2S; 40XS-60 Grey shark 2S; 40XS-60 St. Tropez 2S; 80 Portofino/Tigershark 2S; 25 Kingfish 4S; 40 Aruana 4S; 40XS-40XSR-50-60 Dorado EFI 4S; 40XSR EFI Murena 4S; 80XS-100-100XSR EFI Marlin 4S; 115-115XSR EFI Tarpon 4S; 115 EFI Narwhal 4S.	1995-up to now;  2000-up to now
HONDA	BF40-50-60-75-90 4S; BF115D; BF115A; BF90 V-TEC 4S.	1995-up to now; 1998-2009; 2009-up to now; 2008-up to now	JOHNSON	BJ19-115 4S; BJ60-70 4S; J90-115 V4 2S; J150-175 V6 2S.	2001-2007; 2001-2007; 1995-2007; 1995-2007

\* NOTE: with Suzuki® engines made between 1998 and 2008 (old model) and UC81-OBF cylinder, please, order adjusting kit 45.419.54.



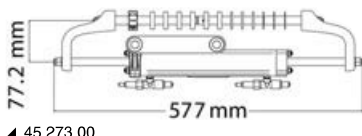
▲ 45.273.00



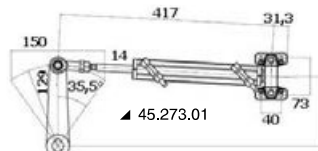
▲ 45.273.01



▲ 45.273.03



▲ 45.273.00



▲ 45.273.01

▲ 45.273.03



▲ 45.273.00

**Autopilot kit for application to steering systems 45.273.00/01/03**

- 45.273.10 The kit includes:
- 14 fittings.
  - 10-m TU1/4 reinforced hose.
  - 5-m TU95 hose.

**Hyco-OBS/M steering system - Max 150 HP, kit version**

- 45.270.09 It includes:
- UP20F pump (45.270.01);
  - UC68-OBS non-balanced side cylinder (45.273.03);
  - 2 x 6-m hoses;
  - 2 litres of hydraulic oil.

3,4/5 steering wheel revolutions

**HYTECH steering system max 175 HP, kit version**

- 45.270.10 The kit contains:
- UP20F pump.
  - UC95-OBF1 balanced cylinder (45.271.10).
  - 9-m hose kit, hose can be cut ( 1 unscrewing fitting).
  - 2 litres of hydraulic oil.

3,7 steering wheel revolutions.

**NAUTECH max 300 HP steering system kit**

- Kit contains:
- UP25F/UP28F pump
  - UC128 balanced cylinder.
  - 2 x 9-m hoses that can be shortened (1 screwable joint).
  - 2 litres of hydraulic oil.

Code	Initials	Description	Wheel rev.
45.283.01	UP25	Kit Nautech 3 with hydraulic cylinder UC128-OBF/1	4,8
45.283.02	UP25	Kit Nautech 3 with hydraulic cylinder UC128-OBF/2	4,8
45.283.15	UP28	Kit Nautech 1 with hydraulic cylinder UC128-OBF/1	4,3
45.283.16	UP28	Kit Nautech 1 with hydraulic cylinder UC128-OBF/2	4,3

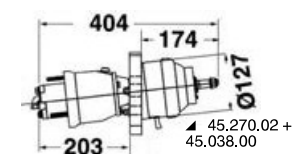
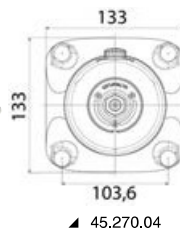
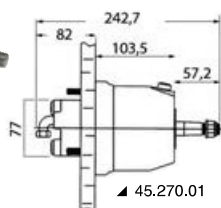
**ULTRAFLEX hydraulic steering system for outboard engines up to 150/175 HP**

UP20 F and UP20 T front pump.

Steering systems shall be supplemented with the following: 2 litres of oil 45.027.00; hose kit 45.290.35; 45.290.40; 45.290.45; 45.290.50; 45.290.55; 45.290.60; 45.290.65; 45.290.70. For mounting flanges see items 45.270.03; 45.270.04; 45.280.10.

Code	Version	Mounting	Cylinders	Max overpressure setting bar	Capacity c.c.	Steering wheel max Ø mm	Fittings
45.270.01	UP20 F	frontal	5	70	20	508	3/8"
45.270.02*	UP20 T	frontal/adjustable	5	70	20	406	-

\* 45.038.00 OPTIONAL Kit X52 for adjustable inclination of the steering wheel

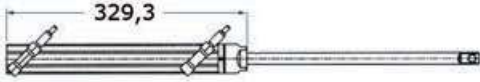
**Kit X52**

Code	Description
45.038.00	Designed to <b>adjust and incline</b> the steering wheel for a total of 48°





▲45.271.04



▲45.271.04



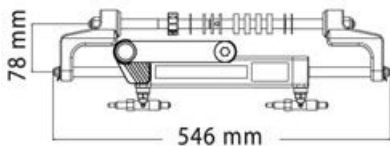
▲45.271.10



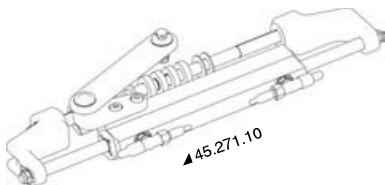
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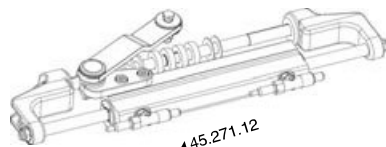
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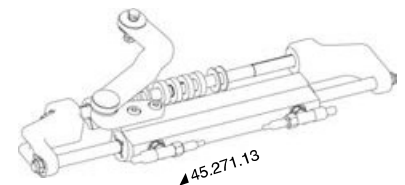
▲45.271.10/12/13



▲45.271.10



▲45.271.12



▲45.271.13

**Hydraulic cylinder 150/175 HP**

Steering systems have to be complete with: 2 litres of oil 45,027,01; hose kit 45,290,35; 45,290,40; 45,290,45; 45,290,50; 45,290,55; 45,290,60; 45,290,65; 45,290,70.

Engine	Model	Year	Cylinder
Mercury Mariner	100-115-150 EFI 2S	1991-2007	UC95 - OBF/1
Mercury Mariner	50-75-90 2S	1990-2008	UC95 - OBF/1
Mercury Mariner	75-90-115 Optimax 2S	2004-2018	UC95 - OBF/3
Mercury Mariner	125-135-150-175 Optimax 2S	1999-2018	UC95 - OBF/1
Mercury Mariner	40-50-60 EFI 4S	2004-up to now	UC95 - OBF/1
Mercury Mariner	75-80-90 EFI 4S/PRO XS/SEAPRO	2000-up to now	UC95 - OBF/1
Mercury Mariner	100-115-150 EFI 4S/PRO XS/SEAPRO	2007-up to now	UC95 - OBF/1
Mercury Mariner	175-V6 4S/SEAPRO	2018-up to now	UC95 - OBF/1
Evinrude	E40-E50-E55-E60 2S	2004-2020	UC95 - OBF/1
Evinrude	E75-E90 2 Stroke V4	2004-2020	UC95 - OBF/1
Evinrude	E115-E130-E135 2 Stroke V4	1995-2020	UC95 - OBF/1
Evinrude	E150-175 2 Stroke V6	1995-2020	UC95 - OBF/1
Yamaha	60-70 2S	1984-2008	UC95 - OBF/1
Yamaha	75C-90 2S	1998-2008	UC95 - OBF/1
Yamaha	115C-130B-150F 2S	1990-2008	UC95 - OBF/1
Yamaha	150-175 HPDI VMAX 2S	2000-2007	UC95 - OBF/1
Yamaha	F60-F75-F80 EFI 4S	1999-2007	UC95 - OBF/1
Yamaha	F90-F100-F115-F150 EFI 4S	1999-2007	UC95 - OBF/1
Yamaha	F115-F150-F175 L4 4S	2004-up to now	UC95 - OBF/1
Honda	BF75-80-90-100 4S	1995-up to now	UC95 - OBF/1
Honda	BF 115D-BF130A	1998-2009	UC95 - OBF/3
Honda	BF115A 4S	2009-up to now	UC95 - OBF/1
Honda	BF135-150 4S	2005-up to now	UC95 - OBF/1
Honda	BF175-4S	2001-up to now	UC95 - OBF/1
Suzuki	DF70-80-90 4S	1998-up to now	UC95 - OBF/1
Suzuki	DF100-115-140 4S	2008-up to now	UC95 - OBF/1
Suzuki	DF150-175 4S	2006-up to now	UC95 - OBF/1
Thoatsu Nissan	115-120-140 2S	2004-up to now	UC95 - OBF/1
Thoatsu Nissan	70-90-115 TLDI 4S	2004-up to now	UC95 - OBF/1
Thoatsu Nissan	BFT 60-75-80-90-100 4S	2015-up to now	UC95 - OBF/1
Thoatsu Nissan	BFT 115-150 4S	2015-up to now	UC95 - OBF/1
Thoatsu Nissan	MFS 50-60-75-90-100 4S	2018-up to now	UC95 - OBF/1
Selva	80 Portofino/Tigershark 2S	1995-2008	UC95 - OBF/1
Selva	150 Whiteshark 2S	2001 - 2007	UC95 - OBF/1
Selva	100 EFI Marlin - 115 EFI Narwhal	2001 - 2007	UC95 - OBF/1
Selva	100-150 EFI Killer Whale 4S	2000-up to now	UC95 - OBF/1
Johnson	BJ90-115-140 4S	2001 - 2007	UC95 - OBF/1
Johnson	BJ70 4S	1995 - 2007	UC95 - OBF/1
Johnson	J90-115 V4 2S	1995 - 2007	UC95 - OBF/1
Johnson	J150-175 V6 2S	1995 - 2007	UC95 - OBF/1

Code	Type	Use	Mounting	Balanced	Volume CC	Thrust kg	Fittings
45.271.04	UC68-OBS	Outboard	Side	Yes	66	168	3/8"
45.271.10	UC95-OBF1	Outboard	Front	Yes	120	450	3/8"
45.271.12	UC95-OBF2	Outboard	Front	Yes	120	450	3/8"
45.271.13*	UC95-OBF3	Outboard	Front	Yes	120	450	3/8"

\* UC95-OBF2 similar to UC95-OBF1 but allows a wider tilting angle. **Only upon request**

**ULTRAFLEX hydraulic steering system for outboard engines up to 300 HP**

Hydraulic pump - Fitted with check valve.  
For mounting flanges, see items 45.270.03; 45.270.04; 45.280.10.

Code	Initials	Mounting	Flow/rev. cc	Pistons	Pressure bar	Max st.wheel Ø mm	Fittings	kg
45.280.00	UP25F	Front	25	5	70	710	3/8"	5
45.280.01	UP28F	Front	28	5	70	710	3/8"	5
45.280.02	UP33F	Front	33	5	70	710	3/8"	5
45.280.03	UP39F	Front	39	7	70	710	3/8"	5
45.280.33	UP45F	Front	45	7	70	710	3/8"	5
45.280.04	UP33R	Rear-dashboard	33	7	70	710	3/8"	5
45.280.07	UP28R	Rear-dashboard	28	5	70	710	3/8"	5
45.280.08	UP39R	Rear-dashboard	39	7	70	710	3/8"	5
45.280.11	UP45F	Rear-dashboard	45	7	70	710	3/8"	5

45.270.08 X68 chromed flange for hydraulic pumps

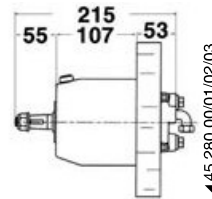
45.270.07 "F" kit for easier filling up and cleaning of hydraulic pumps



▲ 45.280.00/01/02/03/33



▲ 45.280.04/07/08/11



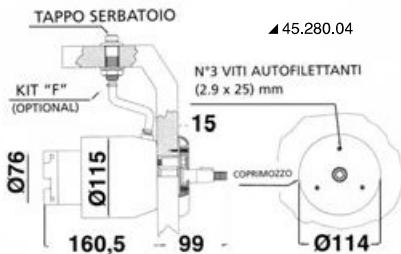
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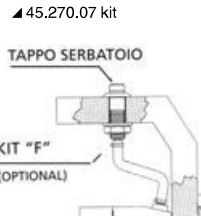
▲ 45.270.07



▲ 45.270.08



▲ 45.280.04



▲ 45.270.07 kit

**Hydraulic pump**

Made ready for mounting kit X52 (45.038.00), wheel inclination.

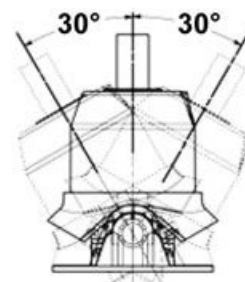
Code	Initials	Flow per turn cc	Pistons	Pressure bar	Max st.wheel Ø mm	kg
45.281.01	UP28T	28	5	70	710	5
45.281.02	UP33T	33	5	70	710	5
45.281.03	UP39T	39	7	70	710	5

**Kit X52**

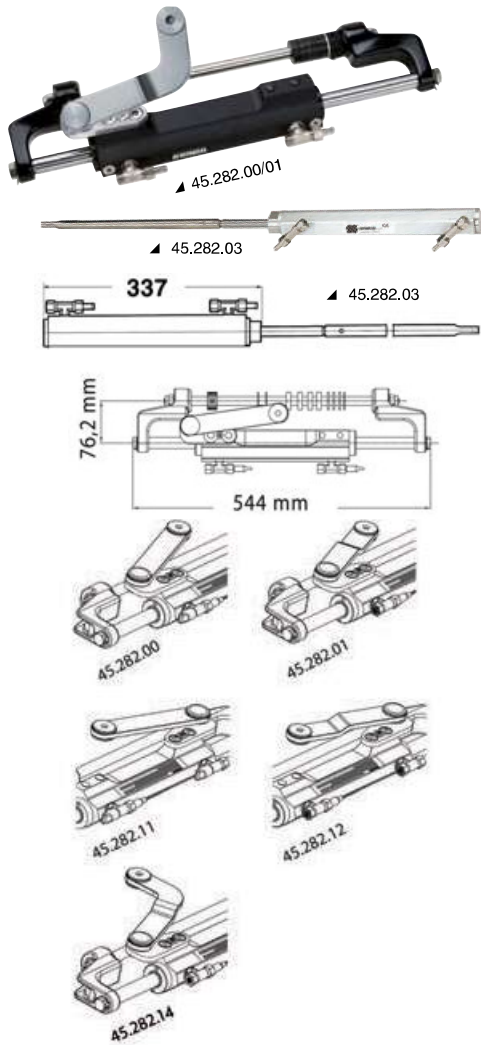
Code	Description
45.038.00	Designed to <b>adjust and incline</b> the steering wheel for a total of 48°

**X72 kit**

45.040.00 It adjusts the steering wheel inclination in 5 positions up to 60°. In comparison with TILT systems 45.038.00/45.039.00, it has a dramatically reduced size since it has to be fixed to the panel and wraps the hydraulic pump.







Hydraulic cylinder for outboard engines

Engine	Model	Year	Cylinder
MERCURY and MARINER	115-125-150 EFI 2S; 225-250 EFI 2S; 75-90-115 Optimax; 135-150-175 Optimax; 200-225-250 Optimax; Racing 300 Optimax; 100-115 EFI 4S; 250 Saltwater EFI 4S; 135-150-175-200 Verado L4; Fourstroke/Pro XS 225-300 V8	1990-2007; 2000-2007; 2004-2018; 1999-2018; 1999-2018; 1999-2011; 2007-up to now; 2007-2011; 2004-2012; 2018- up to now; 2018-up to now 2004-up to now;	UC128-OBF/1; UC128-OBF/1; UC128-OBF/3; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1
	ENVIRUDE	E75-E90 2S; E115-E130-E135 2S V4; E150-E175-E200-E225-E250-E300 2S V6 115C-130B 2S; 75C-90 2S; F70 4S; 150F-200F-250G 2S; 150 HPDI VMAX 2S; 175-200-225-250-300 HPDI VMAX 2S; F115-F150 EFI 4S; F200-F225-F250 4S; F115-F130-F150D-F150F-F175A-F200F-F200G L4; F200-F225-F250-F300 V6 4S	1995-2020; 1995-2020; 1990-2008; 1998-2008; 2010-up to now; 1990-2008; 1996-2007; 2000-2008; 2000-2008; 1999-2007; 2002- up to now; 2004- up to now 1995-up to now; 1998-up to now; 2005-up to now; 2008-up to now; 2001-up to now 1998-up to now; 1998-2008;
YAMAHA	DF70-80-90 4S; DF100-115-140 4S*; DF150-175-DF200 L4 4S; DF200-DF225-DF250-DF300-V6 4S	1998-up to now; 2006-up to now 2004-up to now 2004-up to now; 2018-up to now; 2014-up to now; 2015-up to now	UC128-OBF/3; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1
HONDA	BF115-BF130 4S; BF135-BF150 4S; BF150 V-TEC 4S; BF175-BF200-BF225-BF250 4S	1998-up to now; 2005-up to now; 2008-up to now; 2001-up to now 1998-up to now; 1998-2008;	UC128-OBF/3; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1 UC128-OBF/1; UC128-OBF/3;
SUZUKI	DF70-80-90 4S; DF100-115-140 4S*; DF150-175-DF200 L4 4S; DF200-DF225-DF250-DF300-V6 4S	1998-up to now; 2006-up to now 2004-up to now 2004-up to now; 2018-up to now; 2014-up to now; 2015-up to now	UC128-OBF/1 UC128-OBF/1; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1; UC128-OBF/1
TOHATSU	115-120-140 2S; 70-90-115 TLDI 4S; MFS50-60-75-90-100-115 4S; BFT115-150-200-225-250 4S; BFT60-75-80-90-100 4S 80 Portofino/Tigershark 2S; 150 White Shark 2S; 100EFI Marlin -115 EFI Narwhal-; 225 Beaked Whale 4S; 100-150 EFI Killer Whale 4S; 200 SEI Whale 4S	1995-2008; 2001-2007; 2000-up to now; 2019-up to now; 2000-up to now	UC128-OBF/1; UC128-OBF/2; UC128-OBF/2; UC128-OBF/2; UC128-OBF/1
SELVA	BJ90-115-140 4S; J90-115 V4 2S; J150-175 V6 2S; J200-225 V6 4S	2001-2007; 1995-2007; 1995-2007; 2004-2007	UC128-OBF/1; UC128-OBF/2; UC128-OBF/2; UC128-OBF/2
JOHNSON			UC128-OBF/1; UC128-OBF/2; UC128-OBF/2; UC128-OBF/2

\*NOTE: in case of Suzuki® models made from 1998 to 2008 (old model), cylinder UC128-OBF/1 shall be ordered along with adjustment KIT 45.419.54. For higher power uses, we recommend the "high performance" SilverSteer™ cylinder.

Code	Mounting	Trimmed	Volume cc	Thrust kg	Stroke mm	Pipe joints	Type
45.282.00	front right	yes	120	450	185	3/8"	UC-128-OBF/1
45.282.01	front right	yes	120	450	185	3/8"	UC-128-OBF/2
45.282.11	front left	yes	120	450	185	3/8"	UC-128P OBF/1
45.282.12	front left	yes	120	450	185	3/8"	UC-128P OBF/2
45.282.14	front	yes	120	450	185	3/8"	UC-128 OBF/3
45.282.03	side, non trimmed	no	132/163	455/563	203	3/8"	UC 132 OBS

HOW TO ORDER ITEM 45.282.01

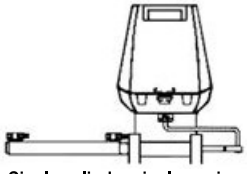
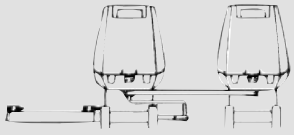
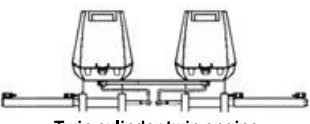
Technical specifications and buying advice for steering systems

SYSTEM	List of components	Codes	Quantity
<p>Single-cylinder single-engine Steering wheel rev.: 4.5 Application up to max 300 hp</p>	Cylinder	45.282..	1
	Pump	45.280.00/01	1
	Pipe kit	45.290.35..	1
	Oil	45.027.01	2
	Steering wheel	-	-
	For additional stations, add	-	-
	Pump	45.280.00/01	1
Joint kit	45.290.15	1	
Pipe kit	45.290.35..	1	
Oil	45.027.01	2	
<p>Single-cylinder twin-engine Steering wheel rev.: 4,8/4,3 Applications: up to max. 300 hp (non counter-rotating engines); max 500 hp (counter-rotating engines)</p>	Cylinder	45.282..	1
	Pump	45.280.00/02	1
	Pipe kit	45.290.35..	1
	Oil	45.027.01	2
	Connection rod	at 94	-
	For additional stations, add	-	-
	Pump	45.280.00/02	1
Joint kit	45.290.15	1	
Pipe kit	45.290.35..	1	
Oil	45.027.01	2	
<p>Twin-cylinder twin-engine Wheel rev.: 6,1/5,3 - Applications: up to max 500 hp (non counter-rotating engines); up to 600 hp (counter-rotating engines)</p>	Cylinder	45.282..right/left	2
	Pump	45.280.03/33	1
	Pipe kit	45.290.35..	2
	T-joint kit	standard	1
	Oil	45.027.01	4
	Connection rod	at 90	-
	For additional stations, add	-	-
	Pump	45.280.03	1
	Joint kit	45.290.15	1
	Pipe kit	45.290.35..	1
Oil	45.027.01	2	

⚠ Cylinder 45.282.00/01 is not recommended if maximum speed of the boat exceeds 60 knots

## HOW TO ORDER ITEM 45.282.03

**APPLICATION 45.282.03.** Same features of model 45.282.01 with the additional information concerning engines Johnson & Evinrude: the cylinder 45.282.03 is not required when an assisted steering engine OMC is already fitted with cylinder model 985519, in this case use n° 2 connecting joints (ref. Parker model F6X-5 10-3/8")

FOR SYSTEM	Component list	Code	Quantity
 <p><b>Single cylinder single engine</b> Steering wheel revolutions: 4,7/5,8 Application up to 300 hp max</p>	Cylinder	45.282.03	1
	Pump	45.280.00/01	1
	Pipe kit	45.290.35..	1
	Oil	45.027.01	2
	Steering wheel	-	-
	For additional stations, add	-	-
	Pump	45.280.00/01	1
	Joint kit	45.290.15	1
	Pipe kit	45.290.35..	1
	Oil	45.027.01	2
 <p><b>Single cylinder twin engine</b> Steering wheel revolutions: 4/5 Application up to: 300 hp max (non contra-rotating engines); 450 hp max (contra-rotating engines)</p>	Cylinder	45.282.03	1
	Pump	45.280.00/01	1
	Pipe kit	45.290.35..	1
	Oil	45.027.01	2
	Connection rod	supplied by the engine manufacturer	-
	Steering Wheel	-	-
	For additional stations, add	-	-
	Pump	45.280.00/01	1
	Joint kit	45.290.15	1
	Pipe kit	45.290.35..	1
 <p><b>Twin cylinder twin engine</b> steering wheel revolutions: 6,5 Application up to 500 hp max (non contra rotating engines); up to 600 hp (contra rotating engines)</p>	Cylinder	45.282.03	2
	Pump	45.280.03	1
	Pipe kit	45.290.35..	2
	Oil	45.027.01	2
	Connection rod	supplied by the engine manufacturer	-
	Steering Wheel	-	-
	For additional stations, add	-	-
	Pump	45.280.03	1
	Joint kit	45.290.15	1
	Pipe kit	45.290.35..	1
Oil	45.027.01	2	



Cylinder 45.282.02 is not recommended if maximum speed of the boat exceeds 60 knots

## Return rod Kit

This allows to adapt cylinders 45.282.00-01-11-12 to different engines. I.E. if engine has been replaced and cylinder not,

Code	Type	For
45.282.21	LA 1	UC-128-OBF/1
45.282.22	LA 2	UC-128-OBF/2
45.282.23	LA 3	UC-128-OBF/3
45.281.24	LA1P	UC-128P-OBF/1
45.281.25	LA2P	UC-128P-OBF/2



## Kit 2 flexible pipes

Blended for onboard steering gears Ultraflex.

Code	Length m	Code	Length m	Code	Length m
45.290.35	3,5	45.290.55	5,5	45.290.80	8
45.290.40	4	45.290.60	6	45.290.90	9
45.290.45	4,5	45.290.65	6,5	45.290.93*	15
45.290.50	5	45.290.70	7		

\* 15 m, can be cut, with reusable fittings



## 3/8" hose



Code	Rolls m
45.291.00	20

## Kit OB-2S



Code	Description
45.290.15	For additional station or for automatic pilot installation. It includes: 16 x fittings; 10 metres of 5/16" hose; 10 metres of 3/8" nylon hose

## Kit 95-2S



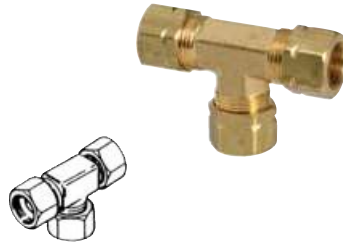
Code	Description
45.290.16	second station joints

**Nut with spinner**



Code	Description
45.290.20	3/8" (61 CA)

**T-joint**



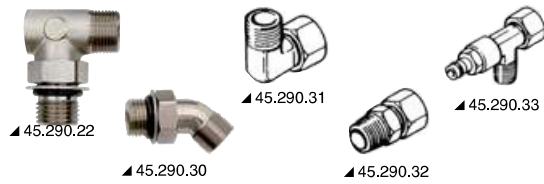
Code	Description
45.290.23	3/8" (TF38)

**Kit including 2 high-resistance reinforced hoses, already jointed for double cylinder and double engine connection**



Connected with rotating nuts and stiffening sleeves. To combine with bulkhead cross 45.028,28; 45.028,30.

Code	Length cm
45.290.11	70
45.290.12	90
45.290.13	120



**Fittings for hydraulic steering systems**

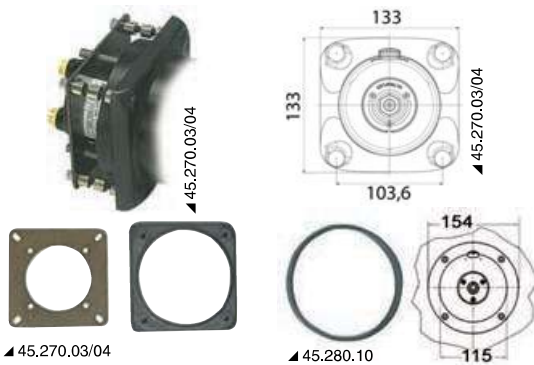
For all ULTRAFLEX pumps.

Code	Description
45.290.22	90° adjustable fitting
45.290.30	45° swivel fitting
45.290.31	90° 3/8" swivel fitting
45.290.32	Straight fitting for 3/8" tube
45.290.33	T fitting for 3/8" drain



**ULTRAFLEX service kit for pumps and hydraulic cylinders**

Code	Description
45.291.10	Seal kit/pump shaft UP20 (code 45.270.01)
45.291.11	Seal kit/pump shaft for pumps UP25, UP28, UP33, UP39 and UP45
45.291.20	Seal kit for cylinder UC94 code 42918X and 42958N
45.291.21	Equipment kit for UC94 cylinders with code 42918X and 42958N (needed to mount the seal without damaging the cylinder)
45.291.30	Spare head for UC128 cylinder code 39423Z, 39966R, 39967T, 40106U, 40107W (2 pcs required for each cylinder)



**Flanges for hydraulic steering gears ULTRAFLEX**

Code	Type	For steering systems
45.270.03*	Square (x64)	UP25F; UP28F; UP33F; UP39F; UP45F; UP28FVS; UP33FVS; UP39FVS
45.270.04	Square (x74)	UP20F **
45.280.10	Round (x57)	UP25F; UP28F; UP33F; UP39F; UP45F; UP28FVS; UP33FVS; UP39FVS

\* Hydrflex-like look.

\*\* For pumps UP20F (45.270.01) serial number 424685, use flange x64 (45.270.03) or x57 (45.280.10).

**ULTRAFLEX Silversteer hydraulic steering system for outboard engines up to 350 HP**



Hydraulic pump - Equipped with check valve. For mounting flanges see items 45.270.03, 45.270.04, 45.280.10.

Code	Type	Mounting	Capacity cc/rev.	Pistons	Pressure bar	steering wheel max Ø mm
45.275.01	UP28 FSVS	front	28	5	105	710
45.275.11*	UP28T-SVS	front/adjustable	28	5	105	406
45.275.02	UP33 FSVS	front	33	7	105	710
45.275.12*	UP33T-SVS	front/adjustable	33	7	105	406
45.275.03	UP39 FSVS	front	39	7	105	710
45.275.13*	UP39T-SVS	front/adjustable	39	7	105	406




\* 45.039.00 Kit X70SVS for steering wheel adjustable inclination up to 48°

**X70SVS kit**



Code	Description
45.039.00	To tilt the steering wheel up to 48°.

## SILVER STEER steering system installation

FOR SYSTEM	Applications	Steering wheel revolutions	Components	Code	Model	Q.ty
 Single cylinder single-engine	Up to max 350 hp	4.3 (UP28)	Cylinder Pump pipe kit Oil	-	UC130-SVS UP30 or UP33-SVS Kit OB-SVS 45.027.01	1
		45.275.01/11/12/02		2		
		45.277.xx 45.027.01		2		
 Single cylinder twin-engine	Non contra-rotating engines up to max 350 hp	4.3 (UP28)	Cylinder Pump pipe kit Oil Connecting rod	-	UC130-SVS UP30 or UP33-SVS Kit OB-SVS 45.027.01 A94	1
		45.275.01/02/11/12		1		
	45.277.xx 45.027.01	1				
	45.027.01	2				
 Double cylinder twin-engine	Non contra-rotating engines up to max 600 hp	6.1 (UP33)	Cylinder Cylinder port Pump pipe kit Oil Connecting rod Connection kit	-	UC130-SVS UC130P-SVS UP33-SVS KIT OB-SVS 45.027.01 A90 KIT OB-2C-SVS	2
				45.275.03/13		1
	45.277.xx 45.027.01	1				
	45.156.11	2				
	45.156.11	4				

## Hydraulic piston

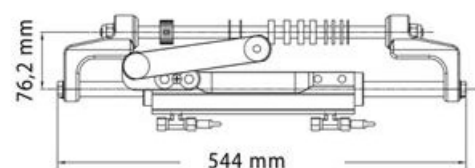
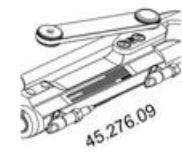
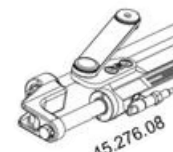
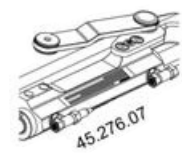
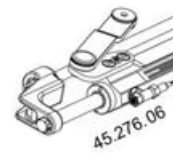
With adjustable joints and ULTRABOLT high-resistance connecting bolt.

ENGINE	MODEL	YEAR	CYLINDER
MERCURY and MARINER	115-125-150 EFI 2S; 225-250 EFI 2S; 135-150-175 Optimax; 200-225-250 Optimax; RACING 300 Optimax; 250 Saltwater EFI 4S; 135-150-175-200 Verado L4; Fourstroke 175-200 V6; Fourstroke 225-300 V8	1990-2007; 2000-2007; 1999-2018; 1999-2018; 1999-2011; 2007-2011; 2004-2012; 2018-up to now; 2018-up to now	UC130-SVS/1
ENVIRUDE	E115-E130-E135 2S V4; E150-E175-E200-E225-E250-E300 2S V6	1995-up to now	UC130-SVS/2
YAMAHA	115C-130B 2S; 150F-200F-250G 2S; 150 HPDI VMAX 2S; 175-200-225-250-300 HPDI VMAX 2S; F115-F150 EFI 4S; F200-F225-F250 4S; F115-F150-F175-F200 L4; F200-F225-F250-F300 V6 4S; F350 4S V8	1990-2008; 1990-2008; 1996-2007; 2000-2008; 2000-2008; 1999-2007; 2002-up to now; 2004-up to now; 2006-up to now	UC130-SVS/2; UC130-SVS/2; UC130-SVS/2; UC130-SVS/2; UC130-SVS/1; UC130-SVS/2; UC130-SVS/1; UC130-SVS/2; UC130-SVS/2;
HONDA	BF135-BF150 4S; BF150 V-TEC 4S; BF175-BF200-BF225-BF250 4S	2005-up to now; 2008-up to now; 2001-up to now	UC130-SVS/1
SUZUKI	DF100-115-140 4S*; DF150-175-DF200 L4 4S; DF200-DF225-DF250-DF300-DF350 V6 4S	2008-up to now; 2006-up to now; 2004-up to now	UC130-SVS/1
TOHATSU	115-120-140 2S; 70-90-115 TLDI 4S; MFS50-60-75-90100-115 4S; BFT115-150-200-225-250 4S; BFT60-75-90-100 4S	2004-up to now; 2004-up to now; 2018-up to now; 2014-up to now; 2015-up to now	UC130-SVS/2; UC130-SVS/1; UC130-SVS/1; UC130-SVS/1; UC130-SVS/1
SELVA	80 Portofino/Tigershark 2S; 150 White Shark 2S; 100EFI Marlin -115 EFI Narwhal; 225 Beaked Whale 4S 150EFI Killer Whale 4S - 200 SEI Whale 4S	1995-2008; 2001-2007; 2000-up to now; 2019-up to now; 2000-up to now	UC130-SVS/1; UC130-SVS/2; UC130-SVS/1; UC130-SVS/2; UC130-SVS/1
JOHNSON	BJ90-115-140 4S; J90-115 V4 2S; J150-175 V6 2S; J200-225 V6 4S	2001-2007; 1995-2007; 1995-2007; 2004-2007	UC130-SVS/1; UC130-SVS/2; UC130-SVS/2; UC130-SVS/2

\*NOTE: When ordering cylinder UC130-SVS/1 for Suzuki® models manufactured from 1998 to 2008 (old model), please, also order adjusting KIT 45.419.54.

Code	Type	Volume cc	Thrust kg	Stroke mm	Fittings
45.276.06	UC130 - SVS/1	130	492	185	3/8
45.276.07*	UC130P - SVS/1	130	492	185	3/8
45.276.08	UC130 - SVS/2	130	492	185	3/8
45.276.09*	UC130P - SVS/2	130	492	185	3/8

\* For applications with double cylinder (bimotor), cylinder with left symmetrical fitting.







### Pair of SILVER STEER high-pressure hoses

Kit including a pair of high-resistance hoses reinforced with pre-crimped fittings and anti-crush reinforcing sleeves.

Code	Type	Length m
45.277.55	OB-SVS 55	5,5
45.277.60	OB-SVS 60	6
45.277.65	OB-SVS 65	6,5
45.277.70	<b>New</b> OB-SVS 70	7
45.277.80	<b>New</b> OB-SVS 80	8



**New**

### Double cylinder/double engine coupling kit for UC-130-SVS cylinders

Code	Engine centre distance mm	Hose length mm
45.278.01	660	381
45.278.02	686	407
45.278.03	711	432
45.278.04	724	445
45.278.05	737	457
45.278.06	762	483
45.278.07	777	496

### Coupling rods

For outboard engines, made of stainless steel.



Code	Steering systems	Type	Engine to engine mm
45.156.08	hydraulic/mechanical	A92, easily adjustable, for small spaces	550/700
45.156.09	hydraulic/mechanical	A92, easily adjustable, for small spaces	700/950
45.156.10	hydraulic/mechanical	A88	650/950



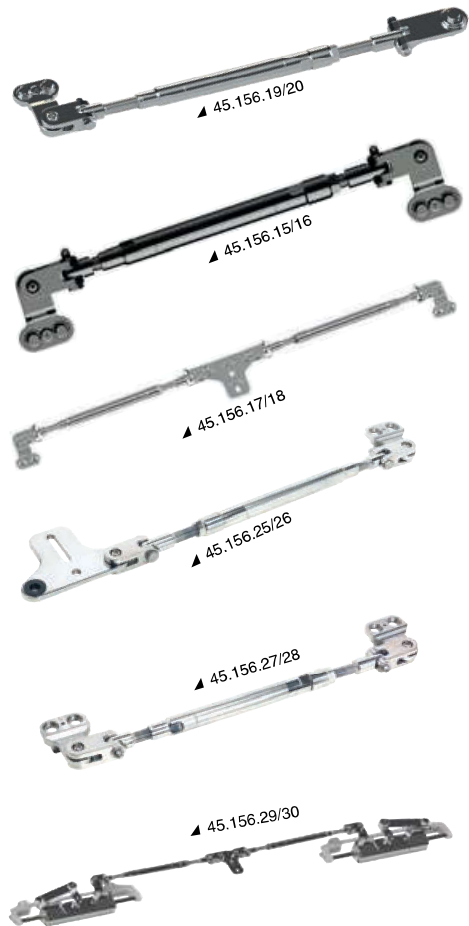
**New**

### SUZUKI DF100/115/140 coupling rod

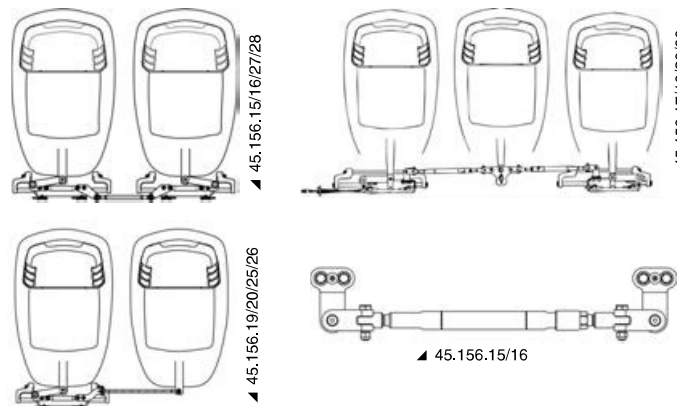
45.156.33 For double engine/double cylinder. 660/950-mm engine centre distance.

### Coupling rod for outboard engine with hydraulic steering

Double/triple engine, with brackets, UC128/UC130 cylinders. All parts made of stainless steel.



Code	Model	Cylinder type	Engines		Independent tilting	Engine centre distance mm
			N.	type		
45.156.19	A96-29	Single	2	Mercury/Yamaha	Yes	660/736
45.156.20	A96-34-5	Single	2	Mercury/Yamaha	Yes	736/873
45.156.15	A95-32	Double	2	Mercury/Yamaha	Yes	660/813
45.156.16	A95-375	Double	2	Mercury/Yamaha	Yes	813/952
45.156.17	A97-30	Double	3	Mercury/Yamaha	Yes	660/762
45.156.18	A97-35,5	Double	3	Mercury/Yamaha	Yes	762/901
45.156.25	<b>New</b> A96-B29	Single	2	Suzuki/Honda	Yes	660-736
45.156.26	<b>New</b> A96-B34-5	Single	2	Suzuki/Honda	Yes	736-873
45.156.27	<b>New</b> A95-B32	Double	2	Suzuki/Honda	Yes	660-813
45.156.28	<b>New</b> A95-B37-5	Double	2	Suzuki/Honda	Yes	813-952
45.156.29	<b>New</b> A97-B30	Double	3	Suzuki/Honda	Yes	660-762
45.156.30	<b>New</b> A97-B35-5	Double	3	Suzuki/Honda	Yes	762-901



**Hydraulic cylinder for inboard/outboard engines**

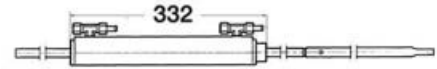
Trimmed version. It matches pumps 45.280.00/01/02/03/33/04/07/08.

Applications

Engine	Year	Foot model	INBOARD-OUTBOARD CYLINDERS			
			non-assisted steering engine	notes	assisted steering engine	notes
MERCURISER®	Current	ALPHA; BRAVO ONE; BRAVO TWO; BRAVO THREE.	UC133-IOB	1,3	UC132-OBS	2
VOLVO®	Up to now; Up to now; Up to now; Current; Current; Current.	275; 280; 290; DP-E; DP-G; DP-S	UC168-I; UC133-IOB; UC133-IOB; UC133-IOB; N/A; N/A	-; 1, 3, 4; 1, 3, 4; 1, 3, 5; -; -	N/D; UC132-OBS; UC132-OBS; UC133V-IOB; UC133V-IOB; UC132-OBS	-; 2; 2; -; -; 2

1. Trimmed cylinder (the total number of steering cycles is equal from either straight of right or vice-versa).
2. Non-trimmed cylinders (the total number of steering cycles is different between straight and left or vice-versa).
3. Minimum side space for installing cylinder: 540 mm (21.2").
4. ULTRAFLEX hydraulic cylinder can be installed only by replacing the mechanical steering gear with cable.
5. Installation requires VOLVO adaptor P.N. 872388.

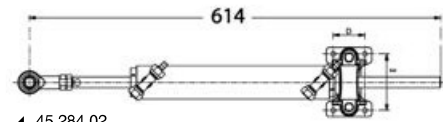
Code	Initials	Version	Torque Kgm	Thrust kg	Stroke mm	Volume cc	Torque kgm	Nylon pipe joints
45.286.01	UC-133-IOB	Trimmed cylinder	66	464	203	132	66	3/8"
45.282.03	UC-132-OBS	Non-trimmed cylinder	66	464	203	-	-	-
45.284.02	UC168-I	-	87	673	178	168	87	-



▲ 45.286.01; 45.282.03



▲ 45.284.02



▲ 45.284.02

**Technical specifications and buying tips for steering systems 45.286.01/02/04.**

Components	Model	Q.ty	Notes
------------	-------	------	-------

**A system - Band-to-band revolutions: Balanced 4,7 - Non Balanced 4,7/5,8 Max torque: 66 kgm - 5738 lbs. in**

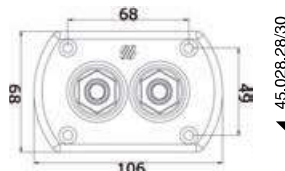
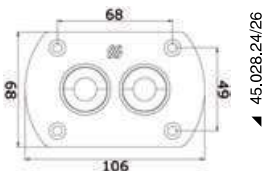
-	45.280.01/02/03/33/04/07	1	For a second station, add: 1 pump 45.280.01/07, 1 joint KIT 45.290.15, 1 pipe KIT 45.290.35/40/45/50/55/60/65/70/80, extra 45.027.00, 1 steering wheel.
-	See applications	1	
-	45.290.35/40/45/50/55/60/65/70/80	1	
-	45.027.01	4	
-	(Steering wheel selection)	1	

**B system - Band-to-band revolutions: Balanced 4 - Non Balanced 4/5 Max torque: 66 kgm - 5738 lbs. in**

-	45.280.02	1	For a second station, add: 1 pump 45.280.02, 1 joint KIT 45.290.15, 1 pipe KIT 45.290.35/40/45/50/55/60/65/70/80, extra 45.027.01, 1 steering wheel.
-	See applications	1	
-	45.290.35/40/45/50/55/60/65/70/80	1	
-	45.027.01	4	
-	(Steering wheel selection)	1	

**Bulkhead troughout twin bush, waterproof**


Code	Base color	For pipes
45.028.24	<input type="checkbox"/> White	Pass through
45.028.26	- Chromed	Pass through
45.028.28	<input type="checkbox"/> White	Twin connection
45.028.30	- Chromed	Twin connection



# ULTRAFLEX hydraulic steering systems for inboard engines

## Applications for hydraulic steering systems

### APPLICAZIONI SISTEMI DI GUIDA IDRAULICI HYDRAULIC STEERING SYSTEM APPLICATIONS

LUNGHEZZA BARCA / Boat length	FINO a UP to 10 m (33')	FINO a UP to 10 m (33')	FINO a UP to 10 m (33')	10 + 12 m (33' + 40')	10 + 12 m (33' + 40')	12 + 14 m (40' + 46')	14 + 16 m (46' + 53')	16 + 18 m (53' + 59')	18 + 20 m (59' + 66')	
CILINDRO Cylinder	45.271.06	45.284.01	45.284.02	45.284.03	45.284.05	45.284.06	45.284.07	45.284.08	45.284.09	
POMPA/Pumps	UC69-I	UC116-I	UC168-I	UC215-I	UC293-I	UC339-I	UC378-I	UC442-I	UC530-I	
45.270.01/02 UP20	3,5 N - 3/8"									
45.280.00 UP25		4,6 N - 3/8"	6,72 L - 3/8"	8,6 L - 3/8"						
45.280.01 UP28		4,1 M - 3/8"	6 N - 3/8"	7,6 L - 3/8"						
45.280.02 UP33		3,5 H - 3/8"	5,1 M - 3/8"	6,5 N - 3/8"	8,8 L - 3/8"					
45.280.03 UP39			4,3 H - 3/8"	5,5 M - 3/8"	7,5 N - 3/8"					
45.280.05 UP39-I R						8,6 N - R7	9,6 L - R7			
45.280.33 UP45					6,5 M - 3/8"					
45.280.06 UP45-I R						7,5 M - R7	8,4 N - R7	9,8 N - R7	11,5 L - R7	
Giri volante da banda a banda / Steering wheel turn	Sensazione al volante / Feeling at the wheel					Tipo di tubi = Hose type				
	L=LEGGERO / LIGHTWEIGHT N=NORMALE / REGULAR M=MEDIO / MEDIUM					3/8" = 45.290.35/40/45/50/55/60/65/70/80 R7 = rame / copper 45.028.11				

ATTENZIONE: queste indicazioni sono di carattere generale. La scelta della corretta applicazione va fatta con l'assistenza di installatori qualificati. Per ogni ulteriore informazione, si prega di contattare il nostro Servizio Assistenza.

ATTENTION: these are indications of a general nature. The correct application shall be chosen upon recommendation by qualified installers. For further details, please contact our After-Sales Service.

### ULTRAFLEX hydraulic pump for inboard engines

Fitted with check valve.  
For mounting flanges, see items 45.270.03; 45.270.04; 45.280.10.

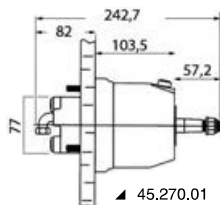
Code	Initials	Mounting	Flow/revolution cc	Pistons	Pressure bar	Steering wheel max Ø mm	Joints	kg
45.270.01	UP20F	front	20	5	70	710	3/8"	4
45.280.00	UP25F	front	25	5	70	710	3/8"	5
45.280.01	UP28F	front	28	5	70	710	3/8"	5
45.280.02	UP33F	front	33	5	70	710	3/8"	5
45.280.03	UP39F	front	39	7	70	710	3/8"	5
45.280.33	UP45F	front	45	7	70	710	3/8"	5
45.280.07	UP28R	rear-dashboard	28	5	70	710	3/8"	5
45.280.04	UP33R	rear-dashboard	33	7	70	710	3/8"	5
45.280.08	UP39R	rear-dashboard	39	7	70	710	3/8"	5
45.280.05	UP39-IR	rear-dashboard	39	7	70	710	12 mm*	-
45.280.06	UP45-IR	rear-dashboard	45	7	70	710	12 mm*	-

\* For copper pipe 45.028.11

45.270.08 X68 chromed flange for hydraulic pumps

45.270.07 "F" kit for easier filling up and cleaning of hydraulic pumps

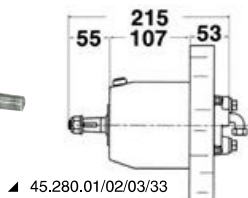
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45.270.01



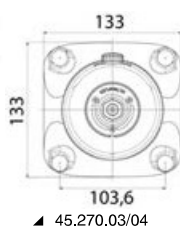
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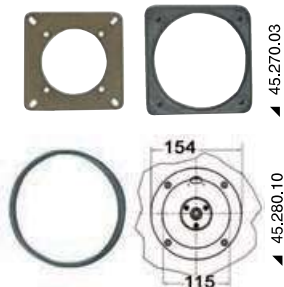
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45.270.03/04



45.270.03/04

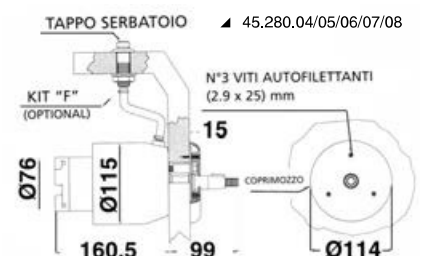


45.270.08

45.280.10



45.280.04/05/06/07/08



45.280.04/05/06/07/08

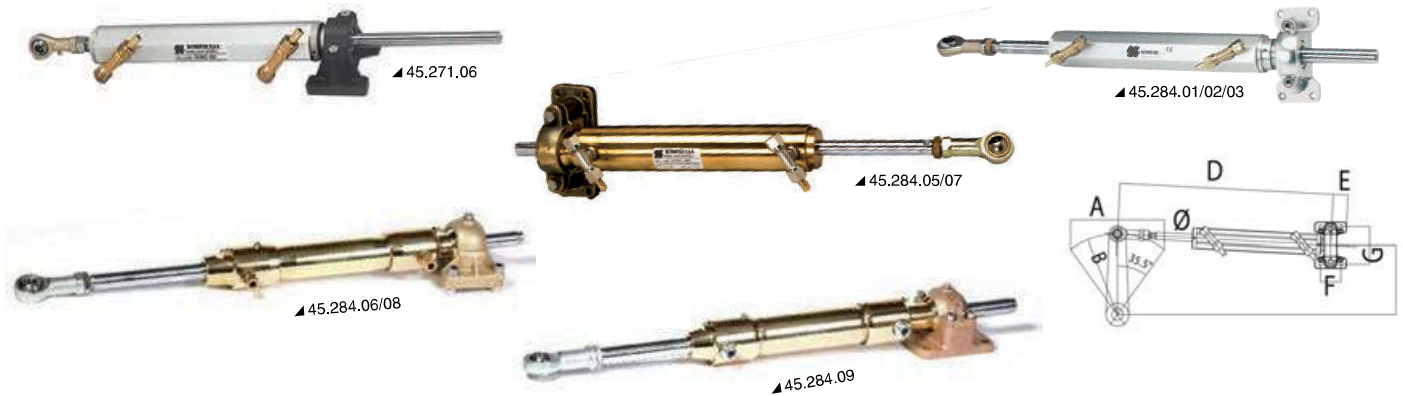


### Hydraulic cylinder for inboard engines

Trimmed version

Code	Initials	Stroke mm	Pipe joints	←→  mm							Volume cc	Thrust kg	Max torque kgm	Balanced
				A	B	C	D	E	F	G				
45.271.06	UC69-I	150	3/8" nylon	150	129	105	417	31,3	40	73	69	168	32	Yes
45.284.01	UC116-I	178	3/8" nylon	178	155	127	466	102	40	73	116	464	58	Yes
45.284.02	UC168-I	178	3/8" nylon	178	155	127	512	107	40	105	168	673	87	Yes
45.284.03	UC215-I	228	3/8" nylon	228	199	163	587	132	40	105	215	673	111	Yes
45.284.05	UC293-I	178	3/8" nylon	178	163	134	506	107	40	125	293	1155	146	Yes
45.284.06	UC339-I	230	12 mm copper*	230	200	164	637	147	70	110	339	1051	172	Yes
45.284.07	UC378-I	228	12 mm copper*	228	199	163	592	132	40	125	376	1155	188	Yes
45.284.08	UC442-I	300	12 mm copper*	300	260	212	749	183	70	110	442	1051	223	Yes
45.284.09	UC530-I	250	12 mm copper*	250	218	178	723	168	120	104	530	1513	270	Yes

\* 45.028.12 12-mm copper pipe



### Kit of 2 x jointed hoses

Suitable for 45.271.06/284.01/02/03/05.

Code	Length m	Code	Length m	Code	Length m
45.290.35	3,5	45.290.55	5,5	45.290.80	8
45.290.40	4	45.290.60	6	45.290.90	9
45.290.45	4,5	45.290.65	6,5		
45.290.50	5	45.290.70	7		



### Kit including 2 reinforced hoses connected at one end



Suitable for 45.271.06/284.01/02/03/05. Equipped with 2 sleeves and 2 reusable connections to install at one end after cutting off the hose at the desired length.

Code	Length m
45.290.92	9
45.290.93	15

### Kit OB-2S 5/16



For cylinders 41.271.06/284.01/02/03/05.

Code	Description
45.290.15	For additional station or for automatic pilot installation. It includes: 16 x fittings; 10 metres of 5/16" hose; 10 metres of 3/8" nylon hose

### Kit 95-2S



Fittings for additional station or automatic pilot.

Code	Description
45.290.16	It includes all fittings for 10 m of 3/8" nylon or copper hose.

### Kit for additional station or automatic pilot



For cylinders and copper pipes.

Code	Description	KIT for	
		copper pipes Ø mm	cylinders
45.290.17	Contains all fittings needed for copper pipe	12	45.284.06; 45.284.07; 45.284.08; 45.284.09



## ULTRAFLEX hydraulic steering systems for inboard engines



Code	Station	For hulls m	Torque Kgm	Kit including				
				Pump	Pump	Cylinder	Fitting kit for second station	Fitting kit for second station
45.040.10	Single	8	32*	45.270.01	-	45.271.06	-	3/8"
45.050.10	Single	10	58*	45.280.01	-	45.284.01	-	3/8"
45.050.20	Double	10	58	45.280.01	(2 pcs)	45.284.01	45.290.15	3/8"
45.090.10	Single	12	111*	45.280.03	-	45.284.03	-	3/8"
45.090.20	Double	12	111	45.280.03	(2 pcs)	45.284.03	45.290.15	3/8"
45.120.10	Single	14	146*	45.280.08	-	45.284.05	-	3/8"
45.120.20	Double	14	146	45.280.08	(2 pcs)	45.284.05	45.290.15	3/8"
45.150.10	Single	16/18	223*	45.280.06	-	45.284.08	-	12-mm copper
45.150.20	Double	16/18	223	45.280.06	(2 pcs)	45.284.08	45.290.17	12-mm copper

\* All pumps are fitted with a **check valve**.

**The steering systems have to be ordered along with:** hydraulic oil 45.027.01 according to your needs; 2) pipes 45.290.35/93 or 45.290.92-93; 3) 12-mm Ø copper pipe.

**The double-station steering systems have to be completed with their dedicated kits** (see table).

## Hydraulic steering system accessories



## LUBRIMAR Hydraulic Oil foamless product

Foamless hydraulic oil containing anti-corrosion additives resistant to high pressure. Suitable for topping up.

Code	Package ml
65.089.00	250



## Hydraulic Oil ISO VG22

This product is ideal for steering systems by ULTRAFLEX, TELEFLEX, MANCINI, etc. Additive-improved formula to boost the pump and seal performance. Resistant to high pressure and corrosion.

Code	Package l
45.027.01	1



## Copper pipe

Ø 6x8 mm	Ø 8x10 mm	Ø 10x12 mm	Roll m
45.028.11	45.028.10	45.028.12	50



## Recoverable copper joints

Used to connect nylon pipe size 5/16 (45.028.14 or similar) standard for steering gears.

Code	Type
45.028.18	straight
45.028.19	90°



## High pressure nylon pipe size 5/16" R7

Suitable for hydraulic steering gear Vetus except for model 45.030.10. 24 meter coils.

Code	Description	Roll m
45.028.14	For all Vetus steering systems except item 45.030.10	24



## Bulkhead troughout bush

Code	Material	For hydraulic hose
45.028.22	Black Nylon	45.028.14
45.028.23	Black Nylon with stainless flange	45.028.14