T81FC - T83NRFC (zero torque)
Rotary tilt steering systems

CE UK CA



T81FC with X82

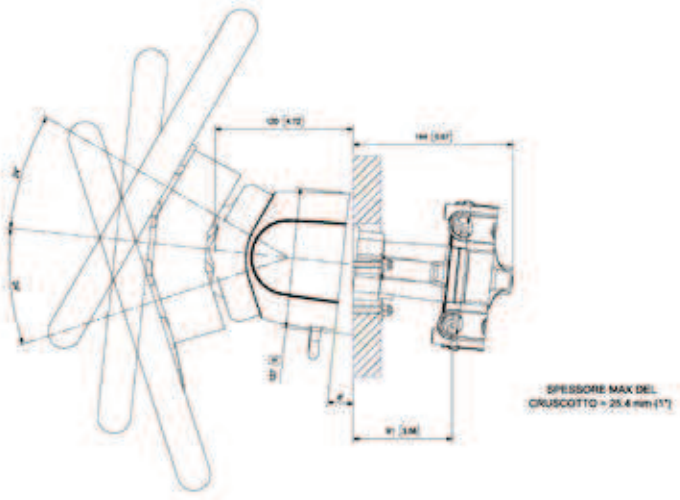
Planetary
Gear Design





X82

- Tilt range of 48° and five locking positions
- Fast connect, simple installation
- Tilt device eliminates underdash movement
- Standard 3/4" tapered shaft – stainless steel
- All stainless steel cable output ends
- Made of corrosion resistant materials
- T81FC and T83NRFC steering systems are not to be used on boats equipped with engines that exceed the maximum horsepower rating of the boat
- X82 tilt mechanism fits Ultraflex tilt mount rotary and rack and pinion steering helms as well as Ultraflex tilt mount hydraulic pumps except SilverSteer™ and MasterDrive™steering systems
- For boats faster than 50 mph our hydraulic steering systems are recommended
- Exceeds ISO 8848 safety standards
- Exceeds ABYC P17 safety standards



COMPONENTS - TO BE ORDERED SEPARATELY

Model	Part No.	Description
T81FC	38957J	Single cable steering helm
T83NRFC	38959N	Zero totque single cable steering Helm
X82	43187N	Tilt mechanism
M66 or M90 Mach	-	Steering cable
Steering wheel	-	See steering wheels section
Accessories	-	See accessories section

Installation	with Tilt X82
M66 - M90 Mach steering cable stroke	228 mm (9")
Lock-to-lock steering wheel turns	approx 3,8
Max. dash depth	25,4 mm (1")
Max. steering wheel diameter	406 mm (16")
Min. steering cable bend radius	150 mm (5.9")

Adjustable steering wheel position mechanisms
Tilt mechanisms

Tilt mechanisms suitable for tilt mount helms

Tilt range of 48° and five locking positions

new



X82



X88



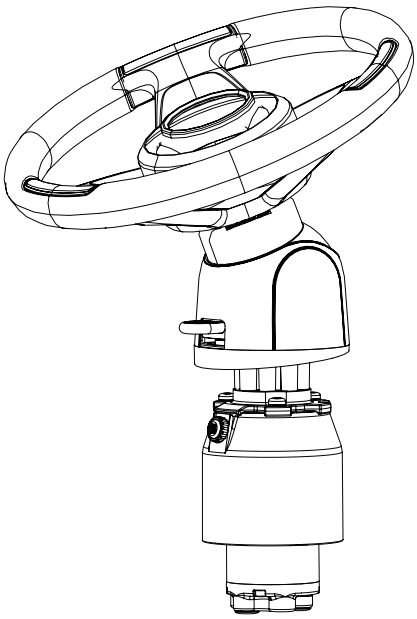
X83-SVS

Model	Part No.	Description
X82	43187N	Tilt mechanism for mechanical hydraulic and electronic steering systems
X88	44006L	Tilt mechanism for Masterdrive™ steering systems
X83-SVS	44005J	Tilt mechanism for Silversteer™ steering systems

X82	Compatible with all pumps suitable for X52 (39250U)
X88	Compatible with all pumps suitable for X66 (40613M)
X83-SVS	Compatible with all pumps suitable for X70-SVS (41880T)

The new pumps fit old Tilt X52, X66 and X70 SVS using the new K84 bracket - 44024N





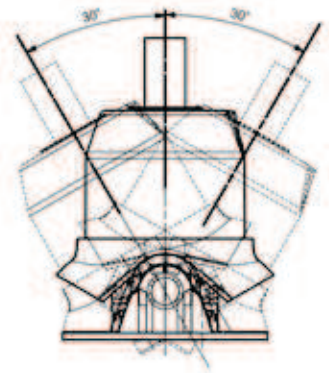
X82, X83-SVS, X88

Tilt mechanism suitable for front mount helms

The only available tilt in the market which can upgrade your standard front mount helm.
Minimum space required under the dashboard.
Tilt range of 60° and five locking positions.
Not applicable to UP18 or UP20 helms



X72



X72	43140K	Tilt mechanism for hydraulic front mount steering systems

Tilt mechanism application for mechanical steering systems

TILT MECHANISM	Part No.	T81, T83NRFC	T101, T103ZT	TM870, TM870ZT, TM87SS TM87SSZT, TM87J
X82	43187N	X	X	X

Tilt mechanism application for hydraulic and electronic steering systems

TILT MECHANISM	Part No.	UP18 UP20F	UP20T	FRONT MOUNT HELMS		TILT MOUNT HELMS		MASTERDRIVE	INTEGRA
				STANDARD UP25F, UP28F, UP33F, UP39F, UP45F	SILVERSTEER UP28F-SVS, UP33F-SVS, UP39F-SVS	STANDARD UP25T, UP28T, UP33T, UP39T, UP45T	SILVERSTEER UP28T-SVS, UP33T-SVS, UP39T-SVS		
X52	39250U	-	X	-	-	X	-	-	X
X72	43140K	-	-	X	X	-	-	-	-
X70-SVS	41880T	-	-	-	-	-	X	-	-
X66	40613M	-	-	-	-	-	-	X	-

TILT MECHANISM	PART No.	UP18 UP20F	UP20T 44033P	FRONT MOUNT HELMS		TILT MOUNT HELMS		MASTERDRIVE	INTEGRA
				STANDARD UP25F, UP28F, UP33F, UP39F, UP45F	SILVERSTEER UP28F-SVS, UP33F-SVS, UP39F-SVS	STANDARD UP25T 44028X, UP28T 44027V, UP33T 44026T, UP39T 44025R, UP45T 44029Z	SILVERSTEER UP28T-SVS 44030H, UP33T-SVS 44031K, UP39T-SVS 44032M		
X82	43187N	-	X	-	-	X	-	-	X
X83-SVS	44005J	-	-	-	-	-	X	-	-
X88	44006L	-	-	-	-	-	-	X	-



UP20T + X82



UP20F

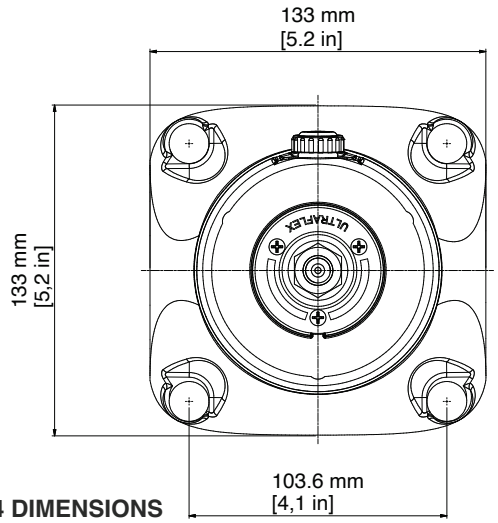


UP20F + X74

- Built-in lock valve for positive rudder lock
- Integrated relief valve for over-pressure protection
- 3/4” tapered stainless steel shaft
- Corrosion proof composite housing
- Easy accessible lock valve and shaft seal for replacement
- Includes 90° adjustable fittings for 3/8” hose
- **KIT F** - 39664Y (optional): Remote fill adapter
- For use with UC95-OBF, UC68-OBS and UC69-I cylinders only

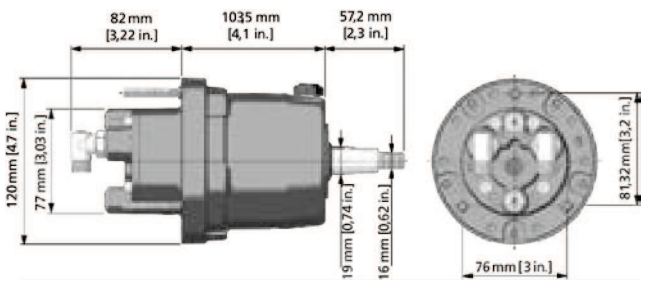
For UP20F pump
• **X74** - 43048Y square flange permits to install the UP20F pump in an intermediate dashboard position

For UP20T pump
• Tilt mechanism: **X82** - 43178N tilt range of 48° and five locking positions

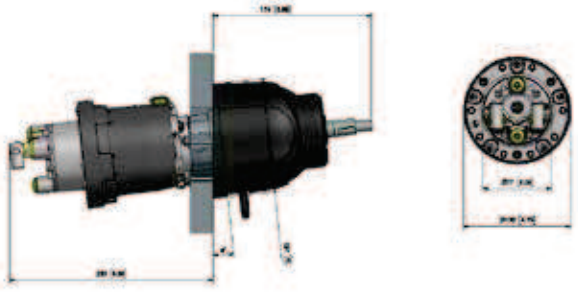


X74 DIMENSIONS

MODEL	P. No.	MOUNTING	DISPLACEMENT/ REVOLUTION	No. OF PISTONS	RELIEF VALVE SETTING	MAXIMUM WHEEL DIA.	WEIGHT
UP20F	43180Y	Front mount	20 cc - 1.2 cu. in	5	70 Bar - 1000 PSI	508 mm - 20”	3,6 kg - 8 lbs
UP20T	44033P	With X82 tilt	20 cc - 1.2 cu. in	5	70 Bar - 1000 PSI	406 mm - 16”	3,9 kg - 8.5 lbs



UP20F DIMENSIONS



UP20T DIMENSIONS

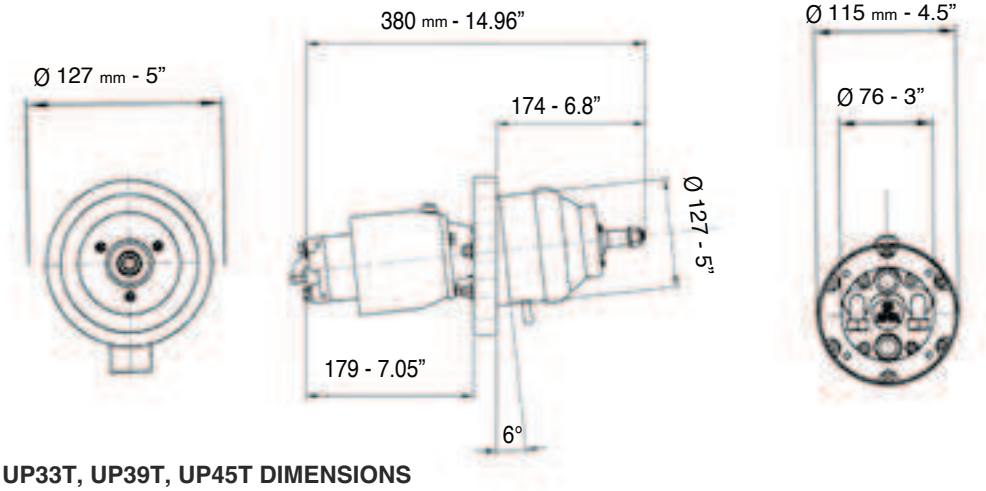




X82

- Available in five dfferent displacement sizes
- Ball bearing piston race
- Built-in lock valve for positive rudder lock
- Integrated relief valve for over-pressure protection
- Stainless steel shaft
- Easy accessible lock valve and shaft seal for replacement
- Cast iron rotor for greater durability and longer life
- Includes 90° adjustable fittings for 3/8” hose
- Tilt mechanism: **X82**- 43187N – tilt range of 48° and five locking positions
- **KIT F** - 39664Y (optional): remote fill adapter

MODEL	P. No.	MOUNTING	DISPLACEMENT/ REVOLUTION	No. OF PISTONS	RELIEF VALVE SETTING	MAXIMUM WHEEL DIA.	WEIGHT
UP25T	44028X	With X82 tilt	25 cc - 1.5 cu.in	5	70 Bar - 1000 PSI	406 mm - 16”	5 kg - 11 lbs
UP28T	44027V	With X82 tilt	28 cc - 1.7 cu.in	5	70 Bar - 1000 PSI	406 mm - 16”	5 kg - 11 lbs
UP33T	44026T	With X82 tilt	33 cc - 2.0 cu.in	7	70 Bar - 1000 PSI	406 mm - 16”	5 kg - 11 lbs
UP39T	44025R	With X82 tilt	39 cc - 2.4 cu.in	7	70 Bar - 1000 PSI	406 mm - 16”	5 kg - 11 lbs
UP45T	44029Z	With X82 tilt	45 cc - 2.7 cu.in	7	70 Bar - 1000 PSI	406 mm - 16”	5 kg - 11 lbs



UP25T, UP28T, UP33T, UP39T, UP45T DIMENSIONS

SILVERSTEER™







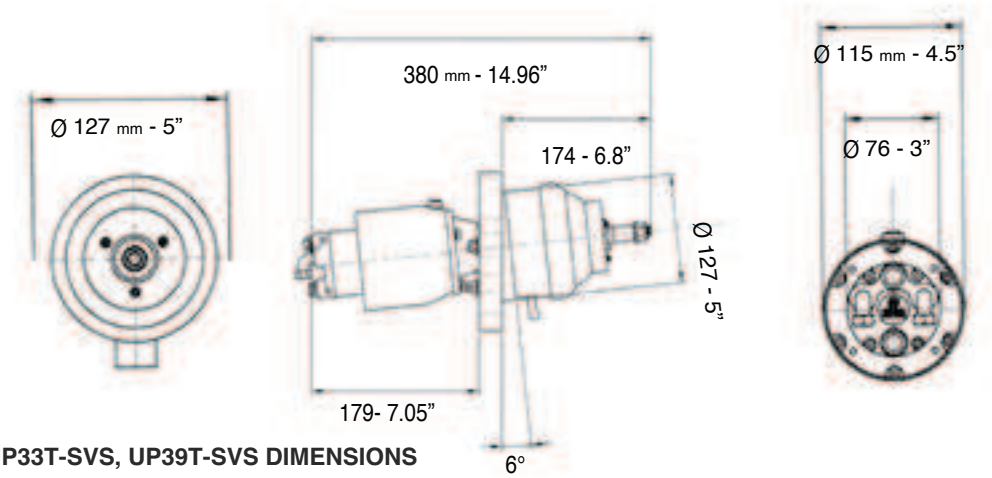
X83-SVS

SilverSteer™ SVS helms have been specifically designed for high torque outboard applications such as bass boats, and boats with shallow dead rise and high horsepower engines.
Featuring a 1500 psi (105 Bar) pressure valve, SilverSteer™ helms will deliver very precise steering at all torque loads.
The SVS helms have to be coupled with the UC130-SVS cylinders and the Kit OB-SVS hoses, which are also specifically designed for high torque applications.
SVS Helm pumps feature stainless steel shafts and 90° adjustable nickel-plated brass fittings.

- Available in three different displacement sizes
- Compact design
- Ball bearing piston race
- Built-in lock valve for positive rudder lock (patented)
- Integral relief valve for over-pressure protection 105 bar (1500 psi)
- Stainless steel shaft
- Easily accessible lock valve and shaft seal for replacement
- Cast iron rotor for greater durability and longer life
- Complete with 90° adjustable fittings for 3/8" hose
- Tilt mechanism for SilverSteer™ systems: **X83-SVS** – 44005J Tilt range of 48° and five locking positions
- **KIT F -** 39664Y (optional): remote fill adapter

WARNING: The SilverSteer™ helm pumps are always to be installed in conjunction with the UC130-SVS cylinder and the Kevlar reinforced hose kit KIT OB-SVS.

MODEL	P. No.	MOUNTING	DISPLACEMENT/ REVOLUTION	No. OF PISTONS	RELIEF VALVE SETTING	MAXIMUM WHEEL DIA.	WEIGHT
UP28T-SVS	44030H	With X83-SVS	28 cc - 1.7 cu.in	5	105 Bar - 1500 PSI	406 mm - 16"	5 kg - 11 lbs
UP33T-SVS	44031K	With X83-SVS	33 cc - 2.0 cu.in	7	105 Bar - 1500 PSI	406 mm - 16"	5 kg - 11 lbs
UP39T-SVS	44032M	With X83-SVS	39 cc - 2.4 cu.in	7	105 Bar - 1500 PSI	406 mm - 16"	5 kg - 11 lbs



UP28T-SVS, UP33T-SVS, UP39T-SVS DIMENSIONS

Masterdrive™
Power Assisted Outboard Steering System

UH - Main Helms

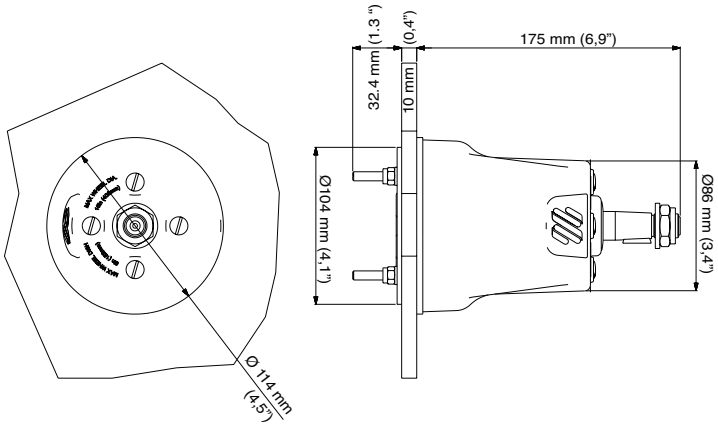
- Available in two different displacement sizes: 32 cc (1.95 cu.in) and 40 cc (2.44 cu.in)
- Front Mount and Tilt Mount versions
- Dual station installation version also available (please refer to MD2 Kit)
- Built-in relief valve
- 3/4" tapered shaft
- Corrosion resistant painted body
- Waterproof



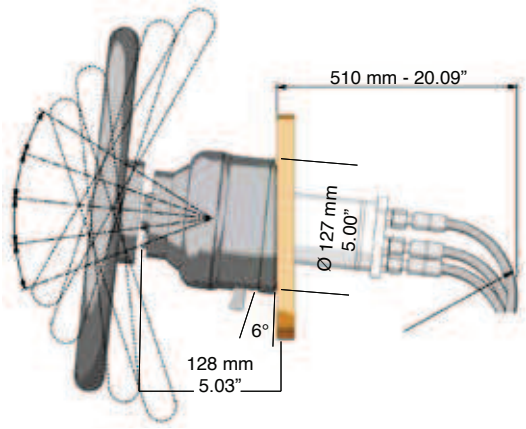
UH

MODEL	P. No.	MOUNTING	DISPLACEMENT/ REVOLUTION	APPLICATION	No. OF STATIONS	MAXIMUM WHEEL DIA.
UH32-F	42091U	front mount	32cc - 1.95 cu.in	single cylinder	1	406 mm - 16"
UH32-T	42092W	with X66 tilt	32cc - 1.95 cu.in	single cylinder	1	406 mm - 16"
UH40-F	42093Y	front mount	40cc - 2.44 cu.in	dual cylinder	1	406 mm - 16"
UH40-T	42095C	with X66 tilt	40cc - 2.44 cu.in	dual cylinder	1	406 mm - 16"

UH32: wheel turns lock-to-lock in single cylinder applications: **3,75**
UH40: wheel turns lock-to-lock in dual cylinder applications: **6**



UH32-F and UH40-F dimensions



UH32-T and UH40-T dimensions

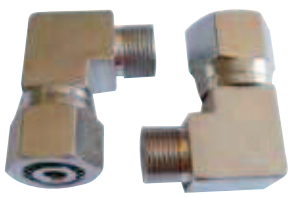
X88 - Tilt mechanism- 44006L

Tilt mechanism for MasterDrive™ tilt mount helms.
Tilt range of 48° and five locking positions



X88

MDF90 90° - two fitting kit for Masterdrive helms (optional)- 42821F



MDF-90

Integra™
Outboard electronic power steering systems

UIH1 - Electronic helm

- Electronic steering helm tilt mount**X82** -43817N
- Easy to install, no oil or hydraulic hoses

UIH1 - 43536M - first station electronic helm.
UIH2 - 43537P - second station electronic helm
UIH3 - 43538S - third station electronic helm

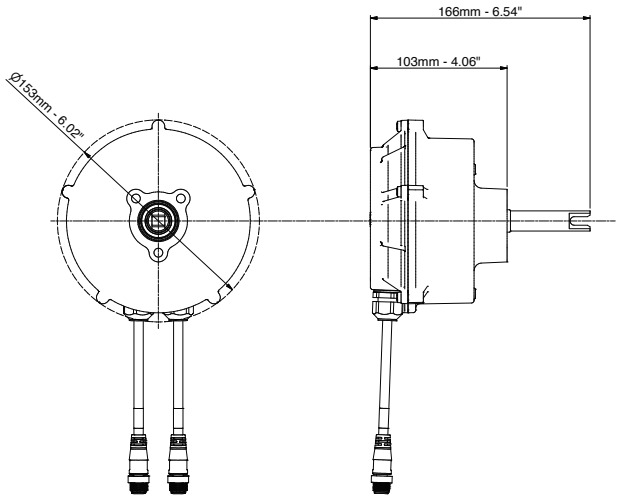
- Resistant to harsh marine conditions
- Steering wheel turns can be set by the user.
- Variable steering wheel resistance according to boat speed
- Instant responsiveness
- Redundant architecture with 2 CAN bus channels

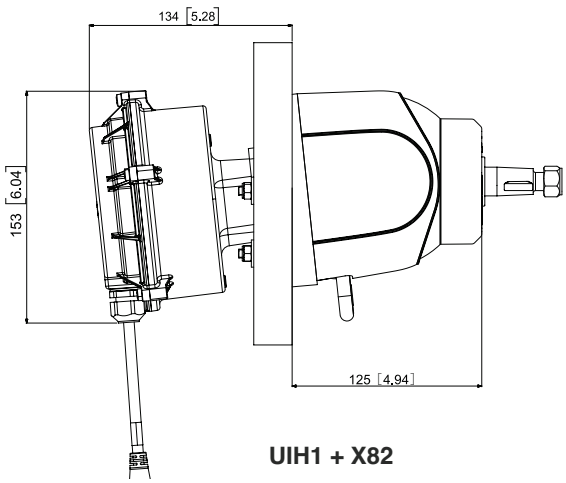
UIH1





X82





UIH1 + X82