

Electric Furling

Cruise in luxury with Harken's new Electric Furling systems. Now with the push of a button, you can reef, furl or set sail comfortably and with precise control from the safety of the cockpit. Whether you're sailing in a blow, basking in a gentle zephyr, or counting on your furling for extra "crew", Harken electric furling systems let you get the most out of your boat, while making sure your passage is safe and enjoyable for everyone on board.



USES

Designed for cruising boats from 35' (10.6 m) to 60' (18 m), these powered furling systems make headsail handling easy.

POWERED FEATURES

Vertical motor features streamlined housing to fit in pulpits, clear anchor tackle, and provide low windage.

The motor is a permanent magnet design with high torque and low power consumption.

The reversible drive uses a high reduction worm gear set to prevent reefed sails from unfurling under load.

Lightweight sculpted aluminum gear box and motor housing is sealed with high-quality lip seals.

Electric furlers can be operated manually if power is lost. A cordless drill adapter and a short crank handle are included with each furler. A standard winch handle works too, but the grinding radius will be much bigger, making it slower.

FURLER FEATURES

An independent tack swivel on Units 2 and 3 help furl the center of the sail before the tack, improving sail shape and upwind pointing. Unit 3 has an additional independent swivel at the head for further shaping.

Unit 2 uses a wedge lock method from the cruising foil system where connectors hold securely against the foil. Screws provide the final lock on each.

Tough foil joints withstand years of torque loading. Unit 3 features MKIV connector and geometric shaped foil interlocks secured by filling an engineered channel system with a syringe-injected adhesive.

MATERIALS

Torque tube, motor, and gear housing are deep-saturation Hardkote-anodized, UV-stabilized aluminum.

Stainless steel link plates resist scratches from the anchor and are easily repolished.

Hardened steel gears are permanently lubricated.

OPTIONS

Units come in 12 or 24 volts. Upgrade Kits available for manual-to-electric conversion.

INSTALLATION

C-shaped connectors slip over headstay without feeding wire through connector.

Lower unit fits over existing turnbuckle, allowing easy length adjustment.

Upgrades from the Unit 2 and Unit 3 manual units are simple using the Harken Upgrade Kit.



Harken switches and a 12- or 24-volt control box and circuit breaker included



Stacked Torlon[®] bearing races in the halyard swivel evenly distribute radial and thrust loads to ball bearings; foils turn freely under halyard loads



Triple-interlock foil joints

Unit 2E Typical Boat Length 35' - 46' (10.6 - 14.2 m)

Wire Ø (1 x 19 SS)	Rod Ø	Clevis Pin Ø
5/16", 3/8", 7/16" (8, 10, 11, 12 mm)	-12 -17, -22 (7.14, 8.38, 9.53 mm)	5/8", 3/4" (15.9, 19.1 mm)

Headstay Length Standard 60'3" (18.36 m); max 67'3" (20.49 m)

Part No.	Description
7312.13 12V	Electric Furler 12 Volt with control box, switches, and circuit breaker
7312.13 24V	Electric Furler 24 Volt with control box, switches, and circuit breaker

Toggle Assembly Required - sold separately

7312.22 5/8	Jaw/Jaw with link plate with 5/8" (15.9 mm) clevis pin
7413.22 3/4	Jaw/Jaw with link plate with 3/4" (19.1 mm) clevis pin

Optional Parts

7312.12V.CONV	Conversion Kit Cruising manual to electric*
7312.24V.CONV	Conversion Kit Cruising manual to electric*
7312.30	Extra 7" (2.13 m) luff foil extrusion
7312.31	Extra 9" (229 mm) connector with isolator
7424 -12	-12 Rod adaptor stud (thread Ø UNF 3/8")**
7425 -17	-17 Rod adaptor stud (thread Ø UNF 5/8")**
7426 -22	-22 Rod adaptor stud (thread Ø UNF 3/4")
7430	Replacement powered furling crank handle (included with new Unit 2E purchase)
7431	Replacement powered furling drill adapter (included with new Unit 2E purchase)

* Includes switches and 12- or 24-volt control box and circuit breaker **Use with conventional turnbuckle

Unit 3E Typical Boat Length 45' - 60' (13.7 - 18.3 m)

Wire Ø (1 x 19 SS)	Rod Ø	Clevis Pin Ø
7/16", 1/2" (11, 12 mm)	-22, -30 (9.53, 11.10 mm)	3/4", 7/8" (19.1, 22.2 mm)

Headstay Length Standard 75'1" (22.88 m); max 82'1" (25.02 m)

Part No.	Description
7413.13 12V	Electric Furler 12 Volt with control box, switches, and circuit breaker
7413.13 24V	Electric Furler 24 Volt with control box, switches, and circuit breaker

Toggle Assembly Required - sold separately

7413.22 3/4	Jaw/Jaw with link plate with 3/4" (19.1 mm) clevis pin
7413.22 7/8	Jaw/Jaw with link plate with 7/8" (22.2 mm) clevis pin

Optional Parts

7413.12V.CONV	Conversion Kit MKIV manual to electric*
7413.24V.CONV	Conversion Kit MKIV manual to electric*
7413.30	Extra 7" (2.13 m) luff foil extrusion
7413.31	Extra 9 3/4" (248 mm) connector with bushings
7426 -22	-22 Rod adaptor stud (thread Ø UNF 3/4")**
7427 -30	-30 Rod adaptor stud (thread Ø UNF 1/2")**
7430	Replacement powered furling crank handle (included with new Unit 3E purchase)
7431	Replacement powered furling drill adapter (included with new Unit 3E purchase)

* Includes switches and 12- or 24-volt control box and circuit breaker **Use with conventional turnbuckle

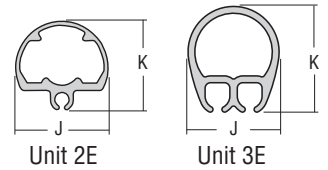
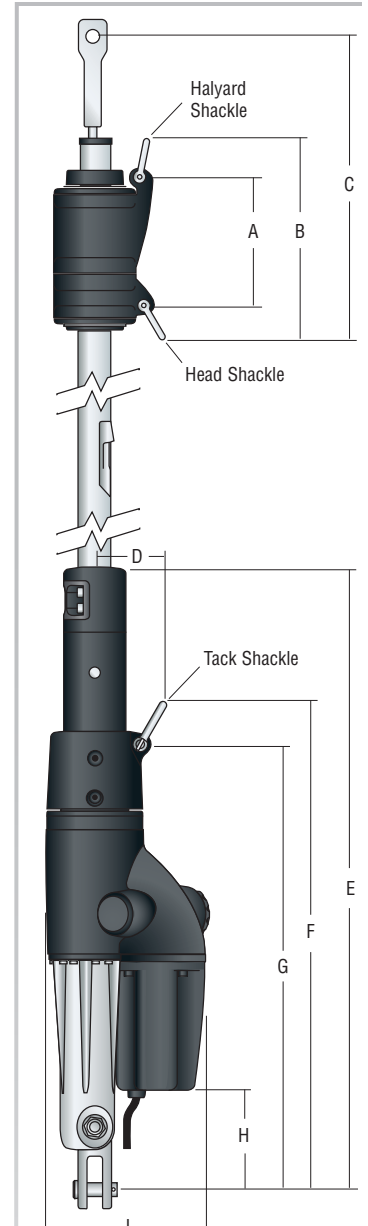


Foil Dimensions

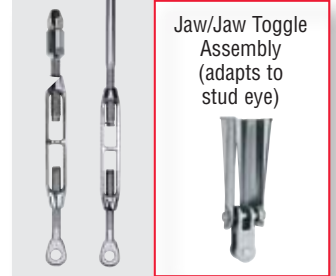
Unit	J		K		Foil length		Luff tape
	in	mm	in	mm	ft	m	
2E	1 3/4	44	1 5/8	42	7	2.13	#6 5/32" (5 mm)
3E	1 1/2	38	1 1/16	43	7	2.13	#6 5/32" (5 mm)

Electric Furler Dimensions

Part No.	A		B		C (Max)		D	E		F		G		H		I		
	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm	in	mm	in	mm	
7312.13 with 7312.22 5/8 toggle	4 1/2	114	8	203	16	406	3/4	82	31 7/8	810	24 1/2	622	22 39/64	574	4 1/2	116	8 11/32	212
7312.13 with 7413.22 3/4 toggle	4 1/2	114	8	203	16	406	3/4	82	32 1/2	826	25 3/32	637	23 1/4	590	5 3/16	132	8 11/32	212
7413.13 with 7413.22 3/4 toggle	7 5/16	186	11 5/8	296	18	457	3/4	82	32 1/2	826	25 3/32	637	23 1/4	590	5 3/16	132	8 11/32	212
7413.13 with 7413.22 7/8 toggle	7 5/16	186	11 5/8	296	18	457	3/4	82	33 7/16	840	25 11/16	652	23 19/16	605	5 3/4	146	8 11/32	212



Rigging Options



Jaw/Jaw Toggle Assembly (adapts to stud eye)