



Polar Bear, 8.36 m (27.43'), Chantier des Ilesaux, naval architect: Paolo Bua © Valerie Lanata

REFLEX FURLING

In a quickly-evolving environment, the Harken Reflex furling system is pushing free-flying sail furling forward. The patented Reflex system provides sailors confidence that their free-flying asymmetrical spinnakers, gennakers, and code sails will furl completely with speed and control. Pull the furling line and the compact drive unit reacts reflexively to rotate the torsion cable, immediately transferring torque to the head. The head swivel reacts instantly, spinning from top to bottom where perfect furls must start. Reflex furling requires much less luff tension to transfer torque than earlier technology, making it the perfect solution for today's budding cable-less code sail technology which requires about half the luff loads previously required. And whether the Reflex torsion cable is specified, or in applications where the head swivel and a tack plate are sewn directly to the sail, Reflex furling's quick release geometry allows crews to use multiple sails with the same bottom unit.



Three sizes:

Unit 1 is rated at 1.5T MWL for boats to 11 m (36').

Unit 2 is rated at 2.5T MWL for boats up to 14 m (45').

Unit 3 is rated at 4.5T MWL for boats up to 17.4 m (58').



Unit 1: 7351.10
Unit 2: 7352.10
Unit 3: 7353.10

Complete even roll-up, tight wrap

- Low-friction ball bearing tack swivel allows the upper part of the sail to furl first.

Strong, lightweight

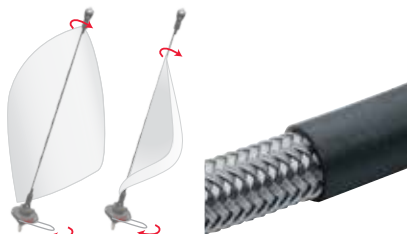
- Large diameter hardcoat-anodized 6061-T6 aluminum drive sheave.
- Torlon® ball bearings reduce friction, simplify maintenance.

Holds line securely

- Flexible polycarbonate alloy cowling allows rope to be easily fed into drive sheave without tools; keeps rope captive.
- Offset holes in drive sheave grip rope securely when furling.
- Stripper and feeder work together to prevent furling line from jamming.



Torlon is a registered trademark of Solvay Advanced Polymers L.L.C.



Code Zero sails

- The quick-release T-fitting allows the bottom unit to handle both code zero and asymmetric sails.
- The fixed tack terminal option is used when the torsion cable is inside the luff. A 2:1 soft attach is recommended for increased purchase and luff tension.

Immediate, smooth, controlled furling

- Reflex cable is more torsionally resistant to corkscrewing than the current breed of textile cable.
- All Reflex furlers use braided stainless steel wire filaments over braided textile core to transmit torque to the head swivel for faster furling. Unit 3 furlers use a Dyneema® core, which twists less and handles increased halyard loads without stretching, making them well suited for code zero applications by eliminating need for additional luff cable.
- Smooth polymer cable jacket protects sails against abrasion.

Easily change furled spinnakers

- Quick-release modular T-fitting allows single drive unit to handle multiple sails.
- Each sail has its own torsion cable. Head and tack swivels are permanently fitted to each sail.
- Rolled sail easily disconnects with the pull of one spring-loaded pin; new furled sail slides and locks into T-slot.



Lightweight, low-profile head swivel

- Integral thimble/terminal for torsion cable saves weight; no fork, eye, or pin connections.
- Compact design reduces weight aloft, maximizes luff length.
- Padded cover prevents damage to spars.

Reflex for retrofit

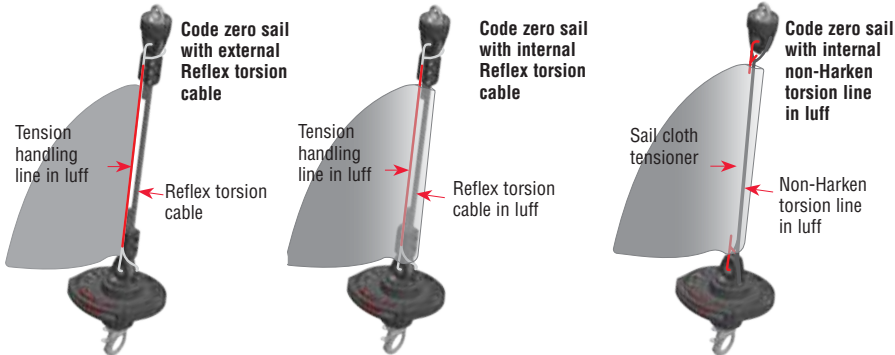
- Both head and tack swivels are available with fork and pin interfaces to allow sails with existing torsion cables finished with eyes to be easily adapted to Reflex furling. Contact Harken for details.

Reflex for cable-less Code sails

- Reflex head swivels and tack plates with integral T-fittings can be sewn directly to today's cable-less sails. The compact solution allows for longer luff lengths. Plus the same drive unit can service the whole inventory. Contact Harken for details.

Ordering Code Zero Reflex Furling

The Reflex torsion cable is not designed to accept luff loads associated with earlier code sail technology. It does, however, transfer the necessary torque to the head swivel for complete furling twice as effectively as any system we have tested—at far lower loads. If high luff loads will be encountered, combine a tension handling line with the Reflex torsion cable.



To furl a code zero sail that has a non-Harken torsion cable sewn into the luff, use either the thimbles or the eyes to secure to the head swivel and fixed tack terminal.



7361.10
7362.10



Includes 2:1 threaded adapter for attachment to bowsprit.

Optional Parts



7351.28 7351.27
7352.28 7352.27



7351.20 7358 7351.21
7352.20 7352.21



7371
7372

7371.SP00L
7372.SP00L

Reflex Furling System Unit 1

For Code Zero Sails

Typical Boat Length 6.7 - 10 m (22' - 32')

Maximum Sail Area 60 m² (650 ft²)

Part No.	Description
7361.10	Code zero furling system*
Optional Parts	
7351.20	Snap shackle threaded adapter
7351.21	D-shackle threaded adapter
7351.27	Reflex fixed tack terminal for extra sails
7351.28	Head swivel for extra sails
7371.SP00L**	Reflex torsion cable (spool) 8 mm x 305 m (5/16" x 1000')
7371**	Reflex torsion cable (ordered by the foot) for extra sails
7357**	Cable clamp (set of 2) for extra sails

*Includes: drive unit, head swivel, Reflex fixed tack terminal, 2:1 threaded adapter.

**Order Reflex torsion cable and clamp set for 7361.10 to improve furling.

Reflex Furling System Unit 2

For Code Zero Sails

Typical Boat Length 9 - 12 m (30' - 40')

Maximum Sail Area 84 m² (900 ft²)

Part No.	Description
7362.10	Code zero furling system*
Optional Parts	
7352.20	Snap shackle threaded adapter
7352.21	D-shackle threaded adapter
7352.27	Reflex fixed tack terminal for extra sails
7352.28	Head swivel for extra sails
7372.SP00L**	Reflex torsion cable (spool) 10 mm x 305 m (3/8" x 1000')
7372**	Reflex torsion cable (ordered by the foot) for extra sails
7358**	Cable clamp (set of 2) for extra sails

*Includes: drive unit, head swivel, Reflex fixed tack terminal, 2:1 threaded adapter.

**Order Reflex torsion cable and clamp set for 7362.10 to improve furling.

Reflex Furling System Unit 3

For Asymmetric Spinnakers

Typical Monohull Length 13 - 17.7 m (44' - 58')

Typical Multihull Length 12 - 16.7 m (39' - 55')

Maximum Sail Area 223 m² (2400 ft²)

Part No.	Description
7353.10.22M	Furling system with 21.95 m (72') cable*
7353.10.26M	Furling system with 25.91 m (85') cable*

Optional Parts

7353.21	D-shackle threaded adapter
7353.22	3:1/soft attachment threaded adapter
7353.26	Reflex tack swivel terminal for extra sails
7353.28	Head swivel for extra sails
7373.SPPOOL	Reflex torsion cable (spool) 13 mm x 305 m (33/64" x 1000')
7373	Reflex torsion cable (ordered by the foot) for extra sails
7367	Cable clamp (set of 2) for extra sails

*Includes: drive unit, head swivel, Reflex tack swivel terminal, snap shackle threaded adapter, Reflex torsion cable, and clamps.

Reflex Furling System Unit 3

For Code Zero Sails

Typical Monohull Length 12 - 16.5 m (39' - 54')

Typical Multihull Length 11 - 15 m (36' - 50')

Maximum Sail Area: Monohull 158 m² (1700 ft²); Multihull 139 m² (1500 ft²)

Part No.	Description
7363.10	Code zero furling system*

Optional Parts

7353.20	Snap shackle threaded adapter
7353.21	D-shackle threaded adapter
7353.27	Reflex fixed tack terminal for extra sails
7353.28	Head swivel for extra sails
7373.SPPOOL**	Reflex torsion cable (spool) 13 mm x 305 m (33/64" x 1000')
7373**	Reflex torsion cable (ordered by the foot) for extra sails
7367**	Cable clamp (set of 2) for extra sails

*Includes: drive unit, head swivel, Reflex fixed tack terminal, 3:1 threaded adapter.

**Order Reflex torsion cable and clamp set for 7363.10 to improve furling.



Optional Parts



7353.28



7353.26



7353.27



7353.20



7353.21



7353.22



7367



7373

7373.SPPOOL

