

GP2 Battcar System



MAINSAIL CONTROL

The GP2 mainsail control Battcar system was developed in partnership with Spain's Telefónica Group and mast engineer Scott Ferguson for the Telefónica Volvo 70s *Blue* and *Black*. Harken engineers developed the geometry for the cars and track by modifying CB captive ball bearing traveler technology so the battens could carry higher loads. Instead of the traditional fasteners, the track was designed so Hall Spars could bond the track to the mast using a high-strength, fatigue-resistant adhesive, saving several kilos of weight aloft.

C9028

C8701



Wire guides keep balls captive, making cars easy to load and maintain



Captive pin features a quick-release button to remove sail quickly, while allowing car to remain on the mast

USES

Free-running GP2 Battcar systems easily control highly-loaded mainsails on Volvo 70s and other ocean racers. They are the smallest and lightest-weight systems Harken has ever designed for boats in this size range.

FEATURES

Track and cars were optimized for mast track applications, increasing load capacity.

Finite Element Analysis software was used to optimize car and track structure, and increase strength-to-weight ratio.

Strong, lightweight cars and no heavy track fasteners means less weight aloft, keeping the center of gravity low; cars are low-profile for less windage.

Ball bearing halyard lock car reduces friction.

MATERIALS

6061-T6 aluminum cars are Hardkote anodized, providing a high strength-to-weight ratio and excellent corrosion resistance.

Track is bonded to the mast using a high-strength, tough adhesive with exceptional fatigue and impact resistance.

Free-rolling Torlon[®] ball bearings; stainless steel wire guides keep balls captive.

OPTIONS

Batten cars can be built with studs to suit customers' batten receptacles.

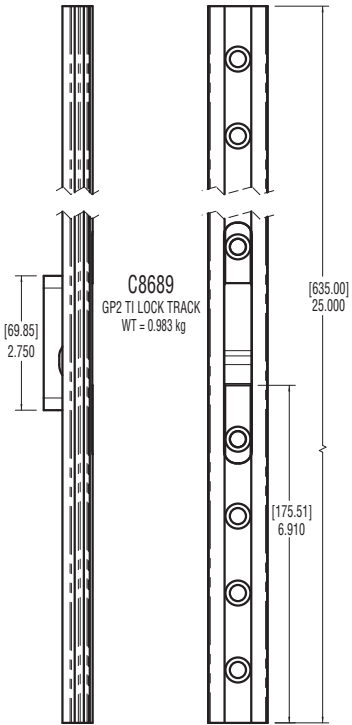
MAINTENANCE

GP2 Battcar systems should be flushed regularly with fresh water.

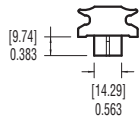
INSTALLATION

GP2 Battcars require professional installation.

Part No.	Description	Length		Width		Weight		Maximum working load	
		in	mm	in	mm	oz	g	lb	kg
C9028	Halyard lock	11 ¹³ / ₁₆	300	2 ¹⁵ / ₁₆	75	41.69	1182	9201	4173
C8890	Battcar/14 mm stud	5 ³ / ₁₆	132	2 ¹⁵ / ₁₆	75	20.28	575	2150	975
C9047	Battcar/12 mm stud	5 ³ / ₁₆	132	2 ¹⁵ / ₁₆	75	17.07	484	2150	975
C8701	Intermediate car	2 ³ / ₄	70	2 ¹⁵ / ₁₆	75	6.38	181	600	272
C8702	Reef car	5 ³ / ₁₆	132	2 ¹⁵ / ₁₆	75	14.32	406	2600	1179



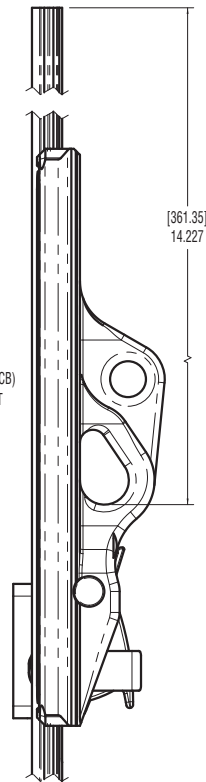
C8689
GP2 TI LOCK TRACK
WT = 0.983 kg



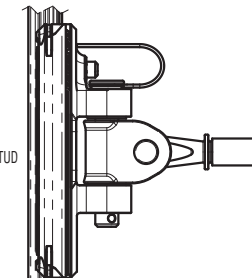
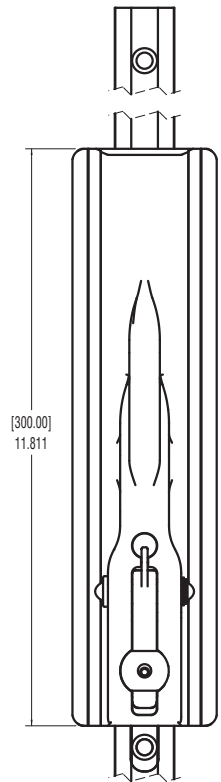

C8688
6m GP2 FLANGED TRACK
WT = 3.977 kg
WT/m = 0.662kg



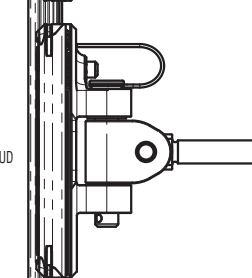
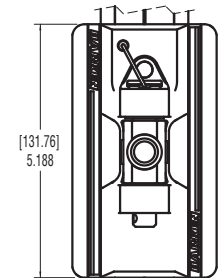
C8703
GP2 TRACK 1M HL
WT = 0.946 kg
WT/m = 0.946 kg



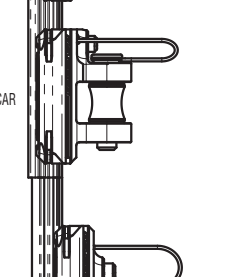
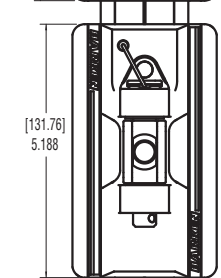
C9028
GP2 HALYARD LOCK (NON CB)
MWL = 4173kg @ 17°AFT
WT = 0.1182 kg



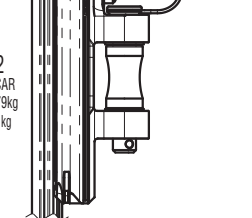
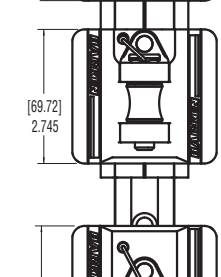
C8890
GP2 BATTEN CAR w/14mm STUD
MWL = 975
WT = 0.575 kg



C9047
GP2 BATTEN CAR w/M12 STUD
MWL = 975
WT = 0.484 kg



C8701
GP2 INTERMEDIATE CAR
MWL = 272kg
WT = 0.181 kg



C8702
GP2 REEF CAR
MWL = 1,179kg
WT = 0.406 kg

