

Tension Spring for Lane Line

Spare part for Racing Lane Line.

Each Original Malmsten Racing Lane Line is sold complete with a tension spring on one end and a take-up reel on the other side.

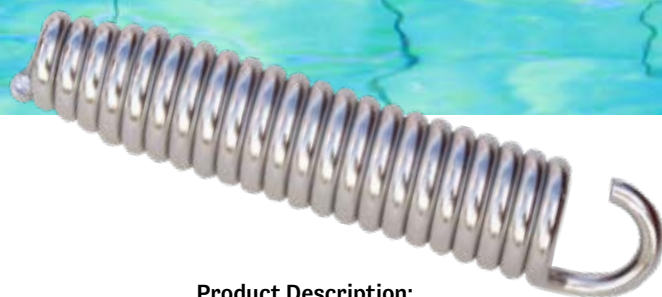
The importance of using a tension spring on a racing lane line is to support the wave absorbing functionality of the lane rope and to absorb unexpected tension.

Tensioning should be 1-1,2kN to allow for the wave absorbing components to interact properly. This tensioning may be adjusted with the take-up reel.

The lane rope wire should withstand a tensile force of 12kN and the anchor in pool wall should withstand 20kN.

Unique qualities:

- Adjusting the tensile force of the Lane Rope.
- Spare part – only to be used on Original Malmsten Racing Lane Lines



Product Description:

Length: 16,6cm

Diameter: 3,2cm

The thickness of the hook is 6mm.

Made with SS AISI316

Weight: 0,412kg

Associated products

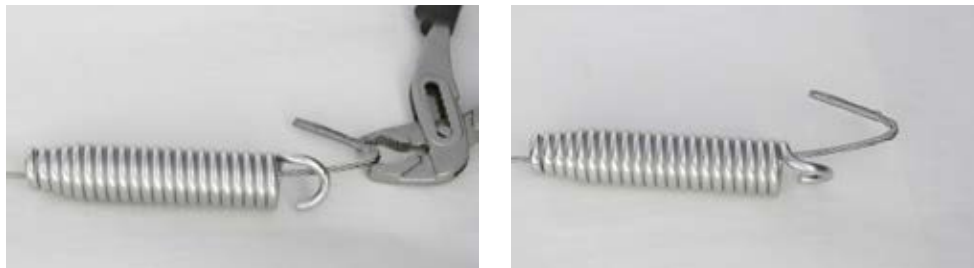
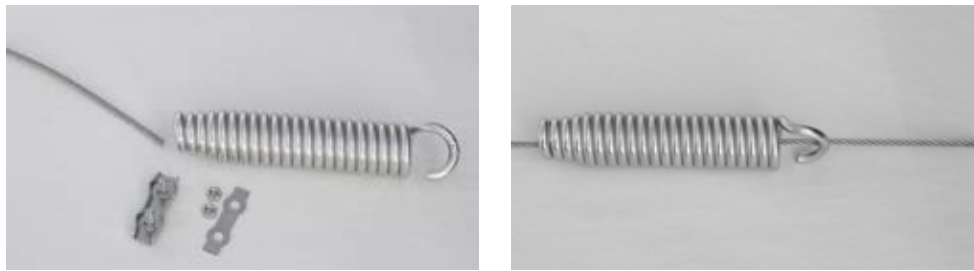


1011023 Spring Cover Red or White

Selected When it Counts

Tension Spring for Lane Line

Mounting instructions for replacement



Selected When it Counts



Straight white - 2310001



Curved white - 2310021



Corner white - 2310041

OP Gratings - Straight/Curved/Corner

Made in-house by Malmsten since 1998. Over 1000 installations worldwide, Olympic pools in Athens and Moscow.

Malmsten OP Gratings are available in standard and custom dimensions to suit any individual requirement. We manufacture the gratings in Sweden according to specifications.

Resistant to chlorine and salt water as well as to microorganisms and bacteria. Easy to keep clean.

Malmsten has developed OP Gratings in UV-resistant polyethylene, 100% recyclable material.

Easy to adjust at building site. Does not shrink.

Unique qualities:

- Excellent anti-skid, rating group 24°
- No sharp edges for bare feet
- Durable/long product life
- Custom made/custom fitted
- Dirt repellent
- Minimizing water loss by routing water down the drain
- Easy to clean and maintain
- Lifting key with each shipment
- Each piece weighs 5-8kg (5kg=1x0,3x0,03m LxWxH)
- OP gratings are solid and milled in one piece with no gaps
- Parallel OP Gratings have excellent water drainage characteristics - recommended
- Easy to lift each section and clean underneath
- Made in Sweden

Selected When it Counts

Product:

- 1-m long sections
 - Other lengths are available, price may differ
- When width exceeds 0,5 m, support is required underneath OP Grating.

Material:

- PE – polyethylene – UV-treated
- Material thickness: 20, 25, 30, 35 or 40 mm
- Material may be recycled at the end of product life

Production process:

- Step 1: Milled to custom fit
 Step 2: Manual cleaning and cutting of sharp edges
 Step 3: Sharp corners and surfaces are melted for optimal comfort

Color:

In stock white PE-material, UV treated
 Available in any RAL-color choice (+-5% exactitude), price difference (appr. 10%)
 Black available in recycled material 25 mm thick
 Blue is a good choice for visually impaired

Models:**Straight**

- Parallel – recommended – for optimal water flow into drain
- Transversal – available

Curved

- Transversal – recommended – for optimal fitting
- 8mm rule observed by reducing distance to 6mm and/or moving centre core

Corner

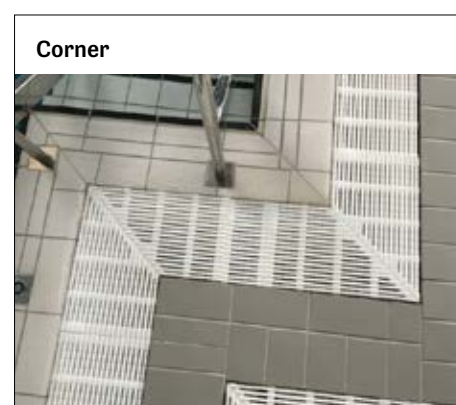
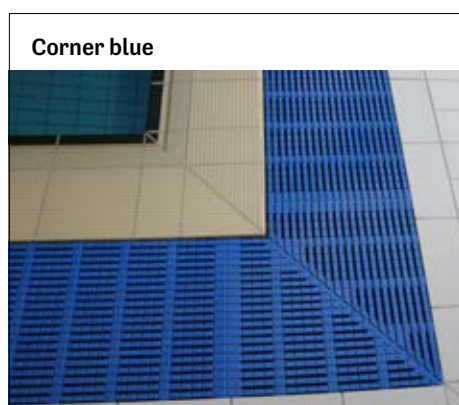
- Parallel – recommended – for optimal water flow into drain
- Transversal – available
- OP Corner units are solid and milled in one piece with no gaps

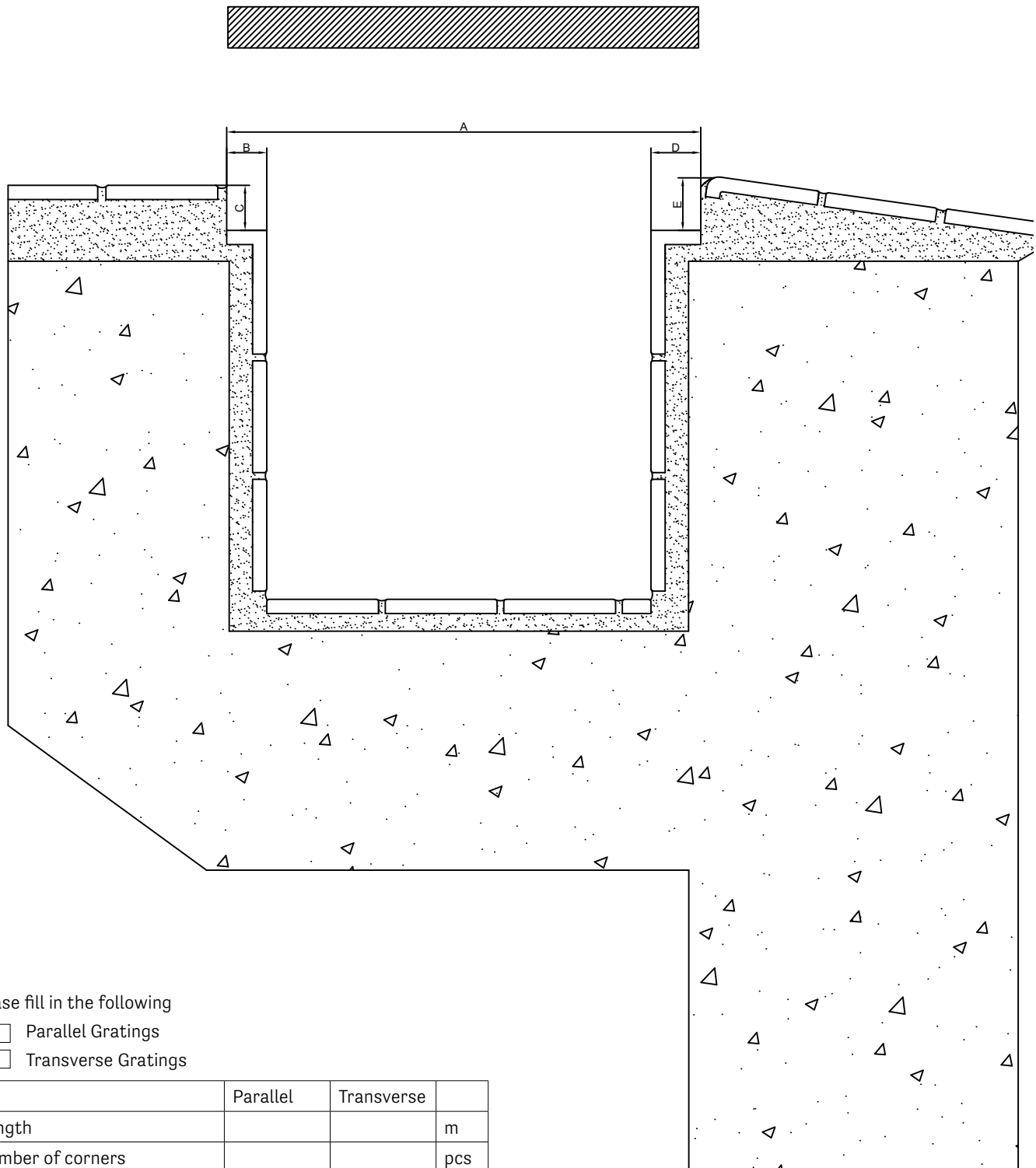
Accessories for wider OP Gratings:

- For width over 0,5 m we design gratings with screw jack pedestals (Buzon – black PP); adjusting heights and slops
- Affixed in gratings

**Manufacturing time from firm order:**

White OP Gratings: 2-3 weeks
 Custom colors: 8 weeks

References:



Please fill in the following

- Parallel Gratings
- Transverse Gratings

	Parallel	Transverse	
Length			m
Number of corners			pcs
A measure			mm
B measure			mm
C measure			mm
D measure			mm
E measure			mm

Reg.	No	Revision of	Sign	Date
Drawn by	Revised by	File name: Measure form gratings-01.dwg	Scale: 1:5/A4	Working nr.

Selected When it Counts



Floor Anchor Ø 40 mm

Levelled, 4° or 8° inclination

Lockable and fixed firmly, embedded, anchor on pool deck, used for lane posts (item 1013001), posts for backstroke (2018001) or turnboard (2018004) and for different pool ladders (item 2012001).

Floor anchor can be equipped with permanent cover so as to meet safety standards when not in use. Levelled or inclination of 4° or 8°.

Requires recess drilled embed of 150x150x150mm or drilled hole Ø 150mm depth 150mm. Anchors are embedded and fixed with epoxy.

Placement of anchor should have at least 75mm construction concrete on all sides and at least 50mm from reinforcementbar in concrete. Earth-bonding (see 6mm pre-drilled hole* on bottom surface) recommended. For details see page 2.

Unique qualities:

- Made from 316L with electro polished surfaces
- Commercial standard with 2mm thick tubing
- Lockable with Allen key



2010010
Levelled with cover

2010020
Levelled without cover

2010014
Inclination of 4° with cover

2010024
Inclination of 4° without cover

2010018
Inclination of 8° with cover

2010028
Inclination of 8° without cover

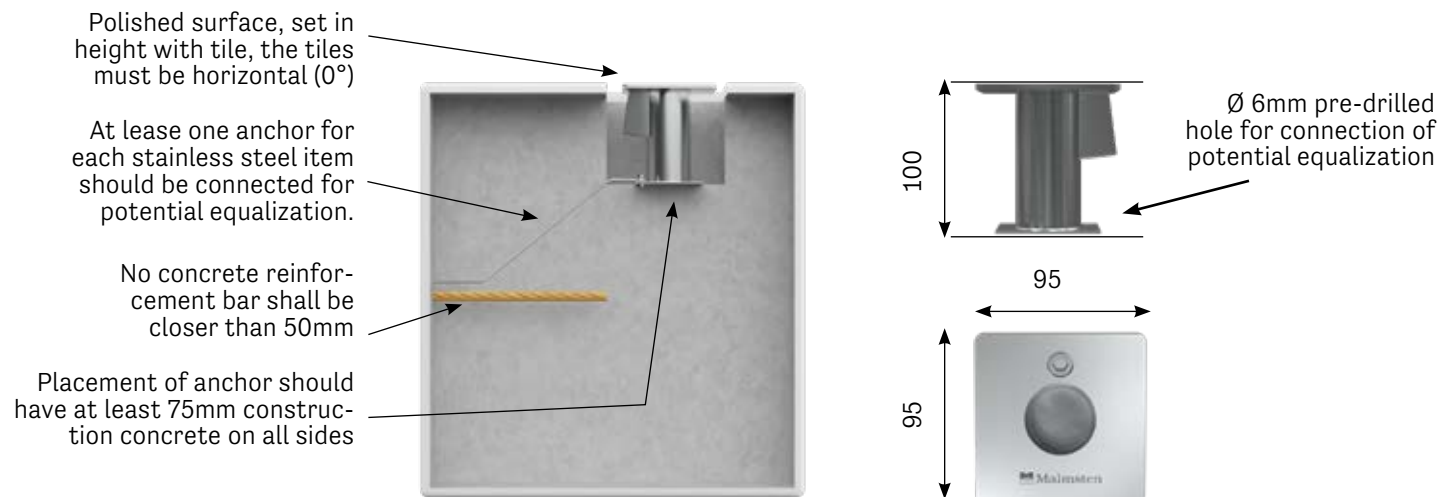
Dimensions:
100x95x95mm - Ø 40 mm

Selected When it Counts

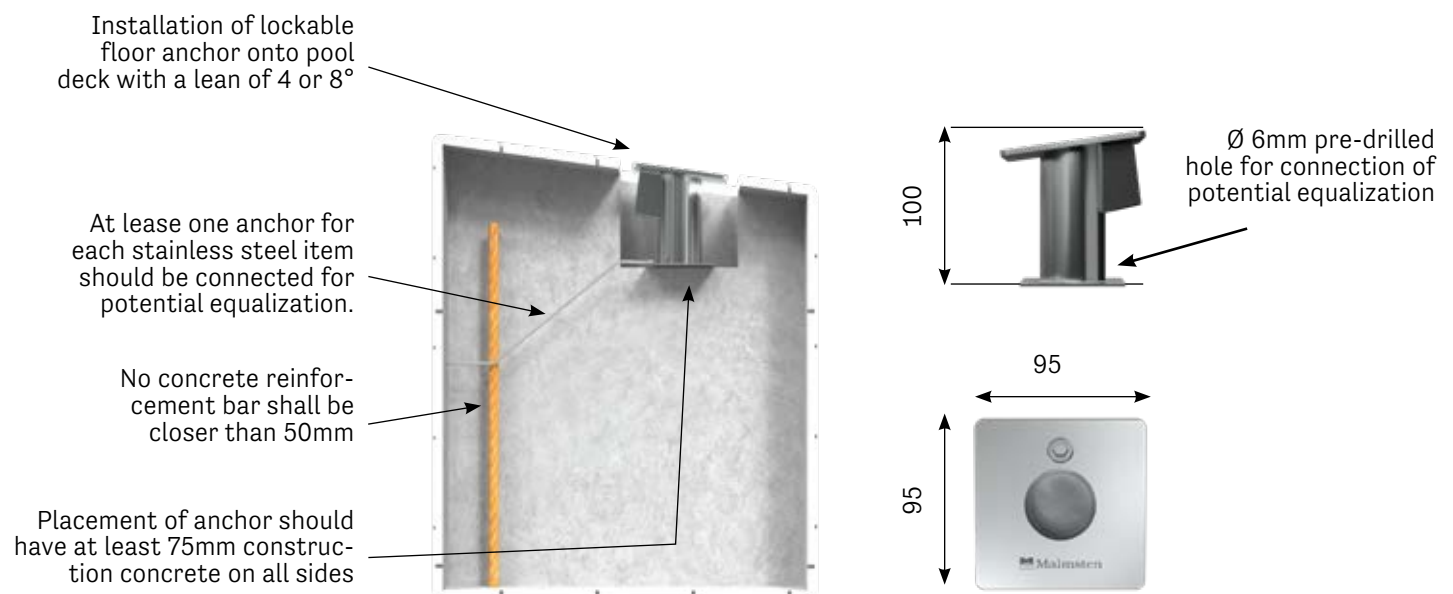
- 1 Builder/construction contractor performs recess in concrete
- 2 Electrical contractor draw up potential equalization (at least one of the anchors should be connected to earth cable).
- 3 Tiles are put in place up to the vicinity of recess, by the tile contractor
- 4.1 The building contractor mounts the anchor into the recessed area, and protects the polished plate from dirt or burn marks from concrete, tile adhesive and grout.
- 4.1 If potential equalization (earth cabling) is to be done, the electrical contractor may connect this to the anchor.
- 5 The recess is then molded with epoxy or expanding concrete, by the construction contractor
- 6 Tile contractor sets tiling against polished plate of anchor.
- 7 Tile contractor or construction contractor removes the cover from the polished plate



Installation of lockable floor anchor onto levelled (0°) pool deck



Installation of lockable floor anchor onto pool deck with a lean of 4 or 8°



Selected When it Counts



Lane Rope Trap

Malmsten lane rope trap with protective roller and stainless steel anti-slip cover plate, for efficient storage of racing lane lines in basement, suitable for 100 and 150 mm wide lanes.

The trap opening is $\varnothing 350$ mm. The folded roll mechanism prevents damage to the lane rope. Just place the lanes hook onto the roll mechanism.

This floor cover plate requires drilling of about 380 mm (round cover) or about 370x370 mm (square cover) and is delivered with a flange to be placed onto the concrete underneath the ceramic layer.

Unique qualities:

- Proven basement storage solution
- High quality and long lasting made of stainless steel
- Equipped with foldable protective roller

Product description:

Measurements $\varnothing 350$ mm.

Made to measure height: H1 = top edge ceramic layer to ceiling underneath (total required height for the drilling).

Made to measure height: H2 = top edge ceramic layer to concrete.

Material: Stainless steel EN 1.4404.

Associated Products:



1011001 Storage Bag for Racing Lane

Selected When it Counts



Wall-/Bottom Anchor

Nicely designed multifunctional wall/floor Malmsten anchor with built in lane hook or eyelet that may be used for anchoring in pool.

To be bolted. Bolts are not included.



Product description:

Face plate: 95 x 95 mm

Back plate: 140 x 140 mm. **Depth:** 34 mm.

Material: Stainless steel 316L.

Associated products



1010010 Tension spring lane line



1010018 Take-up reel lane line

Unique qualities:

- Follow EU-rule of opening (eyelet) less than 8mm.
- Stainless steel 316 L.
- Multifunctional. Maybe used as wall anchor, pool deck anchor or anchor in bot-tom of the pool.

Selected When it Counts



Backstroke Start Device - FINA Compliance

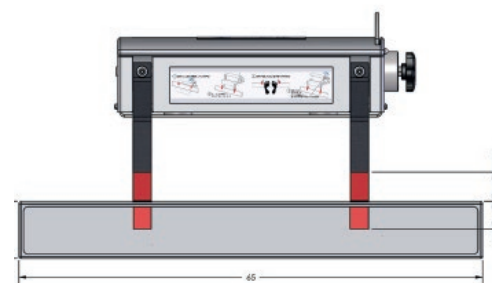
The backstroke start device from Colorado Time Systems helps to eliminate slips at the start of a race.

The versatile design allows the device to attach to nearly any starting block with either straps or anchors. Once in place, pull down the backstroke wedge to the desired location on the pool wall and lock into place.

Once the swimmer has left the wall, the backstroke start device will automatically retract up and out of the water until the next swimmer sets up for the next race without interfering with turns and finishes.

A backstroke ledge may be used:

- The ledge may be adjustable to 4cm above or 4cm below the water level
- The ledge is a minimum of 65cm in length
- The ledge must be 8cm in height, 2cm at the width with 10 degrees of slope



Product Description:

The non-slip backstroke start device wedge measures 65cm x 8cm and features a 10° angle for foot placement at the race start.

Main features:

- anti-slip foot backstroke wedge
- easy to set up
- automatically retracts up and out of the water
- robust construction
- adapts to most starting blocks

Selected When it Counts



Cover for Malmsten Storage Trolley

Cover fitted to trolley (1012001), available in two sizes, and made to protect racing lines or water polo lines from harmful sun rays, dirty rain and wind. Recommended to protect and prolong product life.

Racing lane lines stored on our storage trolley should be rinsed with clear water and kept in a well ventilated area, out of direct sunlight and harmful UV-rays.

Placing a cover over stored racing lines will keep dirt and harmful UV-rays out.

This cover comes with a practical storage pouch, straps to be affixed on trolley side, when not in use.

Unique qualities:

- Practical storage pouch
- Two sizes are available



Product Description:

Blue, lightweight PVC cover.

Two sizes are available.

Gold (large) fits storage trolley Gold (large) which is 2460 x 1250 x 1410 mm.

Small fits storage trolley small which is 1910 x 1250 x 1410 mm.

Associated Products:



1012001 Storage Trolley for Lane Line

Selected When it Counts



Malmsten Storage Trolley

Malmsten proven high quality storage trolley in stainless steel 316L, and partly powder coated for added protection.

Equipped with 4 swivel castors, of which two are lockable. Easy to assemble (instructions available)

Available in two sizes and capacities:

Small – 1910 x 1250 x 1410 mm – 50 kg. Suitable for a max load of 160 kg, 75m Gold or 150m Standard size racing lane lines.

Large – 2460 x 1250 x 1410 mm – 55 kg. Suitable for a max load of 267 kg, 100m Gold or 200m Standard size racing lane lines.

Unique qualities:

- High quality proven storage solution
- Made from 316L stainless steel, with sides powder coated for added solution
- Easy to use with two lockable swivel castors



Product description:

Small: 1) 16 kg/ 0,07 m³ (attention long carton 2m), 2) 19 kg/ 0,274 m³ and 3) 13 kg/0,093 m³

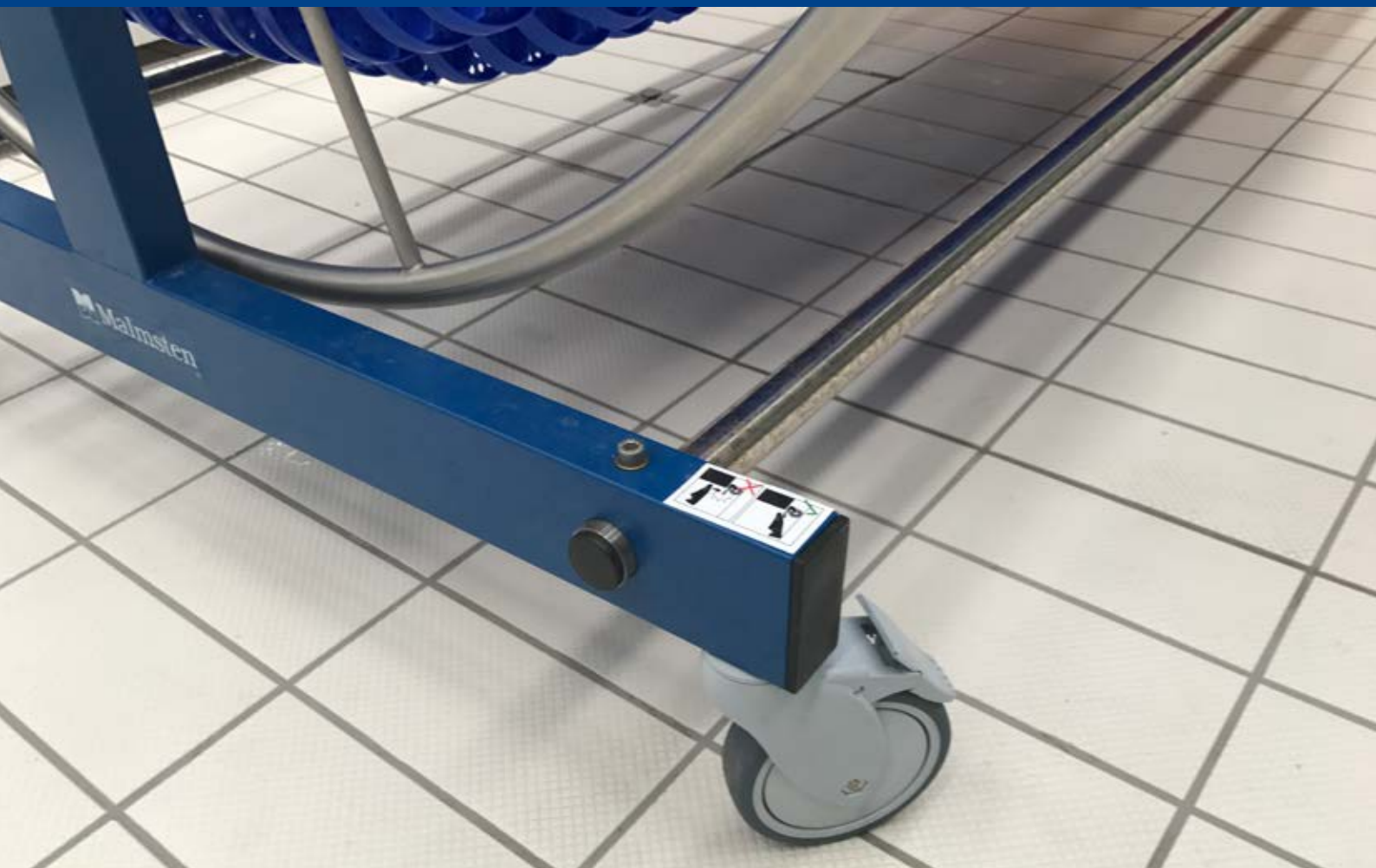
Large: 1) 20 kg/0,07 m³ (attention long carton 2m), 2) 19 kg/ 0,274 m³ and 3) 13 kg/0,093 m³

Associated products:



1050006 Cover for Trolley

Selected When it Counts



Malmsten Storage Trolley

Useful information

- Maintain storage trolley to get the longest life possible.
- Follow installation instructions. Lock castors when rolling up lanes and when in a storage position.
- Retighten bolts on a weekly basis (including bolts of castors). Rinse with clear water on a weekly basis.
- Store the trolley, with or without lanes, in a dry, well ventilated storage area. Preferably out of direct sunlight.
- Tighten wheels - stain steel regularly.
- Attention to that stainless steel parts may react to contact with other metals. Immediately remove any start to rust with soft cloth. Wax surface for prevention.
- Repaint any scratches in the painted area (contact us for information on recommended paint)



Selected When it Counts



Lane Line Slider

The Racing Lane Lines runs smoothly over the lane slider and will therefore not be damaged from the hard edge of the pool.

It also spares the pool edge from wear and tear and makes the taking-up a lot easier.

Made of fiberglass-reinforced polyester with a rubber edge.

This lane slider is lightweight and easy to install. It protects your lines and the pool edge every time they are reeled from your pool.

Unique qualities:

- Made of fibreglass-reinforced polyester
- Protects the pool edge
- Increases the life length of the lanes
- Light weight



Product Description:

Size: 62 x 38 x 44 cm

Weight: 3,3 kg.

Made of fiberglass reinforced polyester

Selected When it Counts



Associated products



2010004 Floor Plate Gold



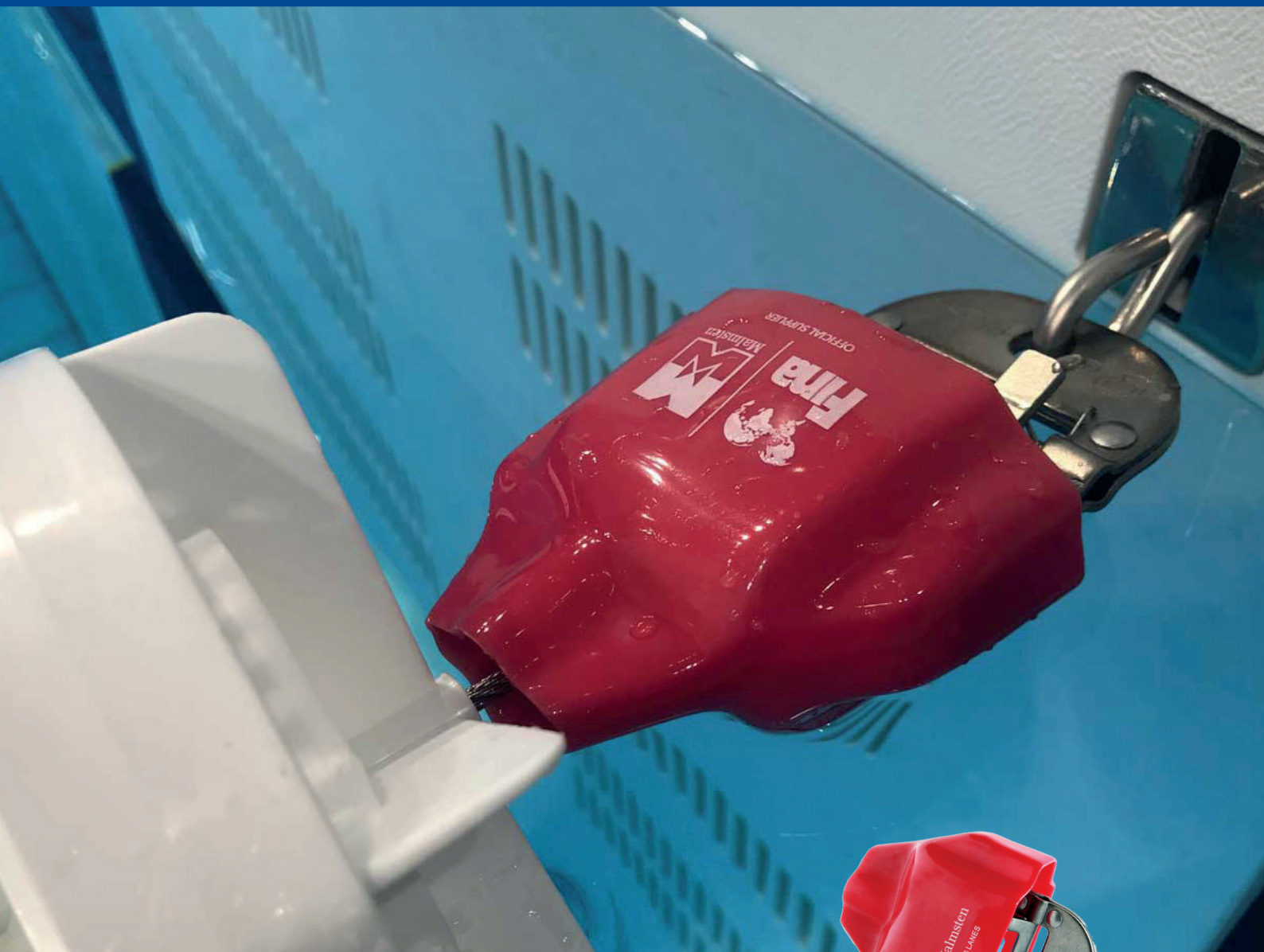
1010001 Racing Lane Line
Malmsten Classic 100 mm



1010002 Racing Lane Line
Malmsten Gold 150 mm



10100012 Racing Lane Line
Malmsten Gold PRO 150 mm



Take-up Reel Lane Line with Cover

Each Original Malmsten Racing Lane Line is sold complete with a take-up reel on one end and a tension spring on the other side.

The importance of using a take-up reel is to properly fit the lane line to the pool anchors. It is an important part on the racing lane lines used for adjusting optimal turbulence control on lane line for competition and training. The advantage of using a separate ratchet spanner (spare part number 1011002), for adjusting the take-up reel, is that lane line tension may only be adjusted by the person (authorized personell) equipped with the ratchet spanner.

The take-up reel has to be adjusted by the original Malmsten ratchet spanner only.

Unique qualities:

- Adjusting lane tension properly
- Separate ratchet spanner – an important safety aspect
- Spare part – only to be used on Original Malmsten Racing Lane Lines

It is important not to use any other tool as other tools may seriously damage the take-up reel.

Product Description:

Length: 17cm - **Weight:** 500 g.

Frame: stainless steel

Mechanism: Brass cogwheel.

Rolling mechanism in blue polyamide.

Equipped with a protective red cover

S-hook for anchoring: Ø 7,8mm (stainless steel)

Associated products

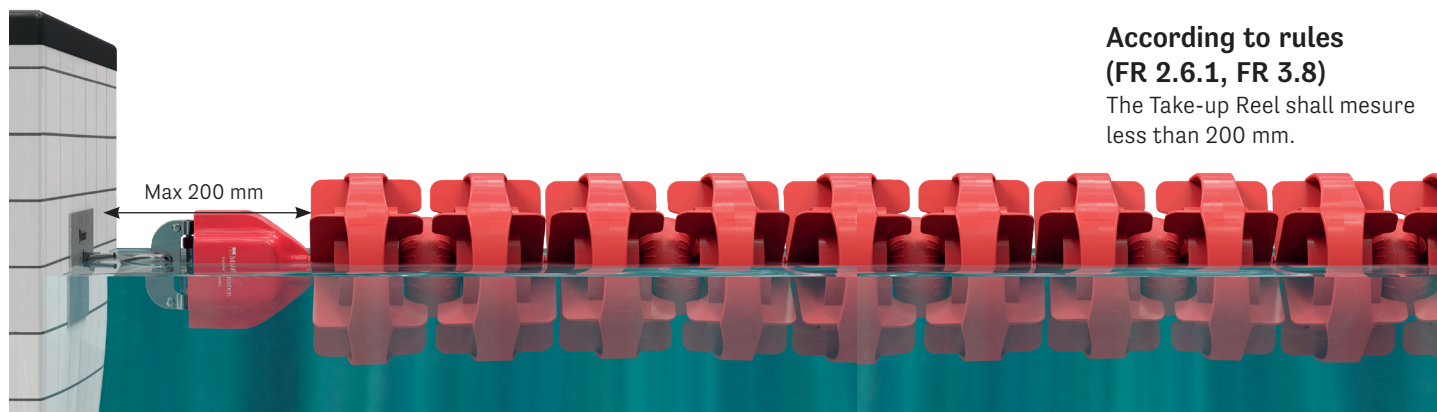


1011002 Ratchet Wrench

Selected When it Counts

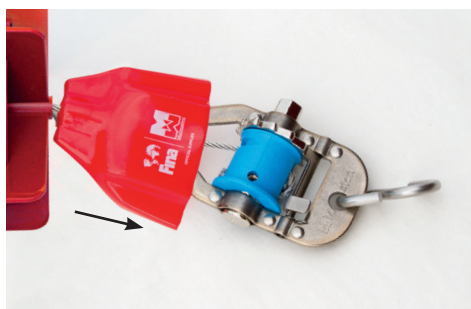
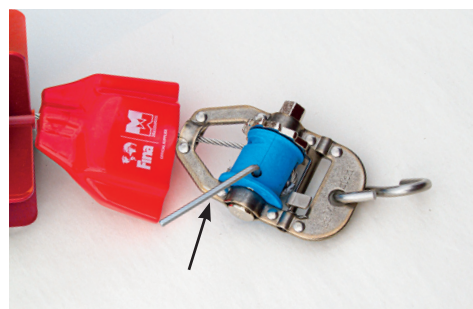
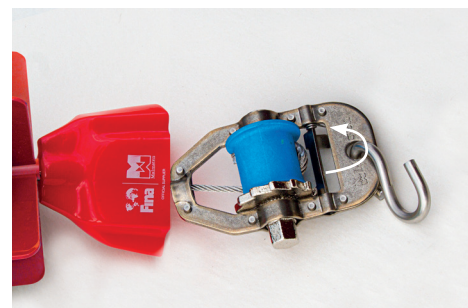
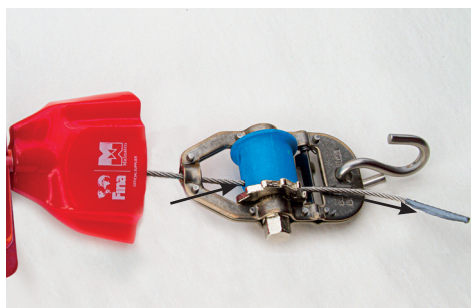
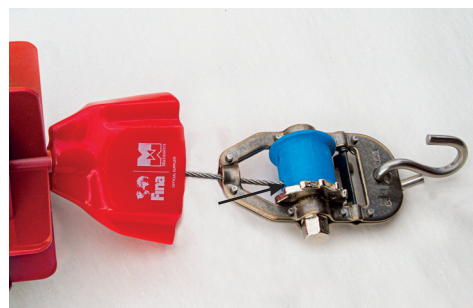
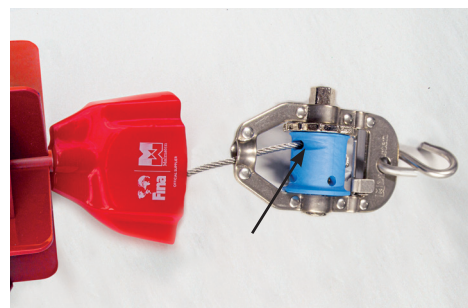
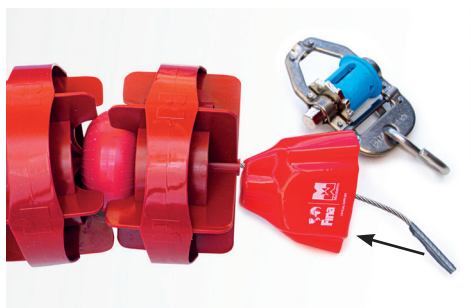
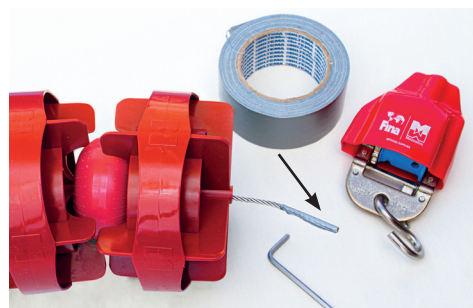
Take-up reel lane line with cover

Mounting instructions for replacement



**According to rules
(FR 2.6.1, FR 3.8)**

The Take-up Reel shall measure less than 200 mm.



The handling of the Take-Up reel should only be done with the Original Ratchet Spanner (always included with your purchase). Any other tool may damage the Take-Up reel.

Selected When it Counts

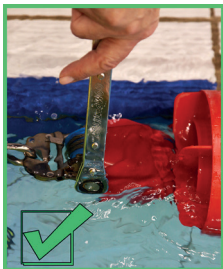
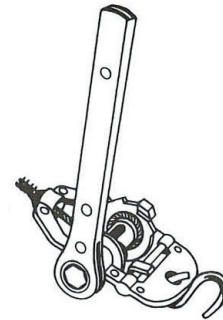
Handling Take-up Reel with the Original Ratchet Wrench

The Take-up Reel of the Racing Lane Line rope requires a tool to lock tensioning into position and to prevent non-authorized tampering. Racing Lane Line shall be firmly stretched and tensions should be 1-1,2kN.

Take-up Reel Lane Line
with cover



Ratchet Wrench



Tightening lanes:

1. Use only Malmsten wrench to tighten lanes.
2. Wind cable on reel spool evenly. Do NOT overlap.

Lanes should never be over tightened. Under normal use, a reliable gauge for proper tension is done by hand tightening the spool then applying the wrench and moving the cylinder three notches.

Realsing lanes:

1. Use only Malmsten wrench to loosen lanes.
2. Increase lane tension enough to release pressur on locking device
3. Depress thumb pawl on locking device and allow spool to release tension one notch.
4. Repeat steps 2 and 3 until tension is completely release applying the wrench and moving the cylinder three notches.



WARNING! When reel is under tension never hit thumb pawl with Ratchet Wrench to release catch lock. DO NOT allow reel spool to run free. This will damage teeth on spool and cause backlash of wire. It is also dangerous to operator.



Selected When it Counts