

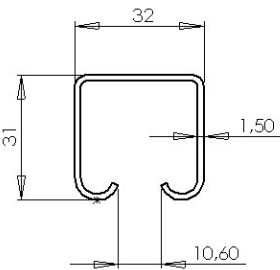



# Industrias GALARZA, S.A.<sup>®</sup>

Leaders in electrical conductivity since 1958

## CATALOGUE 2020



TRACK PROFILE	MAX. LOAD PER TROLLEY	DESCRIPTION	SERIES
	<b>20 KG</b>	<b>FESTOON SYSTEM RUNNING ON A C-PROFILE 32 X 31MM</b>  Max cable package: 58 (L) x 20 (H) mm	<b>2300/R</b> 



# GENERAL SALES CONDITIONS, SUPPLY AND WARRANTY

## Generalities

The supply of the products contained in this catalogue is subject to the conformity of the tariff in force at the moment and the terms contained in these General Conditions of Sale and Guarantees.

## Orders and prices

All orders received by IGA will be confirmed via fax or email. If in the following 24 hours IGA does not receive any claim, they will be considered definitive. IGA reserves the right to accept or reject any order.

## Codes

The codes indicated in this catalogue are the standard products of IGA.

## Delivery time

If for reasons beyond our control we can not fulfill this service commitment, IGA will inform the customer of the new term within a maximum of 48 hours after the reception of the order.

The rest of references will be served in the shortest period of time possible and may make partial deliveries.

Orders received that have a delivery time less than 72 hours, will follow the procedure described above.

The breach of the previous commitment or a fractioned issue will not be grounds for compensation.

## Transport

Our products are considered expired in our warehouse and the date of issue is shown on the delivery note.

The goods travels at the addressee expense and risk, even if they are sent prepaid.

In the case of lack of packages or visible damages due to transportation, the addressee must write it down on the delivery note, claim the carrier and inform the commercial department of IGA within 48 hours. Otherwise, it will be considered the conformity of the goods in quantity and condition. Claims for delays in transportation will not be accepted.

After 8 days from receipt of the goods, no claims will be accepted about the contents of the boxes.

## Refunds

The products invoiced by IGA are considered a firm sale and has no right to refund.

In case of an error in the execution of the order, the following shall be taken into account:

- The change must be authorized by the commercial direction of IGA. The warehouse of IGA will not accept any product without authorization.
- The accepted material will have a 20% reduction of its value for verification expenses.
- The goods returned to IGA travel at the client's risk.

## Installations

IGA is exempted from any responsibility in the installations that do not comply with the advice or with the specifications and features of each range of product.

## Warranty

IGA range of products has a 2 year warranty. The acknowledgment of the responsibility in warranty corresponds only to IGA and / or to its insurance company. Any other defect caused by aging, corrosion, improper installation or improper application, will not be subject to possible claims.

## Jurisdiction

IGA will try to resolve any divergence with his clients through friendly channels. Having said that, in case of litigation, the parties agree and are obliged to submit to the arbitration appointed by the Court of the Arbitration Association of Bilbao, which will be responsible for the administration of the aforementioned arbitration in accordance with its Statute and Regulations. Likewise, they are obliged from now on to comply with the arbitral report that is issued.

IGA reserves the modification of the articles without previous notice.

## NOTES OF INTEREST

### KIT FESTOON :

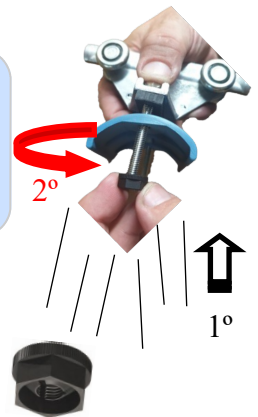
IGA offers the possibility of supplying the entire FESTOON system assembled under the customer's specifications.



KIT FESTOON

### QUICK ASSEMBLY NUTS:

New QUICK polyamide nuts 6.6, that accelerate the operation of assembly of electric cables in cars; Since these nuts are inserted in the screws until almost the final tightening zone.



### SQUARE NECK SCREWS:

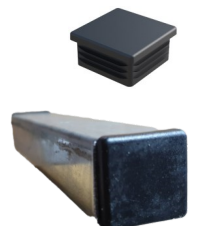
The trolleys with body of sheet steel (series 2324), have been modified for the use of fixing screws with spherical head and square neck (according to DIN 603). The square neck prevents the screw from turning during the tightening process of the hexagonal nut of the carriage, so fewer tools are necessary and the assembly time is reduced.



### FINAL PLUGS FOR THE PROFILE:

The option of plastic material caps to close both ends of the rolling profile has been added to our catalogue.

NOTE: The CM brackets have these series plugs incorporated.



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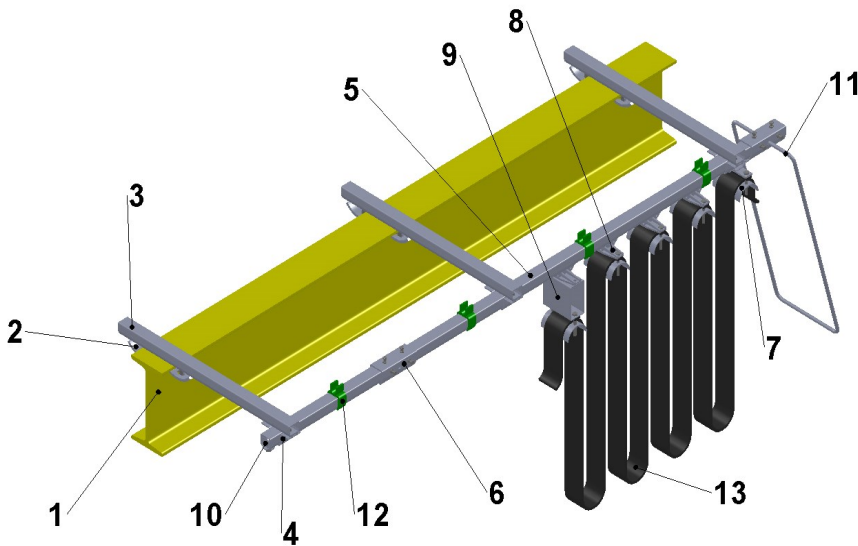




# FESTOON SYSTEM SERIES 2300R

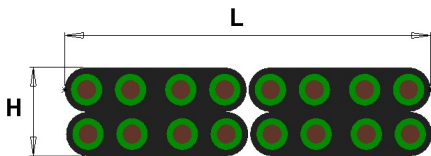
## INDEX

Profile	Page. 03	ROUND CABLE TROLLEY	
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1. Beam
2. Beam clip
3. Cross arm support
4. Track hanger
5. Track profile
6. Track joint
7. End clamp
8. Cable trolley
9. Towing trolley
10. End bumper stop
11. Protection
12. Cable clamp
13. Cable

Maximum cable package: 58 (L) X 20 (H) mm.



In aggressive indoor / outdoor conditions the metal componentes (bodies and cable holders) are supplied with EPOXY paint or made in stainless steel AISI 304.

TEMPERATURE RANGE: -15°C / +80°C.

MAX. LOAD CAPACITY PER TROLLEY = 20

### NUMBER OF TROLLEYS REQUIRED:

$$N = ( L / 2xH ) - 1$$

Where: N: number of cable trolleys  
L: travelling length  
H: maximum loop height

### REQUIRED AMBUSH LENGTH

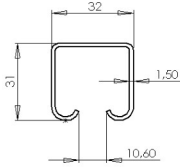
$$b = ( N + 1 ) x m$$

Where: b: maximum ambush length  
N: number of cable trolleys  
m: trolley length



# FESTOON SYSTEM SERIES 2300R

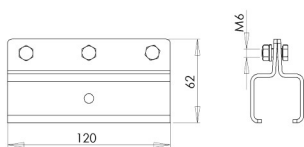
## PROFILE



- Section: 1,560 cm<sup>2</sup>  
 - Ix: 1,990 cm<sup>4</sup>  
 - Wx: 1,156 cm<sup>3</sup>

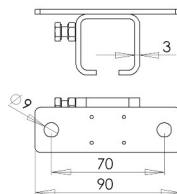
REFERENCE	CODE	MATERIAL	LENGTH	WEIGHT
2300/R-1	303001	Galvanised Steel	5 mts	1,22 Kg/m
2300/R-1	303516	Galvanised Steel	2,5 mts	1,22 Kg/m
2300/R-1-Inox	303259	Stainless Steel AISI 316	5 mts	1,22 Kg/m

## TRACK JOINT



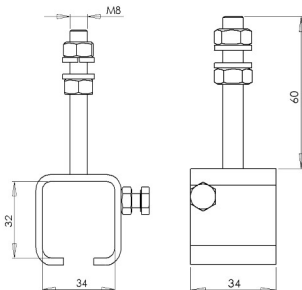
REFERENCE	CODE	MATERIAL		WEIGHT
		Laterals	Screws	
2300/R-3-J	303260	Zinc Plated Steel	Zinc Plated Steel	0,375 Kg
2300/R-3-J-PLY	303014	Painted steel	Stainless Steel	0,385 Kg
2300/R-3-J-Inox	303436	Stainless Steel	Stainless Steel	0,375 Kg

## HORIZONTAL TRACK HANGER BRACKET



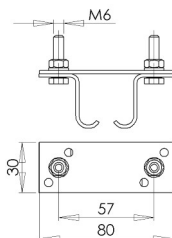
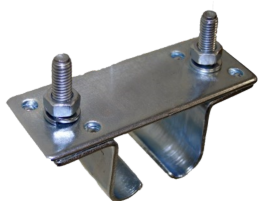
REFERENCE	CODE	MATERIAL		WEIGHT
		Body	Screws	
2300/R-4-H1	303005	Zinc Plated Steel	Zinc Plated Steel	0,154 Kg
2300/R-4-H1-Inox	303605	Stainless Steel	Stainless Steel	0,154 Kg

## CEILING TRACK HANGER BRACKET



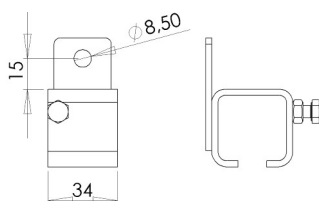
REFERENCE	CODE	MATERIAL		WEIGHT
		Body	Screws	
2300/R-4-H1-R	303378	Zinc plated Steel	Zinc plated Steel	0,115 Kg
2300/R-4-H1-R Inox	303611	Stainless Steel	Stainless Steel	0,115 Kg

## HORIZONTAL TRACK HANGER BRACKET



REFERENCE	CODE	MATERIAL		WEIGHT
		Base + Laterals	Screws	
2300/R-4-H2	303004	Zinc Plated Steel	Zinc Plated Steel	0,106 Kg
2300/R-4-H2-PLY	303015	Painted Steel	Stainless Steel	0,116 Kg
2300/R-4-H2-Inox	303437	Stainless Steel	Stainless Steel	0,106 Kg

## LATERAL TRACK HANGER BRACKET



REFERENCE	CODE	MATERIAL		WEIGHT
		Body	Screws	
2300/R-4-L	303308	Zinc Plated Steel	Zinc Plated Steel	0,155 Kg
2300/R-4-L Inox	303607	Stainless Steel	Stainless Steel	0,155 Kg

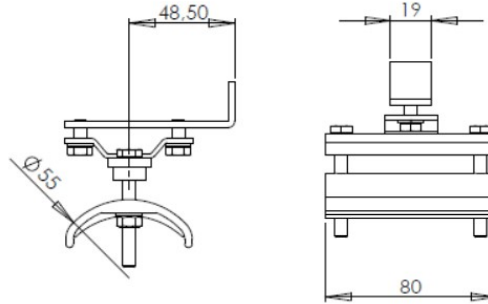
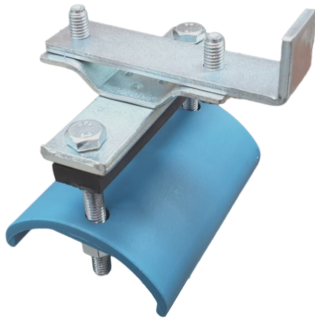




# FESTOON SYSTEM SERIES 2300R

END CLAMP

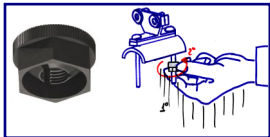
Saddle  $\varnothing 55\text{mm}$



SADDLES  $\varnothing 85\text{mm}$  IN STEEL ARE AVAILABLE

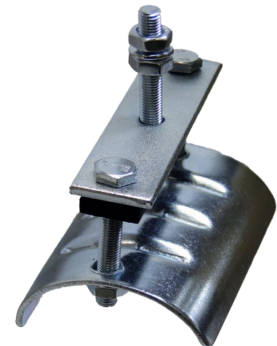
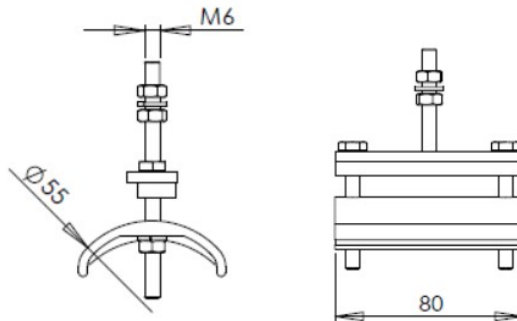
REFERENCE	CODE	MATERIAL			WEIGHT
		Body	Screws	Saddle	
2300/R-2	303002	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,170 Kg
2316-2	303039	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	0,315 Kg
2300/R-2-PLY	303013	Painted Steel	Stainless Steel	Polypropylene	0,180 Kg
2316-2-PLY	303430	Painted Steel	Stainless Steel	Painted Steel	0,325 Kg
2300/R-2-Inox	303582	Stainless Steel	Stainless Steel	Polypropylene	0,170 Kg
2316-2-Inox	303583	Stainless Steel	Stainless Steel	Stainless Steel	0,315 Kg
2300/R-2-TR	303614	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,170 Kg
2300/R-2-PLY-TR	303615	Painted Steel	Stainless Steel	Polypropylene	0,180 Kg
2300/R-2-Inox-TR	303616	Stainless Steel	Stainless Steel	Polypropylene	0,170 Kg

Trolley assembled with QUICK nut



END CLAMP

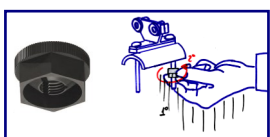
Saddle  $\varnothing 55\text{mm}$



SADDLES  $\varnothing 85\text{mm}$  IN STEEL ARE AVAILABLE

REFERENCE	CODE	MATERIAL			WEIGHT
		Body	Screws	Saddle	
2300/R-2S	303034	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,115 Kg
2316-2S	303040	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	0,315 Kg
2300/R-2S-PLY	303035	Painted Steel	Stainless Steel	Polypropylene	0,125 Kg
2316-2S-PLY	303051	Painted Steel	Stainless Steel	Painted Steel	0,325 Kg
2300/R-2S-Inox	303584	Stainless Steel	Stainless Steel	Polypropylene	0,115 Kg
2316-2S-Inox	303585	Stainless Steel	Stainless Steel	Stainless Steel	0,315 Kg
2300/R-2S-TR	303617	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,115 Kg
2300/R-2S-PLY-TR	303618	Painted Steel	Stainless Steel	Polypropylene	0,125 Kg
2300/R-2S-Inox-TR	303619	Stainless Steel	Stainless Steel	Polypropylene	0,115 Kg

Trolley assembled with QUICK nut

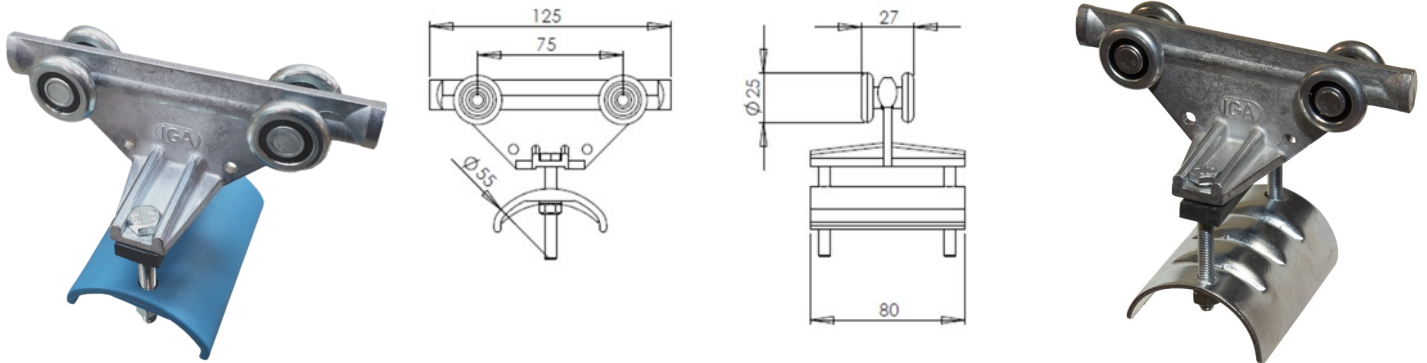




# FESTOON SYSTEM SERIES 2300R

CABLE TROLLEY

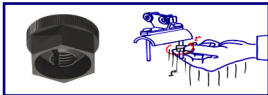
Saddle  $\varnothing 55\text{mm}$



SADDLES  $\varnothing 85\text{mm}$  IN STEEL ARE AVAILABLE

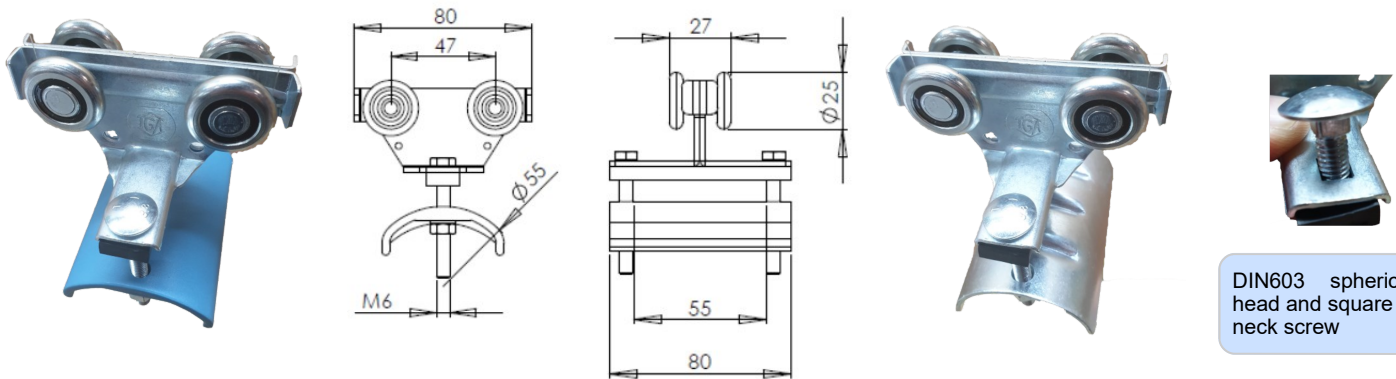
REFERENCE	CODE	MATERIAL			WEIGHT
		Body	Screws + Wheels	Saddle	
2300/R-5	303006	Aluminium	Zinc Plated Steel	Polypropylene	0,230 Kg
2316-5	303044	Aluminium	Zinc Plated Steel	Zinc Plated Steel	0,265 Kg
2300/R-5 PLY	303017	Painted Aluminium	Stainless Steel	Polypropylene	0,240 Kg
2316-5-PLY	303056	Painted Aluminium	Stainless Steel	Painted Steel	0,275 Kg
2300/R-5-TR	303620	Aluminium	Zinc Plated Steel	Polypropylene	0,230 Kg
2300/R-5 PLY-TR	303621	Painted Aluminium	Stainless Steel	Polypropylene	0,240 Kg

Trolley assembled with QUICK nut



CABLE TROLLEY

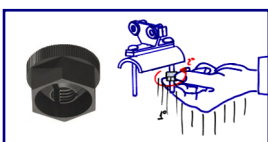
Saddle  $\varnothing 55\text{mm}$



DIN603 spherical head and square neck screw

REFERENCE	CODE	MATERIAL			WEIGHT
		Body	Screws + Wheels	Saddle	
2324-5	303069	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,207 Kg
2324-C-5	303075	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	0,283 Kg
2324-5 PLY	303085	Painted Steel	Stainless Steel	Polypropylene	0,217 Kg
2324-C-5-PLY	303092	Painted Steel	Stainless Steel	Painted Steel	0,293 Kg
2324-5-Inox	303518	Stainless Steel	Stainless Steel	Polypropylene	0,207 Kg
2324-CH-5-Inox	303413	Stainless Steel	Stainless Steel	Stainless Steel	0,283 Kg
2324-5-TR	303622	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,207 Kg
2324-5 PLY-TR	303623	Painted Steel	Stainless Steel	Polypropylene	0,217 Kg
2324-5-Inox-TR	303624	Stainless Steel	Stainless Steel	Polypropylene	0,207 Kg

Trolley assembled with QUICK nut







# FESTOON SYSTEM SERIES 2300R

CABLE TROLLEY

Saddle ø55mm



2340-5



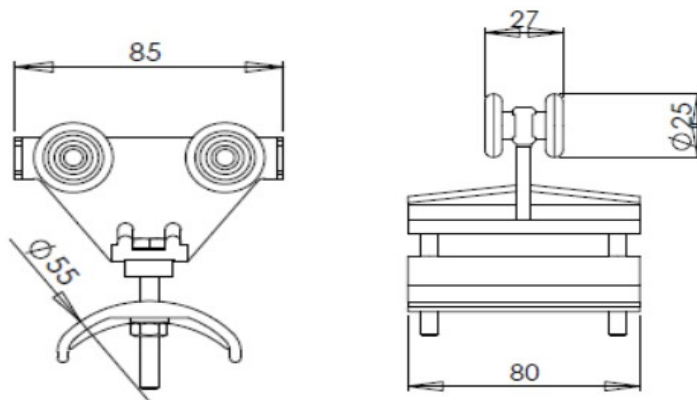
2340-C-5



2340-L-5

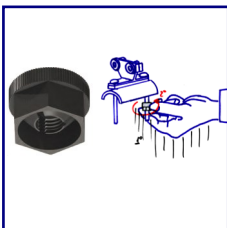


2340-LC-5



REFERENCE	CODE	MATERIAL				MAX. LOAD	WEIGHT
		Body	Wheels	Saddle	Screws		
2340-5	303103	Polypropylene	Polypropylene	Polypropylene	Zinc plated steel	12 Kg	0,100 Kg
2340-C-5	303107	Polypropylene	Polypropylene	Zinc Plated Steel	Zinc plated steel	12 Kg	0,160 Kg
2340-L-5	303110	Polypropylene	Zinc Plated Steel	Polypropylene	Zinc plated steel	15 Kg	0,139 Kg
2340-LC-5	303111	Polypropylene	Zinc Plated Steel	Zinc Plated Steel	Zinc plated steel	15 Kg	0,216 Kg
2340-5-Inox	303319	Polypropylene	Polypropylene	Polypropylene	Stainless steel	12 Kg	0,100 Kg
2340-C-5 Inox	303586	Polypropylene	Polypropylene	Stainless Steel	Stainless steel	12 Kg	0,160 Kg
2340-L-5-Inox	303511	Polypropylene	Stainless Steel	Polypropylene	Stainless steel	15 Kg	0,139 Kg
2340-LC-5 Inox	303587	Polypropylene	Stainless Steel	Stainless Steel	Stainless steel	15 Kg	0,216 Kg
2340-5-TR	303625	Polypropylene	Polypropylene	Polypropylene	Zinc plated steel	12 Kg	0,100 Kg
2340-L-5-TR	303626	Polypropylene	Tread Zinc plated steel	Polypropylene	Zinc plated steel	15 Kg	0,139 Kg
2340-5-Inox-TR	303627	Polypropylene	Polypropylene	Polypropylene	Stainless steel	12 Kg	0,100 Kg
2340-L-5-Inox-TR	303628	Polypropylene	Tread Zinc plated steel	Polypropylene	Stainless steel	15 Kg	0,139 Kg

Trolley assembled with QUICK nut

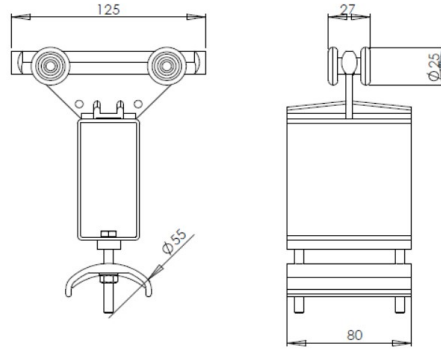




# FESTOON SYSTEM SERIES 2300R

TOWING TROLLEY

Saddle  $\varnothing 55\text{mm}$



SADDLES  $\varnothing 85\text{mm}$  IN STEEL ARE AVAILABLE

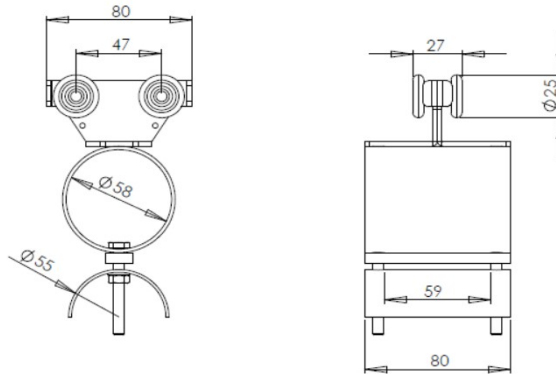
REFERENCE	CODE	MATERIAL				WEIGHT
		Body	Screws + Wheels	Towing Attachment	Saddle	
2300/R-6	303007	Aluminium	Zinc Plated Steel	Polypropylene	Polypropylene	0,265 Kg
2316-6	303045	Aluminium	Zinc Plated Steel	Polypropylene	Zinc Plated Steel	0,341 Kg
2300/R-6-PLY	303018	Painted Aluminium	Stainless Steel	Painted Steel	Polypropylene	0,275 Kg
2316-6 PLY	303057	Painted Aluminium	Stainless Steel	Painted Steel	Painted Steel	0,351 Kg
2300/R-6-TR	303629	Aluminium	Zinc Plated Steel	Polypropylene	Polypropylene	0,265 Kg
2300/R-6-PLY-TR	303630	Painted Aluminium	Stainless Steel	Painted Steel	Polypropylene	0,275 Kg

Trolley assembled with QUICK nut



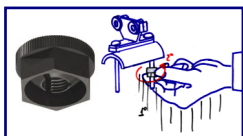
TOWING TROLLEY

Saddle  $\varnothing 55\text{mm}$



REFERENCE	CODE	MATERIAL				WEIGHT
		Body	Screws + Wheels	Towing Attachment	Saddle	
2324-6	303070	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,376 Kg
2324-C-6	303076	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	0,445 Kg
2324-6-PLY	303086	Painted Steel	Stainless Steel	Painted Steel	Polypropylene	0,386 Kg
2324-CH-6-PLY	303093	Painted Steel	Stainless Steel	Painted Steel	Painted Steel	0,455 Kg
2324-6 Inox	303503	Stainless Steel	Stainless Steel	Stainless Steel	Polypropylene	0,376 Kg
2324-C-6-Inox	303414	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	0,376 Kg
2324-6-TR	303631	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,376 Kg
2324-6-PLY-TR	303632	Painted Steel	Stainless Steel	Painted steel	Polypropylene	0,386 Kg
2324-6 Inox-TR	303633	Stainless Steel	Stainless Steel	Stainless Steel	Polypropylene	0,376 Kg

Trolley assembled with QUICK nut



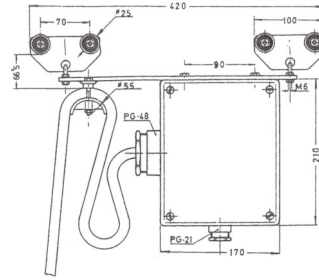
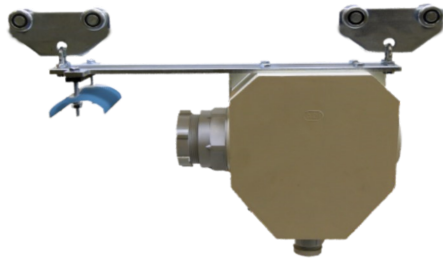




# FESTOON SYSTEM SERIES 2300R

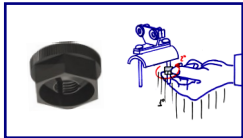
## PENDANT CONTROL UNIT TROLLEY

Saddle ø55mm



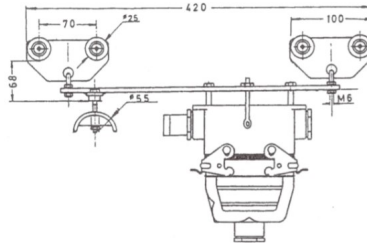
REFERENCE	CODE	MATERIAL					WEIGHT
		Body	Screws + Wheels	Saddle	Junction box	Cable gland	
2300/R-7	303008	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Polyester + Glass Fiber	Polyamide	2,400 Kg
2316-7	303046	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Polyester + Glass Fiber	Polyamide	2,491 Kg
2300/R-7-Inox	303588	Stainless Steel	Stainless Steel	Polypropylene	Polyester + Glass Fiber	Polyamide	2,400 Kg
2316-7-Inox	303589	Stainless Steel	Stainless Steel	Stainless Steel	Polyester + Glass Fiber	Polyamide	2,491 Kg
2300/R-7-TR	303634	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Polyester + Glass Fiber	Polyamide	2,400 Kg
2300/R-7-Inox-TR	303635	Stainless Steel	Stainless Steel	Polypropylene	Polyester + Glass Fiber	Polyamide	2,400 Kg

Trolley assembled with QUICK nut



## QUICK DISCONNECT PENDANT CONTROL UNIT TROLLEY

Saddle ø55mm

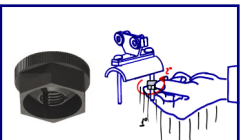


16 Poles Multipole Connector  
(1 Cable Entry PG-21)

24 Poles Multipole Connector  
(2 Cables Entry PG-21)

REFERENCE	CODE	MATERIAL					WEIGHT
		Body	Screws + Wheels	Saddle	Multipole Connector	Cable Gland	
2300/R-7-C16	303334	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Formed Aluminium	Polyethylene	2,373 Kg
2316-7-C16	303533	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Formed Aluminium	Polyethylene	2,468 Kg
2300/R-7-C24	303350	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Formed Aluminium	Polyethylene	2,779 Kg
2316-7-C24	303590	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Formed Aluminium	Polyethylene	2,563 Kg
2316-7-C16-Inox	303591	Stainless Steel	Stainless Steel	Stainless Steel	Formed Aluminium	Polyethylene	2,468 Kg
2316-7-C24-Inox	303592	Stainless Steel	Stainless Steel	Stainless Steel	Formed Aluminium	Polyethylene	2,563 Kg
2300/R-7-C16-TR	303636	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Formed Aluminium	Polyethylene	2,373 Kg
2300/R-7-C24-TR	303637	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Formed Aluminium	Polyethylene	2,779 Kg

Trolley assembled with QUICK nut

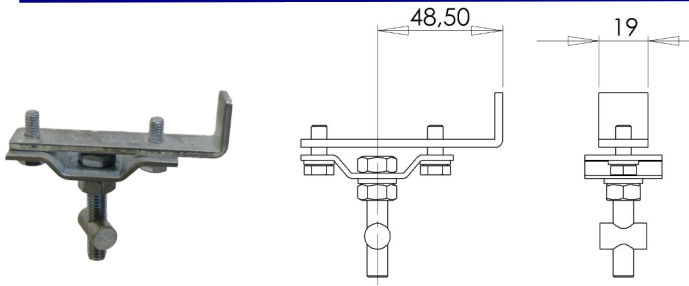




# SERIES 2300R SUPPORT SADDLE FOR ROUND CABLES AND HOSES

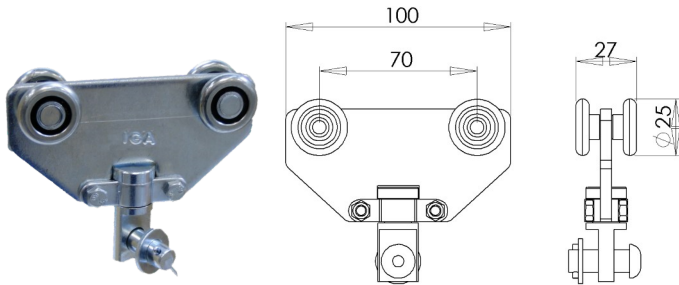


## END CLAMP



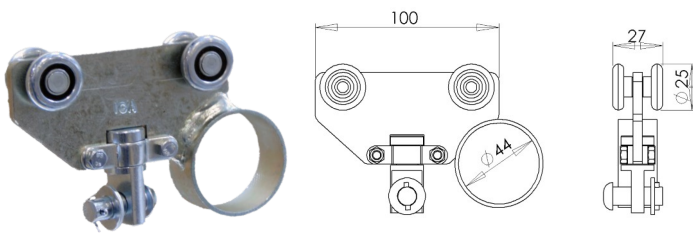
REFERENCE	CODE	MATERIAL	MAX. LOAD	WEIGHT
2335-2	303270	Zinc Plated Steel	20 Kg	0,136 Kg
2335-2-Inox	303593	Stainless Steel	20 Kg	0,136 Kg

## CABLE TROLLEY



REFERENCE	CODE	MATERIAL	MAX. LOAD	WEIGHT
2335-5	303241	Zinc Plated Steel	20 Kg	0,302 Kg
2335-5-Inox	303594	Stainless Steel	20 Kg	0,302 Kg

## TOWING TROLLEY



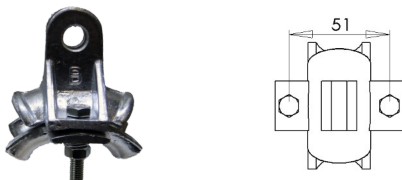
REFERENCE	CODE	MATERIAL	MAX. LOAD	WEIGHT
2335-6	303271	Zinc Plated Steel	20 Kg	0,350 Kg
2335-6-Inox	303595	Stainless Steel	20 Kg	0,350 Kg

## CLIP "+A" for cables from $\varnothing 8\text{mm}$ to $\varnothing 15\text{mm}$



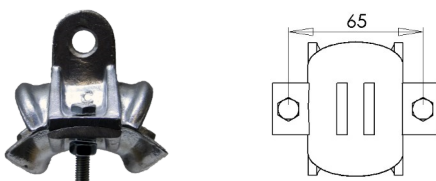
REFERENCE	CODE	MATERIAL	SCREWS	WEIGHT
+A	303251	Aluminium	Zinc Plated Steel	0,104 Kg
+A-Inox	303596	Aluminium	Stainless Steel	0,104 Kg

## CLIP "+B" for cables from $\varnothing 16\text{mm}$ to $\varnothing 24\text{mm}$



REFERENCE	CODE	MATERIAL	SCREWS	WEIGHT
+B	303252	Aluminium	Zinc Plated Steel	0,114 Kg
+B-Inox	303597	Aluminium	Stainless Steel	0,114 Kg

## CLIP "+C" for cables from $\varnothing 25\text{mm}$ to $\varnothing 35\text{mm}$



REFERENCE	CODE	MATERIAL	SCREWS	WEIGHT
+C	303253	Stainless Steel	Zinc Plated Steel	0,150 Kg
+C-Inox	303598	Stainless Steel	Stainless Steel	0,150 Kg



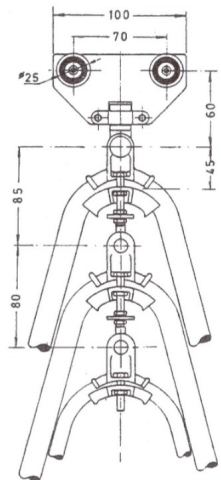
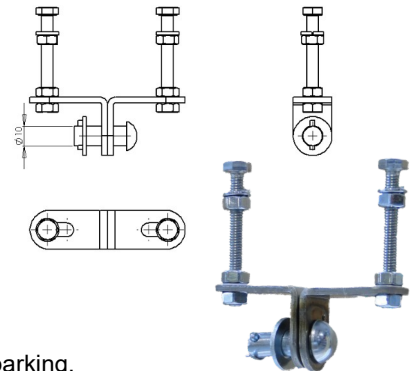


# SERIES 2300R SUPPORT SADDLE FOR ROUND CABLES AND HOSES

## "T" UNION



REFERENCE	CODE	MATERIAL	SCREWS + RIVETS	WEIGHT
T	303496	Stainless Steel	Zinc Plated Steel	0,107 Kg
T-Inox	303599	Stainless Steel	Stainless Steel	0,107 Kg



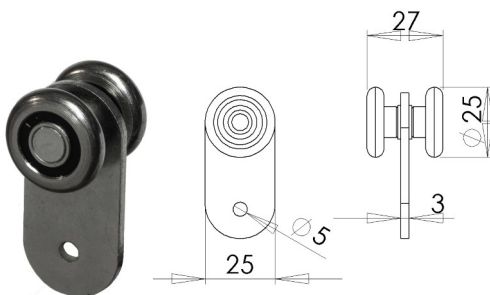
The clips makes a 90 degree turn in order to make easier the parking. When ordering, add to the reference, the necessary clips, followed by the indicative number: end clamp (-2), cable trolley (-5) or towing trolley (-6).

- Example:
- End clamp 2335+C+B-2.
  - Cable trolley 2335+B+B+A-5.
  - Towing trolley 2335+A-6.

Intermedio - Ref. 2.335 + C + B + A-5

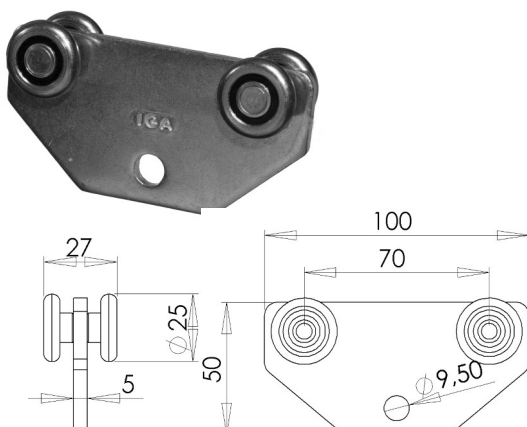
## SERIES 2300R CARRYING TROLLEYS

### SINGLE AXLE CARRYING TROLLEY



REFERENCE	CODE	MATERIAL		MAX LOAD	WEIGHT
		Body	Bearings + Shaft		
2330	303012	Zinc Plated Steel	Zinc Plated Steel	10 Kg	0,068 Kg
2330-PLY	303023	Painted Steel	Stainless Steel	10 Kg	0,078 Kg
2330-Inox	303514	Stainless Steel	Stainless Steel	10 Kg	0,068 Kg

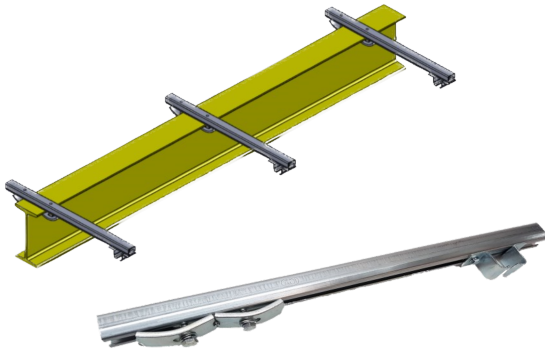
### DOUBLE AXLE CARRYING TROLLEY



REFERENCE	CODE	MATERIAL		MAX LOAD	WEIGHT
		Body	Bearings + Shaft		
2330-D	303011	Zinc Plated Steel	Zinc Plated Steel	20 Kg	0,220 Kg
2330-D-PLY	303022	Painted Steel	Stainless Steel	20 Kg	0,230 Kg
2330-D-Inox	303517	Stainless Steel	Stainless Steel	20 Kg	0,220 Kg



# STANDARD BRACKET FOR SERIES 2300R



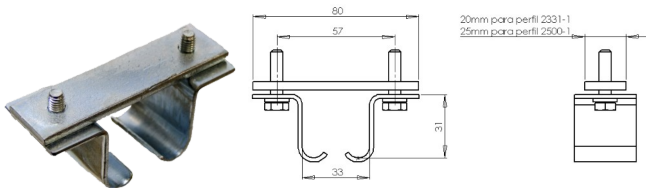
REFERENCE	CODE	MATERIAL			WEIGHT
		Track Support	Beam Claws	Support Arm	
CM-1	---	Zinc Plated Steel	Zinc Plated Steel	Galvanised steel	---
CM-1-inox	---	Stainless Steel	Stainless Steel	Stainless Steel	---
CM-4	---	Zinc Plated Steel	Zinc Plated Steel	Galvanised Steel	---
CM-4-inox	---	Stainless Steel	Stainless Steel	Stainless Steel	---

Cross support arm options:  
 - Profile 2331-1 (30x28mm) : CM-1.  
 - Profile 2500-1 (40x35mm) : CM-4.

Once we have chosen the cross support arm, point out the total length (L) of it. Example:  
 - CM-1-500.  
 - CM-4-500.

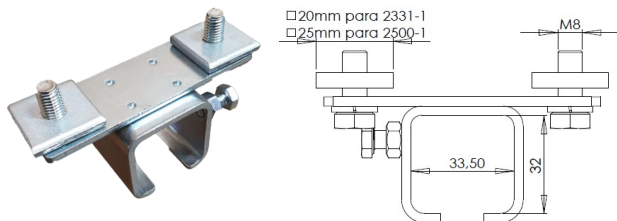
Brackets formed by:  
 - 1 cross support arm 2331-1 (L) or 2500-1 (L).  
 - 2 beam claws.  
 - 1 track holder.

## TRACK HOLDER



FOR ARM	REFERENCE	CODE	MATERIAL	WEIGHT
For 2331-1 profile	2340-13-31-R1	309001	Zinc Plated Steel	0,110 Kg
For 2500-1 profile	2340-13-500-R1	309004	Zinc Plated Steel	0,143 Kg
For 2331-1 Inox profile	2340-13-31-R1-Inox	309329	Zinc Plated Steel	0,110 Kg
For 2500-1 Inox profile	2340-13-500-R1-Inox	309347	Stainless Steel	0,143 Kg

## ADJUSTABLE TRACK HANGER BRACKET WITH LOCK



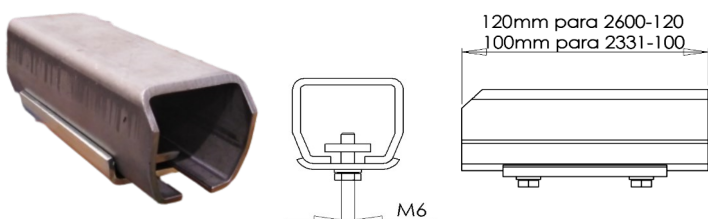
FOR ARM	REFERENCE	CODE	MATERIAL	WEIGHT
For 2331-1 profile	2300/R-4-H1-31	303638	Zinc Plated Steel	0,220 Kg
For 2500-1 profile	2300/R-4-H1-500	303639	Zinc Plated Steel	0,260 Kg
For 2331-1 Inox profile	2300/R-4-H1-31--Inox	303640	Stainless Steel	0,220 Kg
For 2500-1 Inox profile	2300/R-4-H1-500-Inox	303641	Stainless Steel	0,260 Kg

## BEAM CLAWS



FOR ARM	REFERENCE	CODE	MATERIAL		WEIGHT
			Body	Screws	
For 2331-1 profile	2340-12	309005	Zinc Plated Steel	Zinc Plated Steel	0,140 Kg
For 2500-1 profile	2340-12-500	309006	Zinc Plated Steel	Zinc Plated Steel	0,156 Kg
For 2331-1 Inox profile	2340-12-Inox	309321	Stainless Steel	Stainless Steel	0,140 Kg
For 2500-1 Inox profile	2340-12-500-Inox	309316	Stainless Steel	Stainless Steel	0,156 Kg

## WELD-ON BRACKET FOR SUPPORT ARM

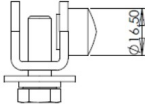
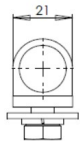


FOR ARM	REFERENCE	CODE	MATERIAL	WEIGHT
2331-1	2331-100	302561	Steel	0,370 Kg
2500-1	2600-120	310011	Steel	0,584 Kg



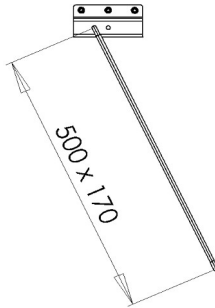
# ACCESSORIES

## END BUMPER STOP



REFERENCE	CODE	MATERIAL			WEIGHT
		Body	Screws	Stop	
2309-2	302118	Zinc Plated Steel	Zinc Plated Steel	Rubber	0,048 Kg
2309-2-PLY	303507	Paint steel	Stainless Steel	Rubber	0,058 Kg
2309-2-Inox	302449	Stainless Steel	Stainless Steel	Rubber	0,048 Kg

## JOINT + LOOP PROTECTION STOP

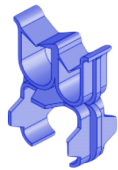


REFERENCE	CODE	MATERIAL	WEIGHT
2300/R-3-J-C	303397	Zinc Plated Steel	0,935 Kg

## CLAMPS FOR ROUND CABLE AND HOSES



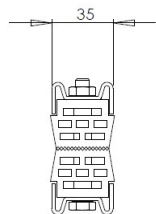
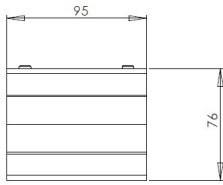
2300-SC-1



2300-SC-2

REFERENCE	CODE	MATERIAL		WEIGHT
2300-SC-1	303256	Polypropylene with glass fiber	2xø15mm	0,013 Kg
2300-SC-2	303600	Polypropylene with glass fiber	1xø13mm y 1xø18mm	0,009 Kg

## CLAMP B



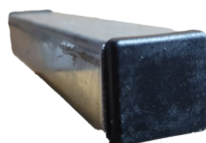
REFERENCE	CODE	MATERIAL				WEIGHT
		Metal Section	Tightening profile	Nuts	Bolts	
B-58	302009	Zinc Plated Steel	Rubber	Brass	Zinc Plated Steel	0,455 Kg
B-58(TI)	303343	Galvanized Steel	Rubber	Brass	Stainless Steel	0,455 Kg
B-58-Inox	302473	Stainless Steel	Rubber	Brass	Stainless Steel	0,455 Kg

## "QUICK" NUT



REFERENCE	CODE	MATERIAL	WEIGHT	UNITS X BAG
TR	303642	Polyamide 6.6	0,005 kg	50

## END CAPS



FOR PROFIL	REFERENCE	CODE	MATERIAL	WEIGHT
2300/R-1	2300/R-EC	303612	Black polyethylene	0,005 Kg
2331-1	2331-EC	302572	Black polyethylene	0,004 Kg
2500-1	2500-EC	305474	Black polyethylene	0,006 Kg



# ASSEMBLY INSTRUCTIONS

## 1) SECURITY

### 1.1 Advices about electricity

- Disconnect the power from the system before starting any assembly operation.
- Do not use electrical cables for higher loads than the specified voltage and current.

### 1.2 Operational advices

- Do not use different cables for which the festoon system is specified. Any change in number, diameter, weight, etc., may affect the normal operation of the cable system.

### 1.3 Maintenance advice

- The modification of the number and/or characteristics of the festoon system components cancels the warranty.

## 2) INSTALLATION

The support structure for the festoon system must be capable of supporting the total weight of the festoon system. Place the support along the beam through which the hoist is to be circulated. These points must be located every 2m, except in the parking area where they must be located every 1m.



STANDARD BRACKETS



BEAM WELDED JOINT BAR



BEAM WELDED SUPPORT



Install the first profile in the supports 2300/R-4 without tightening the screws.



Assemble the next profile section on its corresponding supports 2300/R-4 in the same way as the first.



Join these profiles using the joints 2300/R-3-J that guarantee a continuous travel between both sections. Tighten the screws once the joint has been placed in the middle of both profile sections. Repeat the same operation for the rest of the profile sections.



Once all the profiles have been assembled, we will proceed to align the path with respect to the rolling hoist on the beam, crane, etc. Once the alignment is correct, we will proceed to tighten the screws of the supports 2300/R-4.





# ASSEMBLY INSTRUCTIONS



Cut the necessary length of electrical cable leaving enough length on both sides to make the electrical connections later. Make marks with white chalk on the cable in the required points, according to the height of the loop or number of trolleys to be assembled. Put the cables in the saddle (biggest cables should be mounted on top of the cable package).



Tighten the screws of the cable holders avoiding damaging the cables due to excessive tightening. The cable package should be as centered as possible on the cable holder, so that the trolley runs in a balanced way. Make sure that the smallest cables do not slip into the cable package.



Insert the festoon system into the profile, starting first with the towing trolley and then following the cable trolleys. Insert the end clamp the last. The cables must be mounted without any rotation.



Tighten the end clamp at the end of the profile. Make the connections of the cables on both sides of the system in their respective connection boxes.

## 3 ) OPERATION

### 3.1 Previous tests

Carry out several travels by hand to check that it moves throughout its length without problems.

Check that there is plenty of space in the ambush area.

Check that the cable loops don't get hooked in any part of the travel.

In the cable management system, check the correct height between the pushbutton pendant control station and the floor.

### 3.2 Final tests

Once the electric current is connected, check that the trolleys move forward and backward without problems.

Check that the device, the festoon system is powered on, works correctly.

### 3.3 Normal functioning

Do not exceed the maximum voltage and / or amperage specified for the electric cables.

Use the festoon system within its corresponding electrical and / or mechanical specifications.

## 4 ) MAINTENANCE

Perform periodic maintenance tasks to ensure the status of the festoon system. The maintenance operations will depend on the use given to the system.

During each inspection the following points should be checked:

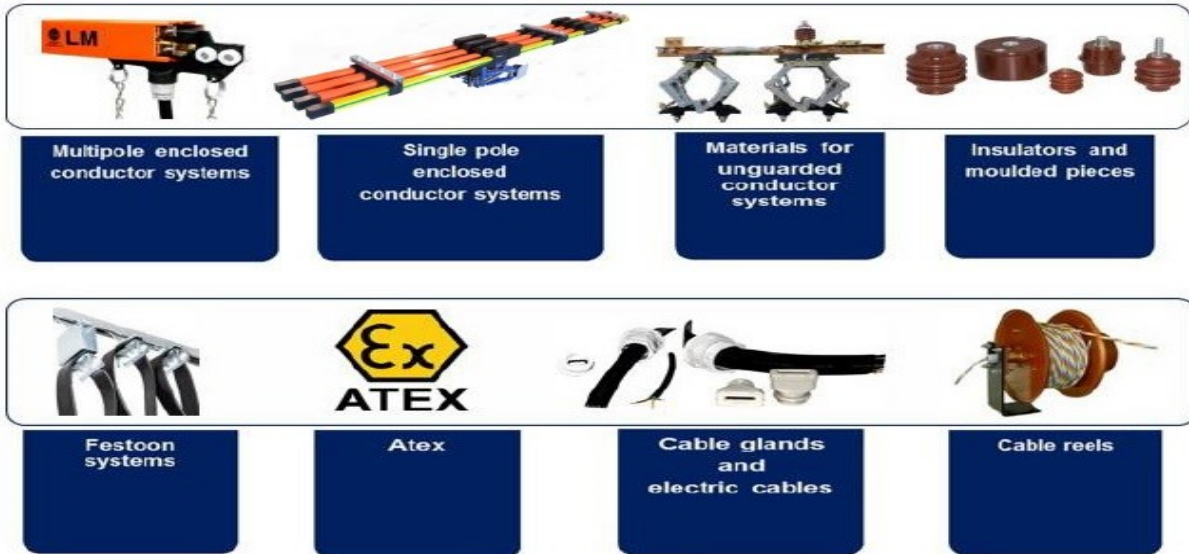
- Wear of ball bearings.
- Ensure screws are correctly tightened.
- Separation or alignment in the joints.
- Electric cables: cuts, cracks, etc...
- The profile must be clean in the running edges.



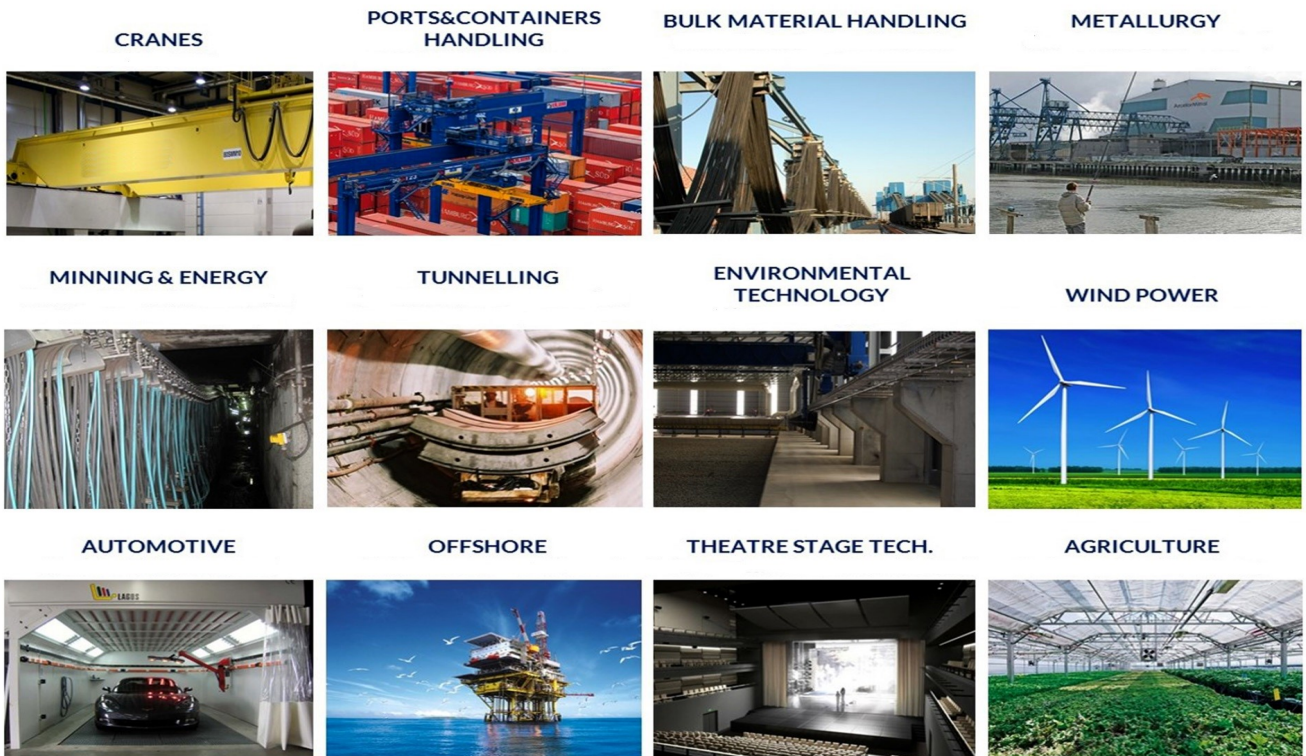
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