



Industrias **GALARZA, S.A.**[®]

Leaders in electrical conductivity since 1958

CATALOGUE 2020

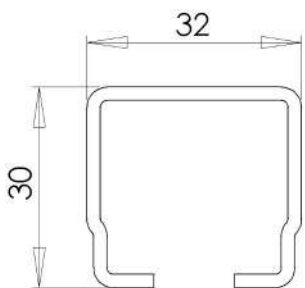


TRACK PROFILE

**MAX. LOAD
PER
TROLLEY**

DESCRIPTION

SERIES



20 KG

**FESTOON SYSTEM
RUNNING ON A
C-PROFILE 32 X 30MM**

Max cable package: 58 (L) x 20 (H) mm

2349





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:

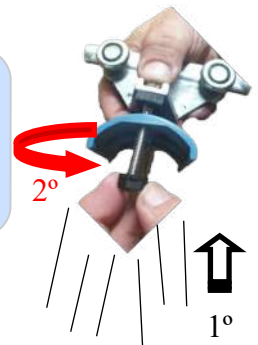
IGA offers the possibility of supplying the entire FESTOON system assembled under the customer's specifications.



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:

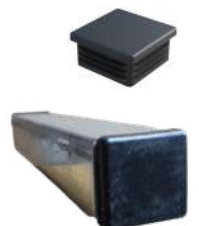
The trolleys with body of sheet steel (series 2324), have been modified for the use of fixing screws with spherical head and square neck (according to DIN 603). The square neck prevents the screw from turning during the tightening process of the hexagonal nut of the carriage, so fewer tools are necessary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



Twitter
@indgalarza



Facebook
Industrias Galarza, S.A.



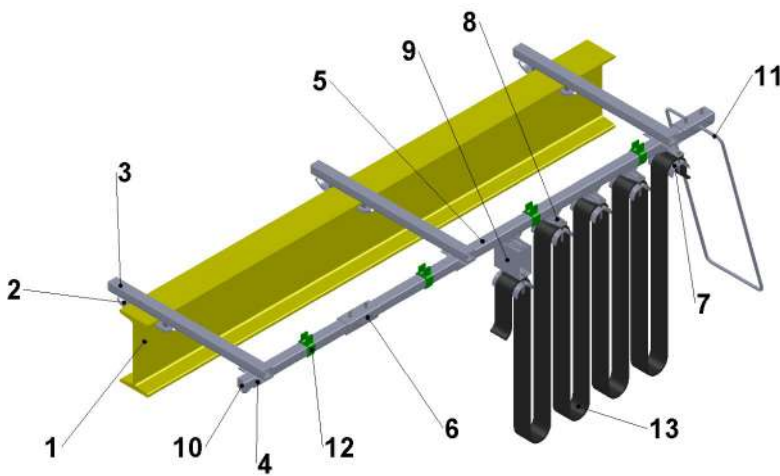
LinkedIn
Industrias Galarza, S.A.



FESTOON SYSTEM SERIES 2349

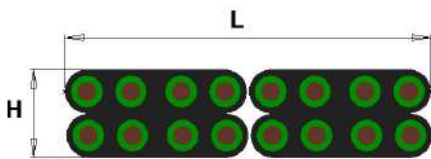
INDEX

Profile	Page. 03	TROLLEYS FOR ROUND CABLE	
Joint	Page. 03	End Clamp	Page. 09
Hangers	Page. 03-04	Cable Trolley	Page. 09
FLAT CABLE TROLLEY		Towing Trolley	Page. 09
End Clamp	Page. 04	Cable holders & "T" union	Page .10
Cable Trolley	Page. 05-06	Mounting set	Page .11
Towing Trolley	Page. 07	Accessories	Page. 12
Pendant control unit trolley	Page. 08	Assembly instructions	Page. 13-14



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 parts (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:

$$N = (L / 2 \times H) - 1$$

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

REQUIRED AMBUSH LENGTH:

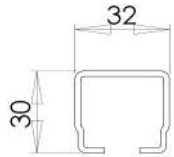
$$b = (N + 1) \times m$$

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



FESTOON SYSTEM SERIES 2349

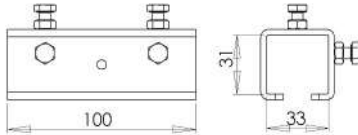
PROFILE



- Sección: 1,794 cm²
 - Ix: 2,02 cm⁴
 - Wx: 1,20 cm³

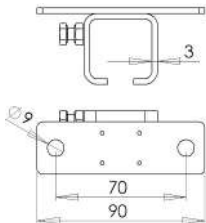
REFERENCE	CODE	MATERIAL	LENGTH	WEIGHT
2349-1	309411	Galvanised Steel	5 meters	1,40 Kg/m
2349-1	309456	Galvanised Steel	2,5 meters	1,40 Kg/m
2349-1-Inox	309412	Stainless Steel. AISI 304	5 meters	1,40 Kg/m

TRACK JOINT



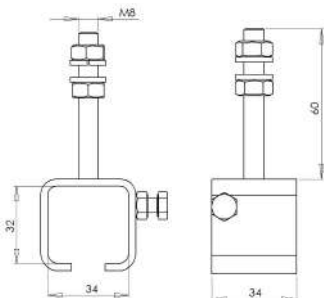
REFERENCE	CODE	MATERIAL		WEIGHT
		Body	Screws	
2349-3	309258	Zinc Plated Steel	Zinc Plated Steel	0,285 Kg
2349-3-PLY	309348	Painted Steel	Stainless Steel	0,295 Kg
2349-3-Inox	309338	Stainless Steel	Stainless Steel	0,285 Kg

TRACK HANGER BRACKET



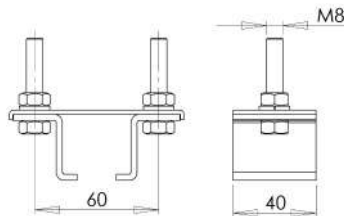
REFERENCE	CODE	MATERIAL		WEIGHT
		Body	Screws	
2300/R-4-H1	303005	Zinc Plated Steel	Zinc Plated Steel	0,154 Kg
2300/R-4-H1-Inox	303605	Stainless Steel	Stainless Steel	0,154 Kg

CEILING TRACK HANGER BRACKET



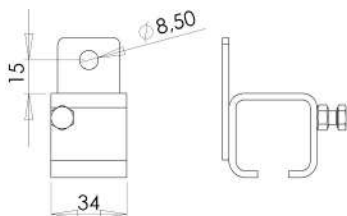
REFERENCE	CODE	MATERIAL		WEIGHT
		Body	Screws	
2300/R-4-H1-R	303378	Zinc Plated Steel	Zinc Plated Steel	0,131 Kg
2300/R-4-H1-R-Inox	303611	Stainless Steel	Stainless Steel	0,131 Kg

TRACK HANGER BRACKET



REFERENCE	CODE	MATERIAL		WEIGHT
		Base+ Laterals	Screws	
2349-4	309303	Zinc Plated Steel	Zinc Plated Steel	0,201 Kg
2349-4-PLY	309349	Painted Steel	Stainless Steel	0,211 Kg
2349-4-Inox	309350	Stainless Steel	Stainless Steel	0,201 Kg

LATERAL TRACK HANGER BRACKET



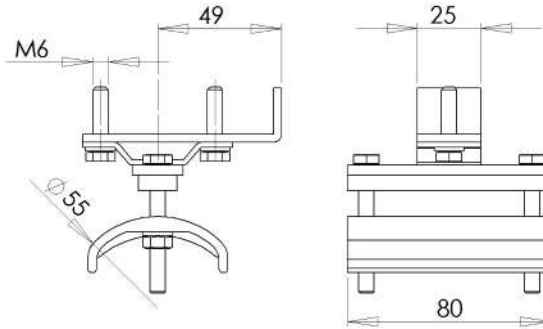
REFERENCE	CODE	MATERIALS		WEIGHT
		Body	Screws	
2300/R-4-L	303308	Zinc Plated Steel	Zinc Plated Steel	0,155 Kg
2300/R-4-L Inox	303607	Stainless Steel	Stainless Steel	0,155 Kg



FESTOON SYSTEM SERIES 2349

END CLAMP

Saddle $\varnothing 55\text{mm}$



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

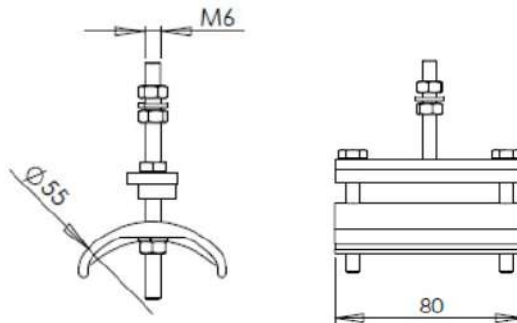
REFERENCE	CODE	MATERIAL			WEIGHT
		Body	Screws	Saddle	
2349-2	309308	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,170 Kg
2349-C-2	309335	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	0,315 Kg
2349-2-PLY	309352	Painted Steel	Stainless Steel	Polypropylene	0,180 Kg
2349-C-2-PLY	309353	Painted Steel	Stainless Steel	Painted Steel	0,325 Kg
2349-2-Inox	309354	Stainless Steel	Stainless Steel	Polypropylene	0,170 Kg
2349-C-2-Inox	309355	Stainless Steel	Stainless Steel	Stainless Steel	0,315 Kg
2349-2-TR	309431	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,170 Kg
2349-2-PLY-TR	309432	Painted Steel	Stainless Steel	Polypropylene	0,180 Kg
2349-2-Inox-TR	309433	Stainless Steel	Stainless Steel	Polypropylene	0,170 Kg

Trolley assembled with QUICK nut



END CLAMP

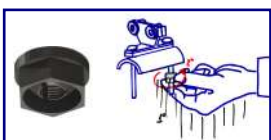
Saddle $\varnothing 55\text{mm}$



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

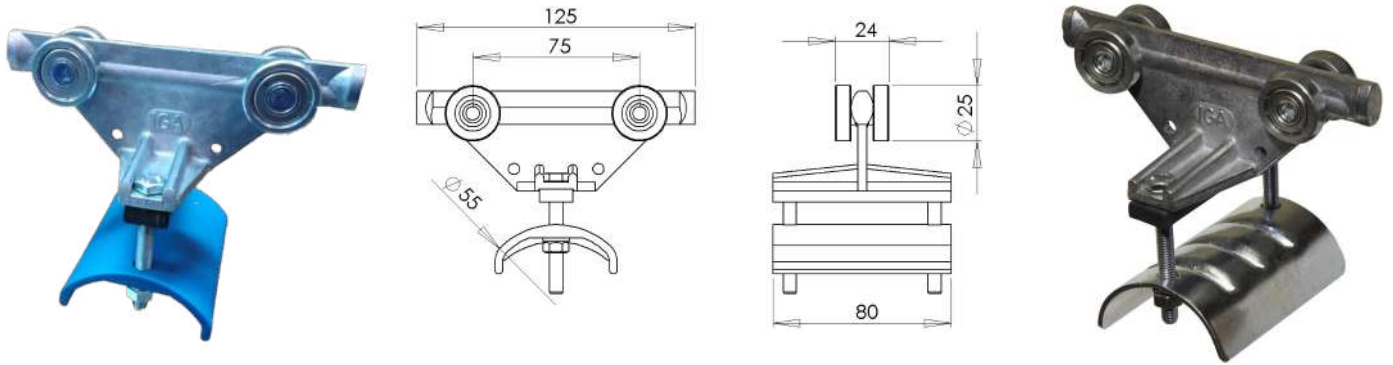




FESTOON SYSTEM SERIES 2349

CABLE TROLLEY

Saddle $\varnothing 55\text{mm}$



SADDLE $\varnothing 85\text{mm}$ IN STEEL IS AVAILABLE

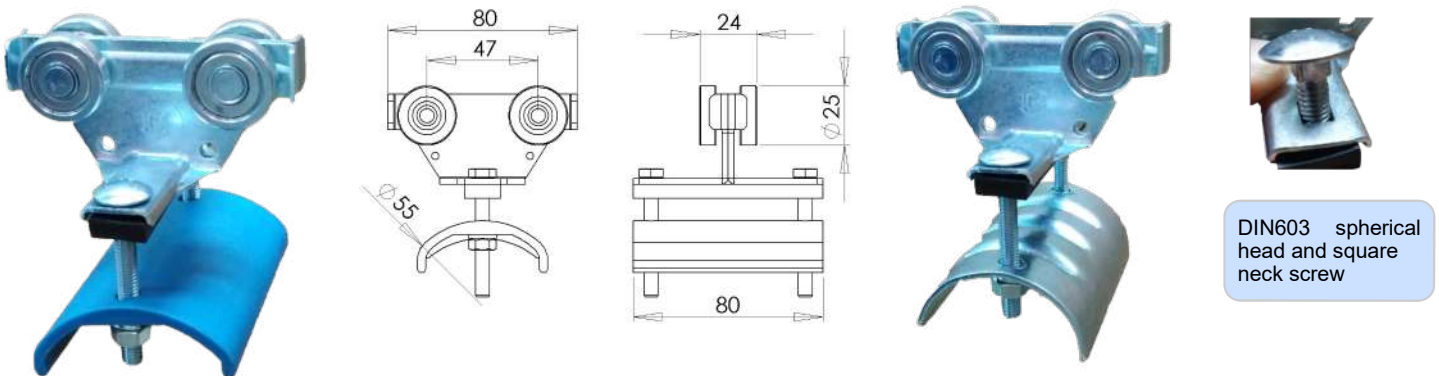
REFERENCE	CODE	MATERIAL			WEIGHT
		Body	Screws + Wheels	Saddle	
2349-5	309272	Aluminium	Zinc Plated Steel	Polypropylene	0,232 Kg
2349-C-5	309359	Aluminium	Zinc Plated Steel	Zinc Plated Steel	0,328 Kg
2349-5-PLY	309360	Painted Aluminium	Stainless Steel	Polypropylene	0,242 Kg
2349-C-5-PLY	309361	Painted Aluminium	Stainless Steel	Painted Steel	0,338 Kg
2349-5-TR	309434	Aluminium	Zinc Plated Steel	Polypropylene	0,232 Kg
2349-5-PLY-TR	309435	Painted Aluminium	Stainless Steel	Polypropylene	0,242 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	
2324-24-5	309050	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,200 Kg
2324-24-C-5	309232	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	0,296 Kg
2324-24-5-PLY	309362	Painted Steel	Stainless Steel	Polypropylene	0,210 Kg
2324-24-C-5-PLY	309363	Painted Steel	Stainless Steel	Painted Steel	0,306 Kg
2324-24-5-Inox	309296	Stainless Steel	Stainless Steel	Polypropylene	0,200 Kg
2324-24-C-5-Inox	309297	Stainless Steel	Stainless Steel	Stainless Steel	0,296 Kg
2324-24-5-TR	309436	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,200 Kg
2324-24-5-PLY-TR	309437	Painted Steel	Stainless Steel	Polypropylene	0,210 Kg
2324-24-5-Inox-TR	309438	Stainless Steel	Stainless Steel	Polypropylene	0,200 Kg

Trolley assembled with QUICK nut





FESTOON SYSTEM SERIES 2349

CABLE TROLLEY

Saddle $\varnothing 55\text{mm}$



2332-5(CRL-1)



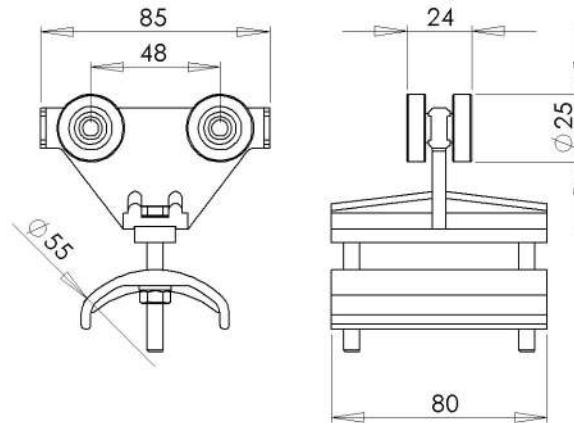
2332-C-5(CRL-1)



2332-L-5(CRL-1)

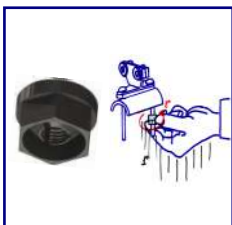


2332-LC-5(CRL-1)



REFERENCE	CODE	MATERIAL				MAX. LOAD	WEIGHT
		Body	Wheels	Saddle	Screws		
2332-5-(CRL-1)	309198	Polypropylene	Polypropylene	Polypropylene	Zinc Plated steel	12 Kg	0,110 Kg
2332-C-5-(CRL-1)	309356	Polypropylene	Polypropylene	Zinc Plated Steel	Zinc Plated Steel	12 Kg	0,196 Kg
2332-L-5-(CRL-1)	309267	Polypropylene	Zinc Plated Steel	Polypropylene	Zinc Plated Steel	15 Kg	0,142 Kg
2332-LC-5-(CRL-1)	309395	Polypropylene	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	15 Kg	0,197 Kg
2332-5-(CRL-1)-Inox	309357	Polypropylene	Polypropylene	Polypropylene	Stainless Steel	12 Kg	0,110 Kg
2332-C-5-(CRL-1)-Inox	309358	Polypropylene	Polypropylene	Stainless Steel	Stainless Steel	12 Kg	0,196 Kg
2332-L-5-(CRL-1)-Inox	309396	Polypropylene	Stainless Steel	Polypropylene	Stainless Steel	15 Kg	0,142 Kg
2332-LC-5-(CRL-1)-Inox	309397	Polypropylene	Stainless Steel	Stainless Steel	Stainless Steel	15 Kg	0,197 Kg
2332-5-(CRL-1)-TR	309439	Polypropylene	Polypropylene	Polypropylene	Zinc Plated Steel	12 Kg	0,110 Kg
2332-L-5-(CRL-1)-TR	309440	Polypropylene	Zinc Plated Steel	Polypropylene	Zinc Plated Steel	15 Kg	0,142 Kg
2332-5-(CRL-1)-Inox-TR	309441	Polypropylene	Polypropylene	Polypropylene	Stainless Steel	12 Kg	0,110 Kg
2332-L-5-(CRL-1)-Inox-TR	309442	Polypropylene	Stainless Steel	Polypropylene	Stainless Steel	15 Kg	0,142 Kg

Trolley assembled with QUICK nut

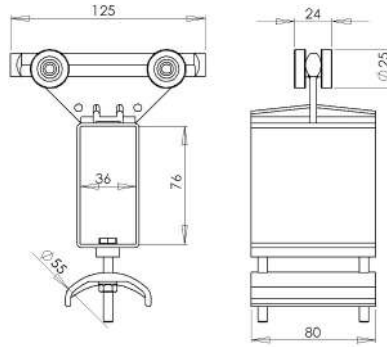




FESTOON SYSTEM SERIES 2349

TOWING TROLLEY

Saddle $\varnothing 55\text{mm}$



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

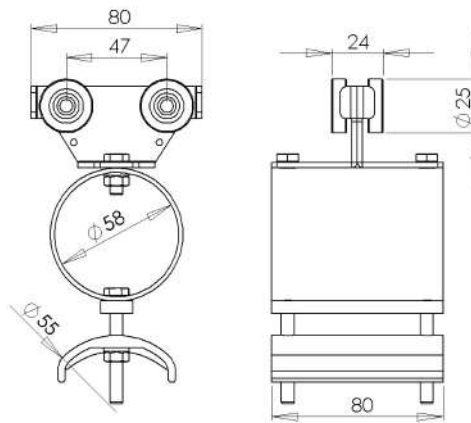
REFERENCE	CODE	MATERIAL				WEIGHT
		Body	Screws + Wheels	Towing Attachment	Saddle	
2349-125-6	309275	Aluminium	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,455 Kg
2349-125-C-6	309314	Aluminium	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	0,551 Kg
2349-125-6-PLY	309364	Painted Aluminium	Stainless Steel	Painted Steel	Polypropylene	0,465 Kg
2349-125-C-6-PLY	309365	Painted Aluminium	Stainless Steel	Painted Steel	Painted Steel	0,561 Kg
2349-125-6-TR	309443	Aluminium	Zinc Plated Steel	Polypropylene	Polypropylene	0,455 Kg
2349-125-6-PLY-TR	309444	Painted Aluminium	Stainless Steel	Painted Steel	Polypropylene	0,465 Kg

Trolley assembled with QUICK nut



TOWING TROLLEY

Saddle $\varnothing 55\text{mm}$



REFERENCE	CODE	MATERIAL				WEIGHT
		Body	Screws + Wheels	Towing Attachment	Saddle	
2324-24-6	309051	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,365 Kg
2324-24-C-6	309305	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	0,425 Kg
2324-24-6-PLY	309398	Painted Steel	Stainless Steel	Painted Steel	Polypropylene	0,375 Kg
2324-24-C-6-PLY	309399	Painted Steel	Stainless Steel	Painted Steel	Painted Steel	0,435 Kg
2324-24-6-Inox	309400	Stainless Steel	Stainless Steel	Stainless Steel	Polypropylene	0,365 Kg
2324-24-C-6-Inox	309337	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	0,425 Kg
2324-24-6-TR	309445	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	0,365 Kg
2324-24-6-PLY-TR	309446	Painted Steel	Stainless Steel	Painted Steel	Polypropylene	0,375 Kg
2324-24-6-Inox-TR	309447	Stainless Steel	Stainless Steel	Stainless Steel	Polypropylene	0,365 Kg

Trolley assembled with QUICK nut

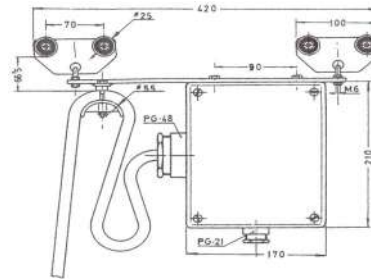
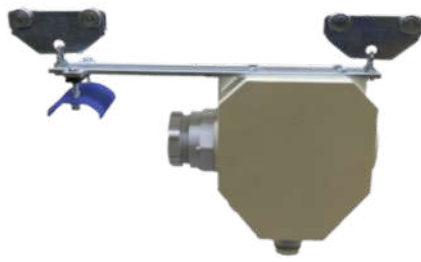




FESTOON SYSTEM SERIES 2349

PENDANT CONTROL UNIT TROLLEY

Saddle ø55mm



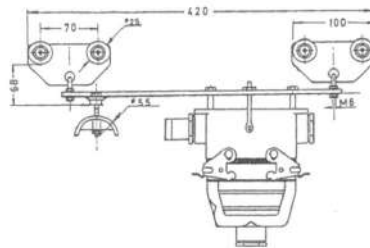
REFERENCE	CODE	MATERIAL					WEIGHT
		Body	Screws + Wheels	Saddle	Junction box	Cable gland	
2349-7	309239	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Polyester & Glass Fiber	Polyamide	2,400 Kg
2349-C-7	309369	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Polyester & Glass Fiber	Polyamide	2,491 Kg
2349-7-Inox	309370	Stainless Steel	Stainless Steel	Polypropylene	Polyester & Glass Fiber	Polyamide	2,400 Kg
2349-C-7-Inox	309371	Stainless Steel	Stainless Steel	Stainless Steel	Polyester & Glass Fiber	Polyamide	2,491 Kg
2349-7-TR	309448	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Polyester + Glass Fiber	Polyamide	2.400 Kg
2349-7-Inox-TR	309449	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

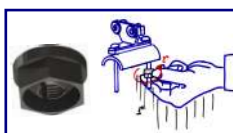


16 Poles Multipole Connector
(1 Cable Entry PG-21)

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

REFERENCE	CODE	MATERIAL					WEIGHT
		Body	Screws + Wheels	Saddle	Multipole Connector	Cable Gland	
2349-7-C16	309213	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Formed Aluminium	Polyethylene	2,373 Kg
2349-C-7-C16	309372	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Formed Aluminium	Polyethylene	2,468 Kg
2349-7-C24	309306	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Formed Aluminium	Polyethylene	2,779 Kg
2349-C-7-C24	309373	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Formed Aluminium	Polyethylene	2,563 Kg
2349-C-7-C16-Inox	309374	Stainless Steel	Stainless Steel	Stainless Steel	Formed Aluminium	Polyethylene	2,468 Kg
2349-C-7-C24-Inox	309375	Stainless Steel	Stainless Steel	Stainless Steel	Formed Aluminium	Polyethylene	2,563 Kg
2349-7-C16-TR	309450	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Formed Aluminium	Polyethylene	2,373 Kg
2349-7-C24-TR	309451	Zinc Plated Steel	Zinc Plated Steel	Polypropylene	Formed Aluminium	Polyethylene	2,779 Kg

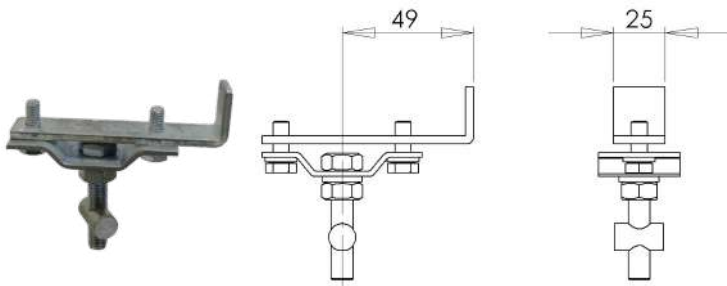
Trolley assembled with QUICK nut





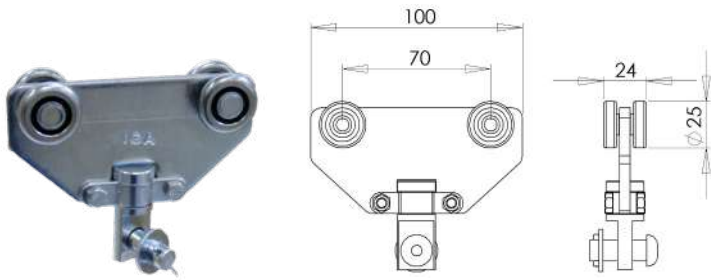
SERIES 2349 SUPPORT SADDLE FOR ROUND CABLES AND HOSES

END CLAMP



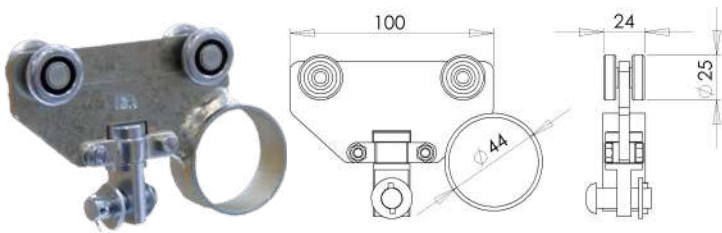
REFERENCE	CODE	MATERIAL	MAX. LOAD	WEIGHT
2349/2	309376	Zinc Plated Steel	20 Kg	0,146 Kg
2349/2-Inox	309377	Stainless Steel	20 Kg	0,146 Kg

CABLE TROLLEY



REFERENCE	CODE	MATERIAL	MAX. LOAD	WEIGHT
2349/5	309378	Zinc Plated Steel	20 Kg	0,310 Kg
2349/5-Inox	309379	Stainless Steel	20 Kg	0,310 Kg

TOWING TROLLEY



REFERENCE	CODE	MATERIAL	MAX. LOAD	WEIGHT
2349/6	309380	Zinc Plated Steel	20 Kg	0,368 Kg
2349/6-Inox	309381	Stainless Steel	20 Kg	0,368 Kg

SADDLE "+A" for cables from ø8mm to ø15mm



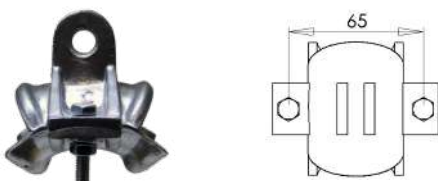
REFERENCE	CODE	MATERIAL	SCREWS	WEIGHT
+A	303251	Aluminium	Zinc Plated Steel	0,104 Kg
+A-Inox	303596	Aluminium	Stainless Steel	0,104 Kg

SADDLE "+B" for cables from ø16mm to ø24mm



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

SADDLE "+C" for cables from ø25mm to ø35mm



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

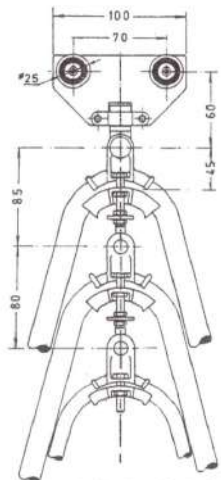
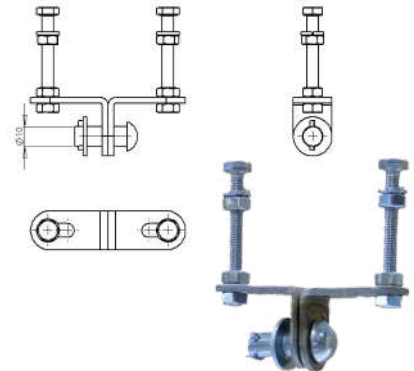


SERIES 2349 SUPPORT SADDLE FOR ROUND CABLES AND HOSES



“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 make 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).

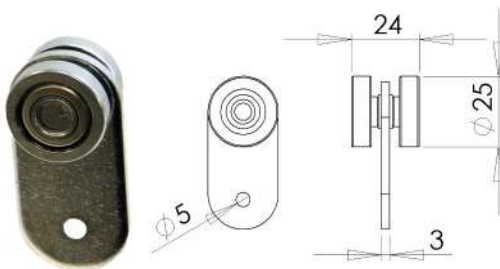
Example:

- End clamp ref. 2349/C+B-2.
- Cable trolley ref. 2349/B+B+A-5.
- Towing trolley ref. 2349/A-6.

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

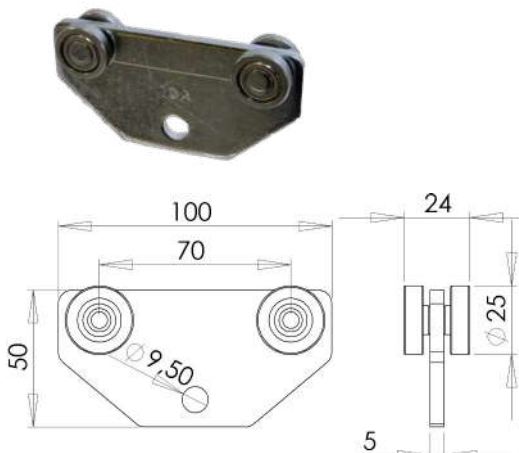
SERIES 2349 CARRYING TROLLEYS

SINGLE AXLE CARRYING TROLLEY



REFERENCE	CODE	MATERIAL		MAX LOAD	WEIGHT
		Body	Bearings + Shaft		
2349-25	309389	Zinc Plated Steel	Zinc Plated Steel	10 Kg	0,062 Kg
2349-25-PLY	309390	Painted Steel	Stainless Steel	10 Kg	0,072 Kg
2349-25-Inox	309391	Stainless Steel	Stainless Steel	10 Kg	0,062 Kg

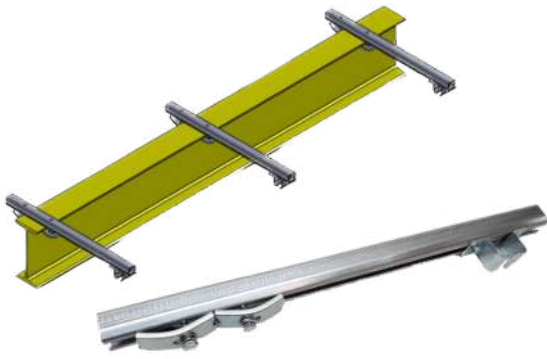
DOUBLE AXLE CARRYING TROLLEY



REFERENCE	CODE	MATERIAL		MAX LOAD	WEIGHT
		Body	Bearings + Shaft		
2349-D-25	309298	Zinc Plated Steel	Zinc Plated Steel	20 Kg	0,226 Kg
2349-D-25-PLY	309392	Painted Steel	Stainless Steel	20 Kg	0,236 Kg
2349-D-25-Inox	309393	Stainless Steel	Stainless Steel	20 Kg	0,226 Kg



STANDARD BRACKET FOR SERIES 2349



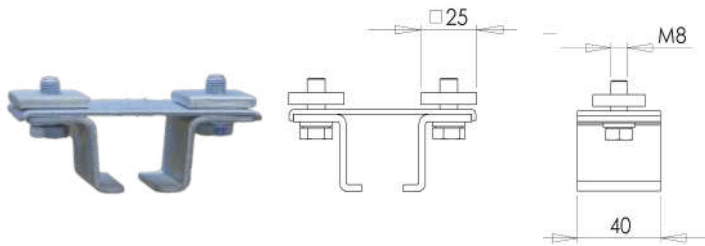
REFERENCE	CODE	MATERIAL			WEIGHT
		Track Support	Beam Claws	Support Arm	
CM-7	—	Zinc Plated Steel	Zinc Plated Steel	Galvanised Steel	---
CM-7-inox	—	Stainless Steel	Stainless Steel	Stainless Steel	---
CM-8	—	Zinc Plated Steel	Zinc Plated Steel	Galvanised Steel	---
CM-8-inox	—	Stainless Steel	Stainless Steel	Stainless Steel	---

Cross support arm options:
 - 2349-1 (32 x 30 mm) = CM-7
 - 2500-1 (40 x 35 mm) = CM-8

Once we have chosen the cross support arm, point out the total length (L) of it. Example:
 - CM-7-500. (500mm)
 - CM-8-500. (500mm)

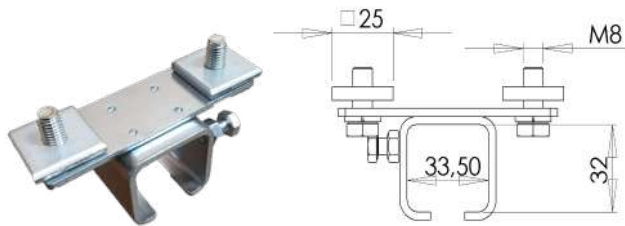
Brackets formed by:
 - 1 Cross support arm 2349-1 (L) o 2500-1
 - 2 Beam claws.
 - 1 track holder. 2349-13

TRACK HOLDER



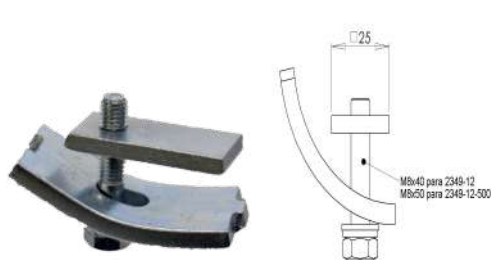
FOR ARM	REFERENCE	CODE	MATERIAL	WEIGHT
For 2349-1, 2500-1 profile	2349-13	309273	Zinc Plated Steel	0,228 Kg
For 2349-1, 2500-1-Inox profile	2349-13-Inox	309345	Stainless Steel	0,228 Kg

ADJUSTABLE TRACK HANGER BRACKET WITH LOCK



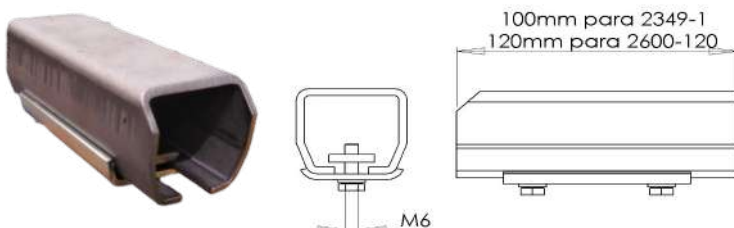
FOR ARM	REFERENCE	CODE	MATERIAL	WEIGHT
For 2349-1, 2500-1 profile	2300/R-4-H1-500	303639	Zinc Plated Steel	0,220 Kg
For 2349-1, 2500-1-Inox profile	2300/R-4-H1-500 Inox	303641	Stainless Steel	0,220 Kg

BEAM CLAWS



FOR ARM	REFERENCE	CODE	MATERIAL		WEIGHT
			Body	Screws	
For perfil 2349-1	2349-12	309262	Zinc Plated Steel	Zinc Plated Steel	0,150 Kg
For profile 2500-1	2349-12-500	309387	Zinc Plated Steel	Zinc Plated Steel	0,162 Kg
For profile 2349-1-Inox	2349-12-Inox	309340	Stainless Steel	Stainless Steel	0,150 Kg
For profile 2500-1-Inox	2349-12-500-Inox	309388	Stainless Steel	Stainless Steel	0,162 Kg

WELD-ON BRACKET FOR SUPPORT ARM

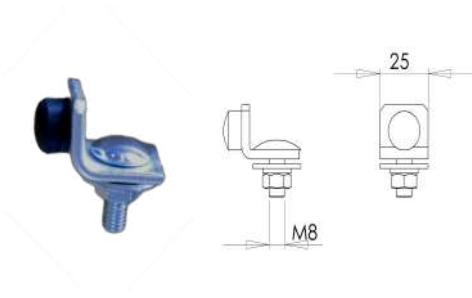


FOR ARM	REFERENCE	CODE	MATERIAL	WEIGHT
2349-1	2349-100	309417	Steel	0,370 Kg
2500-1	2600-120	310011	Steel	0,584 Kg



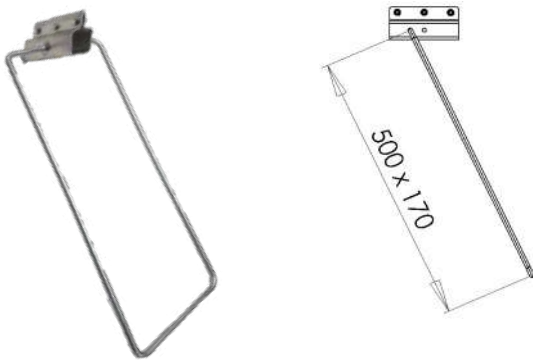
ACCESSORIES

END BUMPER STOP



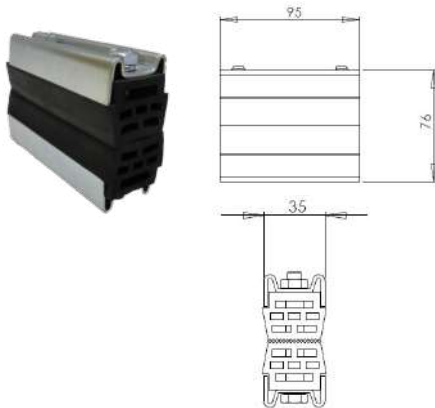
REFERENCE	CODE	MATERIAL			WEIGHT
		Body	Screws	Buffer	
2309-2-W	309274	Zinc Plated Steel	Zinc Plated Steel	Rubber	0,052 Kg
2309-2-W-PLY	309394	Painted Steel	Stainless Steel	Rubber	0,062 Kg
2309-2-W- Inox	309401	Stainless Steel	Stainless Steel	Rubber	0,052 Kg

JOINT + LOOP PROTECTION STOP



REFERENCE	CODE	MATERIAL	WEIGHT
2349-3-C	309418	Zinc Plated Steel	0,935 Kg

CLAMP B



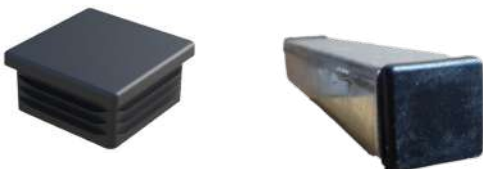
REFERENCE	CODE	MATERIAL				WEIGHT
		Metal Section	Tightening profile	Nuts	Bolts	
B-58	302009	Zinc Plated Steel	Rubber	Brass	Zinc Plated Steel	0,455 Kg
B-58(TI)	303343	Galvanized Steel	Rubber	Brass	Stainless Steel	0,455 Kg
B-58-Inox	302473	Stainless Steel	Rubber	Brass	Stainless Steel	0,455 Kg

"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
2349-1	2349-EC	309430	Black polyethylene	0,005 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 2349-4 without tightening the screws.



Assemble the next profile section on its corresponding supports 2349-4 in the same way as the first.



Join these profiles using the joints 2349-3 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 2349-3.



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.



Industrias GALARZA, S.A.[®]

Leaders in electrical conductivity since 1958

RANGE OF PRODUCTS

Multipole enclosed conductor systems	Single pole enclosed conductor systems	Materials for unguarded conductor systems	Insulators and moulded pieces
Festoon systems	Atex	Cable glands and electric cables	Cable reels

MARKETS

CRANES 	PORTS&CONTAINERS HANDLING 	BULK MATERIAL HANDLING 	METALLURGY
MINNING & ENERGY 	TUNNELLING 	ENVIRONMENTAL TECHNOLOGY 	WIND POWER
AUTOMOTIVE 	OFFSHORE 	THEATRE STAGE TECH. 	AGRICULTURE

INDUSTRIAS GALARZA S.A.
 P.I. Bidosola, Pab. D-4
 48142 ARTEA (BIZKAIA)
 SPAIN
 Tel. +34 944 47 18 12
 Fax. +34 944 76 42 76
 E.mail: info@industriasmgalarza.com
www.industriasmgalarza.com

DISTRIBUTED BY: