

# CABLETROLLEY SYSTEMS FOR CRANES & HOISTS

10-10

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## GASORI

## We build trust



**GASORI S.L**. created in 1984, is a cutting-edge technologyfocused company in industrial subcontracting. Since 2012 it has belonged to the RPK S.Coop industrial group. The group has production centres in Spain, India and Mexico, as well as a technology centre in Spain and a subsidiary dedicated to R+D in Germany.

Our shareholders' commitment to incorporating the latest technological advances, as well as innovating management and expanding both our business lines and markets have put us at the head of a group of leading companies within the sector.

We have a special way of understanding the market.

Our professionalism and quality ensures that each job satisfies the needs and requirements of each customer.

We work hand in hand with top professionals to offer you the most appropriate solutions. We develop products adapted to our customers' requests. Gasori has three lines of business:

**URBELASER**, created for purposes of serving industry in general within the area of developing and supplying metal components in all of their various forms.

At **RG**, we manufacture power supplies for mobile motors.

At **ZR**, we specialise in metal structures for furniture We have been conceiving, designing and producing metal structures for more than 20 years in order to create robust, stable, aesthetically pleasing furniture.

## INTERNATIONALISATION

## Present in more than 25 countries



## Spain

#### Gasori - Anguciana

Pol. Ind. de Anguciana C/ La Loma nº 2 26210 Anguciana - La Rioja (España) Tel. +34 941 320 343 Fax +34 941 302 702 http://www.gasori.com

#### Gasori - Haro

Pol. Ind. Fuente Ciega C/ Las Hayas nº 2 26200 Haro - La Rioja (España) Tel. +34 941 320 343 Fax +34 941 302 702 Today we form part of the RPK S.Coop group, we currently have two production centres, one in Haro and the other in Anguciana (Rioja, Spain).

#### **WE BUILD TRUST**

At Gasori S.L we place the utmost importance on the quality of our products, striving to offer you the best solution to ensure that you are satisfied with your choice.

#### **PASSION FOR WHAT WE DO**

We work together with the best specialists to develop products inspired by research, guaranteeing that they perform well during the most critical moments, where nothing can go wrong, and ensuring all aspects of the installation operate successfully. Accordingly, the products are subject to the UNE-EN ISO 9001: 2015, UNE-EN ISO 3834-1: 2006 and UNE-EN ISO 1090-1: 2011, UNE-EN ISO 45001 standards.

## MORE THAN 40 YEARS

Working for you

#### WE CARE ABOUT THE PLANET

Moreover, Gasori is fully aware of sustainability: the environment matters to us, which is why we continuously improve towards guaranteeing a sustainable product. Our products comply with the UNE-EN ISO 14001: 2015 standard.

#### **EXPERIENCE AND INNOVATION**

Thanks to our extensive experience and capacity to innovate, we offer a wide range of products designed for explosive environments, complying with the 2014/34/EU directives of the European Parliament and of the Council of February 26, 2014 and the UNE-EN ISO 80079-36: 2017/AC: 2020 to guarantee our customers maximum safety and reliability.

## CALCULATION CRITERIA

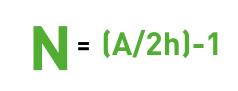
#### Definition of cable length and number of cable trolleys.

In order to design and manufacture the Festoon System correctly, the length of the cable, as well as the number of cable trolleys, have to be determined. This is calculated as follows:

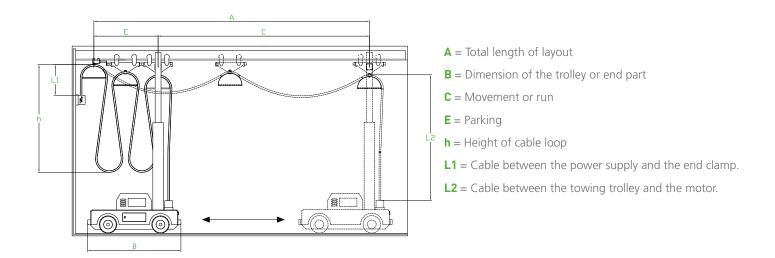
#### Total cable length:

= A + 10% of A + Distance to the power supplies (at both ends).

#### Number of cable trolleys



- $\mathbf{N}$  = Number of cable trolleys
- A = Total length of layout (metres)
- **h** = Height of cable loop (metres)



The number of cable trolleys **N** depends on the length of path **A** and the required cable loop depth **h**. The loop depth is governed by the height available between the line and the floor or any obstructions, or as specified by the customer.

#### EXAMPLE

Length of layout A=16 m, Height of cable loop h=0,8 m, Distance to connections, L1= 0,5 m , L2 =2,5 m **Total length of the cable:** L=A+10%A+L1+L2; L=16+1,6+0,5+2,5; L=20,6 m **Number of cable trolleys:** N=(A/2h)-1; N=(16/2x0,8)-1; N=9. The system will have 9 intermediate trolleys, and also 1 first fixed trolley + 1 last towing trolley (or pendant trolley)

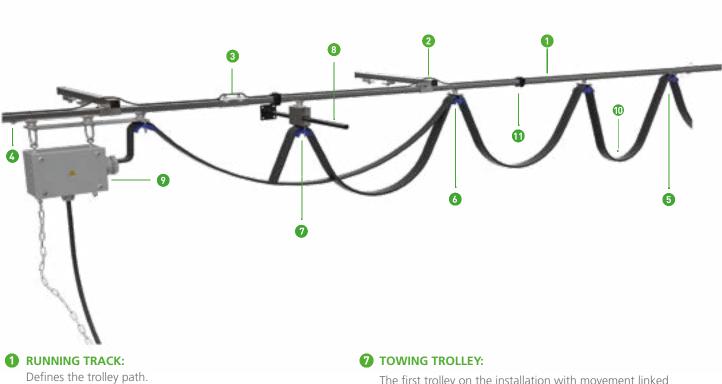
## COMPONENTS AND ASSEMBLY

#### **Efficiency and safety**

Due to a capacity to innovate and design, the Gasori S.L. Festoon system features the most advanced technology, making our products the most reliable on the market.

The Festoon system is method of powering mobile equipment that, by means of cable trolleys, allows the conductor cables to be extended and collected along the path.

#### Schematic description of components and their assembly



These can be open, C-shaped, square or steel sector.

#### **SUPPORT:**

Ensures the rolling track is attached to the structure. Generally speaking, fitted every 1.5 metres: in trolley parking areas, every 1 metre.

#### **3** JOINT:

To join consecutive sections of the rolling track

#### **END STOP:**

Prevents the moving trolleys coming off the end of the line.

#### **5** END CLAMP:

Static cable-supporting element. Fitted to the rolling track during assembly.

#### **6** CABLE TROLLEY:

For holding the cable and movement along the rolling track.

The first trolley on the installation with movement linked to the mobile element being supplied.

#### **8** TOWING ARM:

Linked to the mobile equipment, pulley or crane, in order to pull the first or towing trolley.

#### **9** PENDANT TOWING TROLLEY:

Suitable for carrying the pendant or control element. Pendant connection/disconnection can be done by means of terminals or quick connector.

#### **(D) ELECTRICAL CABLE:**

Flexible cable, defined by the number of conductors and their cross-section. Flat-shaped for better folding when forming loops. They can be PVC or rubber coated depending on where the system is located.

#### **I** FIXED CABLE CLAMP:

As an option to support other conductor cables on top of the rolling track, making full use of the assembly structure.

## Series 10

Series 10 comprises cable trolleys that roll on a Ø8 cylindrical element, either a metal cable or rod. These trolleys are used to power small hoists or tools. Its maximum load is 5 kg and the recommended maximum length of the installation is 12 m.

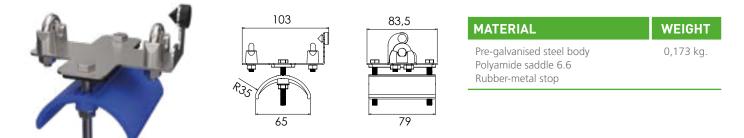
This series is designed for indoor and non-aggressive environments. The trolley comprises two polyamide wheels and a polyamide saddle, the body and screws are made of zinc plated steel. This system requires no previous installation of profile sections.

#### Trolleys to roll on Ø8 mm steel cables.

MAXIMUM CABLE BUNDLE:	L x H = 56 x 15 mm.
MAX. LOAD:	5 g. per trolley

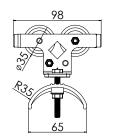


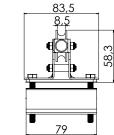
#### END CLAMP Ref. RG1004



## CABLE TROLLEY Ref. RG1005



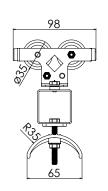


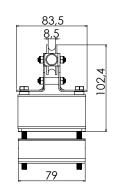


MATERIAL	WEIGHT
Pre-galvanised steel body Polyamide saddle 6.6 Rubber-metal stop Brass spacer bushings Polyamide wheels 6.6	0,160 kg.

#### TOWING TROLLEY Ref. RG1006



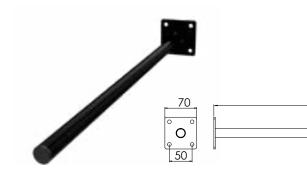




MATERIAL	WEIGHT
Pre-galvanised steel body Painted pickled steel pipe Polyamide saddle 6.6 Rubber-metal stop Brass spacer bushings Polyamide wheels 6.6	0,310 kg.



#### TOWING ARM Ref. RG1014



MATERIAL	WEIGHT
Painted pickled steel pipe Painted S235 sheet steel PVC Cap	0,452 kg.

### SCHEMATIC ASSEMBLY DESCRIPTION SERIES 10

500

ø20



máx. = 12m

Maximum installation length: 12 m.

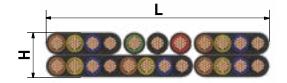
## Series 28

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Series 28 comprises cable trolleys that travel inside a galvanized steel profile. Suitable for straight power or control lines. These trolleys support up to 20kg weight.

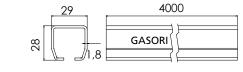
Attachment can be achieved by clamping or welding to beams, screwed to walls or ceilings. These are intended to power hoists, trippers, small motors, etc. Recommended for indoor or outdoor installations in dusty environments, since the profile's flat shape does not allows dust to settle. MAXIMUM CABLE BUNDLE:  $L \times H = 56 \times 15$  mm.

MAX. LOAD:	20 g. per trolley
LENGTH OF PROFILES:	4 m.



#### C - PROFILE Ref. RG2801

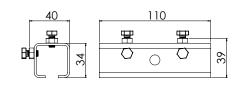




MATERIAL	WEIGHT
Galvanized steel	1,28 Kg/m.
.ength of bars: 4 m.	1,28 Kg/I

#### JOINT Ref. RG2802

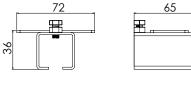


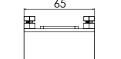


MATERIAL	WEIGHT
Zinc plated steel	0,241 kg.

#### SUPPORT Ref. RG2803



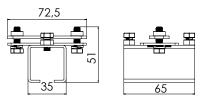




MATERIAL	WEIGHT
Zinc plated steel	0,175 kg.

#### SUPPORT Ref. RG2803R

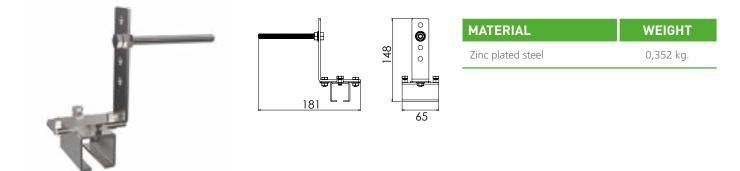




MATERIAL	WEIGHT
Zinc plated steel	0,228 kg.

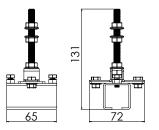


#### END STOP SUPPORT Ref. RG2803FC



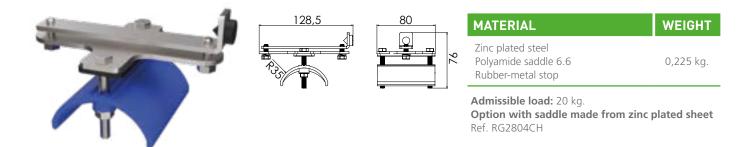
#### CEILING SUPPORT Ref. RG2803Z





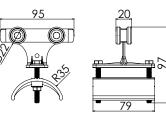
WEIGHT
0,270 kg.

#### END CLAMP Ref. RG2804



#### CABLE TROLLEY Ref. RG2805





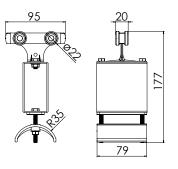
MATERIAL	WEIGHT
Zinc plated steel body Polyamide saddle 6.6 Steel ball bearings Ø22 Polyamide buffer	0,180 kg.

Admissible load: 20 kg.

**Option with saddle made from zinc plated sheet** Ref. RG2805CH

### TOWING TROLLEY Ref. RG2806



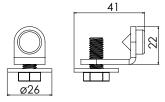


MATERIAL	WEIGHT
Zinc plated steel body Zinc plated steel tube Polyamide saddle 6.6 Steel ball bearings Ø22 Polyamide buffer	0,463 kg.

Admissible load: 20 kg. Option with saddle made from zinc plated sheet Ref. RG2806CH

#### END STOP Ref. RG2807MS

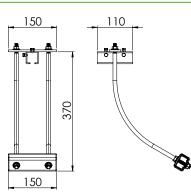




MATERIAL	WEIGHT
Zinc plated steel Rubber-metal stop	0,050 kg

#### LOOP STOP Ref. RG2808

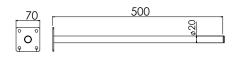




MATERIAL	WEIGHT
Zinc plated steel body Polyamide stop 6.6 + Fibreglas Threaded steel rod with transparent plastic sleevee	1,470 kg.

#### TOWING ARM Ref. RG2814



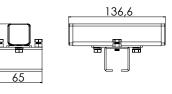


MATERIAL	WEIGHT
Painted pickled steel pipe Painted S235 sheet steel PVC cap	0,452 kg.

#### CEILING SUPPORT Ref. RG2819

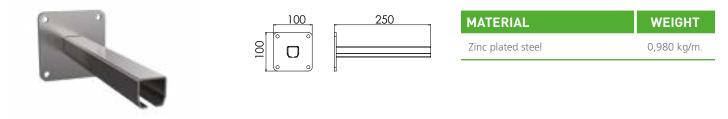
67





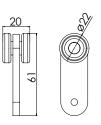
MATERIAL	WEIGHT
Zinc plated steel PVC cap	0,250 kg.

#### WALL SUPPORT Ref. RG2822



#### TROLLEY FOR EXHIBITORS Ref. RG2885





MATERIAL	WEIGHT
Zinc plated steel body Steel ball bearings Ø22	0,070 kg.

Admissible load: 10kg.

MATERIAL

RG2886CH

6 mm thick

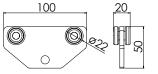
Aluminium body

Steel ball bearings Ø22

Admissible load: 20kg.

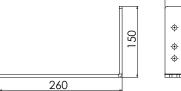
### CARRIER TROLLEY Ref. RG2886





## WALL SUPPORT Ref. RG20MX-1 / RG20MX-2







MATERIAL	WEIGHT
RG20MX-1 Pre-galvanized steel, 4 mm thick	0,420 kg.
RG20MX-2	0,630 kg.

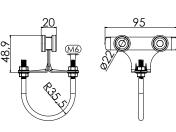
Option with body made from zinc plated sheet

WEIGHT

0,110 kg.

## CABLE TROLLEY CON ABARCÓN Ref. RG2805SC

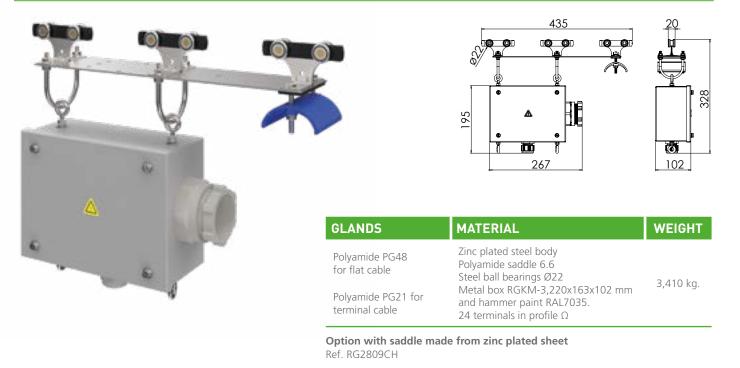




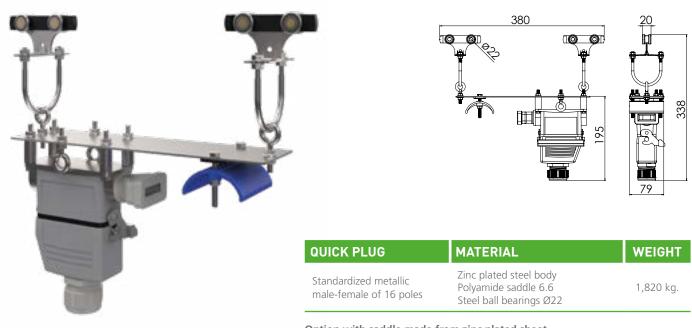
MATERIAL	WEIGHT
Zinc plated steel body Steel ball bearings Ø22 Polyamide buffer	0,170 kg.

Admissible load: 20 kg.

#### TOWING TROLLEY TERMINAL BOX 24 POLES Ref. RG2809



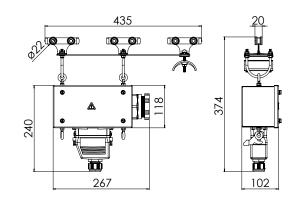
#### PENDANT STATION TOWING TROLLEY WITH PLUG + SOCKET 16 POLES Ref. RG2810SC



**Option with saddle made from zinc plated sheet** Ref. RG2810SCCH

#### TOWING TROLLEY TERMINAL BOX + QUICK PLUG:

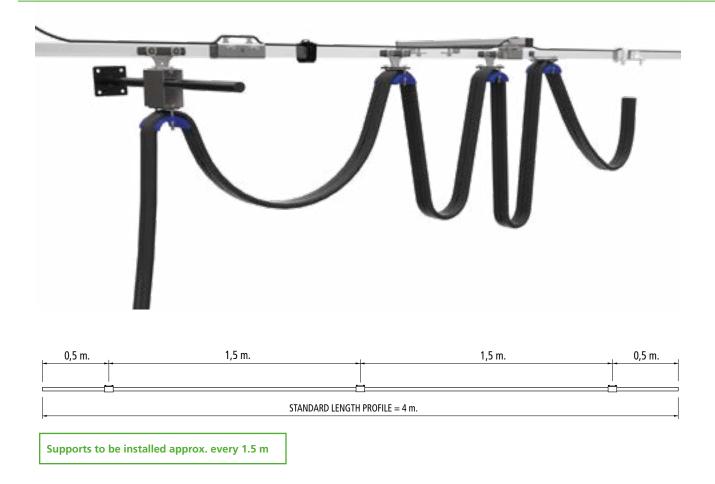




QUICK PLUG	GLAND	MATERIAL	WEIGHT
Metallic male female standardized of 16 or 24 poles	Polyamide PG48 for flat cable	Zinc plated steel body Polyamide saddle 6.6 Steel ball bearings Ø22 Metal boxRGKM-4 or RGKM-5, 220x118x102 mm and hammer paint RAL7035.	<b>16 poles</b> 3,210 kg. <b>24 poles</b> 3,380 kg.

**16 Poles:** RG2810 with box RGKM-4 // **24 Poles:** RG2811, with box RGKM-5 **Option with saddle made from zinc plated sheet** Ref. G2810CH - Ref. RG2811CH

#### SCHEMATIC ASSEMBLY DESCRIPTION SERIES 28



### UNIVERSAL SUPPORT

**Ref. RG2813, RG2813B:** for beams with flanges of thickness  $\leq$  10 mm. **WEIGHT**: 1,090 kg.

Ref. RG2823, RG2823B: for beams with flanges of thickness between 10 and 20 mm. WEIGHT: 1,090 kg.

**Ref. RG2833, RG2833B:** for beams with flanges of thickness between 20 and 30 mm. **WEIGHT**: 1,100 kg.





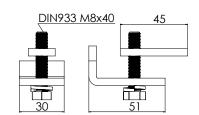
1 Section 500 mm. of profile Ref. RG2801

2 1 Adjustable support Ref. RG2803R

3 2 Gilder clamps

#### GILDER CLAMPS Ref. RG2812





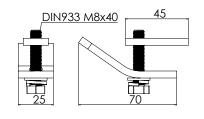
FLANGE	WEIGHT
≤ 10 mm.	0,117 kg.
For series RG2813	

#### GILDER CLAMPS Ref. RG2821



#### GILDER CLAMPS Ref. RG2830





FLANGE	WEIGHT
10 < Flange ≤ 20 mm.	0,114 kg.
For series RG2823	

233 M8x50	<u>45</u>
A	2
55	

FLANGE	WEIGHT
20 < Flange≤ 30 mm.	0,122 kg.
For series RG2833	

We have Double universal supports to fix control and power at the same time. Consult us.

#### SYSTEM FOR WELDING SERIES28 Ref . RG2815



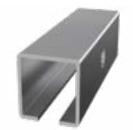
- 2 1 Corbel for welding Ref. RG2816
- WEIGHT: 1,120 kg.

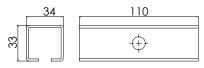


**3** 1 Fixing clamp to corbel Ref. RG2817

4 1 Adjustable support Ref. RG2803R

#### CORBEL FOR WELDING Ref. RG2816



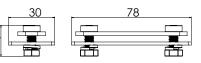


MATERIAL	WEIGHT
Carbon steel	0,190 kg.

Supplied uncoated, allowing it to be welded to a structural steel element.

#### FIXING CLAMP Ref. RG2817





MATERIAL	WEIGHT
Pre-galvanized steel, zinc-plated steel and zinc-plated steel mechanical fasteners.	0,073 kg.

Allows the profile section to be fixed to the RG2816 bracket.

## Series 80

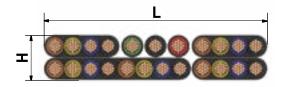
Series 80 comprises cable trolleys that travel inside a galvanized steel profile. Suitable for straight power or control lines. These trolleys support up to 20kg weight.

Attachment can be achieved by clamping or welding to beams, screwed to walls or ceilings. These are intended to power hoists, trippers, small motors, etc. Recommended for installations that require fully guided trolleys, given that the rounded shape of the profile accommodates bearings perfectly.

## RG Series 80

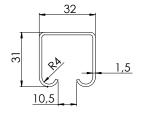
#### MAXIMUM CABLE BUNDLE: $L \times H = 56 \times 15$ mm.

MAX. LOAD:	20 kg. per trolley
LENGTH OF PROFILES:	4 m.



#### C PROFILE Ref. RG8001

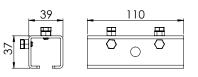




MATERIAL	WEIGHT
Galvanized steel	1,23 kg/m.
Length of bars: 4 m.	

#### JOINT Ref. RG8002R

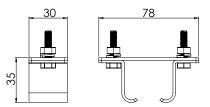




MATERIAL	WEIGHT
Zinc plated steel	0,278 kg.

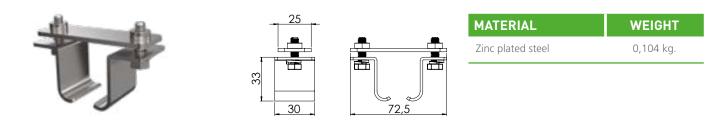
#### SUPPORT Ref. RG8003



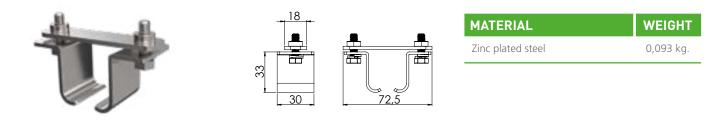


MATERIAL	WEIGHT
Zinc plated steel	0,105 kg.

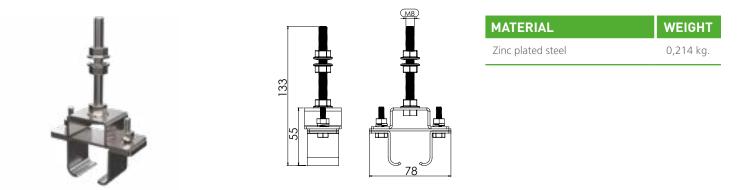
#### ADJUSTABLE SUPPORT Ref. RG8003R-25



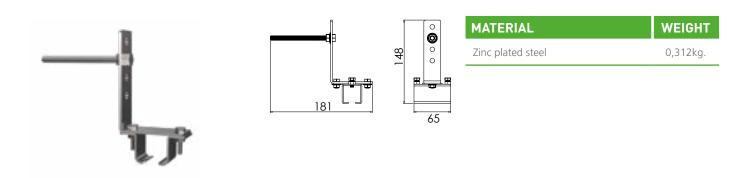
## ADJUSTABLE SUPPORT Ref. RG8003R-28



## CEILING SUPPORT Ref. RG8003C

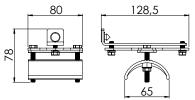


## END STOP SUPPORT Ref. RG8003FC



#### END CLAMP Ref. RG8004





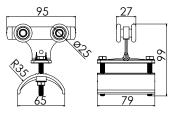
MATERIAL	WEIGHT
Zinc plated steel body Polyamide saddle 6.6 Rubber-metal stop	0,250 kg.

Admissible load: 20 kg.

**Option with saddle made from zinc plated sheet** Ref. RG8004CH

## CABLE TROLLEY Ref. RG8005N





MATERIAL	WEIGHT
Zinc plated steel body Polyamide saddle 6.6 Steel ball bearings Ø25 Polyamide buffer	0,206 kg.

Admissible load: 20 kg. Option with saddle made from zinc plated sheet Ref. RG8005NCH

#### TOWING TROLLEY Ref. RG8006N



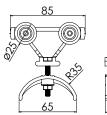
95 ©©© ₽	27	178,5
<b>R</b> 35 <b>6</b> 5	<b>7</b> 9	

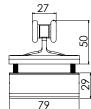
MATERIAL	WEIGHT
Zinc plated steel body Zinc plated steel tube Polyamide saddle 6.6 Steel ball bearings Ø25 Polyamide buffer	0,485 kg.

Admissible load: 20 kg. Option with saddle made from zinc plated sheet Ref. RG8006NCH

#### PLASTIC CABLE TROLLEY Ref. RG8665





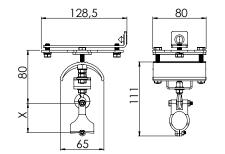


MATERIAL	WEIGHT
Polyamide body 6.6 Polyamide saddle 6.6 Plastic wheels with steel axles	0,100 kg.

Admissible load: 6 kg.

#### END CLAMP Ref. RG8004+ (FOR ROUND CABLES)\*



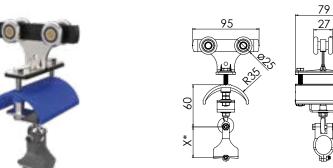


54

MATERIAL	WEIGHT
Zinc plated steel casing Polyamide saddle 6.6 Turning axle metallic Polyethylene cable supports Rubber stop	According to cable-support

Admissible load: 20 kg. Admissible cable carrying load: 8 kg.

#### $CABLE \ TROLLEY \ Ref. \ RG8005N+ \ (for \ round \ cables)^*$



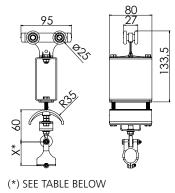
(\*) SEE TABLE BELOW

MATERIAL	WEIGHT
Zinc plated steel casing Polyamide saddle 6.6 Steel ball bearings Ø25 Turning axle metallic Polyethylene cable supports Polyamide buffer	According to cable-support

Admissible load: 20 kg. Admissible cable carrying load: 8 kg.

#### TOWING TROLLEY Ref. RG8006N+ (FOR ROUND CABLES)\*





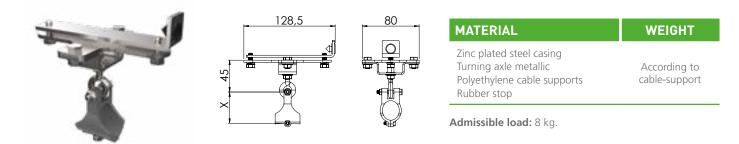
MATERIAL	WEIGHT
Zinc plated steel casing Polyamide saddle 6.6 Steel ball bearings Ø25 Turning axle metallic Polyethylene cable supports Polyamide buffer	According to cable-support

Admissible load: 20 kg. Admissible cable carrying load: 8 kg.

#### The complete reference of the trolley is: RG8005N+Ref. of the cable-support. For example RG8005N+C

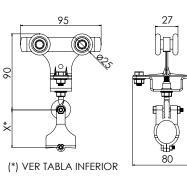
REF.	Ø (mm)	X (mm.)
А	6-8	33
В	10 - 14,5	33
С	15 - 19,5	38
D	20 - 25,5	43
E	25 - 29,5	51
F	30 - 34,5	56
G	35 - 39,5	62

#### END CLAMP Ref. RG8004SB+ (FOR ROUND CABLES)\*



#### CABLE TROLLEY Ref. RG8005NSB+ (FOR ROUND CABLES)\*

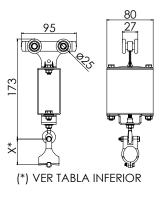




MATERIAL	WEIGHT
Zinc plated steel casing Steel ball bearings Ø25 Turning axle metallic Polyethylene cable supports Polyamide buffer	According to cable-support

#### TOWING TROLLEY Ref. RG8006NSB+ (FOR ROUND CABLES)\*





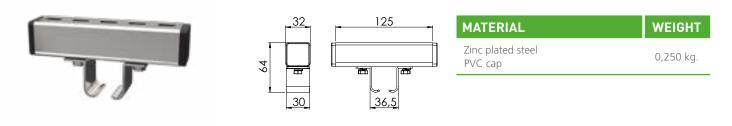
MATERIAL	WEIGHT
Zinc plated steel casing Steel ball bearings Ø25 Turning axle metallic Polyethylene cable supports Polyamide buffer	According to cable-support

Admissible load: 8 kg.

## \*The complete reference of the trolley is: RG8004NSB, RG8005NSB y RG8006NSB + REF. of the cable-support. For example RG8005NSB + C

REF.	Ø de la manguera (mm)	X (mm.)
А	6-8	33
В	10 - 14,5	33
С	15 - 19,5	38
D	20 - 25,5	43
Е	25 - 29,5	51
F	30 - 34,5	56
G	35 - 39,5	62

## CEILING SUPPORT Ref. RG8019



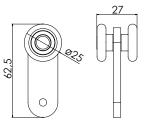
#### WALL SUPPORT Ref. RG8022





#### TROLLEY FOR EXHIBITORS Ref. RG8085



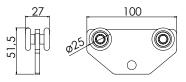


MATERIAL	WEIGHT
Zinc plated steel body Steel ball bearings Ø25	0,080 kg.

Admissible load: 10 kg.

#### CARRIER TROLLEY Ref. RG8086





MATERIAL	WEIGHT
Aluminium body Steel ball bearings Ø25	0,136 kg.

Admissible load: 20 kg.

Option with body made from zinc plated sheet RG8086CH

## WALL SUPPORT Ref. RG20MX-1 / RG20MX-2

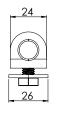


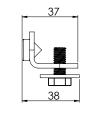
		150
-	260	

40	MATERIAL	WEIGHT
\$	RG20MX-1 Pre-galvanized steel, 4 mm thick	0,42 kg.
⊕ ⊕ ■	RG20MX-2 Zinc plated steel 6 mm thick	0,63 kg.

#### END STOP Ref. RG8007MS

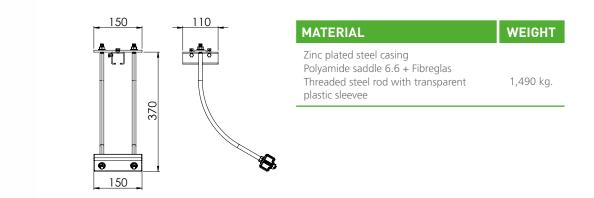




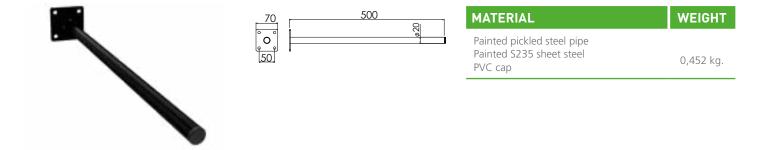


MATERIAL	WEIGHT
Zinc plated steel Rubber-metal stop	0,050 kg.

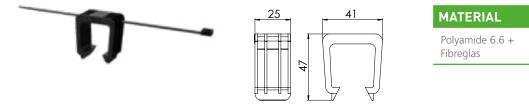
#### LOOP STOP Ref. RG8008



#### TOWING ARM Ref. RG8014

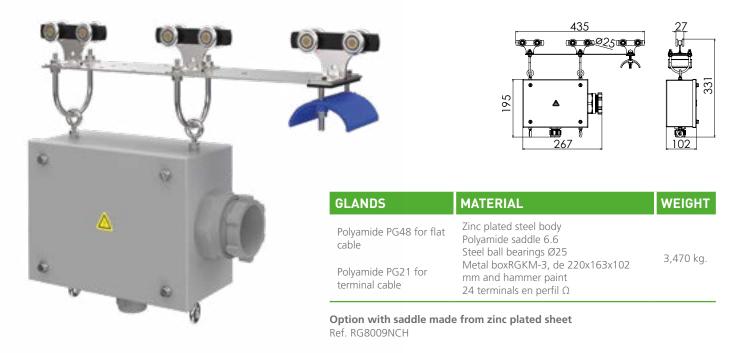


#### CABLE CLIPS Ref. RG8018



MATERIAL	WEIGHT
Polyamide 6.6 + Fibreglas	0,012 kg.

#### PUSH PENDANT WITH TERMINAL BOX 24 POLES Ref. RG8009N

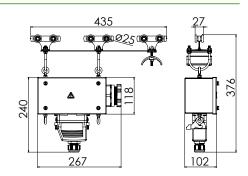


#### PUSH PENDANT WITH TERMINAL BOX + QUICK PLUG 16 POLES Ref. RG8010NSC



#### PUSH PENDANT WITH TERMINAL BOX + QUICK PLUG





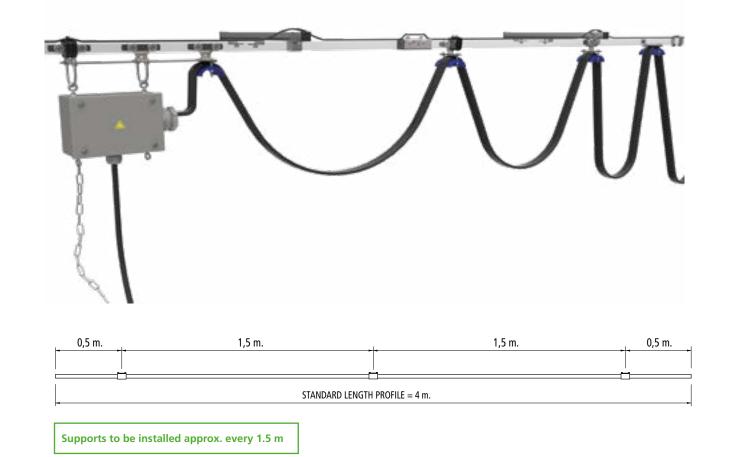
QUICK PLUG	GLANDS	MATERIAL	WEIGHT
Metallic male female standardized of 16 or 24 poless	Polyamide PG48 for flat cable	Zinc plated steel body Polyamide saddle 6.6 Steel ball bearings Ø25 Metal boxRGKM-4 o RGKM-5, de 220x118x102 mm and hammer paint RAL7035	<b>16 poles</b> 3,270 kg. <b>24 poles</b> 3,440 kg.

16 Poles: RG8010N, with box RGKM-4

**24 Poles:** RG8011N, with box RGKM-5

Option with saddle made from zinc plated sheet Ref. RG8010NCH - Ref. RG8011NCH

#### SCHEMATIC ASSEMBLY DESCRIPTION SERIES 80



#### UNIVERSAL SUPPORT

**Ref. RG8013, RG8013B:** for beams with flanges of thickness  $\leq$  10 mm. **WEIGHT**: 0,960 kg.

**Ref. RG8023, RG8023B:** for beams with flanges of thickness between 10 and 20 mm. **WEIGHT**: 0,960 kg.

Ref. RG8033, RG8033B: for beams with flanges of thickness between 20 and 30 mm. WEIGHT: 0,970 kg.

#### Gilder clamps (See Series 28)

 For series
 RG8013:
 Ref. RG2812

 For series
 RG8023:
 Ref. RG2821

 For series
 RG8033:
 Ref. RG2830

#### We have Double universal supports to fix control and power at the same time. Consult us.



#### SYSTEM FOR WELDING SERIES 80 Ref. RG8015

- 1 Section 500 mm. of profile Ref. RG2801
- 2 1 Corbel for welding Ref. RG2816 (See Series 28)
- 3 1 Fixing clamp to corbel Ref. RG2817 (See Series 28)

1 Section 500 mm. of profile Ref. RG2801

2 1 Adjustable support Ref. RG8003R-28

**3** 2 Gilder clamps

4 1 Adjustable support Ref. RG8003R-28

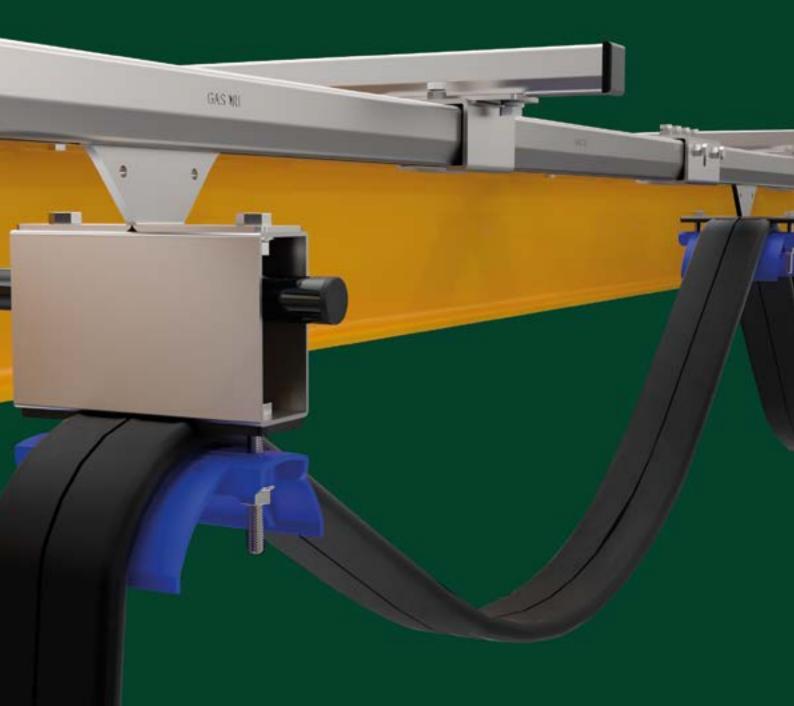
WEIGHT: 0,990 kg.



## Series 40

Series 40 comprises cable trolley Festoon system that travels inside a profile suitable for straight lines. This series is intended for systems that require greater load, since the trolleys can support up to 35 kg. Designed for all types of application in power and control installations.

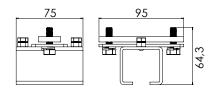
Attachment can be achieved by clamping or welding to beams, screwed to walls or ceilings. These are intended to power hoists, trippers, higher powered motors, etc. Recommended for indoor or outdoor installations in dusty environments, since the profile's flat shape does not allows dust to settle.



MAX. LOAD:	35 kg. per trolley		
ENGTH OF PROFILES:	4 m.		
C PROFILE Ref. RG400	1		
	40 4000	MATERIAL         Galvanized steel         Length of bars: 4 m.	<b>WEIGHT</b> 2,29 Kg/m.
IOINT Ref. RG4002			
A BOOM		MATERIAL Zinc plated steel	<b>WEIGHT</b> 0,390 kg.
SUPPORT Ref. RG4003			
		MATERIAL Zinc plated steel	<b>WEIGHT</b> 0,347 kg.
SUPPORT Ref. RG4003.	Δ		
	95 40	Zinc plated steel	<b>WEIGHT</b> 0,225 kg.
UPPORT Ref. RG4003	AC		
	95 40	MATERIAL         Zinc plated steel         99         96	<b>WEIGHT</b> 0,385 kg.

#### ADJUSTABLE SUPPORT Ref. RG4003R

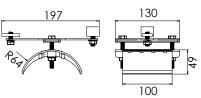




MATERIAL	WEIGHT
Zinc plated steel	0,478 kg.

#### END CLAMP Ref. RG4004



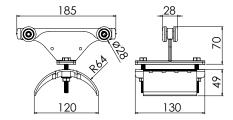


MATERIAL	WEIGHT
Zinc plated steel body Polyamide saddle 6.6 + Fibreglas Rubber-metal stop	0,419 kg.

Admissible load: 35 kg. Option with saddle made from zinc plated sheet Ref. RG4004CH

## CABLE TROLLEY Ref. RG4005





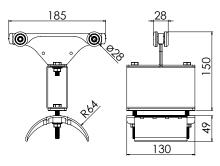
MATERIAL	WEIGHT
Zinc plated steel casing Polyamide saddle 6.6 + Fibreglas Steel ball bearings Ø28 Polyamide buffer	0,609 kg.

Admissible load: 35 kg.

**Option with saddle made from zinc plated sheet** Ref. RG4005CH

#### TOWING TROLLEY Ref. RG4006





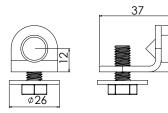
MATERIAL	WEIGHT
Zinc plated steel casing Zinc plated steel tube Polyamide saddle 6.6 + Fibreglas Steel ball bearings Ø28 Polyamide buffer	1,071 kg.

Admissible load: 35 kg.

**Option with saddle made from zinc plated sheet** Ref. RG4006CH

## END STOP Ref. RG4007MS

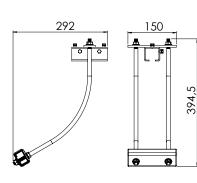




MATERIAL	WEIGHT
Zinc plated steel Rubber-metal stop	0,050 kg.

#### LOOP STOP Ref. RG4008

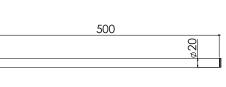




MATERIAL	WEIGHT
Zinc plated steel casing Polyamide saddle 6.6 + Fibreglas Threaded steel rod with transparent plastic sleevee	1,525 kg.

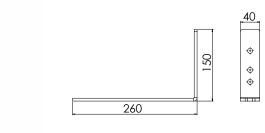
### TOWING ARM Ref. RG4014





MATERIAL	WEIGHT
Painted pickled steel pipe Painted S235 sheet steel PVC cap	0,452 kg.

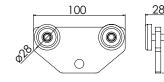
## WALL SUPPORT Ref. RG20MX



MATERIAL	WEIGHT
RG20MX-1 Pre-galvanized steel, 4 mm thick	0,42 kg.
RG20MX-2 Zinc plated steel 6 mm thick	0,63 kg.

## CARRIER TROLLEY Ref. RG4086





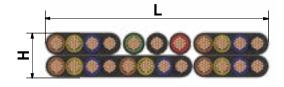
3

MATERIAL	WEIGHT
Aluminium body Steel ball bearings Ø28	0,166 kg.

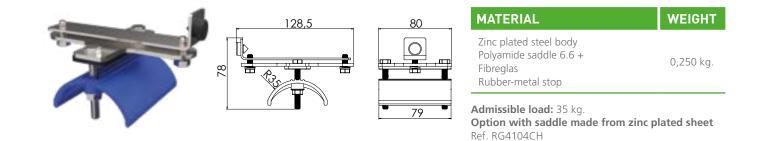
Admissible load: 35 kg.

#### Series 40 trolleys with TYPE A saddle

MAXIMUM CABLE BUNDLE:	L x H = 56 x 15 mm.
MAX. LOAD:	35 kg. per trolley



#### END CLAMP Ref. RG4104



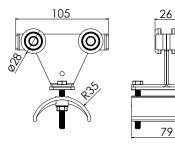
113,5

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79

## CABLE TROLLEY Ref. RG4105



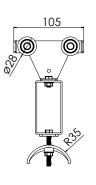


MATERIAL	WEIGHT
Zinc plated steel body Polyamide saddle 6.6 + Fibreglas Steel ball bearings Ø28	0,339 kg.

Admissible load: 35 kg. Option with saddle made from zinc plated sheet Ref. RG4105CH

#### TOWING TROLLEY Ref. RG4106



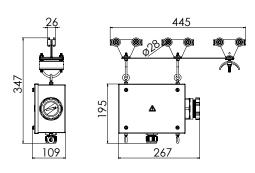


MATERIAL
Zinc plated steel body Zinc plated steel tube Polyamide saddle 6.6 + Fibreglas Steel ball bearings Ø28

Admissible load: 35 kg. Option with saddle made from zinc plated sheet Ref. RG4106CH

# PUSH PENDANT WITH TERMINAL BOX 24 POLES Ref. RG4109

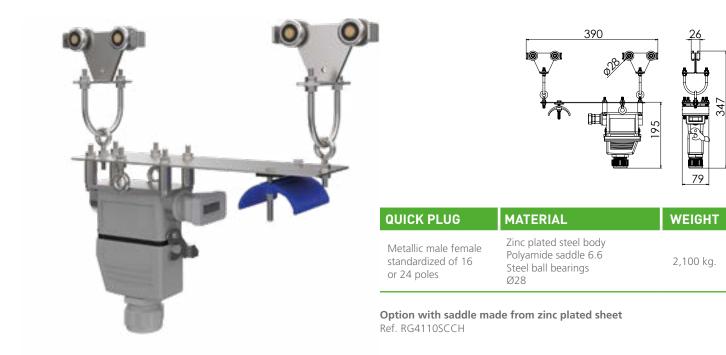




GLANDS	MATERIAL	WEIGHT
Polyamide PG48 for flat cable Polyamide PG21 for terminal cable	Zinc plated steel body Polyamide saddle 6.6 + Fibreglas Steel ball bearings Ø28 Metal boxRGKM-3, de 220x163x102 mm and hammer paint RAL7035 24 bornas en perfil Ω	3,815 kg.

**Option with saddle made from zinc plated sheet** Ref. RG4109CH

# PUSH PENDANT WITH TERMINAL BOX + QUICK PLUG 16 POLES Ref. RG4110SC



#### PENDANT STATION TOWING TROLLEY WITH CONNECTING BOX + PLUG AND SOCKET:



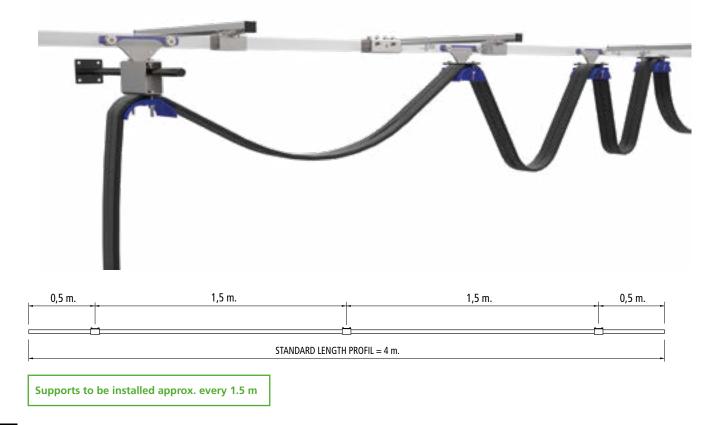
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	102	2	267	

QUICK PLUG	GLANDS	MATERIAL	WEIGHT
Metallic male female standardized of 16 or 24 poles	Polyamide PG48 for flat cable	Zinc plated steel body Polyamide saddle 6.6 + Fibreglas Steel ball bearings Ø28 Metal box RGKM-4 o RGKM-5, 220x118x102 mm and hammer paint RAL7035.	<b>16 poles</b> 3,660 kg. <b>24 poles</b> 3,830 kg.

**16 Poles:** RG4110, with box RGKM-4 **24 Poles:** RG4111, with box RGKM-5

Option with saddle made from zinc plated sheet Ref. RG4110CH – Ref. RG4111CH

# SCHEMATIC ASSEMBLY DESCRIPTION SERIES 40



# UNIVERSAL SUPPORT

**Ref. RG4013:** for beams with flanges of thickness ≤ 10 mm. **WEIGHT**: 1,990 kg.

**Ref. RG4023 :** for beams with flanges of thickness between 10 and 20 mm. **WEIGHT**: 2,030 kg.

**Ref. RG4033 :** for beams with flanges of thickness between 20 and 30 mm.**WEIGHT**: 2,180 kg.

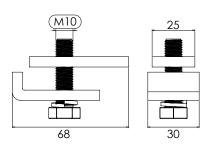
1 Section 500 mm. of profileRef. RG4001

- 2 1 Adjustable support Ref. RG4003R
- 3 2 Gilder clamps



#### GILDER CLAMPS Ref. RG8012

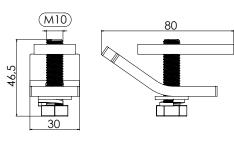




FLANGE	WEIGHT
≤ 10 mm.	0,180 kg.
For series RG4013	

# GILDER CLAMPS Ref. RG8021

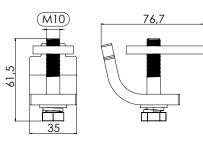




FLANGE	WEIGHT
$10 < Flange \le 20 \text{ mm}.$	0,200 kg.
or series RG4023	

#### GILDER CLAMPS Ref. RG8030





FLANGE	WEIGHT
$20 < Flange \le 30 \text{ mm}.$	0,277 kg.
or series RG4033	

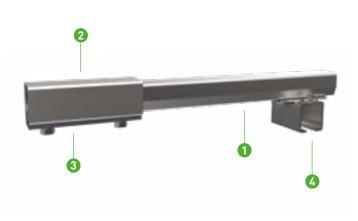
We have Double universal supports to fix control and power at the same time. Consult us.

# SYSTEM FOR WELDING SERIES 40 Ref. RG4015



2 1 Corbel for welding Ref. RG4016

WEIGHT: 2,570 kg.



**3** 1 Fixing clamp to corbel Ref. RG4017

4 1 Adjustable support Ref. RG4003R

# CORBEL FOR WELDING Ref. RG4016



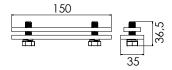
47,5	150
42,5	

MATERIAL	WEIGHT
Carbon steel	0,486 kg.

Supplied uncoated, allowing it to be welded to a structural steel element.

#### FIXING CLAMP Ref. RG4017





MATERIAL	WEIGHT
Pre-galvanized steel, zinc-plated steel and zinc-plated steel mechanical fasteners.	0,461 kg.

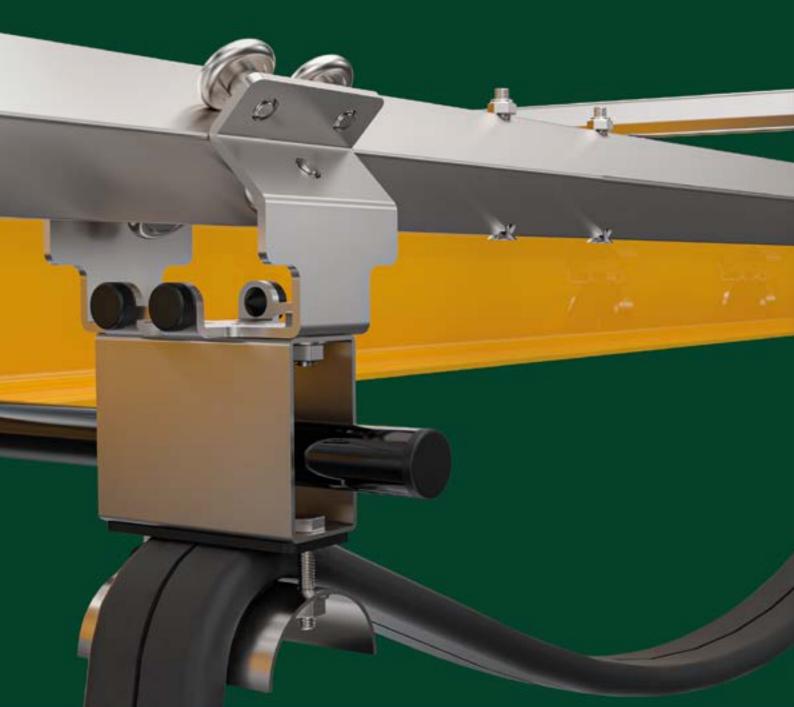
Allows the profile section to be fixed to the RG4016 bracket.

# Series 35



Series 35 is a cable trolley Festoon System intended for installations with curved and straight sections, and for paths that require greater speed. It is also available in stainless steel, making it especially suitable for installations exposed to harsher conditions. It is approved for ATEX installations, featuring an exclusive design that permits operation in flammable atmosphere, providing the customer with complete peace of mind and safety.

Thanks to the exclusive design of its rhombus-shaped profile, this product is ideal for use in extremely dusty or dirty environments.



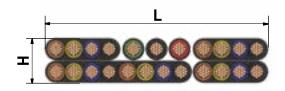


Suitable for installations with curves (minimum radius of 1 m) and high-speed paths (up to 30 m/min on straight sections and 20 m/min on curved sections).

#### MAXIMUM CABLE BUNDLE: $L \times H = 56 \times 15 \text{ mm}$ .

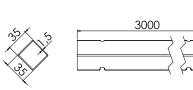
MAX. LOAD:	12 kg. per trolley

LENGTH OF PROFILES: 3 m.



#### C PROFILE Ref. RG3501R





MATERIAL	WEIGHT
Galvanized steel	1,61 kg/m.
Length of bars: 3 m.	

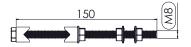
### JOINT Ref. RG3502R





# SUPPORT Ref. RG3503R

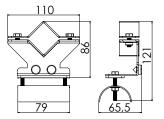




MATERIAL	WEIGHT
Zinc plated steel Aluminium bushings	0,079 kg.

# END CLAMP Ref. RG3504R



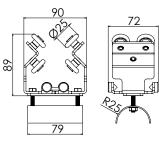


MATERIAL	WEIGHT
Zinc plated steel Rubber stop Aluminium tray	0,259 kg.

Admissible load: 12 kg.

# CABLE TROLLEY Ref. RG3505R



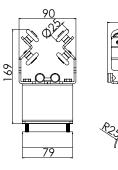


MATERIAL	WEIGHT
Zinc plated steel Rubber stop Steel ball bearings Ø25 Aluminium tray	0,502 kg.

Admissible load: 12 kg.

# TOWING TROLLEY Ref. RG3506R





MATERIAL	WEIGHT
Zinc plated steel Rubber stop Steel ball bearings Ø25 Aluminium tray	0,672 kg.

#### Admissible load: 12 kg.

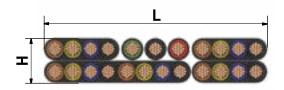


Morphological and functional characteristics similar to those of Series 35, but designed to work in explosive atmospheres. Complies with EX IIGDcT6T85°C requirements.

#### MAXIMUM CABLE BUNDLE: $L \times H = 56 \times 15 \text{ mm}$ .

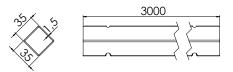
12 kg. per trolley

LENGTH OF PROFILES: 3 m.



#### C PROFILE Ref. RG3501R-EX

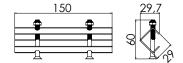




WEIGHT
1,61 kg/m.
ength of bars: 3 m

# JOINT Ref. RG3502R-EX

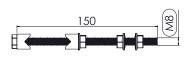




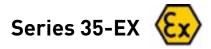
WEIG	HT
0,168	kg.

# SUPPORT Ref. RG3503R-EX





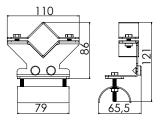






# END CLAMP Ref. RG3504R-EX



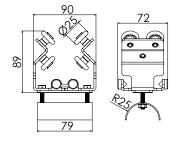


WEIGHT	
0,259 kg.	

Admissible load: 12 kg.

# CABLE TROLLEY Ref. RG3505R-EX



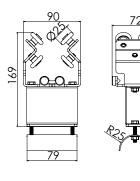


WEIGHT	
0,502 kg.	

Admissible load: 12 kg.

TOWING TROLLEY Ref. RG3506R-EX





0.672 kg	
0,672 kg.	
Admissible load: 12 kg.	

Series suitable for installations with curves where loads heavier than 12 kg must be transported by trolley. The same ATEX rated series is available for explosive atmospheres.

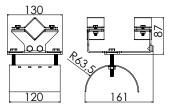
MAXIMUM CABLE BUNDLE:	L x H = 90 x 30 mm.
MAX. LOAD:	35 kg. per trolley

LENGTH OF PROFILES: 3 m.



# END CLAMP Ref. RG3504RB



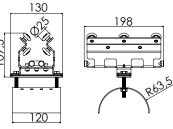


MATERIAL	WEIGHT
Painted steel saddle Rubber-metal stop	1,250 kg.

Admissible load: 35 kg.

# CABLE TROLLEY Ref. RG3505RB



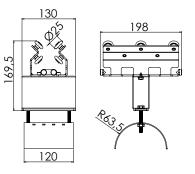


MATERIAL	WEIGHT
Painted steel Rubber-metal stop Steel ball bearings Ø25 Painted steel saddle	1,798 kg.

Admissible load: 35 kg.

# TOWING TROLLEY Ref. RG3506RB



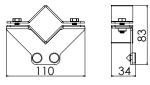


MATERIAL
Painted steel Rubber-metal stop Steel ball bearings Ø25 Painted steel saddle

Admissible load: 35 kg.

# END STOP Ref. RG3507R

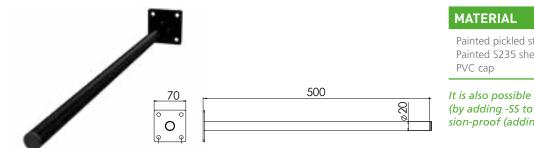




MATERIAL	WEIGHT
Galvanized steel Rubber-metal stop	0,139 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

# TOWING ARM Ref. RG3514



MATERIAL	WEIGHT
Painted pickled steel pipe Painted S235 sheet steel PVC cap	0,452 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

# WALL SUPPORT Ref. RG20MX



	150
260	<b>⊢</b> •

40

⊕ ⊕ ⊕

MATERIAL	WEIGHT
RG20MX-1 Pre-galvanized steel thickness 4mm	0,42 kg.
RG20MX-2 Zinc plated steel thickness 6mm	0,63 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

# SCHEMATIC ASSEMBLY DESCRIPTION SERIES 35



# Installations on Standardized Profiles

IPN - IPE - HEB - HEA - HEM - S





#### IPN - IPE - HEB - HEA - HEM - S

They travel directly on standard **IPN**, **IPE**, **HEB**, **HEA**, **HEM** or S profiles. The possible combinations of rolling tracks with wheels, as well as the number and type of cable saddles, make it possible to obtain many different references. Trolleys and clamps also available in stainless steel, making them suitable for operation in explosive atmospheres.

Complies with EX IIGDcT6T85°C requirements.

#### There is an option to increase the coatings on the trolleys for installations in harsh environments.

#### METALLIC CABLE SUPPORT SADDLES

STANDAR SADDLES						
TYPE RADIO		LONGITUD ESTÁNDAR			REFERENCE	
				ALUMINIUM	RG-BACH-80AL	
ACH	30,0	79	56x15	INOX STEEL	RG-BACH-80-INO	
				ZINC STEEL	RG-BACH-80	
				PAINTED STEEL	RG-BBCH-120	
BCH	63,5	120	92x30	PAINT. INOX STEEL	RG-BBCHSS-120	
				ATEX	RG-BBCHEX-120	
				PAINTED STEEL	RG-BE-190	
Е	80,0	190	150x30	PAINT. INOX STEEL	RG-BESS-190	
				ATEX	RG-BEEX-190	
				PAINTED STEEL	RG-BF-190	
F	100,5	190	150x30	PAINT. INOX STEEL	RG-BFSS-190	
			150 150850	ATEX	RG-BFEX-190	
				PAINTED STEEL	RG-BG-190	
G	137,5	190	150x30	PAINT. INOX STEEL	RG-BGSS-190	
				ATEX	RG-BGEX-190	
				PAINTED STEEL	RG-BH-190	
Н	185,0	190	150x30	PAINT. INOX STEEL	RG-BHSS-190	
				ATEX	RG-BHEX-190	
				PAINTED STEEL	RG-BI-190	
Ι	200,0	190	150x30	PAINT. INOX STEEL	RG-BISS-190	
				ATEX	RG-BIEX-190	
				PAINTED STEEL	RG-BJ-190	
J	210,0	190	150x30	PAINT. INOX STEEL	RG-BJSS-190	
				ATEX	RG-BJEX-190	
				PAINTED STEEL	RG-BK-190	
K	250,0	190	150x30	PAINT. INOX STEEL	RG-BKSS-190	
				ATEX	RG-BKEX-190	

Option to manufacture saddles of any size and finish depending on the installation's specific needs.

# POLYAMIDE CABLE SUPPORT SADDLES



REF. SADDLE	CODE	MAX BUNDLE. LXH (mm.)	MAX LOAD. (Kg.)
RG - BA - 80	А	56 x 15	20
RG - BB1 - 130	B1	92 x 30	50
RG - BC - 250	С	182 x 30	75
RG - BD - 250	D	182 x 40	100

#### Material:

• Polyamide 6.6 (Saddle ref. A )

• Polyamide 6.6 + fibreglass. (Saddles ref. B, C and D )



#### IPN - IPE - HEB - HEA - HEM - S

#### TROLLEY WHEELS



REF. WHEEL	CODE	WHEEL DIAMETER (mm.)	MAXIMUM SPEED (m/min.)
RG - RC - 50	50	50	80
RG - RG - 85	85	85	120
RG-RC-120PU	120	120	230

Manufactured from tempered steel, with steel ball bearings and lifelong lubrication.

#### CODES - HOW TO OBTAIN THE REFERENCES

STANDARD TROLLEYS WITH ONLY ONE SADDLE (Only	RG INITIALS	WHEEL CODE	PROFILE TYPE AND SIZE (2 or 3 characters)	SADDLE TYPE (1 or 2 characters)	ROLLERS (Put R only if it has bottom rollers)	GUIDE	TROLLEY TYPE (4 end, 5 cable, 6 towing)	GUIDE	MATERIAL & FINISH (SS painted stainless, EX ATEX)
applicable to Series 50)	RG	50	XXX	Х	R	-	Х	-	XX

#### These types of trolley are referenced as follows:

RG + wheel code (always 50) + profile type and size (2 or 3 characters) + saddle type (1 or 2 characters) + R (only if it has bottom rollers) + guide + trolley type (numbers 4, 5 or 6) + guide + material and finish (SS painted stainless steel, EX for ATEX, put nothing for painted steel).

#### EXAMPLES

Ref. RG5008A-5: Cable trolley with 50 diameter wheels, for IPN 80 profile, with polyamide saddle A, made of painted steel

Ref. RG50E12GR-5-EX: Cable trolley with 50 diameter wheels, for IPE 120 profile, with G saddle, made of stainless steel and natural finish.

CUSTOM- MADE TROLLEYS	RG INITIALS	WHEEL CODE (2 or 3 characters)	PROFILE TYPE AND SIZE (2 or 3 characters)	GUIDE	COMBINATION OF SADDLES, ROLLERS AND FINISHES (Correlative N°)	GUIDE	TROLLEY TYPE (4 end, 5 cable, 6 towing)
FORMED BY SEVERAL SADDLES	RG	XX	XXX	-	XX	-	Х

#### These types of trolley are referenced as follows:

These types of trolley are referenced as follows: RG + wheel code + profile type and size (2 or 3 characters) + saddle type (1 or 2 characters) + R (only if it has bottom rollers) + guide + trolley type (numbers 4, 5 or 6) + guide + material and finish (SS painted stainless steel, EX for ATEX, put nothing for painted steel).

#### EXAMPLES

**Ref. RG85506-04-6:** Towing trolley with 85 diameter wheels, for S 6 profile, with the combination of saddles, rollers and correlative finish for series 85 N°4, made of painted steel.

**Ref. RG120N18-06-5:** Cabble trolley with 120 diameter wheels, for IPN 180 profile, with the combination of saddles, rollers and correlative finish for the 120 series No. 6, made of stainless steel for explosive atmospheres.

# Series 50

Series 50 is a cable trolley system designed to offer our customers customised solutions. These trolleys travel on standard profiles. They feature a carefully selected exclusive design, based on the customer's requirements. They are available in carbon steel and stainless steel, making them suitable for installations in harsh environments and explosive atmospheres. Approved for ATEX installations. They are usually installed in port companies and large metallurgical companies around the world where environmental conditions are extreme.

The possible combinations of rolling tracks, number and type of cable saddles, as well as finishes and raw materials, provide multiple references for this series.

This type of trolley can support loads of up to 80 kg.

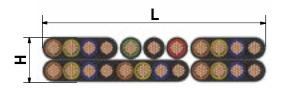


Ref. RG5008A, for travelling on IPN 80 profile, made of Zinc plated steel, with Ø50 mm wheels and type A saddle. The 50 EX II2GDc-T6T85° C series is available for explosive atmospheres.

#### MAXIMUM CABLE BUNDLE: $L \times H = 56 \times 15 \text{ mm}$ .

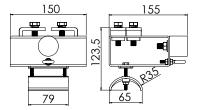
MAX. LOAD:

20 kg. per trolley



#### END CLAMP Ref. RG5008A-4



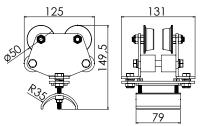


MATERIAL	WEIGHT
Zinc plated steel body Polyamide saddle 6.6 Rubber-metal stop	2,250 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

# CABLE TROLLEY Ref. RG5008A-5



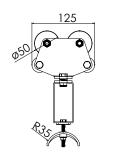


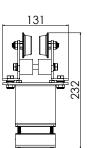
MATERIAL	WEIGHT
Zinc plated steel bodyØ50 Wheels made from hardened steel with ball bearings Anti-lift rollers made from Ertalon Polyamide saddle 6.6	1,550 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

#### CABLE TROLLEY Ref. RG5008A-6







79

MATERIAL	WEIGHT
Zinc plated steel bodyØ50 Wheels made from hardened steel with ball bearings Anti-lift rollers made from Ertalon Polyamide saddle 6.6	1,840 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

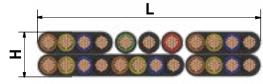
# Series 50 B

Ref. RG5008NB, for travelling on IPN 80 profile, made of painted steel, with Ø50 mm wheels and type B saddle. The 50 EX II2GDcT6T85° C series is available for explosive atmospheres.

MAXIMUM CABLE BUNDLE:  $L \times H = 90 \times 30$  mm.

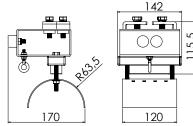
MAX. LOAD:

35 kg. per trolley



# END CLAMP Ref. RG5008NBCH-4





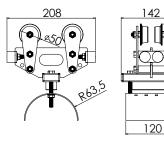
MATERIAL	WEIGHT
Cuerpo de acero pintado Painted steel saddle Rubber stops	2,658 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

It also exists with a polyamide saddle.

# CABLE TROLLEY Ref. RG5008NBCH-5





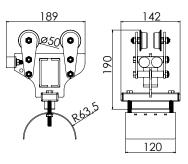
MATERIAL	WEIGHT
Painted steel body Painted steel saddle Rubber stops Steel ball bearings Ø50	2,543 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

It also exists with a polyamide saddle.

# TOWING TROLLEY Ref. RG5008NBCH-6





MATERIAL	WEIGHT
Painted steel body Painted steel saddle Rubber stops Steel ball bearings Ø50	2,978 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

It also exists with a polyamide saddle.

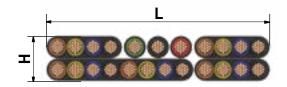


Ref. RG5008NC, for travelling on IPN 80 profile, made of painted steel, with Ø50 mm wheels and type C saddle. The 50 EX II2GDc-T6T85° C series is available for explosive atmospheres.

#### MAXIMUM CABLE BUNDLE: $L \times H = 182 \times 30 \text{ mm}$ .

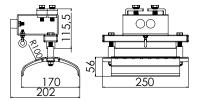
MAX. LOAD:

50 kg.



#### END CLAMP Ref. RG5008NC-4



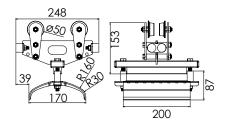


MATERIAL	WEIGHT
Painted steel body Polyamide saddle Rubber stops	2,68 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

# CABLE TROLLEY Ref. RG5008NC-5



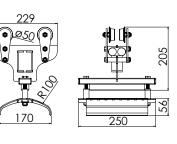


MATERIAL	WEIGHT
Painted steel body Polyamide saddle Rubber stops Steel ball bearings Ø50	3,42 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

#### CABLE TROLLEY Ref. RG5008NC-6





MATERIAL	WEIGHT
Painted steel body Polyamide saddle Rubber stops Steel ball bearings Ø50	3,55 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

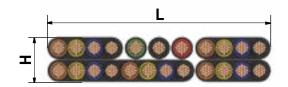
# Series 50 F

Ref. RG5008F, for travelling on IPN 80 profile, made of painted steel, with Ø50 mm wheels and type F saddle. The 50 EX II2GDcT6T85° C series is available for explosive atmospheres.

#### MAXIMUM CABLE BUNDLE: $L \times H = 150 \times 30$ mm.

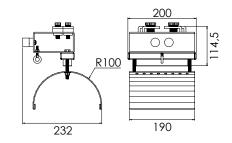
MAX. LOAD:

50 kg.



#### END CLAMP Ref. RG5008F-4





200

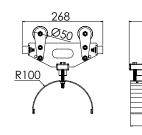
190

MATERIAL	WEIGHT
Painted steel body Painted steel saddle Rubber stops	4,12 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

# CABLE TROLLEY Ref. RG5008F-5





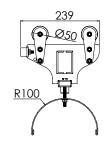
	MATERIAL
165	Painted steel body Painted steel saddle Rubber stops Steel ball bearings Ø

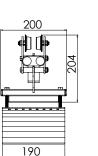
TERIAL	WEIGHT
nted steel body nted steel saddle	3,31 kg.
ober stops	
el ball bearings Ø50	

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

#### CABLE TROLLEY Ref. RG5008F-6







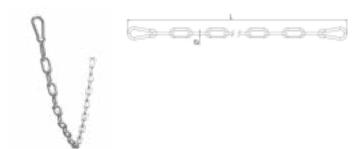
# MATERIALWEIGHTPainted steel body<br/>Painted steel saddle<br/>Rubber stops<br/>Steel ball bearings Ø504,21 kg.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

# WALL SUPPORT Ref. RG20MX

			40	MATERIAL	WEIGHT
:		20	¢	RG20MX-1 Pre-galvanized steel, 4 mm thick	0,42 kg.
A	260		<ul><li>⊕</li><li>⊕</li><li>⊕</li></ul>	RG20MX-2 Zinc plated steel 6 mm thick	0,63 kg.

# TOWING CABLE Ref. RGCT-Ø-L

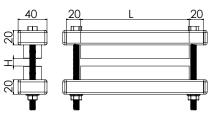


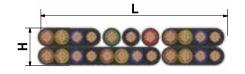
# MATERIALDIAMETER (Ø)LONGITUD (L)Zinc plated steelVariable according to<br/>the speed of the trolley,<br/>and of its loadConditioned to<br/>the total<br/>length of the loop

It is also possible to have it made in stainless steel (by adding -SS to the end of code).



LOOP CLAMP Ref. RGB-XXX





REF.	MAXIMUM CABLE BUNDLE
RGB90	L x H = 90 x 30 mm.
RGB150	L x H = 150 x 30 mm.
RGB300	L x H = 300 x 30 mm.
RGBN-90	L x H = 90 x 30 mm.

It is also possible to have it made in stainless steel (by adding -SS to the end of code), or explosion-proof (adding -EX at the end).

# SCHEMATIC ASSEMBLY DESCRIPTION SERIES 50



# Series 85, 120

As with series 50, series 85 and 120 have been created to offer customised solutions based on our customers' needs. These trolleys travel on standard profiles. Trolleys can be manufactured with one, two and up to three layers of saddles, depending on the number of cables to be transported. They can support loads of up to 250 kg. These trolleys can be made in a wide range of finishes to suit the customer' needs. They are approved for ATEX installations, complying with EX IIGDcT6T85°C requirements.

Below are some of the projects carried out by Gasori S.L for companies around the world.





#### RG85S06-06



Trolleys made of pickled S275 steel, finished with primer + RAL1011 SMOOTH YELLOW paint, and stainless steel mechanical fasteners.

Designed to travel on IPS 06 type profiles, having 4 x Ø85 Zinc plated steel wheels and side and bottom rollers to prevent bouncing and excessive drift.

They have two type G3 top saddles, with a radius of 137.5 mm and capacity for cable packages up to 200x30 mm, and two type F bottom saddles, with a radius of 100.5 mm and capacity for cable packages up to 150x30 mm. Both have side stops to prevent the cable packages coming free from the saddles.

Attachment to the end clamp profile is done means of screwing on to it, and a towing arm up to 70 mm wide can be attached to the towing trolley.

#### RG120N16-03



Trolleys made of AISI304/316 stainless steel, finished with primer + RAL2004 SMOOTH ORANGE paint, and stainless steel mechanical fasteners.

Designed to travel on IPS 160 type profiles, having 4 x Ø120 Zinc plated steel and polyurethane covered wheels, plus side and bottom rollers to prevent bouncing and excessive drift.

It has two J3 type saddles, with a radius of 205 mm and capacity for cable packages up to 90x35 mm. Fitted with side stops to prevent the cable packages coming free from the saddles.

Attachment to the end clamp profile is done means of screwing on to it, and a towing arm up to 30 mm wide can be attached to the towing trolley.



#### RG85S06-01



# RG120N18-07 (ATEX)

Trolleys made of pickled S275 steel, finished with primer + RAL1011 SMOOTH ORANGE paint, and stainless steel mechanical fasteners.

Designed to travel on IPS 06 type profiles, having 4 x Ø85 Zinc plated steel wheels and side and bottom rollers to prevent bouncing and excessive drift.

They have two type G top saddles, with a radius of 137.5 mm and capacity for cable packages up to 150x30 mm, and two type F bottom saddles, with a radius of 100.5 mm and capacity for cable packages up to 150x30 mm.



#### RG120N20-01

Trolleys made of AISI304/316 stainless steel, and stainless steel mechanical fasteners. Designed to travel on IPS 180 type profiles, having 4 x Ø120 Zinc plated steel wheels and 8mm thick polyurethane covering. This covering allows the design to be classified as Explosion-Proof. They also have side and bottom rollers to prevent bouncing and excessive drift.

It has two P type saddles, with a radius of 325 mm and capacity for cable packages up to 160x35 mm. Both have side stops to prevent the cable packages coming free from the saddles.



Trolleys made of pickled S275 steel, finished with primer + RAL3001 SMOOTH RED paint, and stainless steel mechanical fasteners.

Designed to travel on IPS 200 type profiles, having 4 x Ø120 Zinc plated steel wheels and side and bottom rollers to prevent bouncing and excessive drift.

They have two type J top saddles, with a radius of 210 mm and capacity for cable packages up to 150x35 mm, and two type H bottom saddles, with a radius of 185 mm and capacity for cable packages up to 150x30 mm.

It also has a system that allows the trolley's lower body (saddles and wiring) to be coupled/ uncoupled once the main body has been mounted on the rolling beam.

#### RG120S12-01



Trolleys made of pickled S275 steel, finished with primer + RAL6024 SMOOTH GREEN paint, and stainless steel mechanical fasteners.

Designed to travel on IPS 12 type profiles, having 6 x Ø120 Zinc plated steel and polyurethane covered wheels, plus side and bottom rollers to prevent bouncing and excessive drift. They have two type Q top saddles, with a radius of 550 mm and capacity for cable packages up to 225x40 mm, and two type K bottom saddles, with a radius of 250 mm and capacity for cable packages up to 150x30 mm. Both have side stops to prevent the cable packages coming free from the saddles.

Commercial components

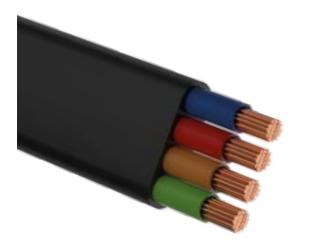
# ROUND CABLES WITH TWO FASTENERS FOR PUSH PENDANT STATIONS



CODING:	W - K
ASSIGNED VOLTAGE:	0,6 / 1 kV
COATING:	PVC according to UNE 21123 with 2 lateral steel fasteners
CONDUCTORS:	Class 5 according to UNE-EN 60228. IEC 60228 in PVC numbered.
MAX. SERVICE TEMPERATURE :	70° C

Nº CONDUCTORS x SECTION	DIAMETER (mm)	WEIGHT APROX. (g/m)
8x1,5	14,7	410
12x1,5	16,3	461
15x1,5	17,4	550
20x1,5	19,2	675

#### MINIMUM CURVATURE RADIUS: 10 X CABLE DIAMETER.



	L L J
<u>т</u> —	

CODING:	-H07VVH6-F UNE-EN 50214
ASSIGNED VOLTAGE:	450-750V
COATING:	Black PVC
CONDUCTORS:	Class 5 according to UNE-EN 60228. IEC 60228 en PVC numbered + earth (yellow/green)
MAX. SERVICE TEMPERATURE :	0° C a 70° C

N° CONDUCTORS x SECTION	DIMENSIONS APROX (mm.) LxH	WEIGHT APROX. (G/M)	АМР
4G1,5	14,8 x 5	132	15
4G2,5	20,2 x 6,1	206	20
4G4	23,5 x 7,6	343	27
4G6	25,5 x 7,6	425	34
4G10	31,8 x 9,6	709	48
4G16	40,5 x 11,8	1015	65
4G25	43,3 x 14,15	1890	86
8G1,5	29 x 5,3	266	14
8G2,5	36,8 x 6,1	399	20
10G1,5	38,2 x 5,3	333	13
10G2,5	46 x 7,8	517	20
12G1,5	43 x 5,3	422	11
12G2,5	53,4 x 6,1	580	19
16G1,5	64 x 5,8	696	12

#### MINIMUM CURVATURE RADIUS: 10 X Thickness (H)

# FLAT CABLES

# GLANDS FOR FLAT CABLES

THREAD SIZE	L (m	m.)	H (m	ım.)	MATERIAL
	FROM	ТО	FROM	TO	
PG 16	-	16	1	5	BRASS POLYAMIDE
PG 21	9	21	3	8	BRASS POLYAMIDE
PG 29	14	30	4	11,5	BRASS POLYAMIDE
PG 36	24	40	5	11,5	BRASS POLYAMIDE
PG 42	29	45	5	12	BRASS POLYAMIDE
PG 48	34	50	5	12	BRASS POLYAMIDE
M20 x 1,5	-	6	1	5	BRASS
M25 x 1,5	9	21	3	8	BRASS
M32 x 1,5	14	30	4	11,5	BRASS
M40 x 1,5	24	40	4	11,5	BRASS
M50 x 1,5	29	45	5	12	BRASS
M63 x 1,5	34	50	5	12	BRASS

THEY INCLUDE THEIR CORRESPONDING LOCKNUT

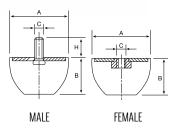


Manufactured from a mixture of rubber that allows large deformations with high-energy absorption. Their shape provides progressive contact allowing gradual energy absorption without great instant efforts, in addition avoiding transmission of noises and vibrations.

**Application:** End stops for cranes and hoists.

# PROGRESSIVE BUFFERS





					DYNAMIC			
ΤΥΡΕ	Α	В	С	н	LOAD (kg)	ARROW (mm)	ENERGY A 1 m/s (kg⋅m)	REF.*
T - 25	25	20	M8	20	100	8	0,3	RG300
T - 30	30	16	M6	16	140	15	0,6	RG301
T - 50	50	20	M8	20	340	25	3	RG308
T - 50	50	35	M8	35	370	32	4	RG302
T - 50	50	20	M8	20	400	28	3,7	RG312
T - 70	72	30	M12	30	550	26	5	RG303
T - 95	95	45	M16	45	1100	37	12	RG304
T - 85	84	35	M12	35	1500	20	20	RG309
T - 120	120	45	M16	45	3000	22	34	RG305
T - 220	220	80	M24	80	15000	40	250	RG306

DIABOLO BUFFERS



\* ADD TO THE REFERENCE "M" (MALE) OR "H" (FEMALE) AS APPROPRIATE

														DYN	DYNAMIC		ATIC	
ТҮРЕ	Α	В	С	н	MAX. LOAD (daN)	ARROW (mm)	MAX. LOAD (daN)	ARROW (mm)	REF.*									
R.3	30	23	M8	20	90	9	40	5	RG311									
R.7	44	42	M8	20	100	10	50	6	RG312									
R.1	60	44	M8	20	100	10	40	4	RG316									
R.2	60	44	M8	20	200	12	75	5,5	RG313									
R.4	60	60	M10	25	350	15	150	8	RG318									
R.8	60	31	M10	25	275	14	100	7	RG314									
R.5	80	65	M14	35	800	16	300	9,5	RG315									
R.6	95	70	M16	45	1000	18	400	9,5	RG317									

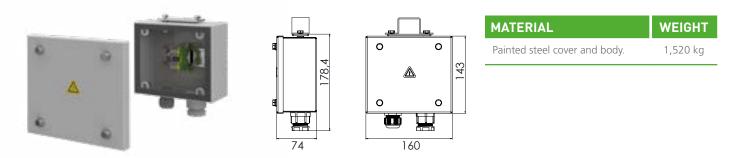
\* ADD TO THE REFERENCE "M" (MALE) OR "H" (FEMALE) AS APPROPRIATE

							STATIC		
TIPO	A	В	С	D	E	LOAD (kg)	ARROW (mm)	ENERGY A 1 m/s (kg⋅m)	REF.
T - 150	150	125	185	150	13,5	5000	50	125	RG307
T - 250	250	208	315	250	14,5	40000	100	1250	RG310

# ROUND BUFFERS

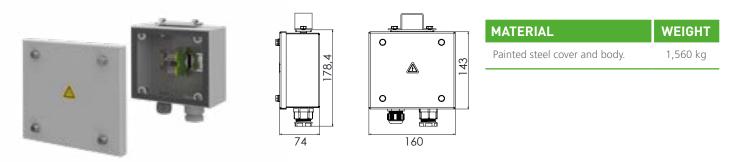


#### FIXED CONNECTION BOX RGKM-1



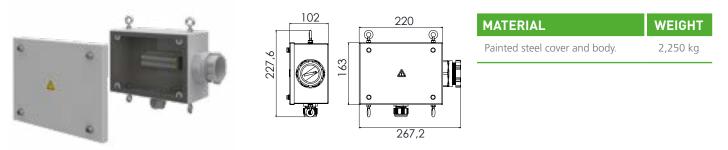
Composed of a cylindrical GLAND M20x1.5, PG21 for flat cable, and 3 phase terminals + earth for 2.5 mm<sup>2</sup> cable. These are placed at the beginning of the installation to allow connection to the assembly. For connecting 4 x 2.5 mm<sup>2</sup> cables (3P+1G)

#### FIXED CONNECTION BOX RGKM-2



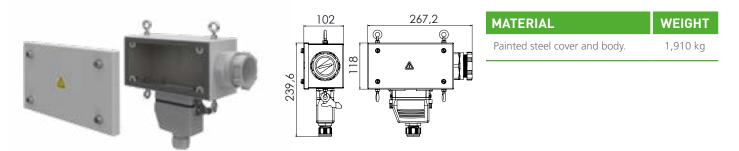
Composed of a cylindrical gland M25x1.5, PG29 for flat cable, and 3 phase terminals + earth for 4 mm<sup>2</sup> cable. These are placed at the beginning of the installation to allow connection to the assembly. For connecting 4 x 4 mm<sup>2</sup> cables (3P+E)

# PENDANT CONNECTION BOX RGKM-3



Composed of a PG21 input cable gland and a PG48 output cable gland, 23 phase terminals + earth for 1.5 mm<sup>2</sup> cable Included on the Trolley Pendant, they are placed at the end of the installation for towing and control. For connecting up to 24 x 1.5 mm<sup>2</sup> cables (23P+E)

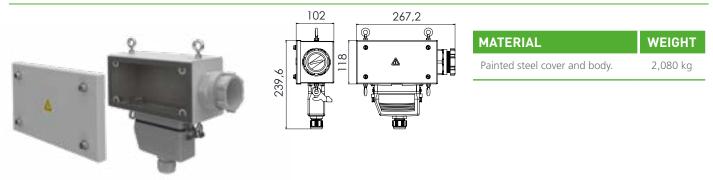
#### PENDANT CONNECTION BOX RGKM-4



Composed of a PG21 input cable gland, a PG48 output cable gland, and a quick coupling allowing the cable to be easily connected and disconnected from the installation

Included on the Trolley Pendant, they are placed at the end of the installation for towing and control. With quick connector for connecting up to 16 cables.

#### PENDANT CONNECTION BOX RGKM-5



Composed of a PG21 input cable gland, a PG48 output cable gland, and a quick connector allowing the cable to be easily connected and disconnected from the installation

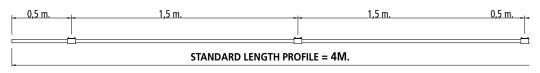
Included on the Trolley Pendant, they are placed at the end of the installation for towing and control. With quick connector for connecting up to 24 cables.

# Assembly Instructions

# ASSEMBLY INSTRUCTIONS FOR CABLE SUPPORTING TROLLEYS

#### 1) Installation Of The Fixed Part Of The System (Profiles, Joints And Supports)

Firstly, we install our universal supports (avoiding welding, and allowing better alignment), or any type of arm to be welded by the onsite installer, respecting the installation distances as indicated on this drawing.





#### STEP 1

If you have the universal supports, these will be fixed to the upper flange of the beam by means of tightening the M8 bolts of the tabs. Next, we install the line supports.



#### **STEP 2**

In series 28 and 40 systems, these are introduced from one end of the profiles, because they are manufactured as a single piece. In the case of Series 80, the supports are manufactured in two halves, so the profiles are housed in the support by press upwards, and then fixing both with M6 bolts.



#### STEP 3

After fixing the profiles to the supports, and fixing these to the structure, we then slide the line joints into the profiles from one end of the same.



#### **STEP 4**

To join two consecutive profiles we will position the joint at the link between two profiles so we can see the mentioned joint through the window.

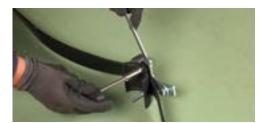
#### STEP 5

Finally, first tighten the two upper M6 bolts, and then the two side ones, checking that the joint on the running side is uniform. Repeat this operation until completing the entire length of the line.

**G** Assembly Instructions

#### 2. Installation of the mobile part of the system (trolleys and cables)

We have laid the length of the cable on the floor, and marked on these cables the distance we have defined between the cable supports, as well as their excess at both ends of the line (from the end clamp to the electricity panel, and from the towing trolley to the cabinet of the unit to be supplied).



#### STEP 1

Next, we will install the cable on the saddle of the end clamp, fixing both elements by means of tightening the M6 bolts of the clamp saddle.



#### **STEP 2**

We repeat this operation with the cable trolleys. Finally, we will do the same with the towing trolley.

#### STEP 3

After having finished the carousel of trolleys and cables, we will take if from the end where we have established the power supply, and introduce the towing trolley into the profile. Next, we will introduce the cable trolleys, until reaching the end clamp.

#### STEP 4

Which will fix to the profile by means of the M8 bolts on its lower part.



# STEP 5

We will manually slide the trolleys along the line checking the correct alignment of the same, as well as the smooth operation of the trolleys in its entire length.





# STEP 6

When we reach the other end, we will install the end stop, to avoid accidental exits of the trolleys.

#### **STEP 7**

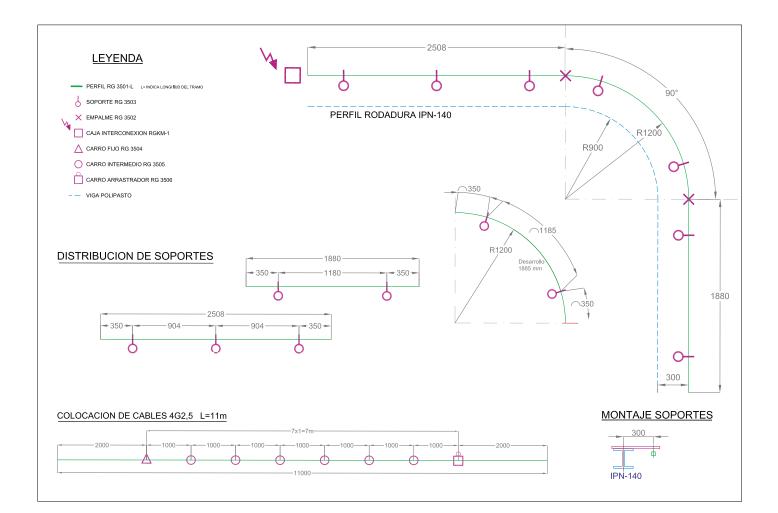
Finally, we will install the towing arm by introducing it into the tube of the towing trolley, linking it to the machine to be supplied from the other end. Make the corresponding electrical connections, and check the operation of the entire system.



# ASSEMBLY INSTRUCTIONS FOR CABLE SUPPORTING TROLLEYS

#### 1. Preliminaries

This system is supplied with a drawing of the installation previously agreed and established, that indicates the distance for installing the supports, as well as the layout of the joints that are numbered on the running track profile, so it can be assembled like a kit.



# 2. Installation of the fixed parts of the instalation (profiles RG3501, joints RG3502 and supports RG3503



#### STEP 1

The installation of our universal supports is absolutely necessary to guarantee the correct operation and alignment of the system. We will install them at the distances indicated on the drawing supplied with the installation. Both the supports and the joints are installed on the profile.

#### STEP 2

Firstly, we present the supports RG3503R, fixing them to the universal supports by means of the M8 bolts, without definite tightening.



#### **STEP 3**

Then we will join the consecutive profiles using joint RG3502R. We will fully unite both profiles.



#### **STEP 4**

And finally tighten the two M& bolts to fix the joint. Repeat this operation until finishing the line.



#### **STEP 5**

The next step is to align the line at its operational height, which we do by adjusting the M8 bolts of the supports. After levelling the entire system, we then definitely tighten all the bolts of the mentioned supports.

#### 3. Installation of the mobile part of the system (trolleys and cables)

In these installations, the minimum distance between trolleys is defined by the smallest radius of the curves forming the line. This distance can be seen on the supplied drawing.



#### STEP 1

We have laid the length of the cable(s) on the floor, and marked the distance we have defined between the cable supports, and we install the cable(s) on the saddle of the end clamp RG3504R, fixing both elements by tightening the M6 bolts of the end clamp saddle.



#### **STEP 2**

Now we repeat this operation with the cable trolleys RG3505R.



#### **STEP 3**

After having finished the carousel of trolleys and cables, we will take if from the end where we have established the power supply, and introduce the towing trolley into the profile. Next, we will introduce the cable trolleys.



#### **STEP 4**

Until reaching the end clamp, which will fix to the profile by means of the M8 bolts. We will manually slide the trolleys along the line checking the correct alignment of the same, as well as the smooth operation of the trolleys in its entire length.





#### **STEP 5**

When we reach the other end, we will install the end stop RG3507, by means of tightening the M6 bolts to avoid accidental exits of the trolleys.

#### **STEP 6**

Finally, we will install the towing arm by introducing it into the tube of the towing trolley, linking it to the machine to be supplied from the other end. make the corresponding electrical connections, and check the operation of the entire system.

# ASSEMBLY INSTRUCTIONS FOR CABLE TROLLEYS

#### Running on standardized profiles (IPN, IPE, IPS...)

#### 1. General view of the components forming the instalation:

A) End clamp: This is prepared with gilder clamps to be fixed to the installation running track profile.

B) Cable trolley: Prepared for running on the foreseen running profile.

**C)** Towing trolley: During assembly, a towing arm should be attached to the crane or element to be supplied. This arm should have four holes as seen on the drawing.

**D) Fixing clamps:** These can be fixed (rgb-150) or sliding (rgb-90 and rgb190). The first fix the cables firmly. The latter freely slide along the loop allowing correct alignment of the cables.



END CLAMP

TOWING TROLLEY

CABLE TROLLEY



# x

#### MARK THE DISTANCE

Mark the distance X that should be between trolleys X=2H, H being the expected height of the loop (see figure 8). Separate the saddles from the trolleys and install the cables on them.



#### **INSTALL THE BOLTS**

That join the body of the trolley to its saddle. Alternatively tighten the bolts until the cables are firmly clamped to the trolley using the tightening rubbers.



#### **FIXING FLANGES**

The saddles have holes for the installation clamps for double fixing safety of the cables.



#### **REPEAT THE OPERATION**

Repeat the operation with all the trolley forming part of the installation.



#### **INSTALLATION OF THE FIXING CLAMPS**

If these are the RGB-150, install at the average point of distance between two trolleys and alternatively tighten the bolts until the cables are firmly clamped.

Of on the other hand these are the sliding clamps RGB-90 and RGB-150, then install at any point tightening the bolts so they easily slide along the entire length of the cable.

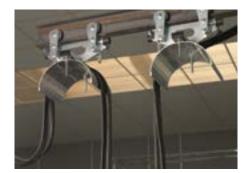




#### INSTALLATION OF THE TOWING CABLES RGCT

Their length (L) is defined by the height of the cables defined in the project. They are factory adjusted so they can provide the traction movement of the installation that way avoiding breakage of the electric cables (L<X)

The ends have eye stiffeners that are joined to the trolleys by means of the clips these have.



#### DETAIL OF THE FINAL ASSEMBLY

The cable trolley will be introduced from one end of the running beam. Then the towing clamp will be fixed to the towing arm.

Manually check the correct operation of the trolleys making several manoeuvres in both directions to avoid possible jamming and resolve any incident that may appear (track alignment, smoothening of welded joints...)



#### **INSTALLATION OF THE ENDCLAMP**

Finally install the foreseen end clamp by means of its gilder clamps to fix it by tightening the bolts to the running beam of the installation.

# QUESTIONNAIRE FOR COLLECTING DATA FOR PREPARING THE OFFER

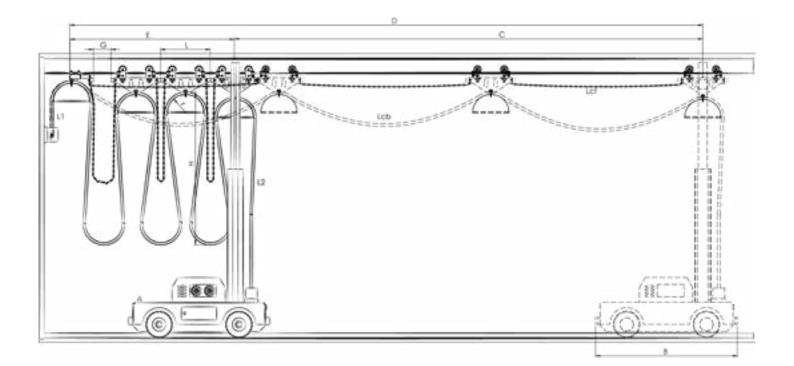
Cor	npany:			Contact person:
Tel.	:			Date:
E -	mail:			
01	Type of insta	allation		
•••••	Installation			
02		Exterior	]	
03	Operating te		]	
00	Min	°C	Máx	°C
04	Total length		With	
••••••	Parking area			
•••••	Maximum lo		( m.):	
07	Length of de	evice B (m.):		
08	Path C ( m. )	:		
09	Travel speed	d ( m/min ):		
10	Acceleratior	n ( m/s² ):		
11	Type of bear	n:		
	IPN	IPE	IPE	Other (include drawing)
12	In the case o	of an ATEX in	stallation, in	ndicate area type:
13	List possible	e difficulties:		

#### 14 Necessary cables:

N° OF CABLES	Nº OF CONDUCTORS PER SECTION	Ø mm.	WIDTH x HEIGHT (FLAT CABLES)	MINIMUM CURVATURE RADIUS

Send the finished questionnaire to: ventas@gasori.com

# **Preparing Quote**



RG







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