BETT SISTEMI

Original COMPONENTS

HAND BOOK

2

2011

Guides and linear tables

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As of **April 2013** the price list shall be increased by **5.6%**

Parts 3D

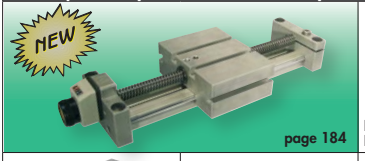
PDF Adobe

ROBO linear

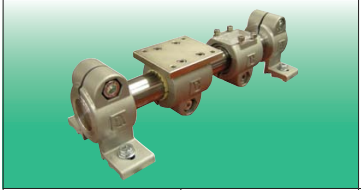
Pubbl. 03363 12/2011 Rev. 07/08/2013

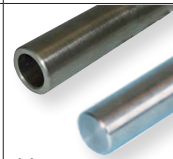
Components for DIY construction of C-shaped and J-shaped guides and C-shaped guides with rods

Components for DIY construction of manually driven linear tables

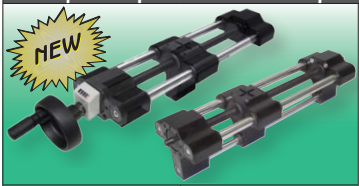


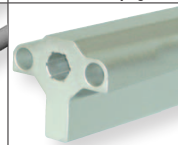
Sliding shafts and bushes



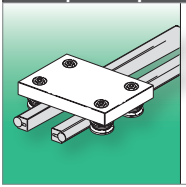


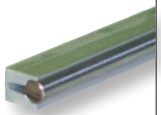
Components for DIY construction of linear tables with 2 and 3 columns





Components for DIY construction of Ø10 - Ø20 single linear guides



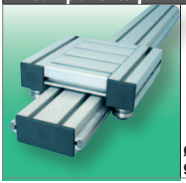


Single guide Ø10 page 36 Ø20 page 38

Cylindrical and grooved rollers Ø10 page 40-42 Ø20 page 46-48

Carriage for guides Ø10 page 44 Ø20 page 50

Components for DIY construction of Ø12 double linear guides



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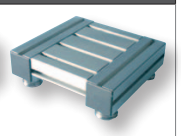

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Components for DIY construction of motor-driven Ø12 linear guides

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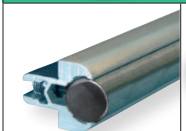
Head drive and idler units page 66

90x90 Beam page 176

Head drive and idler units page 67



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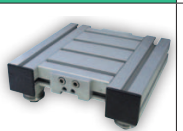
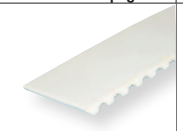


Carriage with belt tensioner block page 68



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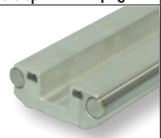
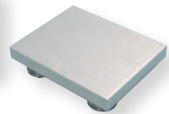
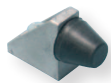
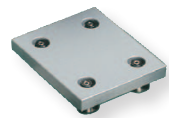
Components for DIY construction of Ø10 - Ø12 double linear guides

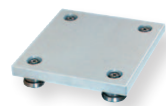




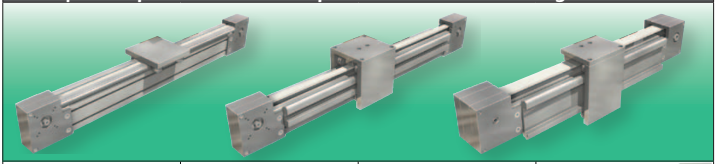


Components for DIY construction of Ø20 double linear guides





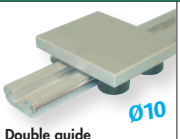
Components for DIY construction of motor-driven Ø10-20 linear guides



45x90 Series

45x90 Beam page 156

Head drive and idler units page 157



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Double guide with carriage page 160

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90x90 Series

90x90 Beam page 176

Head drive and idler units page 177

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Double guide with carriage page 180

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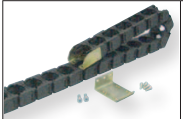
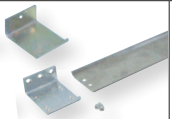
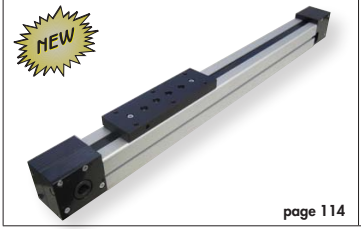


Cable holder chain kit page 166 page 170



Supports for cable holder chain page 168 page 172

Motor-driven Ø6 linear guides in pre-assembled kits



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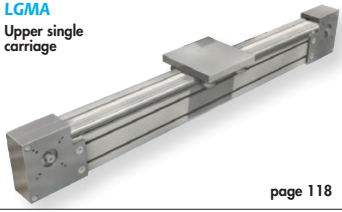
Motor-driven Ø10 linear guides in pre-assembled kits — 45x90 Series

LGMA
Upper single carriage



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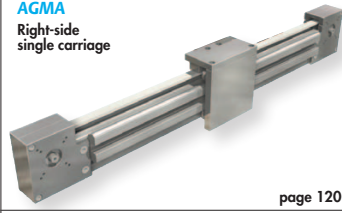
AGMA
Right-side single carriage



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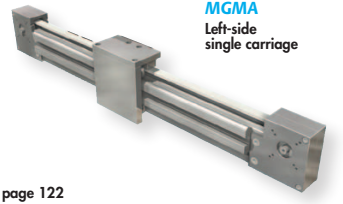
MGMA
Left-side single carriage



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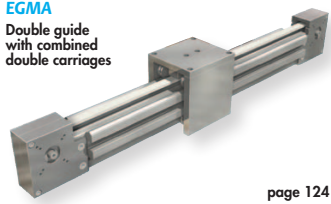
EGMA
Double guide with combined double carriages



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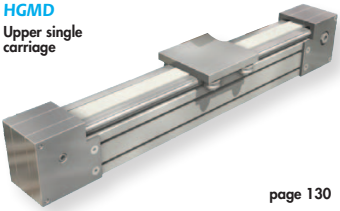
Motor-driven Ø20 linear guides in pre-assembled kits — 90x90 Series

HGMD
Upper single carriage



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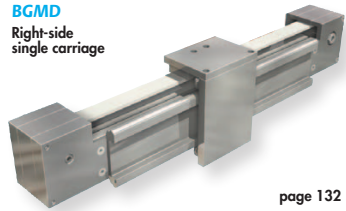
BGMD
Right-side single carriage



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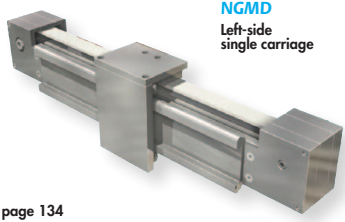
NGMD
Left-side single carriage



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BETT SISTEMI SERVICE system partner

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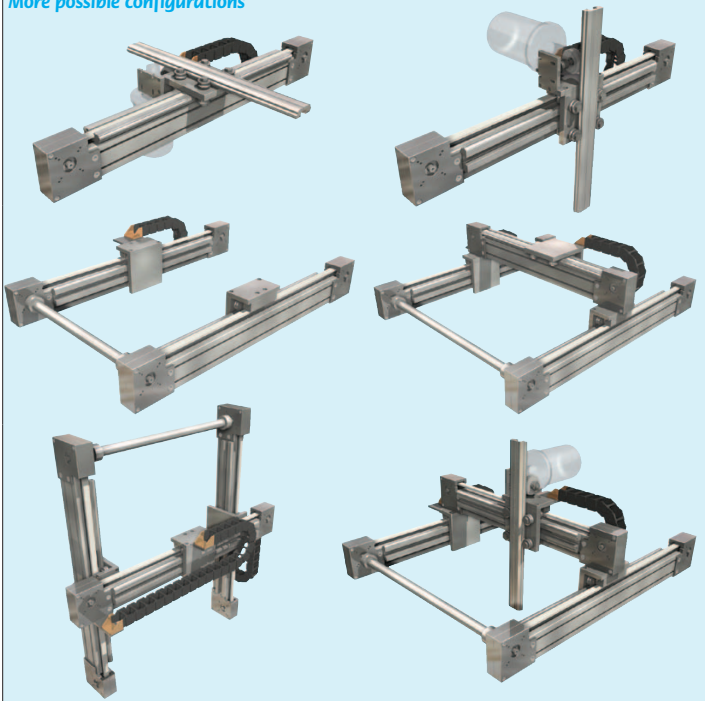
More possible configurations



Fill in all sections of the "TECHNICAL QUESTIONNAIRE" and send it to our Sales Department to get a quote for a preassembled component kit by your nearest Bett Service centre.

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Components for DIY construction of C-shaped linear guides

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Components for DIY construction of J-shaped linear guides

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Components for DIY construction of C-shaped linear guides with rods

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Sliding shafts and bushes

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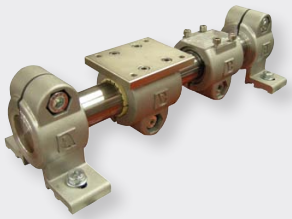

Components for DIY construction of Ø10 - Ø20 single linear guides

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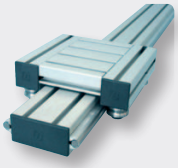

Components for DIY construction of Ø12 double linear guides

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Components for DIY construction of Ø12 motor-driven linear guides

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Components for DIY construction of 10-Ø12 double linear guides

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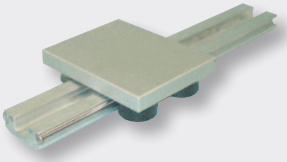

Components for DIY construction of Ø20 double linear guides

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55x55 Motor-driven Ø6 linear guides in pre-assembled kits

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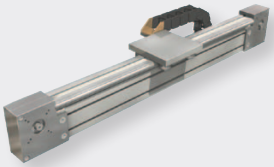
45x90 Motor-driven Ø10 linear guides in pre-assembled kits



With upper single carriage LGMA

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With right-side single carriage AGMA

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With left-side single carriage MGMA

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With combined double carriage EGMA

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90x90 Motor-driven linear guides in pre-assembled kits

With upper single carriage HGMD

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With right-side single carriage RGMD

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With left-side single carriage NGMD

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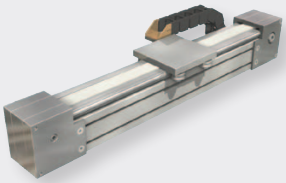

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Components for DIY construction of 45x90 motor-driven Ø10 linear guides

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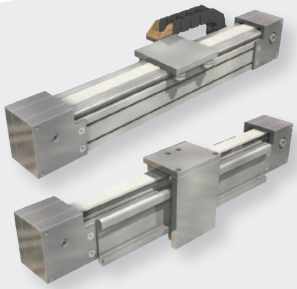

Components for DIY construction of 90x90 motor-driven Ø20 linear guides

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Components for DIY construction of manually driven linear tables

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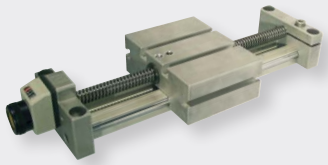

Components for DIY construction of linear tables with columns

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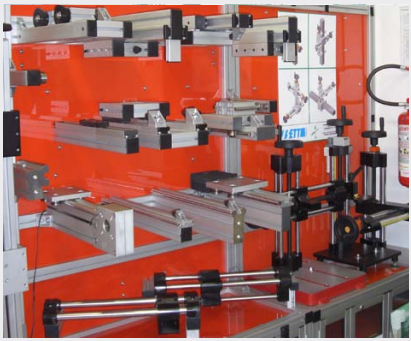
Production
Research and Development
Marketing
Distribution

A young company with a 30-year experience, *Bett Sistemi was established in 1994. The founding partner is an entrepreneur who has been in the* ***industry of innovative standard*** *components for over 30 years. Bett Sistemi, which is ISO 9001 and ISO 14001-certified, today is with* ***B group*** *a leader in the design and manufacture of innovative components and systems, dedicated to flexible automation and machine safety.*

BETT SISTEMI Original B COMPONENTS



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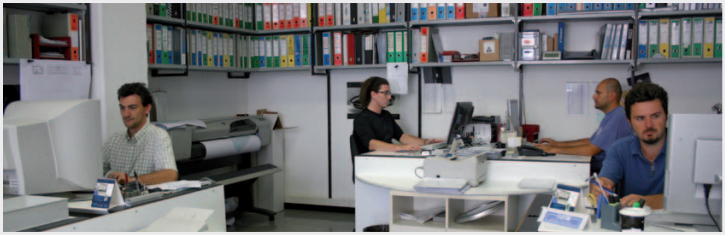

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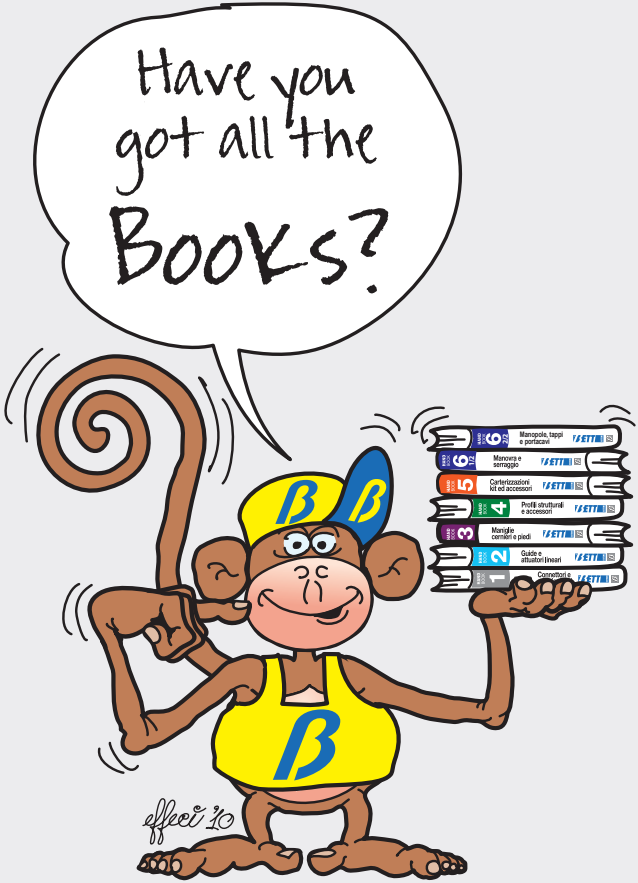

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you can download the handbooks in PDF format from www.bettsistemi.com or have them sent to your address.

Dimensioning

- Generic angle
- Round hole
- Square hole

Delivery times

- Delivery in 3 days
- Express service

Documentation available

- 3D drawings
- PDF

Other

- Static load
- New Product
- Technical/sales information
- Products in stock
- Focus
- Warning
- Food-grade

Go

- Go ...
- Go to page ...
- Go to handbook ...

Product specifications

Aluminium — Different materials for the same model:

Technical details in comparison — Robust

stainless steel — Additional reinforcing

Combinations — Highlighted information

1420 → — Part numbers continued on another page

→ 1420 → — Part numbers continued on another page

↓ 1420 — End

Stock

- ✓ Product in stock
- ■ Product **not** in stock

Product under completion at the time of printing.

Safety solution

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BETT SISTEMI

PARTNER FOR SYSTEMS IN FLEXIBLE AUTOMATION AND THE SAFETY OF MACHINES

Production site
Correggio, (RE) Italy
7000 m2 covered space

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Laboratory of industrial research
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Ministero dell'Istruzione, dell'Università e della Ricerca

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- **Practical**
- **Complete**
- **Immediate**
- **Specific**
- **Original**
- **Complementary**
- **Accurate**
- **Ecological**
- **Young**

Collection

Components

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is ready to supply its **"Original components"** *in:*

Parts 3D

www.bettsistemi.com

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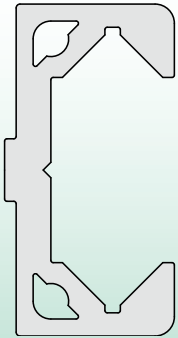

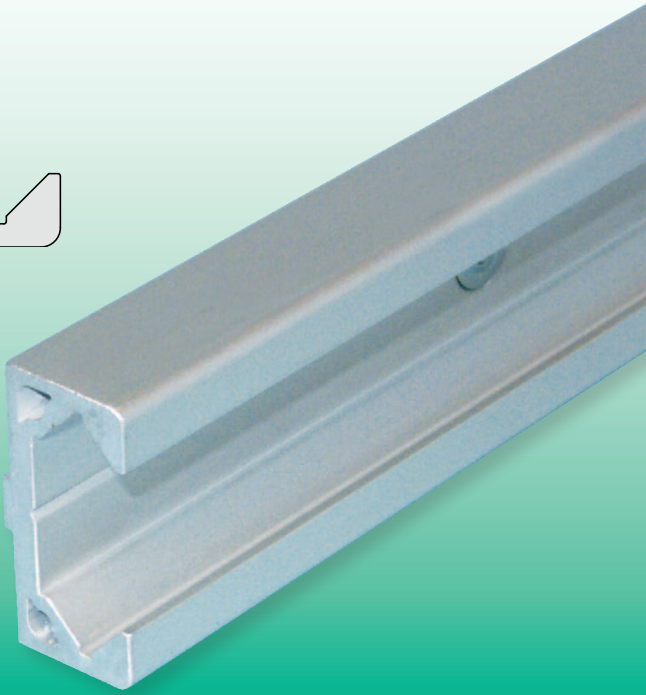

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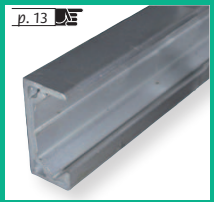

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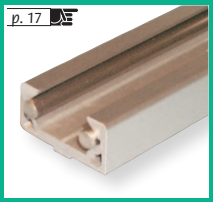
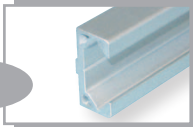
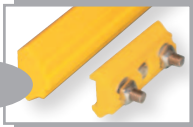
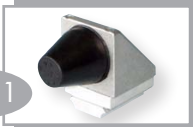


Components for DIY construction of C-shaped linear guides

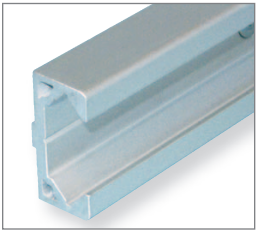






958 C-shaped guide profile

Use: to construct linear guides.
Material anodised AFNOR 6060 aluminium 15 µm guide; galvanised steel nuts and bolts.
State of supply for the pre-drilled version: complete with 15 M6x16 countersunk head screws and 15 M6 nuts part. 802.
Standard pack: 2 bars.



Combinations


Pg.10

Pg.8

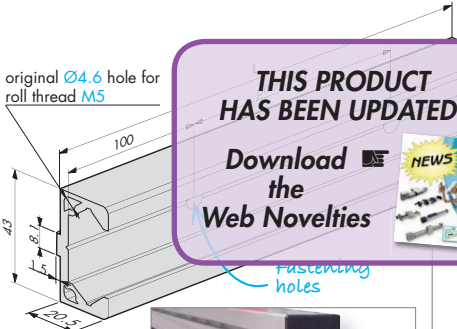
Pg.9

Pg.6

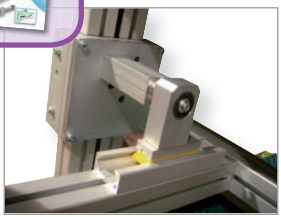
Pg.3

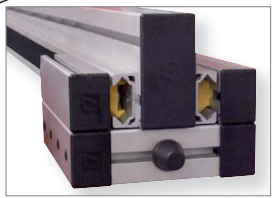
Pg.4

Pg.11



THIS PRODUCT HAS BEEN UPDATED!
Download the Web Novelties





QUANTITY DISCOUNT

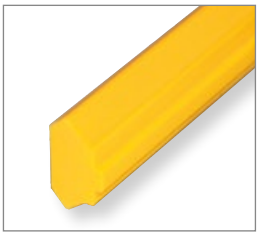
Bars	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

Code	L	Version	Bending inertia		Weight	Stock	€
		with fastening holes	Ix cm⁴	Iy cm⁴	Kg/m		bar
608241	2 x 3 m	no	8	1	1.01	✓	78.42
659713	2 x 6 m	no	8	1	1.01	✓	156.84
610321	2 x 3 m	yes	8	1	1.01	✓	97.98
659743	2 x 6 m	yes	8	1	1,01	▪	195,96

▪ **Products not in stock**, *minimum order: 2 bars, delivery in 10 days.*

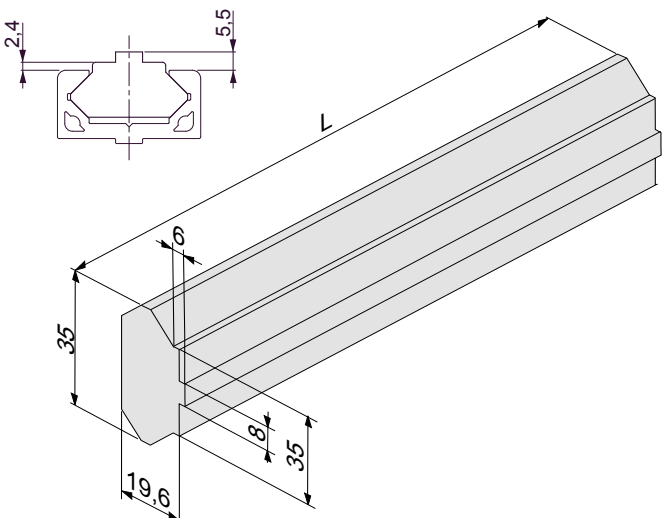
Sliding runner

Use: for profiles Part. 958.
Characteristics: runner for semi-finished product sliding.
Material High-density polyethylene.
Standard pack: 4 bars.



Combinations


Pg.2



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

Order code	L mm	Colour	Weight g	Stock	€ piece
661111	370	Yellow RAL 1006	170	✓	28.05

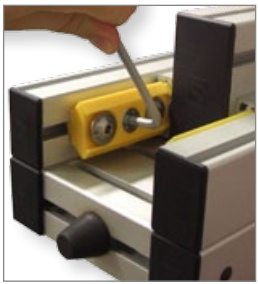
959 Runner for sliding
with adjustable friction

Use: *in combination with guide Part. 958 to construct friction sliding assemblies.*

Material *High-density polyethylene runner, 2 special wide-head M8 screws in stainless steel, 1 M8x16 countersunk head screw, 2 M8 washers and 3 M8 square nuts in galvanised steel, 2 spacers in brass.*

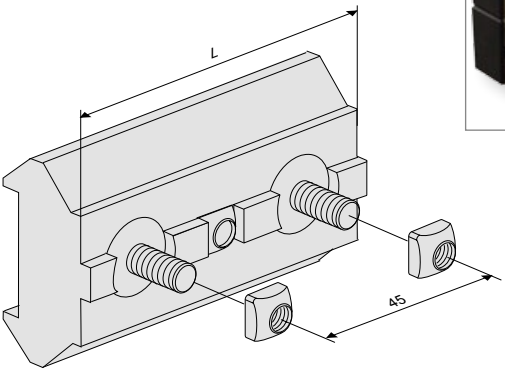
Standard pack: *4 pieces.*

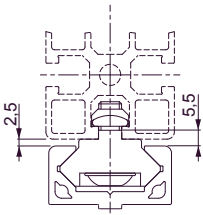
Characteristics: *using the central screw, you can adjust friction inside the linear guide. As this is a runner with reduced clearance and it is difficult to position on the profile, this adjustment has been studied in order to obtain a friction level according to the customer's requirements (working conditions, temperatures or other). In addition, given that the runner material might not maintain the desired friction over time, this modification allows recalibration during maintenance by tightening or loosening the central screw.*



Combinations

Pg.2





QUANTITY DISCOUNT

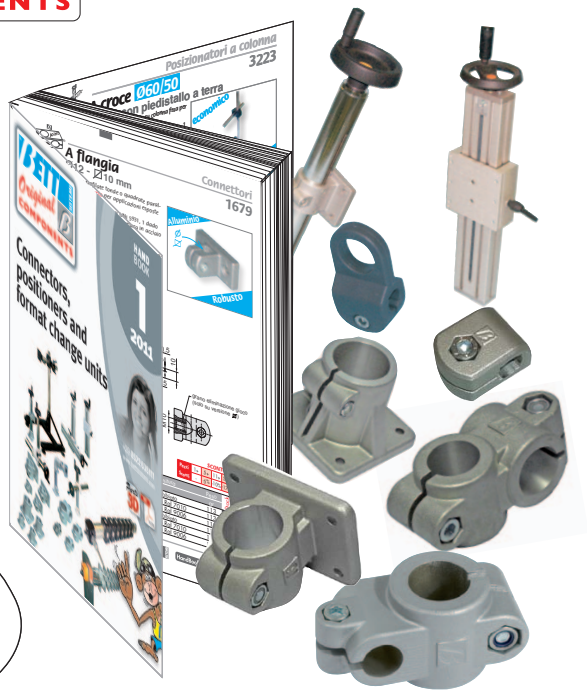
Piece	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

Order code	L mm	Colour	Weight g	Stock	€ piece
660901	70	Yellow RAL 1006	82	✓	18.53

BETTI SISTEMI

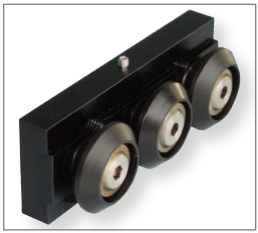
Original β

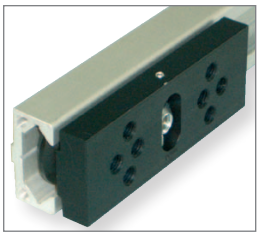
COMPONENTS



2054 → Runner with 3 rollers

Use: to construct sliding elements.
Material aluminium runner, 3 polyamide rollers, 3 steel bearings, 2 M8x20 socket head screws, 2 M4x16 grub screws, 1 M8 square nut in galvanised steel.
Standard pack: 4 pieces.
Warning: set-up solely for vertical fitting; this part should be preferably used instead of the roller with bearing part. 2053 to construct sliding doors that require a higher load capacity (large doors).
The runners must always be used in pairs.

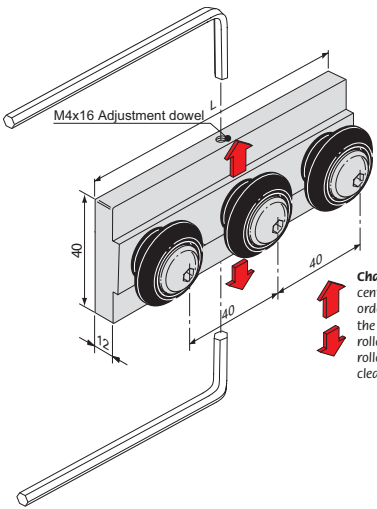




Combinations


Pg.2


Pg.14



Characteristics: *the position of the central roller can be adjusted in order to offset any clearance between the seat and the side rollers (the 2 side rollers bear the load, while the central roller is exclusively used to recover clearance).*

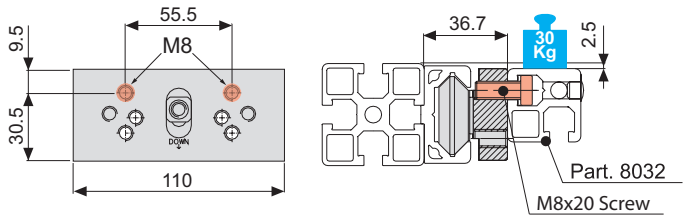
QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

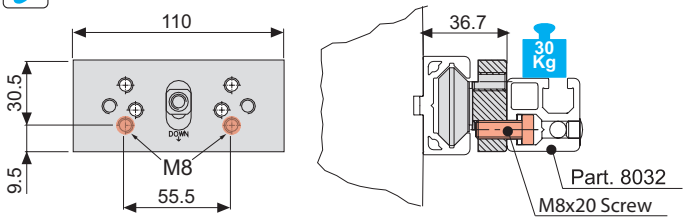
Order code	L mm	Finish	Weight g	Stock	€ piece
682973	100	anodised 15 µm	245	✓	69.14

Runner with 3 rollers 2054

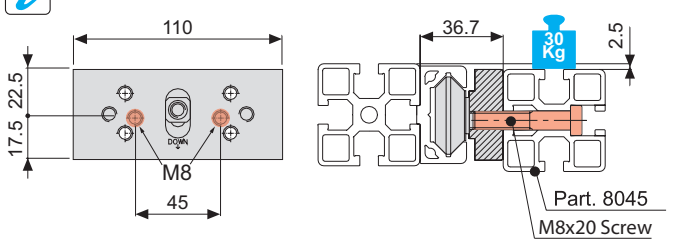
APPLICATION ON FIXED FRAME 45x45 **DOOR FRAME 32x32**



WALL APPLICATION **DOOR FRAME 32x32**



APPLICATION ON FIXED FRAME 45x45 **DOOR FRAME 45x45**

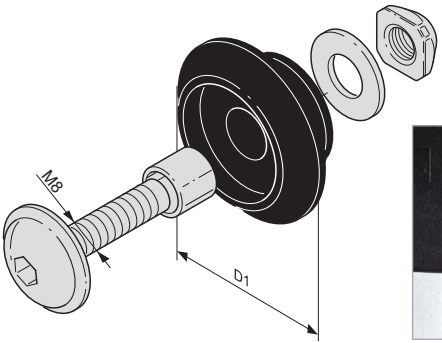


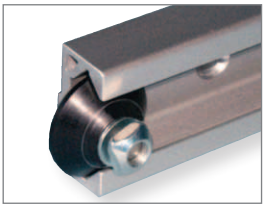
1292 Roller without bearing

Use: *in combination with guide part. 958 to construct sliding elements.*
Material *polyamide roller, 1 M8 wide round-head screw, 1 M8 square nut, 1 anti-crushing spacer and 1 M8 washer in galvanised steel.*
Standard pack: *12 pieces.*

Combinations

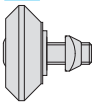
Pg.2 Pg.14





Load on individual roller

10 Kg



QUANTITY DISCOUNT

Pieces	1+	6+	12+	24+
Discounts	-	-10%	-17%	on request

Order code	D1 Ø	Finish	Weight g	Stock	€ piece
673661	35	Black RAL 9005	30	✓	3.67

Roller with bearing

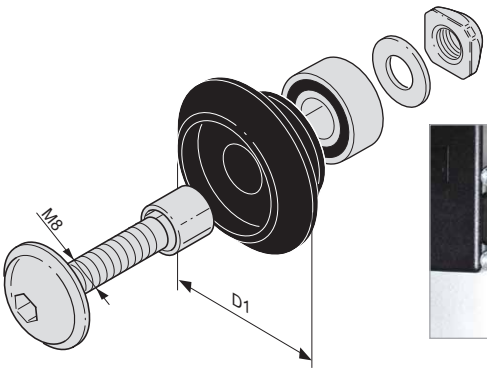
Use: *in combination with guide part. 958 to construct sliding elements.*

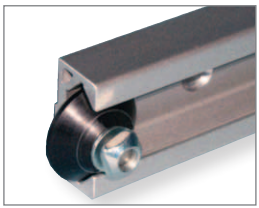
Material *polyamide roller, 1 8x22x7 ZZ steel bearing, 1 M8x26.5 wide round-head screw, 1 M8 square nut, 1 anti-crushing spacer and 1 M8 washer in galvanised steel.*

Standard pack: *12 pieces.*

Combinations

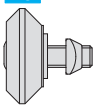
Pg.2 Pg.14





Load on individual roller

15 Kg



QUANTITY DISCOUNT

Pieces	1+	6+	12+	24+
Discounts	-	-10%	-17%	on request

Order code	D1 Ø	Finish	Weight g	Stock	€ piece
682963	35	Black RAL 9005	41	✓	4.55

2063 End cap
for linear guide

Use: *end cap for guides part. 958 and 2056.*

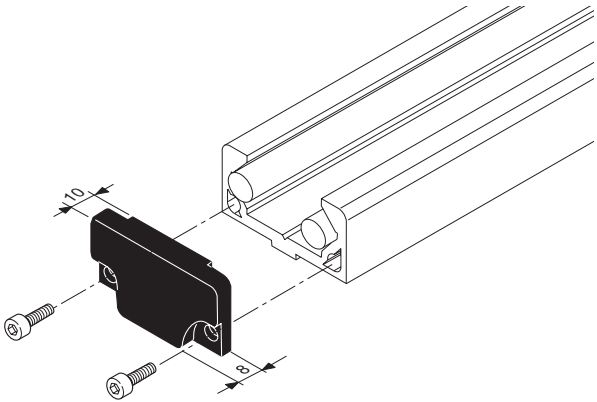
Material *polyamide end, 2 M5x20 socket head screws in galvanised steel.*

Standard pack: *8 pieces.*

Combinations


Pg.18


Pg.2



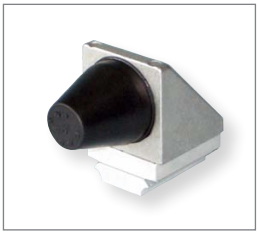
QUANTITY DISCOUNT

Pieces	1+	4+	8+	16+
Discounts	-	-10%	-17%	on request

Order code		Colour	Weight g	Stock	€ piece
644717		Black RAL9005	25	✓	8.03

End-stop buffer kit

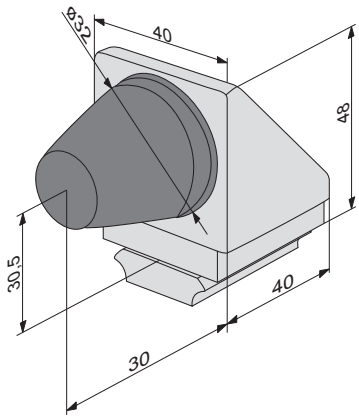
Use: *safety end-stop; it allows gentle impact absorption and prevents stress on the mechanical sliding components.*
Material *aluminium end-stop support; rubber buffer with M8 rod; M8 washer, M8 blind nut, M8 short hexagon nut, M8x25 socket head screw in galvanised steel.*
Characteristics: *it can be positioned at any point, both at the head of the guide and in an intermediate position.*
Standard pack: *4 pieces.*



Combinations


Pg.18

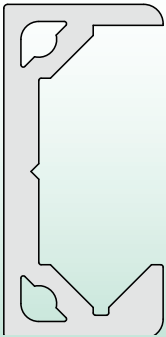
Pg.2

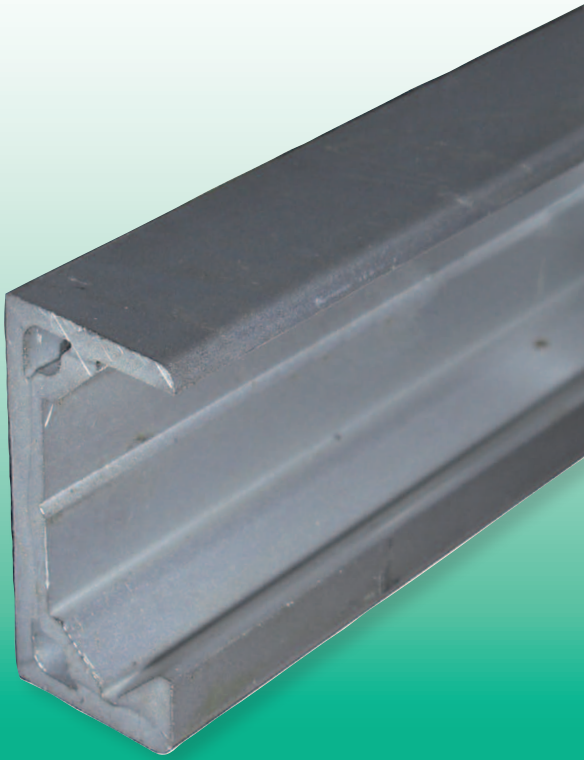


QUANTITY DISCOUNT

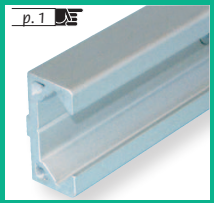
Pieces	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

Order code		Finish	Weight g	Stock	€ piece
634514		sand-blasted	171	✓	36.74





p. 1

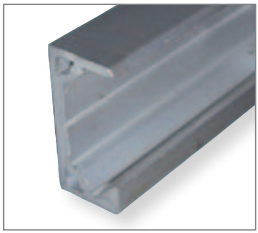


p. 17

Components for DIY construction of J-shaped linear guides

2019 J-shaped guide profiles

Use: *for opposed guides, the rollers of the runner rest in the V-shaped seat of the guide.*
Material *aluminium guide; M6x25 countersunk head screws and galvanised steel M6 square nuts (only for the pre-drilled version).*
Standard pack: *2 bars.*
Characteristics: *it is used when chippings or other material are to be prevented from remaining stuck inside the guide, thereby preventing the rollers from sliding.*



Combinations

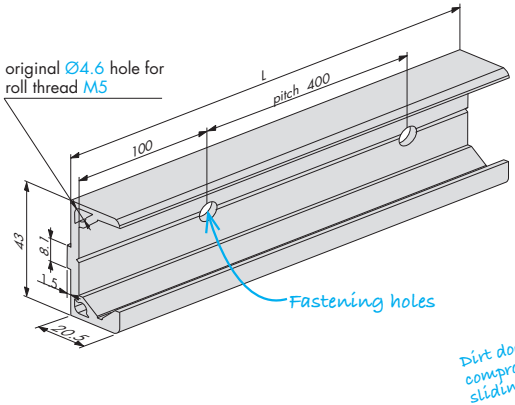

Pg.10

Pg.8

Pg.9

Pg.6

Pg.11



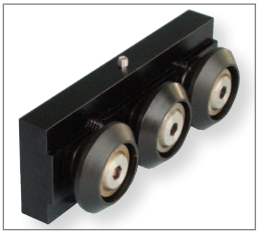
QUANTITY DISCOUNT

Bars	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

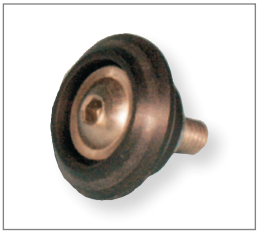
Order code	L	Pre-drilled	Finish	Weight Kg/m	Stock	€ bar
683883	2 x 3 m	no	anodised 15 µm	0.95	▪	172.50
683913	2 x 6 m	yes	anodised 15 µm	0.95	✓	215.52

▪ **Products not in stock**, *minimum order: 2 bars, delivery in 10 days.*

2054 p. 6
Runner with 3 rollers

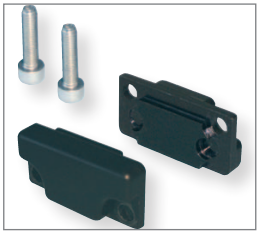


1292 p. 8
Roller without bearing

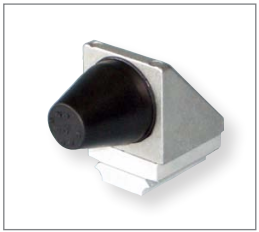


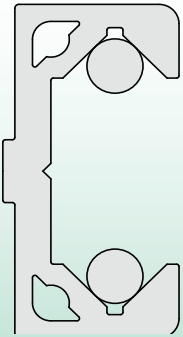
2053 p. 9
Roller with bearing

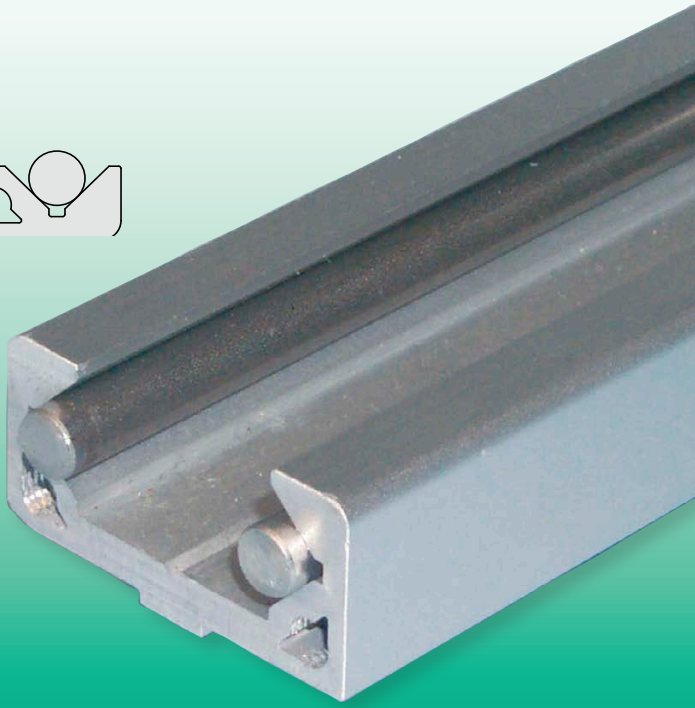
2063 p. 10
End cap



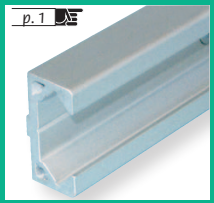
2246 p. 11
End-stop buffer kit



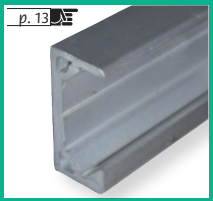




p. 1



p. 13



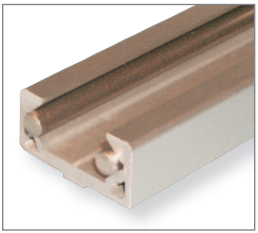
Components for DIY construction of C-shaped linear guides with rods

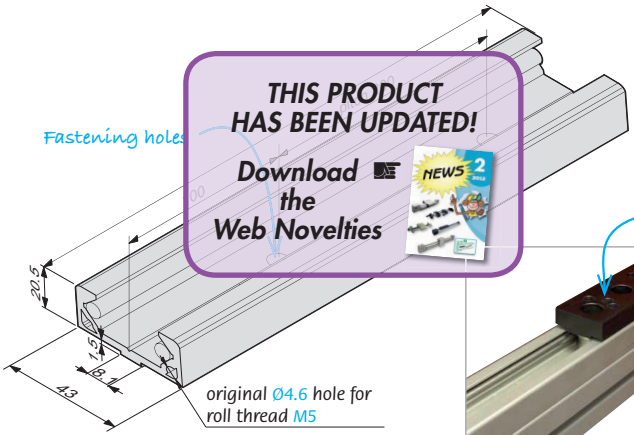
2056 C-shaped guide with ø7 steel round bars

Use: *to construct super smooth-sliding linear guides.*
Material *aluminium guide; round bars in AISI 304 stainless steel; 15 M6x25 countersunk head screws and 15 galvanised steel M6 square nuts (only for the pre-drilled version).*
Standard pack: *2 bars.*

Combinations

Pg.10 Pg.19 Pg.11





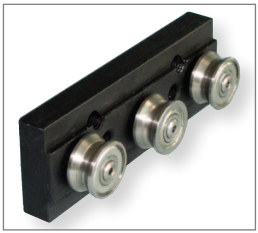
QUANTITY DISCOUNT

Bars	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

Order code	L	Pre-drilled	Finish	Weight Kg/m	Stock	€ piece
682993	2 x 3 m	no	anodised 15 µm	1.60	✓	152.31
689853	2 x 3 m	yes	anodised 15 µm	1.60	▪	171.84

▪ **Products not in stock**, *minimum order: 2 bars, delivery in 10 days.*

Runner with 3 rollers → 2055
in steel with race



Use: *to construct sliding elements.*

Material *aluminium runner, 2 concentric grooved rollers and 1 eccentric grooved roller in steel, 3 M6 washers and 3 M6 nuts in galvanised steel.*

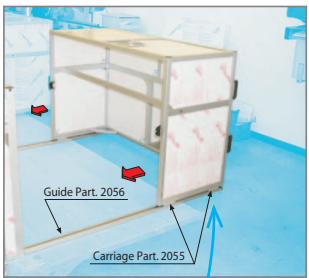
Characteristics: *eccentric central roller to eliminate clearance on the guide.*

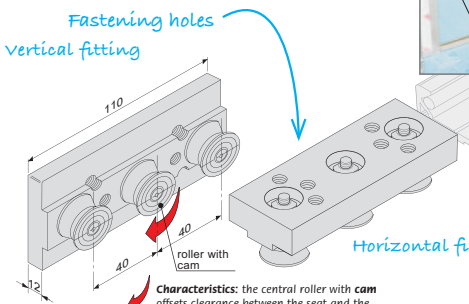
Warning: *to be preferred to the runner with polyamide bearings, part. 2054 to construct large and heavy doors (glass buffer) and for applications that require horizontal fitting (e.g. sliding tunnels). The runners must always be used in pairs.*

Standard pack: *4 pieces.*

Combinations

Pg.18





Characteristics: *the central roller with* ***cam*** *offsets clearance between the seat and the side rollers (in vertical assemblies, the 2 side rollers bear the load, while the central one is exclusively used to recover clearance).*

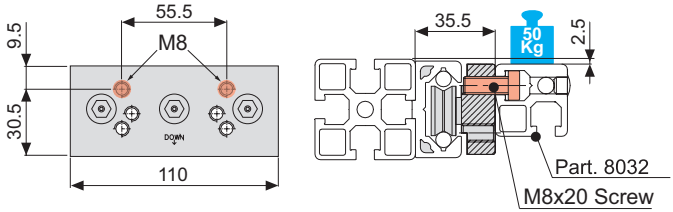
QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

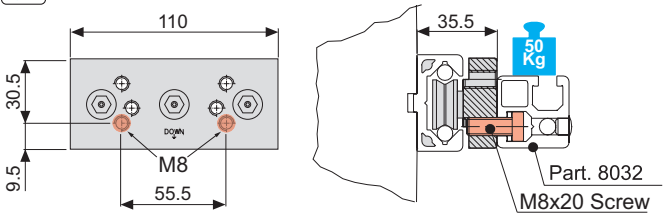
Order code		L mm	Finish	Weight g	Stock	€ piece
682983		100	black anodised	212	✓	78.73

2055 Runner with 3 rollers
in steel with race

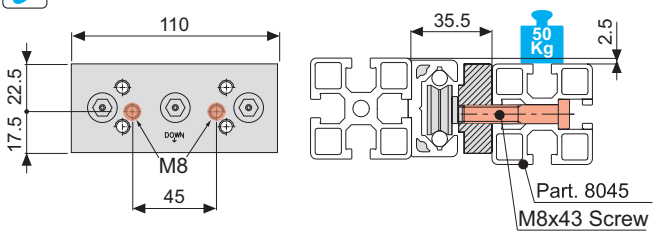
APPLICATION ON FIXED FRAME 45x45 **DOOR FRAME 32x32**



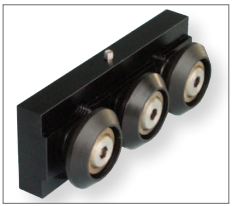
WALL APPLICATION **DOOR FRAME 32x32**



APPLICATION ON FIXED FRAME 45x45 **DOOR FRAME 45x45**



2054 p. 6
Runner with 3 rollers

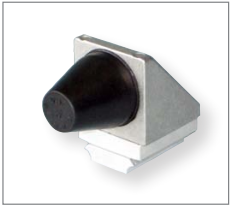


1292 p. 8
Roller without bearing

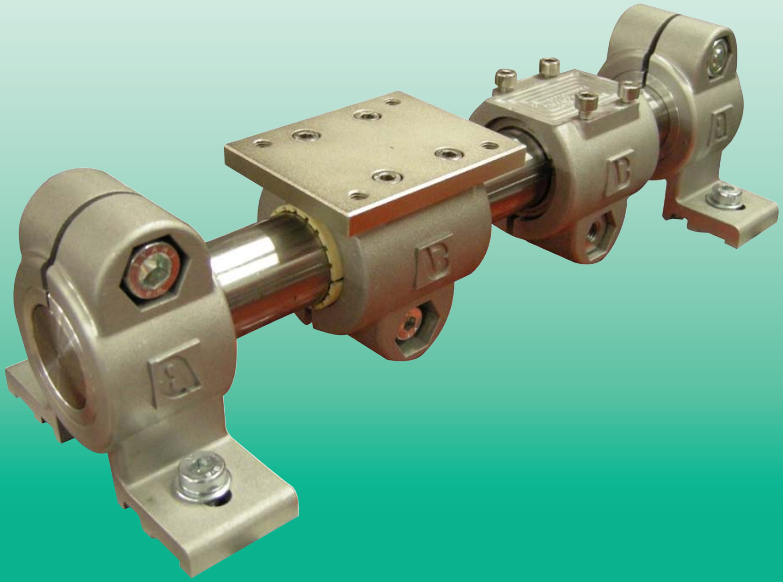
2053 p. 9
Roller with bearing

2063 p. 10
End cap

2246 p. 11
End-stop buffer kit

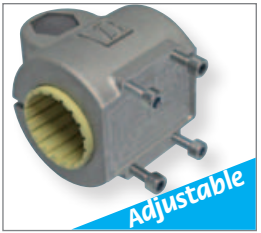


LIGHT *Linear tables*



Sliding shafts and bushes

3270 Flage mount
with anti-friction bushing



Use: *for linear sliding on drawn or ground shafts with possibility of adjusting the clearance on the shaft; it allows application of customised flanges.*

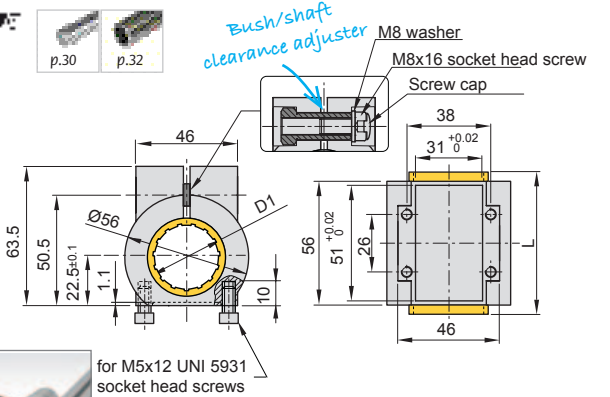
Material *Aluminium bush, 1 polyamide anti-friction bushing, 1 DIN 7984 M8 socket head screw, 4 UNI 5931 M5 socket head screws, 1 M8 washer, 1 galvanised steel torque limiter and 1 polyamide screw cap.*

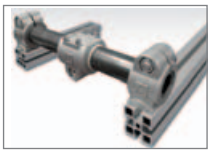
Standard pack: *4 pieces.*

Characteristics: *anti-friction bushing insensitive to dust and dirt, resistant to corrosion and abrasion, silent, with possibility of using it on not hardened shafts, operating temperature: +90°C to -50°C, friction coefficient 0.08 - 0.18 μ*

The limit switch prevents the bushings from locking on the shaft.

combinations





QUANTITY DISCOUNT

Qty	4+	8+	50+
Discounts	-	-5%	-10%

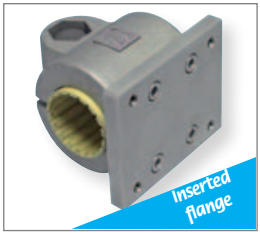
Order code	D1 Ø	Tolerance	L	Max dynamic load (N)	Max static load (N)	Finish	Weight g	Stock	€ piece
600747	30	+0.04 +0.085	62	2650	18400	shot peening	277	■	68.24
602447	35	+0.04 +0.085	68	3420	24000	shot peening	277	■	69.47

■ **Products not in stock** *minimum order: 4 pieces, delivery in 15 days.*

With flange
with anti-friction bushing

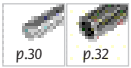
3287

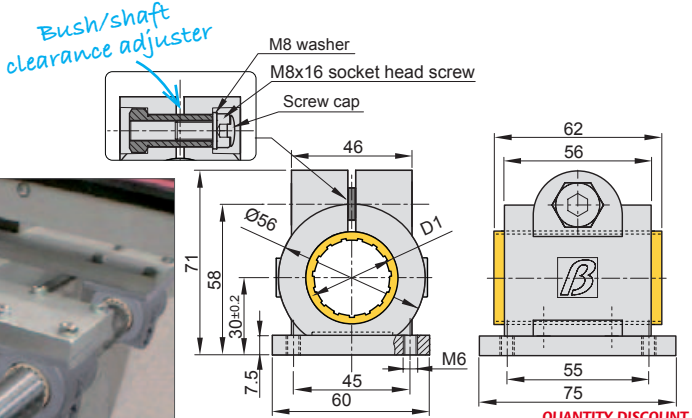
Use: *for linear sliding on drawn or ground shafts with possibility of adjusting the clearance on the shaft.*
Material *Aluminium bush, 1 polyamide anti-friction bushing, 1 DIN 7984 M8 socket head screw, 1 M8 washer, 1 galvanised steel torque limiter and 1 polyamide screw cap.*
Standard pack: *4 pieces.*
Characteristics: *anti-friction bushing insensitive to dust and dirt, resistant to corrosion and abrasion, silent, with possibility of using it on not hardened shafts, operating temperature: +90°C to -50°C, friction coefficient 0.08 - 0.18 μ*
The limit switch prevents the bushings from locking on the shaft.



On request we can supply the bush complete with customised flange

combinations


p.30 p.32



QUANTITY DISCOUNT

Qty	4+	8+	50+
Discounts	-	-5%	-10%

Order code	D1 Ø	Tolerance	Max dynamic load (N)	Max static load (N)	Finish	Weight g	Stock	€ piece
600787	30	+0.04 +0.085	2650	18400	shot peening	370	■	86.67

■ **Products not in stock** *minimum order 4 pieces, delivery in 20 days.*

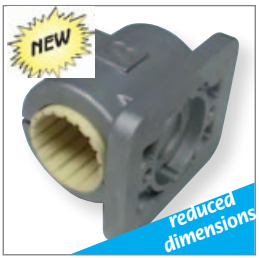
3828 With vertical flange
with anti-friction bushing

Use: *for linear sliding on drawn or ground shafts with possibility of adjusting the clearance on the shaft.*

Material *Aluminium bush, 1 polyamide anti-friction bushing, 1 DIN 985 self-locking hexagon nut, 4 UNI 5931 socket head screws in galvanised steel.*

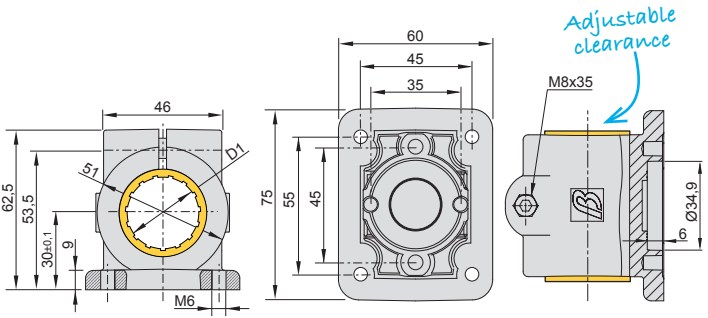
Standard pack: *4 pieces.*

Characteristics: *anti-friction bushing insensitive to dust and dirt, resistant to corrosion and abrasion, silent, with possibility of using it on not hardened shafts, operating temperature: +90°C to -50°C, friction coefficient 0.08 - 0.18 μ.*



combinations


p.31 p.32



QUANTITY DISCOUNT

Qty	4	8	16	32	64
Discounts	-	-3%	-6%	-10%	on request

Order code	D1 Ø	Tolerance	Max dynamic load (N)	Max static load (N)	Finish	Weight g	Stock	€ piece
632068	30	+0,0 +0,2	2650	18400	shot peening	270	✓	50,55

ROBO linear

Guided fitting
with anti-friction bushing

Use: *for linear sliding on drawn or ground shafts with possibility of adjusting the clearance on the shaft; it allows lock joining 35mm wide flat bars.*

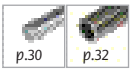
Material *Aluminium bush, 1 polyamide anti-friction bushing, 1 DIN 7984 M8 socket head screw, 1 M8 washer, 1 galvanised steel torque limiter and 1 polyamide screw cap.*

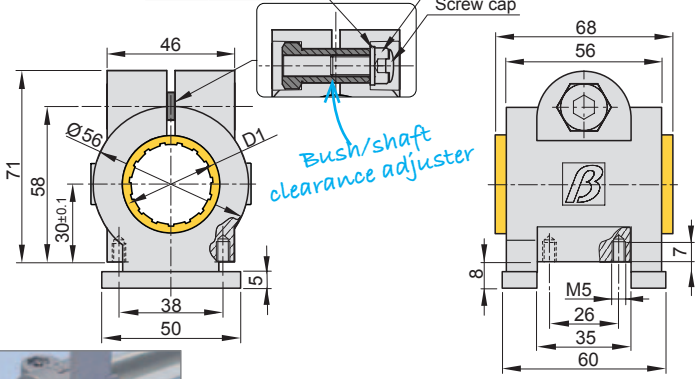
Standard pack: *4 pieces.*

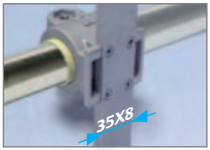
Characteristics: *anti-friction bushing insensitive to dust and dirt, resistant to corrosion and abrasion, silent, with possibility of using it on not hardened shafts, operating temperature: +90°C to -50°C, friction coefficient 0.08 - 0.18 μ*

The limit switch prevents the bushings from locking on the shaft.

Combinations:







QUANTITY DISCOUNT

Qty	4+	8+	50+
Discounts	-	-5%	-10%

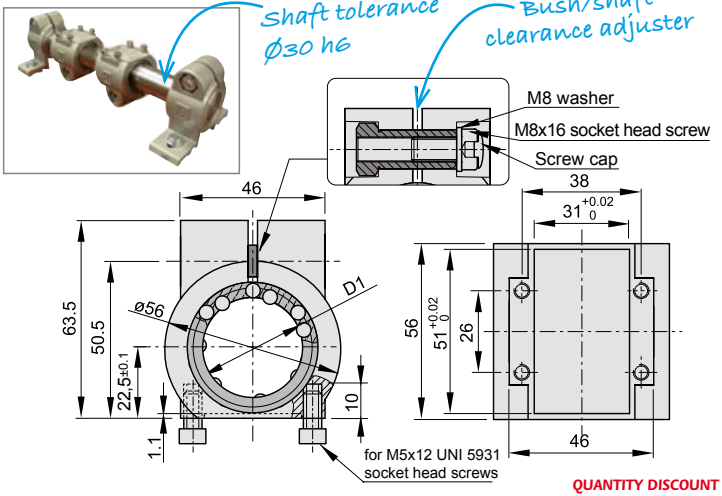
Order code	D1 Ø	Tolerance	Max dynamic load (N)	Max static load (N)	Finish	Weight g	Stock	€ piece
600767	35	+0.04 +0.085	3420	24000	shot peening	288	■	79.61

■ **Products not in stock** *minimum order 4 pieces, delivery in 20 days.*

3285 Flange mount
with linear bearing

Use: for linear sliding on hardened and ground shafts; it allows application on customised flanges.
Material Aluminium bush, 1 linear ball bearing, 1 DIN 7984 M8 socket head screw, 4 UNI 5931 M5 socket head screws, 1 M8 washer, 1 galvanised steel torque limiter and 1 polyamide screw cap.
Standard pack: 4 pieces.

Combinations



QUANTITY DISCOUNT

Qty	4+	8+	50+
Discounts	-	-5%	-10%

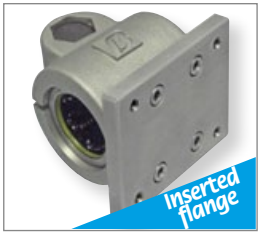
Order code	D1 Ø	Max dynamic load (N)	Max static load (N)	Finish	Weight g	Stock	€ piece
600757	30	1960	1890	shot peening	312	■	30.13

■ **Products not in stock** *minimum order 4 pieces, delivery in 20 days.*

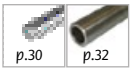
With flange
with linear bearing

3286

Use: for linear sliding on hardened and ground shafts.
Material Aluminium bush, 1 linear ball bearing, 1 DIN 7984 M8 socket head screw, 1 M8 washer, 1 galvanised steel torque limiter and 1 polyamide screw cap.
Standard pack: 4 pieces.

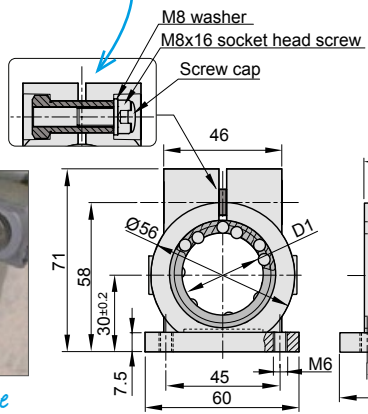


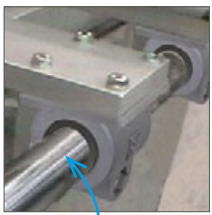
Combinations


p.30 p.32

Bush/shaft clearance adjuster

On request we can supply the bush complete with customised flange





Shaft tolerance Ø30 h6

QUANTITY DISCOUNT

Qty	4+	8+	50+
Discounts	-	-5%	-10%

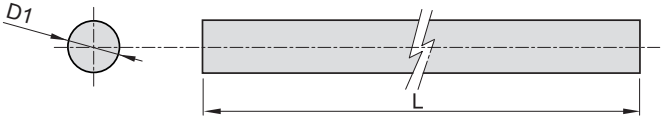
Order code	D1 Ø	Max dynamic load (N)	Max static load (N)	Finish	Weight g	Stock	€ piece
600777	30	1960	1890	shot peening	410	■	63.63

■ **Products not in stock** *minimum order 4 pieces, delivery in 20 days.*

2566 Sliding shaft

round hardened chrome-plated ground

Use: *for* ***sliding bushes****, suitable for linear ball bearing.*
Material *CF53 hardened steel (60-65 HRC).*
Characteristics: *profondità della tempra: 1 to 2.5 mm;*
cromatura prof. 15 µm (950-1100 HV);
rettilineità: 0,5/1000 mm.
rugosità: <0,02 µm
Standard pack: *6 metres.*



QUANTITY DISCOUNT

Bars	1+	6+	12+	24+
Discounts	-	-5%	-10%	on request

Order code	D1 Ø	L m	Finish			Weight kg/m	Stock	€ bar
654307	30 h6	3	hardened	chrome-plated	ground	5.51	■	119.5

■ **Products not in stock** *minimum order 6 metres, delivery in 12 days.*

Sliding shaft 3291

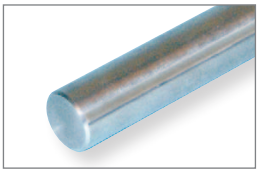
round chrome plated ground

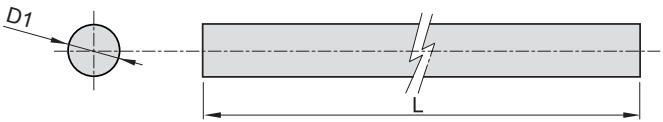
Use: *for* ***sliding bushes,*** ***not*** *suitable for linear ball bearing.*

Material *C45 steel shaft.*

Characteristics: *chrome-plating depth 15 µm (950-1100 HV); rettilineità: 0,5/1000 mm. rugosità: <0,02 µm*

Standard pack: *6 metres.*





QUANTITY DISCOUNT

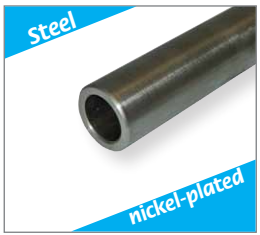
Barre	1+	6+	12+	24+
Discounts	-	-5%	-10%	on request

Order code	D1 Ø	L m	Finish		Weight kg/m	Stock	€ bar
641547	30 h7	2	chrome-plated	ground	5.51	■	51.6
641437	30 h7	3	chrome-plated	ground	5.51	■	76.9
641557	35 h7	2	chrome-plated	ground	8.17	■	76.4
641457	35 h7	3	chrome-plated	ground	8.17	■	114.0

■ ***Products not in stock*** *minimum order 6 metres, delivery in 12 days.*

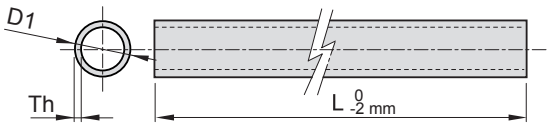
3292 Sliding tube in drawn steel

Use: for **sliding bushes**.
Material ST52 steel / EN 10305-1.
Standard pack: 6 metres.



Combinations


p.33



QUANTITY DISCOUNT

Bars	1+	2+	4+	8+
Discounts	-	-5%	-10%	on request

on request they may be delivered cut to size and bevelled (€ 3 per cut) and supplied in kits

Order code	D1 Ø	Th. mm	L m	Finish	Weight kg/m	Stock	€ bar
621337	30 +0.05/-0.15	5	2	brushed, not nickel-plated	3.09	▪	69.16
641507	30 +0.05/-0.15	5	2	brushing + electrolytic nickel-plating	3.09	▪	101.66
621347	35 +0.05/-0.15	5	2	brushed, not nickel-plated	3.88	▪	76.45
689206	35 +0.05/-0.15	5	2	brushing + electrolytic nickel-plating	3.88	▪	108.95
621357	40 +0.05/-0.15	4	2	brushed, not nickel-plated	2.73	✓	74.84
602467	40 +0.05/-0.15	4	2	brushing + electrolytic nickel-plating	2.73	▪	107.34
621367	50 +0.05/-0.15	5	2	brushed, not nickel-plated	5.78	✓	94.57
641517	50 +0.05/-0.15	5	2	brushing + electrolytic nickel-plating	5.78	▪	127.07
621377	60 +0.05/-0.15	5	2	brushed, not nickel-plated	7.06	✓	106.40
641527	60 +0.05/-0.15	5	2	brushing + electrolytic nickel-plating	7.06	▪	138.90

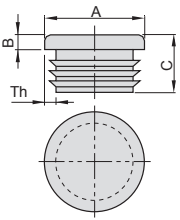
Other thicknesses on request

▪ **Products not in stock** 30Ø, *minimum order 3 bars; other diameters, minimum order 1 bar, delivery in 15 days.*

ROBO linear

Cap
for tube in millimetres

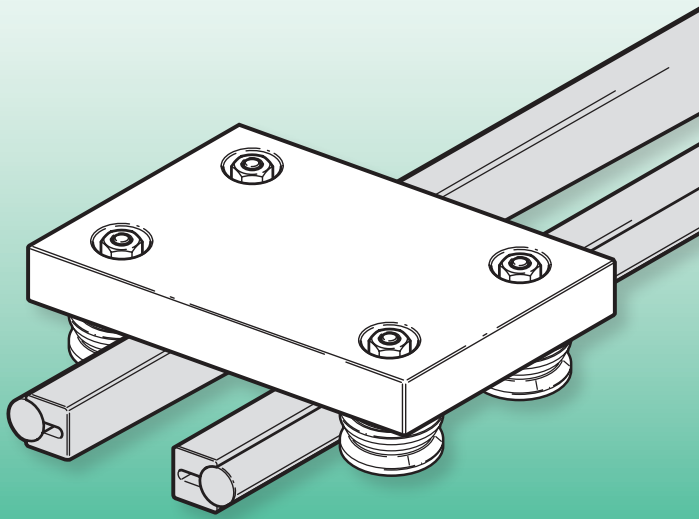
Use: *for end capping.*
Material *RAL9005 black polyethylene*
Standard pack: *200 pieces.*



QUANTITY DISCOUNT

Qty	1+	10+	50+	200+	400+
Discounts	Net	-5%	-10%	-20%	on request

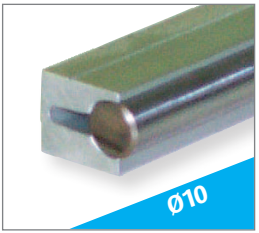
Order code	A Ø	Thickness mm	B mm	C mm	Finish	Weight g	Stock	€ piece
01ILT30A	30	1.0-3	5	16.5	Black RAL 9005	3.44	✓	0.28
01ILT40A	40	1.0-3	5	16.5	Black RAL 9005	5.9	✓	0.34
01IL40TB	40	3.0-5	5	16.5	Black RAL 9005	5.45	✓	0.32
01ILT50A	50	1.0-3	5	16.5	Black RAL 9005	9.7	✓	0.40
01ILT50B	50	2.5-4.5	5	16.5	Black RAL 9005	7.45	✓	0.40
01ILT60A	60	1.0-3	5	23.5	Black RAL 9005	16.4	✓	0.50



Components for DIY construction of Ø10 - Ø20 single linear guides

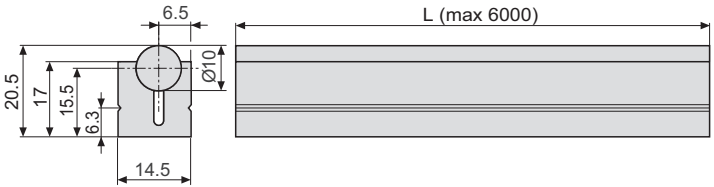
S10 → Ø10 Single guide

Use: *when it is necessary to increase or reduce the distance between the guides, when clearance must be set up between the 2 guides or when the guides must be fitted inwards.*
Material *sliding shaft in hardened, chrome-plated and ground Cf53 steel or hardened and ground AISI 431 stainless steel; aluminium profile.*
Characteristics: *tolerance on diameter h7. Tolerance on cut ±1 mm.*
Standard pack: *1 piece.*



Combinations

Pg.40 Pg.42



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on Request

Order code	L mm	Material of shaft	Profile finish	Weight Kg	Stock	€ piece
LG00 S10 A 0300	300	steel	anodised	0.318	▪	11,12
LG00 S10 A 0500	500	steel	anodised	0.53	▪	18,54
LG00 S10 A 0600	600	steel	anodised	0.636	▪	22,25
LG00 S10 A 0685	685	steel	anodised	0.726	▪	25,40
LG00 S10 A 1000	1000	steel	anodised	1.06	▪	37,08

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Ø10 Single guide

S10

Order code	L mm	Material of shaft	Profile finish	Weight Kg	Stock	€ piece
LG00 S10 A 1 1 0 0	1100	steel	anodised	1.166	■	40,78
LG00 S10 A 1 5 0 0	1500	steel	anodised	1.59	■	55,66
LG00 S10 A 2 0 0 0	2000	steel	anodised	2.12	■	74,14
LG00 S10 A 2 5 0 0	2500	steel	anodised	2.65	■	92,68
LG00 S10 A 3 0 0 0	3000	steel	anodised	3.18	■	111,22
LG00 S10 A 3 5 0 0	3500	steel	anodised	3.71	■	129,74
LG00 S10 A 4 0 0 0	4000	steel	anodised	4.24	■	148,28
LG00 S10 A 4 5 0 0	4500	steel	anodised	4.77	■	166,82
LG00 S10 A 5 0 0 0	5000	steel	anodised	5.3	■	185,35
LG00 S10 A 5 5 0 0	5500	steel	anodised	5.83	■	203,89
LG00 S10 A 6 0 0 0	6000	steel	anodised	6.36	■	222,42

■ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

To order other customised measurements, use the order code shown below:

Order code

LG00 S10 [ ][ ][ ][ ]

Length **L** *in mm (max 6000)*

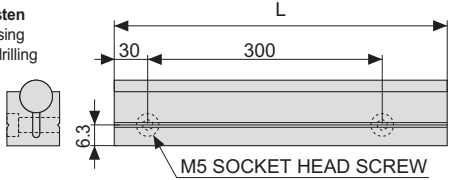
Steel sliding shaft = **A**
Stainless steel sliding shaft = **I**

Ordering example

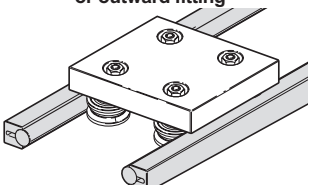
LG00 S10 A 1 2 5 0

(Ø10 steel guide with length L = 1250 mm)

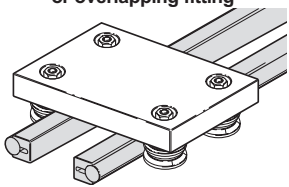
Recommendations to fit and fasten the rods: drill and fasten the guides using M5 socket head screws following the drilling distance between centres shown at the side. Templates must be used to drill and when tightening the screws in order to obtain parallelism between the guides.



Example of an inward or outward fitting

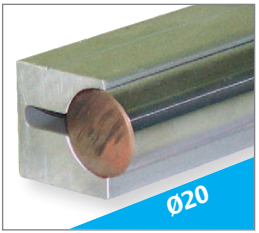


Example of an outdoor or overlapping fitting



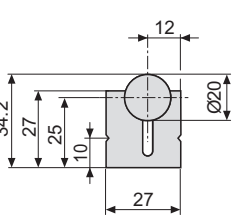
S20 → Ø20 Single guide

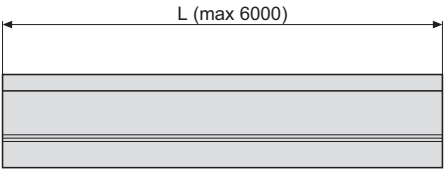
Use: *when it is necessary to increase or reduce the distance between the guides, when clearance must be set up between the 2 guides or when the guides must be fitted inwards.*
Material *sliding shaft in hardened, chrome-plated and ground Cf53 steel or hardened and ground AISI 431 stainless steel; aluminium profile.*
Characteristics: *tolerance on diameter h7. Tolerance on cut ±1 mm.*
Standard pack: *1 piece.*



Combinations

Pg.46 Pg.48





QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on Request

Order code							L mm	Material of shaft	Profile finish	Weight Kg	Stock	€ piece
LG00	S20	A	0	3	0	0	300	steel	anodised	0.94	▪	23,52
LG00	S20	A	0	5	0	0	500	steel	anodised	1.56	▪	33,62
LG00	S20	I	0	5	0	0	500	steel	anodised	1.50	▪	48,85
LG00	S20	A	0	6	0	0	600	steel	anodised	1.87	▪	40,34
LG00	S20	A	0	6	8	5	685	steel	anodised	2.13	▪	46,05
LG00	S20	A	0	7	0	0	700	steel	anodised	2.18	▪	47,06
LG00	S20	A	0	8	0	0	800	steel	anodised	2.50	▪	53,78

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Ø20 Single guide

S20

Order code	L mm	Material of shaft	Profile finish	Weight Kg	Stock	€ piece
LG00 S20 A 1000	1000	steel	anodised	3.12	▪	67,23
LG00 S20 A 1100	1100	steel	anodised	3.432	▪	73,95
LG00 S20 A 1500	1500	steel	anodised	4.68	▪	100,85
LG00 S20 A 2000	2000	steel	anodised	6.24	▪	134,34
LG00 S20 A 2500	2500	steel	anodised	7.8	▪	168,08
LG00 S20 A 3000	3000	steel	anodised	9.36	▪	201,69
LG00 S20 A 3500	3500	steel	anodised	10.92	▪	235,31
LG00 S20 A 4000	4000	steel	anodised	12.48	▪	268,92
LG00 S20 A 4500	4500	steel	anodised	14	▪	302,54
LG00 S20 A 5000	5000	steel	anodised	15.6	▪	336,15
LG00 S20 A 5500	5500	steel	anodised	17.16	▪	369,77
LG00 S20 A 6000	6000	steel	anodised	18.72	▪	403,38

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

To order other customised measurements, use the order code shown below:

Order code

LG00 S20 [ ][ ][ ][ ][ ]

Length **L** *in mm (max 6000)*

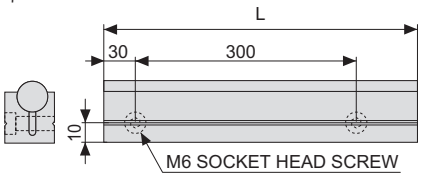
Steel sliding shaft = **A**
Stainless steel sliding shaft = **I**

Ordering example

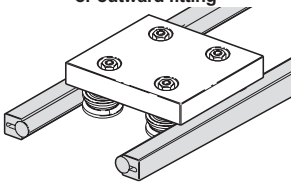
LG00 S20 A 1 2 5 0

(Ø20 steel guide with length L = 1250 mm)

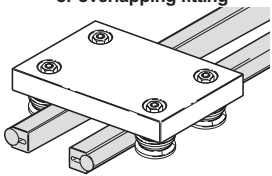
Recommendations to fit and fasten the rods: drill and fasten the guides using M5 socket head screws following the drilling distance between centres shown at the side. Templates must be used to drill and when tightening the screws in order to obtain parallelism between the guides.



Example of an inward or outward fitting



Example of an outdoor or overlapping fitting



LG00 ➔ Grooved rollers for Ø10 guide

Use: *for S10 and D10 guides.*
Material *AISI 431 stainless steel or steel roller and pin (see table).*
Characteristics: *the pin is provided with a hexagon socket at the two ends for pre-load adjustment from the easier side. The steel rollers have a dust seal in the ZZ version, whereas the stainless steel rollers have it in the 2RS version.*
A nut is supplied together with a Belleville washer, which has the dual function of a washer and a self-locking fitting.
Standard pack: *1 piece.*

Combinations


Pg.36

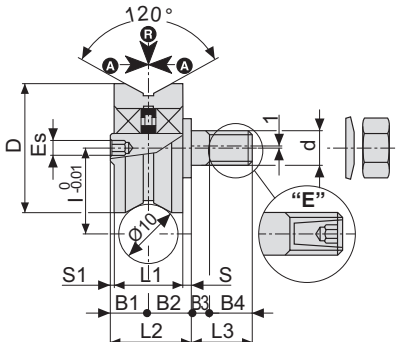
Pg.80

Pg.44

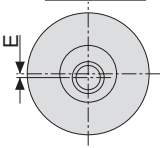
Pg.82

Legend :

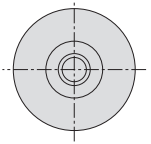
Ⓐ axial load
Ⓡ radial load



"E" **eccentric** roller



"C" **concentric** roller



Type of roller	D	d	L1	L2	L3	L	B1	B2	B3	B4	Es	l	S	S1
106	22	M6	11	14.5	9.5	24	6.5	8	2.5	7	2.5	14.5	2.5	1
208	30	M8	14	18	14	32	9	9	4.5	9.5	3	18	2	2
210	39	M10	18	22.5	19	41.5	11	11.5	4	15	5	22	2.5	2

Grooved rollers
for Ø10 guide

LG00

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on Request

Order code	Type of roller	Loads A (N)	Loads R (N)	Version	Material	Weight g	Stock	€ piece
LG00 C S 106 A	106	300	300	concentric	steel	30	✓	22,52
LG00 E S 106 A	106	300	300	eccentric	steel	30	✓	22,52
LG00 C S 208 A	208	400	1000	concentric	steel	70	✓	26,05
LG00 E S 208 A	208	400	1000	eccentric	steel	70	✓	26,05
LG00 C S 210 A	210	600	1300	concentric	steel	150	✓	30,03
LG00 E S 210 A	210	600	1300	eccentric	steel	150	✓	30,03
LG00 C S 210 I	210	600	1300	concentric	stainless steel	150	▪	50,91
LG00 E S 210 I	210	600	1300	eccentric	stainless steel	150	▪	50,91

▪ **Products not in stock** *minimum order: 2 pieces, delivery in 10 days.*

To order other customised measurements, use the order code shown below:

Order code

LG00 S

Steel = **A**
Stainless steel = **I**

Type of roller Pg.40

Concentric roller = **C**
Eccentric roller = **E**

Ordering example

LG00 C S 106 I

(for a 106-type concentric grooved roller, in stainless steel)

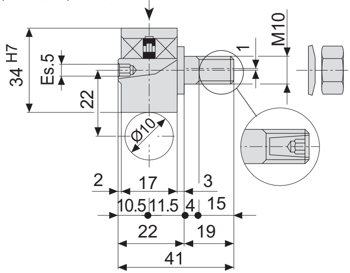
Characteristics of the grooved rollers:

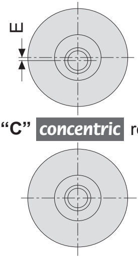
- *Our systems slide on grooved rollers with an idle pin.*
- *Each roller is sized with a concentric pin and eccentric pin. The concentric rollers obtain parallelism between the plate and guide, any clearance is eliminated with the eccentric rollers and the system can be pre-loaded for smoother or frictional sliding, according to the application requirements.*
  The 120° groove on the external ring guarantees even distribution of the load on 2 points of the guide, therefore each carriage slides smoothly along its guide.
- *The pin is provided with a hexagon socket at the two ends for pre-load adjustment from the easier side. A nut is supplied together with a Belleville washer, which has the dual function of a washer and a self-locking fitting. If the self-locking function is to be improved further, the normal nut can be replaced with a self-locking nut.*

LG00 Cylindrical rollers
for Ø10 guide

Use: *for S10 and D10 guides.*
Material *AISI 431 stainless steel or steel roller and pin (see table).*
Characteristics: *the pin is provided with a hexagon socket at the two ends for pre-load adjustment from the easier side. The steel rollers have a dust seal in the ZZ version, whereas the stainless steel rollers have it in the 2RS version.*
A nut is supplied together with a Belleville washer, which has the dual function of a washer and a self-locking fitting.
Standard pack: *1 piece.*

Combinations





QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on Request

Order code				Type of roller	Loads R (N)	Version	Material	Weight g	Stock	€ piece
LG00	C C	210	A	210	1300	concentric	steel		▪	30,03
LG00	E C	210	A	210	1300	eccentric	steel		▪	30,03
LG00	C C	210	I	210	1300	concentric	stainless steel		▪	50,91
LG00	E C	210	I	210	1300	eccentric	stainless steel		▪	50,91

▪ **Products not in stock** *minimum order: 2 pieces, delivery in 10 days..*

To order other customised measurements, use the order code shown below:

Order code

LG00	C		

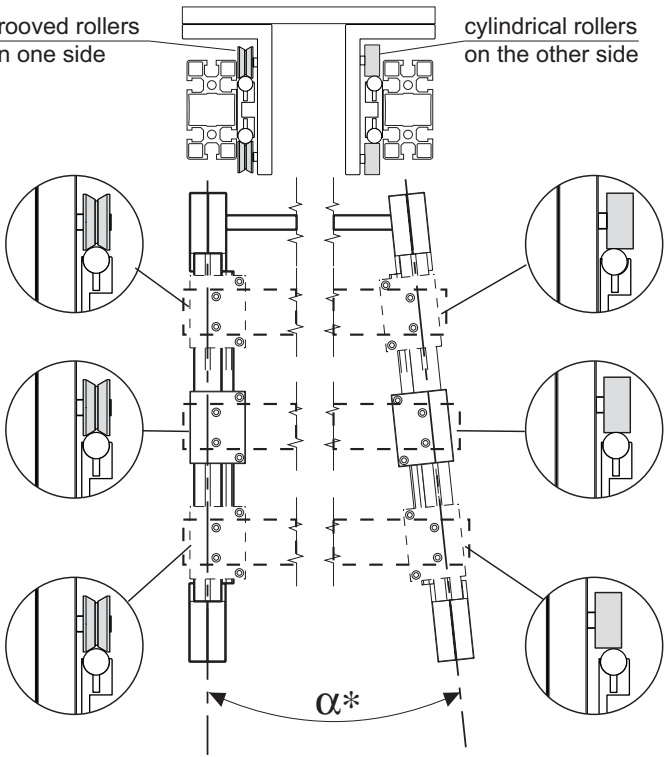
*Steel = **A***
*Stainless steel = **I***
Type of roller *Pg.40*
*Concentric roller = **C***
*Eccentric roller = **E***

Ordering example

LG00	C C	210	I

Ordering example for a 210-type concentric cylindrical roller, in **stainless** *steel*

Fitting instructions cylindrical and grooved rollers



* α = angle due to errors in parallelism or the structure on which the guides are installed

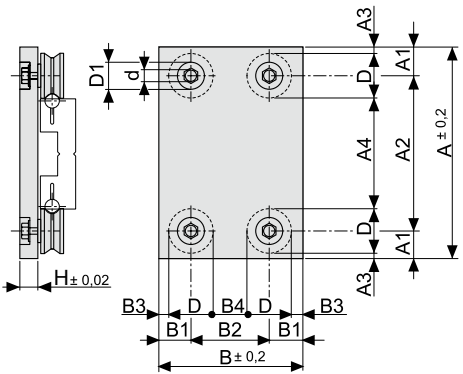
LG00 → Carriages for Ø10 guide

Use: for S10 and D10 guides.
Material Fe37 steel or anodised aluminium carriage, steel rollers.
State of supply the carriages can be supplied with or without rollers. The complete versions are supplied with disassembled rollers for any subsequent working.
Standard pack: 1 piece.

Combinations


Pg.36


Pg.80



Dimensions of the STANDARD carriages														Weight		Type of
A	B	H	A1	A2	A3*	A4*	B1	B2	B3*	B4*	D	d	D1	Steel	Aluminium	roller
120	80	10	18.5	83	7.5	61	19.5	41	8.5	19	22	6	16	0.70	0.25	106
140	120	15	25	90	10	60	25	70	10	40	30	8	20	1.90	0.60	208
150	120	20	26	98	7	60	25	70	6	32	38	10	26	2.50	0.90	210

* Indicative values based on eccentric adjustment.

Minimum dimensions for SPECIAL carriages														Type of
A	B	H	A1	A2	A3*	A4*	B1	B2	B3*	B4*	D	d	D1	roller
107	51	10	12	83	1	61	12	27	1	5	22	6	16	106
122	67	15	16	90	1	60	16	35	1	5	30	8	20	208
138	77	20	20	98	1	60	17.5	40	1	5	39	10	16	210

ROBO linear

Carriages for Ø10 guide

LG00

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on Request

Order code	Type of roller	A	B	H	Rollers	Material	Weight Kg	Stock	€ piece
LG00 106 A 000 C	106	120	80	10	yes	steel	0.82	▪	125,28
LG00 106 L 000 C	106	120	80	10	yes	aluminium	0.37	▪	125,28
LG00 106 L 000 S	106	120	80	10	no	aluminium	0.25	▪	35,31
LG00 208 A 000 C	208	140	120	15	yes	steel	2.18	▪	148,23
LG00 208 L 000 C	208	140	120	15	yes	aluminium	0.88	✓	148,23
LG00 208 L 000 S	208	140	120	15	no	aluminium	0.60	✓	44,14
LG00 210 A 000 C	210	150	120	20	yes	steel	3.10	▪	171,31
LG00 210 A 000 S	210	150	120	20	no	steel	2.50	▪	52,03
LG00 210 L 000 C	210	150	120	20	yes	aluminium	1.50	✓	171,31
LG00 210 L 000 S	210	150	120	20	no	aluminium	0.90	✓	51,03

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LG00 [ ] [ ] [ ] [ ]

- [ ] → with rollers = **C**, without rollers = **S**
- [ ] → standard carriage = **000**, special carriages = distance between centres **B2**
- [ ] → aluminium = **L**, steel = **A**
- [ ] → type of roller Pg.40

Ordering example

LG00 208 L 000 S

(208-type standard carriage in aluminium without rollers)

LG00 208 L 120 S

(208-type distance between centres B2=120 special carriage, in aluminium without rollers)

INSTRUCTIONS TO ADJUST CLEARANCE ON THE CARRIAGES:

*- fit and fasten the two concentric rollers marked with the letter **C**, on one of the two carriage sliding sides (fig. 1).*
*- fit the other two eccentric rollers marked with the letter **E**, on the opposite side (fig. 1) and position them using an Allen wrench in the point with greatest clearance.*
- insert the guide in the carriage.
*- adjust and tighten the two eccentric rollers **E** (fig.2) to give the correct pre-load (fig. 3).*
***ATTENTION:** always fit the rollers in pairs as shown in the figure; do not pre-load the eccentric rollers excessively so as to prevent premature wear of the bars and damaging the rollers.*

Fig. 1

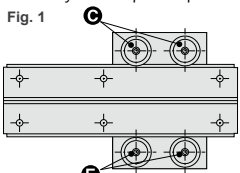


Fig. 2

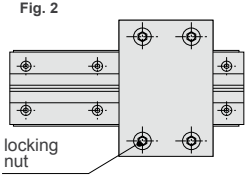
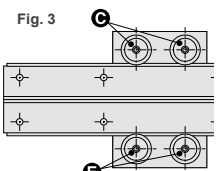


Fig. 3



LG00 → Grooved rollers for Ø20 guide

Use: for S20 and D20, G20 guides.
Material AISI 431 stainless steel or steel roller and pin (see table).
Characteristics: *the pin is provided with a hexagon socket at the two ends for pre-load adjustment from the easier side. The steel rollers have a dust seal in the ZZ version, whereas the stainless steel rollers have it in the 2RS version.*
A nut is supplied together with a Belleville washer, which has the dual function of a washer and a self-locking fitting.
Standard pack: *1 piece.*

Combinations


Pg.38

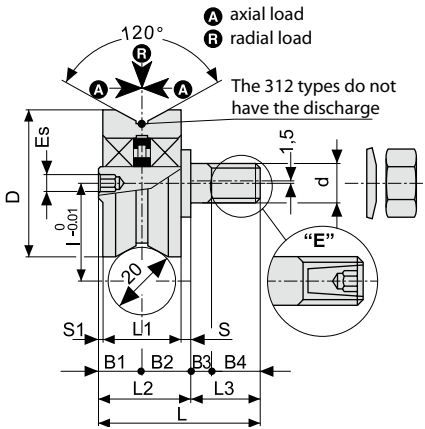

Pg.100

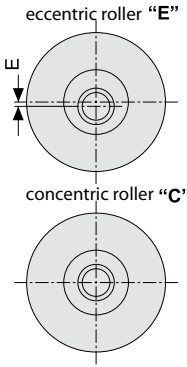

Pg.102


Pg.50


Pg.104


Pg.106





Type of roller	D	d	L1	L2	L3	L	B1	B2	B3	B4	Es	l	S	S1
312	40	M12	18	24	19	43	11	13	4	15	5	28	4	2
416	57	M16	22	33.5	24	57.5	14.5	19	10	14	8	35	8	3.5

Grooved rollers
for Ø20 guide

LG00

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on Request

Order code	Type of roller	Loads A (N)	Loads R (N)	Version	Material	Weight g	Stock	€ piece
LG00 C S 312 A	312	800	1600	concentric	steel	165	✓	32,68
LG00 E S 312 A	312	800	1600	eccentric	steel	165	✓	32,68
LG00 C S 416 A	416	1600	3500	concentric	steel	415	▪	43,28
LG00 E S 416 A	416	1600	3500	eccentric	steel	415	▪	43,28

▪ **Products not in stock** *minimum order: 2 pieces, delivery in 10 days.*

To order other customised measurements, use the order code shown below:

Order code

LG00 S _ _

- Steel = **A**
  Stainless steel = **I**
- *Type of roller* Pg.46
- *Concentric roller* = **C**
  Eccentric roller = **E**

Ordering example

LG00 C S 312 I

(312-type concentric grooved roller, in stainless steel)

LG00 Cylindrical rollers for Ø20 guide

Use: for S20 and D20, G20 guides.
Material AISI 431 stainless steel or steel roller and pin (see table).
Characteristics: *the pin is provided with a hexagon socket at the two ends for pre-load adjustment from the easier side. The steel rollers have a dust seal in the ZZ version, whereas the stainless steel rollers have it in the 2RS version.*
A nut is supplied together with a Belleville washer, which has the dual function of a washer and a self-locking fitting.
Standard pack: *1 piece.*

Combinations


Pg.38

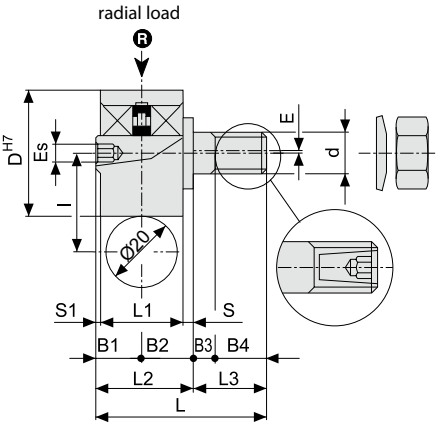
Pg.100

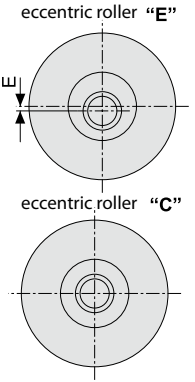
Pg.102

Pg.50

Pg.104

Pg.106





Type of roller	D	d	L1	L2	L3	L	B1	B2	B3	B4	E	Es	I	S	S1
312	36	M12	20	23.5	19	42.5	10.5	13	4	15	1	5	28	3	0.5
416	50	M16	25	34	24	58	15	19	10	14	1.5	8	35	6.5	2.5

Cylindrical rollers
for Ø20 guide

LG00

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on Request

Order code	Type of roller	Loads R (N)	Version	Material	Weight g	Stock	€ piece
LG00 C C 312 A	312	1600	concentric	steel	190	▪	32,68
LG00 E C 312 A	312	1600	eccentric	steel	190	▪	32,68
LG00 C C 416 A	416	3500	concentric	steel	480	▪	43,28
LG00 E C 416 A	416	3500	eccentric	steel	480	▪	43,28

▪ ***Products not in stock*** *minimum order: 2 pieces, delivery in 10 days.*

To order other customised measurements, use the order code shown below:

Order code

LG00 C

- Steel = **A**
  Stainless steel = **I**
- *Type of roller* Pg.46
- *Concentric roller* = **C**
  Eccentric roller = **E**

Ordering example

LG00 C C 416 I

(416-type concentric cylindrical roller, in stainless steel)

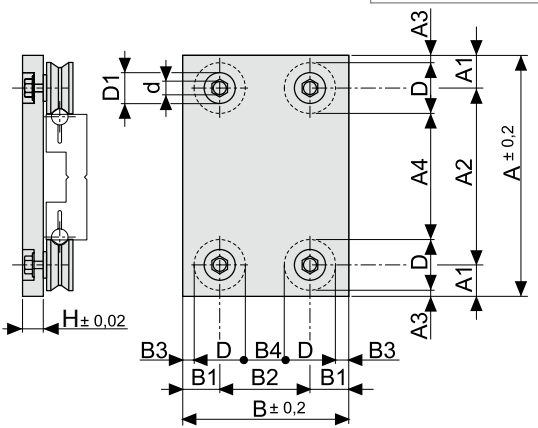
LG00 → Carriages for Ø20 guide

Use: for S20 and D20 guides.
Material Fe37 steel or anodised aluminium carriage, steel rollers.
State of supply the carriages can be supplied with or without rollers. The complete versions are supplied with disassembled rollers for any subsequent working.
Standard pack: 1 piece.

Combinations


Pg.38


Pg.100



Dimensions of the STANDARD carriages														Weight		Type of
A	B	H	A1	A2	A3*	A4*	B1	B2	B3*	B4*	D	d	D1	Steel	Aluminium	roller
180	150	20	27	126	9	78	30	90	9	48	42	12	30	3.80	1.30	312
200	180	25	40	140	11	82	40	100	11	42	58	16	36	7.00	2.60	416

* *Indicative values based on eccentric adjustment.*

Minimum dimensions for SPECIAL carriages														Type of
A	B	H	A1	A2	A3*	A4*	B1	B2	B3*	B4*	D	d	D1	roller
164	91	20	22	126	1	86	22	47	1	5	40	12	30	312
200	123	25	30	140	1	83	30	63	1	5	57	16	36	416

Carriages for Ø20 guide

LG00

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on Request

Order code	Type of roller	A	B	H	Rollers	Material	Weight Kg	Stock	€ piece
LG00 312 L 000 C	312	180	150	20	yes	aluminium	1.96	✓	185,28
LG00 312 L 000 S	312	180	150	20	no	aluminium	1.30	✓	54,69
LG00 416 A 000 C	416	200	180	25	yes	steel	8.66	▪	247,02
LG00 416 A 000 S	416	200	180	25	no	steel	7.00	▪	83,18
LG00 416 L 000 C	416	200	180	25	yes	aluminium	4.26	▪	247,02
LG00 416 L 000 S	416	200	180	25	no	aluminium	2.60	▪	83,18

▪ ***Products not in stock*** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LG00 ☐ ☐ ☐

- with rollers = **C**, without rollers = **S**
- standard carriage = **000**, special carriages = distance between centres **B2**
- aluminium = **L**, steel = **A**
- type of roller Pg.46

Ordering example

LG00 416 L 000 S

(416-type standard carriage in aluminium without rollers)

LG00 416 L 220 S

(416-type distance between centres B2=220 special carriage, in aluminium without rollers)

INSTRUCTIONS TO ADJUST CLEARANCE ON THE CARRIAGES:

- fit and fasten the two concentric rollers marked with the letter **C**, *on one of the two carriage sliding sides (fig. 1).*
- fit the other two eccentric rollers marked with the letter **E**, *on the opposite side (fig. 1) and position them using an Allen wrench in the point with greatest clearance.*
- insert the guide in the carriage.
- adjust and tighten the two eccentric rollers **E** *(fig.2) to give the correct pre-load (fig. 3).*
ATTENTION: *always fit the rollers in pairs as shown in the figure; do not pre-load the eccentric rollers excessively so as to prevent premature wear of the bars and damaging the rollers.*

Fig. 1

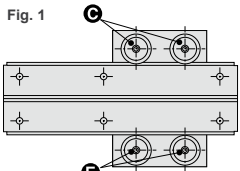


Fig. 2

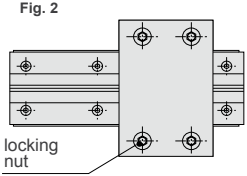
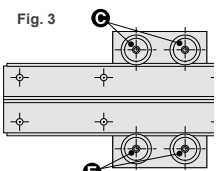
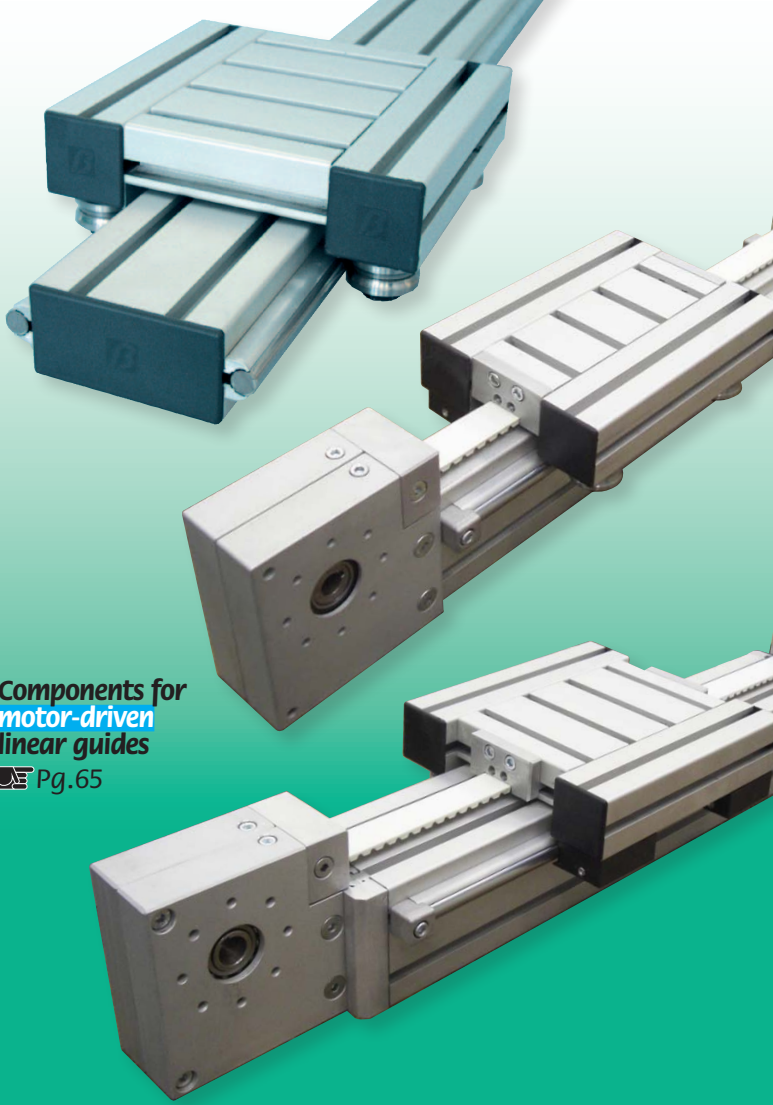


Fig. 3





Components for *motor-driven* linear guides

Pg.65

Components for DIY construction of Ø 12 double linear guides

WARNINGS

The information contained in this catalogue is exclusively meant for component description purposes and shall not be understood as a statement made by Bett Sistemi regarding a specific characteristic of the component or its suitability for a specific use. The data provided **shall not relieve the customers from their responsibilities of evaluating, checking** and using the components. All information is based on the data available at the time of publishing and is not binding. Bett Sistemi shall not be held liable for any incomplete or wrong information, and for any damage which may arise in connection with such information. The products may be modified at any time without prior notice, **we therefore recommend that you always check the product updates at the website www.bettsistemi.com.**

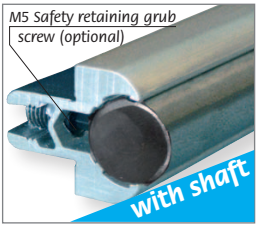
3837 Profile with Ø12 shaft kit

Use: *inserted in the groove of Robomec profiles for DIY construction of Ø12 linear guides.*

Material AFNOR 6060 *aluminium profile, Cf53 steel shaft (60-65 HRC).*

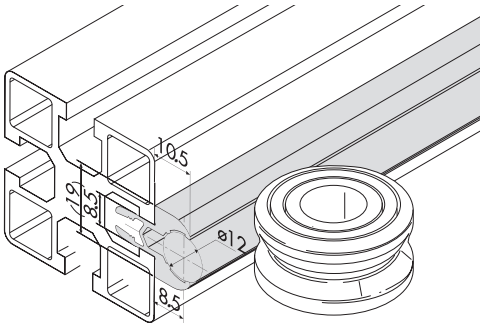
Shaft characteristics: *hardening depth: from 1 to 2.5 mm; straightness: 0.5/1000 mm; roughness: <0.02 µm.*

Standard pack: *6 bars.*



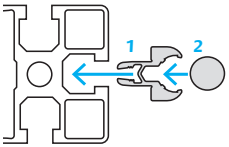
Combinations

Pg.71 Pg.58 Pg.59 Pg.60 Pg.61



Fitting sequence:

1. *insert the shaft-holder profile in the Robomec profile groove*
2. *insert the shaft in the shaft-holder profile.*



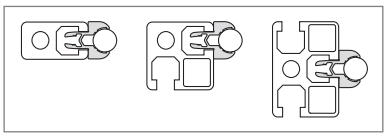
QUANTITY DISCOUNT

Bar 3 m	1+	6+	12+	24+
Bar 6 m	1+	3+	6+	12+
Discounts	-	-10%	-17%	on request

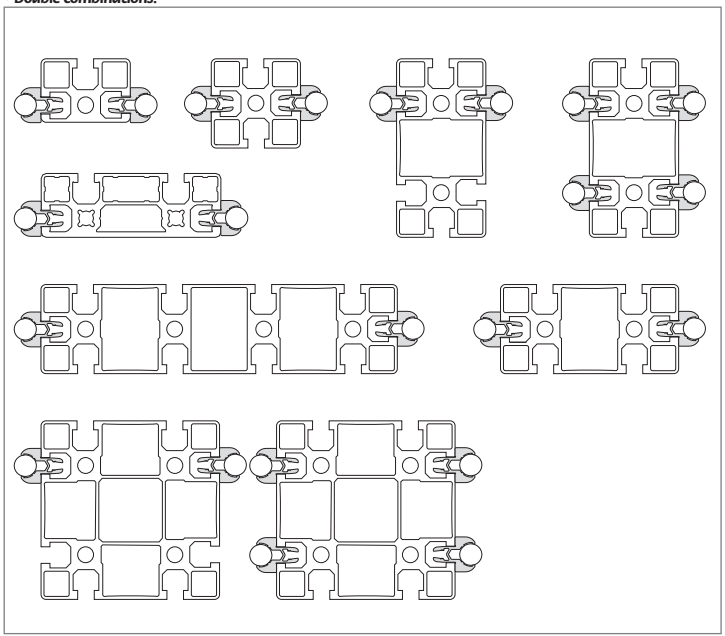
Order code	Length m	Finish profile	Finish shaft	Weight Kg/m	Stock	€ bar
692497	3	anodised 15 µm	ground	1.24	✓	58,89
692507	6	anodised 15 µm	ground	1.24	✓	109,92
692517	3	anodised 15 µm	chrome-plated and ground	1.24	✓	77,34
692527	6	anodised 15 µm	chrome-plated and ground	1.24	✓	140,82

Fitting of part. 3837
combinations with Robomec profiles

• *Single combinations:*

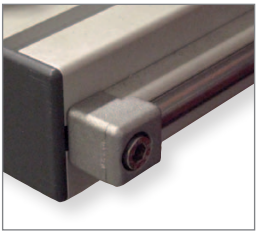


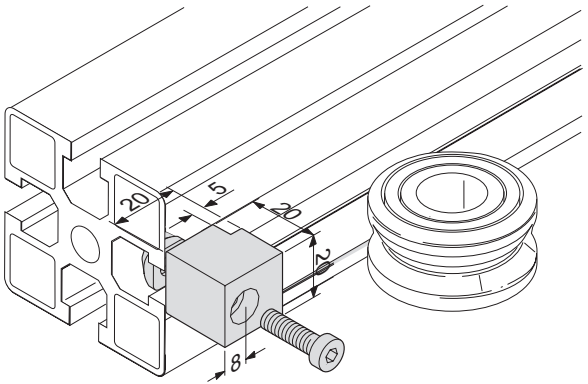
• *Double combinations:*



2160 Guide profile stopper block

Use: to block shaft-holder profile part. 2130.
Material 1 aluminium block, 1 M6x25 UNI 5931 (ISO 4017) screw and 1 galvanised steel M6 square nut.
Standard pack: 32 pieces.





QUANTITY DISCOUNT

Piece	1+	16+	32+	64+
Discounts	-	-10%	-17%	on request

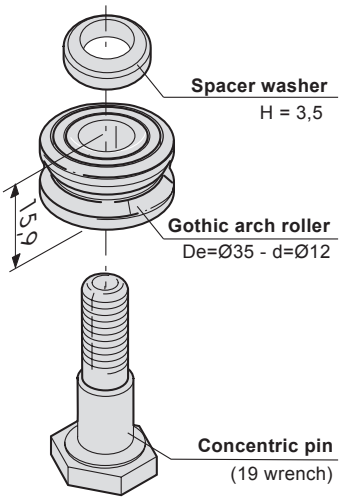
Order code	Finish	Weight g	Stock	€ piece
699033	sand-blasted	24	✓	4,36

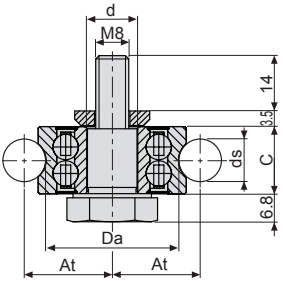
BETTI SISTEMI

Original β COMPONENTS

2190 Concentric roller kit with pin

Use: to construct sliding carriages.
Material pin and spacer washer in burnished steel, grooved roller in steel.
Standard pack: 16 pieces.





QUANTITY DISCOUNT

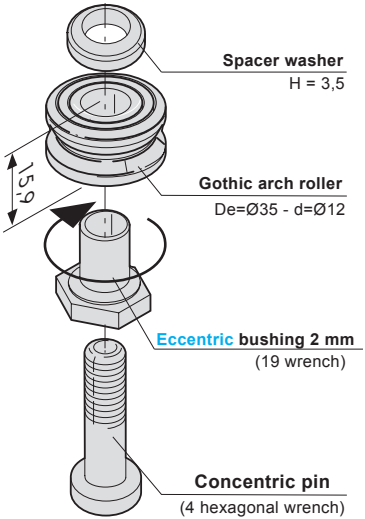
Piece	1+	8+	16+	32+
Discounts	-	-10%	-17%	on request

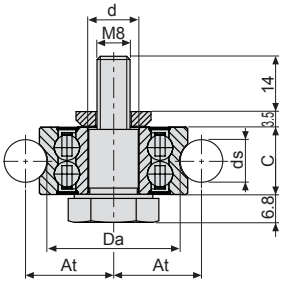
Order code	C	d	ds	At	Da	Load coefficient Static (N)	Load coefficient Dynamic (N)	Weight g	Stock	€ piece
608974	15.9	12	12	21.75	33.1	6000	10500	110	✓	14,19

Eccentric roller kit with pin

2191

Use: to construct sliding carriages.
Material pin, eccentric bushing (eccentricity 2 mm) and spacer washer in burnished steel, grooved roller in steel.
Standard pack: 16 pieces.





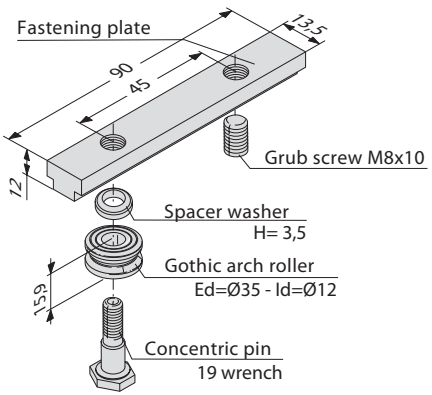
QUANTITY DISCOUNT

Piece	1+	8+	16+	32+
Discounts	-	-10%	-17%	on request

Order code	C	d	ds	At	Da	Load coefficient Static (N)	Load coefficient Dynamic (N)	Weight g	Stock	€ piece
608984	15.9	12	12	21.75	33.1	6000	10500	108	✓	16,37

2132 Concentric AG roller kit
for Robomec groove

Use: *to construct sliding carriages.*
Material *fastening plate and grub screw in galvanised steel, pin and spacer washer in burnished steel, grooved roller in steel.*
Standard pack: *2 pieces.*



QUANTITY DISCOUNT

Piece	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

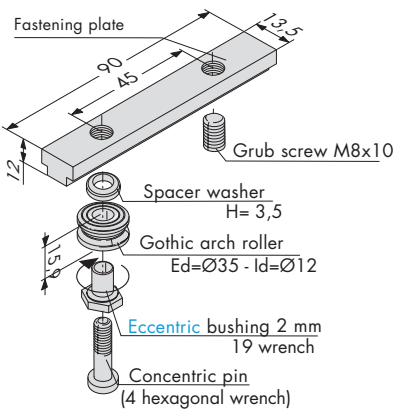
Order code	Load coefficient		Weight	Stock	€
	Static (N)	Dynamic (N)	g		piece
696873	6000	10500	198	✓	17,72

■ **Products not in stock** *minimum order: 2 pieces, delivery in 5 days.*

Eccentric AG roller kit 2133

for Robomec groove

Use: *to construct sliding carriages.*
Material *fastening plate and grub screw in galvanised steel, pin, eccentric bushing (eccentricity 2 mm) and spacer washer in burnished steel, grooved roller in steel.*
Standard pack: *2 pieces.*



QUANTITY DISCOUNT

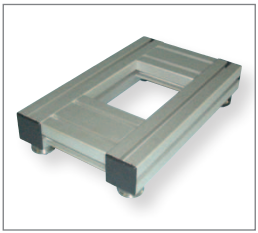
Piece	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

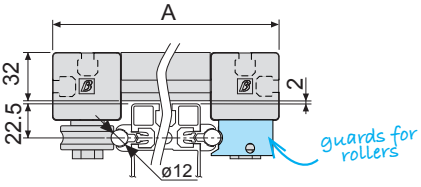
Order code	Load coefficient		Weight	Stock	€
	Static (N)	Dynamic (N)	g		piece
696883	6000	10500	205	✓	19,89

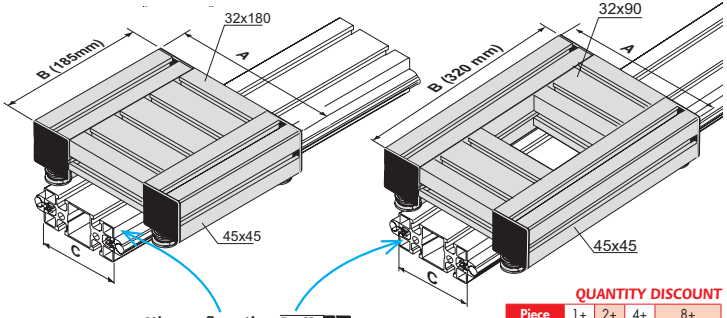
■ ***Products not in stock*** *minimum order: 2 pieces, delivery in 5 days.*

2134 Profile carriage

Use: for Ø12 guides.
Material anodised aluminium profiles, 4 ABS end caps, 2 eccentric roller kits, 2 concentric roller kits, **4 guards for rollers** (see table)
Standard pack: 1 piece.







Other configurations **Pg.63**

QUANTITY DISCOUNT

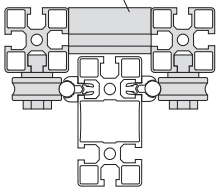
Piece	1+	2+	4+	8+
Discounts	-	-10%	-17%	on request

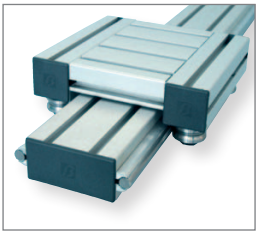
Order code	A mm	B mm	C mm	Version	Carriage finish	Weight Kg	Stock	€ piece
696893	150.5	185	45	without roller guards	anodised	2.53	▪	176,65
692537	150.5	185	45	with roller guards	anodised	2.63	▪	261,65
696903	195.5	185	90	without roller guards	anodised	3.03	▪	181,12
692547	195.5	185	90	with roller guards	anodised	3.13	▪	266,12
673674	195.5	320	90	without roller guards	anodised	2.60	▪	193,71
692557	195.5	320	90	with roller guards	anodised	2.70	▪	278,71
696913	285.5	185	180	without roller guards	anodised	5.00	▪	190,08
692567	285.5	185	180	with roller guards	anodised	5.10	▪	275,08
Customisations	B on request						▪	

▪ **Products not in stock** minimum order: 1 piece, delivery in 10 days.

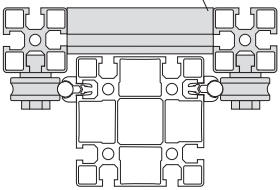
Double guide system
on Robomec profiles

Carriage
Code 696893

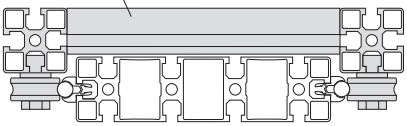


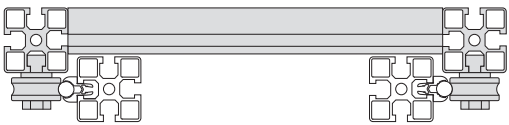


Carriage
Code 696903-673674

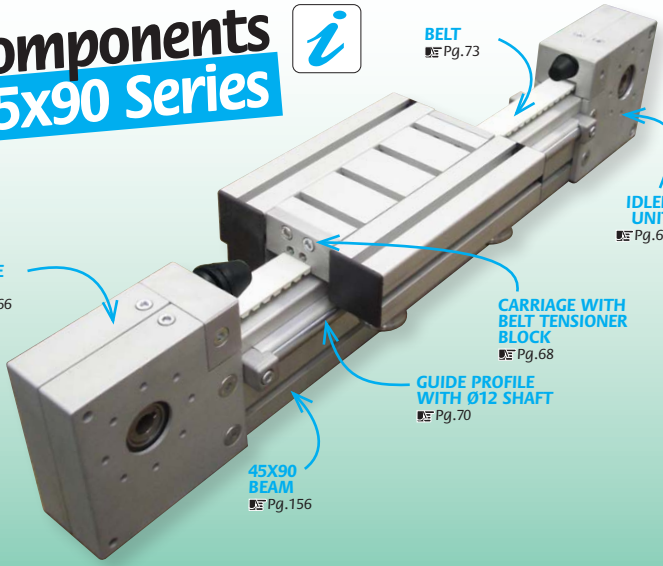


Carriage
Code 696913

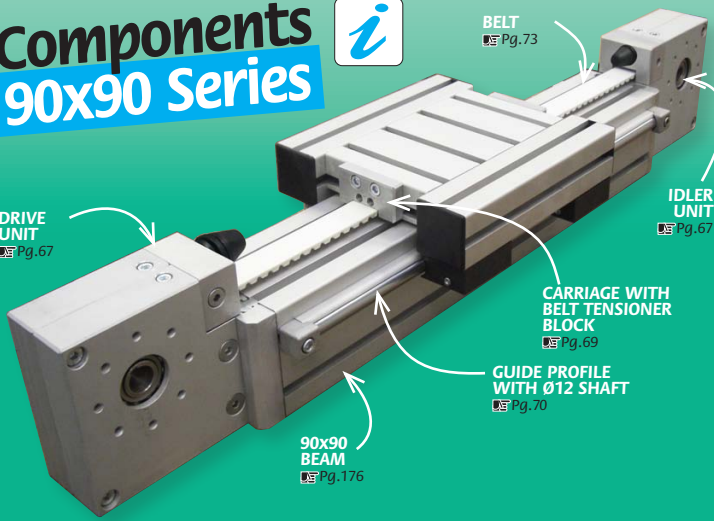




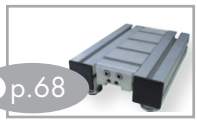
Components 45x90 Series

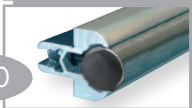


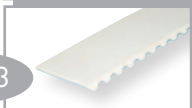
Components 90x90 Series

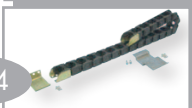


Components for DIY construction of Ø12 motor-driven linear guides









WARNINGS

4153 Head for guides 45x90 Series

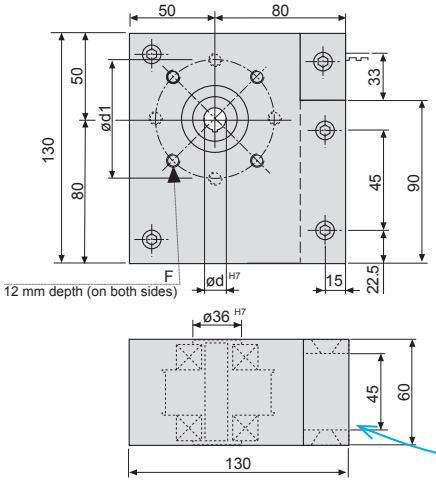
Use: *to motorise the linear guide with a 45x90 profile.*

State of supply *head complete with 4 M8X20 UNI 5933 (ISO 10642) screws and 4 M8 rectangular nuts to fasten to the beam, end-stop buffer.*

Material *aluminium head, steel pulley, galvanised steel nuts and bolts, rubber end-stop buffer.*

Technical characteristics: *1 turn of pulley = 200 mm.*

Standard pack: *1 piece.*



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	d mm	d1 mm	F	Compatible gearmotor	Compatible belt	Finish	Weight Kg	Stock	€ piece
691937	14	68	8xM6	Bonf.MVF/30	692072 (AT 10/25)	anodised	2.2	▪	182,85
691947	18	68	8xM6	Bonf.MVF/44*	692072 (AT 10/25)	anodised	2.2	▪	192,85
691957	19	68	8xM6		692072 (AT 10/25)	anodised	2.2	▪	192,85

*Fit Bonf.MVF/44 B with adapter flange.

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Head for guides 90x90 Series

4154

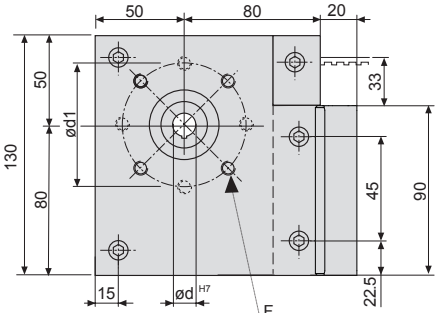
Use: to motorise the linear guide with a 90x90 profile.

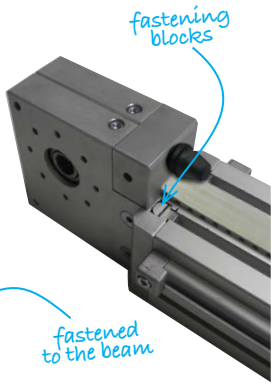
State of supply head complete with 4 M8 fastening connectors to fasten to the beam, end-stop buffer.

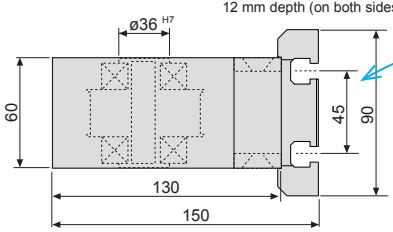
Material aluminium head, steel pulley, galvanised steel nuts and bolts, rubber end-stop buffer.

Technical characteristics: 1 turn of pulley = 200 mm.

Standard pack: 1 piece.







QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	d mm	d1 mm	F	Compatible gearmotor	Compatible belt	Finish	Weight Kg	Stock	€ piece
691967	14	68	8xM6	Bonf.MVF/30	692072 (AT 10/25)	anodised	2.2	■	232,85
691977	18	68	8xM6	Bonf.MVF/44*	692072 (AT 10/25)	anodised	2.2	■	242,85
691987	19	68	8xM6		692072 (AT 10/25)	anodised	2.2	■	242,85

*Fit Bonf.MVF/44 B with adapter flange.

■ ***Products not in stock*** *minimum order: 1 piece, delivery in 10 days.*

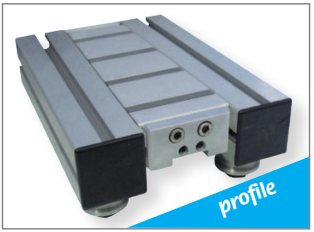
3815 Carriage for guides 45x90 Series with belt tensioner blocks

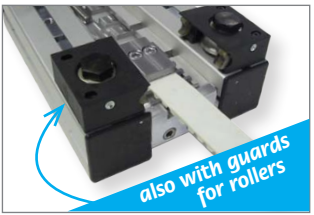
Use: to fasten components that are to be moved (when the guide is to remain fixed and the carriage made to slide) or to fasten the guide to a structure (when the carriage is fixed and the guide is made to slide).

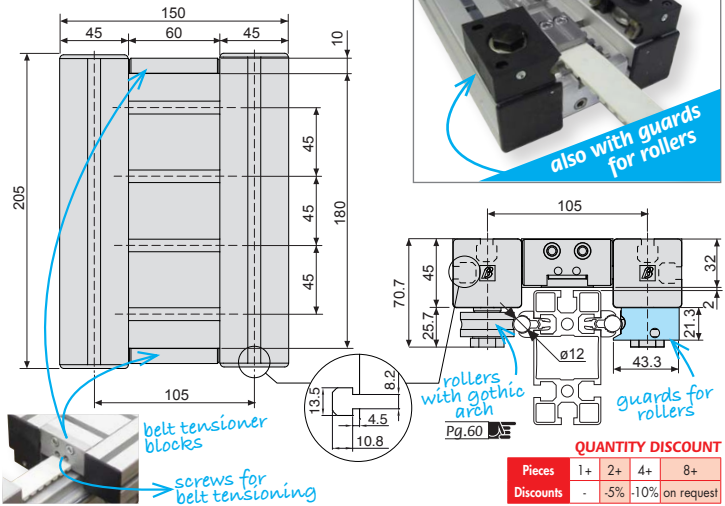
State of supply carriage complete with 4 end caps, 2 eccentric roller kits, 2 concentric roller kits, **4 guards for rollers** (see table), 2 belt tensioner blocks.

Material aluminium profile carriage, ABS end caps, steel rollers, guards for rollers (on request, see table) in ABS, aluminium belt tensioner blocks, galvanised steel nuts and bolts.

Standard pack: 1 piece.







QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	-5%	-10%	on request

Order code	Version	Carriage finish	Weight Kg	Stock	€ piece
621278	without roller guards	anodised		■	342,00
621268	with roller guards	anodised		■	414,00

■ **Products not in stock** *minimum order: 1 piece, delivery in 20 days.*

Carriage for guides 90x90 Series 3816

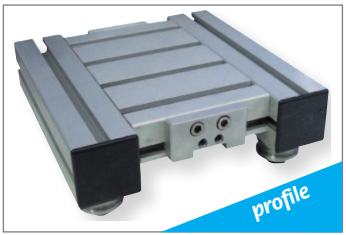
with belt tensioner blocks

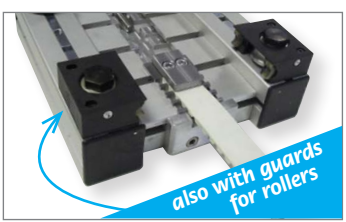
Use: *to fasten components that are to be moved (when the guide is to remain fixed and the carriage made to slide) or to fasten the guide to a structure (when the carriage is fixed and the guide is made to slide).*

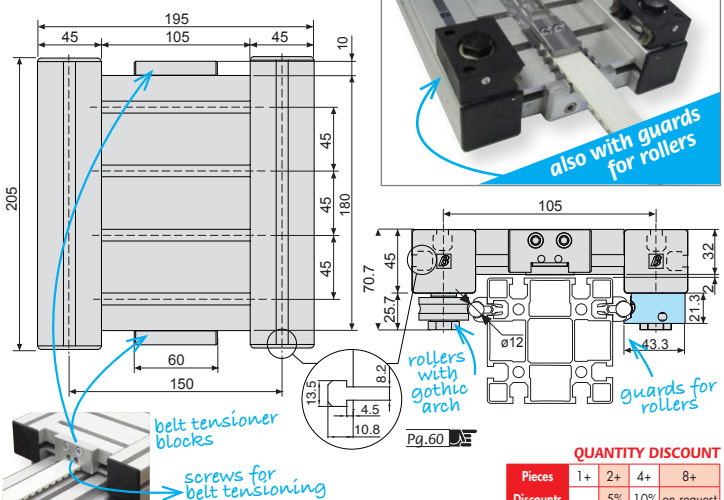
State of supply *carriage complete with 4 end caps, 2 eccentric roller kits, 2 concentric roller kits,* ***4 guards for rollers*** *(see table), 2 belt tensioner blocks.*

Material *aluminium profile carriage, ABS end caps, steel rollers, guards for rollers (on request, see table) in ABS, aluminium belt tensioner blocks, galvanised steel nuts and bolts.*

Standard pack: *1 piece.*







Pg.60

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	-5%	-10%	on request

Order code	Version	Carriage finish	Weight Kg	Stock	€ piece
621298	without roller guards	anodised		■	342,00
621288	with roller guards	anodised		■	414,00

■ **Products not in stock** *minimum order: 1 piece, delivery in 20 days.*

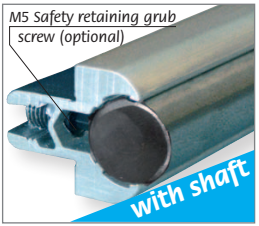
3837 Profile with Ø12 shaft kit

Use: *inserted in the groove of Robomec profiles for DIY construction of Ø12 linear guides.*

Material AFNOR 6060 *aluminium profile, Cf53 steel shaft (60-65 HRC).*

Shaft characteristics: *hardening depth: from 1 to 2.5 mm; straightness: 0.5/1000 mm; roughness: <0.02 µm.*

Standard pack: *6 bars.*



Combinations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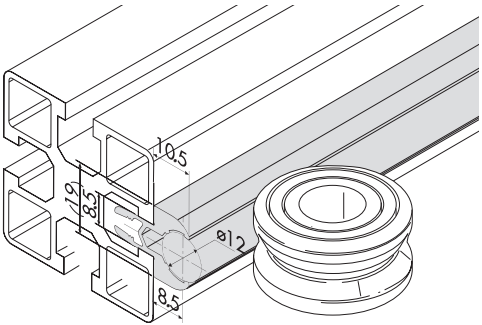
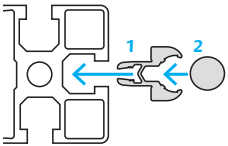


Fitting sequence:

1. *insert the shaft-holder profile in the Robomec profile groove*
2. *insert the shaft in the shaft-holder profile.*



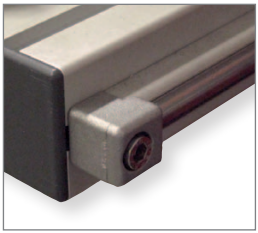
QUANTITY DISCOUNT

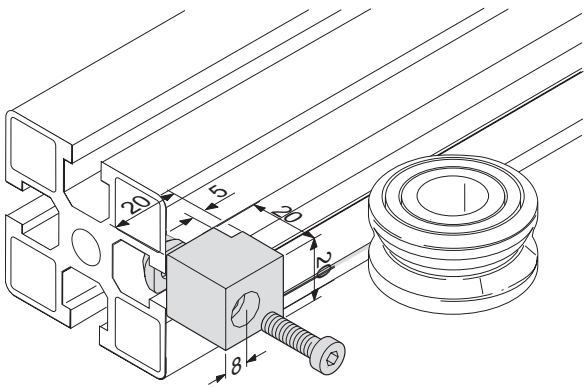
Bar 3 m	1+	6+	12+	24+
Bar 6 m	1+	3+	6+	12+
Discounts	-	-10%	-17%	on request

Order code	Length m	Finish profile	Finish shaft	Weight Kg/m	Stock	€ bar
692497	3	anodised 15 µm	ground	1.24	✓	58,89
692507	6	anodised 15 µm	ground	1.24	✓	109,92
692517	3	anodised 15 µm	chrome-plated and ground	1.24	✓	77,34
692527	6	anodised 15 µm	chrome-plated and ground	1.24	✓	140,82

Guide profile stopper block 2160

Use: *to block the profile with shaft part. 2130.*
Material *1 aluminium block, 1 M6x25 UNI 5931 (ISO 4017) screw and 1 galvanised steel M6 square nut.*
Standard pack: *32 pieces.*





QUANTITY DISCOUNT

Piece	1+	16+	32+	64+
Discounts	-	-10%	-17%	on request

Order code	Finish	Weight g	Stock	€ piece
699033	sand-blasted	24	✓	4,36

BETT SISTEMI

Original COMPONENTS

Components for DIY construction of toothed belt synchronous conveying guides

Belt for motor-drive guide

1964

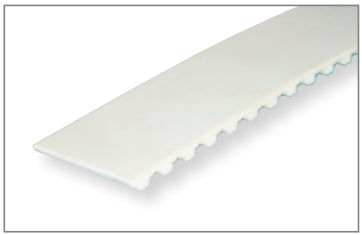
Use: to motorise the linear guide.

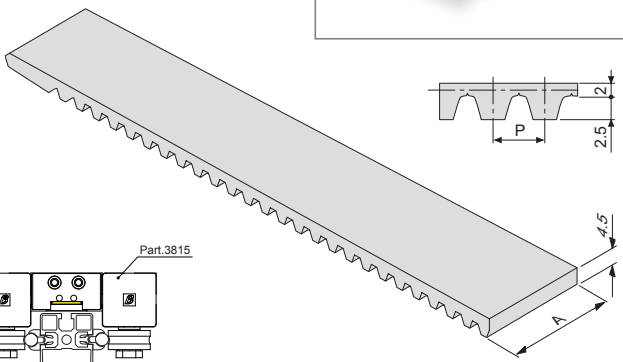
Material polyurethane with reinforced steel cables.

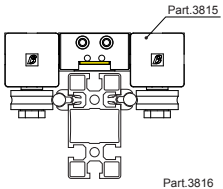
Maintenance: it is advisable to replace the belt every 3 years (when applied to linear guides).

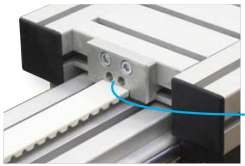
Characteristics: temperature limits: from -5° to +70°C; hardness characteristics: 92 shore A.

Standard pack: 20 m roll.









QUANTITY DISCOUNT

Metres	1+	10+	20+	40+
Discounts	-	5%	10%	on request

Order code	A mm	pitch P mm	Max tension traction	Type of belt	Weight Kg/m	Stock	€ m
692072	25	10	3660	AT 10/25	0.14	■	33,05

■ **Products not in stock** *minimum order: 5 m, delivery in 10 days.*

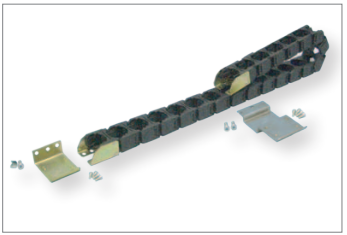
2969 ➔ Cable holder chain kit with long support

Use: *for the safe passage of electric cables along the linear guide.*

Material *chain links in glass fibre reinforced technopolymer; galvanised steel couplings; stainless steel brackets; galvanised steel nuts and bolts.*

State of supply: *cable holder chain of required length; 2 plates (to fasten the chain to the brackets) with 8 screws to fasten the chain; 1 bracket (to fasten to the carriage) and 1 bracket (to fasten to the guide) with 6 M8x16 DIN7984 screws and 6 M8 square nuts with spring.*

Standard pack: *1 piece.*



Mechanical characteristics

- *deformation resistance: 190 N/mm2*
- *deformation module: 10000 N/mm2*
- *expansion of rupture: 5%*
- *impact resistance: 45 KJ/m*
- *coefficient of friction: 0.3*

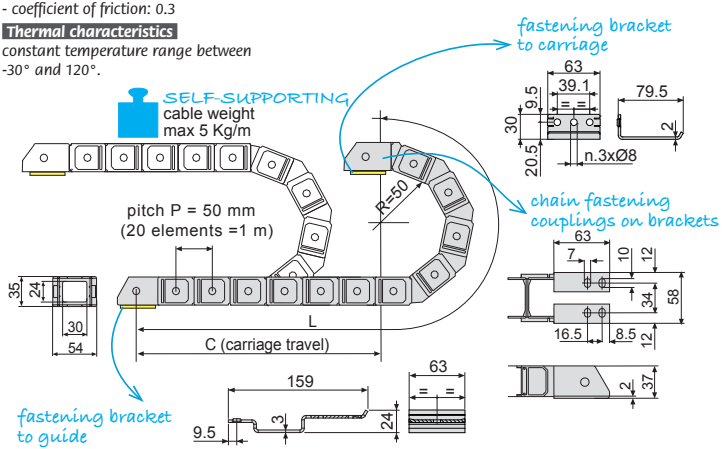
Thermal characteristics

constant temperature range between -30° and 120°.

Combinations


Pg.77


Pg.76



Formula to determine the length of the chain **L = C + (3.14 x R) + (2 x P).**

Calculation of n. of chain links **n = L/P** *(rounded to the next whole number).*

Once the length of the chain is determined, as pitch is P=50 mm, the chain is provided with a number of links that rounds up the value calculated using the above formula.

If for example, a chain length of **L=1025 mm** *corresponding to* **20.5** *links is calculated, the chain will be supplied with* **21** *links corresponding to a length of* **L=1050.**

Cable holder chain kit with long support

2969

QUANTITY DISCOUNT

Pieces	1+	4+
Discounts	-	on request

Order code		L mm	C mm	Weight Kg	Stock	€ piece
2969	L 0500	500	230	0.3	■	103,20
2969	L 1000	1000	730	0.6	■	137,68
2969	L 1500	1500	1230	0.9	■	153,90
2969	L 2000	2000	1730	1.2	■	180,88
2969	L 2500	2500	2230	1.5	■	204,58
2969	L 3000	3000	2730	1.8	■	231,55
Customisations L and C on request.					■	

■ **Products not in stock** minimum order: 1 piece, delivery in 15 days.

To order other customised measurements, use the order code shown below:

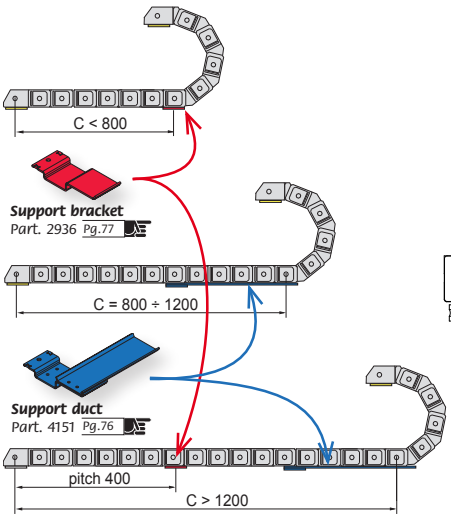
Order code

2969 L ____ → length **L** in mm

Example of a cable holder chain L = 4000 mm

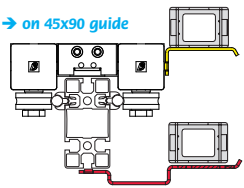
2969 L 4000

Guide to choosing supports for the cable holder chain

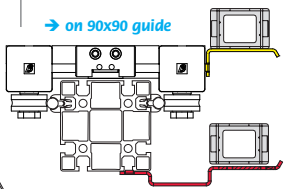


Fitting examples

→ on 45x90 guide



→ on 90x90 guide



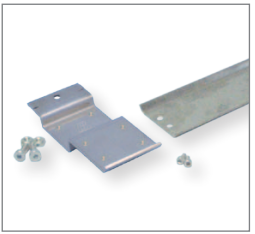
4151 Support duct for cable holder chain

Use: *as a support for cable holder chains Part. 2969 on guides whose travel exceeds 800 mm, to be fastened at the end of the guide (opposite side to the chain coupling).*

Material *stainless steel duct and bracket, galvanised steel nuts and bolts.*

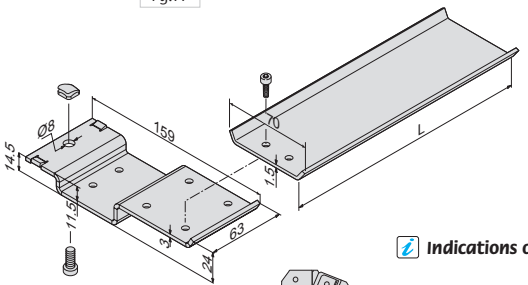
State of supply *1 bracket and 1 support steel plate, 1 M8x16 DIN7984 screw and 1 M8 square nut with spring to fasten to the profile groove, 2 screws to fasten the steel plate to the bracket.*

Standard pack: *1 piece.*

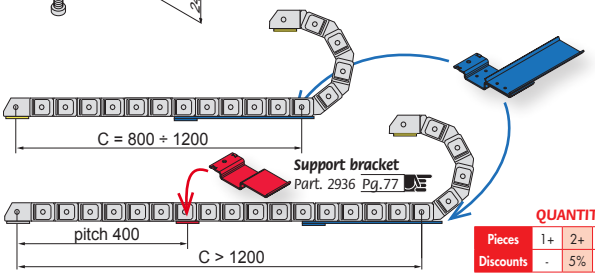


Combinations


Pg.77



Indications of use



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

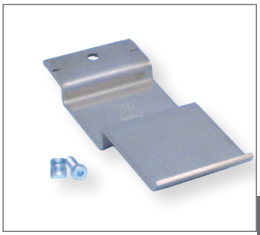
Order code							L mm	Finish	Weight g	Stock	€ piece
4151	L	0	3	5	0		350	AISI304 stainless steel	740	■	78,42
Customisations L on request (max 3000).										■	

■ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Support bracket for cable holder chain

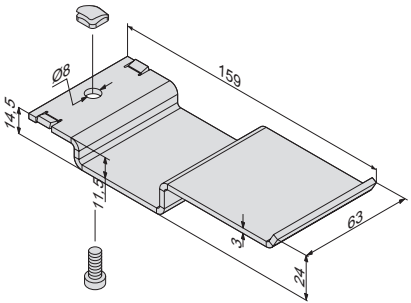
2936

Use: *as a support for cable holder chains Part. 2969 on guides whose travel is less than 800 mm, or together with the support duct Part. 4151 on guides whose travel exceeds 1200 mm (every 400 mm).*
Material *stainless steel bracket, galvanised steel nuts and bolts.*
State of supply *complete with 1 M8x16 DIN7984 screw and 1 M8 square nut with spring to fasten to the profile groove.*
Standard pack: *3 pieces.*

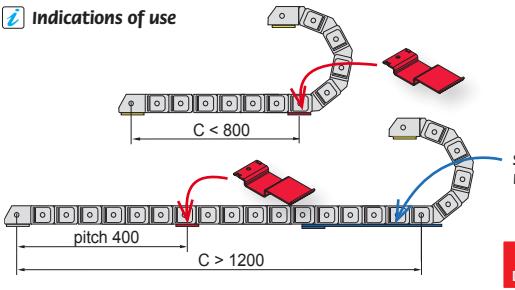


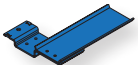
Combinations

Pg.76



Indications of use



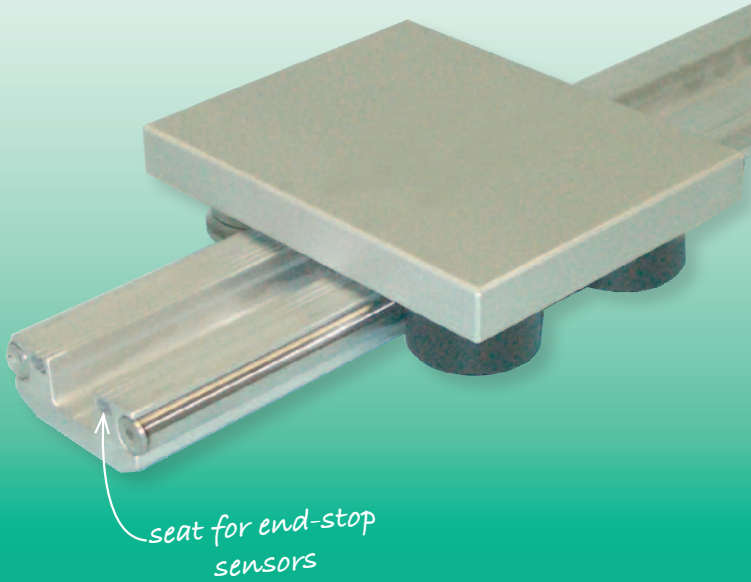


Support duct
Part. 4151 Pg.76

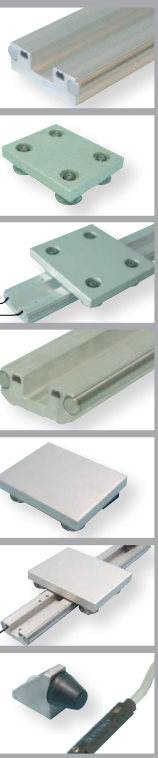
QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code		Finish	Weight g	Stock	€ piece
620498		AISI304 stainless steel	275	✓	24,32


seat for end-stop
sensors

Components for DIY construction of 10-Ø12 double linear guides



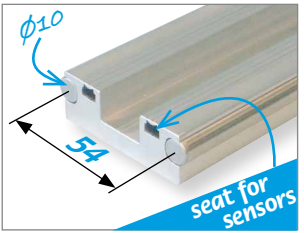
WARNINGS

The information contained in this catalogue is exclusively meant for component description purposes and shall not be understood as a statement made by Bett Sistemi regarding a specific characteristic of the component or its suitability for a specific use. The data provided **shall not relieve the customers from their responsibilities of evaluating, checking** and using the components. All information is based on the data available at the time of publishing and is not binding. Bett Sistemi shall not be held liable for any incomplete or wrong information, and for any damage which may arise in connection with such information. The products may be modified at any time without prior notice, **we therefore recommend that you always check the product updates at the website www.bettsistemi.com.**

LG0D → D10 Double guide

set-up for end-stop sensors

Use: the guide is ready for installation; it only needs to be drilled to be fastened to the structure using the relative indent in the centre of the profile. It does not require lubrication or further maintenance.
Material sliding shafts in hardened, chrome-plated and ground Cf53 steel or hardened and ground AISI 431 stainless steel; aluminium profile.
Characteristics: tolerance on diameter h7.
parallelism tolerance of the steel bars: 0.03 mm/m.
tolerance on cut: ±1 mm.
Standard pack: 1 piece.



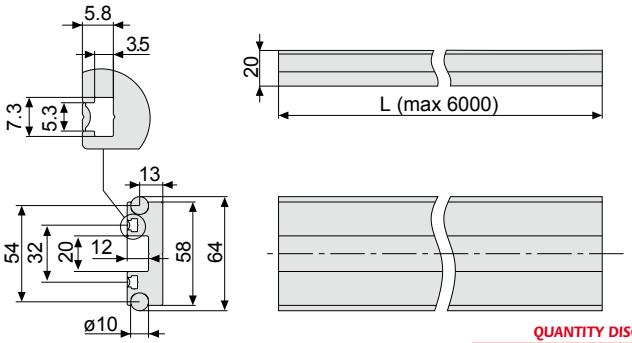
Combinations


Pg.82

Pg.84

Pg.40

Pg.42



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	L mm	Material of shafts	Profile finish	Weight Kg	Stock	€ piece
LG0D D10 A 0500	500	steel	anodised 15 µm	1.55	■	47,38
LG0D D10 A 1000	1000	steel	anodised 15 µm	3.10	■	94,77
LG0D D10 A 1500	1500	steel	anodised 15 µm	4.65	■	142,15
LG0D D10 A 2000	2000	steel	anodised 15 µm	6.20	■	189,54
LG0D D10 A 2500	2500	steel	anodised 15 µm	7.75	■	236,92
LG0D D10 A 3000	3000	steel	anodised 15 µm	9.30	■	284,31

■ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

D10 Double guide

LG0D

set-up for end-stop sensors

Customisations additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow. To order other customised measurements, use the order code shown below:

Order code

LG0D D10 [ ][ ][ ][ ][ ] → Length **L** in mm (max 6000)

Steel sliding shaft = **A**
Stainless steel sliding shaft = **I**

Ordering example

LG0D D10 A 1 2 5 0
(Ø10 steel guide with length L = 1250 mm)

INSTRUCTIONS TO FIT THE END-STOP SENSORS

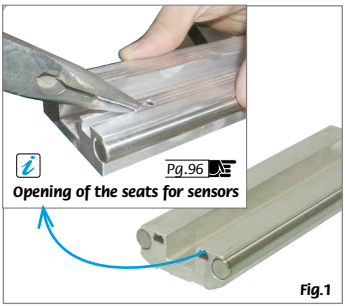


Fig.1

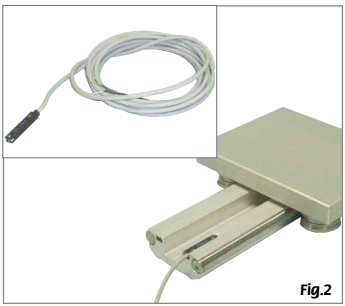


Fig.2

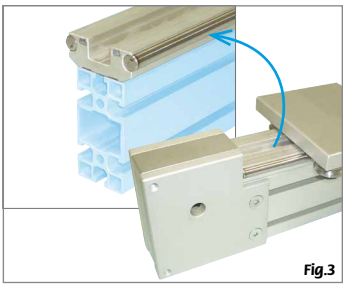


Fig.3

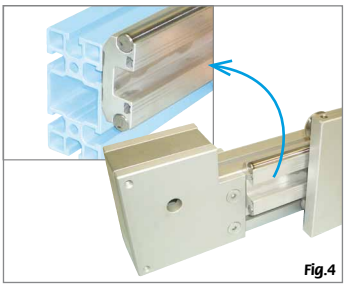


Fig.4

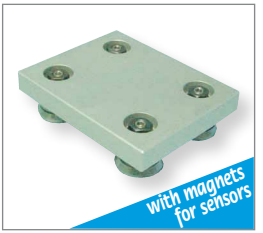
Fig.1: New aluminium profile with ø12 mm hardened and ground steel bars, tear-off grooves with set-up for end-stop sensors.
Fig.2: Fitting the end-stop sensor in the relative groove. The sensor is supplied with a 2.5 m cable.
Fig.3: If the guide is to be fitted on the upper side of the 45x90 profile, use the sensors to prevent accidental impact of the carriage against the heads.
Fig.4: The presence of the sensor in a side fitting prevents the carriage detaching from its guide.

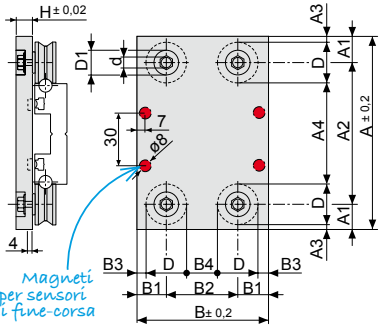
LG01 ➔ Carriage
for D10 double guides

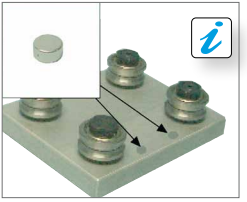
Use: for Ø10 double guides.
Material anodised aluminium carriage, steel rollers.
State of supply the carriages can be supplied with or without rollers. The complete versions are supplied with disassembled rollers for any subsequent working, 4 button magnets.
Standard pack: 1 piece.

Combinations

Pg.95







If the 4 button magnets inserted in the lower part at the sides of the carriage, are combined with the end-stop sensors on the guide, they protect the system against impact with the heads, due to a malfunction in the electronic control unit.

● = Zone in cui non è possibile eseguire forature per staffaggi

Dimensions of the STANDARD carriages														Weight	Type of
A	B	H	A1	A2	A3*	A4*	B1	B2	B3*	B4*	D	d	D1	Kg	roller
120	80	10	18.5	83	7.5	61	19.5	41	8.5	19	22	6	16	0.25	106
140	120	15	25	90	10	60	25	70	10	40	30	8	20	0.60	208
150	120	20	26	98	7	60	25	70	6	32	38	10	26	0.90	210

* Indicative values based on eccentric adjustment.

Carriage
for D10 double guides

LG01

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code					Type of roller	A	B	H	Rollers	Magnets	Material	Weight Kg	Stock	€ piece
LG01	106	L	000	C	106	120	80	10	yes	yes	aluminium	0.37	▪	168,55
LG01	106	L	000	S	106	120	80	10	no	yes	aluminium	0.25	▪	78,58
LG01	208	L	000	C	208	140	120	15	yes	yes	aluminium	0.88	▪	191,51
LG01	208	L	000	S	208	140	120	15	no	yes	aluminium	0.60	▪	87,42
LG01	210	L	000	C	210	150	120	20	yes	yes	aluminium	1.50	▪	214,58
LG01	210	L	000	S	210	150	120	20	no	yes	aluminium	0.90	▪	95,31

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LG01 ___ L 000

with rollers = **C**
without rollers = **S**

Type of roller Pg.40

Ordering example

LG01 208 L 000 S

Order example for 208-type standard carriage in aluminium without rollers.

INSTRUCTIONS TO ADJUST CLEARANCE ON THE CARRIAGES:

- fit and fasten the two concentric rollers marked with the letter **C**, *on one of the two carriage sliding sides (fig. 1).*
- fit the other two eccentric rollers marked with the letter **E**, *on the opposite side (fig. 1) and position them using an Allen wrench in the point with greatest clearance.*
- insert the guide in the carriage.
- adjust and tighten the two eccentric rollers **E** *(fig.2) to give the correct pre-load (fig. 3).*
ATTENTION: *always fit the rollers in pairs as shown in the figure; do not pre-load the eccentric rollers excessively so as to prevent premature wear of the bars and damaging the rollers.*

Fig. 1

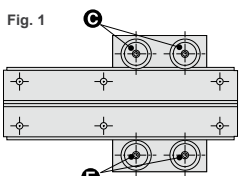


Fig. 2

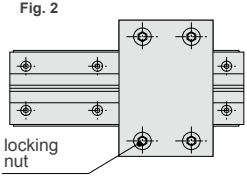
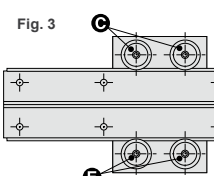
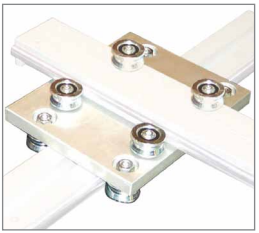


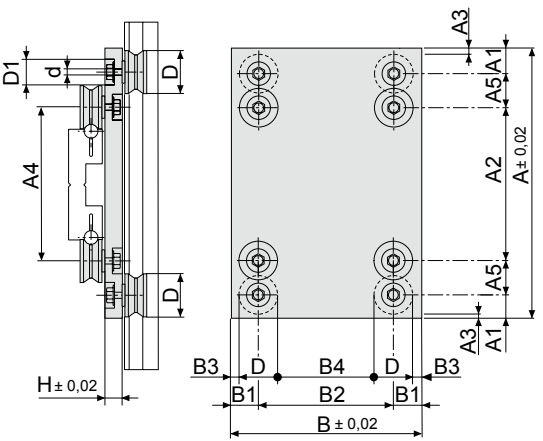
Fig. 3



LG0C➔ Cross carriage
for D10 double guides

Use: *allows the piece to be positioned parallel to the fitting plane to be connected and made to slide* ***on two axes****.*
Material *anodised aluminium carriage, steel rollers with stainless steel pin, galvanised steel nuts and bolts.*
Standard pack: *1 piece.*





Dimensions of the STANDARD carriages														Weight	Type of
A	B	H	A1	A2	A3*	A4*	B1	B2	B3*	B4*	D	d	D1	Kg	roller
165	120	10	18.5	83	7.5	161	18.5	83	8.5	61	22	6	16	0.50	106
200	140	15	25	90	10	60	25	90	10	60	30	8	20	1.00	208
220	150	20	25	98	5.5	59	26	98	6.5	59	39	10	26	1.70	210

* *Indicative values based on eccentric adjustment.*

Cross carriage
for D10 double guides

LG0C

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	Type of roller	A	B	H	For guides	Rollers	Material	Weight Kg	Stock	€ piece
LG0 C 106 L 000 S	106	165	120	10	D10	no	aluminium	0.50	■	82,05
LG0 C 106 L 000 C	106	165	120	10	D10	yes	aluminium	0.62	■	155,65
LG0 C 208 L 000 S	208	200	140	15	D10	no	aluminium	1.00	■	89,74
LG0 C 208 L 000 C	208	200	140	15	D10	yes	aluminium	1.28	■	188,72
LG0 C 210 L 000 S	210	220	150	20	D10	no	aluminium	1.70	■	106,66
LG0 C 210 L 000 C	210	220	150	20	D10	yes	aluminium	2.30	■	220,51

■ *Products not in stock minimum order: 1 piece, delivery in 10 days.*

Customisations additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.

To order other customised measurements, use the order code shown below:

Order code

LG0C [ ] L 000

with rollers = **C**
without rollers = **S**

Type of roller Pg.40

Ordering example

LG0C 208 L 000 S

(208-type standard carriage in aluminium without rollers)

INSTRUCTIONS TO ADJUST CLEARANCE ON THE CARRIAGES:

*- fit and fasten the two concentric rollers marked with the letter **C**, on one of the two carriage sliding sides (fig. 1).*
*- fit the other two eccentric rollers marked with the letter **E**, on the opposite side (fig. 1) and position them using an Allen wrench in the point with greatest clearance.*
- insert the guide in the carriage.
*- adjust and tighten the two eccentric rollers **E** (fig.2) to give the correct pre-load (fig. 3).*
***ATTENTION:** always fit the rollers in pairs as shown in the figure; do not pre-load the eccentric rollers excessively so as to prevent premature wear of the bars and damaging the rollers.*

Fig. 1

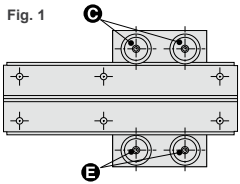


Fig. 2

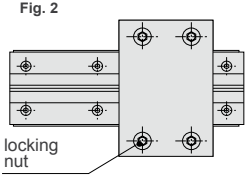
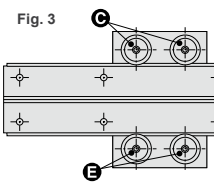


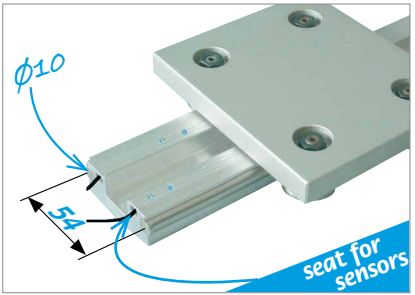
Fig. 3



LGAS → D10 Double guide

with carriage set-up for end-stop sensors

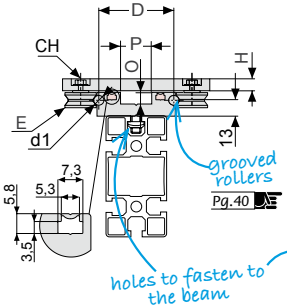
Use: simple and safe system to be used when the guide is to remain fixed and the roller-holder carriage made to slide or when the carriage is fixed and the guide is made to slide.
Material ground, hardened and chrome-plated (or AISI431 stainless steel) Cf53 steel sliding shafts, anodised aluminium carriage and profile, steel rollers.
Standard pack: 1 piece.

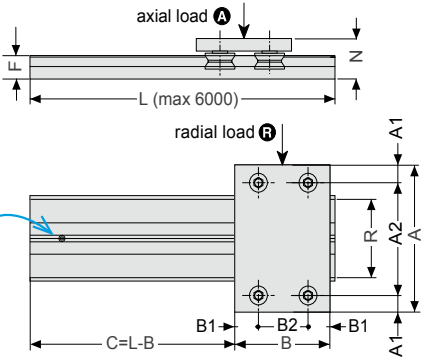


Combinations


Pg.95

Fitting the sensors Pg.96





Type of roller	d1 Ø	A mm	B mm	H mm	A1 mm	A2 mm	B1 mm	B2 mm	D mm	E wrench	F mm	N mm	CH wrench	P mm	O mm	R mm	A N	R N
106	10	120	80	10	18.5	83	19.5	41	54	2	20	30,5	10	20	25	58	800	400
208	10	140	120	15	25	90	25	70	54	3	20	37	13	20	25	58	1600	2000
210	10	150	120	20	26	98	25	70	54	5	20	44	17	20	25	58	2400	2600

D10 Double guide

with carriage set-up for end-stop sensors

LGAS

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	Type of roller	L mm	Material of sliding shafts	Weight Kg	Stock	€ piece
LGA S106A1000	106	1000	steel	3.5	▪	215,08
LGA S106A4000	106	4000	steel	12.8	▪	499,38
LGA S208A1000	208	1000	steel	4.0	▪	238,15
LGA S208A3000	208	3000	steel	10.2	▪	427,69
LGA S208A4000	208	4000	steel	14.3	▪	522,46
LGA S210A1000	210	1000	steel	4.6	▪	262,46
LGA S210A3000	210	3000	steel	10.8	▪	452,00
LGA S210A4000	210	4000	steel	14.9	▪	546,77

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LGA S [ ] [ ]

- *Length* **L** *in mm (max 6000)*
- *Chrome-plated steel sliding shaft =* **A**
  Stainless steel sliding shaft = **I**
- *Type of roller* Pg.40

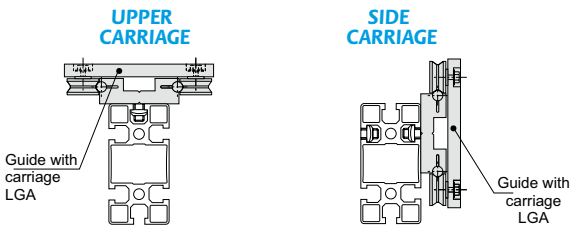
Ordering example

LGA S208A0500

Ordering example for 208-type linear guide, length L = 500 mm, steel shaft, with set-up for end-stop.

FITTING RECOMMENDATIONS

A thin groove in the centre of the profile indicates the axis where to drill for it to be anchored to the structure (it is recommended to drill every 500 mm; use M6 screws).



LG00 ➔ D12 Double guide

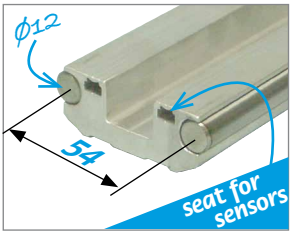
set-up for end-stop sensors

Use: *the guide is ready for installation; it only needs to be drilled to be fastened to the structure using the relative indent in the centre of the profile. It does not require lubrication or further maintenance.*

Material *Sliding shafts in hardened, chrome-plated and ground Cf53 steel or hardened and ground AISI 431 stainless steel; aluminium profile.*

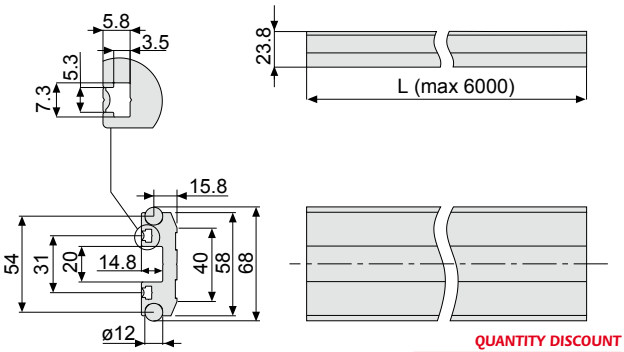
Characteristics: *tolerance on diameter h7; parallelism tolerance of the steel bars: 0.03 mm/m; tolerance on cut: ±1 mm.*

Standard pack: *1 piece.*



Combinations

Pg.90 Pg.58 Pg.59 Pg.95



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	L mm	Material of shafts	Profile finish	Weight Kg	Stock	€ piece
LG00 D12 A 1000	1000	steel	anodised 15 µm	3.8	■	164,26
LG00 D12 A 1500	1500	steel	anodised 15 µm	5.7	■	186,20
LG00 D12 A 2000	2000	steel	anodised 15 µm	7.6	■	217,58
LG00 D12 A 2500	2500	steel	anodised 15 µm	9.5	■	249,18
LG00 D12 A 3000	3000	steel	anodised 15 µm	11.4	■	281,12

■ **Products not in stock** *minimum order: 1 piece, delivery in 5 days.*

D12 Double guide

LG00

set-up for end-stop sensors

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow. To order other customised measurements, use the order code shown below:*

Order code

LG00 D12 [ ][ ][ ][ ][ ] → *Length* **L** *in mm (max 6000)*

Steel sliding shafts = **A**
Stainless steel sliding shafts = **I**

Ordering example

LG00 D12 A 1 2 5 0
(Ø12 steel guide with length L = 1250 mm)

INSTRUCTIONS TO FIT THE END-STOP SENSORS

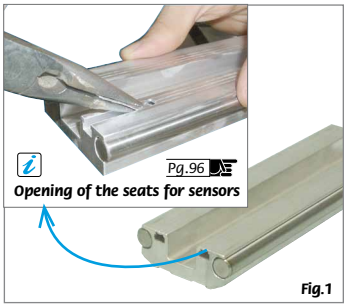


Fig.1

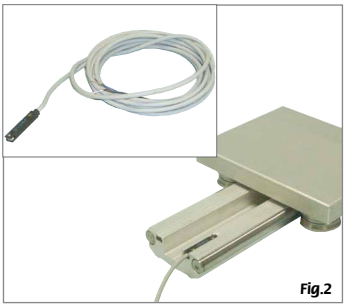


Fig.2

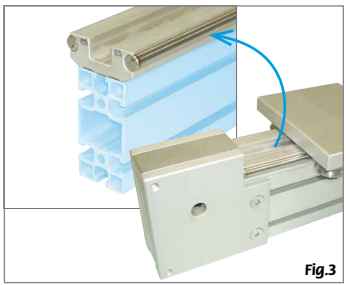


Fig.3

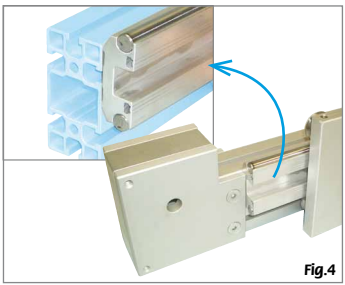


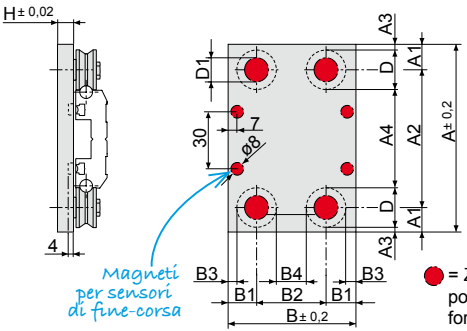
Fig.4

Fig.1: *New aluminium profile with ø12 mm hardened and ground steel bars, tear-off grooves with set-up for end-stop sensors.*
Fig.2: *Fitting the end-stop sensor in the relative groove. The sensor is supplied with a 2.5 m cable.*
Fig.3: *If the guide is to be fitted on the upper side of the 45x90 profile, use the sensors to prevent accidental impact of the carriage against the heads.*
Fig.4: *The presence of the sensor in a side fitting prevents the carriage detaching from its guide.*

LG00 Carriage for D12 double guides

Use: for Ø12 double guides.
Material anodised aluminium carriage, steel rollers.
State of supply the carriages can be supplied with or without rollers. The complete versions are supplied with disassembled rollers for any subsequent working, 4 button magnets.
Standard pack: 1 piece.

Combinations Pg.95



Dimensions of the STANDARD carriages												Weight	Type of
A	B	H	A1	A2	A3*	A4*	B1	B2	B3*	B4*	D	D1	Kg	roller
150	120	20	26.3	97.3	8.85	62.3	25	70	7.5	35	35	18	0.70	308

* *Indicative values based on eccentric adjustment.*

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	Type of roller	A	B	H	Rollers	Magnets	Material	Weight Kg	Stock	€ piece
LG00 308 L 000 S	308	150	120	20	no	yes	aluminium	0.7	✓	83,18
LG00 308 L 000 C	308	150	120	20	yes	yes	aluminium	1.1	✓	172,02

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

Carriage
for D12 double guides

LG00

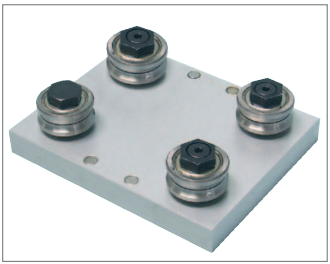


Fig.1: *The new 308-type carriage does not have spot-facings on the upper part, for the screws that fasten the rollers. The latter are fitted by tightening them on the lower side making it easier to clean the carriage. The pre-load is adjusted by acting on the two eccentric rollers, like for traditional carriages.*

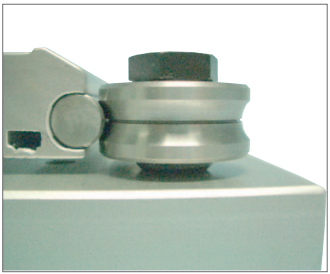


Fig.2: *The new rollers with a gothic arch profile guarantee wider contact surfaces than traditional rollers with a V-shaped profile. This reduces the contact pressures and increases the applicable loads, reliability and durability.*

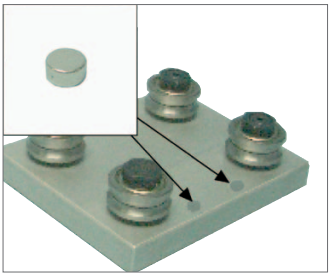
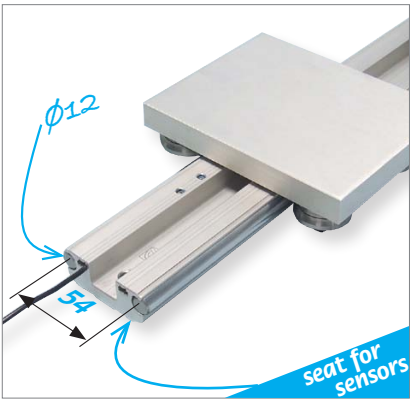


Fig.3: *If the 4 button magnets inserted in the lower part at the sides of the carriage, are combined with the end-stop sensors on the guide, they protect the system against impact with the heads, due to a malfunction in the electronic control unit.*

LGA → 12 Double guide

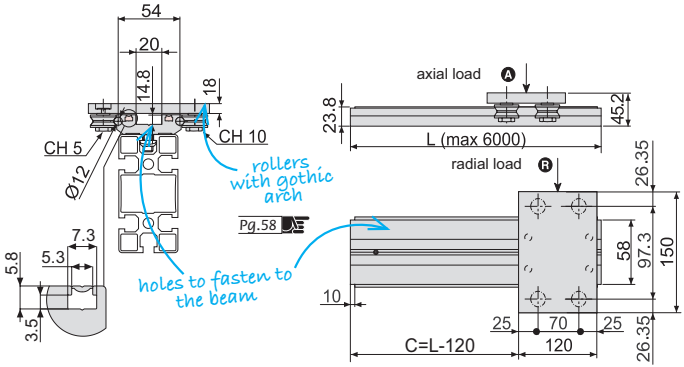
with carriage set-up for end-stop sensors

Use: simple and safe system to be used when the guide is to remain fixed and the roller-holder carriage made to slide or when the carriage is fixed and the guide is made to slide.
Material ground, hardened and chrome-plated steel h7 sliding shafts, anodised aluminium carriage and profile, steel rollers.
Standard pack: 1 piece.



Combinations

Fitting the sensors Pg.96



D12 Double guide with carriage set-up for end-stop sensors

LGA

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	Type of roller	L mm	Holes for sensors	Material of shafts	Weight Kg	Stock	€ piece
LGA S 308A 1000	308	1000	no	steel	4.9	▪	255,43
LGA S 308A 2000	308	2000	no	steel	8.7	▪	316,08
LGA S 308A 3000	308	3000	no	steel	12.5	▪	371,11
LGA S 308A 4000	308	4000	no	steel	16.3	▪	427,03
LGA S 308A 5000	308	5000	no	steel	20.1	▪	482,95
LGA S 308A 6000	308	6000	no	steel	23.9	▪	538,85

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LGA S ☐ ☐

- *length* **L** *in mm (max 6000)*
- *Chrome-plated steel sliding shafts =* **A**
  Stainless steel sliding shafts = **I**
- *type of roller* Pg.58

Ordering example

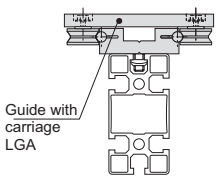
LGA S 308A 0500

Ordering example for 308-type linear guide, length L = 500 mm, steel shafts, with set-up for end-stop

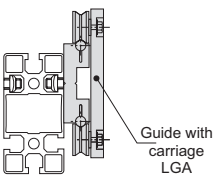
FITTING RECOMMENDATIONS

A thin groove in the centre of the profile indicates the axis where to drill for it to be anchored to the structure (it is recommended to drill every 500 mm; use M6 screws).

UPPER CARRIAGE

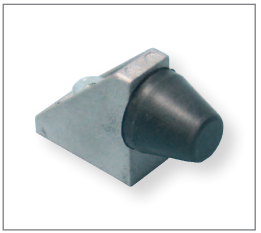


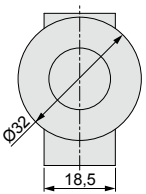
SIDE CARRIAGE

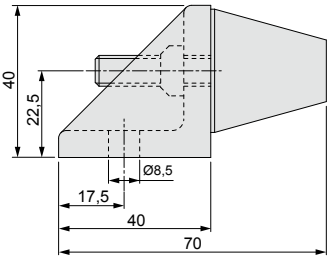


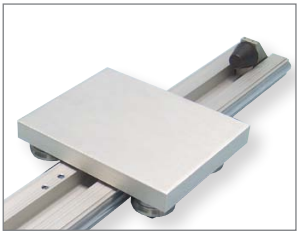
2712 End-stop buffer kit
for linear guides

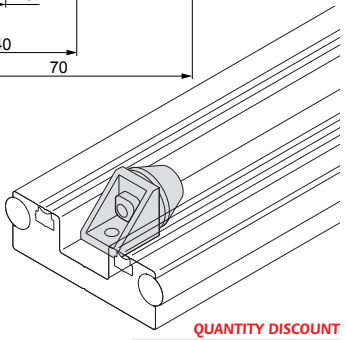
Use: *as a mechanical end-stop for D10, D12, D20, G20 linear guides.*
Material *aluminium angle, rubber buffer, 1 galvanised steel square nut.*
Standard pack: *1 piece.*











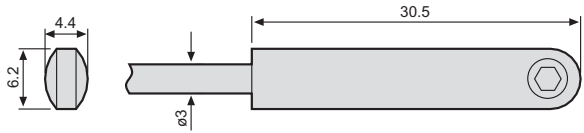
QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

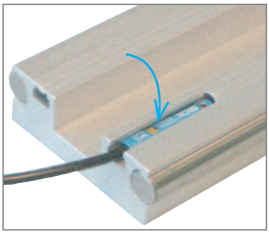
Order code	Finish	Weight g	Stock	€ piece
602095	sand-blasted	100	✓	4,98

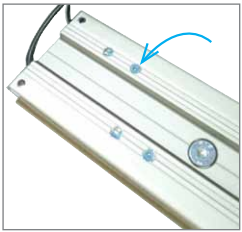
End-stop sensor

Use: *end-stop for D10 and D10 guides.*
Standard pack: *2 pcs.*
Characteristics: *operating voltage: AC/DC 10-30V.*
maximum drive current: 500 mA.
maximum drive power: 6 W.
operating temperature: -25 ÷75 °C.
cable: black three-pole.
conductor section: 0.14 mm.



Fitting the sensors Pg.96





QUANTITY DISCOUNT

Pieces	1+	2+	4+	6+
Discounts	-	5%	10%	on request

Order code	L cable mm	Type of contact	Weight g	Stock	€ piece
655514	2000	reed	30	✓	33,98
656764	5000	reed	75	▪	48,94

▪ ***Products not in stock*** *minimum order: 2 pieces, delivery in 10 days.*

Steps to open the seats for the sensors

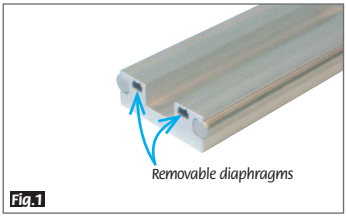


Fig. 1: the profile has two removable diaphragms with indents in the centre of the grooves for the sensors.

Fig. 2: mark the indents on the profile at about 30 mm from the end of the guide.

Fig. 3: use a punch to engrave the markings just made on the profile.

Fig. 4: Drill the profile using a ø5.25 bit right through the removable diaphragm.

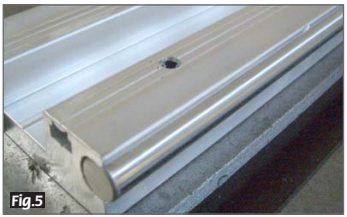


Fig. 5: Drilled profile in line with the marking.

Fig. 6: use flat pliers to remove the diaphragm up to the hole.

Steps to open the seats for the sensors

Fig. 7: *carefully remove the burrs using a flat file.*

Fig. 8: *Profile with open groove and ready for the sensor to be fitted.*

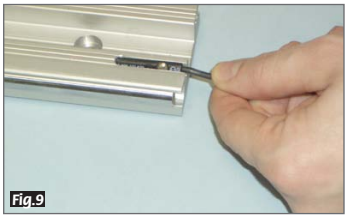


Fig. 9: *the sensor can be turned over inside the groove to be easily inserted.*

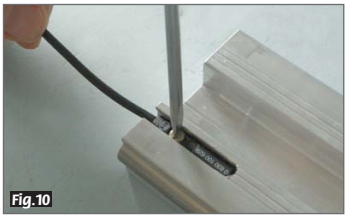


Fig.10: *place the sensor in its seat and block it with the relative screw.*

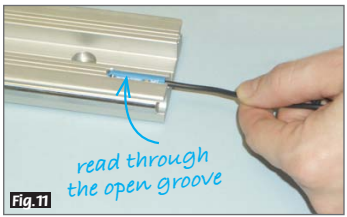


Fig.11: *the SICK sensor can also be turned over inside the groove.*

ATTENTION: *to avoid weakening the profile in the work areas of the carriage, only open the sensor grooves in line with the ends of the guide.*

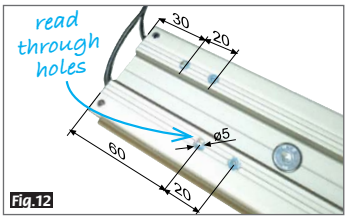
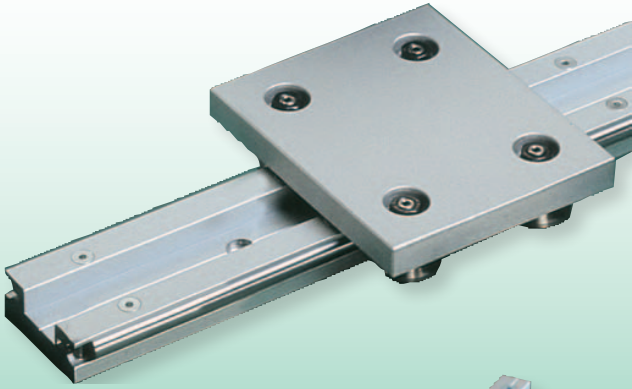


Fig.12: *alternatively, set-up for the sensors can be done by making 2 holes for each sensor, according to diagram in fig. 12, without having to remove the diaphragm.*



Components for DIY construction of Ø20 double linear guides

LG00 → D20 Double guide

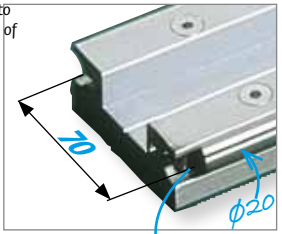
Use: the guide is ready for installation; it only needs to be drilled to be fastened to the structure using the relative indent in the centre of the profile. It does not require lubrication or further maintenance.

Material h6 sliding shafts in hardened, chrome-plated and ground steel or hardened and ground AISI 431 stainless steel; anodised aluminium profile.

Characteristics:

guide width tolerance: +0.2 / 0
parallelism tolerance of the steel bars: 0.03 mm/m
tolerance on cut: ±1 mm.

Standard pack: 1 piece.

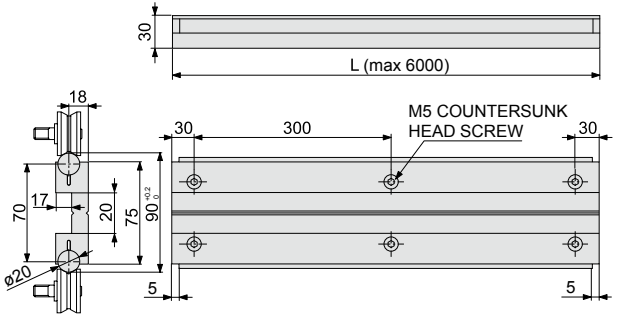


Combinations


Pg.104


Pg.46


Pg.48



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	L mm	Material of shafts	Weight Kg	Stock	€ piece
LG00 D20 A 0250	250	steel	2.12	▪	50,78
LG00 D20 A 0350	350	steel	2.97	▪	50,78
LG00 D20 A 0400	400	steel	3.40	▪	58,03
LG00 D20 A 0500	500	steel	4.25	▪	72,54

D20 Double guide

LG00

Order code	L mm	Material of shafts	Weight Kg	Stock	€ piece
LG00 D20 A 0535	535	steel	4.55	▪	77,62
LG00 D20 A 0600	600	steel	5.10	▪	87,05
LG00 D20 A 0700	700	steel	5.95	▪	101,55
LG00 D20 A 0800	800	steel	6.80	▪	116,06
LG00 D20 A 1000	1000	steel	8.50	▪	145,08
LG00 D20 A 1360	1360	steel	11.56	▪	197,31
LG00 D20 A 1500	1500	steel	12.75	▪	217,62
LG00 D20 A 2000	2000	steel	17.00	▪	290,15
LG00 D20 A 2500	2500	steel	21.25	▪	362,69
LG00 D20 A 2700	2700	steel	22.95	▪	391,71
LG00 D20 A 3000	3000	steel	25.50	▪	435,23

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow. To order other customised measurements, use the order code shown below:*

Order code

LG00 D20 [ ][ ][ ][ ][ ]

Length **L** *in mm (max 6000)*

Chrome-plated steel sliding shafts = **A**

Stainless steel sliding shafts = **I**

Ordering example

LG00 D20 A 1250

Ordering example for Ø20 steel guide with length L = 1250 mm

For lengths of more than 6000mm, contact our Sales Department.

LG00 → G20 Double guide

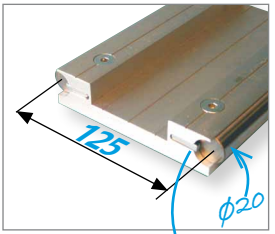
Use: *guarantees better stability, considering the increase of the support base and the distance between the guides, compared to the D20 version.*

Material *h6 sliding shafts in hardened, chrome-plated and ground steel or hardened and ground AISI 431 stainless steel; anodised aluminium profile.*

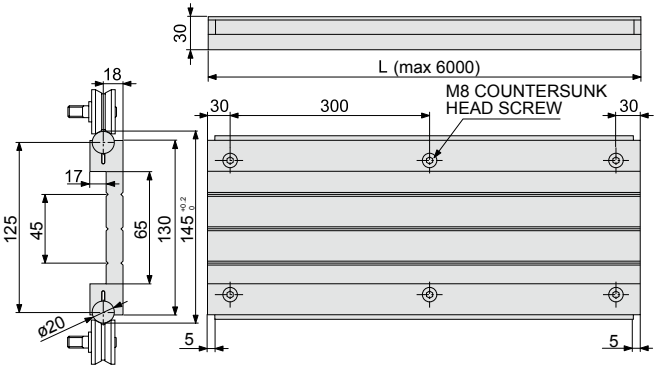
Characteristics:

guide width tolerance: +0,2 / 0
parallelism tolerance of the steel bars: 0.03 mm/m
tolerance on cut: ±1 mm.

Standard pack: *1 piece.*



Combinations



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	L mm	Material of shafts	Weight Kg	Stock	€ piece
LG00 G20 A 0450	450	steel	4.86	▪	87,82
LG00 G20 A 0500	500	steel	5.40	▪	97,46
LG00 G20 A 0600	600	steel	6.48	▪	116,95

G20 Double guide

LG00

Order code	L mm	Material of shafts	Weight Kg	Stock	€ piece
LG00 G20 A 0670	670	steel	7.24	■	130,60
LG00 G20 A 0800	800	steel	8.64	■	155,94
LG00 G20 A 1000	1000	steel	10.80	■	194,92
LG00 G20 A 1700	1700	steel	18.36	■	331,37
LG00 G20 A 2000	2000	steel	21.60	■	389,85
LG00 G20 A 2060	2060	steel	22.25	■	401,54
LG00 G20 A 2100	2100	steel	22.68	■	409,34
LG00 G20 A 2180	2180	steel	23.54	■	424,93
LG00 G20 A 2430	2430	steel	26.24	■	473,66
LG00 G20 A 2980	2980	steel	32.18	■	580,97
LG00 G20 A 3000	3000	steel	32.40	■	584,77
LG00 G20 A 4300	4300	steel	46.44	■	838,17
LG00 G20 A 6000	6000	steel	64.80	■	1169,54

■ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow. To order other customised measurements, use the order code shown below:*

Order code

LG00 G20 [ ][ ][ ][ ][ ]

Length **L** *in mm (max 6000)*

Chrome-plated steel sliding shafts = **A**

Stainless steel sliding shafts = **I**

Ordering example

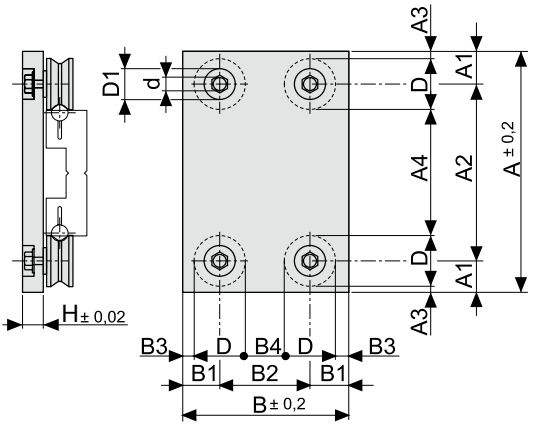
LG00 G20 A 1250

Ordering example for Ø20 steel guide with length L = 1250 mm

For lengths of more than 6000mm, contact our Sales Department.

LG00 → Carriages for D20 guide

Use: for S20 and D20 guides.
Material Fe37 steel or anodised aluminium carriage, steel rollers.
State of supply the carriages can be supplied with or without rollers. The complete versions are supplied with disassembled rollers for any subsequent working.
Standard pack: 1 piece.



Dimensions of the STANDARD carriages														Weight		Type of
A	B	H	A1	A2	A3*	A4*	B1	B2	B3*	B4*	D	d	D1	Steel	Aluminium	roller
180	150	20	27	126	9	78	30	90	9	48	42	12	30	3.80	1.30	312
200	180	25	40	140	11	82	40	100	11	42	58	16	36	7.00	2.60	416

* *Indicative values based on eccentric adjustment.*

Minimum dimensions for SPECIAL carriages														Type of
A	B	H	A1	A2	A3*	A4*	B1	B2	B3*	B4*	D	d	D1	roller
164	91	20	22	126	1	86	22	47	1	5	40	12	30	312
200	123	25	30	140	1	83	30	63	1	5	57	16	36	416

Carriages for D20 guide

LG00

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	Type of roller	A	B	H	Rollers	Material	Weight Kg	Stock	€ piece
LG00 312 L 000 C	312	180	150	20	yes	aluminium	1.96	▪	185,28
LG00 312 L 000 S	312	180	150	20	no	aluminium	1.30	✓	54,69
LG00 416 A 000 C	416	200	180	25	yes	steel	8.66	▪	247,02
LG00 416 A 000 S	416	200	180	25	no	steel	7.00	▪	74,12
LG00 416 L 000 C	416	200	180	25	yes	aluminium	4.26	▪	247,02

▪ ***Products not in stock*** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LG00 [ ] [ ] [ ]

- [ ] → *with rollers =* **C** *without rollers =* **S**
- [ ] → *standard carriage =* **000** *special carriages = distance between centres* **B2**
- [ ] → *aluminium =* **L** *steel =* **A**
- → *type of roller* Pg.46

Ordering example

LG00 416 L 000 S

(416-type standard carriage in aluminium without rollers)

LG00 416 L 220 S

(416-type distance between centres B2=220 special carriage, in aluminium without rollers)

INSTRUCTIONS TO ADJUST CLEARANCE ON THE CARRIAGES:

- fit and fasten the two concentric rollers marked with the letter **C**, *on one of the two carriage sliding sides (fig. 1).*
- fit the other two eccentric rollers marked with the letter **E**, *on the opposite side (fig. 1) and position them using an Allen wrench in the point with greatest clearance.*
- insert the guide in the carriage.
- adjust and tighten the two eccentric rollers **E** *(fig.2) to give the correct pre-load (fig. 3).*
ATTENTION: *always fit the rollers in pairs as shown in the figure; do not pre-load the eccentric rollers excessively so as to prevent premature wear of the bars and damaging the rollers.*

Fig. 1

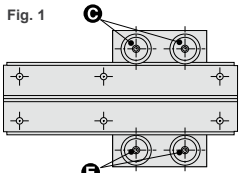


Fig. 2

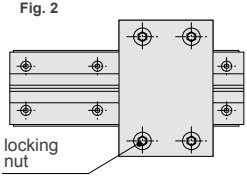
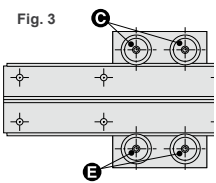


Fig. 3

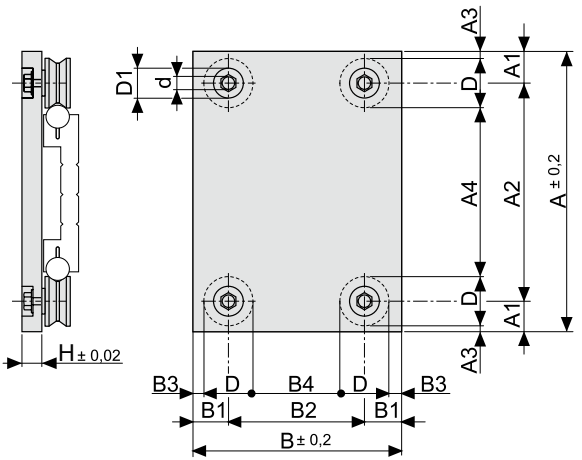


LG00 Carriages for G20 guide

Use: for the G20 guides.

Material aluminium carriage, 4 pins and 4 rollers in stainless steel, galvanised steel screws.

Standard pack: 1 piece.



Additional carriage dimensions														
A	B	H	A1	A2	A3	A4	B1	B2	B3	B4	D	d	D1	Type of roller
275	300	25	40	195	18	137	40	220	18	162	58	16	36	416

Carriages for G20 guide

LG00

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	Type of roller	A	B	H	Rollers	Material	Weight Kg	Stock	€ piece
LG00 416 G 000 C	416	275	300	25	yes	aluminium	2,60	▪	290,54
LG00 416 G 000 S	416	275	300	25	no	aluminium	1,94	▪	108,74

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LG00 416 G

- with rollers = **C**
- without rollers = **S**

standard carriage = **000**
special carriages = distance between centres **B2**

Ordering example

LG00 416 G 000 S

Order example for 416-type standard carriage in aluminium without rollers

INSTRUCTIONS TO ADJUST CLEARANCE ON THE CARRIAGES:

- fit and fasten the two concentric rollers marked with the letter **C**, on one of the two carriage sliding sides (fig. 1).
- fit the other two eccentric rollers marked with the letter **E**, on the opposite side (fig. 1) and position them using an Allen wrench in the point with greatest clearance.
- insert the guide in the carriage.
- adjust and tighten the two eccentric rollers **E** (fig.2) to give the correct pre-load (fig. 3).

ATTENTION: always fit the rollers in pairs as shown in the figure; do not pre-load the eccentric rollers excessively so as to prevent premature wear of the bars and damaging the rollers.

Fig. 1

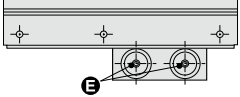


Fig. 2

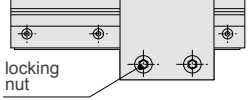
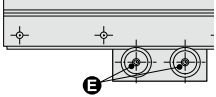


Fig. 3

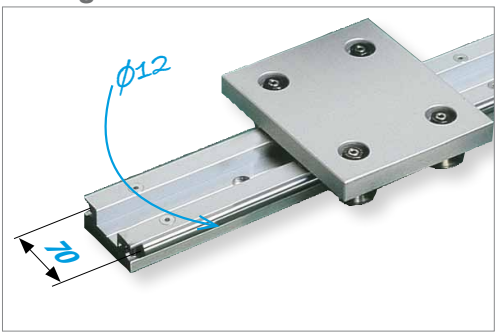


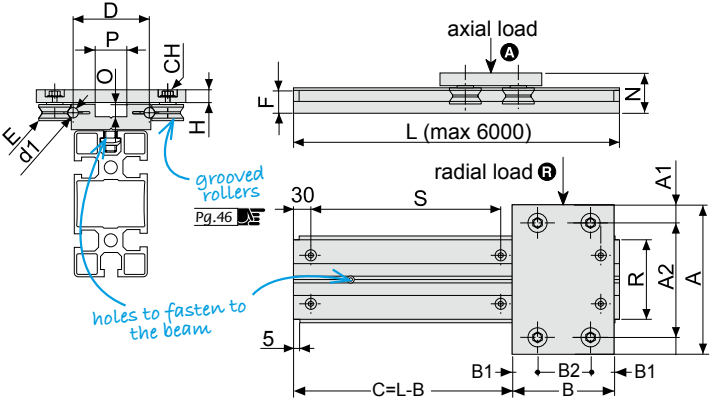
LGAD → D20 Double guide with carriage

Use: *simple and safe system to be used when the guide is to remain fixed and the roller-holder carriage made to slide or when the carriage is fixed and the guide is made to slide.*

Material *h6 sliding shafts in hardened, chrome-plated and ground steel or hardened and ground AISI 431 stainless steel; anodised aluminium profile and carriage, steel rollers.*

Standard pack: *1 piece.*





Type of roller	d1 Ø	A mm	B mm	H mm	A1 mm	A2 mm	B1 mm	B2 mm	D mm	E wrench	F mm	N mm	CH wrench	P mm	O mm	R mm	S mm	A N	R N
312	20	180	150	20	27	126	30	90	70	6	30	51	19	20	20	75	300	3200	3200
416	20	200	180	25	30	140	40	100	70	8	30	61,5	24	20	20	75	300	6400	7000

D20 Double guide with carriage

LGAD

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	Type of roller	A mm	B mm	C mm	L mm	Material of shafts	Weight Kg	Stock	€ piece
LGAD312A0250	312	180	150	100	250	steel	4.1	■	233,55
LGAD312A0300	312	180	150	150	300	steel	4.5	■	235,52
LGAD312A0500	312	180	150	350	500	steel	6.2	■	255,31
LGAD312A0600	312	180	150	450	600	steel	7.1	■	269,82
LGAD312A0660	312	180	150	510	660	steel	7.6	■	278,52
LGAD312A0750	312	180	150	600	750	steel	8.3	■	291,58
LGAD312A1500	312	180	150	1350	1500	steel	14.7	■	400,38
LGAD312A1750	312	180	150	1600	1750	steel	16.8	■	436,66
LGAD416A0800	416	200	180	620	800	steel	8.8	■	363,60
LGAD416A1500	416	200	180	1320	1500	steel	14.7	■	465,15

■ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LGAD [ ] [ ] → *Length* **L** *in mm (max 6000)*

steel sliding shafts = **A**
stainless steel sliding shafts = **I**

type of roller Pg.46

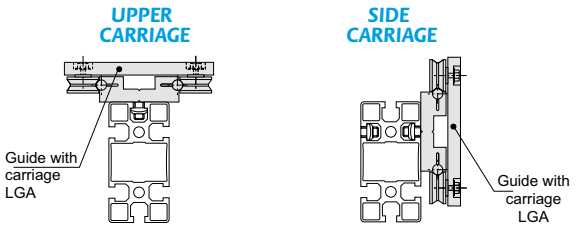
Ordering example

LGAD312A1250
Ordering example for 312-type linear guide, length L = 1250 *mm, with steel shafts.*

For lengths of more than 6000mm, contact our Sales Department.

FITTING RECOMMENDATIONS

A thin groove in the centre of the profile indicates the axis where to drill for it to be anchored to the structure (it is recommended to drill every 500 mm; use M6 screws).

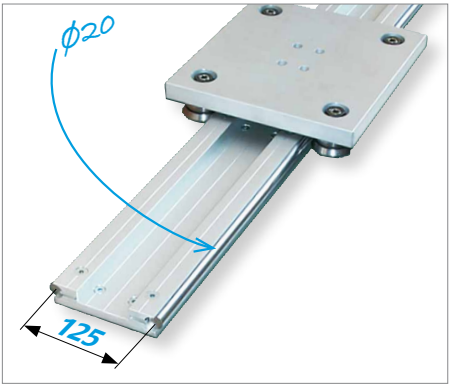


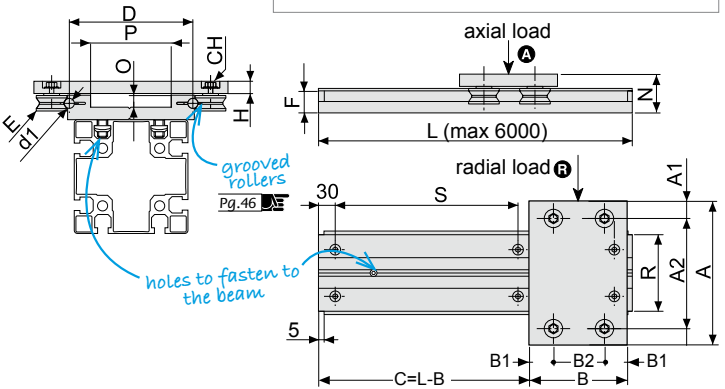
LGAG → G20 Double guide with carriage

Use: simple and safe system to be used when the guide is to remain fixed and the roller-holder carriage made to slide or when the carriage is fixed and the guide is made to slide.

Material h6 sliding shafts in hardened, chrome-plated and ground steel or hardened and ground AISI 431 stainless steel; anodised aluminium profile and carriage, steel rollers.

Standard pack: 1 piece.





Type of roller	d1 Ø	A mm	B mm	H mm	A1 mm	A2 mm	B1 mm	B2 mm	D mm	E wrench	F mm	N mm	CH wrench	P mm	O mm	R mm	S mm	A N	R N
416	20	275	300	25	40	195	40	220	125	8	30	61.5	24	65	17	130	300	6400	7000
516	20	275	300	25	40	195	40	220	125	8	30	61.5	24	65	17	130	300	17200	8600

G20 Double guide with carriage

LGAG

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	Type of roller	A mm	B mm	C mm	L mm	Material of shafts	Weight Kg	Stock	€ piece
LGAG416A0800	416	275	300	500	800	steel	11,2	■	640,25
LGAG416A1500	416	275	300	1200	1500	steel	18,8	■	776,69

■ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LGAG ____ ____ → *Length* **L** *in mm (max 6000)*

Steel sliding shafts = **A**
Stainless steel sliding shafts = **I**

Type of roller Pg.110

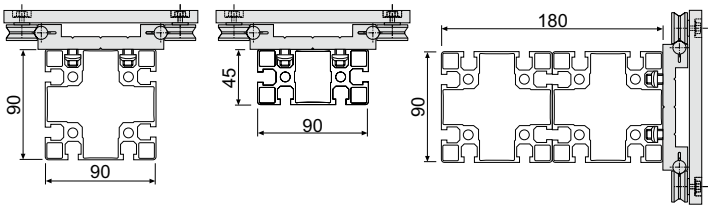
Ordering example

LGAG416A1250
Ordering example for 416-type linear guide, length L = 1250 *mm, with steel shafts.*

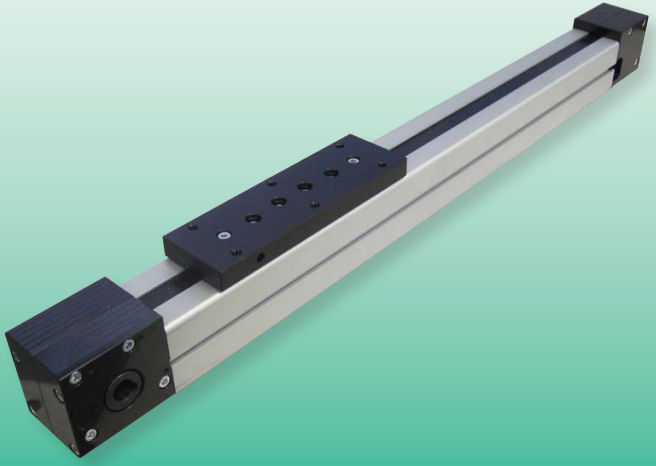
For lengths of more than 6000mm, contact our Sales Department.

FITTING RECOMMENDATIONS

A thin groove in the centre of the profile indicates the axis where to drill for it to be anchored to the structure (it is recommended to drill every 500 mm; use M10 screws).



55x55 Series



Pg.136

BETT SISTEMI
SERVICE
system partner

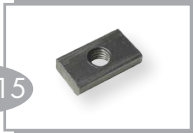
55x55 Motor-driven Ø6 linear guides in pre-assembled kits

With narrow carriage

2 p.114

Bracket fitting nut

2 p.115



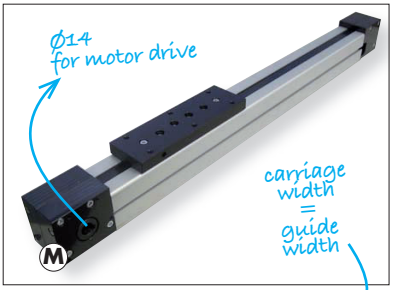
4137 D6 Pre-assembled linear guide kit with narrow carriage

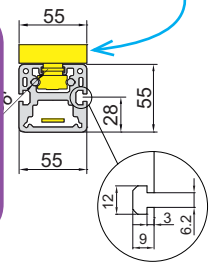
Material hardened and chrome-plated steel rollers and guides; anodised aluminium carriage, heads and profile; polyurethane toothed belt; galvanised steel nuts and bolts.
Standard pack: 1 piece.

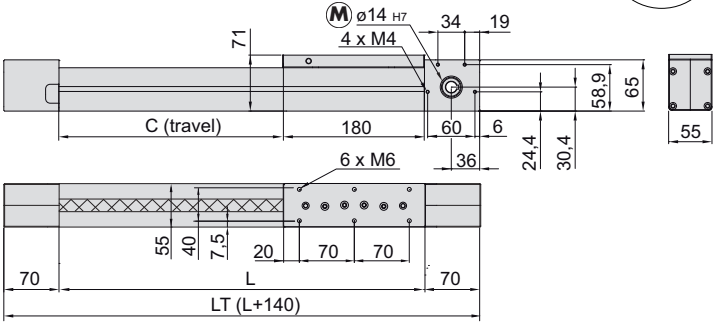
Technical characteristics
- Compact and sturdy profile.
- Maximum carriage speed: 5 m/s*.
- Maximum carriage acceleration: 12 m/s²*.
- Theoretical precision: ±0.1 mm**.
- 1 turn of pulley: 138 mm.

WARNINGS

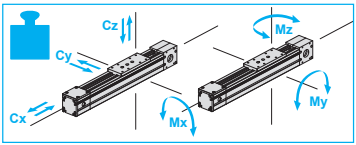
* The indicated maximum speed and acceleration are indicative and must be verified case by case.
** the indicated PRECISION is theoretical. The actual precision depends on the real conditions of use and must consider the details concerning the kinematic chain consisting of the gearbox, the motor, any connection joints and performance of the position control system (encoder, etc.).







Pre-assembled linear guide kit with narrow carriage 4137



QUANTITY DISCOUNT

Pieces	1+	5+	10+	40+
Discounts	-	5%	10%	on request

Order code	LT mm	L mm	C mm	Material of guides	Cx N	Cy N	Cz N	Mx Nm	My Nm	Mz Nm	Weight Kg	Stock	€ piece
651438	620	480	300	chrome-plated steel	820	930	650	12	28	40	4,2	■	405,00
691357	720	580	400	chrome-plated steel	820	930	650	12	28	40	4,5	■	419,50
650428	770	630	450	chrome-plated steel	820	930	650	12	28	40	4,7	■	427,50
632708	820	680	500	chrome-plated steel	820	930	650	12	28	40	5,0	■	435,00
670388	1070	930	750	chrome-plated steel	820	930	650	12	28	40	7,2	■	472,50
649178	1120	980	800	chrome-plated steel	820	930	650	12	28	40	7,5	■	477,00
651448	1320	1180	1000	chrome-plated steel	820	930	650	12	28	40	9,0	■	510,00
691397	1520	1380	1200	chrome-plated steel	820	930	650	12	28	40	10,5	■	540,00
650028	2520	2380	2200	chrome-plated steel	820	930	650	12	28	40	12,5	■	690,00
Customisations LT, L and C on request (L: min 360 - max 4000 mm).												■	

■ **Products not in stock** minimum order: 1 piece, delivery in 15 days.

Bracket fitting nut 4141

Use: for the bracket fitting of the linear guide Part. 4137 on the supporting structures.

Material galvanised steel.
Standard pack: 1 piece.

QUANTITY DISCOUNT

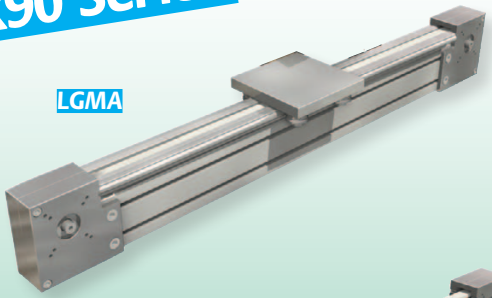
Pieces	1+	4+	8+	16+
Discounts	-	5%	10%	on request

Order code	D	Finish	Weight g	Stock	€ piece
691467	M4	galvanised	8	■	3,63
691477	M5	galvanised	8	■	3,63
691487	M6	galvanised	8	■	3,63

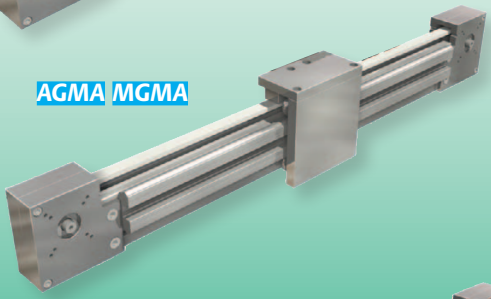
■ **Products not in stock** minimum order: 1 piece, delivery in 15 days.

45x90 Series

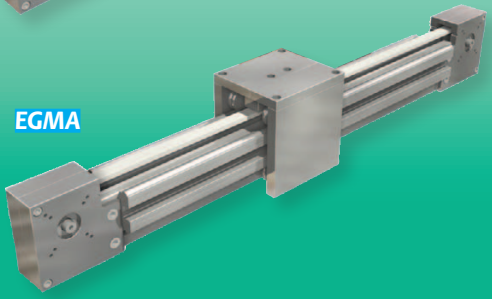
LGMA



AGMA MGMA



EGMA

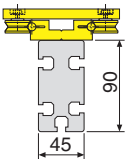


Pg.136

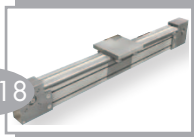
BETT SISTEMI
SERVICE
system partner

45x90 Motor-driven Ø10 linear guides in pre-assembled kits

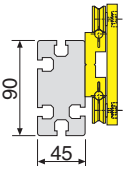
With upper single carriage **LGMA**



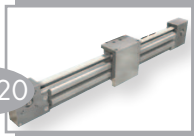
2 p.118



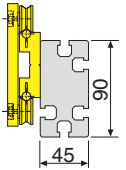
With right-side single carriage **AGMA**



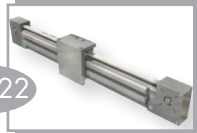
2 p.120



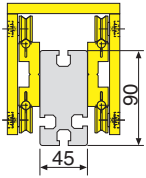
With left-side single carriage **MGMA**



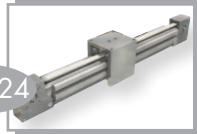
2 p.122



With combined double carriage **EGMA**



2 p.124



WARNINGS

LGMA D10 Pre-assembled linear guide kit with upper single carriage

Material ground, hardened and chrome-plated (AISI431 stainless steel on request) Cf53 steel rollers and sliding shafts, silver-coloured anodised aluminium carriage, heads and profile; polyurethane belt with steel cables; galvanised steel nuts and bolts.

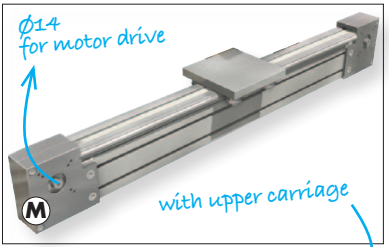
Standard pack: 1 piece.

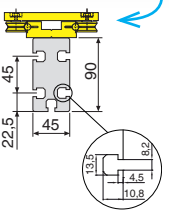
Technical characteristics

- Maximum carriage speed: 3 m/s*.
- Maximum carriage acceleration: 12 m/s²*.
- Theoretical precision: ±0.1mm**.
- 1 turn of pulley: 200 mm.

WARNINGS

* The indicated maximum speed and acceleration are indicative and must be verified case by case.
** the indicated PRECISION is theoretical. The actual precision depends on the real conditions of use and must consider the details concerning the kinematic chain consisting of the gearbox, the motor, any connection joints and performance of the position control system (encoder, etc.).



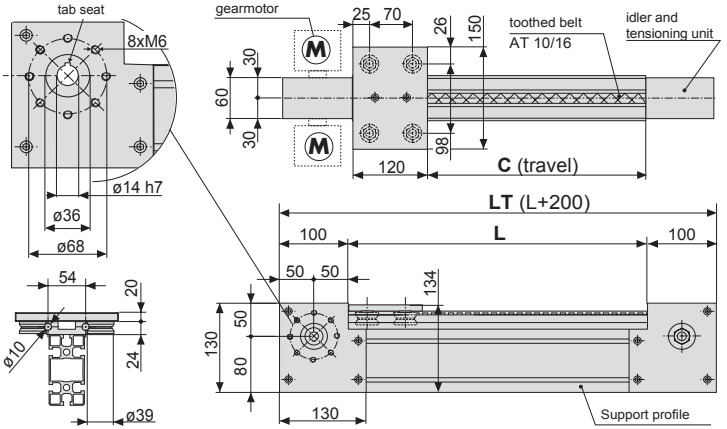


Combinations


Pg.166

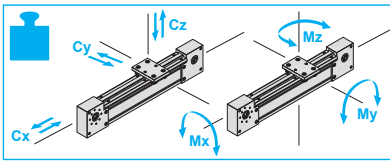

Pg.168


Pg.169



D10 Pre-assembled linear guide kit with upper single carriage

LGMA



Recommended moments and loads.
To obtain the values of the tolerable moments and loads, see charts on Pg.126

QUANTITY DISCOUNT

Pieces	1+	3+
Discounts	-	on request

Order code	LT mm	L mm	C mm	Cx N	Cy N	Cz N	Mx Nm	My Nm	Mz Nm	Weight Kg	Stock	€ piece
LGMA210A0350	550	350	230	650	200	200	10	10	20	8.0	▪	641,48
LGMA210A0400	600	400	280	650	200	200	10	10	20	8.3	▪	654,03
LGMA210A0500	700	500	380	650	200	200	10	10	20	8.9	▪	679,15
LGMA210A0600	800	600	480	650	200	200	10	10	20	9.6	▪	704,28
LGMA210A0700	900	700	580	650	200	200	10	10	20	10.2	▪	729,40
LGMA210A0800	1000	800	680	650	200	200	10	10	20	10.9	▪	754,52
LGMA210A0900	1100	900	780	650	200	200	10	10	20	11.5	▪	779,65
LGMA210A1000	1200	1000	880	650	200	200	10	10	20	12.2	▪	804,77
LGMA210A1100	1300	1100	980	650	200	200	10	10	20	12.8	▪	829,89
LGMA210A1200	1400	1200	1080	650	200	200	10	10	20	13.5	▪	855,02
LGMA210A1300	1500	1300	1180	650	200	200	10	10	20	14.1	▪	880,14
LGMA210A1400	1600	1400	1280	650	200	200	10	10	20	14.8	▪	905,26
LGMA210A1500	1700	1500	1380	650	200	200	10	10	20	15.4	▪	930,38
LGMA210A1600	1800	1600	1480	650	200	200	10	10	20	16.1	▪	955,51
LGMA210A1700	1900	1700	1580	650	200	200	10	10	20	16.7	▪	980,63
LGMA210A1800	2000	1800	1680	650	200	200	10	10	20	17.4	▪	1005,75
LGMA210A1900	2100	1900	1780	650	200	200	10	10	20	18.0	▪	1030,88
LGMA210A2000	2200	2000	1880	650	200	200	10	10	20	18.7	▪	1056,00
LGMA210A2100	2300	2100	1980	650	200	200	10	10	20	19.3	▪	1081,12
LGMA210A2200	2400	2200	2080	650	200	200	10	10	20	20.0	▪	1106,25
LGMA210A2300	2500	2300	2180	650	200	200	10	10	20	20.6	▪	1131,37
LGMA210A2400	2600	2400	2280	650	200	200	10	10	20	21.3	▪	1156,49
LGMA210A2500	2700	2500	2380	650	200	200	10	10	20	21.9	▪	1181,62
LGMA210A2600	2800	2600	2480	650	200	200	10	10	20	22.6	▪	1206,74
LGMA210A2700	2900	2700	2580	650	200	200	10	10	20	23.2	▪	1231,86
LGMA210A2800	3000	2800	2680	650	200	200	10	10	20	23.9	▪	1256,98
LGMA210A2900	3100	2900	2780	650	200	200	10	10	20	24.5	▪	1282,11
LGMA210A3000	3200	3000	2880	650	200	200	10	10	20	25.2	▪	1307,23
Customisations LT, L and C (L: min 350 mm - max 6000 mm), stainless steel rollers and shafts.											▪	

▪ **Products not in stock** minimum order: 1 piece, delivery in 15 days.

AGMA D10 Pre-assembled linear guide kit with right-side single carriage

Material ground, hardened and chrome-plated (AISI431 stainless steel on request) Cf53 steel rollers and sliding shafts, silver-coloured anodised aluminium carriage, heads and profile; polyurethane belt with steel cables; galvanised steel nuts and bolts.

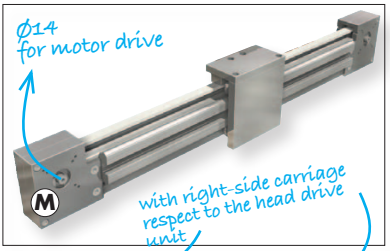
Standard pack: 1 piece.

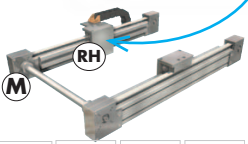
Technical characteristics

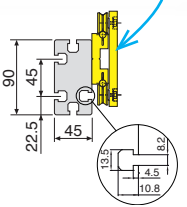
- Maximum carriage speed: 3 m/s*.
- Maximum carriage acceleration: 12 m/s²*.
- Theoretical precision: ±0.1mm**.
- 1 turn of pulley: 200 mm.

WARNINGS

* The indicated maximum speed and acceleration are indicative and must be verified case by case.
** the indicated PRECISION is theoretical. The actual precision depends on the real conditions of use and must consider the details concerning the kinematic chain consisting of the gearbox, the motor, any connection joints and performance of the position control system (encoder, etc.).





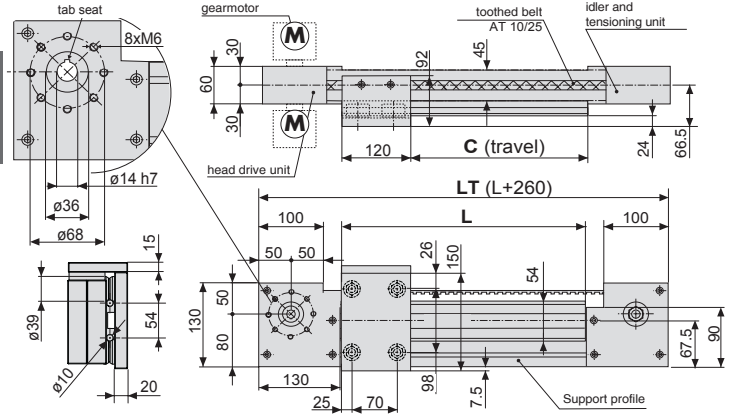


Combinations

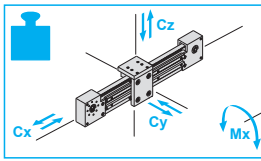
Cable holder chain

Pg.166 Pg.168 Pg.169 Pg.170 Pg.172 Pg.173

opposite side of carriage — carriage side



D10 Pre-assembled linear guide AGMA kit with right-side single carriage



Recommended moments and loads.
To obtain the values of the tolerable moments and loads, see charts on Pg.126

QUANTITY DISCOUNT

Pieces	1+	3+
Discounts	-	on request

Order code	LT mm	L mm	C mm	Cx N	Cy N	Cz N	Mx Nm	My Nm	Mz Nm	Weight Kg	Stock	€ piece
AGMA210A0350	610	350	230	2000	200	200	10	20	10	8.4	■	723,55
AGMA210A0400	660	400	280	2000	200	200	10	20	10	8.7	■	736,95
AGMA210A0500	760	500	380	2000	200	200	10	20	10	9.4	■	763,77
AGMA210A0600	860	600	480	2000	200	200	10	20	10	10.0	■	790,58
AGMA210A0700	960	700	580	2000	200	200	10	20	10	10.7	■	817,40
LGMA210A0800	1060	800	680	2000	200	200	10	20	10	11.3	■	844,22
AGMA210A0900	1160	900	780	2000	200	200	10	20	10	12.0	■	871,03
AGMA210A1000	1260	1000	880	2000	200	200	10	20	10	12.6	■	897,85
AGMA210A1100	1360	1100	980	2000	200	200	10	20	10	13.3	■	924,66
AGMA210A1200	1460	1200	1080	2000	200	200	10	20	10	13.9	■	951,48
AGMA210A1300	1560	1300	1180	2000	200	200	10	20	10	14.6	■	978,29
AGMA210A1400	1660	1400	1280	2000	200	200	10	20	10	15.2	■	1005,11
AGMA210A1500	1760	1500	1380	2000	200	200	10	20	10	15.9	■	1031,92
AGMA210A1600	1860	1600	1480	2000	200	200	10	20	10	16.5	■	1058,74
AGMA210A1700	1960	1700	1580	2000	200	200	10	20	10	17.2	■	1085,55
AGMA210A1800	2060	1800	1680	2000	200	200	10	20	10	17.8	■	1112,37
AGMA210A1900	2160	1900	1780	2000	200	200	10	20	10	18.5	■	1139,18
AGMA210A2000	2260	2000	1880	2000	200	200	10	20	10	19.2	■	1166,00
AGMA210A2100	2360	2100	1980	2000	200	200	10	20	10	19.8	■	1192,82
AGMA210A2200	2460	2200	2080	2000	200	200	10	20	10	20.5	■	1219,63
AGMA210A2300	2560	2300	2180	2000	200	200	10	20	10	21.1	■	1246,45
AGMA210A2400	2660	2400	2280	2000	200	200	10	20	10	21.8	■	1273,26
AGMA210A2500	2760	2500	2380	2000	200	200	10	20	10	22.4	■	1300,08
AGMA210A2600	2860	2600	2480	2000	200	200	10	20	10	23.1	■	1326,89
AGMA210A2700	2960	2700	2580	2000	200	200	10	20	10	23.7	■	1353,71
AGMA210A2800	3060	2800	2680	2000	200	200	10	20	10	24.4	■	1380,52
AGMA210A2900	3160	2900	2780	2000	200	200	10	20	10	25.0	■	1407,34
AGMA210A3000	3260	3000	2880	2000	200	200	10	20	10	25.7	■	1434,15
Customisations LT, L and C (L: min 350 mm - max 6000 mm), stainless steel rollers and shafts.											■	

■ **Products not in stock** minimum order: 1 piece, delivery in 15 days.

MGMA D10 Pre-assembled linear guide kit with left-side single carriage

Material ground, hardened and chrome-plated (AISI431 stainless steel on request) Cf53 steel rollers and sliding shafts, silver-coloured anodised aluminium carriage, heads and profile; polyurethane belt with steel cables; galvanised steel nuts and bolts.

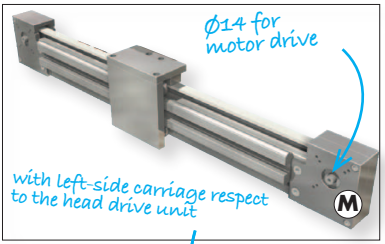
Standard pack: 1 piece.

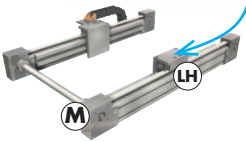
Technical characteristics

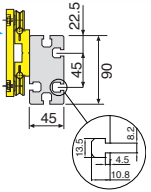
- Maximum carriage speed: 3 m/s*.
- Maximum carriage acceleration: 12 m/s²*.
- Theoretical precision: ±0.1mm**.
- 1 turn of pulley: 200 mm.

WARNINGS

* The indicated maximum speed and acceleration are indicative and must be verified case by case.
** the indicated PRECISION is theoretical. The actual precision depends on the real conditions of use and must consider the details concerning the kinematic chain consisting of the gearbox, the motor, any connection joints and performance of the position control system (encoder, etc.).





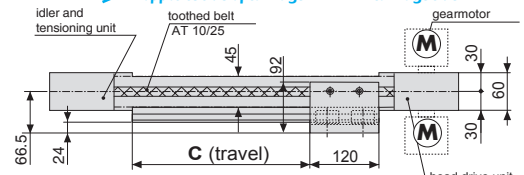


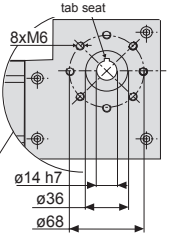
Combinations

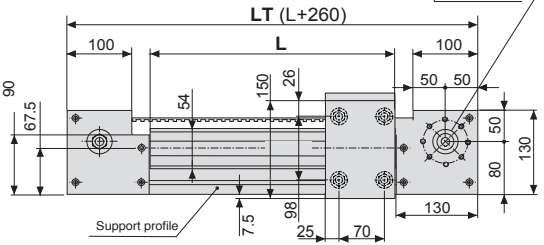
Cable holder chain

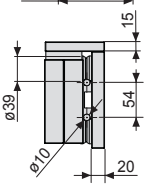
Pg.166 Pg.168 Pg.169 Pg.170 Pg.172 Pg.173

opposite side of carriage — carriage side



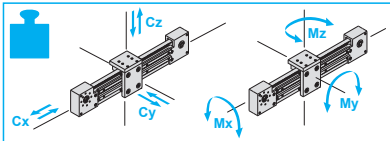






D10 Pre-assembled linear guide kit with left-side single carriage

MGMA



Recommended moments and loads.
To obtain the values of the tolerable moments and loads, see charts on Pg.126

QUANTITY DISCOUNT

Pieces	1+	3+
Discounts	-	on request

Order code	LT mm	L mm	C mm	Cx N	Cy N	Cz N	Mx Nm	My Nm	Mz Nm	Weight Kg	Stock	€ piece
MGMA210A0350	610	350	230	2000	200	200	10	20	10	8.4	■	723,55
MGMA210A0400	660	400	280	2000	200	200	10	20	10	8.7	■	736,95
MGMA210A0500	760	500	380	2000	200	200	10	20	10	9.4	■	763,77
MGMA210A0600	860	600	480	2000	200	200	10	20	10	10.0	■	790,58
MGMA210A0700	960	700	580	2000	200	200	10	20	10	10.7	■	817,40
MGMA210A0800	1060	800	680	2000	200	200	10	20	10	11.3	■	844,22
MGMA210A0900	1160	900	780	2000	200	200	10	20	10	12.0	■	871,03
MGMA210A1000	1260	1000	880	2000	200	200	10	20	10	12.6	■	897,85
MGMA210A1100	1360	1100	980	2000	200	200	10	20	10	13.3	■	924,66
MGMA210A1200	1460	1200	1080	2000	200	200	10	20	10	13.9	■	951,48
MGMA210A1300	1560	1300	1180	2000	200	200	10	20	10	14.6	■	978,29
MGMA210A1400	1660	1400	1280	2000	200	200	10	20	10	15.2	■	1005,11
MGMA210A1500	1760	1500	1380	2000	200	200	10	20	10	15.9	■	1031,92
MGMA210A1600	1860	1600	1480	2000	200	200	10	20	10	16.5	■	1058,74
MGMA210A1700	1960	1700	1580	2000	200	200	10	20	10	17.2	■	1085,55
MGMA210A1800	2060	1800	1680	2000	200	200	10	20	10	17.8	■	1112,37
MGMA210A1900	2160	1900	1780	2000	200	200	10	20	10	18.5	■	1139,18
MGMA210A2000	2260	2000	1880	2000	200	200	10	20	10	19.2	■	1166,00
MGMA210A2100	2360	2100	1980	2000	200	200	10	20	10	19.8	■	1192,82
MGMA210A2200	2460	2200	2080	2000	200	200	10	20	10	20.5	■	1219,63
MGMA210A2300	2560	2300	2180	2000	200	200	10	20	10	21.1	■	1246,45
MGMA210A2400	2660	2400	2280	2000	200	200	10	20	10	21.8	■	1273,26
MGMA210A2500	2760	2500	2380	2000	200	200	10	20	10	22.4	■	1300,08
MGMA210A2600	2860	2600	2480	2000	200	200	10	20	10	23.1	■	1326,89
MGMA210A2700	2960	2700	2580	2000	200	200	10	20	10	23.7	■	1353,71
MGMA210A2800	3060	2800	2680	2000	200	200	10	20	10	24.4	■	1380,52
MGMA210A2900	3160	2900	2780	2000	200	200	10	20	10	25.0	■	1407,34
MGMA210A3000	3260	3000	2880	2000	200	200	10	20	10	25.7	■	1434,15

Customisations LT, L and C (L: min 350 mm - max 6000 mm), stainless steel rollers and shafts. ■

■ **Products not in stock** minimum order: 1 piece, delivery in 15 days.

EGMA D10 Pre-assembled linear guide kit with combined double carriage

Material ground, hardened and chrome-plated (AISI431 stainless steel on request) Cf53 steel rollers and sliding shafts, silver-coloured anodised aluminium carriage, heads and profile; polyurethane belt with steel cables; galvanised steel nuts and bolts.

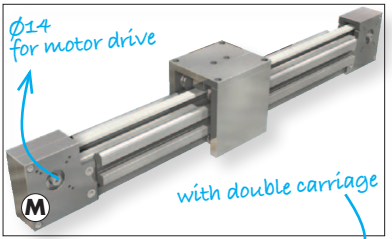
Standard pack: 1 piece.

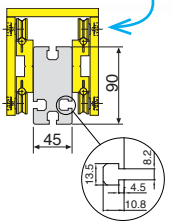
Technical characteristics

- Maximum carriage speed: 3 m/s*.
- Maximum carriage acceleration: 12 m/s²*.
- Theoretical precision: ±0.1mm**.
- 1 turn of pulley: 200 mm.

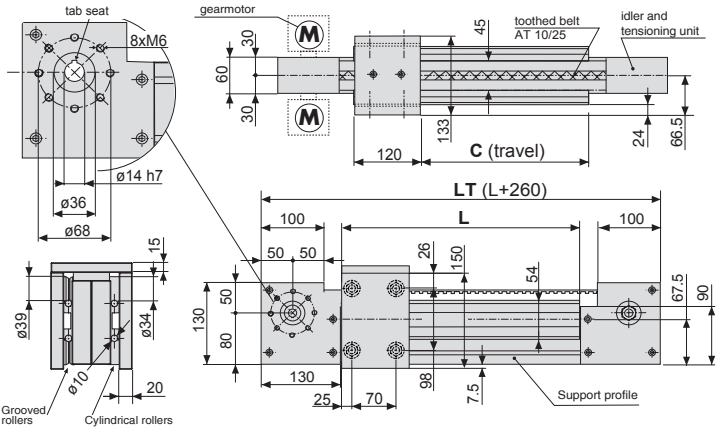
WARNINGS

* The indicated maximum speed and acceleration are indicative and must be verified case by case.
** the indicated PRECISION is theoretical. The actual precision depends on the real conditions of use and must consider the details concerning the kinematic chain consisting of the gearbox, the motor, any connection joints and performance of the position control system (encoder, etc.).



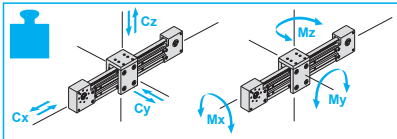


Combinations



D10 Pre-assembled linear guide kit with combined double carriage

EGMA



Recommended moments and loads.
To obtain the values of the tolerable moments and loads, see charts on Pg.126

QUANTITY DISCOUNT

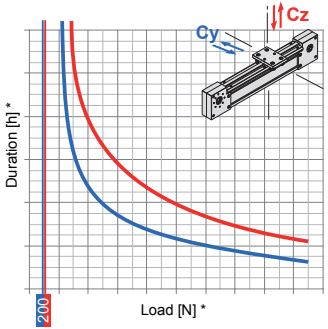
Pieces	1+	3+
Discounts	-	on request

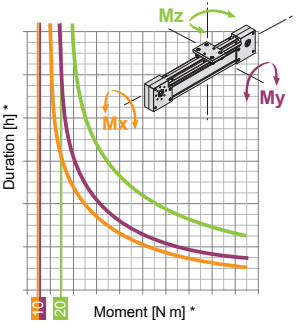
Order code	LT mm	L mm	C mm	Cx N	Cy N	Cz N	Mx Nm	My Nm	Mz Nm	Weight Kg	Stock	€ piece
EGMA210A0350	610	350	230	2000	600	600	30	40	20	11.7	▪	924,41
EGMA210A0400	660	400	280	2000	600	600	30	40	20	12.2	▪	942,55
EGMA210A0500	760	500	380	2000	600	600	30	40	20	13.1	▪	978,85
EGMA210A0600	860	600	480	2000	600	600	30	40	20	14.1	▪	1015,13
EGMA210A0700	960	700	580	2000	600	600	30	40	20	15.0	▪	1051,43
EGMA210A0800	1060	800	680	2000	600	600	30	40	20	16.0	▪	1087,73
EGMA210A0900	1160	900	780	2000	600	600	30	40	20	17.0	▪	1124,01
EGMA210A1000	1260	1000	880	2000	600	600	30	40	20	17.9	▪	1160,31
EGMA210A1100	1360	1100	980	2000	600	600	30	40	20	18.9	▪	1196,60
EGMA210A1200	1460	1200	1080	2000	600	600	30	40	20	19.9	▪	1232,90
EGMA210A1300	1560	1300	1180	2000	600	600	30	40	20	20.8	▪	1269,18
EGMA210A1400	1660	1400	1280	2000	600	600	30	40	20	21.8	▪	1305,48
EGMA210A1500	1760	1500	1380	2000	600	600	30	40	20	22.7	▪	1341,77
EGMA210A1600	1860	1600	1480	2000	600	600	30	40	20	23.7	▪	1378,06
EGMA210A1700	1960	1700	1580	2000	600	600	30	40	20	24.7	▪	1414,35
EGMA210A1800	2060	1800	1680	2000	600	600	30	40	20	25.6	▪	1450,65
EGMA210A1900	2160	1900	1780	2000	600	600	30	40	20	26.6	▪	1486,93
EGMA210A2000	2260	2000	1880	2000	600	600	30	40	20	27.6	▪	1523,23
EGMA210A2100	2360	2100	1980	2000	600	600	30	40	20	28.5	▪	1559,53
EGMA210A2200	2460	2200	2080	2000	600	600	30	40	20	29.5	▪	1595,81
EGMA210A2300	2560	2300	2180	2000	600	600	30	40	20	30.4	▪	1632,11
EGMA210A2400	2660	2400	2280	2000	600	600	30	40	20	31.4	▪	1668,40
EGMA210A2500	2760	2500	2380	2000	600	600	30	40	20	32.4	▪	1704,70
EGMA210A2600	2860	2600	2480	2000	600	600	30	40	20	33.3	▪	1740,98
EGMA210A2700	2960	2700	2580	2000	600	600	30	40	20	34.3	▪	1777,28
EGMA210A2800	3060	2800	2680	2000	600	600	30	40	20	35.3	▪	1813,57
EGMA210A2900	3160	2900	2780	2000	600	600	30	40	20	36.2	▪	1849,86
EGMA210A3000	3260	3000	2880	2000	600	600	30	40	20	37.2	▪	1886,15
Customisations LT, L and C (L: min 350 mm - max 6000 mm), stainless steel rollers and shafts.											▪	

▪ **Products not in stock** minimum order: 1 piece, delivery in 15 days.

Duration of carriage rollers based on applied loads

LGMA D10 guide with upper single carriage



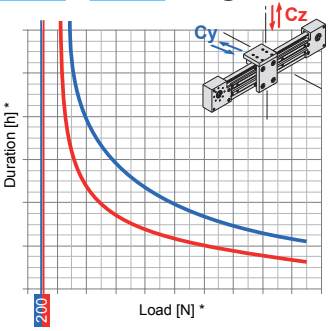


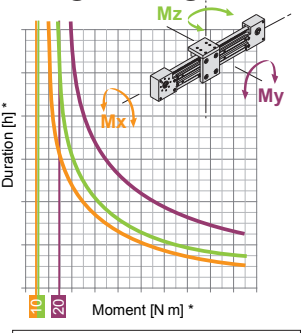
Recommended load in table

Recommended moment in table

*** upon customer request the charts complete with values are supplied by our technical department.**

AGMA - MGMA D10 guide with side single carriage





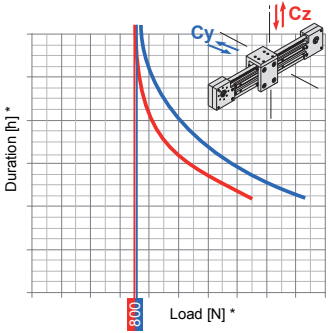
Recommended load in table

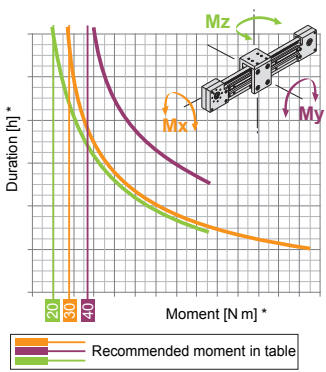
Recommended moment in table

*** upon customer request the charts complete with values are supplied by our technical department.**

Duration of carriage rollers based on applied loads

EGMA D10 guide with double carriage

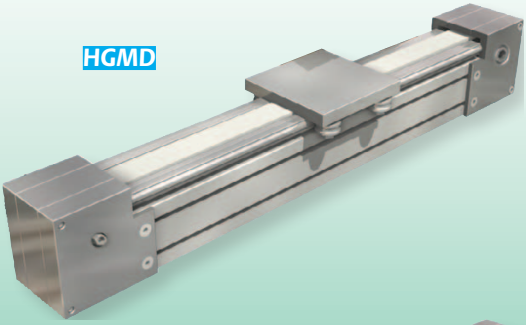




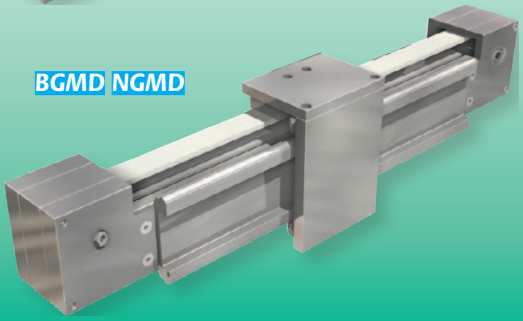
*** upon customer request the charts complete with values are supplied by our technical department.**

90x90 Series

HGMD



BGMD NGMD



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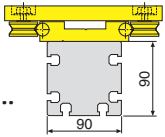
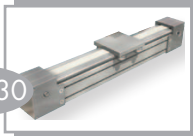
BETT SISTEMI
SERVICE
system partner

90x90 Motor-driven linear guides in pre-assembled kits

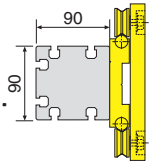
With upper single carriage **HGMD**



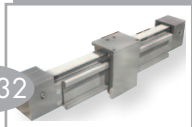
2 p.130



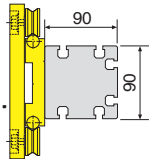
With right-side single carriage **BGMD**



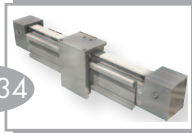
2 p.132



With left-side single carriage **NGMD**



2 p.134



WARNINGS

HGMD D10 Pre-assembled linear guide kit with upper single carriage

Material ground, hardened and chrome-plated (AISI431 stainless steel on request) Cf53 steel rollers and sliding shafts, silver-coloured anodised aluminium carriage, heads and profile; polyurethane belt with steel cables; galvanised steel nuts and bolts.

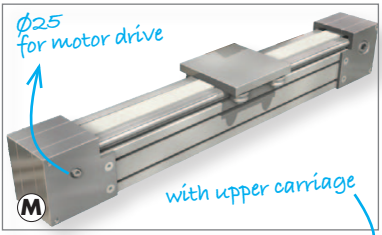
Standard pack: 1 piece.

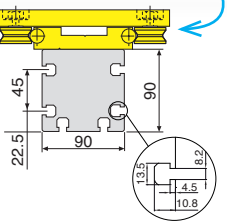
Technical characteristics

- Maximum carriage speed: 3 m/s*.
- Maximum carriage acceleration: 12 m/s²*.
- Theoretical precision: ±0.1mm**.
- 1 turn of pulley: 200 mm.

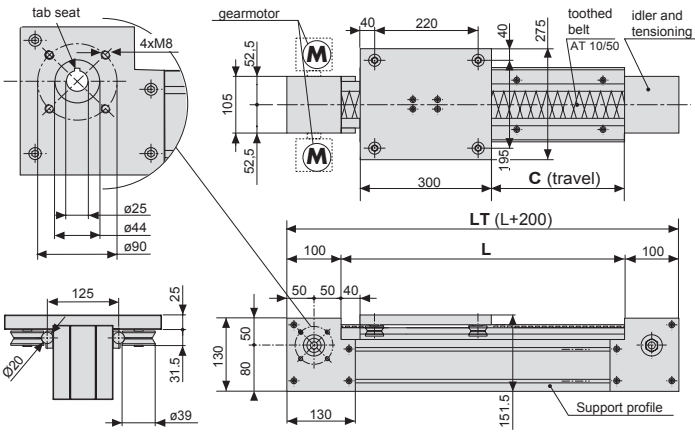
WARNINGS

* The indicated maximum speed and acceleration are indicative and must be verified case by case.
** the indicated PRECISION is theoretical. The actual precision depends on the real conditions of use and must consider the details concerning the kinematic chain consisting of the gearbox, the motor, any connection joints and performance of the position control system (encoder, etc.).

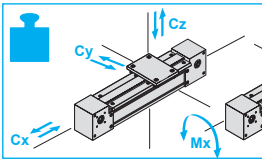




Combinations



D10 Pre-assembled linear guide kit with upper single carriage HGMD



Recommended moments and loads. To obtain the values of the tolerable moments and loads, see charts on Pg.136

QUANTITY DISCOUNT

Pieces	1+	3+
Discounts	-	on request

Order code	LT mm	L mm	C mm	Cx N	Cy N	Cz N	Mx Nm	My Nm	Mz Nm	Weight Kg	Stock	€ piece
HGMD416A0500	700	500	160	650	600	1200	40	60	110	18.2	■	1375,50
HGMD416A0600	800	600	260	650	600	1200	40	60	110	19.8	■	1421,15
HGMD416A0700	900	700	360	650	600	1200	40	60	110	21.4	■	1466,80
HGMD416A0800	1000	800	460	650	600	1200	40	60	110	23.0	■	1512,45
HGMD416A0900	1100	900	560	650	600	1200	40	60	110	24.6	■	1558,10
HGMD416A1000	1200	1000	660	650	600	1200	40	60	110	26.2	■	1603,75
HGMD416A1100	1300	1100	760	650	600	1200	40	60	110	27.8	■	1649,40
HGMD416A1200	1400	1200	860	650	600	1200	40	60	110	29.4	■	1695,06
HGMD416A1300	1500	1300	960	650	600	1200	40	60	110	30.9	■	1740,71
HGMD416A1400	1600	1400	1060	650	600	1200	40	60	110	32.5	■	1786,36
HGMD416A1500	1700	1500	1160	650	600	1200	40	60	110	34.1	■	1832,01
HGMD416A1600	1800	1600	1260	650	600	1200	40	60	110	35.7	■	1877,66
HGMD416A1700	1900	1700	1360	650	600	1200	40	60	110	37.3	■	1923,31
HGMD416A1800	2000	1800	1460	650	600	1200	40	60	110	38.9	■	1968,96
HGMD416A1900	2100	1900	1560	650	600	1200	40	60	110	40.5	■	2014,61
HGMD416A2000	2200	2000	1660	650	600	1200	40	60	110	42.1	■	2060,26
HGMD416A2100	2300	2100	1760	650	600	1200	40	60	110	43.6	■	2105,91
HGMD416A2200	2400	2200	1860	650	600	1200	40	60	110	45.2	■	2151,56
HGMD416A2300	2500	2300	1960	650	600	1200	40	60	110	46.8	■	2197,21
HGMD416A2400	2600	2400	2060	650	600	1200	40	60	110	48.4	■	2242,86
HGMD416A2500	2700	2500	2160	650	600	1200	40	60	110	50.0	■	2288,52
HGMD416A2600	2800	2600	2260	650	600	1200	40	60	110	51.6	■	2334,17
HGMD416A2700	2900	2700	2360	650	600	1200	40	60	110	53.2	■	2379,82
HGMD416A2800	3000	2800	2460	650	600	1200	40	60	110	54.8	■	2425,47
HGMD416A2900	3100	2900	2560	650	600	1200	40	60	110	56.4	■	2471,12
HGMD416A3000	3200	3000	2660	650	600	1200	40	60	110	57.9	■	2516,77

Customisations *LT, L and C (L: min 500mm - max 6000 mm), stainless steel rollers and shafts.* ■

■ **Products not in stock** *minimum order: 1 piece, delivery in 15 working days.*

BGMD D10 Pre-assembled linear guide kit with right-side single carriage

Material ground, hardened and chrome-plated (AISI431 stainless steel on request) Cf53 steel rollers and sliding shafts, silver-coloured anodised aluminium carriage, heads and profile; polyurethane belt with steel cables; galvanised steel nuts and bolts.

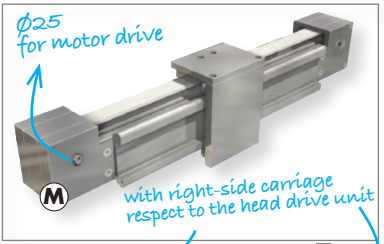
Standard pack: 1 piece.

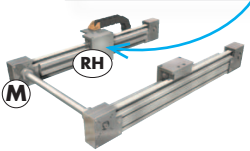
Technical characteristics

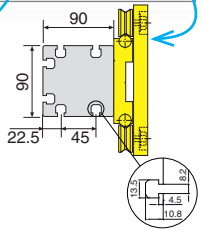
- Maximum carriage speed: 3 m/s*.
- Maximum carriage acceleration: 12 m/s²*.
- Theoretical precision: ±0.1mm**.
- 1 turn of pulley: 200 mm.

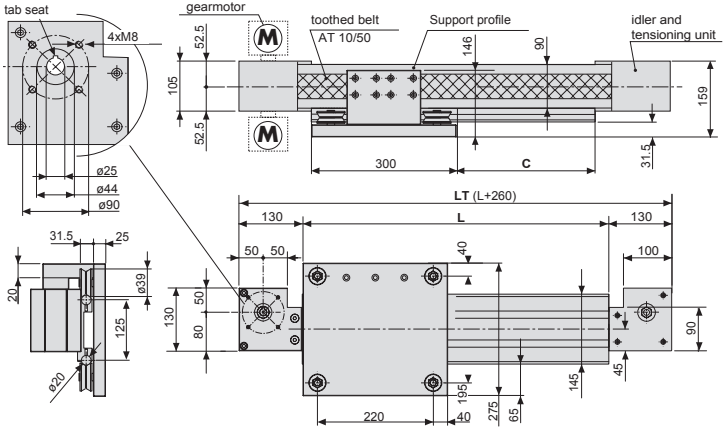
WARNINGS

* The indicated maximum speed and acceleration are indicative and must be verified case by case.
** the indicated PRECISION is theoretical. The actual precision depends on the real conditions of use and must consider the details concerning the kinematic chain consisting of the gearbox, the motor, any connection joints and performance of the position control system (encoder, etc.).



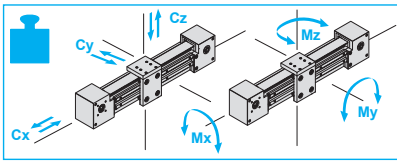






D10 Pre-assembled linear guide kit with right-side single carriage

BGMD



Recommended moments and loads. To obtain the values of the tolerable moments and loads, see charts on Pg.136

QUANTITY DISCOUNT

Pieces	1+	3+
Discounts	-	on request

Order code	LT mm	L mm	C mm	Cx N	Cy N	Cz N	Mx Nm	My Nm	Mz Nm	Weight Kg	Stock	€ piece
BGMD416A0500	760	500	200	2000	600	1200	40	110	60	19.2	▪	1470,19
BGMD416A0600	860	600	300	2000	600	1200	40	110	60	20.8	▪	1515,84
BGMD416A0700	960	700	400	2000	600	1200	40	110	60	22.4	▪	1561,50
BGMD416A0800	1060	800	500	2000	600	1200	40	110	60	24.0	▪	1607,15
BGMD416A0900	1160	900	600	2000	600	1200	40	110	60	25.6	▪	1652,80
BGMD416A1000	1260	1000	700	2000	600	1200	40	110	60	27.2	▪	1698,45
BGMD416A1100	1360	1100	800	2000	600	1200	40	110	60	28.8	▪	1744,10
BGMD416A1200	1460	1200	900	2000	600	1200	40	110	60	30.4	▪	1789,75
BGMD416A1300	1560	1300	1000	2000	600	1200	40	110	60	31.9	▪	1835,40
BGMD416A1400	1660	1400	1100	2000	600	1200	40	110	60	33.5	▪	1881,05
BGMD416A1500	1760	1500	1200	2000	600	1200	40	110	60	35.1	▪	1926,70
BGMD416A1600	1860	1600	1300	2000	600	1200	40	110	60	36.7	▪	1972,35
BGMD416A1700	1960	1700	1400	2000	600	1200	40	110	60	38.3	▪	2018,00
BGMD416A1800	2060	1800	1500	2000	600	1200	40	110	60	39.9	▪	2063,65
BGMD416A1900	2160	1900	1600	2000	600	1200	40	110	60	41.5	▪	2109,30
BGMD416A2000	2260	2000	1700	2000	600	1200	40	110	60	43.1	▪	2154,96
BGMD416A2100	2360	2100	1800	2000	600	1200	40	110	60	44.6	▪	2200,61
BGMD416A2200	2460	2200	1900	2000	600	1200	40	110	60	46.2	▪	2246,26
BGMD416A2300	2560	2300	2000	2000	600	1200	40	110	60	47.8	▪	2291,91
BGMD416A2400	2660	2400	2100	2000	600	1200	40	110	60	49.4	▪	2337,56
BGMD416A2500	2760	2500	2200	2000	600	1200	40	110	60	51.0	▪	2383,21
BGMD416A2600	2860	2600	2300	2000	600	1200	40	110	60	52.6	▪	2428,86
BGMD416A2700	2760	2700	2400	2000	600	1200	40	110	60	54.2	▪	2474,51
BGMD416A2800	3060	2800	2500	2000	600	1200	40	110	60	55.8	▪	2520,16
BGMD416A2900	3160	2900	2600	2000	600	1200	40	110	60	57.4	▪	2565,81
BGMD416A3000	3260	3000	2700	2000	600	1200	40	110	60	58.9	▪	2611,46

Customisations *LT, L and C (L: min 500mm - max 6000 mm), stainless steel rollers and shafts.* ▪

▪ **Products not in stock** *minimum order: 1 piece, delivery in 15 working days.*

NGMD D10 Pre-assembled linear guide kit with left-side single carriage

Material ground, hardened and chrome-plated (AISI431 stainless steel on request) Cf53 steel rollers and sliding shafts, silver-coloured anodised aluminium carriage, heads and profile; polyurethane belt with steel cables; galvanised steel nuts and bolts.

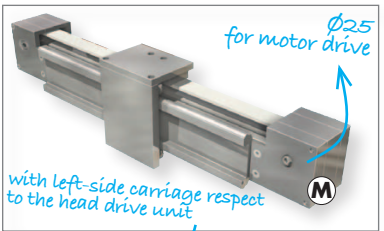
Standard pack: 1 piece.

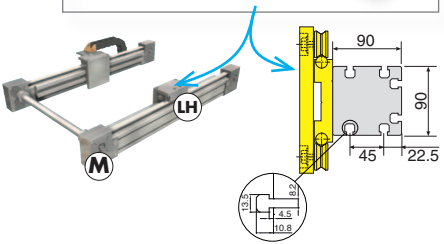
Technical characteristics

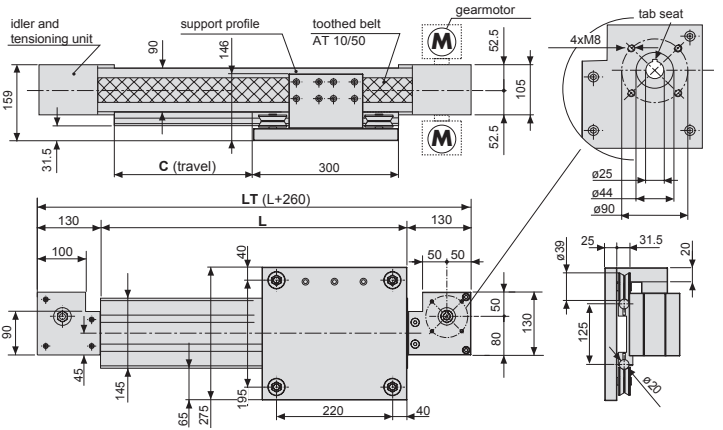
- Maximum carriage speed: 3 m/s*.
- Maximum carriage acceleration: 12 m/s²*.
- Theoretical precision: ±0.1mm**.
- 1 turn of pulley: 200 mm.

WARNINGS

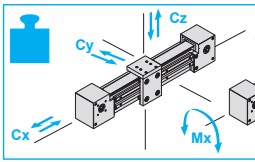
* The indicated maximum speed and acceleration are indicative and must be verified case by case.
** the indicated PRECISION is theoretical. The actual precision depends on the real conditions of use and must consider the details concerning the kinematic chain consisting of the gearbox, the motor, any connection joints and performance of the position control system (encoder, etc.).







D10 Pre-assembled linear guide kit with left-side single carriage NGMD



Recommended moments and loads. To obtain the values of the tolerable moments and loads, see charts on Pg.136

QUANTITY DISCOUNT

Pieces	1+	3+
Discounts	-	on request

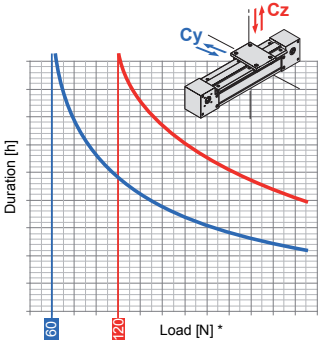
Order code	LT mm	L mm	C mm	Cx N	Cy N	Cz N	Mx Nm	My Nm	Mz Nm	Weight Kg	Stock	€ piece
NGMD416A0500	760	500	200	2000	600	1200	40	110	60	19.2	▪	1470,19
NGMD416A0600	860	600	300	2000	600	1200	40	110	60	20.8	▪	1515,84
NGMD416A0700	960	700	400	2000	600	1200	40	110	60	22.4	▪	1561,50
NGMD416A0800	1060	800	500	2000	600	1200	40	110	60	24.0	▪	1607,15
NGMD416A0900	1160	900	600	2000	600	1200	40	110	60	25.6	▪	1652,80
NGMD416A1000	1260	1000	700	2000	600	1200	40	110	60	27.2	▪	1698,45
NGMD416A1100	1360	1100	800	2000	600	1200	40	110	60	28.8	▪	1744,10
NGMD416A1200	1460	1200	900	2000	600	1200	40	110	60	30.4	▪	1789,75
NGMD416A1300	1560	1300	1000	2000	600	1200	40	110	60	31.9	▪	1835,40
NGMD416A1400	1660	1400	1100	2000	600	1200	40	110	60	33.5	▪	1881,05
NGMD416A1500	1760	1500	1200	2000	600	1200	40	110	60	35.1	▪	1926,70
NGMD416A1600	1860	1600	1300	2000	600	1200	40	110	60	36.7	▪	1972,35
NGMD416A1700	1960	1700	1400	2000	600	1200	40	110	60	38.3	▪	2018,00
NGMD416A1800	2060	1800	1500	2000	600	1200	40	110	60	39.9	▪	2063,65
NGMD416A1900	2160	1900	1600	2000	600	1200	40	110	60	41.5	▪	2109,30
NGMD416A2000	2260	2000	1700	2000	600	1200	40	110	60	43.1	▪	2154,96
NGMD416A2100	2360	2100	1800	2000	600	1200	40	110	60	44.6	▪	2200,61
NGMD416A2200	2460	2200	1900	2000	600	1200	40	110	60	46.2	▪	2246,26
NGMD416A2300	2560	2300	2000	2000	600	1200	40	110	60	47.8	▪	2291,91
NGMD416A2400	2660	2400	2100	2000	600	1200	40	110	60	49.4	▪	2337,56
NGMD416A2500	2760	2500	2200	2000	600	1200	40	110	60	51.0	▪	2383,21
NGMD416A2600	2860	2600	2300	2000	600	1200	40	110	60	52.6	▪	2428,86
NGMD416A2700	2760	2700	2400	2000	600	1200	40	110	60	54.2	▪	2474,51
NGMD416A2800	3060	2800	2500	2000	600	1200	40	110	60	55.8	▪	2520,16
NGMD416A2900	3160	2900	2600	2000	600	1200	40	110	60	57.4	▪	2565,81
NGMD416A3000	3260	3000	2700	2000	600	1200	40	110	60	58.9	▪	2611,46
Customisations LT, L and C (L: min 500mm - max 6000 mm), stainless steel rollers and shafts.											▪	

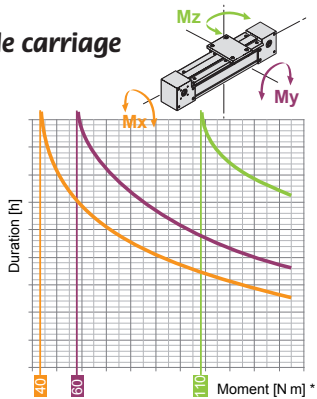
▪ **Products not in stock** *minimum order: 1 piece, delivery in 15 working days.*

ROBO linear

Duration of carriage rollers based on applied loads

HGMD D20 guide with upper single carriage



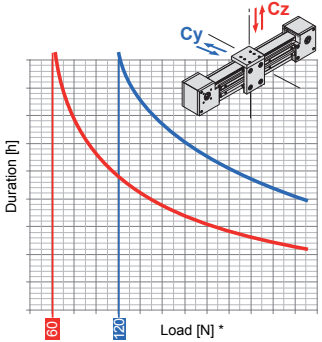


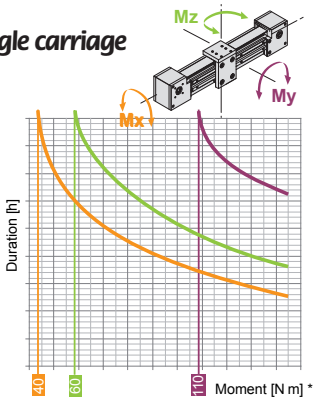
Recommended load in table

Recommended moment in table

*** upon customer request the charts complete with values are supplied by our technical department.**

BGMD-NGMD D20 guide with side single carriage





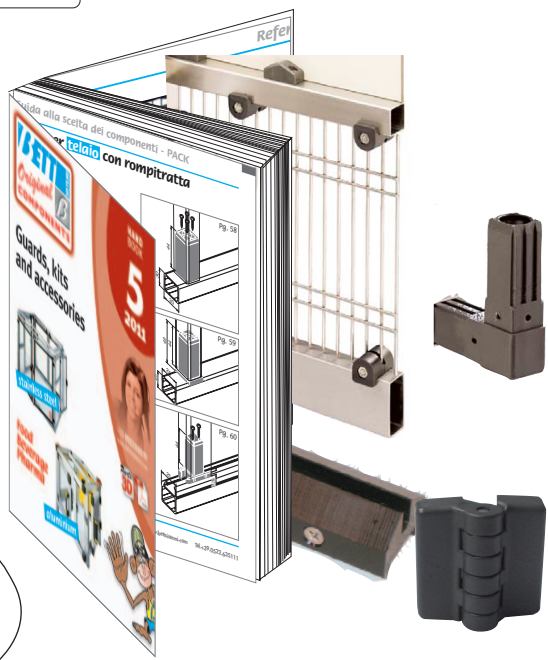
Recommended load in table

Recommended moment in table

*** upon customer request the charts complete with values are supplied by our technical department.**

BETTI SISTEMI

Original COMPONENTS



For further services

BETT SISTEMI SERVICE system partner

Tel: +39 0522 635111

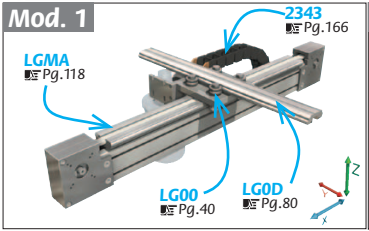
Please do not hesitate to ask for support from the Bett Service System Partners whenever you require more than just DIY components.

BETT SISTEMI Original COMPONENTS

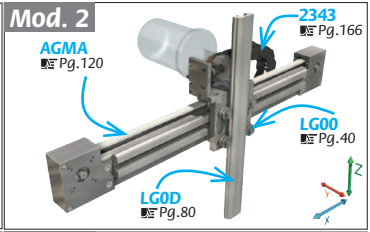
If you require pre-assembled kits like those shown in the following pages, complete the ***technical questionnaire*** *found on page 141 and send it by fax (+39 0522 635222) or e-mail (bsistemi@bettsistemi.com) to request the support of one of our System Partners.*

The BETT SERVICE SYSTEM PARTNERS are centres authorised by BETT SISTEMI with the aim of adding value to the "Original Components", thanks to their engineering and services. Besides a vast System Partner network within Bett Sistemi, authorised centres are also present in various cities in Italy and abroad.

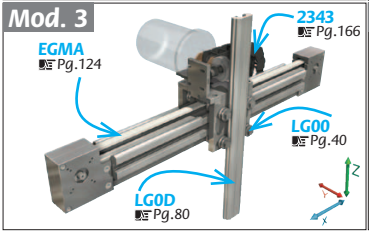
Mod. 1



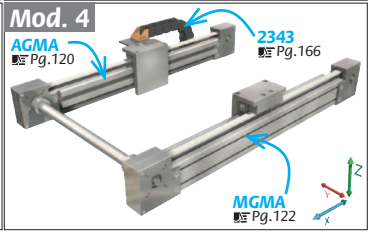
Mod. 2



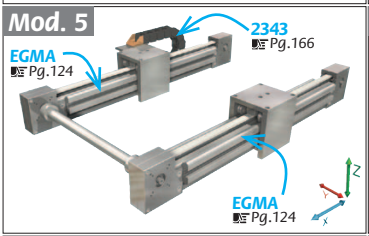
Mod. 3



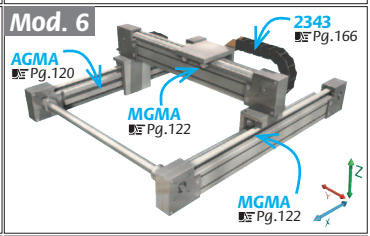
Mod. 4



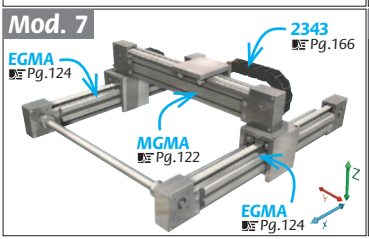
Mod. 5



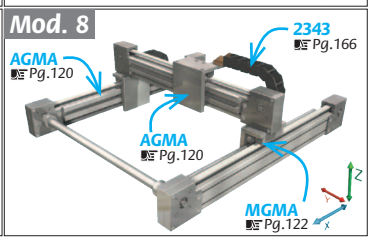
Mod. 6



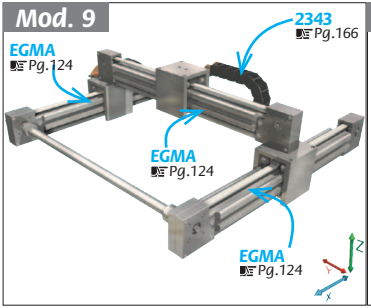
Mod. 7



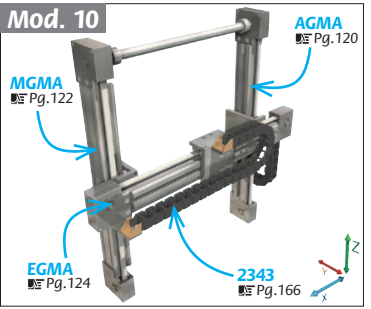
Mod. 8



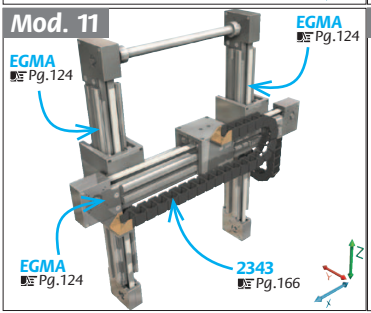
Mod. 9



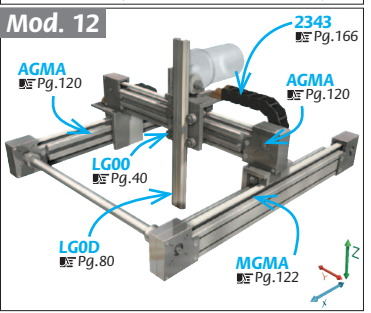
Mod. 10



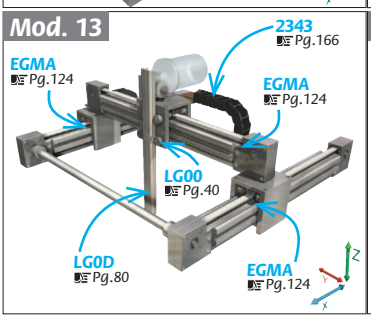
Mod. 11



Mod. 12



Mod. 13



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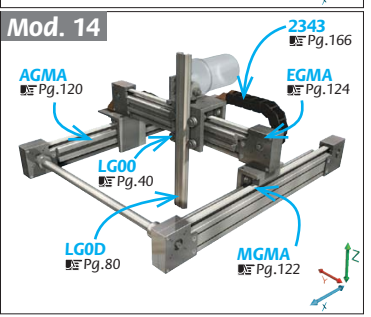


Customer:.....

Purchasing contact:.....

Technical manager: .....

Supply to be delivered before: ..... Kit to be delivered before: .....

Type of customer: Manufacturer ☐ System integrator ☐ User ☐

1) DESCRIPTION OF USE

A description of the type of work that the guide must perform is required together with a sketch indicating the dimensions.

USE (required field):

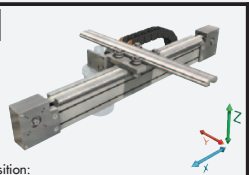
.....

.....

.....

2) CHOICE OF CONFIGURATION

Mod. 1



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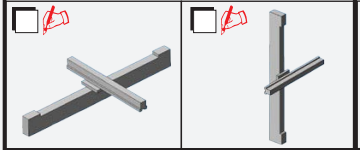

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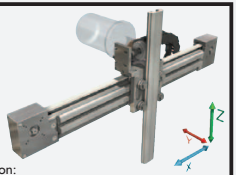

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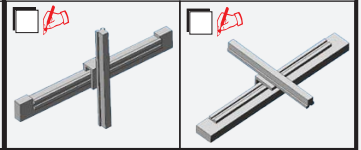

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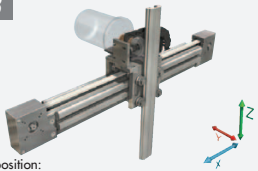

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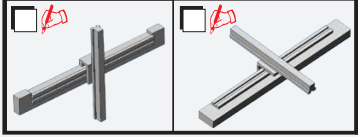

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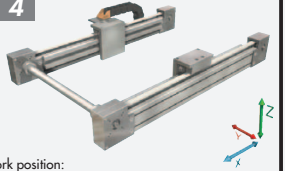

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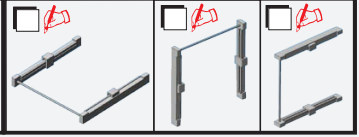

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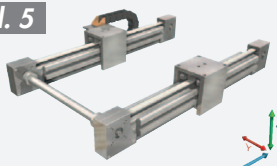

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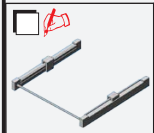

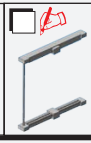

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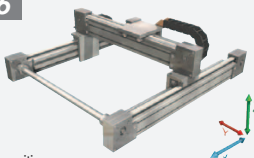

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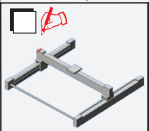
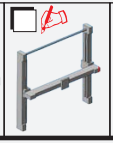


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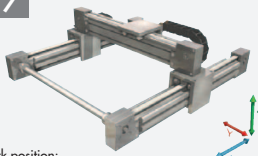

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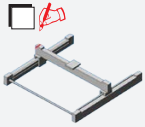
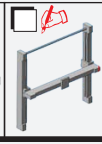


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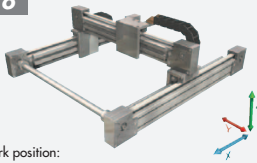

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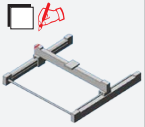
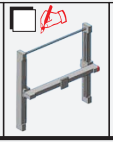


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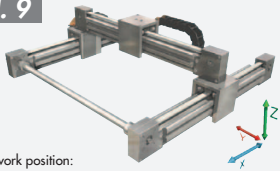

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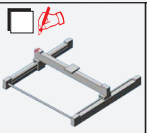
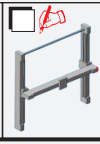


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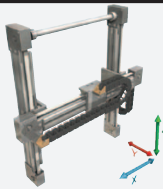

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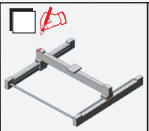
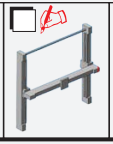


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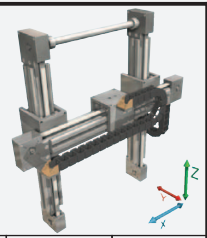

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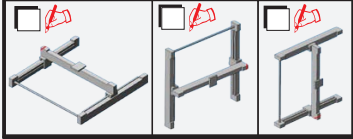

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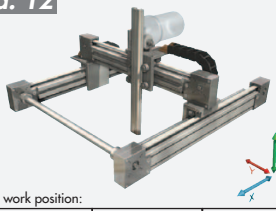

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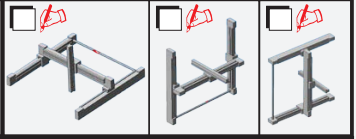

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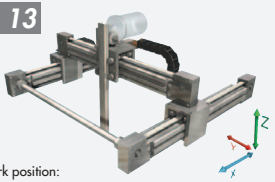

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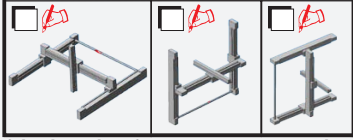

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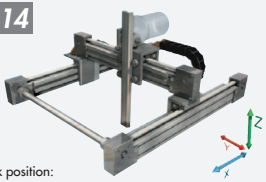

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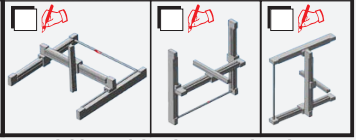


If the desired configuration is not among the 14 available models, please send us the corresponding drawing and characteristics.

3) DESCRIPTION OF THE TECHNICAL CHARACTERISTICS

3.1 - DIMENSIONS OF THE AXES

	Travel* (mm)	Precision on positioning (mm) * ATTENTION: Max obtainable precision ± 0.1 mm
X-AXIS	.....	± .....
Y-AXIS	.....	± .....
*Z-AXIS***	.....	± .....

* these fields are COMPULSORY.

** for travel exceeding 500 mm or heavy loads, the Z-axis may have to be lifted completely BEFORE moving the other axes.

3.2 - WORK CYCLE CHARACTERISTICS:

1 **Simultaneous movement of the axes:** **NO** ☐ **YES** ☐
2 **Downtime when started :**.....
3 **Downtime when stopped (sec):**.....
4 **Daily operating hours:**.....
5 **Work days in a year:** .....
6 **Guide speed (m/sec):**.....
7 **Work cycles in the time unit:** .....

These fields are COMPULSORY
Points 6 and 7 are optional: complete one or the other.

3.3 - CHARACTERISTICS OF THE APPLIED LOAD:

Mass to be transported: .....kg

Weight of the support structure of the mass (if present): .....kg

Overall dimensions of the mass to be transported:

H .....mm
B .....mm
P .....mm

Position of the mass to be transported respect to the carriage (or to the Z-axis):.....
.....
.....

The guide is used to move products: **NO** ☐ **YES** ☐

The guide is used to perform mechanical work:
(e.g. removal of chippings, engraving, etc.) **NO** ☐ **YES** ☐

External forces acting on the carriage or on the mass: **NO** ☐ **YES** ☐ .....kg

3.4 - WORK CONDITIONS AND ENVIRONMENT:

☐ Laboratory ☐ Mechanical workshop ☐ Warehouse ☐ Other: .....

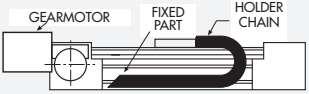
3.5 - EXPECTED DURATION OF THE GUIDE:

(indicate the expected maintenance interval) **Months:** .....

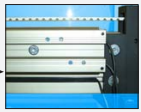
3.6 - ACCESSORIES:

- Cable holder chain **YES** ☐ **NO** ☐

(*) ATTENTION: the cable holder chain is mounted on the gearmotor side with the fixed part next to it.



- Integrated over-travel and zero sensors? (only for Ø10 and Ø12 guides) **YES** ☐ **NO** ☐



4) GENERAL NOTES AND DRAWING

- Notes: .....

.....

.....

- Are customised works required on the carriage? ☐ **YES** (provide drawing) ☐ **NO**

(ATTENTION: it is advisable for Bett to perform these works before mounting the guide, otherwise it must be dismantled and re-assembled.)

Completion date of questionnaire

.....

Signature of Applicant

.....

Items not provided in the questionnaire

For further services

BETT SISTEMI SERVICE system partner

Tel: +39 0522 635111

Please do not hesitate to ask for support from the Bett Service System Partners whenever you require more than just DIY components.

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Switzerland: Zurich
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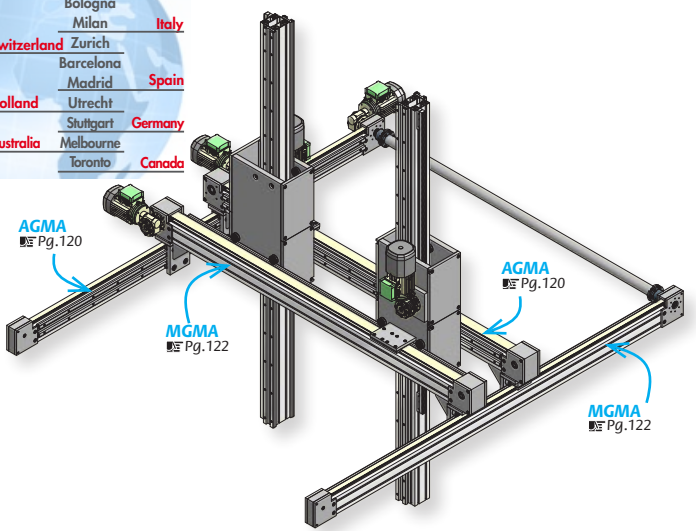
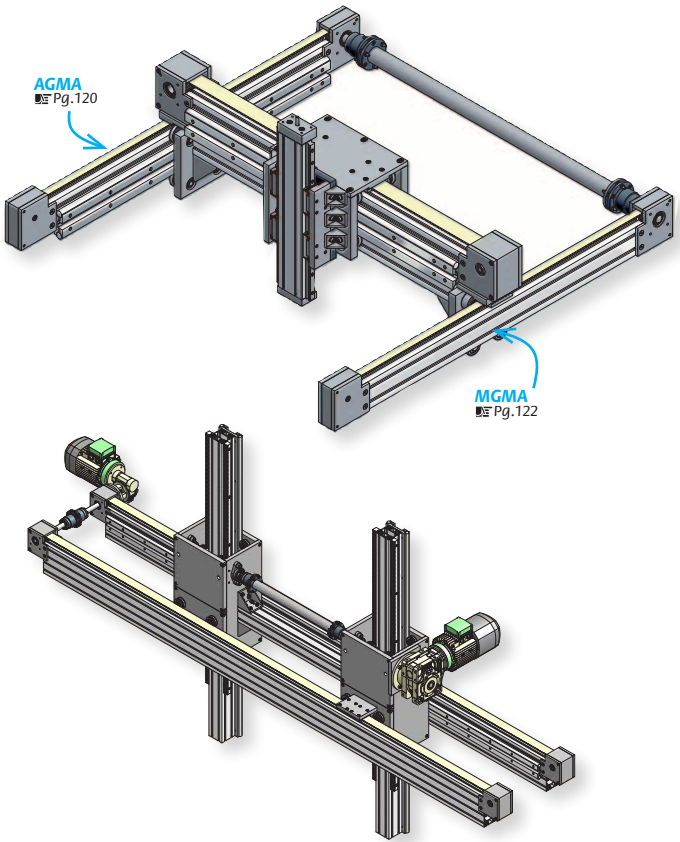
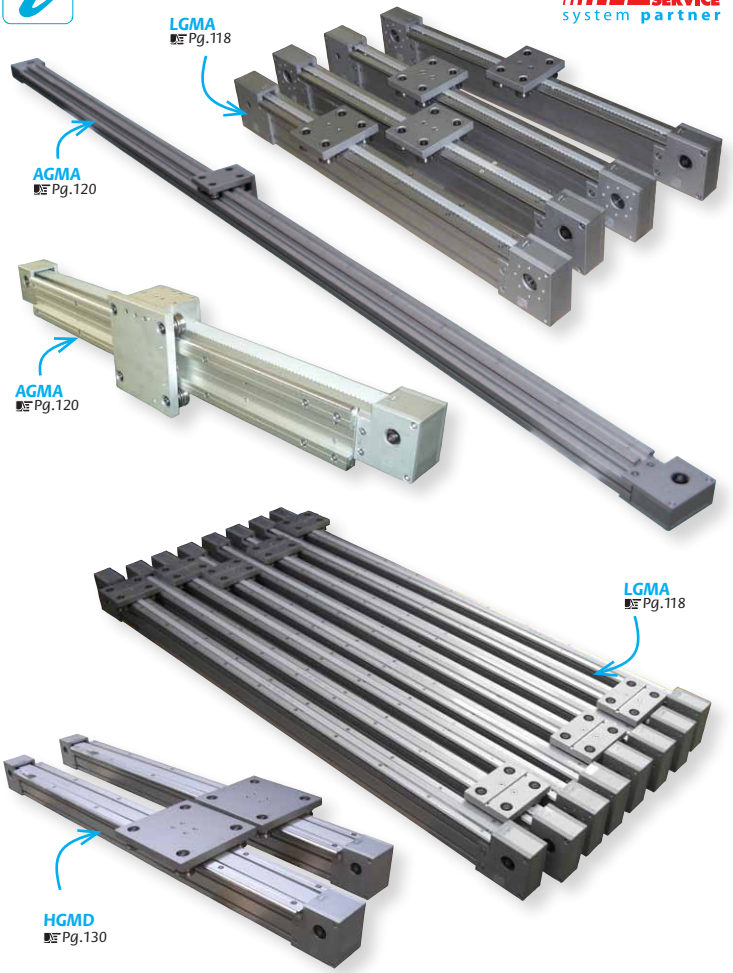
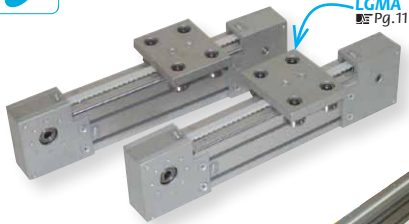


Items not provided in the questionnaire




LGMA
Pg.118
AGMA
Pg.120
AGMA
Pg.120
LGMA
Pg.118
HGMD
Pg.130



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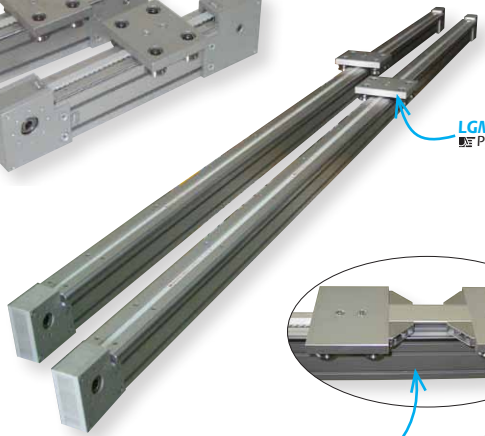
Pg.118



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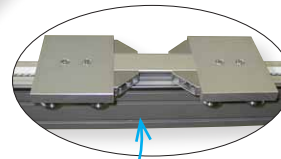
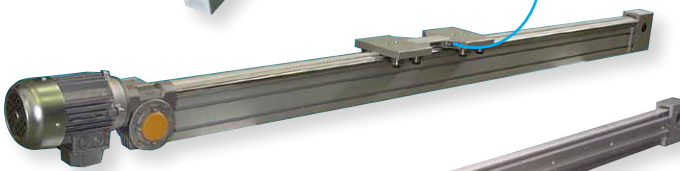
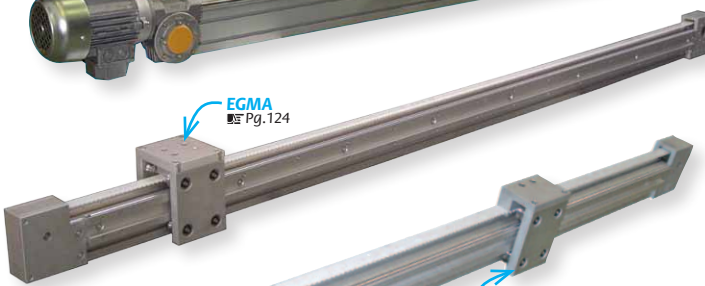
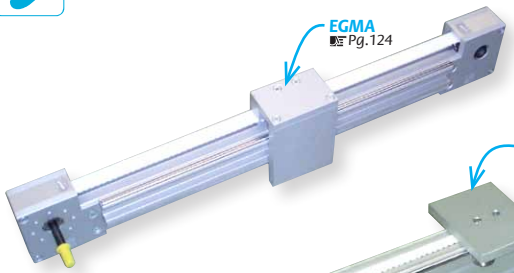






EGMA
Pg.124

AGMA
Pg.120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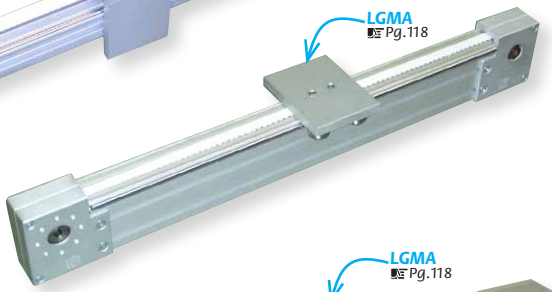
Pg.124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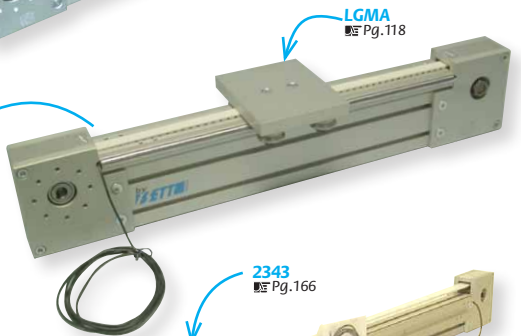
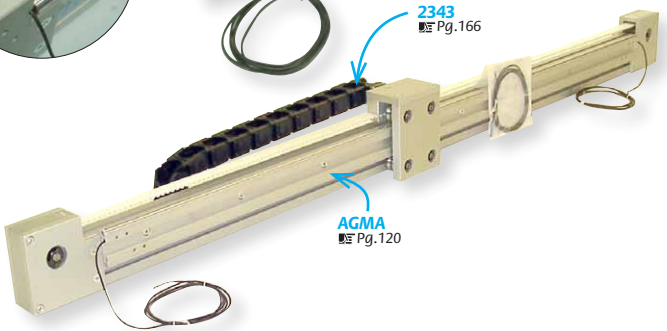

LGMA
Pg.118


2341
Pg.95


2343
Pg.166
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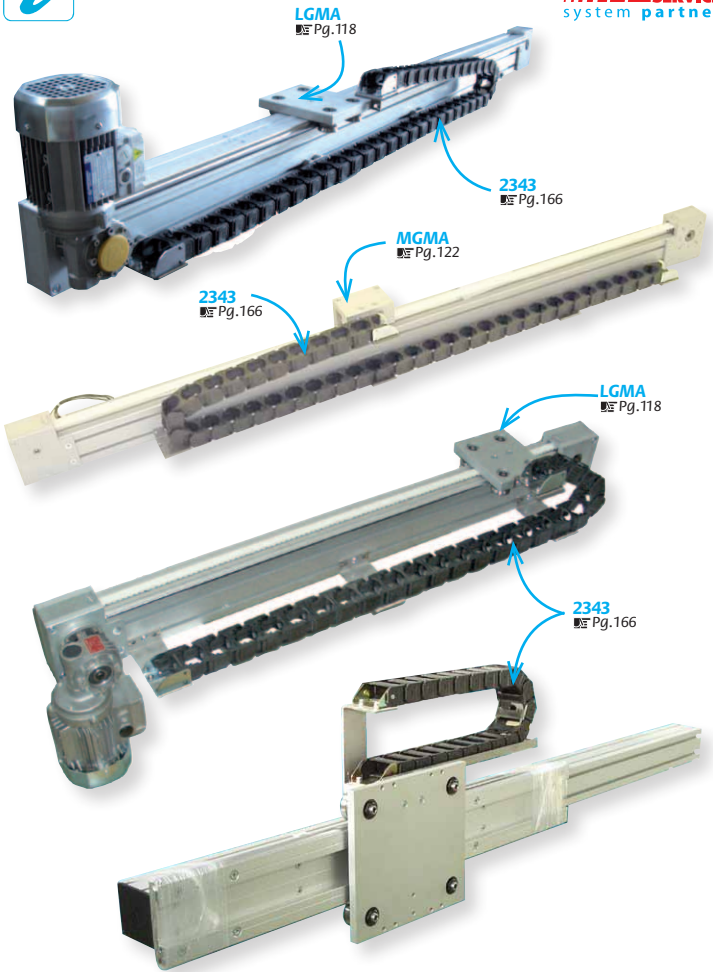
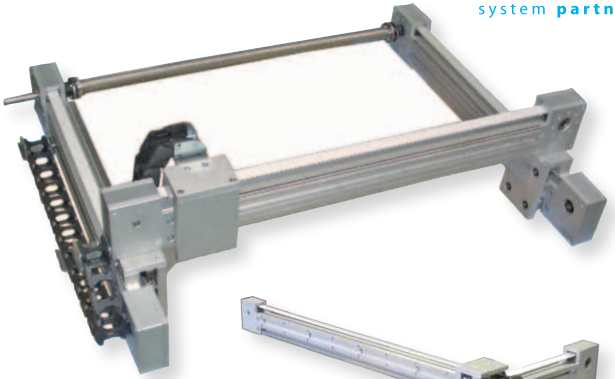
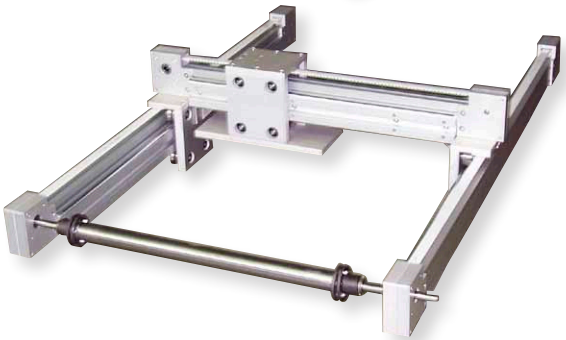
Pg.120

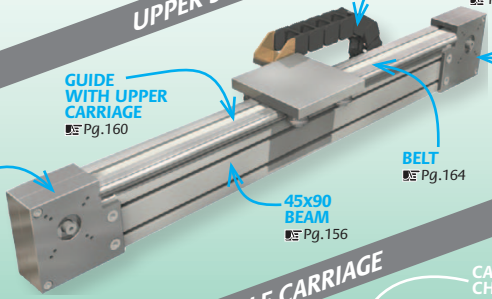

LGMA
Pg.118
2343
Pg.166
MGMA
Pg.122
2343
Pg.166
LGMA
Pg.118
2343
Pg.166



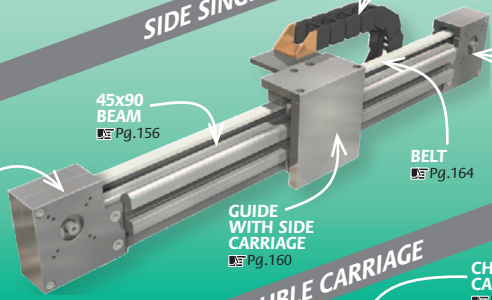


Components 45x90 Series

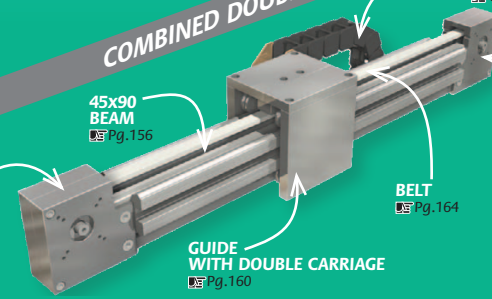
UPPER SINGLE CARRIAGE



SIDE SINGLE CARRIAGE



COMBINED DOUBLE CARRIAGE



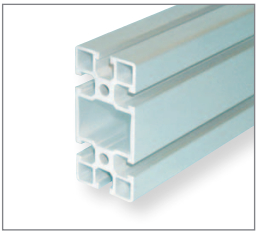
Components for DIY construction of 45x90 motor-driven Ø10 linear guides

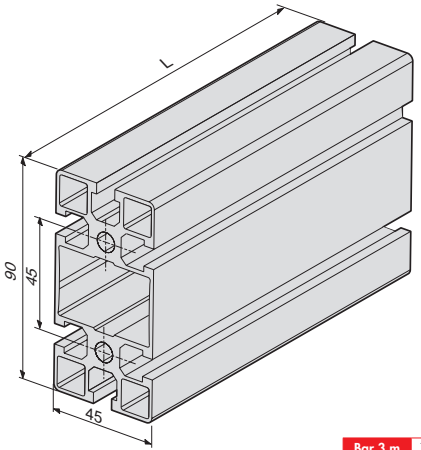
8090 45x90 Beam

Use: *grooved profile support, which provides guide rigidity, with a compartment for the belt to pass through. The grooves allow the guide to be anchored to the structure and the end-stops, sensors, etc. to be applied.*

Material *aluminium.*

Characteristics:
4 open sides.
bending moment of inertia: Iy = 96 cm⁴ / Iz = 26 cm⁴
torsion moment of inertia: 13 cm⁴
Standard pack: *8 bars.*





QUANTITY DISCOUNT

Bar 3 m	1+	8+	16+	32+
Bar 6 m	1+	4+	8+	16+
Discounts	-	-10%	-17%	on request

Order code	L	Finish	Weight Kg	Stock	€ bar
684661	8 x 3 m	anodised	9.9	✓	97,62
67773	8 x 6 m	anodised	19.8	✓	195,24
Customisations L on request (max 6000 mm).				▪	

▪ **Products not in stock** *minimum order: 1 bar, delivery in 10 days.*

Head drive unit

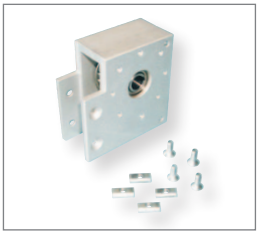
Use: *to motorise the linear guide.*

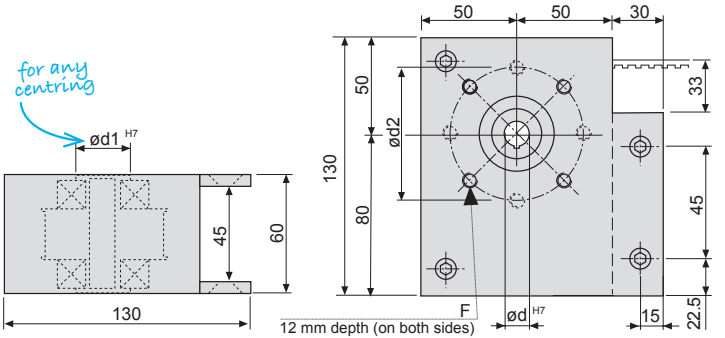
State of supply *head complete with 4 M8X20 UNI 5933 (ISO 10642) screws and 2 M8 rectangular nuts to fasten to the beam.*

Material *aluminium head, steel pulley, galvanised steel nuts and bolts.*

Technical characteristics: *1 turn of pulley = 200 mm.*

Standard pack: *1 piece.*





QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	d mm	d1 mm	d2 mm	F	Compatible gearmotor	Compatible belt	Finish	Weight Kg	Stock	€ piece
For guides with upper carriage										
628183	14	36	68	8xM6	Bonf.MVF/30	692062 (AT 10/16)	anodised	2.2	✓	152,85
628053	18	36	87	4xM6	Bonf.MVF/44	692062 (AT 10/16)	anodised	2.2	✓	162,85
628193	19	36	68	8xM6		692062 (AT 10/16)	anodised	2.2	✓	162,85
For guides with side/double carriage										
658503	14	36	68	8xM6	Bonf.MVF/30	692072 (AT 10/25)	anodised	2.2	▪	162,85
658513	18	36	87	4xM6	Bonf.MVF/44	692072 (AT 10/25)	anodised	2.2	▪	162,85
691927	25	44	90	4xM8	Bonf.MVF/49	692072 (AT 10/25)	anodised	2.2	▪	162,85

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

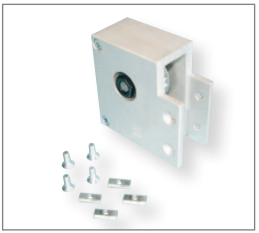
1963 Idler unit
with eccentric wheel

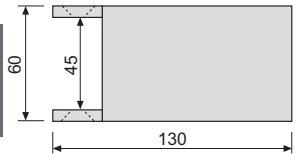
Use: *applied on the opposite side of the head drive unit, it allows the belt to return.*

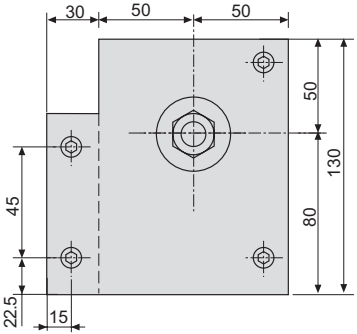
State of supply *head complete with 4 M8X20 UNI 5933 (ISO 10642) screws and 2 M8 rectangular nuts to fasten to the beam.*

Material *aluminium head, galvanised steel screws.*

Standard pack: *1 piece.*





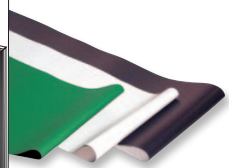


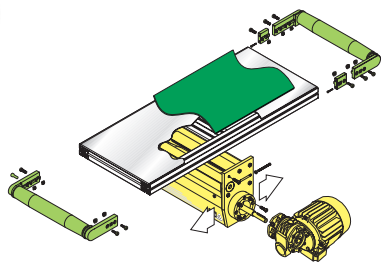
QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	Compatible belt	Finish	Weight Kg	Stock	€ piece
628063	692062 (AT 10/16)	anodised	1.93	✓	162,85
658533	692072 (AT 10/25)	anodised	1.93	✓	162,85

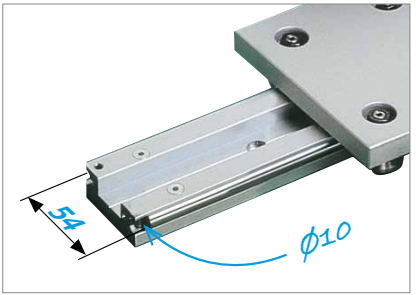

Belt Conveyor System
SERIE B045
SERIES B045
Belt Conveyors System

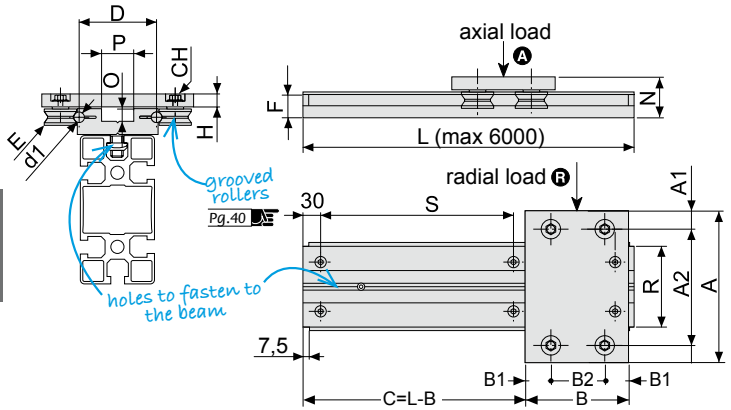




LGAD → D10 Double guide with carriage

Use: simple and safe system to be used when the guide is to remain fixed and the roller-holder carriage made to slide or when the carriage is fixed and the guide is made to slide.
Material ground, hardened and chrome-plated (or AISI431 stainless steel) Cf53 steel guides, anodised aluminium carriage and profile, steel rollers.
Standard pack: 1 piece.





Type of	d1	A	B	H	A1	A2	B1	B2	D	E	F	N	CH	P	O	R	S	A	R
roller	Ø	mm	mm	mm	mm	mm	mm	mm	mm	wrench	mm	mm	wrench	mm	mm	mm	mm	N	N
210	10	150	120	20	26	98	25	70	54	5	20	44	17	25	25	58	150	2400	2600

D10 Double guide with carriage

LGAD

Order code	Type of roller	L mm	Material of guides	Weight Kg	Stock	€ piece
LGA D210A1000	210	1000	chrome-plated steel	4.6	▪	
LGA D210A3000	210	3000	chrome-plated steel	10.8	▪	
LGA D210A4000	210	4000	chrome-plated steel	14.9	▪	

▪ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LGA D210 ▢

- *length* **L** *in mm (max 6000)*
- *chrome-plated steel guide =* **A**
  stainless steel guide = **I**
- *type of roller* Pg.40

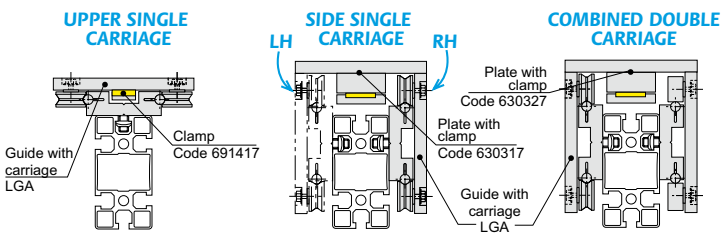
Ordering example

LGA D210A0500

Ordering example for 210-type linear guide, length L = 500 *mm, steel guides.*

FITTING RECOMMENDATIONS

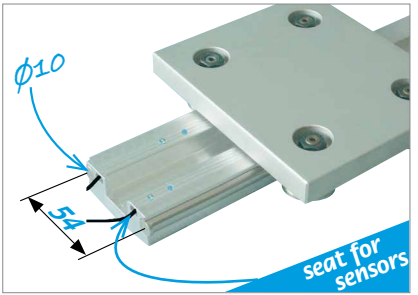
A thin groove in the centre of the profile indicates the axis where to drill for it to be anchored to the structure (it is recommended to drill every 500 mm; use M6 screws).



LGAS ➔ D10 Double guide

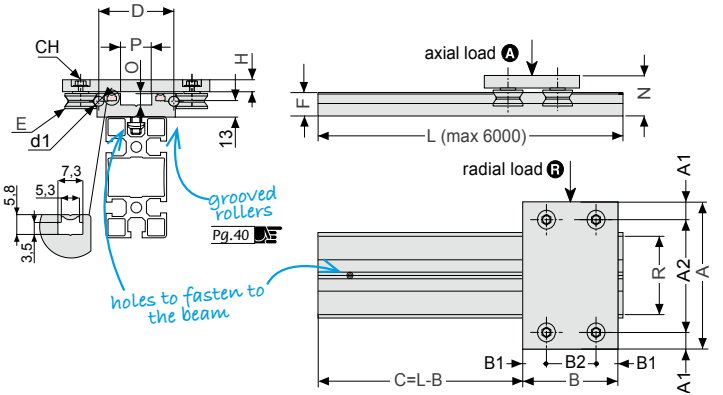
with carriage set-up for end-stop sensors

Use: *simple and safe system to be used when the guide is to remain fixed and the roller-holder carriage made to slide or when the carriage is fixed and the guide is made to slide.*
Material *ground, hardened and chrome-plated (or AISI431 stainless steel) Cf53 steel sliding shafts, anodised aluminium carriage and profile, steel rollers.*
Standard pack: *1 piece.*



Combinations Pg.95

Fitting the sensors Pg.96



Type of roller	d1 Ø	A mm	B mm	H mm	A1 mm	A2 mm	B1 mm	B2 mm	D mm	E wrench	F mm	N mm	CH wrench	P mm	O mm	R mm	A N	R N
210	10	150	120	20	26	98	25	70	54	5	20	44	17	20	25	58	2400	2600

D10 Double guide

with carriage set-up for end-stop sensors

LGAS

Order code	Type of roller	L mm	Material of shafts	Weight Kg	Stock	€ piece
LGA S 210 A 1000	210	1000	steel	4.6	■	
LGA S 210 A 3000	210	3000	steel	10.8	■	
LGA S 210 A 4000	210	4000	steel	14.9	■	

■ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LGA S 210 ____

- *length* **L** *in mm (max 6000)*
- *chrome-plated steel sliding shafts =* **A**
- *stainless steel sliding shafts =* **I**
- *type of roller* Pg.40

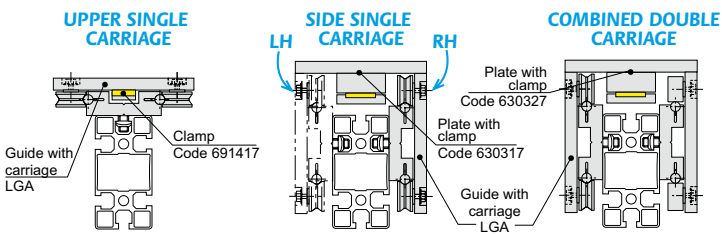
Ordering example

LGA S 210 A 0500

Ordering example for 210-type linear guide, length L = 500 mm, steel shafts, with set-up for end-stop.

FITTING RECOMMENDATIONS

A thin groove in the centre of the profile indicates the axis where to drill for it to be anchored to the structure (it is recommended to drill every 500 mm; use M6 screws).



1964 ➔ Belt for motor-drive guide

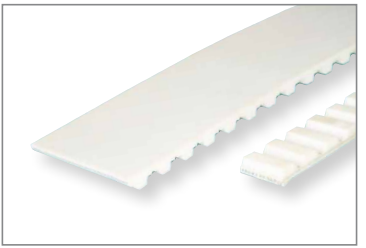
Use: to motorise the linear guide.

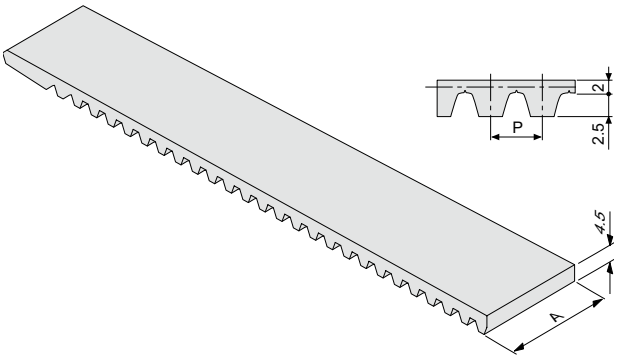
Material polyurethane with reinforced steel cables.

Maintenance: it is advisable to replace the belt every 3 years (when applied to linear guides).

Characteristics: temperature limits: from -5° to +70°C; hardness characteristics: 92 shore A.

Standard pack: 20 m roll.





Order code	A mm	pitch P mm	Max voltage traction	Type of belt	Weight kg/m	Stock	€ m
692062	16	10	2190	AT 10/16	0.09	✓	
692072 ✱	25	10	3660	AT 10/25	0.14	▪	

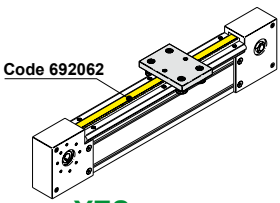
ATTENTION the belt (code 692072) cannot be used for applications that require the belt to pass through the sliding channel (in D10 and D20 guides) for clearance-relted purposes; it must therefore only be used in applications with carriages mounted sideways; see diagram Pg.165.

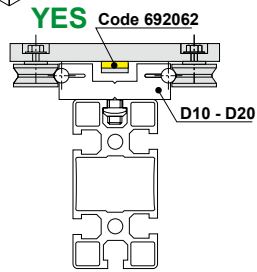
▪ **Products not in stock**, minimum order: 5 m, delivery in 10 days.

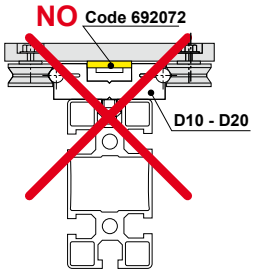
Belt for motor-drive guide

1964

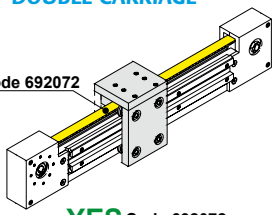
APPLICATION ON UPPER SINGLE CARRIAGE

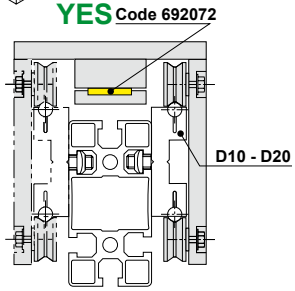


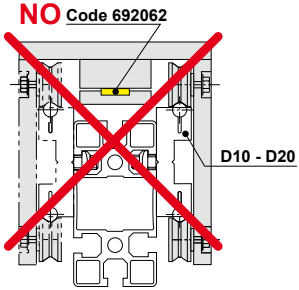




APPLICATION ON SIDE SINGLE OR COMBINED DOUBLE CARRIAGE







2343 → Cable holder chain kit with short support

Use: for the safe passage of electric cables along the linear guide with an upper or side carriage (opposite side of the carriage).

Material chain links in glass fibre reinforced technopolymer; galvanised steel couplings; stainless steel brackets; galvanised steel nuts and bolts.

State of supply: cable holder chain of required length; 2 plates (to fasten the chain to the brackets) with 8 screws to fasten the chain; 2 brackets (to fasten to the carriage and guide) with 6 M8x16 DIN7984 screws and 6 M8 square nuts with spring.

Standard pack: 1 piece.

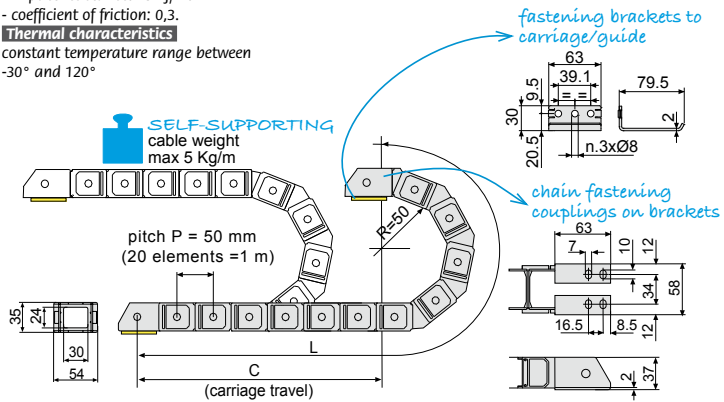
Combinations


Pg.169


Pg.168

Mechanical characteristics
- deformation resistance: 190 N/mm2.
- deformation module: 10000 N/mm2.
- expansion of rupture: 5%.
- impact resistance: 45 KJ/m.
- coefficient of friction: 0,3.

Thermal characteristics
constant temperature range between -30° and 120°



Formula to determine the length of the chain **L = C + (3,14 x R) + (2 x P).**

Calculation of n. of chain links ***n = L/P*** *(rounded to the next whole number).*

Once the length of the chain is determined, as pitch is P=50 mm, the chain is provided with a number of links that rounds up, the value calculated using the above formula. If for example, a chain length of **L=1025 mm** *corresponding to* **20.5** *links is calculated, the chain will be supplied with* **21** *links corresponding to a length of* **L=1050.**

Cable holder chain kit with short support 2343

Order code		L mm	C mm	Weight Kg	Stock	€ piece
2343	L 0500	500	230	0,3	▪	
2343	L 1000	1000	730	0,6	▪	
2343	L 1500	1500	1230	0,9	▪	
2343	L 2000	2000	1730	1,2	▪	
2343	L 2500	2500	2230	1,5	▪	
2343	L 3000	3000	2730	1,8	▪	
Customisations L and C on request.					▪	

▪ **Products not in stock** minimum order: 1 piece, delivery in 15 days.

To order other customised measurements, use the order code shown below:

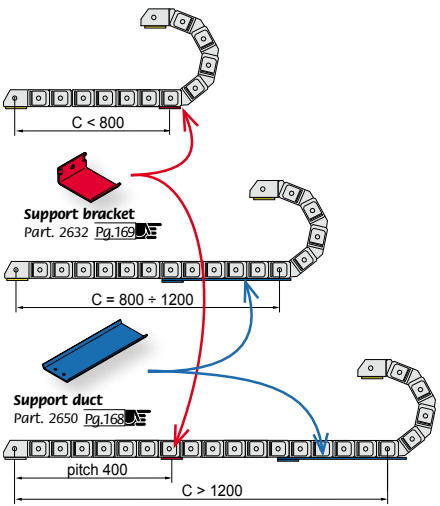
Order code

2343 L → length **L** in mm

Example of a cable holder chain L = 4000 mm.

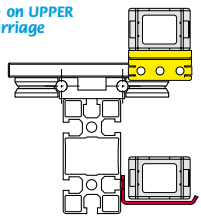
2343 L 4000

Guide to choosing supports for cable holder chain

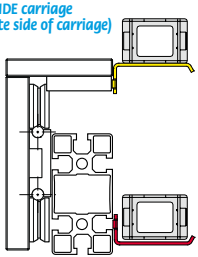


Fitting examples

→ on UPPER carriage



→ on SIDE carriage (opposite side of carriage)



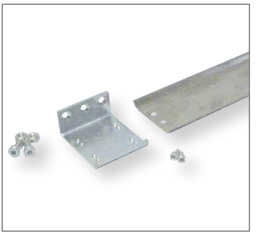
2650 Support duct for cable holder chain

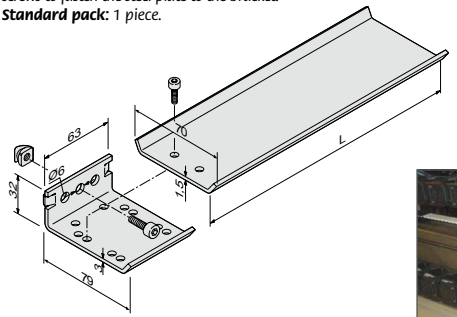
Use: *as a support for cable holder chains Part. 2343 on guides whose travel exceeds 800 mm, to be fastened at the end of the guide (opposite side to the chain coupling).*

Material *stainless steel duct and bracket, galvanised steel nuts and bolts.*

State of supply *1 bracket and 1 support steel plate, 1 M8x16 DIN7984 screw and 1 M8 square nut with spring to fasten to the profile groove, 2 screws to fasten the steel plate to the bracket.*

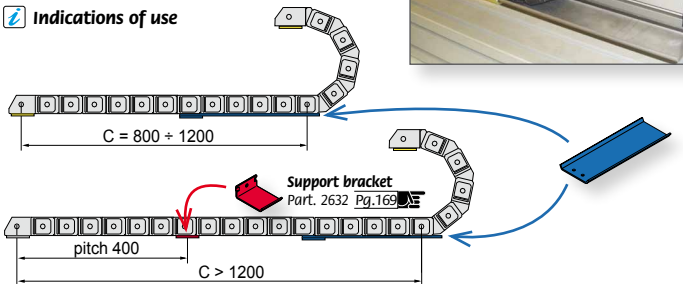
Standard pack: *1 piece.*





Combinations Pg.169

Indications of use



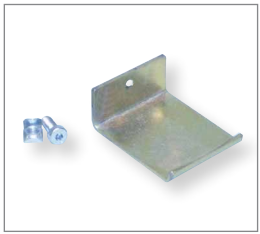
Order code					L mm	Finish	Weight g	Stock	€ piece
2650	L	0	3	5 0	350	AISI304 stainless steel	665	■	
Customisations L on request (max 3000).								■	

■ ***Products not in stock*** *minimum order: 1 piece, delivery in 10 days.*

Support bracket for cable holder chain

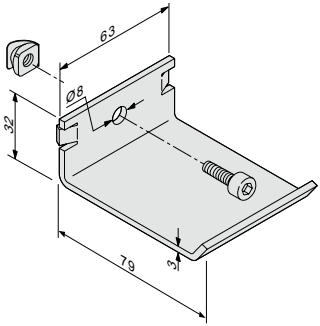
2632

Use: *as a support for cable holder chains Part. 2343 on guides whose travel is less than 800 mm, or together with the support duct Part. 2650 on guides whose travel exceeds 1200 mm (every 400 mm).*
Material *stainless steel bracket, galvanised steel nuts and bolts.*
State of supply *complete with 1 M8x16 DIN7984 screw and 1 M8 square nut with spring to fasten to the profile groove.*
Standard pack: *3 pieces.*

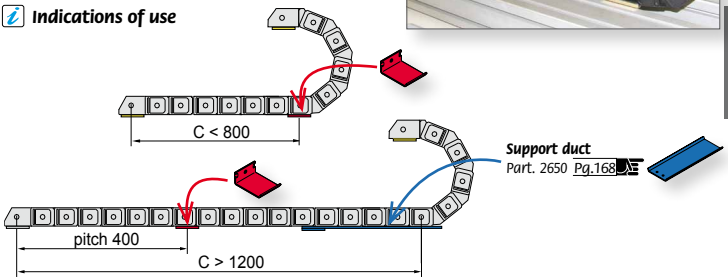


Combinations

Pg.168



Indications of use



Order code		Finish	Weight g	Stock	€ piece
690924		AISI304 stainless steel	160	✓	

2969 → Cable holder chain kit with long support

Use: *for the safe passage of electric cables along the linear guide with a side or double carriage (carriage side).*

Material *chain links in glass fibre reinforced technopolymer; galvanised steel couplings; stainless steel brackets; galvanised steel nuts and bolts.*

State of supply: *cable holder chain of required length; 2 plates (to fasten the chain to the brackets) with 8 screws to fasten the chain; 1 bracket (to fasten to the carriage) and 1 bracket (to fasten to the guide) with 6 M8x16 DIN7984 screws and 6 M8 square nuts with spring.*

Standard pack: *1 piece.*

Mechanical characteristics

- *deformation resistance: 190 N/mm2.*
- *deformation module: 10000 N/mm2.*
- *expansion of rupture: 5%.*
- *impact resistance: 45 KJ/m.*
- *coefficient of friction: 0,3.*

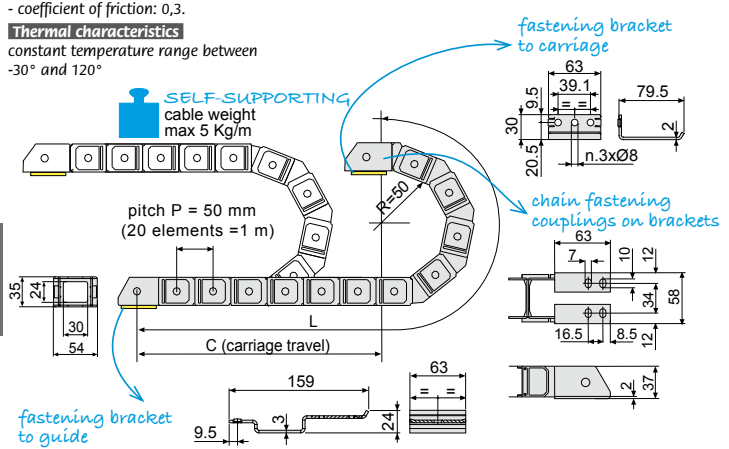
Thermal characteristics

constant temperature range between -30° and 120°

Combinations


Pg.173


Pg.172



Formula to determine the length of the chain **L = C + (3,14 x R) + (2 x P).**

Calculation of n. of chain links **n = L/P** *(rounded to the next whole number).*

Once the length of the chain is determined, as pitch is P=50 mm, the chain is provided with a number of links that rounds up, the value calculated using the above formula. If for example, a chain length of **L=1025 mm** *corresponding to* **20.5** *links is calculated, the chain will be supplied with* **21** *corresponding to a length of* **L=1050.**

Cable holder chain kit with long support 2969

Order code		L mm	C mm	Weight Kg	Stock	€ piece
2969	L 0500	500	230	0.3	▪	
2969	L 1000	1000	730	0.6	▪	
2969	L 1500	1500	1230	0.9	▪	
2969	L 2000	2000	1730	1.2	▪	
2969	L 2500	2500	2230	1.5	▪	
2969	L 3000	3000	2730	1.8	▪	
Customisations L and C on request.					▪	

▪ **Products not in stock** minimum order: 1 piece, delivery in 15 days.

To order other customised measurements, use the order code shown below:

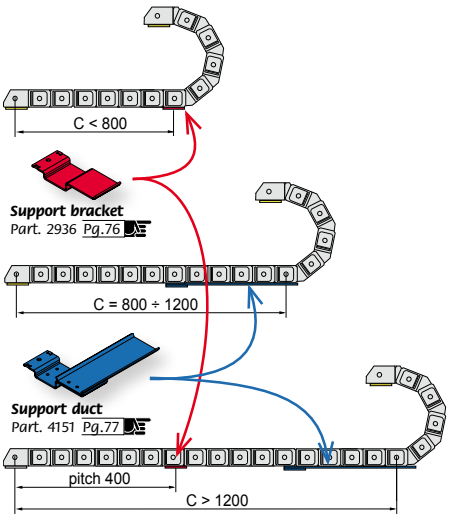
Order code

2969 | L | → length **L** in mm

Example of cable gland chain with length L = 4000

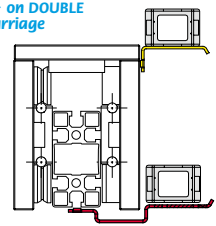
2969 L 4000

Guide to choosing supports for cable holder chain

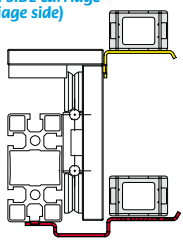


Fitting examples

→ **on DOUBLE carriage**



→ **on SIDE carriage (carriage side)**



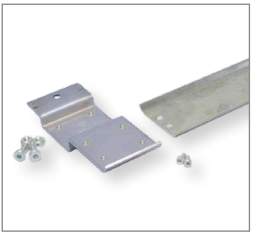
4151 Support duct for cable holder chain

Use: *as a support for cable holder chains Part. 2969 on guides whose travel exceeds 800 mm, to be fastened at the end of the guide (opposite side to the chain coupling).*

Material *stainless steel duct and bracket, galvanised steel nuts and bolts.*

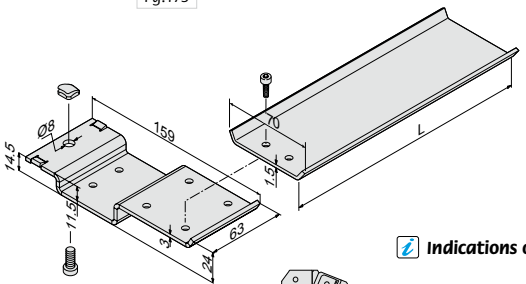
State of supply *1 bracket and 1 support steel plate, 1 M8x16 DIN7984 screw and 1 M8 square nut with spring to fasten to the profile groove, 2 screws to fasten the steel plate to the bracket.*

Standard pack: *1 piece.*

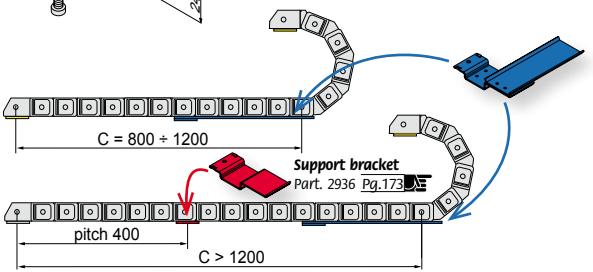


Combinations


Pg.173



Indications of use



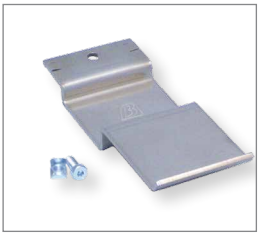
Order code					L mm	Finish	Weight g	Stock	€ piece
4151	L	0	3	5 0	350	AISI304 stainless steel	740	■	
Customisations	L on request (max 3000)							■	

■ ***Products not in stock*** *minimum order: 1 piece, delivery in 10 days.*

Support bracket for cable holder chain

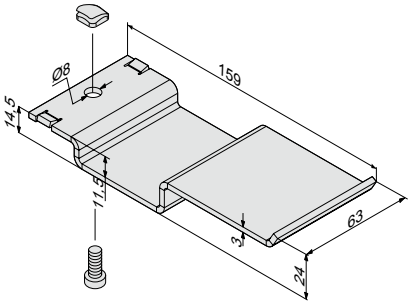
2936

Use: as support for cable holder chains Part. 2969 on guides whose travel is less than 800 mm, or together with the to support duct Part. 4151 on guides whose travel exceeds 1200 mm (every 400 mm).
Material stainless steel bracket, galvanised steel nuts and bolts.
State of supply complete with 1 M8x16 DIN7984 screw and 1 M8 square nut with spring to fasten to the profile groove.
Standard pack: 3 pieces.

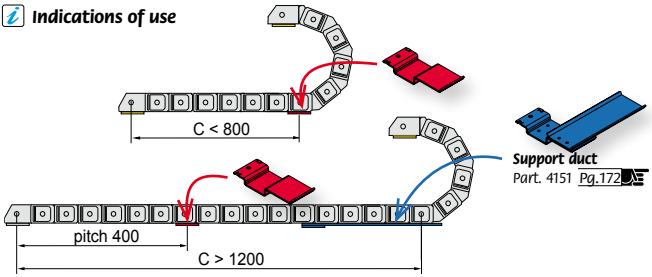


Combinations

Pg.172



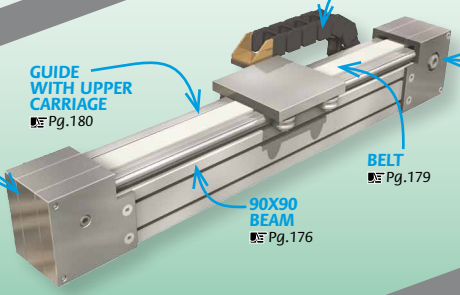
Indications of use



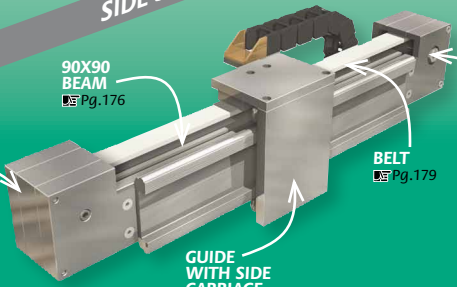
Order code		Finish	Weight g	Stock	€ piece
620498		AISI304 stainless steel	275	✓	

Components 90x90 Series

UPPER SINGLE CARRIAGE



SIDE SINGLE CARRIAGE



Components for DIY construction of 90x90 motor-driven Ø20 linear guides

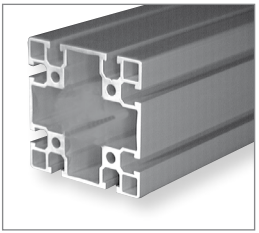
8990L 90x90 Beam

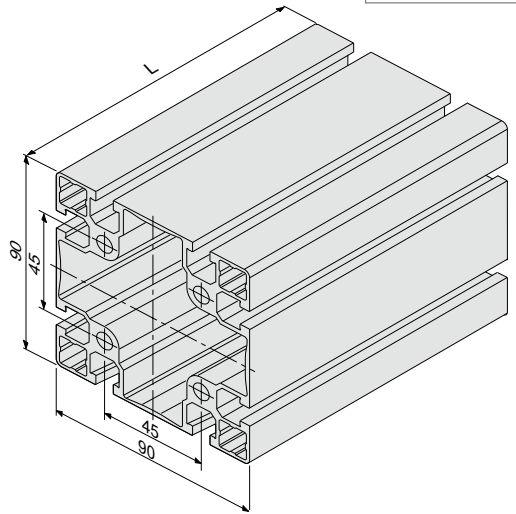
Use: *grooved profile support, which provides guide rigidity, with a compartment for the belt to pass through. The grooves allow the guide to be anchored to the structure and the end-stops, sensors, etc. to be applied.*

Material *aluminium.*

Characteristics:
4 open sides
hollow inside
bending moment of inertia: $I_y = 167\ cm^4$ / $I_z = 167\ cm^4$
torsion moment of inertia: 48,3 cm^4

Standard pack: *6 bars.*





Order code	L	Finish	Weight Kg	Stock	€ bar
688833	6 x 3 m	anodised	28,8	✓	
685722	6 x 6 m	anodised	28,8	✓	
Customisations L on request (max 6000 mm).				▪	

▪ **Products not in stock** *minimum order: 1 bar, delivery in 10 days.*

Head drive unit for Ø25 shaft

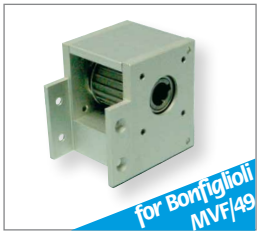
Use: *to motorise the linear guide.*

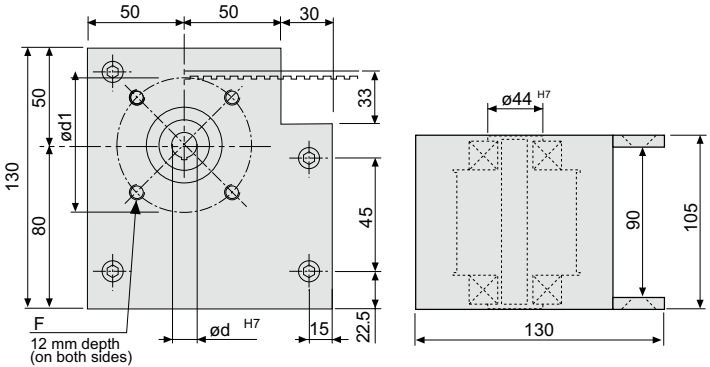
State of supply *head complete with 4 M8X20 UNI 5933 (ISO 10642) screws and 2 M8 rectangular nuts to fasten to the beam.*

Material *aluminium head, steel pulley, galvanised steel nuts and bolts.*

Technical characteristics: *1 turn of pulley = 200 mm.*

Standard pack: *1 piece.*





Order code	d mm	d1 mm	F	Compatible gearmotor	Compatible belt	Finish	Weight Kg	Stock	€ piece
674154	25	90	4xM8	Bonf.MVF/49	692082 (AT 10/50)	anodised	4.0	■	

■ ***Products not in stock*** *minimum order: 1 piece, delivery in 10 days.*

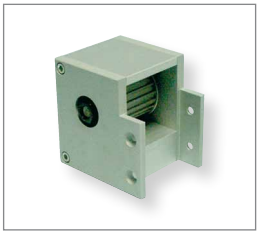
2527 Idler unit
with eccentric wheel

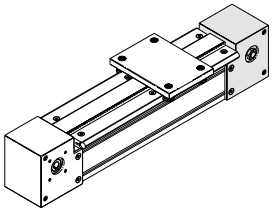
Use: *applied on the opposite side of the head drive unit, it allows the belt to return.*

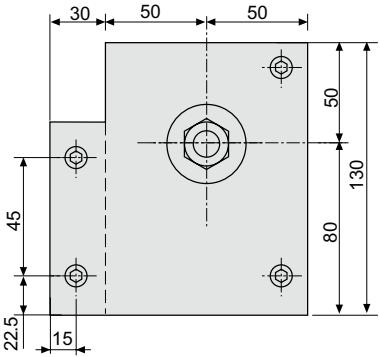
State of supply *head complete with 2 M8X20 UNI 5933 (ISO 10642) screws and 2 M8 rectangular nuts to fasten to the beam.*

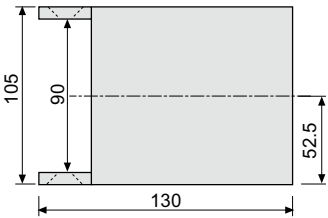
Material *aluminium head, galvanised steel screws.*

Standard pack: *1 piece.*









Order code	Compatible belt	Finish	Weight Kg	Stock	€ piece
674164	692082 (AT 10/50)	anodised	3.7	■	

■ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Belt for motor-drive guide

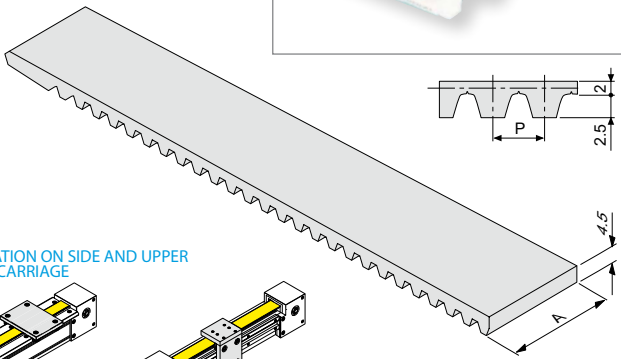
Use: *to motorise the linear guide.*

Material *polyurethane with reinforced steel cables.*

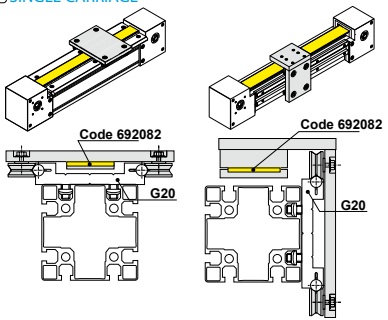
Maintenance: *it is advisable to replace the belt every 3 years (when applied to linear guides).*

Characteristics: *temperature limits: from -5° to +70°C; hardness characteristics: 92 shore A.*

Standard pack: *20 m roll.*



APPLICATION ON SIDE AND UPPER SINGLE CARRIAGE



Order code	A mm	pitch P mm	Max voltage traction	Type of belt	Weight kg/m	Stock	€ m
692082	50	10	8050	AT 10/50	0.28	■	

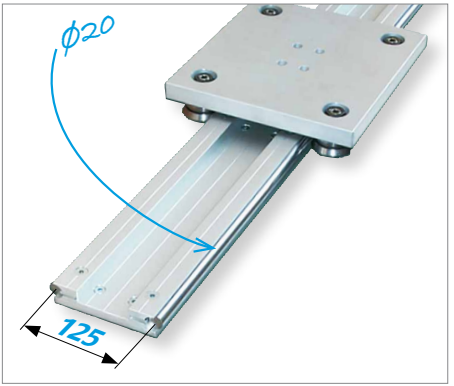
■ ***Products not in stock****, minimum order: 5 m, delivery in 10 days.*

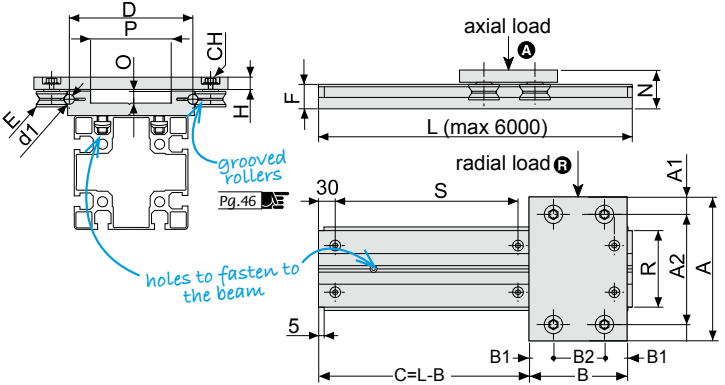
LGAG → G20 Double guide with carriage

Use: *simple and safe system to be used when the guide is to remain fixed and the roller-holder carriage made to slide or when the carriage is fixed and the guide is made to slide.*

Material *h6 sliding shafts in hardened, chrome-plated and ground steel or hardened and ground AISI 431 stainless steel; anodised aluminium profile and carriage, steel rollers.*

Standard pack: *1 piece.*





Type of roller	d1 Ø	A mm	B mm	H mm	A1 mm	A2 mm	B1 mm	B2 mm	D mm	E wrench	F mm	N mm	CH wrench	P mm	O mm	R mm	S mm	A N	R N
416	20	275	300	25	40	195	40	220	125	8	30	61.5	24	65	17	130	300	6400	7000
516	20	275	300	25	40	195	40	220	125	8	30	61.5	24	65	17	130	300	17200	8600

G20 Double guide with carriage

LGAG

Order code	Type of roller	A mm	B mm	H mm	L mm	Material of shafts	Weight Kg	Stock	€ piece
LGAG416A0800	416	275	300	25	800	steel	11.2	■	
LGAG416A1500	416	275	300	25	1500	steel	18.8	■	

■ **Products not in stock** *minimum order: 1 piece, delivery in 10 days.*

Customisations *additional working (drilling/threading) on the carriage: 5 additional delivery days, price to follow.*

To order other customised measurements, use the order code shown below:

Order code

LGAG [ ] → *Length* **L** *in mm (max 6000)*

→ *Steel sliding shafts =* **A**
Stainless steel sliding shafts = **I**

→ *Type of roller* Pg.46

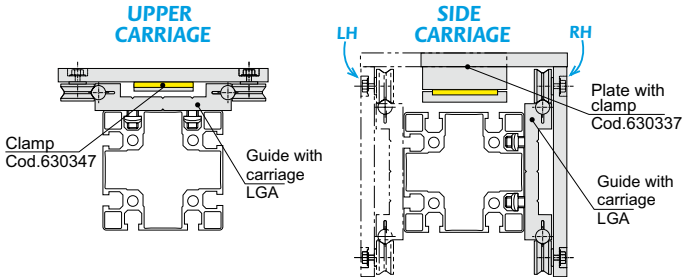
Ordering example

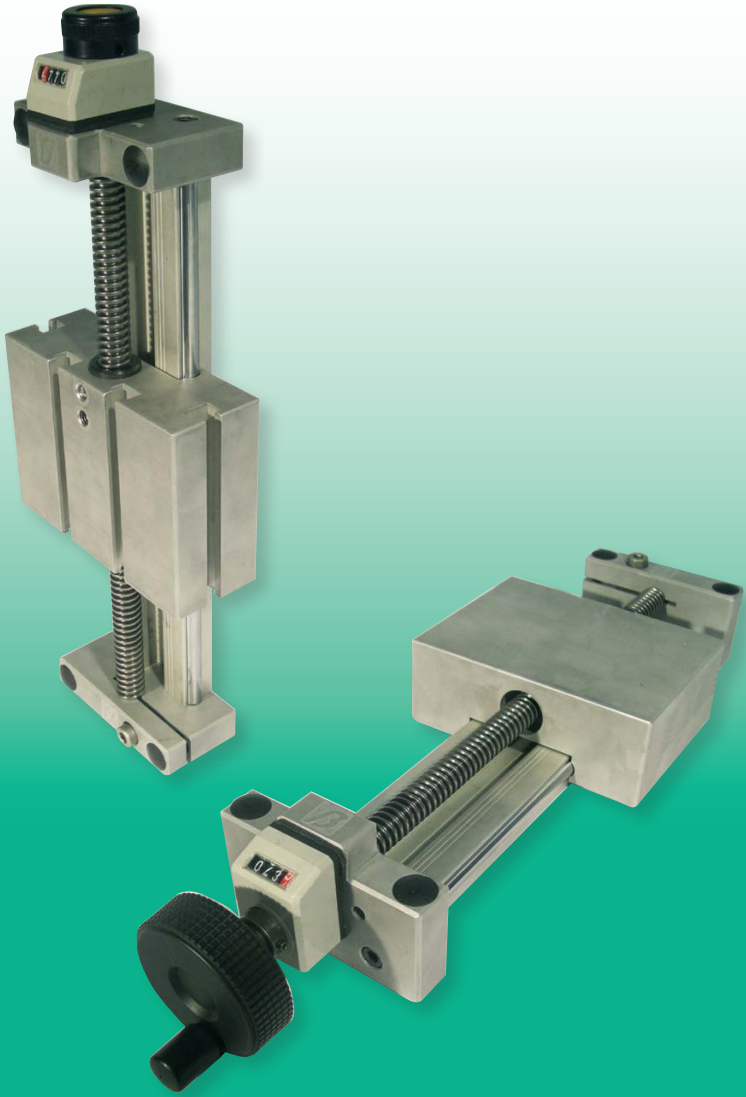
LGAG416A1250

Ordering example for 416-type linear guide, length L = 1250 *mm, with steel shafts.*

FITTING RECOMMENDATIONS

A thin groove in the centre of the profile indicates the axis where to drill for it to be anchored to the structure (it is recommended to drill every 500 mm; use M10 *screws).*





Components for DIY construction of manually driven linear tables

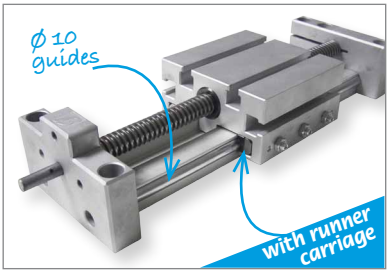
TL Pre-assembled D10 linear table kit with manual drive

Use: *precise positioning and adjustment of manually driven work units with high loads.*

Material *chrome-plated, hardened and ground Cf53 steel sliding shafts (on request, AISI431 stainless steel) on anodised aluminium profile; anodised aluminium head with polyethylene caps and galvanised steel screws; anodised aluminium carriage with polyamide runners (or steel rollers) and galvanised steel plates and nuts and bolts; burnished leaded high speed steel screw with trapeze thread.*

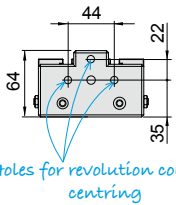
Standard pack: *1 piece.*

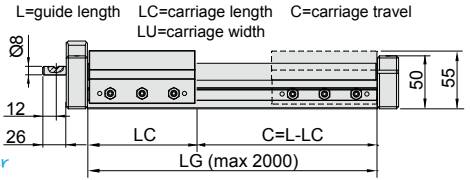
Technical characteristics *Tr16 Worm screw, pitch 4 (1 turn = 4 linear mm).*

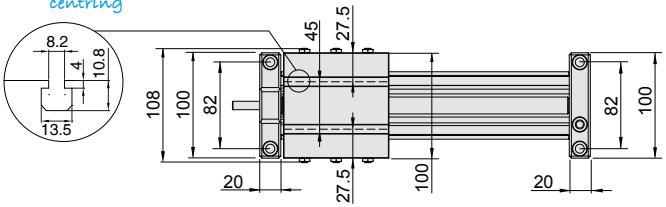


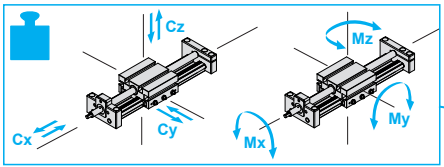
Combinations

Pg.193 Pg.194 Pg.195 Pg.196 Pg.95









QUANTITY DISCOUNT

Pieces	1+	5+	10+	20+
Discounts	-	5%	15%	on request

Order code						LG mm	LC mm	C mm	Cx N	Cy N	Cz N	Mx Nm	My Nm	Mz Nm	Weight Kg	Stock	€ piece
With runner carriage with grooves																	
TL	P	S	D10	A	0125	125	100	25	1500	1090	1090	30	20	20	2.58	▪	429,27
TL	P	S	D10	A	0150	150	100	50	1500	1090	1090	30	20	20	2.69	▪	430,47
TL	P	S	D10	A	0175	175	100	75	1500	1090	1090	30	20	20	2.80	▪	431,77
TL	P	S	D10	A	0200	200	100	100	1500	1090	1090	30	20	20	2.91	▪	432,86
TL	P	S	D10	A	0225	225	100	125	1500	1090	1090	30	20	20	3.02	▪	434,06
With runner carriage without grooves																	
TL	P	L	D10	A	0125	125	100	25	1500	1090	1090	30	20	20	2.63	▪	409,14
TL	P	L	D10	A	0150	150	100	50	1500	1090	1090	30	20	20	2.74	▪	410,34
TL	P	L	D10	A	0175	175	100	75	1500	1090	1090	30	20	20	2.85	▪	411,54
TL	P	L	D10	A	0200	200	100	100	1500	1090	1090	30	20	20	2.96	▪	412,73
TL	P	L	D10	A	0225	225	100	125	1500	1090	1090	30	20	20	3.07	▪	413,93
With roller carriage with grooves																	
TL	R	S	D10	A	0125	125	100	25	1500	900	900	40	45	80	2.64	▪	487,62
TL	R	S	D10	A	0150	150	100	50	1500	900	900	40	45	80	2.75	▪	488,82
TL	R	S	D10	A	0175	175	100	75	1500	900	900	40	45	80	2.86	▪	490,02
TL	R	S	D10	A	0200	200	100	100	1500	900	900	40	45	80	2.97	▪	491,21
TL	R	S	D10	A	0225	225	100	125	1500	900	900	40	45	80	3.08	▪	491,41
With roller carriage without grooves																	
TL	R	L	D10	A	0125	125	100	25	1500	900	900	40	45	80	2.69	▪	467,49
TL	R	L	D10	A	0150	150	100	50	1500	900	900	40	45	80	2.80	▪	468,69
TL	R	L	D10	A	0175	175	100	75	1500	900	900	40	45	80	2.91	▪	469,89
TL	R	L	D10	A	0200	200	100	100	1500	900	900	40	45	80	3.02	▪	471,08
TL	R	L	D10	A	0225	225	100	125	1500	900	900	40	45	80	3.13	▪	472,28
Customisations on request L, LC and C; stainless steel rollers and sliding shafts.																▪	

▪ **Products not in stock** minimum order: 1 piece, delivery in 15 days.

To order other customised measurements, use the order code shown below:

Order code

TL [ ][ ] 10 [ ][ ][ ][ ][ ]

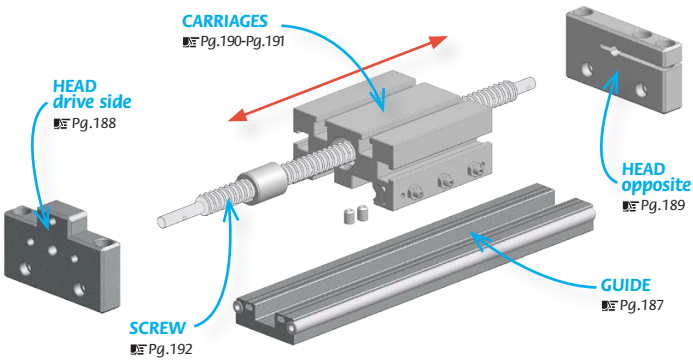
- Length **L** in mm (max 2000)
- Steel guide = **A** - Stainless steel guide = **I**
- With end-stop sensors set-up = **C**
  Without end-stop sensors set-up = **D**
- Carriage with grooves = **S** - Carriage without grooves = **L**
- Carriage with runners = **P** - Carriage with rollers = **R**

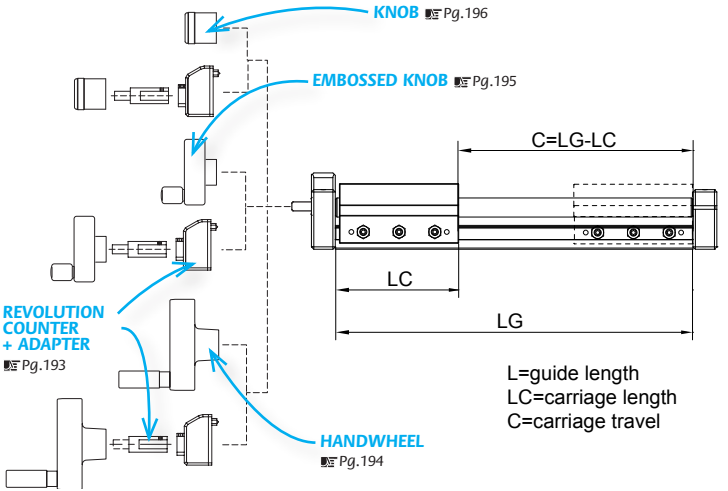
Ordering example

TL	P	L	D10	A	0	2	5	0

Ordering example for table with Ø10 steel shafts, carriage with runners, without grooves and length L = 250 mm.

Guide to DIY construction





Double guide
set-up for end-stop sensors

LG0F

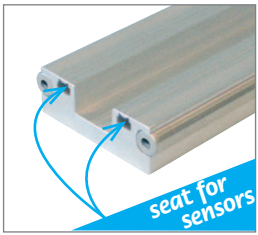
Use: *the guide is ready for installation; it only needs to be drilled to be fastened to the structure using the relative indent in the centre of the profile. It does not require lubrication or further maintenance.*

Material *ground, hardened and chrome-plated (on request AISI431 stainless steel) Cf53 sliding shafts, anodised aluminium profile.*

Standard pack: *1 piece.*

Characteristics:

parallelism tolerance of the steel bars: 0.03 mm/m
tolerance on cut: ±1 mm.



Combinations

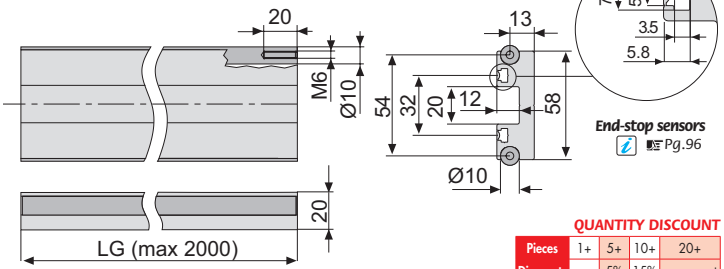

Pg.188

Pg.189

Pg.190

Pg.191

Pg.95



End-stop sensors Pg.96

QUANTITY DISCOUNT

Pieces	1+	5+	10+	20+
Discounts	-	5%	15%	on request

Order code	LG mm	Material of guides	Weight Kg	Stock	€ piece
LG0F D10 A 0125	125	steel	0.38	▪	81,57
LG0F D10 A 0150	150	steel	0.46	▪	82,37
LG0F D10 A 0175	175	steel	0.54	▪	83,17
LG0F D10 A 0200	200	steel	0.62	▪	83,96
LG0F D10 A 0225	225	steel	0.70	▪	84,76

▪ ***Products not in stock*** *minimum order: 1 piece, delivery in 5 days.*

To order other customised measurements, use the order code shown below:

Order code

LG0F 10 [ ][ ][ ][ ][ ]
- [ ][ ][ ][ ][ ] → *Length L in mm (max 2000)*
- [A] → *Steel shafts = A*
- [I] → *Stainless steel shafts = I*
- [C] → *With end-stop sensors set-up = C*
- [D] → *Without end-stop sensors set-up = D*

Ordering example

LG0F D10 A 0250

Ordering example for guide with Ø10 steel shafts and length L = 250 mm

4130 Head drive side

Use: *handwheel driven double guide linear tables control side closing head.*

Material *anodised aluminium head, polyethylene caps, galvanised steel screws, brass anti-friction washer.*
Standard pack: *1 piece.*

Combinations


Pg.187

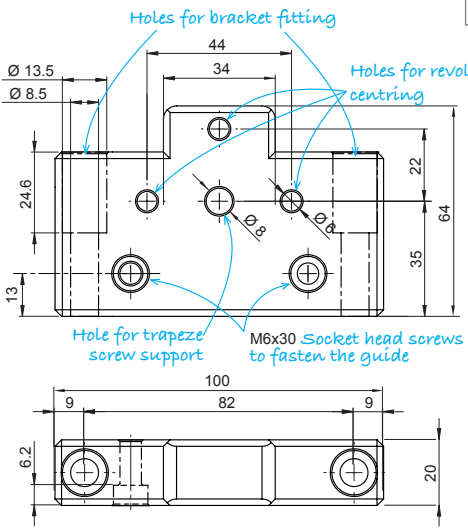
Pg.192

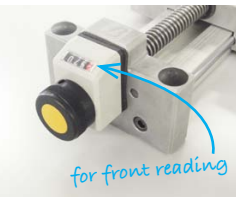
Pg.193

Pg.194

Pg.195

Pg.196





QUANTITY DISCOUNT

Pieces	1+	5+	10+	20+
Discounts	-	5%	15%	on request

Order code		Finish	Weight g	Stock	€ piece
691017		anodised	278	■	43,00

■ **Products not in stock** *minimum order: 1 piece, delivery in 20 days.*

Head
opposite side

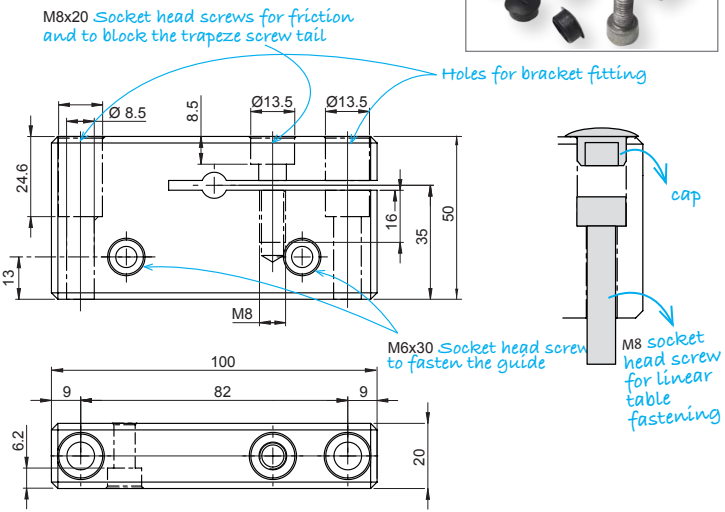
Use: *handwheel driven double guide linear tables control opposite side closing head.*

Material *anodised aluminium head, polyethylene caps, galvanised steel screws, brass anti-friction washer.*

Standard pack: *1 piece.*

Combinations

Pg.187 Pg.192



QUANTITY DISCOUNT

Pieces	1+	5+	10+	20+
Discounts	-	5%	15%	on request

Order code		Finish	Weight g	Stock	€ piece
691027		anodised	245	■	45,00

■ ***Products not in stock*** *minimum order: 1 piece, delivery in 20 days.*

4134 Runner carriage

Use: to fasten components that are to be moved on handwheel driven double guide linear tables.

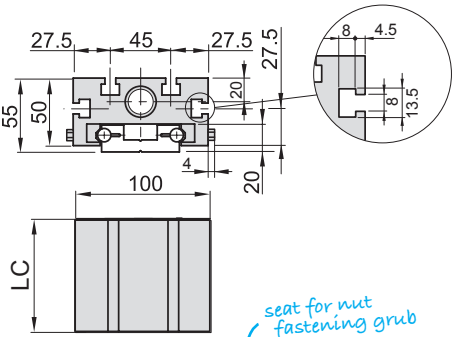
Material anodised aluminium carriage, polyamide runners, galvanised steel plates and nuts and bolts.

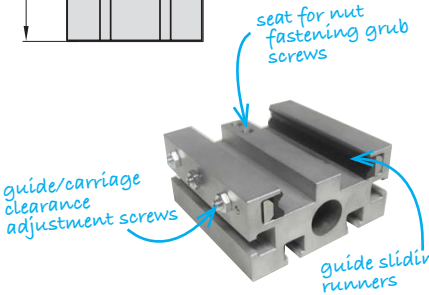
Standard pack: 1 piece.

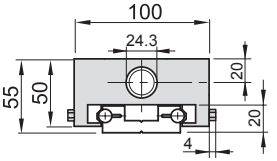
Combinations


Pg.187


Pg.192







QUANTITY DISCOUNT

Pieces	1+	5+	10+	20+
Discounts	-	5%	15%	on request

Order code	LC	Version	Finish	Weight g	Stock	€ piece
691167	100	with grooves	anodised	1455	■	164,75
691177	100	without grooves	anodised	1610	■	144,62

■ **Products not in stock** *minimum order: 1 piece, delivery in 20 days.*

Roller carriage 4135

Use: to fasten components that are to be moved on handwheel driven double guide linear tables.

Material anodised aluminium carriage, steel rollers.

Standard pack: 1 piece.

Combinations

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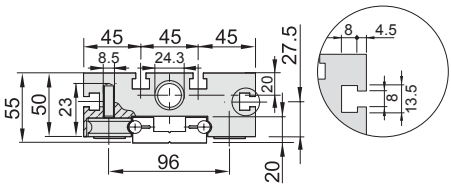
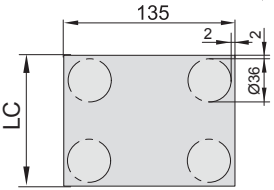
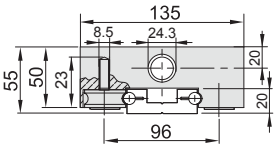
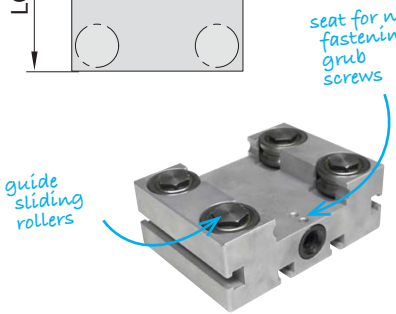
Pg.192









QUANTITY DISCOUNT

Pieces	1+	5+	10+	20+
Discounts	-	5%	15%	on request

Order code	LC	Version	Finish	Weight g	Stock	€ piece
691227	100	with grooves	anodised	1515	▪	223,10
691237	100	without grooves	anodised	1670	▪	202,97

▪ **Products not in stock** *minimum order: 1 piece, delivery in 20 days.*

4132 Trapeze screw with threaded nut

Use: *for the carriage to be driven by the handwheel.*
Material *burnished leaded high speed steel with trapeze thread.*
Characteristics: *permissible axial load = 3.9 kN.*
Standard pack: *1 piece.*

Combinations


Pg.188

Pg.189

Pg.190

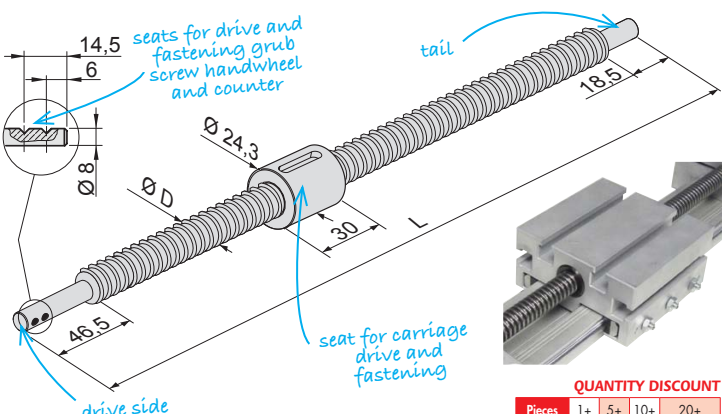
Pg.191

Pg.193

Pg.194

Pg.195

Pg.196



QUANTITY DISCOUNT

Pieces	1+	5+	10+	20+
Discounts	-	5%	15%	on request

Order code	D Ø	Pitch mm	L mm	Finish	Weight g	Stock	€ piece
617548	16	4	189	Burnished	220	▪	72,45
617558	16	4	214	Burnished	250	▪	72,85
617568	16	4	239	Burnished	280	▪	73,25
617578	16	4	264	Burnished	310	▪	73,65
617588	16	4	289	Burnished	340	▪	74,05
Customisations L on request (max 2064)						▪	

▪ **Products not in stock** *minimum order: 1 piece, delivery in 20 days.*

Revolution counter 4136

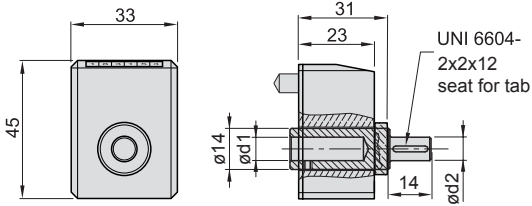
Use: *numerical reading indicator of movements on the linear table.*

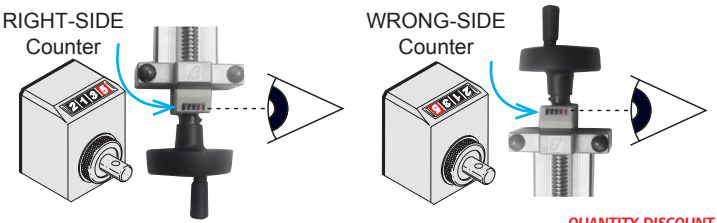
Material RAL7035 *grey technopolymer casing, burnished steel adapter pin, RAL9006 painted aluminium fastening flange, galvanised steel nuts and bolts, black polyurethane gasket.*

Characteristics: *increasing values with clockwise rotation; pitch 4 (1 handwheel turn = 004 on counter = 4 linear mm).*

Standard pack: 1 *piece.*

Combinations





QUANTITY DISCOUNT

Q.ty	1+	50+
Discounts	Net	on request

Order code	Counter	Pitch	d1 mm	d2 mm	Weight g	Stock	€ piece
691107	RIGHT-SIDE	4	8	8	72.5	✓	39,35
691117	WRONG-SIDE	4	8	8	72.5	✓	39,35

1897 Handwheel with folding grip

Use: *to manually drive the linear table. The folding grip reduces the dimensions and the risk of movements caused by accidental impact.*

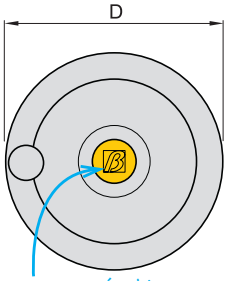
Material *black reinforced polyamide, RAL1006 yellow reinforced polyamide cover, galvanised steel insert, burnished steel UNI 5927 (ISO 4027) grub screw.*

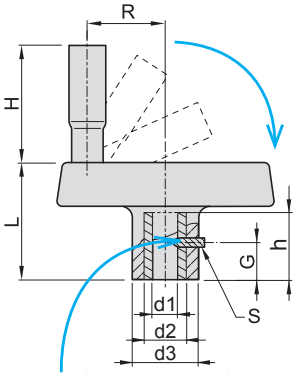
Standard pack: *1 piece.*

Customisations *cover in RAL colour on request, in adequate quantities.*

Combinations


Pg.193





QUANTITY DISCOUNT

Pieces	1+	5+	10+
Discounts	-	-2%	on request

Order code	d1 Ø	d2 Ø	d3 Ø	D Ø	R mm	L mm	H mm	G mm	h mm	S	Weight g	Stock	€ piece
697983	8 H7	20	28	100	37	48	57	10	22	M3x6	164	■	17,46
697973	8 H7	20	24	80	28	45	49	10	22	M3x6	138	✓	16,76

■ **Products not in stock** *minimum order: 20 pieces, delivery in 15 days.*

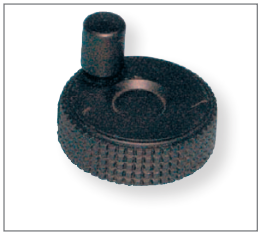
Embossed knob
with fixed grip

1983

Use: to manually drive the linear table. The embossed knob allows a secure and comfortable grip for greater sensitivity in precision adjustments; the grip speeds-up rotation for adjustments requiring several turns.

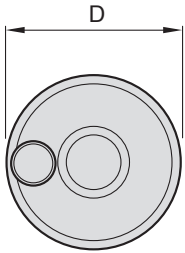
Material black polypropylene knob, black polyamide grip, brass insert, burnished steel UNI 5925 (ISO 4028) grub screw.

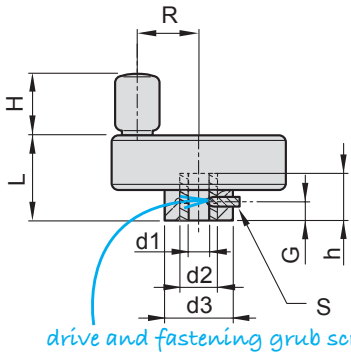
Standard pack: 1 piece.



Combinations

Pg.193





QUANTITY DISCOUNT

Q.ty	10+	30+
Discounts	Net	on request

Order code	d1 Ø	d2 Ø	d3 Ø	D Ø	R mm	L mm	H mm	G mm	h mm	S	Weight g	Stock	€ piece
658823	6 H9	14	20	50	17	25	19	5	19	M3x8	75	■	11,24
691277	8 H9	17	23	60	22	29	23	5	22	M3x8	75	■	17,46

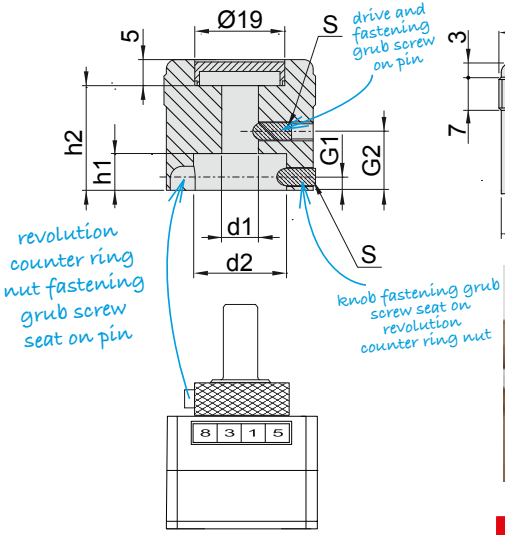
■ **Products not in stock** minimum order: 10 pieces, delivery in 20 days.
Alternatively, we recommend using handwheel 1897 in stock.

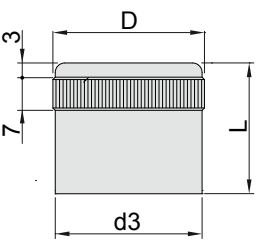
4148 Knob

Use: to manually drive the linear table with light loads.
Material black anodised aluminium, RAL1006 yellow reinforced polyamide cover, galvanised steel insert, burnished steel grub screw.
Standard pack: 1 piece.

Combinations


Pg.193





QUANTITY DISCOUNT

Q.ty	1+	5+	10+	50+
Discounts	-	-5%	-10%	on request

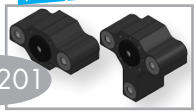
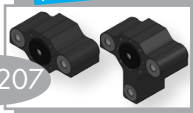
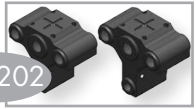
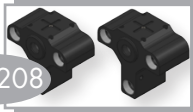
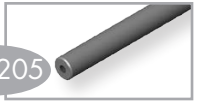
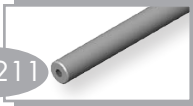
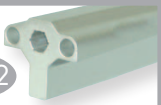
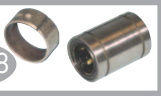
Order code	Positioner combinations	d1 Ø	d2 Ø	d3 Ø	D Ø	L mm	G1 mm	G2 mm	h1 mm	h2 mm	S	Weight g	Stock	€ piece
692067	Ø18, Ø20	6 H7	19.7	31	32	23	2.8	11	5.8	17	M3x4	40	✓	22,40
691737	Ø30	8 H7	19.7	31	32	23	2.8	11	5.8	17	M3x4	40	✓	22,40

BETTI SISTEMI

Original β COMPONENTS


NEW

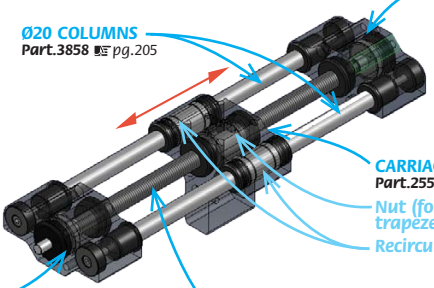
Components for DIY construction of linear tables with columns

	Ø20/16 Columns	Ø25 Columns
Heads	 p.201	 p.207
Carriages	 p.202	 p.208
Sliding columns	 p.205	 p.211
Extruded part for special carriages and heads	 p.212	
Metric and trapeze screws, with threaded nut	 p.214	 p.216
Sliding bushings		 p.218
Revolution counter and handwheel		 p.220

ROBO linear

Selection guide: with Ø20/16 columns with recirculating balls

with 2 Ø20 columns



END HEAD FOR 2 COLUMNS **Part.2556** pg.201

Ø20 COLUMNS **Part.3858** pg.205

CARRIAGE FOR 2 COLUMNS **Part.2557** pg.202

Nut (for metric screw or trapeze screw)

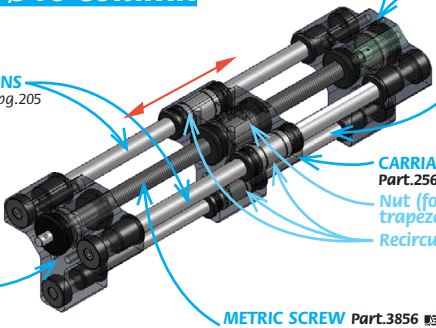
Recirculating ball bushings

DRIVE HEAD FOR 2 COLUMNS **Part.2556** pg.201

METRIC SCREW **Part.3856** pg.214

TRAPEZE SCREW **Part.3855** pg.216

with 2 Ø20 columns and 1 Ø16 column



END HEAD FOR 3 COLUMNS **Part.2560** pg.203

Ø20 COLUMNS **Part.3858** pg.205

Ø16 COLUMN **Part.3858** pg.205

CARRIAGE FOR 3 COLUMNS **Part.2561** pg.204

Nut (for metric screw or trapeze screw)

Recirculating ball bushings

DRIVE HEAD FOR 3 COLUMNS **Part.2560** pg.203

METRIC SCREW **Part.3856** pg.214

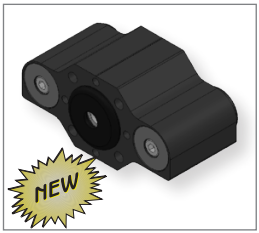
TRAPEZE SCREW **Part.3855** pg.216

Head for 2 Ø20 columns 2556

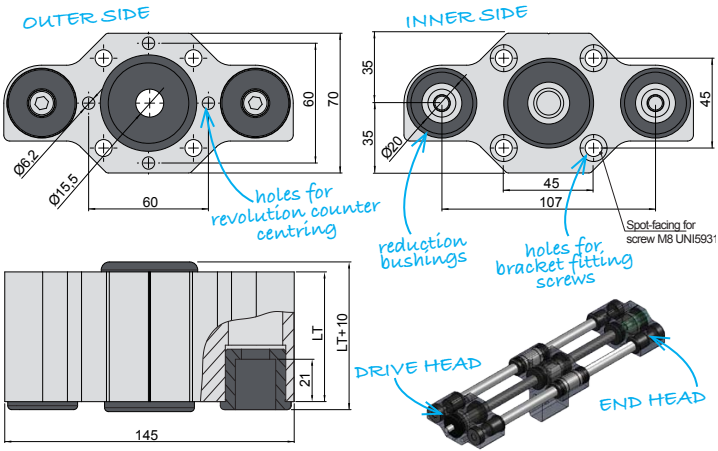
Use: *as an end head of linear guides for 2 Ø20 columns with carriage/columns contact by means of* ***recirculating ball bushings.***

Material *anodised black aluminium head, 2 anodised black aluminium reduction bushings, 2 burnished steel washers, 2 UNI 5931 (ISO 4017) M8x50 galvanised steel screws, 1 brass screw support bushing, 1 galvanised steel self-locking ring nut, 2 black polyamide end caps.*

Standard pack: *1 piece.*



Combinations



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	LT mm	Version	Sliding element	Technical characteristics Precision	Load capacity	Weight Kg	Stock	€ piece
689174	65	drive	Recirculating bushings	High	Low	1,69	▪	180,00
650478	65	end	Recirculating bushings	High	Low	1,69	▪	180,00

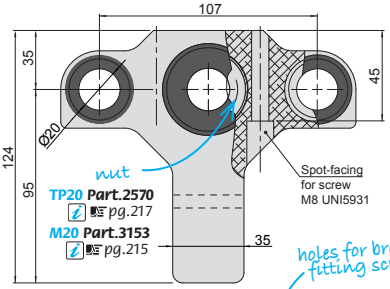
LT= other measurements on request Pg.212 **Products not in stock** *minimum order: 1 piece, delivery in 15 days.*

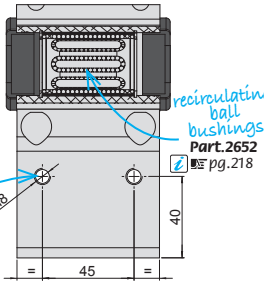
2557 Carriage for 2 Ø20 columns with recirculating ball bushings

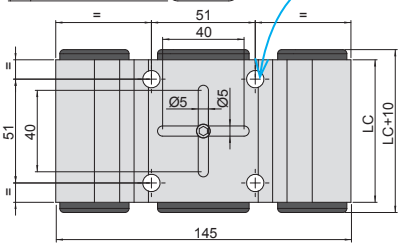
Use: *to fasten and slide on Ø20 columns (by means of* ***recirculating ball*** *bushings).*
Material *anodised black aluminium carriage, 2 hardened and ground steel recirculating ball bushings, 1 threaded nut (see table), 6 black polyamide drilled end caps.*
Standard pack: *1 piece.*

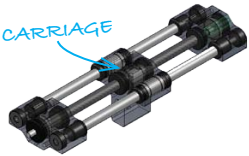
Combinations

Pg.205 Pg.214 Pg.216









QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	LC mm	Version nut	Sliding element	Technical characteristics Precision	Load capacity	Weight Kg	Stock	€ piece
689204	70	TP20	Recirculating bushings	High	Low	1,82	▪	220,00
650528	70	M20	Recirculating bushings	High	Low	1,80	▪	220,00

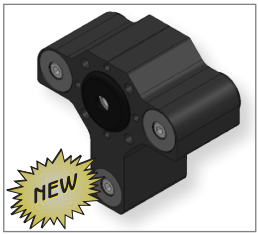
LC= *other measurements on request* Pg.212 **Products not in stock** *minimum order: 1 piece, delivery in 15 days.*

Head for 3 Ø20/16 columns 2560

Use: *as an end head of linear guides for 3 columns with carriage/columns contact by means of* ***recirculating ball bushings.***

Material *anodised black aluminium head, 3 anodised black aluminium reduction bushings, 3 burnished steel washers, 3 UNI 5931 (ISO 4017) M8x50 galvanised steel screws, 1 brass screw support bushing, 1 galvanised steel self-locking ring nut, 2 black polyamide end caps.*

Standard pack: *1 piece.*



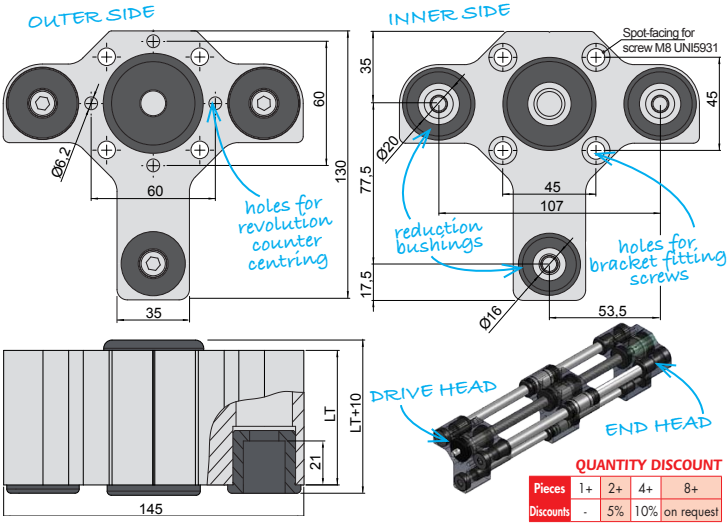
Combinations


Pg.205


Pg.214


Pg.216


pg.221



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	LT mm	Version	Sliding element	Technical characteristics Precision	Load capacity	Weight Kg	Stock	€ piece
689234	65	drive	Recirculating bushings	High	Low	1,81	▪	220,00
650538	65	end	Recirculating bushings	High	Low	1,81	▪	220,00

LT= other measurements on request Pg.212 **Products not in stock** *minimum order: 1 piece, delivery in 15 days.*

2561 Carriage for 3 columns Ø20/16 with recirculating ball bushings

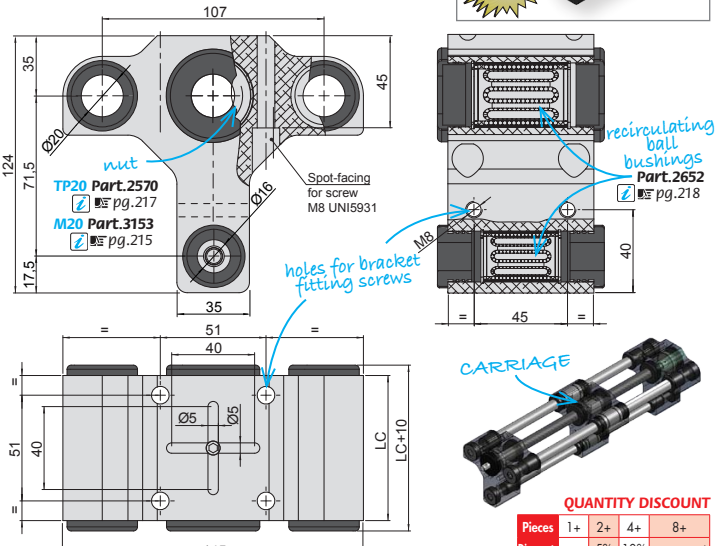
Use: *to connect and slide on Ø20/Ø16 columns by means of* ***recirculating ball bushings***.

Material *anodised black aluminium carriage, 3 hardened and ground steel recirculating ball bushings, 1 threaded nut (see table), 6 black polyamide drilled end caps.*

Standard pack: *1 piece.*

Combinations

Pg.205 Pg.214 Pg.216



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	LC mm	Version nut	Sliding element	Technical characteristics Precision	Load capacity	Weight Kg	Stock	€ piece
689264	70	TP20	Recirculating bushings	High	Low	1,87	■	260,00
650558	70	M20	Recirculating bushings	High	Low	1,85	■	260,00

LC= other measurements on request Pg.212 **Products not in stock** *minimum order: 1 piece, delivery in 15 days.*

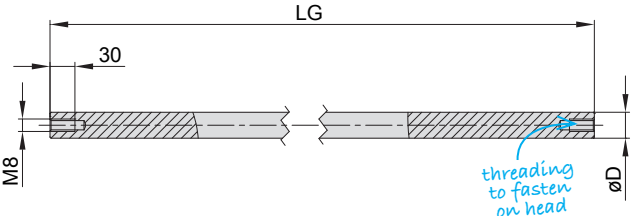
Sliding column Ø20/16 3858

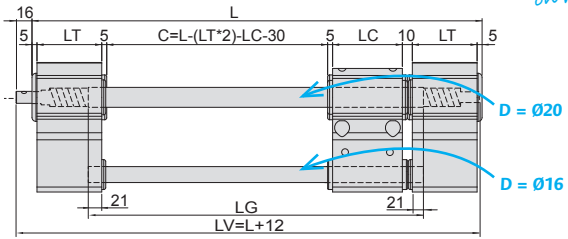
round hardened chrome-plated ground

Use: *for the carriage to slide, suitable for* ***recirculating ball bearing.***
Material ***hardened Cf53 steel (60-65 HRC).***
Characteristics: *hardening depth: from 1 to 2.5 mm; chrome-plating depth 15 µm (950-1100 HV); straightness: 0.5/1000 mm. roughness: <0,02 µm*
Standard pack: *1 piece.*

Combinations


Pg.218





L=table lenght LT=heads lenght LC=carriage lenght
C=carriage travel LV=screw lenght LG=columns lenght

QUANTITY DISCOUNT

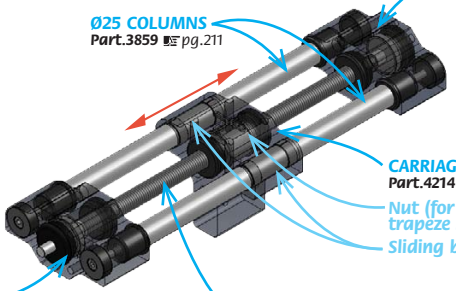
Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	D Ø	LA mm	Finish			Weight g	Stock	€ piece
651198	20 h6	410	hardened	chrome-plated	ground	500	▪	50,00
651208	16 h6	410	hardened	chrome-plated	ground	400	▪	50,00
Customisations L = cut to measure on request							▪	

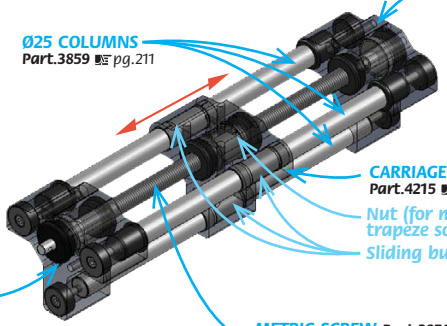
Products not in stock *minimum order: 1 piece, delivery in 15 days.*

Selection guide: with Ø25 columns sliding

with 2 Ø25 columns



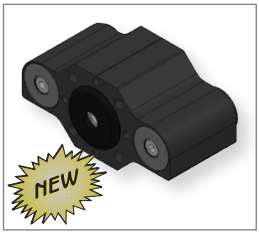
with 3 Ø25 columns



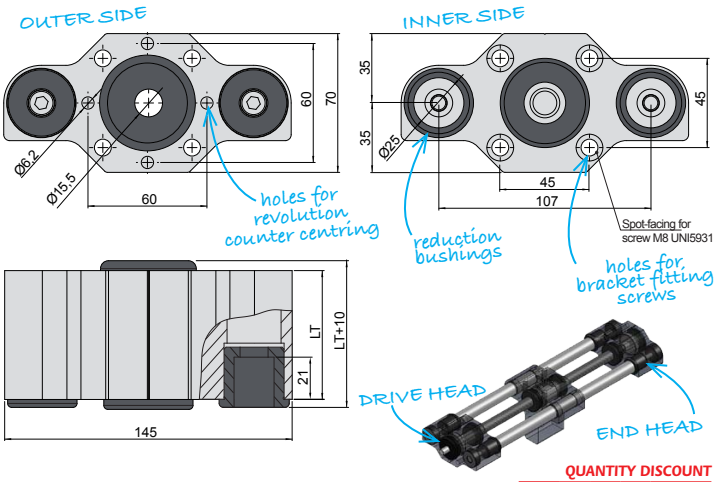
Head for 2 Ø25 columns 2554

Use: *as an end head of linear guides for 2 Ø25 columns with carriage/columns contact by means of* ***sliding bushings.***

Material *anodised black aluminium head, 2 anodised black aluminium reduction bushings, 2 burnished steel washers, 2 UNI 5931 (ISO 4017) M8x50 galvanised steel screws, 1 brass screw support bushing, 1 galvanised steel self-locking ring nut, 2 black polyamide end caps.*



Combinations



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	LT mm	Version	Sliding element	Technical characteristics Precision	Load capacity	Weight Kg	Stock	€ piece
689154	65	drive	Sliding bushings	Average	Average	1,69	▪	180,00
650488	65	end	Sliding bushings	Average	Average	1,69	▪	180,00

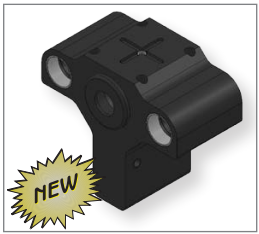
LT= other measurements on request Pg.212 ***Products not in stock*** *minimum order: 1 piece, delivery in 15 days.*

4214 Carriage for 2 Ø25 columns with sliding bushings

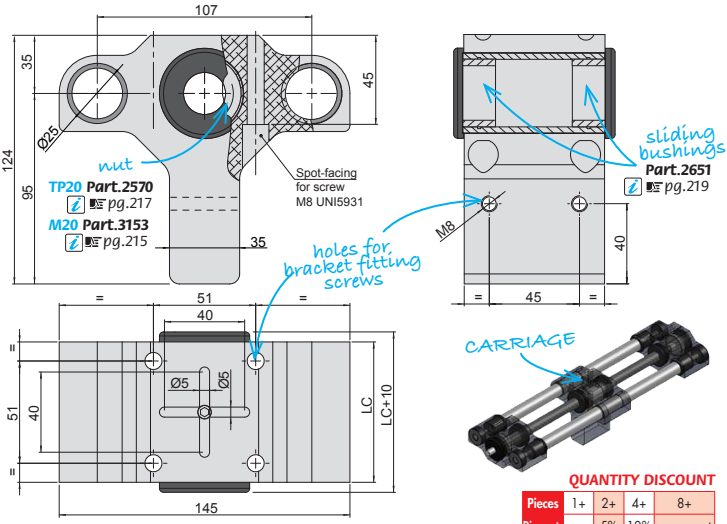
Use: *to fasten and slide on Ø25 columns (by means of* ***sliding*** *bushings).*

Material *anodised black aluminium carriage, 4 steel sliding bushings in electrochemically treated tin-coated steel and anti-friction coating, 1 threaded nut (see table), 2 black polyamide drilled end caps.*

Standard pack: *1 piece.*



Combinations



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	LC mm	Version nut	Sliding element	Technical characteristics Precision	Load capacity	Weight Kg	Stock	€ piece
689184	70	TP20	Sliding bushings	Average	Average	1,76	■	200,00
650928	70	M20	Sliding bushings	Average	Average	1,74	■	200,00

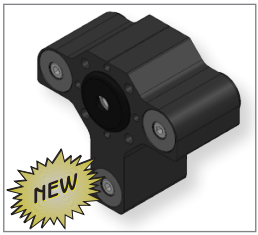
LC= *other measurements on request* Pg.212 **Products not in stock** *minimum order: 1 piece, delivery in 15 days.*

Head for 3 Ø25 columns 2558

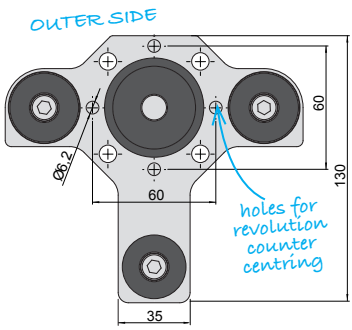
Use: *as an end head of linear guides for 3 columns with carriage/columns contact by means of* ***sliding bushings.***

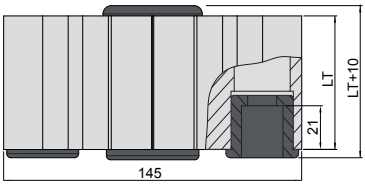
Material *anodised black aluminium head, 2 anodised black aluminium reduction bushings, 3 burnished steel washers, 3 UNI 5931 (ISO 4017) M8x50 galvanised steel screws, 1 brass screw support bushing, 1 galvanised steel self-locking ring nut, 2 black polyamide end caps.*

Standard pack: *1 piece.*



Combinations





QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	LT mm	Version	Sliding element	Technical characteristics: Precision	Load capacity	Weight Kg	Stock	€ piece
689214	65	drive	Sliding bushings	Average	Average	1,81	▪	200,00
650918	65	end	Sliding bushings	Average	Average	1,81	▪	200,00

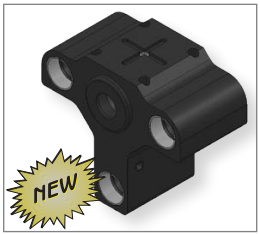
LT= other measurements on request Pg.212 **Products not in stock** *minimum order: 1 piece, delivery in 15 days.*

4215 Carriage for 3 Ø25 columns with sliding bushings

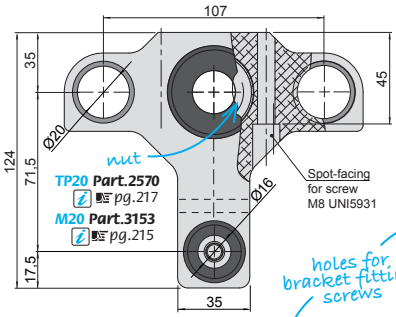
Use: to connect and slide on Ø25 columns by means of ***sliding bushings***.

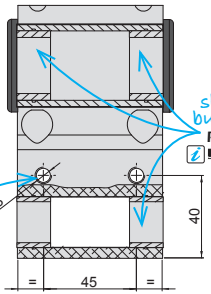
Material anodised black aluminium carriage, 6 steel sliding bushings in electrochemically treated tin-coated steel and anti-friction coating, 1 threaded nut (see table), 2 black polyamide drilled end caps.

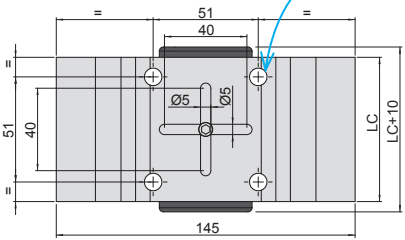
Standard pack: 1 piece.



Combinations







QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	LC mm	Version nut	Sliding element	Technical characteristics Precision	Load capacity	Weight Kg	Stock	€ piece
689254	70	TP20	Sliding bushings	Average	Average	1,77	■	220,00
650948	70	M20	Sliding bushings	Average	Average	1,75	■	220,00

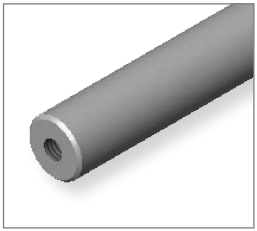
LC= other measurements on request Pg.212 **Products not in stock** minimum order: 1 piece, delivery in 15 days.

ROBO linear

Sliding column Ø25 round chrome-plated ground

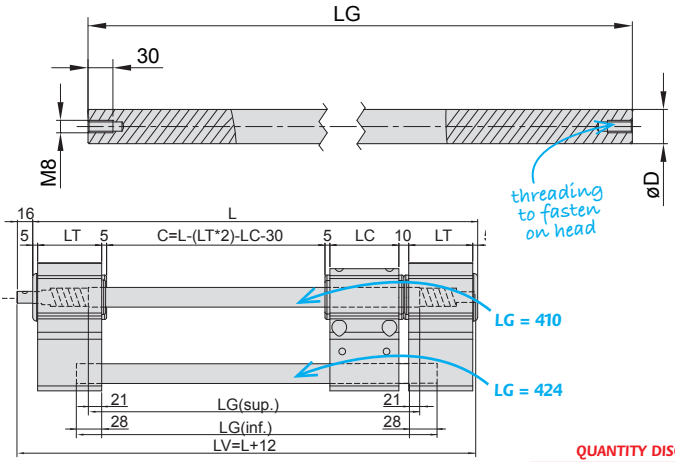
3859

Use: *for the carriage to slide, suitable for* ***sliding bearing****.*
Material **C45 steel.**
Characteristics:
chrome-plating depth 15 µm (950-1100 HV);
straightness: 0.5/1000 mm.
roughness: <0,02 µm
Standard pack: *1 piece.*



Combinations


Pg.219



L=table lenght LT=heads lenght LC=carriage lenght
C=carriage travel LV=screw lenght LG=columns lenght

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	D Ø	LG mm	Finish		Weight g	Stock	€ piece
651218	25 h7	410	chrome-plated	ground	625	▪	50,00
651228	25 h7	424	chrome-plated	ground	650	▪	50,00
Customisations *L = cut to measure on request*						▪	

Products not in stock *minimum order: 1 piece, delivery in 15 days.*

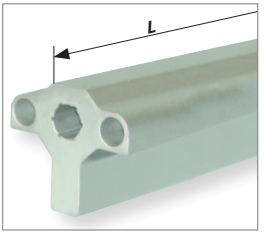
2443 Extruded profile
for carriages and heads

Use: to construct heads and carriages for guides with 2/3 columns.

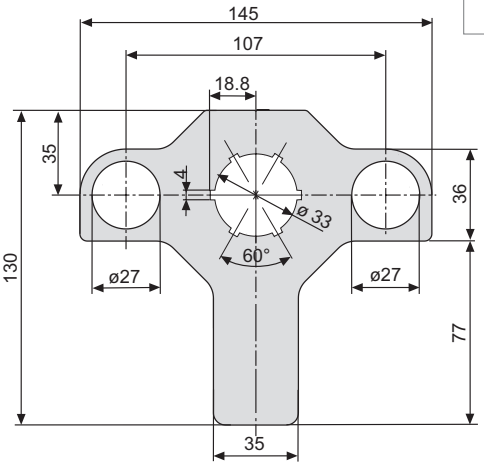
Material aluminium.

Characteristics: moment of inertia Ix: $5.63x10^6$ mm^4 - Iy: $8.29x10^6$ mm^4

Standard pack: 1 piece.



Combinations



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	L mm	Profile finish	Weight Kg	Stock	€ piece
650968	65	to be anodised	1,3	✓	10,60
650778	75	to be anodised	1,5	✓	11,78
654487	500	to be anodised	9,8	✓	66,00
620897	1000	to be anodised	19,6	✓	117,00
620907	2000	to be anodised	39,2	✓	229,00
673184	3000	to be anodised	58,8	✓	335,00

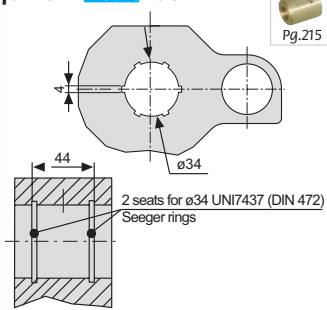
Customisations L = cut to measure on request — ***price per cut € 3***

Customisations Subsequent customised works — ***price and delivery to follow***

Seats for nuts and bushings

for 20x4 metric nut

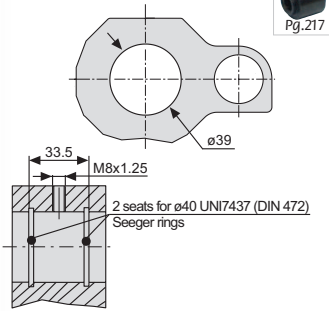
Pg.215



2 seats must be made for ø34 Seeger rings at the indicated distance for the axial block; a 4x4x20 tab must be set in one of the seats of the extruded part for anti-rotation.

for 20x4 trapeze nut

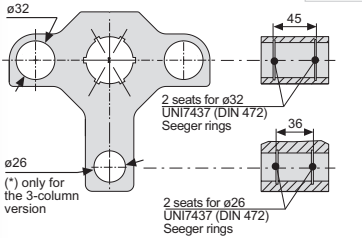
Pg.217



2 seats must be made for ø40 Seeger rings at the indicated distance for the axial block; a seat must be made for an M8 threaded grub screw for anti-rotation.

for recirculating ball bushings

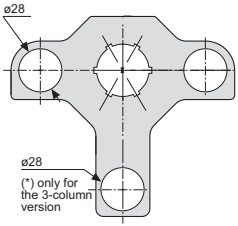
Pg.218



The side pre-holes must be made in the extruded part as shown in the diagram, to create the housing of the recirculating ball bushings for the guides with 2 and 3 ø20 and ø16 columns. A hole must be made at the base of the extruded part in the version with 3 columns. The seats must be made for the Seeger rings at the indicated distances for the axial block.

for sliding bushings

Pg.219



The side pre-holes must be made in the extruded part as shown in the diagram, to create the housing of the anti-friction bushings for the guides with 2 and 3 ø25 columns. A hole must be made at the base of the extruded part for the version with 3 columns.

3856 Metric screw

Use: *for the carriage with 2/3 columns to be driven by the handwheel.*

Material *burnished steel*

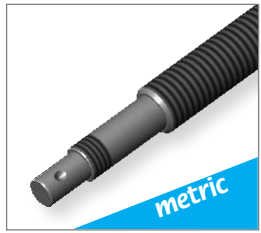
Standard pack: *1 piece.*

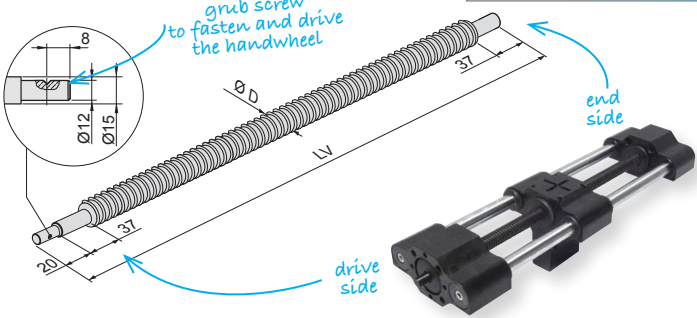
Combinations


Pg.215


pg.221

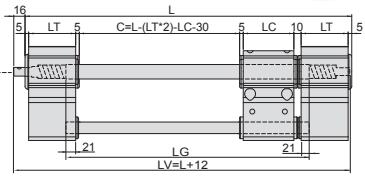

pg.220





HANDWHEEL
pg.220

REVOLUTION COUNTER + ADAPTER
pg.221



L=table lenght
C=carriage travel
LT=heads lenght
LV=screw lenght
LC=carriage lenght
LG=columns lenght

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	M Ø	Pitch mm	LV mm	Version	Finish	Weight g	Stock	€ piece
651148	20	2.5	520	RH	burnished	945	▪	50,00
Customisations *LV on request, LH version*							▪	

Products not in stock *minimum order: 1 piece, delivery in 15 days.*

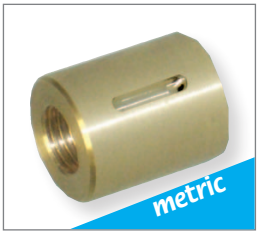
Threaded nut
for metric screw

Use: *for the carriage of the guides with 2/3 columns to be driven by the handwheel.*

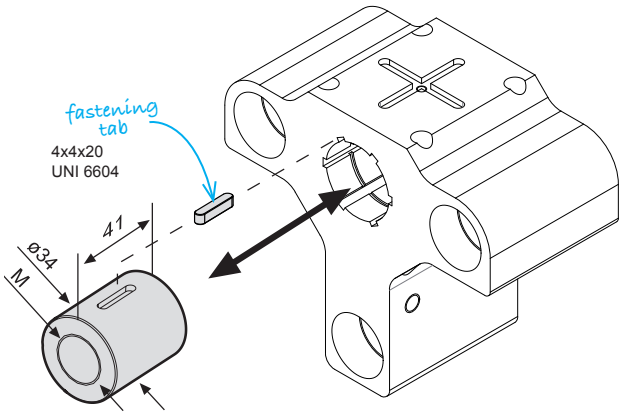
Material *brass with metric threading, steel tab.*

Characteristics: *permissible axial load (in combination with screw Part.2664) = 2.4 kN.*

Standard pack: *1 piece.*



Combinations



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	M Ø	Pitch mm	Version	Weight g	Stock	€ piece
662906	20	2.5	RH	216	▪	16,00
Customisations *LH version*					▪	

Products not in stock *minimum order: 1 piece, delivery in 15 days.*

3855 Trapeze screw

Use: *for the carriage with 2/3 columns to be driven by the handwheel.*

Material *burnished leaded high speed steel.*

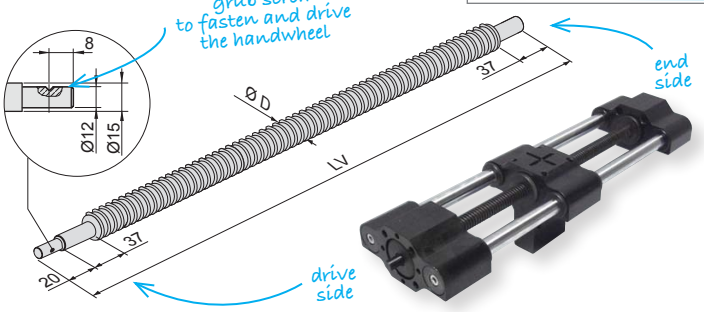
Standard pack: *1 piece.*

Combinations


Pg.215

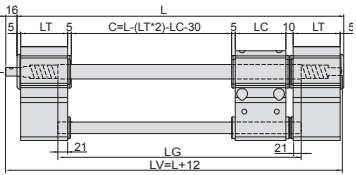

pg.221


pg.220



HANDWHEEL
pg.220

REVOLUTION COUNTER + ADAPTER
pg.221



L=table lenght
C=carriage travel
LT=heads lenght
LV=screw lenght
LC=carriage lenght
LG=columns lenght

QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	M Ø	Pitch mm	LV mm	Version	Finish	Weight g	Stock	€ piece
651118	20	4	520	RH	burnished	945	✓	30,00
Customisations *LV on request, LH version*							▪	

Products not in stock *minimum order: 1 piece, delivery in 15 days.*

Threaded nut
for trapeze screw

2570

Use: *for the carriage of the guides with 2/3 columns to be driven by the handwheel.*

Material *burnished leaded high speed steel with trapeze thread, galvanised steel grub screw.*

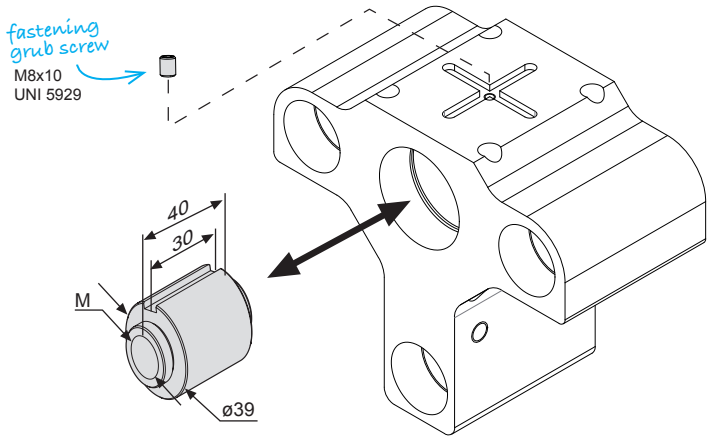
Characteristics: *permissible axial load (in combination with screw Part.2573) = 3.9 kN.*

Standard pack: *1 piece.*

Combinations


Pg.212


Pg.216



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	M Ø	Pitch mm	Version	Finish	Weight g	Stock	€ piece
689534	20	4	RH	burnished	235	✓	20,00
Customisations *LH version*						▪	

Products not in stock *minimum order: 1 piece, delivery in 15 days.*

2652 Recirculating ball bushing for Ø20 and Ø16 columns

Use: *guide bushing for Ø20 and Ø16 carriages.*

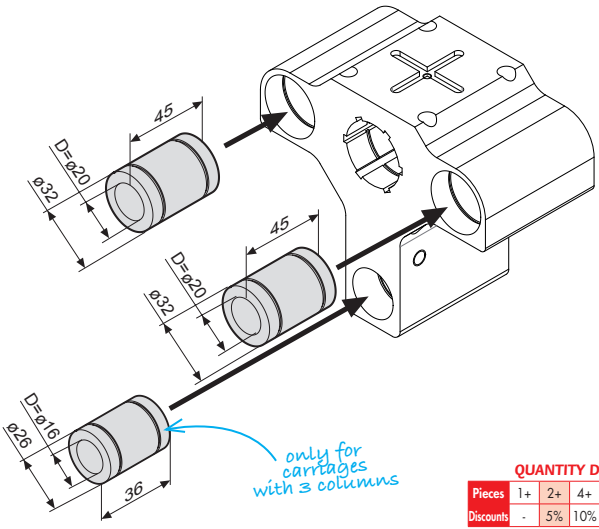
Material *bushing with external ring in hardened and ground steel that contains a plastic cage for the guide of the balls.*

Standard pack: *1 piece.*

Combinations


Pg.205


Pg.212



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	D Ø	Finish	Weight g	Stock	€ piece
600375	16	hardened and ground	50	▪	22,00
600695	20	hardened and ground	88	▪	25,00

Products not in stock *minimum order: 1 piece, delivery in 15 days.*

Sliding bushing for Ø25 columns

2651

Use: *guide bushings for carriages with 2 and 3 ø25 columns.*

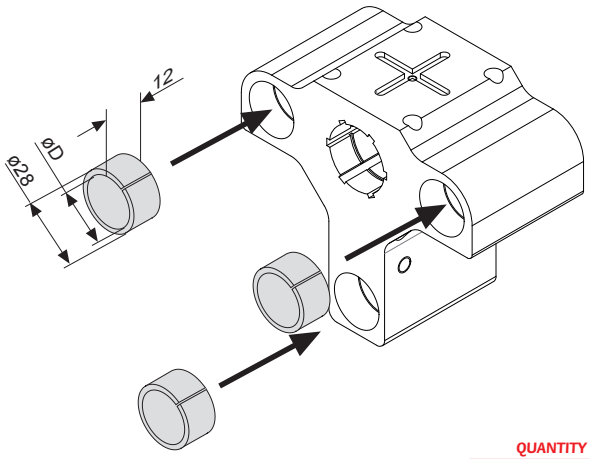
Material *bushing in electrochemically treated tin-coated steel and anti-friction coating.*

Standard pack: *1 piece.*

Combinations


Pg.211


Pg.212



QUANTITY DISCOUNT

Pieces	1+	2+	4+	8+
Discounts	-	5%	10%	on request

Order code	D Ø	Finish	Weight g	Stock	€ piece
629657	25	electrochemical tin-coating	11	✓	2,50

1897 Handwheel with folding grip

Use: to manually drive the linear table. The folding grip reduces the dimensions and the risk of movements caused by accidental impact.

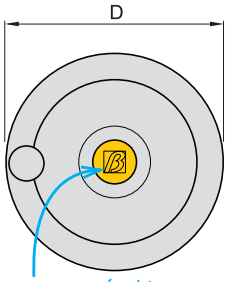
Material black reinforced polyamide, RAL1006 yellow reinforced polyamide cover, galvanised steel insert, burnished steel UNI 5927 (ISO 4027) grub screw.

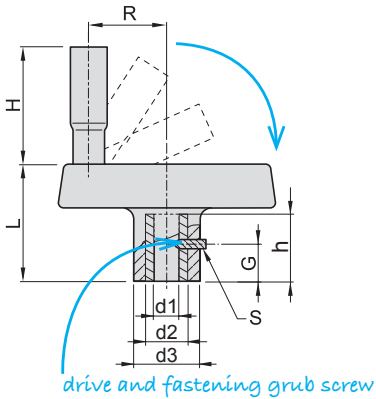
Standard pack: 1 piece.

Customisations cover in RAL colour on request, in adequate quantities.

Combinations

pg.221





QUANTITY DISCOUNT

Pieces	1+	5+	10+
Discounts	-	-2%	on request

Order code	d1 Ø	d2 Ø	d3 Ø	D Ø	R mm	L mm	H mm	G mm	h mm	S	Weight g	Stock	€ piece
627733	12 H7	28	36	125	47	65	68	8	22	M6X10	399	✓	30,89

■ **Products not in stock** *minimum order: 20 pieces, delivery in 15 days.*

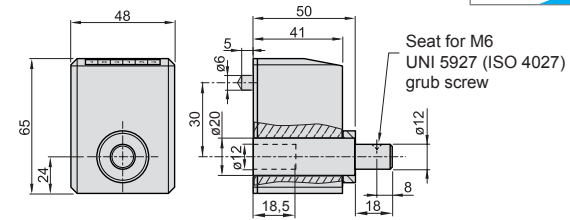
Revolution counter 3857

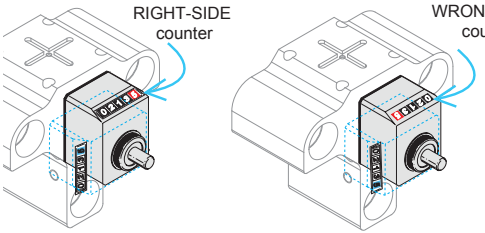
Use: *numerical reading indicator of movements on the linear table.*

Material RAL7035 *grey technopolymer casing, burnished steel adapter pin, galvanised steel nuts and bolts.*

Characteristics: *increasing values with clockwise rotation; pitch 4 (1 handwheel turn = 0004 on counter = 4 linear mm) suitable for linear tables with trapeze screw; pitch 2.5 (1 handwheel turn = 0002.5 on counter = 2.5 linear mm) suitable for linear tables with metric screw.*

Standard pack: *1 piece.*





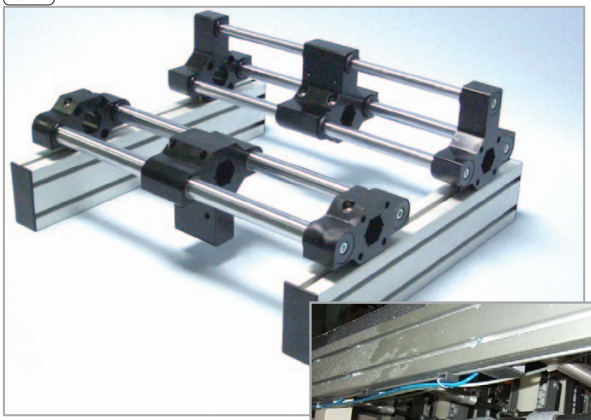
QUANTITY DISCOUNT

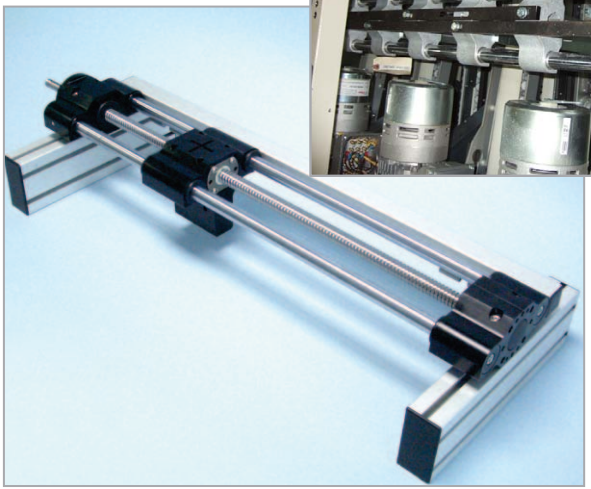
Q.ty	1+	5+	10+	50+
Discounts	-	-5%	-10%	on request

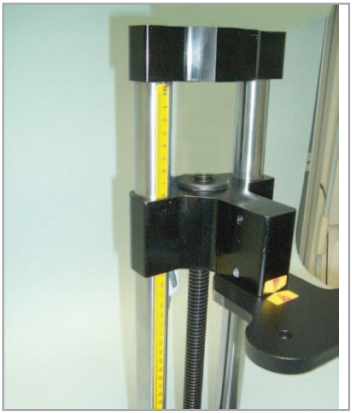
Order code	Counter	Pitch	Version	Weight g	Stock	€ piece
651178	RIGHT-SIDE	4	RH	250	▪	45,00
651158	RIGHT-SIDE	2.5	RH	250	▪	45,00
651188	WRONG-SIDE	4	RH	250	▪	45,00
651168	WRONG-SIDE	2.5	RH	250	▪	45,00
Customisations	*LH version. RAL2004 orange or RAL9011 black casing*				▪	

▪ **Products not in stock** *minimum order: 1 piece, delivery in 20 days.*

Possible configurations







Resistance to chemical agents

Bett Sistemi components may be used in contact with chemical substances in normal operating conditions.

Never use acids with pH < 4, bases with pH > 9, and never expose to chlorinated hydrocarbons such as trichloroethylene for long periods of time.

The following table specifies the resistance to the various chemical agents of the individual materials. The concentration and the form of some of these substances may cause different reactions.

Chemical agent	Material																					
	Anodised aluminium Elox aluminium		Galvanised steel		AISI 303 stainless steel		AISI 304 stainless steel		AISI 316 stainless steel		AISI 430F stainless steel		Nickel-plated steel / brass		Resafon®		Adiprene		Shockproof acrylic			
	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C		
Vinegar		◒		◒		●		●		●		●		●		●				●		
Acetone	50	●		○	50	●	50	●	100	●	100	●		●	100	●		◒		○		
Acetic acid	20	●		○	20	●	20	●	20	●	20	○		◒	5	○	sol. 20	◒	10	●		
Boric acid	100	●		○	100	◒	100	◒	100	◒	100	◒			5	○		●		●		
Butryc acid	5	●		○	5	●	5	●	5	●	5	●			10	○			5	●		
Citric acid	5	●		○	5	●	5	●	5	●	5	●		○	10	◒						
Hydrochloric acid		○		○		○		○		○		○		◒	2.5	◒	20	◒	40	●		
Hydrofluoric acid		○		○		○		○		○		○							40	◐		
Formic acid	5	○		○	5	◒	5	◒	5	●	5	○		●	90	○		◒		○		
Phosphoric acid	10	○		○	10	○	10	○	10	●	10	○		○	5	○	20	○	10	●		
Lactic acid	5	●		○	5	●	5	●	5	●	5	◒		○	10	●			10	●		
Nitric acid	10	●		○	10	●	10	●	10	●	10	◒			10	○	10	○	20	●		
Oleic acid	100	●		○	100	◒	100	◒	100	◒	100	◒		●				◒				

● = good resistance ◒ = medium resistance ○ = poor resistance

Material																						Chemical agent
Polycarbonate		ABS		Laminate		Polyamide		Polypropylene		Polyethylene PE		Polyethylene HDPE		Polyurethane		Rubber		Polyacetal		PVC		
%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	
					●		●		●		●				○		◒		●		●	Vinegar
	○		○		●	100	●		●		●				○		○		◒	5	●	Acetone
20	◒	5	●		◒	Sol. 10	○		●	10	●			Sol. 10	○		○	5	○	10	●	Acetic acid
					◒	Sol. 10	●	40	●	Sat.	●			Sat.	●	Sol.	●				●	Boric acid
	○				●		○	Sat.			●				○				○	1	●	Butryc acid
		10	●		◒	Sol. 10	◒		●		●				●		●		◒		●	Citric acid
		10	●		○	Sol. 10	○	Sol. 10	●	37	●			Sol. 30	○	Sol. 10	◒	37	○	36	●	Hydrochloric acid
					○	Sol. 40	○	30	●	70	●					65	○		●	3	●	Hydrofluoric acid
30	○	10	●		○	10	○	40		10	●			10	○			10	○	2.5	●	Formic acid
		10	●		○	Sol. 10	○		●	95	●			Sol. 20	●	Sol. 20	◒	10	○		●	Phosphoric acid
		10	●		◒	Sol. 10	●	Sol. 85	●		●				○	Sol.	●		●	85	●	Lactic acid
					○	10	○	Sol. 20	●	5	◒					Sol. 10	○	5	○	25	●	Nitric acid
			●		◒	100	●		●		◒				●		◒					Oleic acid

● = good resistance ◒ = medium resistance ○ = poor resistance

Resistance to chemical agents

Chemical agent	Material																											
	Anodised aluminium Elox aluminium		Galvanised steel		AISI 303 stainless steel		AISI 304 stainless steel		AISI 316 stainless steel		AISI 430F stainless steel		Nickel-plated steel / brass		Resaton®		Adiprene		Shockproof acrylic									
	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C								
Sulphuric acid	10	◒		○	10	○	10	○	10	◒	10	○		●	30	○			40	●								
Tartaric acid	10	◒		○	10	●	10	●	10	◒	10	●		○				●	50	●								
Chlorinated water		○		○		○		○		◒		○			5	◒				◒								
Distilled water	10	●		●												●												
Fresh water		●		●		●		●		●		●				●				●								
Sea water		●		○		●		●		●		○		●		●												
Oxygenated water	30	○		○	30	●	30	●	30	●	30	●		◒					40 Vol.	●								
Turpentine		●		◒		●		●		●		●																
Water and soap		●		●		●		●		●		●				●												
Alkylphenol ethoxylate																												
Ethyl alcohol	10	●		◒	10	●	10	●	10	●	10	◒		●				○										
Methyl alcohol	100	●		○	100	◒	100	◒	100	◒	100	◒		●						○								
Ammoniac	50	◒		○	50	●	50	●	50	●	50	●		○	100	◒		◒		●								
Aniline	3	●		◒	3	●	3	●	3	●	3	●																
Benzene	70	◒		○	70	◒	70	◒	70	◒	70	◒			100	●												
Benzene		●		○		●		●		●		●		◒	100	●				●								
Benzol		●		○		●		●		●		●		●	100	●		○		○								
Non-alcoholic drinks		●		◒		●		●		●		●				●												
Beer		●		○		●		●		●		●		●		●				●								
Butter		●		◒		●		●		●		●		●		●												
Sodium carbonate	5	◒		◒	5	●	5	●	5	●	5	●			2	●			Sat.	●								
Chloroform	100	●		◒	100	●	100	●	100	●	100	◒		●	100	●				○								

● = good resistance ◒ = medium resistance ○ = poor resistance

Material																										Chemical agent
Polycarbonate		ABS		Laminate		Polyamide		Polypropylene		Polyethylene PE		Polyethylene HDPE		Polyurethane		Rubber		Polyacetal		PVC						
%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C					
		10	●		○	Sol. 10	○	Sol	●	40	◒					Sol	○	40	○		●					Sulphuric acid
		30	●		◒		●	98	●		●			10	◒	Sol	●	30	◒		●					Tartaric acid
					●			10	○		○								○	0.3	●					Chlorinated water
					●		●		●		●				●		●		●		●					Distilled water
					●		●		●		●				●		●		●		●					Fresh water
			●		●		●		●		●				○		●		◒		●					Sea water
		10 Vol.	●		●	Sol. 3	○	30	●		●					Sol. 80	○		○	30	●					Oxygenated water
					◒						○				○				○		●					Turpentine
			●		●		●		●		●				●				●		●					Water and soap
																					○					Alkylphenol ethoxylate
96	●	96	●	15	●										○											Ethyl alcohol
		95	●		●	100	●		●						○		◒		●							Methyl alcohol
Sol.	◒	10	●		◒	10	●	30	●		●				○	Sol.	◒	Sol.	●		○					Ammoniac
					●					3	●				○			3	●		○					Aniline
					●				●		◒				○				●		○					Benzene
			●		●		●		◒		◒				●		◒		●		○					Benzene
	○		○		●	100	●		◒		◒				○		○		●		○					Benzol
					●		●		●		●								●							Non-alcoholic drinks
					●		●		●		●				●		●		●		●					Beer
					●	Sol.	●		●		●				◒		●		●							Butter
		Sat.	●		◒	10	●	Sol. Sat.	●		●			Sol. 10	●	Sol.	●		●		●					Sodium carbonate
	○		○		●	Sol. 100.	○		◒		○				○		○		○		○					Chloroform

● = good resistance ◒ = medium resistance ○ = poor resistance

Resistance to chemical agents

Chemical agent	Material																	
	Anodised aluminium Elox aluminium		Galvanised steel		AISI 303 stainless steel		AISI 304 stainless steel		AISI 316 stainless steel		AISI 430F stainless steel		Nickel-plated steel / brass		Resafon®		Adiprene		Shockproof acrylic	
	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C
Calcium chloride	10	◒		○	10	○	10	○	10	○	10	○		●	5	○				●
Ethyl chloride		●		○		●		●		●		●		◒						○
Methylene chloride		◒		○		◒		◒		◒					100	◒				
Sodium chloride	5	●		○	5	●	5	●	5	●	5	◒		●	10	●				●
Thinners*		●		◒		●		●		●		●		◒	100	●				○
Ethyl ether		●		◒																○
Petroleum ether		●		◒		●		●		●				●						○
Formaldehyde	100	●		◒	100	●	100	●	100	●	100	◒		●			3	◒		
Glycerine		●		●		●		●		●		◒		●			*7*	●		●
Food fats		●		●		●		●		●		●			5	◒				
Potassium hydroxide																				
Sodium hypochlorite		○		○		○		○				○		●						◐
Milk		●		◒		●		●		●		●		●		●				
Mercury		◒		○		◒		◒		◒		◒		◒				●		
Food oils		●		●		●		●		●		●				●				
Mineral oils		●		●		●		●		●		●				●		●		●
Vegetable oils		●		●		●		●		●		●				●				
Oxonia																				
Paraffin		●		●		●		●		●		●								
Petroleum		●		◒		●		●		●		●		●		●				

* standard composition: xylol + toluene

·· raw aluminium ◒

● = good resistance ◒ = medium resistance ○ = poor resistance

Material																						
Polycarbonate		ABS		Laminate		Polyamide		Polypropylene		Polyethylene PE		Polyethylene HDPE		Polyurethane		Rubber		Polyacetal		PVC		Chemical agent
%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	
					◒	10	●	Sol. 50	●	Sat.	●					Sol.	●				●	Calcium chloride
					●	100	●		○		○										○	Ethyl chloride
			○		◒	Sol. 100	●		◒		◒				○		○		○		○	Methylene chloride
		20	●		●	10	●	Sol. Sat.	●		●			Sol. 10	○	Sol.	●		●		●	Sodium chloride
			○		●		●		○		◒				○		○		●		○	Thinners*
	○				●	100	●		●		●				○						○	Ethyl ether
					●	Sol. 30	●	Sol. 40	●										●		○	Petroleum ether
		4	●		◒		●		●		◒								●		○	Formaldehyde
		0	●		●		●		●		●				○		●		●		●	Glycerine
					●	Sol	●	Sol. 20			●					Sol.	●					Food fats
							●		●						○					0.01	●	Potassium hydroxide
					◒		○		●		●						○		○		●	Sodium hypochlorite
			●		●		●		●		●				●		●		●			Milk
					●				●		●				●						●	Mercury
			●		●		●		●		●						●		●			Food oils
			●		●		●		●		●				●		●		●		●	Mineral oils
					●		●		●		●				●				●			Vegetable oils
						1	○		●		●						○		○		●	Oxonia
					●						●				●				●		●	Paraffin
					●		●				○				●		●		●			Petroleum

● = good resistance ◒ = medium resistance ○ = poor resistance

Chemical agent	Material																					
	Anodised aluminium Elox aluminium		Galvanised steel		AISI 303 stainless steel		AISI 304 stainless steel		AISI 316 stainless steel		AISI 430F stainless steel		Nickel-plated steel / brass		Resaton®		Adiprene		Shockproof acrylic			
	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C		
Tomato (sauce) pH4		●··																				
Brine		○		○								○		10								
Caustic soda		○		○		●		●		●		●		●		◒			2	●		
Fruit juices		●		◒								◒				●				●		
Vegetable juices		●		◒		●		●		●		●			90	●						
Copper sulphate	5	●		○	5	●	5	●	5	●	5	●										
Sodium sulphate		●		○	5	●	5	●	5	●	5	●			10	●				●		
Carbon sulphide	10	●		○		●		●		●		◒			0	●				○		
Carbon tetrachloride		○		○	10	○	10	○	10	○	10	○		●		●		○		○		
Iodine dye		○		◒										○		◒						
Trichloroethylene		◒		◒		●		●		●		●		●		●						
Vaseline		●		●												●				●		
Wine		●		◒		●		●		●		●		●	10	●				●		
Whisky	100	●		◒		●		●		●		◒		●	0	●				○		
Xylol		●		◒		●		●		●		●		◒								

● = good resistance ◒ = medium resistance ○ = poor resistance

Material																								Chemical agent
Polycarbonate		ABS		Laminate		Polyamide		Polypropylene		Polyethylene PE		Polyethylene HDPE		Polyurethane		Rubber		Polyacetal		PVC			
%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C	%	23°C		
																								Tomato (sauce) pH4
																								Brine
																								Caustic soda
																								Fruit juices
																								Vegetable juices
																								Copper sulphate
																								Sodium sulphate
																								Carbon sulphide
																								Carbon tetrachloride
																								Iodine dye
																								Trichloroethylene
																								Vaseline
																								Wine
																								Whisky
																								Xylol

● = good resistance ◒ = medium resistance ○ = poor resistance

Surface finishing

- **Sandblasting**
- **Painting**
- **Ball polishing**
- **Chemical nickel-plating**
- **Etc.**
- **Microball-blasting**
- **Electropolishing**
- **Mirror polishing**

Standard finishes

- **Sandblasting**
- **Painting RAL**

Estimated delivery: **5 *days*** *from order acceptance (as per table)*

Other finishes on request

- **Painting RAL on choice of the customer**
  Price and code on request.
  The minimum quantity is **100 *pieces*** *per colour (for lower quantities a lump sum of € € 45.00 will be added) and the estimated delivery is* **10 *days*** *from order acceptance.*

- **Ball polishing**
  Price and code on request.
  Available for a minimum quantity of **50 *pieces***.
  For lower quantities, a lump sum of € € 45.00 will be added, and the estimated delivery is **10 *days*** *from order acceptance.*

- **Chemical nickel-plating**
  It is more resistant and functional than electrolytic nickel-plating and **does not flake** *(used in the food industry)*
  More resistant to oxidation *(used in the beverage industry)*
  Price and code on request.
  Available for a minimum quantity of **50 *pieces***.
  For lower quantities, a lump sum of € € 45.00 will be added, and the estimated delivery is **15 *days*** *from order acceptance.*

GENERAL CONDITIONS OF SALE

1 – APPLICATION AND ENFORCEABILITY OF THE GENERAL CONDITIONS OF SALE

These general conditions of sale are systematically sent or delivered to purchasers to enable them to transmit their orders. Consequently, passing an order to BETT SISTEMI entails the purchaser's full acceptance of these conditions of sale, with no reservations whatsoever, with the exclusion of any further documents such as catalogues or brochures published by the seller, provided strictly for information purposes and having a purely indicative nature; this shall apply regardless of any provisions to the contrary shown in the client's order forms. Any conditions other than those relating to the specifications of those parts to be made to measure (customised) established by the purchaser shall therefore - unless expressly approved - be unenforceable on the seller, regardless of the time or moment they are communicated.

Only the specifications of the parts to be customised can supplement these general conditions of sale.

Any failure on the part of the seller to enforce any of the following provisions at any time shall not be construed as a waiver of any right at any future time.

2 – ORDER

The order must be transmitted by the client in writing to BETT SISTEMI. Any telephone orders shall therefore need to be confirmed in writing by the client within 24 hours of the call. Failure to do so will cause the order not to be taken into consideration. The sales contract will be considered valid and therefore perfected and final only upon acceptance of the order by BETT SISTEMI. As evidence of acceptance by BETT SISTEMI, the latter shall send the client an order confirmation.

Any changes by BETT SISTEMI to the clients' Orders, shown in the confirmation letter sent to the client, shall be considered accepted by the same should the client fail to send any written observations within 24 hours.

Orders for an amount below 40 euros, VAT not included, will not be accepted.

3 – CHANGES TO THE ORDER

Any changes or cancellations of the order requested by the client will be taken into consideration only where made in writing, and received prior to dispatch of the products (standard products) or to the start of production (customised or made-to-measure products) and if expressly accepted by BETT SISTEMI via fax, to be sent to the client within 24 hours of the request for change. Should any of the conditions not be complied with, the products initially ordered shall be delivered as originally agreed and shall have to be paid for aforesaid.

4 – PRICE

All prices shown in our catalogue are non-inclusive of VAT. Value added tax at the applicable rate and transport expenses shall therefore be added (for orders amounting to less than 80 Euros, VAT excluded).

Unless otherwise agreed, products are sold at the price applicable at the time of the order. The prices for the products mentioned in the catalogue are those applicable at the date of publication of the aforementioned catalogue, shown on the cover. Prices may be changed at any time.

5 - DELIVERY - PROCEDURES - TERMS

A – TERMS

Parts already in stock at the time of order acceptance may be available or dispatched within a maximum time-frame of 72 hours as of our acceptance (payment by bank wire transfer or PayPal); in the case of payments by bank wire transfer, the parts already in stock may be available or dispatched after 72 hours minimum as of our acceptance.
As for parts in the catalogue that are not in stock at the time of acceptance of the order or for special parts, an indication of the lead time will be communicated upon order acceptance.

The estimated delivery terms are purely indicative and may not give rise, under any circumstance, to indemnity claims for delay, compensation for damages, non-payments or cancellations of open orders, regardless of the causes, gravity and consequences of the delay. BETT SISTEMI shall be relieved from all delivery obligations in the case of force majeure events such as, by way of example and not limited thereto, wars, riots, fire, strikes, natural disasters, impossibility to receive supplies.

B – DELIVERY

Unless otherwise agreed, the products shall be delivered directly to the client, at the works of BETT SISTEMI in Correggio 42015 (Italy) or to the carrier chosen by BETT SISTEMI or the same client.

Products are sold ex works Correggio 42015 Italy (works of BETT SISTEMI) and they are transported at the risk of the recipient in derogation to the retention of title clause of BETT SISTEMI, shown hereinafter.

Unless otherwise expressly agreed, transport shall be ex-works, at the client's expense, by the carrier chosen by BETT SISTEMI, or failing that, by the carrier chosen by the same client.

Should any damage or failure occur during transport, it will be the client's responsibility to make all the necessary claims and objections within 8 days of receipt of the goods (as shown at the bottom of the sale invoice).

BETT SISTEMI shall be entitled to make partial deliveries.

C – RECEIPT

Without prejudice to the provisions vis-à-vis the carrier, complaints regarding visible defects or non-conformity of the product delivered, of the product ordered or the dispatch note, shall be made in writing by and not later than thirty days following the arrival of the products, on pain of forfeiture of the same right.

The purchaser shall provide valid grounds to prove the existence of the actual defect or anomaly ascertained. The purchaser shall allow the seller to ascertain the existence of the said defects and to provide a remedy. The purchaser shall refrain from intervening directly or from causing third parties to intervene to that end.

By way of warranty, the only obligation for the seller shall involve the replacement, free of charge, or the repair of the product or the item recognised to be defective through its own service. Products covered by a warranty shall first be submitted to the seller's after-sales service for examination, this department's approval being required for any replacement to be granted. Transport expenses shall be charged to the purchaser if the warranty is not applicable.

6 - PAYMENT - METHODS

Our invoices, sent along with the ordered items, can be settled as follows:

- Credit card
- PayPal
- Bank wire transfer or other methods agreed with BETT SISTEMI at the time of order confirmation; the choice of any payment method shall not change the payment due date.

No discounts will be granted for advance payments.

7 – LATE PAYMENT OR NON-PAYMENT -

Failure to pay by the due date shall entitle us to charge interests on arrears as provided for by the Italian Legislative Decree 231/02 and to claim the costs incurred for payment collection. In the event of a payment extension, we will apply the monthly interest rate referred to in the aforementioned Legislative Decree to the same extension granted.

8 – WARRANTY

BETT SISTEMI's products are covered by warranty against any hidden defects or flaws of the products sold under the terms provided for in article 1476 of the Italian Civil Code.

In the event of customised products, BETT SISTEMI undertakes to manufacture products conforming to the specifications given by the client, without however guaranteeing in any way whatsoever its operating nature, which shall be exclusively evaluated by the client. The client is the sole party responsible for the information transmitted to BETT SISTEMI.

As for standard products, BETT SISTEMI guarantees their conformity with the specifications shown in the catalogue. BETT SISTEMI cannot be held responsible and/or the warranty shall not be applicable upon expiry of the terms according to the law and cannot give rise to any indemnity claim.
Any use of the standard products is made on the sole responsibility of the purchaser, who declares to have examined the technical specifications of the products purchased and deems them suitable for his specific intended use.

Should a customised product infringe the rights of third parties, the client agrees to reimburse all costs (for proceedings, indemnification, damage compensation, legal advice and other consulting expenses) which BETT SISTEMI should incur in connection thereof and to take an active part in its defence.

The warranty shall not be applicable if the products sold have been changed or tampered with or if they are used in a manner or in conditions which are improper or inconsistent with their characteristics, intended use or standards applicable (in particular, in the event of use or installation in aircrafts and/or space vehicles for which the said products are absolutely unsuited).

TRANSFER OF RISK The moment the goods are delivered at the destination, the risks of improper use of the product, loss, direct or indirect damage shall be borne by the purchaser.

9 - RETURNS - PROCEDURES

Any returns of products shall be formally agreed in writing between the seller and the purchaser and sent via fax (0522/635222), e-mail (bsistemi@bettsistemi.com), or by registered mail with advice of receipt. Should any products be returned without the aforementioned express agreement, they will be kept at the purchaser's disposal and shall not entitle to any compensation or refunds.

At any rate, returns shall not be accepted after thirty days following receipt of the goods. Expenses and risks related to the products returned shall always be charged to the purchaser. All returns must be sent to our factory. The choice of carrier is at our discretion.

The collection of a product by the seller shall entitle the purchaser to a refund for a period of six months as of the date the right was established. The products to be returned shall be intact and in proper working order, this being an essential condition if the client wishes to exercise the right of withdrawal.
Should there be visible defects or in the event of non-conformity of the products delivered, duly assessed by the seller, the purchaser shall be entitled either to the replacement of the products free of charge or to a refund for those products, at the seller's discretion. The purchaser shall not however be entitled to any indemnification or compensation of any kind.

10 – RETENTION OF TITLE

The ownership of standard parts or customised parts shall be transferred only subject to full payment of the price in principal and any accessory costs, it being understood that the payment shall be considered effected on the day the related sums are actually cashed by BETT SISTEMI.

Notwithstanding the provisions set forth in the foregoing paragraph, any and all risks shall be transferred to the client at the time of dispatch or delivery of the goods by BETT SISTEMI (in particular the risk of loss, deterioration and damage caused by the items sent).

Whenever a client sends a device or equipment in order to have a part manufactured, that is to be incorporated into, or that is to complete the aforementioned device or equipment, the client remains the owner thereof, bears the transport costs and the costs for the item to be re-delivered, assumes the risks connected with transport, any adjustment or transformation by BETT SISTEMI and any damage that this may cause.

11 – NON-FULFILMENT

In the event that the purchaser does not fulfil even only one of the obligations set out herein, or becomes subject to bankruptcy or insolvency proceedings, requests suspension of payments, liquidates or transfers his activity, his properties are repossessed or sequestered in whole or in part, does not present upon our request guarantees for the balance of the purchase price agreed upon, we reserve the right to recede from the contractual obligation stipulated with the purchaser or to recede from the part of the contract not yet executed, even without resort to legal proceedings, and we shall have the right to re-enter into possession of all the goods already delivered and for which the counterparty has not fully and exactly performed his obligations in relation thereto.

12 – SUSPENSION/TERMINATION CONDITIONS

The company undertakes to fulfil the undersigned agreements on condition that the counterparty proves his full and certain solvency in relation to the negotiations to be concluded. Furthermore, the Company shall have the right, at its own discretion, to request the purchaser to provide payment guarantees to the extent requested by the Company and also to suspend execution of the agreement until said requests have been fully satisfied.

13 – APPLICABLE LAW

A – JURISDICTION

Pursuant to art.23 of Council Regulation EC44/2001 of 22 December 2000, the parties mutually agree that any dispute, none excluded nor excepted, relating to the interpretation, execution and termination of this contract shall be exclusively referred to the Italian Judicial Authorities.

B – TERRITORIAL JURISDICTION

Any dispute, none excluded, relating to the interpretation, execution and termination of this contract, including events of connection, shall be solely ruled upon by the Court of Reggio Emilia, in Italy.

Dear Customer,
with the aim of continually improving our services, your opinion is of major importance to us. We would appreciate not only knowing your opinion, but also receiving comments, proposals or suggestions.

This area is dedicated to this. If you wish, you may send us an email to bsistemi@bettsistemi.com, or a fax using the attached form, to be sent to +39.0522.635222.

We will be glad to answer your requests and consider your suggestions.

Kind regards

The Management

Continual improvement

Continual improvement