GRAZIADIO UK







GLS

25-40-63A

CE

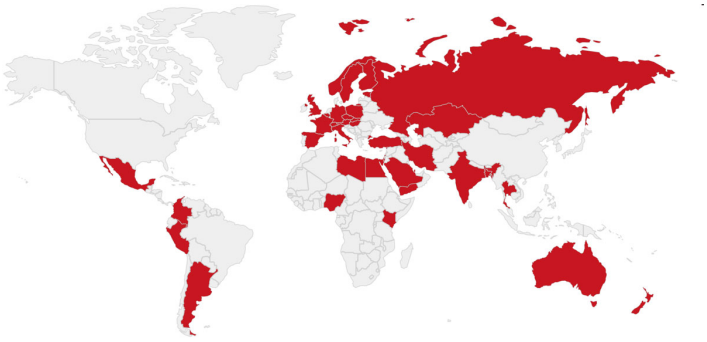
GLS

Graziadio Busbar

Graziadio have been making busbar in Italy since 1959. Originally founded by Antonio Graziadio. The company continued to expand its sales and product ranges within the Italian markets through to the 90's.

As the new millennium approached the business expanded further into overseas markets, including the UK. As these markets developed an additional automated factory was opened in 2005 dedicated to the production of GLS lighting busbar. Taking the total facilities to 84,000 sqft.

Graziadio factory circa 1959



Today, overseas sales account for more than half of the company's turnover, and they supply over 40 different countries across the world. Graziadio now manufacture a complete range of busbar from 25A for lighting to 6300A for more specialist applications.

The Company success has been built on product development, more flexible manufacturing schedules and the more personal service associated with an independent business.

To continue these values, Graziadio have recently appointed an independent UK distributor to continue the growth on behalf of Graziadio in the UK.

Stock for the GLS lighting busbar product range is therefore now available for immediate dispatch from our 8500 sq ft UK distribution facility based in the West Midlands.

UK based sales and technical support is also available for any assistance you may require with your project design.

Graziadio UK
Unit 2
280 Foleshill Road
Coventry
CV6 5AH

Telephone
+44(0)2476 706109

Email
sales@graziadio.co.uk

Conformity declaration

GLS busbar described in this publication complies with the following standards:

IEC61439-1
IEC61439-6
IEC60529
CEI EN50102
CEI EN61439-1
CEI EN61439-6
CEI EN60529

Type test

Short-circuit resistance
Casing degree of protection (IP code)
Insulation resistance
Overheating limit
Applied voltage resistance
Resistance to normal loads
Protective circuit efficiency
Air and surface distances
Casing degree of protection (IK code)

The product object of this declaration exceeds the test types above mentioned and therefore this material is marked:

Rivoli, 07/01/2005
GRAZIADIO & C. S.p.A.

Certifications

To receive a copy of any certifications please contact us:**sales@graziadio.co.uk**

Lighting busbar system

25-40-63 A

- Aluminium external housing
- Copper conductors
- Standard 3 meter lengths
- 2, 4, 6, 8 pole options
- Fast jointing system to save time
- Plug-in points every 1m
- Secure fit tap off boxes

GLS complies with the following standard:

IEC 61439-1
IEC 61439-6
CEI EN 61439-1
CEI EN 61439-6
DIV VDE 0660 part 500
DIN VDE 0660 part 502

IP55

GLS

CE

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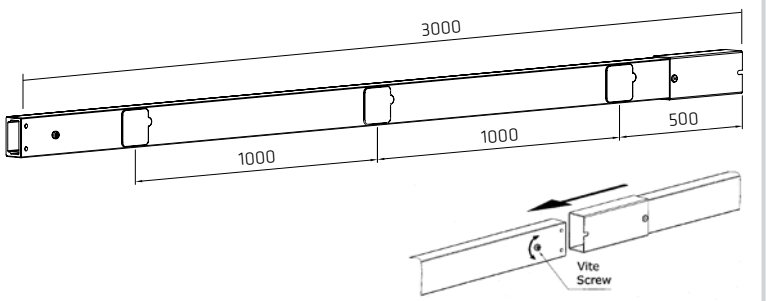
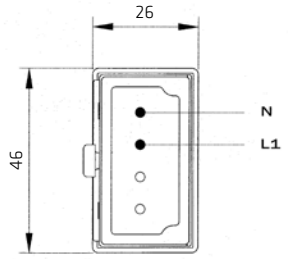
3 m

	25 A		40 A		
	Code	Kg	Code	Kg	Tap off points
2P	GLS2532	1,59	GLS4032	1,71	3
2P	GLS25325	1,65	GLS40325	1,74	6
4P	GLS2534	1,77	GLS4034	1,89	3
4P	GLS25345	1,83	GLS40345	1,92	6

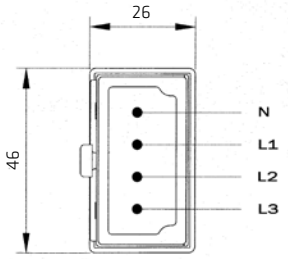
The fast fit joint is pre-installed in every length.



2P



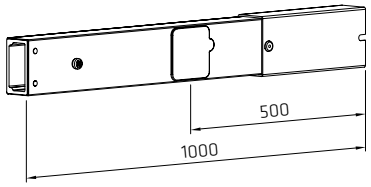
4P



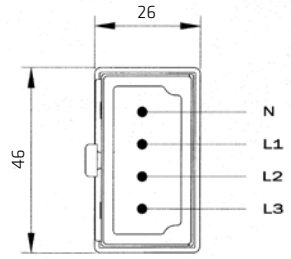
1 m

	25 / 40 A		
	Code	Kg	Tap off points
2P 4P	GLS4014	0,69	1

The fast fit joint is pre-installed in every length.



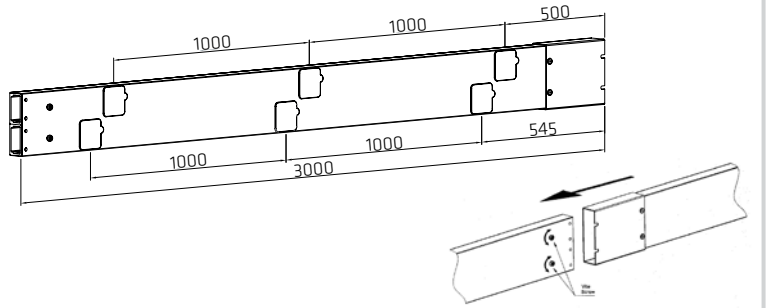
2/4P



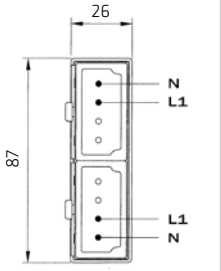
3 m

	25 A		40 A		
	Code	Kg	Code	Kg	Tap off points
2+2P	GLS253D	2,70	GLS403D	2,88	3+3
6P	GLS2536	2,82	GLS4036	3,12	3+3
6P	GLS25365	2,94	GLS40365	3,24	6+6
8P	GLS2538	2,94	GLS4038	3,36	3+3
8P	GLS25385	3,06	GLS40385	3,48	6+6

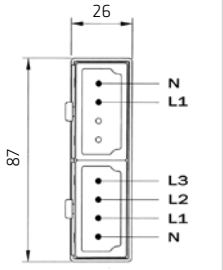
The fast fit joint is pre-installed in every length.



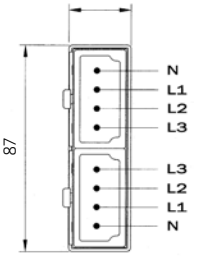
2+2P



6P



8P



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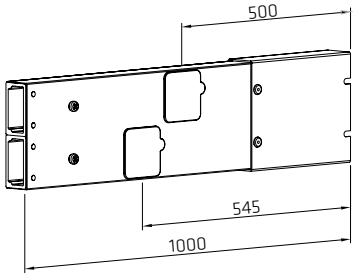
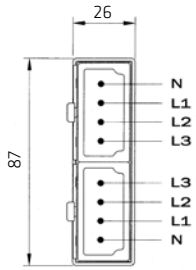
1 m

		25 / 40 A		
		Code	Kg	Tap off points
25/40 A	2+2P 6P 8P	GLS4018	1,12	1+1

The fast fit joint is pre-installed in every length.



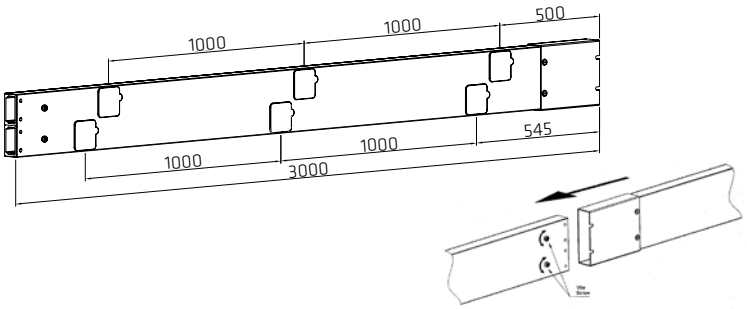
2+2/6/8P



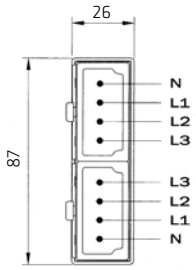
3 m

	63 A		
	Code	Kg	Tap off points
4P	GLS6334	3,40	3
4P	GLS63345	3,50	6

The fast fit joint is pre-installed in every length.



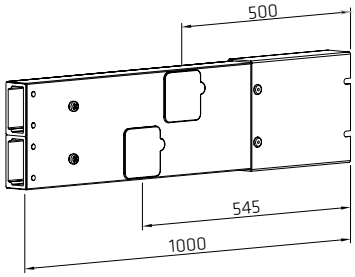
4P



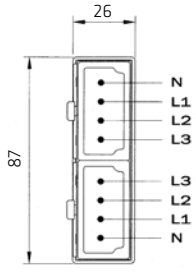
1 m

	63 A		
	Code	Kg	Tap off points
4P	GLS6314	1,12	1

The fast fit joint is pre-installed in every length.



4P

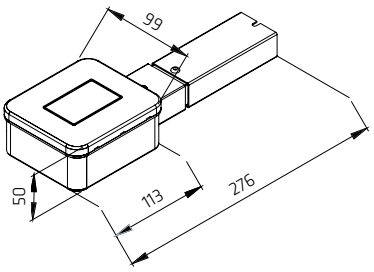


FEED UNIT 25 / 40 A

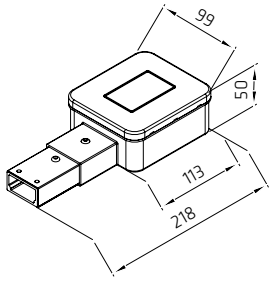
SX

DX

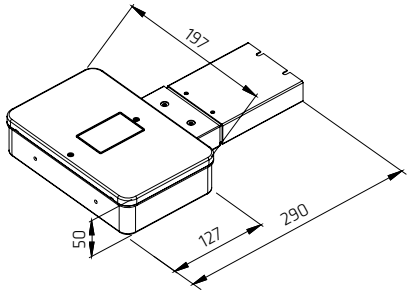
SX 4P



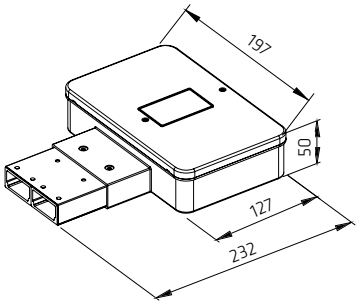
DX 4P



SX 8P

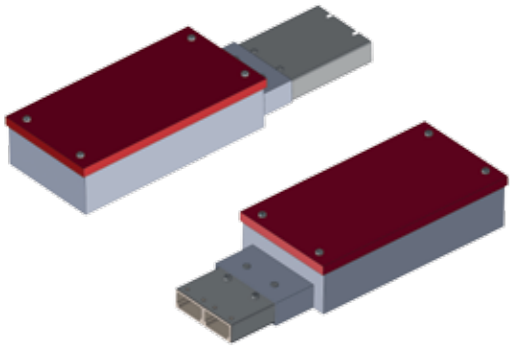


DX 8P

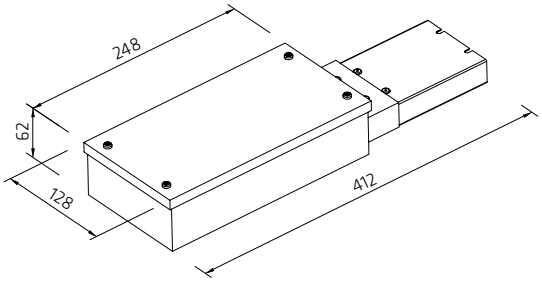


	25 / 40 A	
	Code L/HAND	Code R/HAND
2/4P	GLSATS4	GLSATD4
Cable entry	ø 30mm	ø 30mm
Max incoming cable size	16 mm²	16 mm²
Weight	0,4 Kg	0,33 Kg
2+2/6/8P	GLSATS8	GLSATD8
Cable entry	ø 30x2 mm	ø 30x2 mm
Weight	0,6 Kg	0,5 Kg

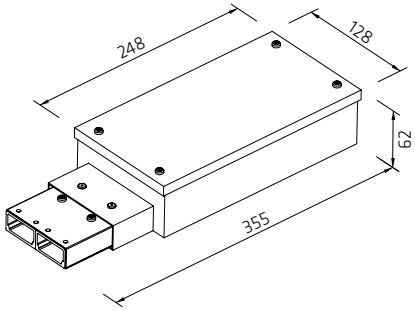
FEED UNIT 63 A



SX



DX



	63 A	
	Code L/HAND	Code R/HAND
2/4P	GLSATS63	GLSATD63
Cable entry	ø 35mm	ø 35mm
Max incoming cable size	25 mm²	25 mm²
Weight	1,7 Kg	1,6 Kg

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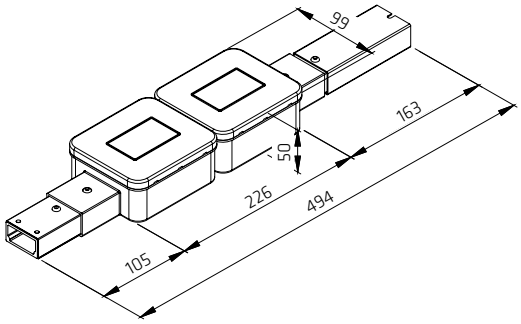
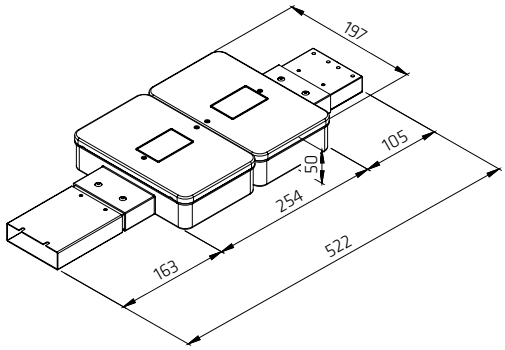
CENTER FEED BOX 25 / 40 A

2/4P

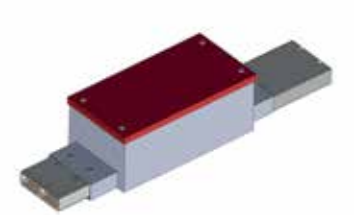


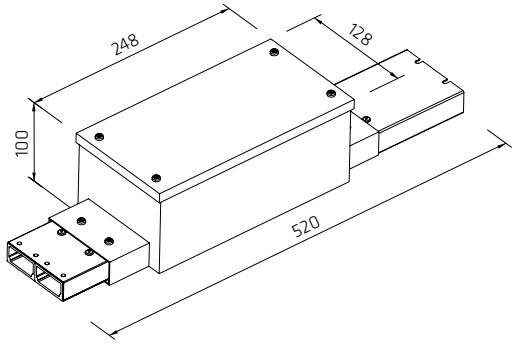
2+2/6/8P



		25 A / 40 A	
		Code	Code
		GLSAI4	GLSAI8
	Type	2/4P	2+2/6/8P
25/40 A	Cable entry	ø 30mm	ø 30mm
	Max incoming cable size	16 mm²	16 mm²
	Weight	0,8 Kg	1,2 Kg

CENTER FEED BOX 63 A





		63 A
		Code
		GLSAI63
	Type	4P
63 A	Cable entry	ø 35mm
	Max incoming cable size	25 mm²
	Weight	3,3 Kg

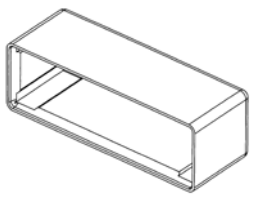
END CAP

GLSCT4

GLSCT8

GLSCT4

GLSCT8

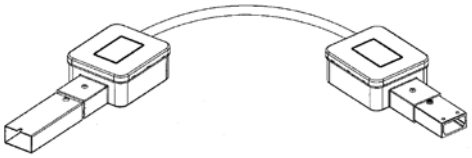


	2+2P 6P 8P
63 A	4P

FLEXIBLE BEND

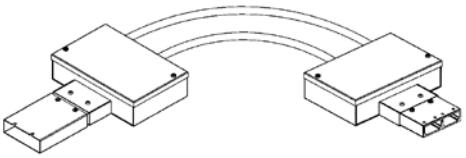
2/4P

Flexible length = 500 mm



2+2/6/8P

Flexible length = 500 mm



FLEXIBLE BEND			
		Code	Kg
25/40 A	2P 4P	GLSFX4	0,9
	2+2P 6P 8P	GLSFX8	2,5
63 A	4P	GLSFX63	3,8
FLEXIBLE "T"			
		Code	
25/40 A	2P 4P	GLSFX4T	
	2+2P 6P 8P	GLSFX8T	
63 A	4P	GLSFX63T	

Longer flexible lengths available on request code. GLSFX•-xxxx.

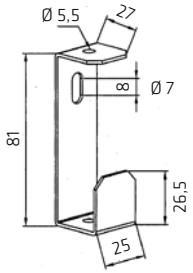
FIXING HANGER VERTICAL

GLSS•

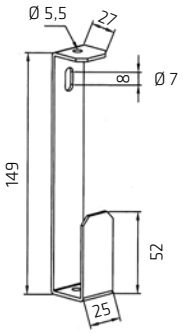
	25 A / 40 A / 63 A	
	Code	Kg
2/4P	GLSS4	0,04
2+2/6/8P	GLSS8	0,05
63 A	GLSS8	0,05

*Use 2 hangers every 3 m straight length.

GLSS4



GLSS8



HANGER HORIZONTAL

GLSS0•

	25 A / 40 A / 63 A	
	Code	Kg
2/4P	GLSS04	0,08
2+2/6/8P	GLSS08	0,18
63 A	GLSS08	0,18

HOOKS FOR WIRE SUSPENSION

GLSGAN

	25 A / 40 A / 63 A	
	Code	Kg
Open	GLSGAN	0,05

GLSGANC

	25 A / 40 A / 63 A	
	Code	Kg
Closed	GLSGANC	0,05

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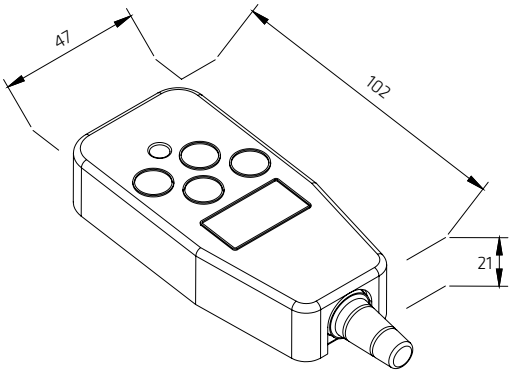
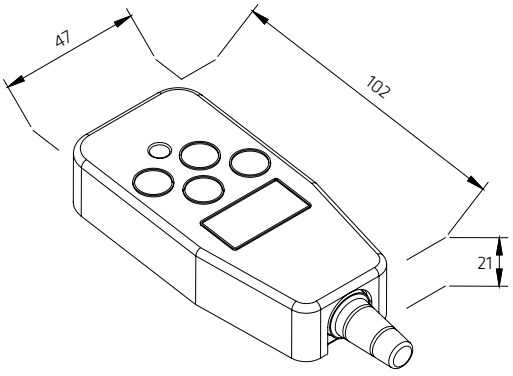
TAP OFF BOX WITH PHASE SELECTION



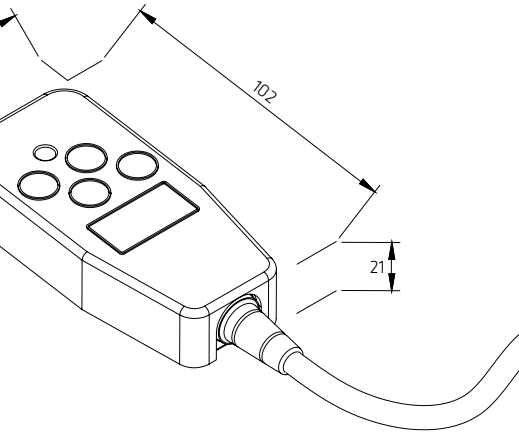
Code	GLS10LN	GLS16LN	GLS10L4	GLS16L4
Tap off material	Plastic	Plastic	Plastic	Plastic
Conductor	Cu	Cu	Cu	Cu
Rating	10 A	16 A	10 A	16 A
Max cable size	2,5 mm²	2,5 mm²	2,5 mm²	2,5 mm²
Max.cable diameter	ø 13 mm	ø 13 mm	ø 13 mm	ø 13 mm
Fused pins	no	no	no	no
Number of poles	2P+PE	2P+PE	4P+PE	4P+PE

TAP OFF BOX 16 A WITH PHASE SELECTION C/W 6.3A FITTED FUSE



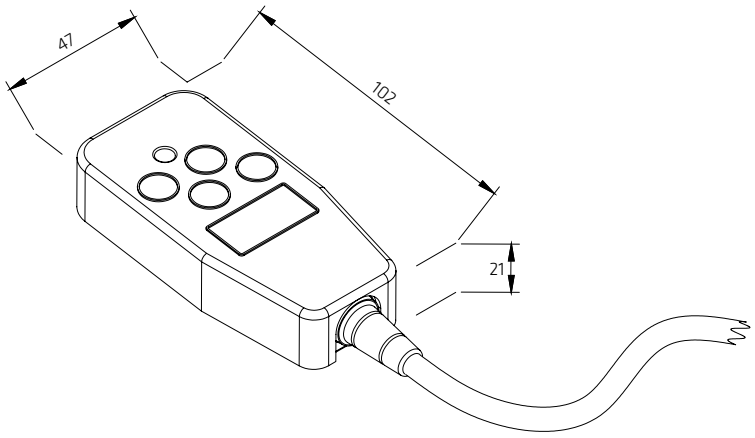
code	GLS16FN	GLS16F4
Tap off material	Plastic	Plastic
Conductor	Cu	Cu
Rating	16 A	16 A
Max cable size	2,5 mm²	2,5 mm²
Max cable diameter	ø 13 mm	ø 13 mm
Fused pins	5 x 20 - 6,3 A	5 x 20 - 6,3 A
Number of poles	2P+PE	4P+PE

TAP OFF BOX WITH PHASE SELECTION /PRE-WIRED FLEX



Tap off material	Plastic	Plastic
Rating	10 A	16 A
* Please select required pin position	1 = L1 - N 2 = L2 - N 3 = L3 - N 4 = 4P - N	1 = L1 - N 2 = L2 - N 3 = L3 - N 4 = 4P - N
Cable length ★ ★	up to 10m	
Standard cable	3 core x 1,5 1m	3 core x 1,5 1m

TAP OFF BOX WITH PHASE SELECTION/PRE-WIRED FLEX/6.3A FUSE FITTED

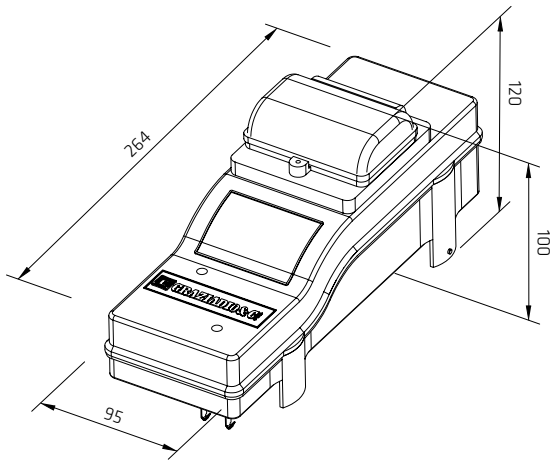


Code	GLS16F•C★
Tap off material	Plastic
Conductor	Cu
Rating	16 A
Fused pins	5 x 20 - 6,3 A
Please select required pin position)	1 = F1 - N 2 = F2 - N 3 = F3 - N 4 = 4P - N
Cable length ★ ★	up to 10m
Standard cable	3 core x 1.5 1m

Red cover tap off boxes available on request - For the code simply add "E" at the end of the code. Eg: GLS10LNE.

Other pre-wired cable lengths available to order up to 10m

TAP OFF BOX 32 A (FOR GLS63 ONLY)



		WITH FUSE BASE	MODULAR
Code	2P	GLS32F2	GLS32M2
	4P	GLS32F4	GLS32M4
tap off material		Plastic	Plastic
Conductor material		Cu	Cu
max cable size		25 mm²	25 mm²
Max cable diameter		ø 28 mm	ø 28 mm
Fused pins		10,3 x 38	-
MCB Modules number		-	4

The tap off box can be used only on GLS63 63A rated busbar

ACCESSORIES

GLSCOPDER

Code	Description
GLSCOPDER	Plug -in point spare cover

GLS0051

Code	Description
GLS0051	Non fused extra contact for tap off

GLS0038

Description	
GLS0038	Extra contact for tap off with 6.3A fuse base

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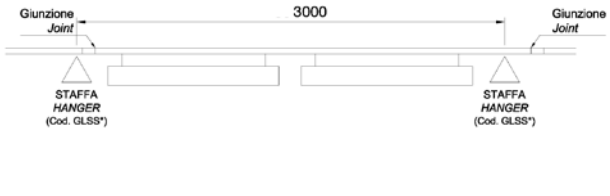
DATA SHEET GLS											
Nominal current	I_n	[A]	25	25	25	25	40	40	40	40	63
Dimensions	D	[mm]	26x46	26x46	26x87	26x87	26x46	26x46	26x87	26x87	26x87
			2P	4P	6P	8P	2P	4P	6P	8P	4P
Conductor material			Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu	Cu
voltage	U_e	[V]	400	400	400	400	400	400	400	400	400
Insulation voltage	U_i	[V]	500	500	500	500	500	500	500	500	500
Frequency	f	[Hz]	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Phase Conductor size	S_f	[mm²]	2,5	2,5	2,5	2,5	4	4	4	4	8
Neutral conductor size	S_n	[mm²]	2,5	2,5	2,5	2,5	4	4	4	4	8
Cross section of protective conductor (case)	S_{PE}	[mm²]	144	144	246	246	144	144	246	246	246
Phase resistance (20° C)	R_{20}	[mΩ/m]	8,91	8,91	8,91	8,91	5,57	5,57	5,57	5,57	2,79
Phase reactance	X	[mΩ/m]	0,155	0,155	0,155	0,155	0,143	0,143	0,143	0,143	0,08
Phase Impedance (20°C)	Z_{20}	[mΩ/m]	8,911	8,911	8,911	8,911	5,572	5,572	5,572	5,572	2,79
PE Resistance (housing)	R_{PE}	[mΩ/m]	0,194	0,194	0,114	0,114	0,194	0,194	0,114	0,114	0,114
PE Reactance (housing)	X_{PE}	[mΩ/m]	0,0141	0,0141	0,0141	0,0141	0,0141	0,0141	0,0141	0,0141	0,141
I PE Impedance (housing)	Z_{PE}	[mΩ/m]	0,195	0,195	0,115	0,115	0,195	0,195	0,115	0,115	0,115
Losses for the Joule effect at nominal current	P_i	[W/m]	18,7	18,7	18,7	18,7	30,0	30,0	30,0	30,0	33,2
Rated short circuit time current	Icw (0,1 s)	[kA]	2,5	2,5	2,5	2,5	3,2	3,2	3,2	3,2	3,2
Peak current	Ipk	[kA]	3,75	3,75	3,75	3,75	4,8	4,8	4,8	4,8	4,8
T Rated short circuits time of neutral bar	Icw (0,1 s)	[kA]	2,5	2,5	2,5	2,5	3,2	3,2	3,2	3,2	3,2
Peak current of neutral bar	Ipk	[kA]	3,75	3,75	3,75	3,75	4,8	4,8	4,8	4,8	4,8
T Rated short circuit time of PE	Icw (0,1 s)	[kA]	2,5	2,5	2,5	2,5	3,2	3,2	3,2	3,2	3,2
Peak current of PE	Ipk	[kA]	3,75	3,75	3,75	3,75	3,75	3,75	3,75	3,75	3,75
Max thermal limit $I^2 \cdot t$		[A^2-S-10^2]	193,6	193,6	193,6	193,6	495,6	495,6	495,6	495,6	495,6
IP degree of protection	IP		55	55	55	55	55	55	55	55	55
Calorific power		[kcal/m]	546	846	1392	1692	597	949	1546	1898	1898

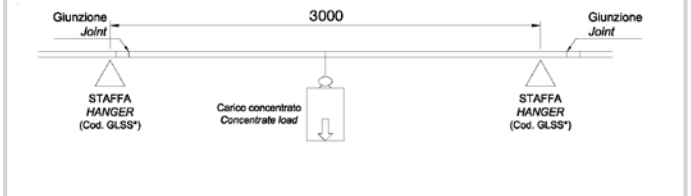
VOLTAGE DROP WITH DISTRIBUTED LOAD [ΔV]											
Cosφ = 0,7		[mV/m]	153,5	153,5	153,5	153,5	154,7	154,7	154,7	154,7	109,5
Cosφ = 0,8		[mV/m]	174,7	174,7	174,7	174,7	175,7	175,7	175,7	175,7	124,3
Cosφ = 0,9		[mV/m]	195,7	195,7	195,7	195,7	196,7	196,7	196,7	196,7	138,7
Cosφ = 1,0		[mV/m]	215,8	215,8	215,8	215,8	215,9	215,9	215,9	215,9	152,0

SCHEDULE OF RATINGS FOR THE AMBIENT TEMPERATURE IN AVERAGE 24H											
	10° C	15° C						41° C			
K	1,19	1,18	1,16	1,16	1,12	1,08	1,04	1	0,84	0,70	0,58

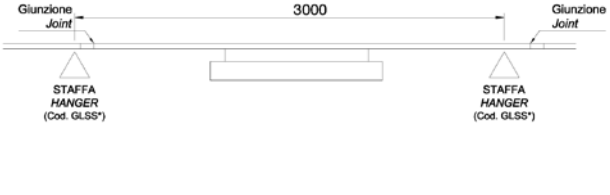
Max. weights with 3m suspension spacing



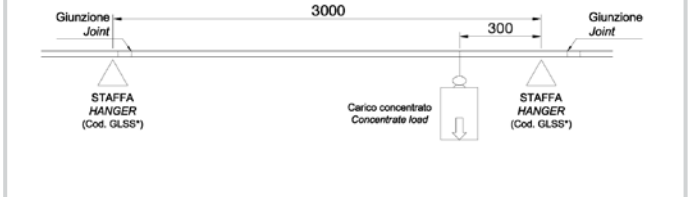
LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	6,2 Kg	5,3 Kg	24,2 Kg	24,2 Kg
1x58	6,9 Kg	7,8 Kg	19,5 Kg	15,9 Kg
2x36	6,2 Kg	5,3 Kg	24,2 Kg	24,2 Kg
2x58	6,9 Kg	7,8 Kg	15,9 Kg	15,9 Kg
250/400	/	/	/	/



LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	/	/	/	/
1x58	/	/	/	/
2x36	/	/	/	/
2x58	/	/	/	/
250/400	4,1 Kg	2,9 Kg	8,4 Kg	8,4 Kg

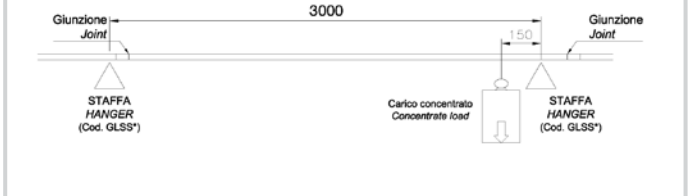


LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	5,2 Kg	4 Kg	15,7 Kg	15,7 Kg
1x58	4,35 Kg	4,35 Kg	9,75 Kg	9,75 Kg
2x36	5,2 Kg	4 Kg	15,7 Kg	15,7 Kg
2x58	4,35 Kg	4,35 Kg	9,75 Kg	9,75 Kg
250/400	/	/	/	/



LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	/	/	/	/
1x58	/	/	/	/
2x36	/	/	/	/
2x58	/	/	/	/
250/400	15,7 Kg	10,7 Kg	8,4 Kg	8,4 Kg

LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	15,55 Kg	10,3 Kg	15,7 Kg	15,7 Kg
1x58	9,3 Kg	5,7 Kg	8,85 Kg	8,85 Kg
2x36	15,55 Kg	10,3 Kg	15,7 Kg	15,7 Kg
2x58	9,3 Kg	5,7 Kg	8,85 Kg	8,85 Kg
250/400	/	/	/	/



LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	15,55 Kg	10,3 Kg	15,7 Kg	15,7 Kg
1x58	9,3 Kg	5,7 Kg	8,85 Kg	8,85 Kg
2x36	15,55 Kg	10,3 Kg	15,7 Kg	15,7 Kg
2x58	9,3 Kg	5,7 Kg	8,85 Kg	8,85 Kg
250/400	/	/	/	/

1/350 and 1/500 are the maximum allowed deflection

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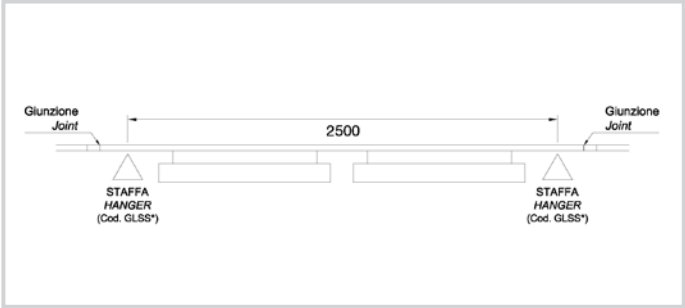
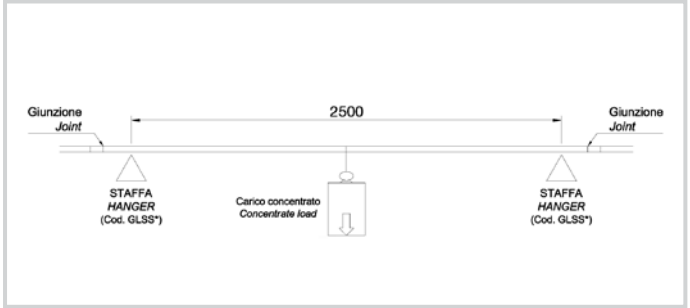
All dimensions are in mm.

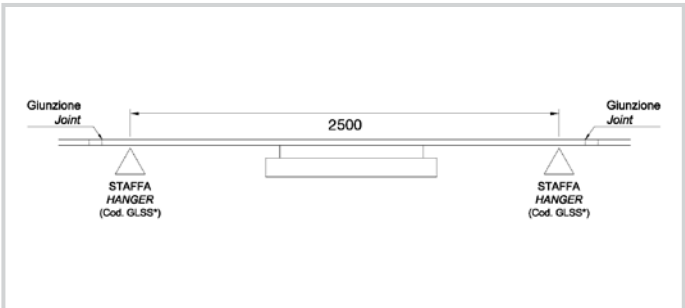
Max. weights with 2.5m suspension spacing



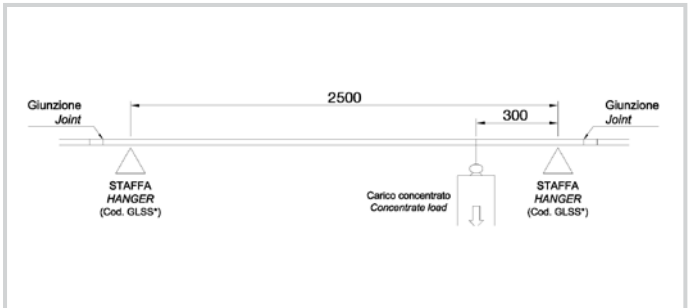
LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	8,8 Kg	5,3 Kg	26,0 Kg	26,0 Kg
1x58	12,4 Kg	7,8 Kg	19,5 Kg	19,5 Kg
2x36	8,8 Kg	5,3 Kg	26,0 Kg	26,0 Kg
2x58	12,4 Kg	7,8 Kg	19,5 Kg	19,5 Kg
250/400	/	/	/	/



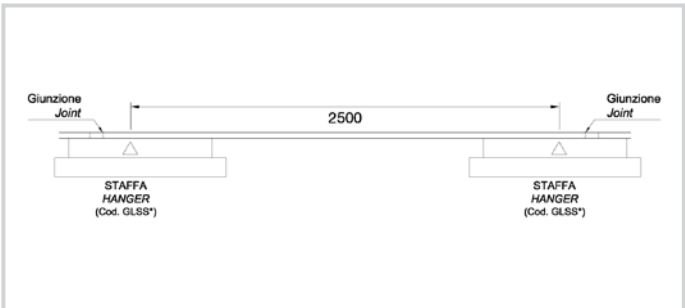
LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	/	/	/	/
1x58	/	/	/	/
2x36	/	/	/	/
2x58	/	/	/	/
250/400	5,2 Kg	3,4 Kg	12,5 Kg	12,5 Kg



LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	6,2 Kg	4 Kg	18,4 Kg	18,4 Kg
1x58	7,45 Kg	7,45 Kg	11,95 Kg	11,95 Kg
2x36	6,2 Kg	4 Kg	18,4 Kg	18,4 Kg
2x58	7,45 Kg	7,45 Kg	11,95 Kg	11,95 Kg
250/400	/	/	/	/



LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	/	/	/	/
1x58	/	/	/	/
2x36	/	/	/	/
2x58	/	/	/	/
250/400	16,1 Kg	9,6 Kg	9,3 Kg	9,3 Kg



LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	26,95 Kg	23,8 Kg	11,2 Kg	11,2 Kg
1x58	18,3 Kg	13,35 Kg	10,65 Kg	10,65 Kg
2x36	26,95 Kg	23,8 Kg	11,2 Kg	11,2 Kg
2x58	18,3 Kg	13,35 Kg	10,65 Kg	10,65 Kg
250/400	/	/	/	/

LAMP	GLS 2/4P		GLS 6/8P + GLS 4P 63A	
	1/350	1/500	1/350	1/500
1x36	/	/	/	/
1x58	/	/	/	/
2x36	/	/	/	/
2x58	/	/	/	/
250/400	33,8 Kg	22,4 Kg	10,7 Kg	10,7 Kg

1/350 and 1/500 is the maximum allowed deflection

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