

**A
-
O
4
-
2
5**



GLS



20 Dixon Place, College Milton, East Kilbride G74 JF
Tel: +44(0)1355 234443 Fax: +44(0)1355 247301
email: info@nova.uk.com www.novaelectrical.co.uk

25 - 40 A



LIGHTING BUSBAR SYSTEMS



GLS complies with the following standard:
IEC 60439-1, IEC 60439-2, CEI EN 60439-1, CEI EN 60439-2, DIV VDE 0660 part 500, DIN VDE 0660 part 502

GLS

- **Aluminium external housing**
- **Copper conductors ETP 99,9**
- **Standard 3 meters straight elements**
- **Executions 2, 4, 2+2, 6, 8 poles**
- **Fast jointing system**
- **Plug-in points up to 0,5 m**



Straight elements (3 m)

25 A		40 A		kg/m	kg/m	Tap off points
Code	Code	Code	Code			
2P GLS2532	0,53	GLS4032	0,57	3		
2P GLS25325	0,55	GLS40325	0,58	6		
4P GLS2534	0,59	GLS4034	0,63	3		
4P GLS25345	0,61	GLS40345	0,64	6		

Options:

COP V: *Painted housing*
(RAL to communicate)

COP N: *Anodized housing*

The fast mounting joint is pre-installed in every lenght.



Straight elements (1 m)

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

The fast mounting joint is pre-installed in every lenght.



Straight elements (3 m)

25 A		40 A		kg/m	Code	Tap off points
Code	Code	Code	Code			
2+2P GLS253D	0,90	GLS403D	0,96	3+3		
6P GLS2536	0,94	GLS4036	1,04	3+3		
6P GLS25365	0,98	GLS40365	1,08	6+6		
8P GLS2538	0,98	GLS4038	1,12	3+3		
8P GLS25385	1,02	GLS40385	1,16	6+6		

Options:

COP V: *Painted housing*
(RAL to communicate)

COP N: *Anodized housing*

The fast mounting joint is pre-installed in every lenght.



Straight elements (1 m)

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

The fast mounting joint is pre-installed in every lenght.

GLS



IP55 execution

All the straight elements and the accessories are IP55 standard.


Feed unit

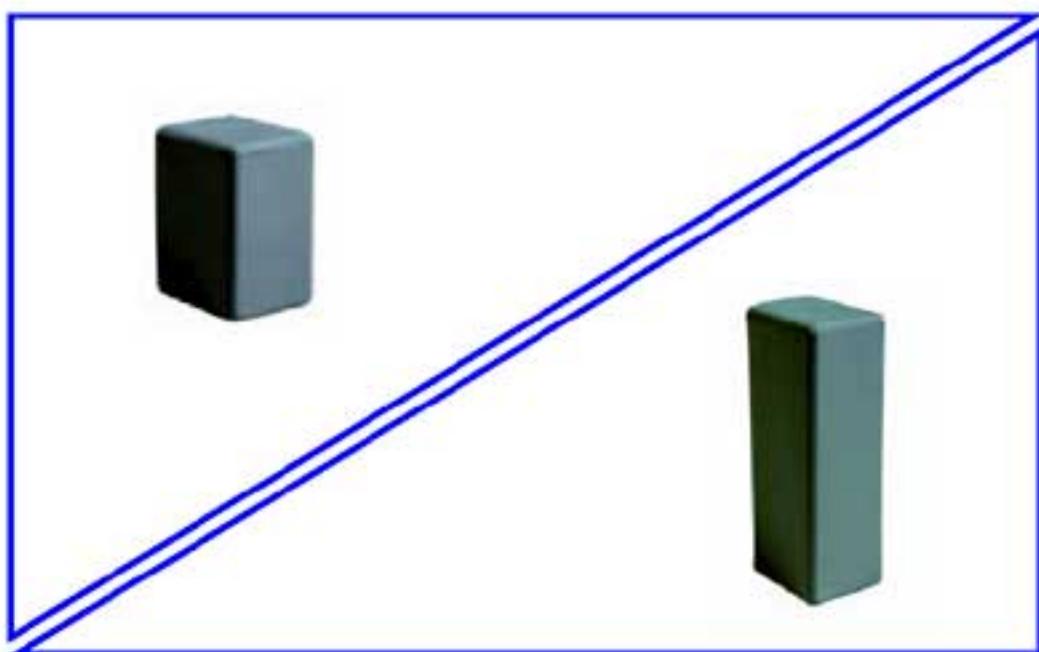
	25/40A	
SX/LH	DX/RH	
2/4P	GLSATS4	GLSATD4
Cables entrance	Ø 30 mm	Ø 30 mm
Weight	0,33 Kg	0,23 Kg

Feed unit

	25/40A	
SX/LH	DX/RH	
2+2/6/8P	GLSATS8	GLSATD8
Cables entrance	Ø 23x2 mm	Ø 23x2 mm

Weight

1,07 Kg 0,97 Kg


End cap

	25/40A	
2/4P	2+2/6/8PX	
GLSCT4	GLSCT8	
Weight	0,02 Kg	0,03 Kg


Flexible element for elbows

	25/40A	
2/4P	Weight	
GLSFX4	0,9 Kg	

Flexible element for elbows

	25/40A	
2+2/6/8P	Weight	
GLSFX8	2,5 Kg	

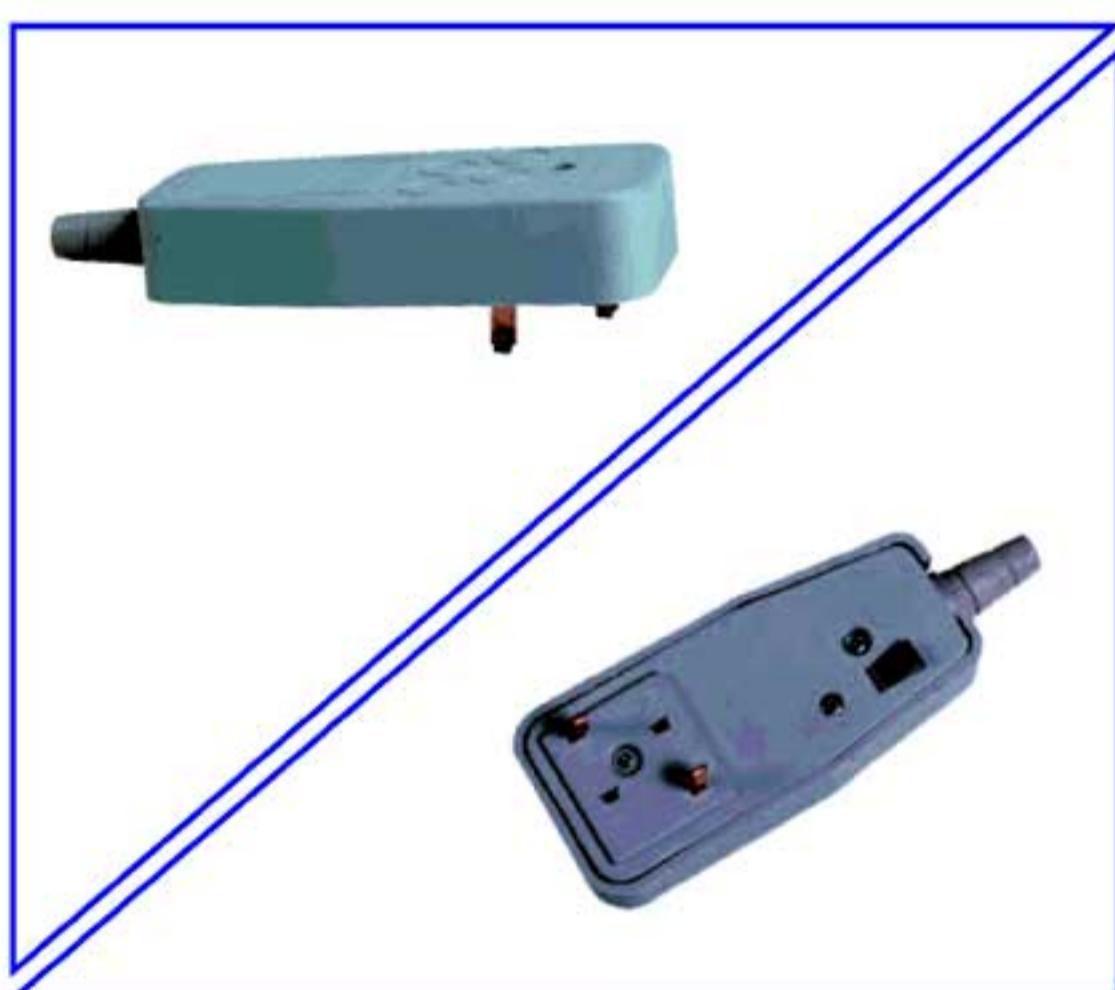

Plug-in point cover (spare)

	25/40A	
2/8P	Weight	
GLSCOPDER	0,005 Kg	


Tap off boxes with phase selection

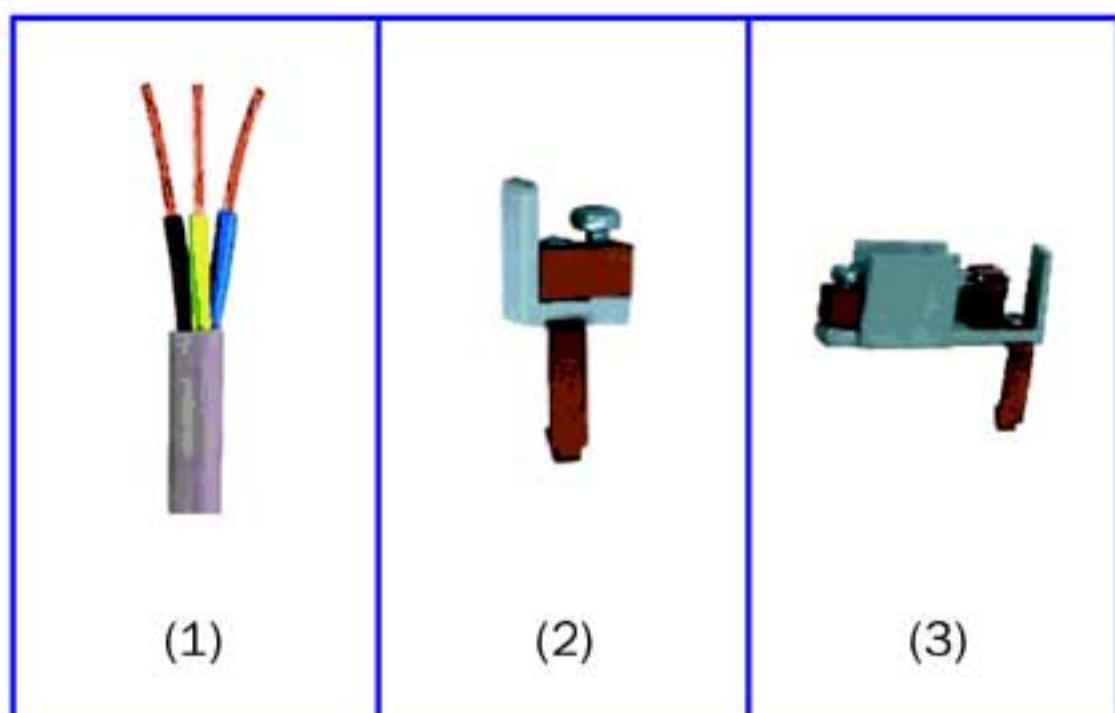
	GLS10LN	GLS16LN	GLS10L4	GLS16L4
Tap off material	Plastic	Plastic	Plastic	Plastic
conductor Material.	Cu	Cu	Cu	Cu
Max cable section	2,5 mm ²	2,5 mm ²	2,5 mm ²	2,5 mm ²
Maximum entrance cable	13 Ø mm	13 Ø mm	13 Ø mm	13 Ø mm
Fuse-base type	Not included	Not included	Not included	Not included
Execution	2P+PE	2P+PE	4P+PE	4P+PE

It is available the tap off for emergency line in red color. Use the same color of the table adding a "E" at the end of the code. Example: GLS10LN → GLS10LNE.


Tap off boxes 16 A with phase selection with fuse

	GLS16FN	GLS16F4
Tap off material	Plastic	Plastic
conductor Material	Cu	Cu
Max cable section	2,5 mm ²	2,5 mm ²
Maximum entrance cable	13 Ø mm	13 Ø mm
Fuse-base type	5x20	5x20
Fuse	6,3 A	6,3 A
Execution	2P+PE	4P+PE

The fuse is included in the tap off box.


Accessories for tap off boxes

Code	Description
GLSCAV2 (1)	Cable 2P installed on tap off (per meter)
GLSCAV4	Cable 4P installed on tap off (per meter)
GLS0051 (2)	Extra contact for tap off (16 A)
GLS0038 (3)	Extra contact for tap off with fuse base
GLSID	Label for tap off phase selection (n°4)


Fixing hanger

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

Hanger for side lines

	25/40A		
	2/4P	kg	kg
GLSS04	0,08		GLSS08 0,18

Hooks

	25/40A	
	Open	kg
GLSGAN		0,05
GLSGANC		0,05

For hangers and hooks in stainless steel put a "x" at the end of each code.

GLS Technical data

<i>Nominal current</i>	I_n	[A]	25	25	25	25	40	40	40	40
<i>Execution</i>			2P	4P	6P	8P	2P	4P	6P	8P
<i>Material of phase and neutral conductor</i>			Cu							
<i>Operational voltage</i>	U_e	[V]	500	500	500	500	500	500	500	500
<i>Insulation voltage</i>	U_i	[V]	750	750	750	750	750	750	750	750
<i>Frequency</i>	f	[Hz]	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
<i>Cross section phases</i>	S_F	[mm ²]	2,5	2,5	2,5	2,5	4	4	4	4
<i>Cross section neutral</i>	S_N	[mm ²]	2,5	2,5	2,5	2,5	4	4	4	4
<i>Cross section of protective conductor</i>	S_{PE}	[mm ²]	144	144	246	246	144	144	246	246
<i>Phase resistance (20°C)</i>	R_{20}	[mΩ/m]	8,91	8,91	8,91	8,91	5,57	5,57	5,57	5,57
<i>Phase reactance</i>	X	[mΩ/m]	0,155	0,155	0,155	0,155	0,143	0,143	0,143	0,143
<i>Phase impedance (20°C)</i>		[mΩ/m]	8,911	8,911	8,911	8,911	5,572	5,572	5,572	5,572
<i>PE Resistance (housing)</i>	R_{PE}	[mΩ/m]	0,194	0,194	0,114	0,114	0,194	0,194	0,144	0,144
<i>PE Reactance (housing)</i>	X_{PE}	[mΩ/m]	0,0141	0,0141	0,0141	0,0141	0,0141	0,0141	0,0141	0,0141
<i>PE impedance (housing)</i>		[mΩ/m]	0,195	0,195	0,115	0,115	0,195	0,195	0,115	0,115
<i>Losses for the Joule effect at nominal current</i>	P_i	[W/m]	18,7	18,7	18,7	18,7	30,0	30,0	30,0	30,0
<i>Rated short circuit time current</i>	$I_{cw} (0,1s)$	[kA]	0,75	0,75	0,75	0,75	1,2	1,2	1,2	1,2
<i>Peak current</i>	I_{pk}	[kA]	1,5	1,5	1,5	1,5	2,5	2,5	2,5	2,5
<i>Rated short circuits time of neutral bar</i>	$I_{cw} (0,1s)$	[kA]	0,75	0,75	0,75	0,75	1,2	1,2	1,2	1,2
<i>Peak current of neutral bar</i>	I_{pk}	[kA]	1,5	1,5	1,5	1,5	2,5	2,5	2,5	2,5
<i>Rated short circuit time of PE</i>	$I_{cw} (0,1s)$	[kA]	0,75	0,75	0,75	0,75	1,2	1,2	1,2	1,2
<i>Peak current of PE</i>	I_{pk}	[kA]	1,5	1,5	1,5	1,5	2,5	2,5	2,5	2,5
<i>IP degree of protection</i>	IP		55	55	55	55	55	55	55	55
<i>IK degree of protection</i>	IK		09	09	09	09	09	09	09	09
<i>Calorific power</i>		kcal/m	546	846	1392	1692	597	949	1546	1898

Caduta di tensione per carico distribuito - Voltage drop with distributed load [ΔV]

$\cos\phi = 0,7$	[mV/m]	153,5	153,5	153,5	153,5	154,7	154,7	154,7	154,7
$\cos\phi = 0,8$	[mV/m]	174,7	174,7	174,7	174,7	175,7	175,7	175,7	175,7
$\cos\phi = 0,9$	[mV/m]	195,7	195,7	195,7	195,7	196,5	196,5	196,5	196,5
$\cos\phi = 1,0$	[mV/m]	215,8	215,8	215,8	215,8	215,9	215,9	215,9	215,9

Schedule of ratings for the ambient temperature on average 24 h

	18°C	25°C	30°C	35°C	41°C	45°C	50°C
K	1,16	1,12	1,08	1,04	1	0,84	0,70

Conformity declaration

GLS busbar described in this publication complies with the following standards

IEC60439-1 IEC60439-2 IEC60529 CEI EN50102 DIN VDE 0660 parte 500

CEI EN60439-1 CEI EN60439-2 CEI EN60529 DIN VDE 0660 parte 502

Test types

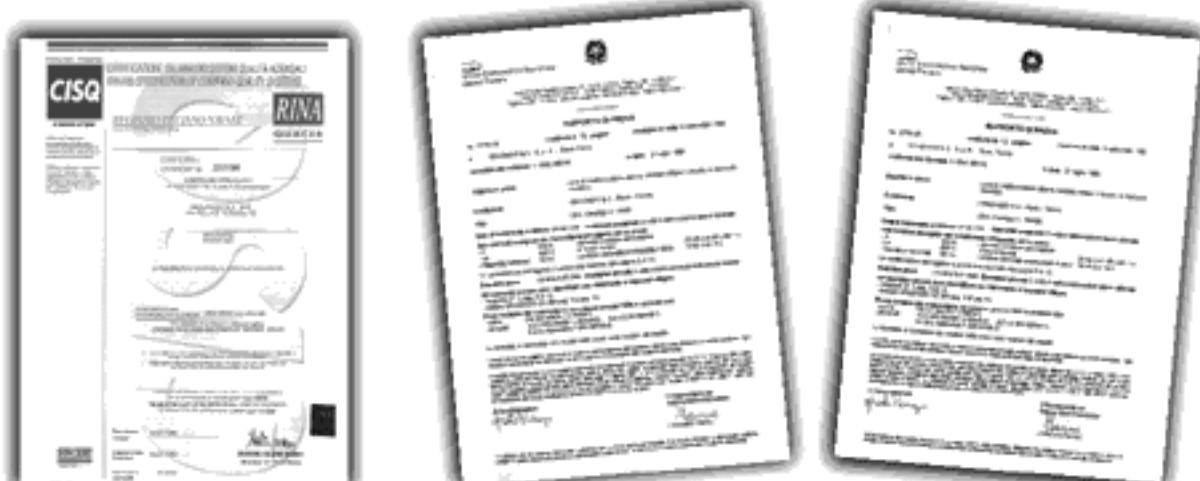
Short-circuit resistance	Resistance to heavy loads
Casing degree of protection (IP code)	Protection countermeasures
Insulation resistance	Protective circuit efficiency
Overheating limit	Air and surface distances
Wiring, electrical operation	Insulation
Applied voltage resistance	Casing degree of protection (IK code)
Operation	

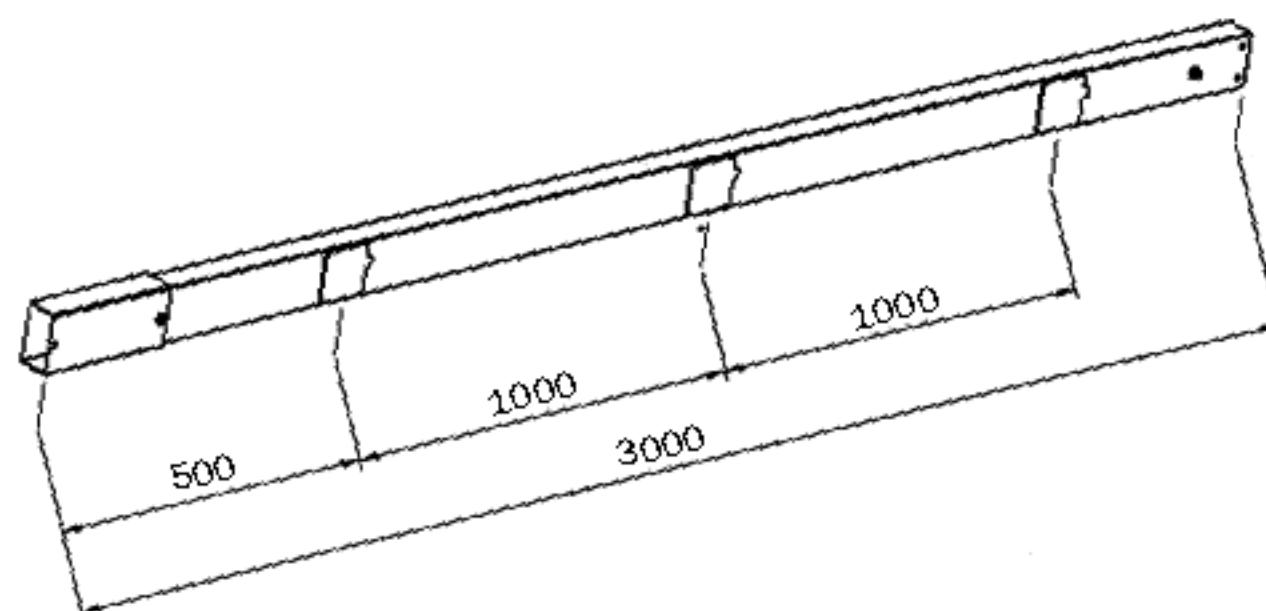
The product object of this declaration exceeds the test types above mentionned and therefore this material is marked:



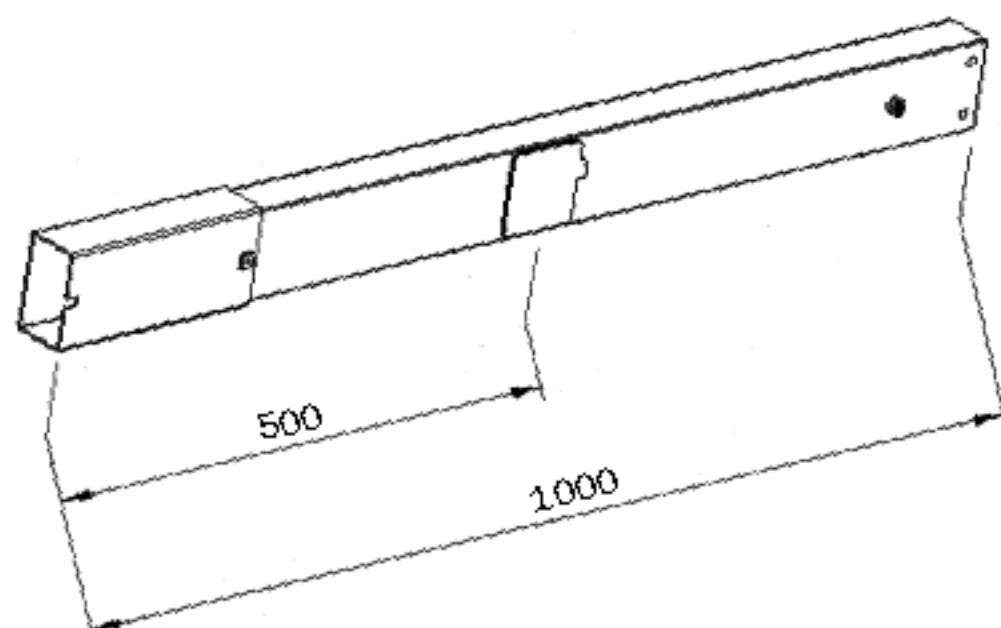
GLS

Certifications

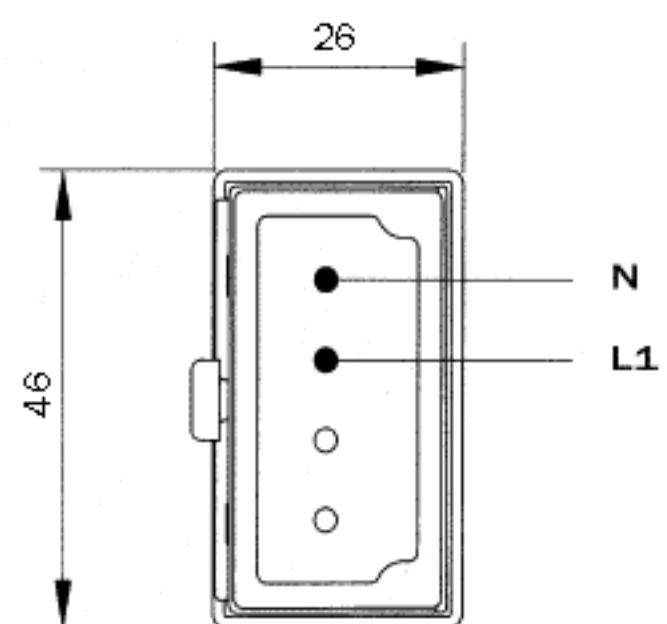




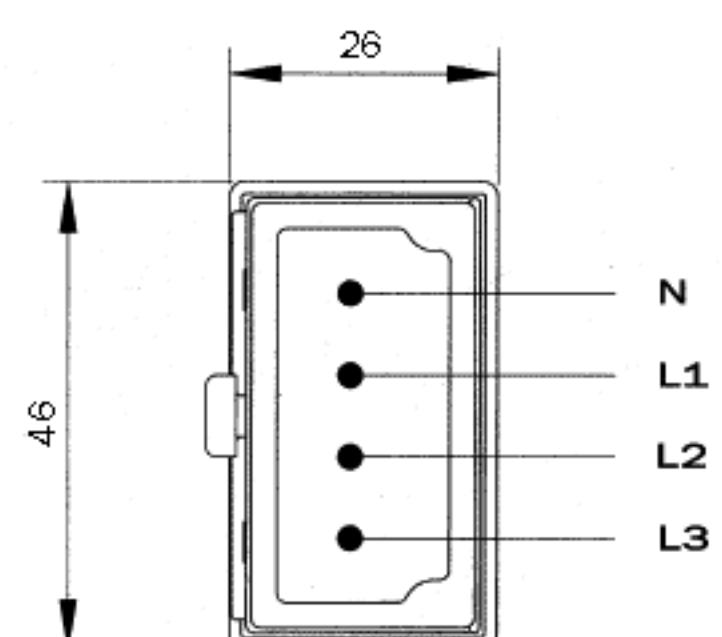
■ **Straight element 3 m**



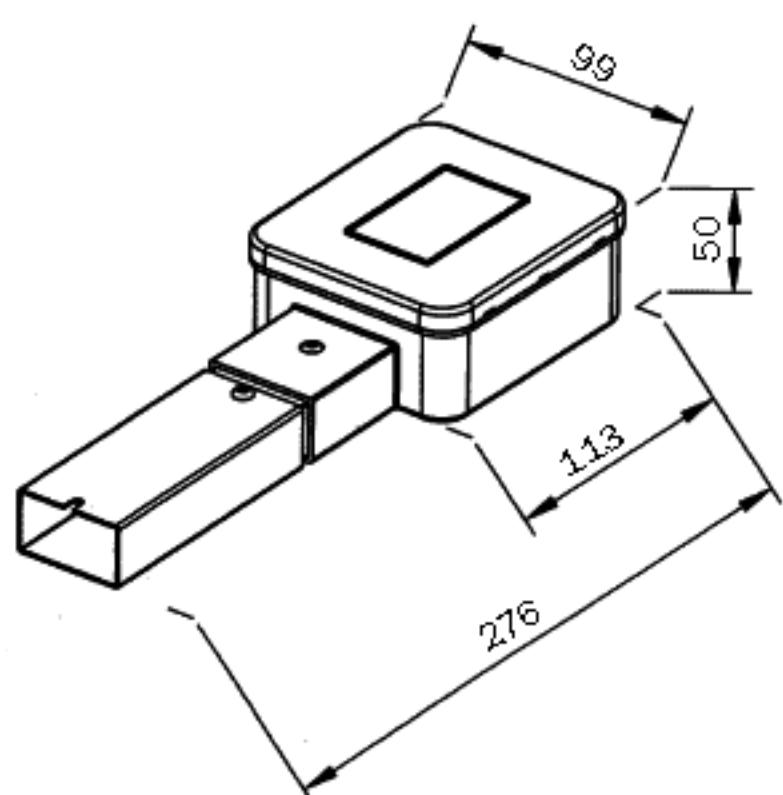
■ **Straight element 1 m**



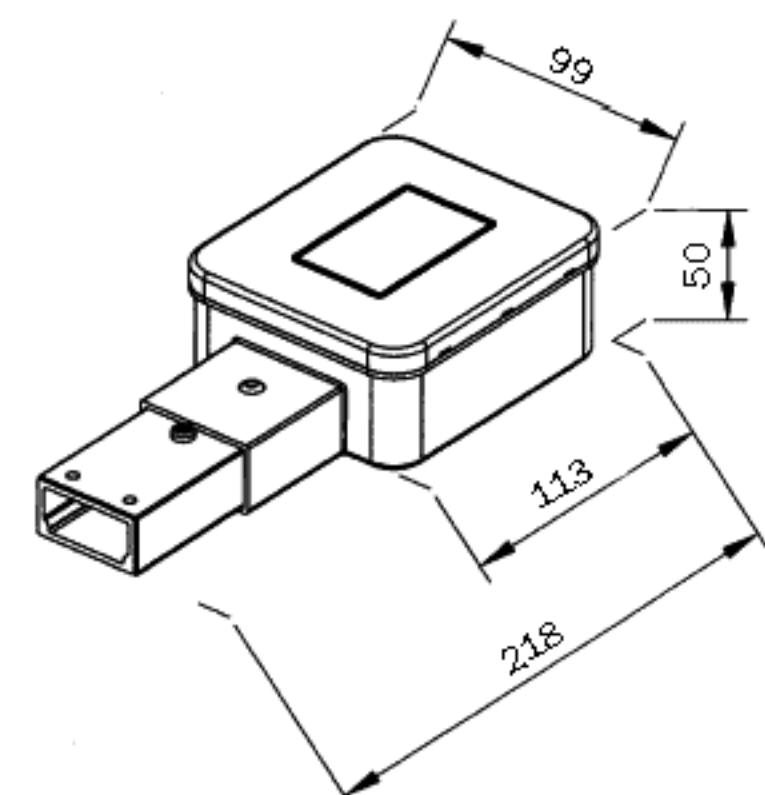
■ **2 P**



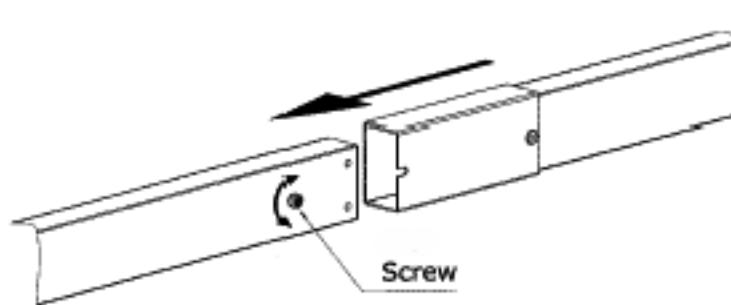
■ **4 P**



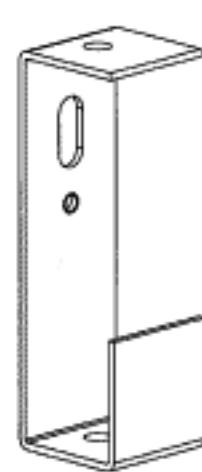
■ **End cap 4 P**



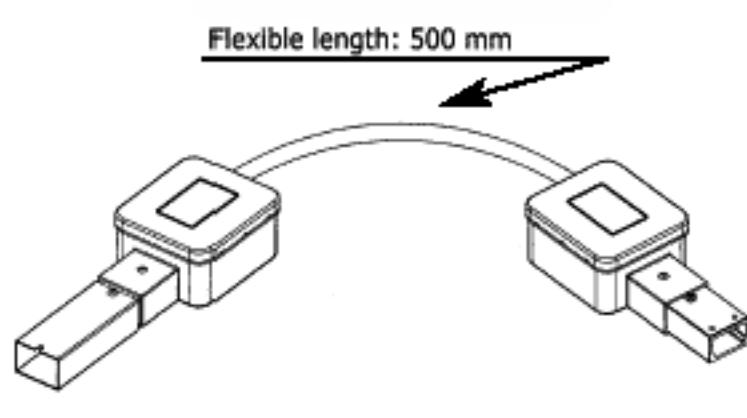
■ **End feed box RH 4 P**



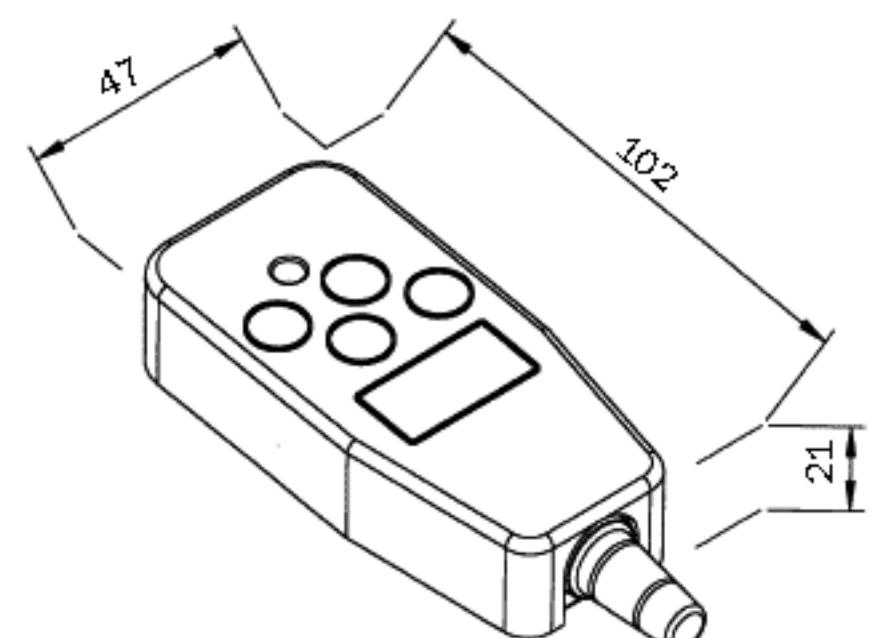
■ **Joint**



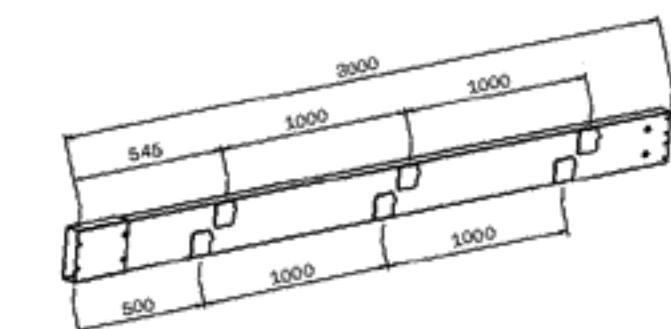
■ **Fixing hanger 4 P**



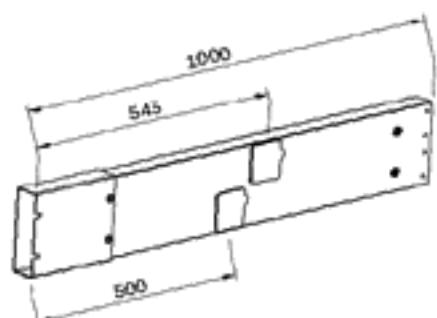
■ **Flexible joint for elbows**



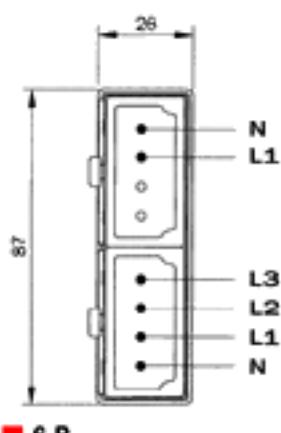
■ **Tap off box 10/16 A**



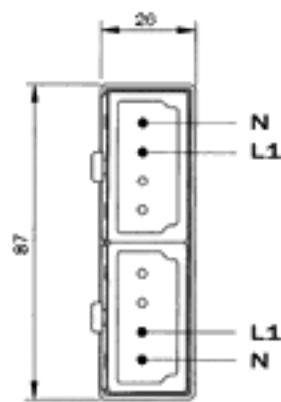
■ Straight element 3 m



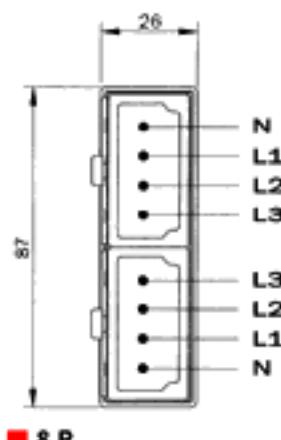
■ Straight element 1 m



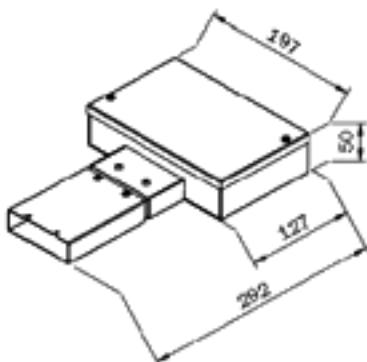
■ 6 P



■ 2 + 2P



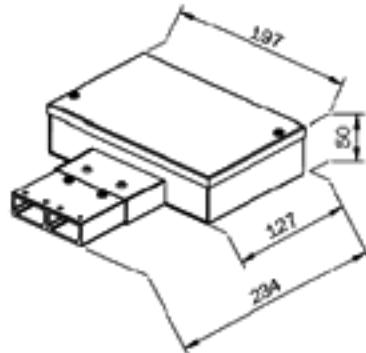
■ 8 P



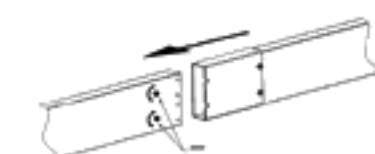
■ End feed box LH 4 P



■ End cap 8 P



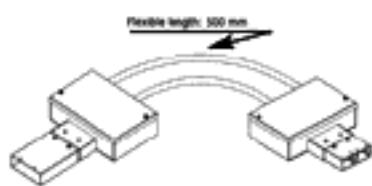
■ End feed box RH 8 P



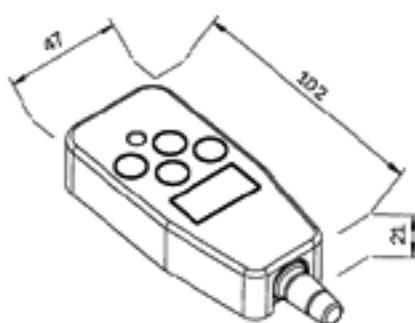
■ Joint



■ Fixing hanger 8 P



■ Flexible joint for elbows



■ Tap off box 10/16 A