

Catalogue

 **SOFAMEL**



The logo for SOFAMEL, featuring a blue stylized icon of a diagonal line with a small square at the end, followed by the word "SOFAMEL" in a bold, blue, sans-serif font.

More than 30 years
protecting people
and delivering solid,
long-lasting connections
— with no risks,
no interruptions,
and no exceptions.

Sofamel, ever.

Connections

Copper connectors	10
Shear head bolt connectors	23
Aluminum connectors	28
Bimetallic connectors	30
Compression and mechanical clamps	37
Screw connectors	41
Crimps	43
Studded clamps	45
Terminals strips	47
Cord end terminals	48
Insulated terminals	52
ABC connectors	57
Earthing rods and accessories	65
Connections for photovoltaic installations	69

Tools

Mechanical

Multifunctional electrician scissors	72
Cable cutters	74
Crimping tools for non insulated terminals	77
Crimping tools for insulated and non-insulated ferrules	80
Crimping tools for insulated terminals	83
Crimping tool for solar connectors	83
Multipurpose tools	84
Stripping tools	85
Other tools	87
Stripping tools for MV cables	89

Hydraulic

Hydraulic hand-tools	100
Electrohydraulic tools	104
Battery wire ratchet cutter	111
Mini battery powered crimping tools	112
Hydraulic heads and pumps	114
Accessories	124
Use guide for dies	126

Safety

Gloves	148
Personal protection equipment	157
Insulation	169
Insulating poles	179
Earthing devices	206
Voltage detectors	263
Rescue and first aid	297
Shears	304
Padlocks	305
Signalization and beacons	313
1000 V insulated tools	324
Polyester-fiber ladders	340



Connections

Copper connectors	10
Shear head bolt connectors	23
Aluminum connectors	28
Bimetallic connectors	30
Compression and mechanical clamps	37
Screw connectors	41
Crimps	43
Studded clamps	45
Terminals strips	47
Cord end terminals	48
Insulated terminals	52
ABC connectors	57
Earthing rods and accessories	65
Connections for photovoltaic installations	69

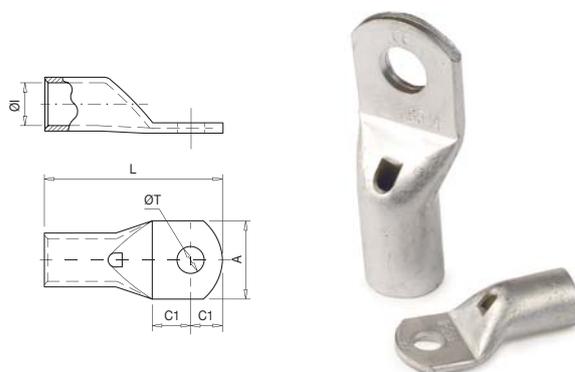
10101 T

Copper cable lug

T terminals are made of high-conductivity electrolytic copper tube, with a tinned surface finish to improve electrical contact.

They feature an inspection hole that allows easy verification of correct conductor insertion.

According to IEC 61238-1-1 standard.



Code	Ref.	Section (mm ²)		Dimensions (mm)						Kg x 100	Bag	Box
				ØI	L	ØT	A	C1	C2			
010100	T-1,5/4	1.5	4	1.8	18.0	4.3	8.7	5.0	4.0	0.074	100	3000
010110	T-1,5/5		5		18.5	5.3	8.7	5.0	4.5	0.071	100	3000
010120	T-1,5/6		6		20.0	6.4	11.0	6.0	5.0	0.081	100	2000
010130	T-2,5/4	2.5	4	2.7	18.0	4.3	8.7	5.0	4.0	0.111	100	2000
010140	T-2,5/5		5		19.0	5.3	8.7	5.5	4.5	0.112	100	2000
010150	T-2,5/6		6		20.0	6.4	9.0	6.0	5.0	0.110	100	1800
010160	T-2,5/8	8	24.0	8.3	12.0	8.0	7.0	0.128	100	1800		
010170	T-4/4	4	4	3.3	21.0	4.3	8.7	5.0	4.5	0.168	100	1600
010180	T-4/5		5		21.0	5.3	8.7	5.0	4.5	0.163	100	1600
010190	T-4/6		6		23.0	6.4	11.0	6.0	5.5	0.171	100	1600
010200	T-4/8	8	26.5	8.3	14.0	8.0	7.0	0.179	100	1200		
010210	T-6/4	6	4	3.8	23.0	4.3	10.3	6.0	5.0	0.204	100	1600
010220	T-6/5		5		23.0	5.3	10.3	6.0	5.0	0.202	100	1500
010230	T-6/6		6		24.0	6.4	10.3	6.0	5.5	0.200	100	1500
010240	T-6/8	8	27.0	8.3	14.0	8.0	7.0	0.208	100	1300		
010260	T-10/5	10	5	4.7	25.5	5.3	11.9	6.0	5.5	0.364	100	1000
010270	T-10/6		6		27.0	6.4	11.9	7.0	6.0	0.361	100	1000
010280	T-10/8		8		30.0	8.3	15.0	8.0	8.0	0.388	100	800
010290	T-10/10	10	34.0	10.5	18.0	10.5	9.5	0.414	100	600		
010310	T-16/5	16	5	5.6	26.5	5.3	11.9	6.0	5.0	0.465	100	700
010320	T-16/6		6		28.5	6.4	11.9	7.0	6.0	0.489	100	700
010330	T-16/8		8		31.0	8.3	15.0	8.0	7.5	0.500	100	600
010340	T-16/10	10	34.5	10.5	18.0	10.0	9.0	0.524	100	500		
010350	T-16/12	12	38.5	13.0	20.0	12.0	11.0	0.552	100	500		
010360	T-25/6	25	6	7.1	31.0	6.4	13.8	7.0	6.0	0.700	50	450
010370	T-25/8		8		34.0	8.3	15.0	8.5	7.5	0.742	50	450
010380	T-25/10		10		39.0	10.5	18.0	11.0	10.0	0.811	50	400
010390	T-25/12	12	41.0	13.0	21.0	12.0	11.0	0.793	50	300		
010410	T-35/6	35	6	8.7	34.0	6.4	15.7	7.0	6.0	1.081	50	300
010420	T-35/8		8		38.0	8.3	15.7	9.0	8.0	1.165	50	300
010430	T-35/10		10		42.0	10.5	19.0	11.0	10.0	1.221	50	200
010440	T-35/12	12	44.0	13.0	21.0	12.0	11.0	1.231	50	200		
010450	T-35/14	14	48.0	14.5	21.0	14.0	13.0	1.315	50	200		
010500	T-50/6	50	6	9.8	41.0	6.4	17.9	8.0	7.0	1.570	20	200
010510	T-50/8		8		43.0	8.3	17.9	9.0	8.0	1.591	20	180
010520	T-50/10		10		47.0	10.5	20.0	11.0	10.0	1.706	20	160
010530	T-50/12	12	51.0	13.0	21.0	13.0	12.0	1.746	20	160		
010540	T-50/14	14	53.0	14.5	25.0	14.0	13.0	1.793	20	140		
010550	T-50/16	16	55.0	16.5	26.0	15.0	14.0	1.771	20	140		

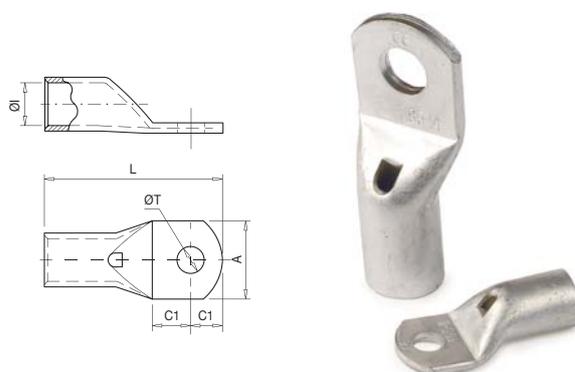
10101 T

Copper cable lug

T terminals are made of high-conductivity electrolytic copper tube, with a tinned surface finish to improve electrical contact.

They feature an inspection hole that allows easy verification of correct conductor insertion.

According to IEC 61238-1-1 standard.



Code	Ref.	Section (mm ²)		Dimensions (mm)						Kg x 100	Bag	Box
				ØI	L	ØT	A	C1	C2			
010570	T-70/8	70	8	11.5	47.0	8.3	21.5	9.0	8.0	2.385	20	120
010580	T-70/10		10		51.0	10.5	21.5	11.0	10.0	2.510	20	120
010590	T-70/12		12		53.0	13.0	21.5	12.0	11.0	2.504	20	120
010600	T-70/14		14		58.0	14.5	25.0	15.0	13.0	2.698	20	100
010610	T-70/16		16		59.0	16.5	26.0	15.0	14.0	2.617	20	100
010630	T-95/8	95	8	13.5	52.0	8.3	24.7	10.0	9.0	3.354	20	80
010640	T-95/10		10		55.0	10.5	24.7	11.0	11.0	3.387	20	80
010650	T-95/12		12		57.0	13.0	24.7	12.0	12.0	3.468	20	80
010660	T-95/14		14		61.0	14.5	24.7	15.0	13.0	3.622	20	80
010670	T-95/16		16		64.0	16.5	27.0	16.0	15.0	3.690	20	80
010690	T-120/8	120	8	15.6	56.0	8.3	28.9	10.0	9.0	5.357	10	60
010700	T-120/10		10		58.0	10.5	28.9	11.0	10.0	5.452	10	60
010710	T-120/12		12		63.0	13.0	28.9	14.0	12.0	5.800	10	60
010720	T-120/14		14		67.0	14.5	28.9	16.0	14.0	6.068	10	60
010730	T-120/16		16		71.0	16.5	28.9	17.0	16.0	6.296	10	60
010750	T-150/10	150	10	16.5	69.0	10.5	30.4	13.0	11.0	7.125	10	50
010760	T-150/12		12		75.0	13.0	30.4	16.0	14.0	7.749	10	50
010770	T-150/14		14		79.0	14.5	30.4	18.0	16.0	7.891	10	50
010780	T-150/16		16		79.0	16.5	30.4	18.0	16.0	7.694	10	40
010800	T-185/10		185		10	18.8	74.0	10.5	34.0	13.0	11.0	9.842
010810	T-185/12	12		80.0	13.0		34.0	16.0	14.0	10.447	10	40
010820	T-185/14	14		84.0	14.5		34.0	18.0	16.0	10.991	10	40
010830	T-185/16	16		85.0	16.5		34.0	18.0	17.0	10.831	10	40
010850	T-240/10	240		10	21.2		82.0	10.5	38.4	14.0	12.0	12.466
010860	T-240/12		12	86.0		13.0	38.4	16.0	14.0	12.916	5	25
010870	T-240/14		14	90.0		14.5	38.4	18.0	16.0	13.352	5	25
010880	T-240/16		16	91.0		16.5	38.4	18.0	17.0	13.198	5	25
010900	T-300/12		300	12		23.4	93.0	13.0	41.7	16.0	14.0	15.780
010910	T-300/14	14		94.0	14.5		41.7	16.0	15.0	17.249	5	15
010920	T-300/16	16		100.0	16.5		41.7	19.0	18.0	18.161	5	15
010940	T-400/12*	12		110.0	13.0		47.8	21.0	19.0	24.560	5	10
010950	T-400/16*	16		110.0	16.5		47.8	21.0	19.0	24.246	5	10
010960	T-400/20*	20	116.0	21.0	47.8	24.0	22.0	25.010	5	10		
010980	T-500/16*	500	16	29.8	115.0	16.5	54.8	22.0	19.0	42.990	1	9
010985	T-500/20*		20		120.0	21.0	54.8	24.0	22.0	46.702	1	9
010988	T-630/16*		16		128.0	16.5	64.4	22.0	19.0	66.260	1	5
010990	T-630/20*	20	134.0	21.0	64.4	24.0	23.0	68.680	1	5		

* Not according to UL certified.

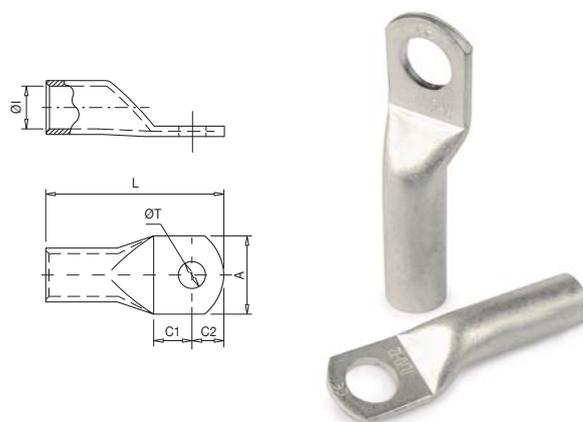
10102 TL

Copper cable lug long barrel

TL cable lug manufactured from electrolytic copper tubing with a tin-plated surface finish to improve electrical contact.

The longer barrel length ensures a better electrical connection in more adverse conditions.

According to IEC 61238-1-1 standard.



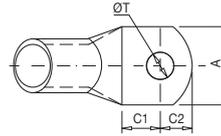
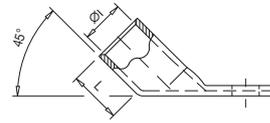
Code	Ref.	Section (mm ²)		Dimensions (mm)						Kg x 100	Bag	Box
				ØI	L	ØT	A	C1	C2			
006270	TL-10/6	10	6	4.7	35	6.4	11.9	7.0	6.0	0.492	100	600
006280	TL-10/8		8		38	8.3	15.0	8.0	8.0	0.513	100	600
006320	TL-16/6	16	6	5.6	39	6.4	11.9	7.0	6.0	0.685	100	400
006330	TL-16/8		8		41.5	8.3	15.0	8.0	7.5	0.691	100	400
006370	TL-25/8	25	8	7.1	50	8.3	15.0	8.5	7.5	1.128	50	250
006380	TL-25/10		10		55	10.5	18.0	11.0	10.0	1.193	50	200
006420	TL-35/8	35	8	8.7	53	8.3	15.7	9.0	8.0	1.685	50	150
006430	TL-35/10		10		57	10.5	19.0	11.0	10.0	1.765	50	150
006520	TL-50/10	50	10	9.8	63	10.5	20.0	11.0	10.0	2.372	20	120
006530	TL-50/12		12		67	13.0	21.0	13.0	12.0	2.402	20	100
006580	TL-70/10	70	10	11.5	69	10.5	21.5	11.0	10.0	3.600	10	40
006590	TL-70/12		12		71	13.0	21.5	12.0	11.0	3.561	10	40
006650	TL-95/12	95	12	13.5	79	13.0	24.7	12.0	12.0	5.260	10	40
006660	TL-95/14		14		83	14.5	24.7	15.0	13.0	5.137	10	40
006670	TL-95/16	16	86	16.5	27.0	16.0	15.0	5.191	10	40		
006710	TL-120/12	120	12	15.6	87	13.0	28.9	14.0	12.0	8.231	10	30
006720	TL-120/14		14		91	14.5	28.9	16.0	14.0	8.630	10	30
006730	TL-120/16	16	95	16.5	28.9	17.0	16.0	8.834	10	30		
006760	TL-150/12	150	12	16.5	99	13.0	30.4	16.0	14.0	10.243	10	30
006770	TL-150/14		14		103	14.5	30.4	18.0	16.0	10.290	10	30
006780	TL-150/16	16	103	16.5	30.4	18.0	16.0	10.423	10	30		
006810	TL-185/12	185	12	18.8	108	13.0	34.0	16.0	14.0	14.417	10	20
006820	TL-185/14		14		112	14.5	34.0	18.0	16.0	14.891	10	20
006830	TL-185/16	16	113	16.5	34.0	18.0	17.0	14.746	10	20		
006860	TL-240/12	240	12	21.2	114	13.0	38.4	16.0	14.0	17.324	5	15
006870	TL-240/14		14		118	14.5	38.4	18.0	16.0	17.978	5	15
006880	TL-240/16	16	119	16.5	38.4	18.0	17.0	17.914	5	15		
006920	TL-300/16	300	16	23.4	132	16.5	41.7	19.0	18.0	22.698	6	12
006950	TL-400/16	400	16	26.8	140	16.5	47.8	21.0	19.0	32.130	4	8
006980	TL-500/16	500	16	29.8	143	16.5	54.8	22.0	19.0	53.430	1	7
006985	TL-630/16	630	16	34.5	155	16.5	64.4	22.0	19.0	85.713	1	3

10103 T45° Copper cable lug 45°

T45° cable lug manufactured from electrolytic copper tubing with a tin-plated surface finish to electrical contact.

Its particular orientation makes it suitable for installations where connection needs a specific placement.

According to IEC 61238-1-1 standard.



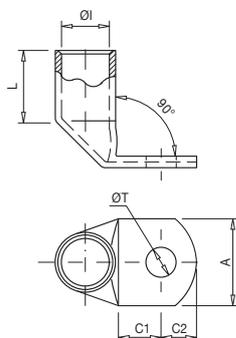
Code	Ref.	Section (mm ²)		Dimensions (mm)						Kg x100	Bag	Box
				ØI	L	ØT	A	C1	C2			
007270	T45-10/6	10	6	4.7	10	6.4	11.9	7.0	6.0	0.391	100	800
007280	T45-10/8		8									
007320	T45-16/6	16	6	5.6	11	6.4	11.9	7.0	6.0	0.518	100	600
007330	T45-16/8		8									
007370	T45-25/8	25	8	7.1	13	8.3	15.0	8.5	7.5	0.731	50	350
007380	T45-25/10		10									
007420	T45-35/8	35	8	8.7	16	8.3	15.7	9.0	8.0	1.157	50	250
007430	T45-35/10		10									
007520	T45-50/10	50	10	9.8	19	10.5	20.0	11.0	10.0	1.822	20	120
007530	T45-50/12		12									
007580	T45-70/10	70	10	11.5	21	10.5	21.5	11.0	10.0	2.470	20	100
007590	T45-70/12		12									
007660	T45-95/14	95	14	13.5	24	14.5	24.7	15.0	13.0	3.606	20	60
007670	T45-95/16		16									
007720	T45-120/14	120	14	15.6	28	14.5	28.9	16.0	14.0	5.948	10	50
007730	T45-120/16		16									
007770	T45-150/14	150	14	16.5	32	14.5	30.4	18.0	16.0	7.814	10	40
007780	T45-150/16		16									
007830	T45-185/16	185	16	18.8	34	16.5	34.0	18.0	17.0	10.540	10	20
007880	T45-240/16	240	16	21.2	38	16.5	38.4	18.0	17.0	13.126	5	20

10104 T90° Copper cable lug 90°

T90° cable lug manufactured from electrolytic copper tubing with a tin-plated surface finish to electrical contact.

Its particular orientation makes it suitable for installations where connection needs a specific placement.

According to IEC 61238-1-1 standard.



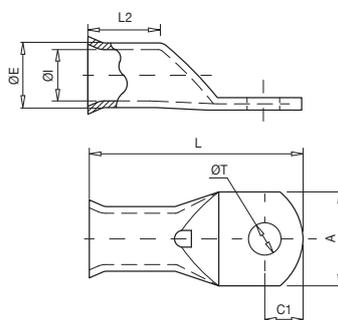
Code	Ref.	Section (mm ²)		Dimensions (mm)						Kg x 100	Bag	Box
				ØI	L	ØT	A	C1	C2			
008270	T90-10/6	10	6	4.7	10	6.4	11.9	7.0	6.0	0.374	100	800
008280	T90-10/8		8			8.3	15.0	8.0	8.0	0.396	100	700
008290	T90-10/10		10			10.5	18.0	11.0	10.0	0.444	100	100
008320	T90-16/6	16	6	5.6	11	6.4	11.9	7.0	6.0	0.500	100	600
008330	T90-16/8		8			8.3	15.0	8.0	7.5	0.509	100	600
008370	T90-25/8	25	8	7.1	13	8.3	15.0	8.5	7.5	0.768	50	300
008380	T90-25/10		10			10.5	18.0	11.0	10.0	0.813	50	300
008420	T90-35/8	35	8	8.7	16	8.3	15.7	9.0	8.0	1.295	50	250
008430	T90-35/10		10			10.5	19.0	11.0	10.0	1.157	50	200
008520	T90-50/10	50	10	9.8	19	10.5	20.0	11.0	10.0	1.788	20	160
008530	T90-50/12		12			13.0	21.0	13.0	12.0	1.983	20	160
008580	T90-70/10	70	10	11.5	21	10.5	21.5	11.0	10.0	2.586	20	100
008590	T90-70/12		12			13.0	22.0	12.0	11.0	2.614	20	100
008660	T90-95/14	95	14	13.5	24	14.5	24.7	15.0	13.0	3.737	20	60
008670	T90-95/16		16			16.5	27.0	16.0	15.0	3.730	20	60
008720	T90-120/14	120	14	15.6	28	14.5	28.9	16.0	14.0	6.350	10	30
008730	T90-120/16		16			16.5		17.0	16.0	16.0	6.508	10
008770	T90-150/14	150	14	16.5	32	14.5	30.4	18.0	16.0	8.000	10	30
008780	T90-150/16		16			16.5		18.0	16.0	16.0	7.860	10
008830	T90-185/16	185	16	18.8	34	16.5	34.0	18.0	17.0	10.850	10	20
008880	T90-240/16	240	16	21.2	38	16.5	38.4	18.0	17.0	13.630	5	15

10105 TT

NF C20-130 Tulip copper cable lug

TT cable lug manufactured from electrolytic copper tubing with a tin-plated surface finish. The tulip shape at the end of the barrel facilitates the introduction of the cable.

According to NF C20-130 standard.



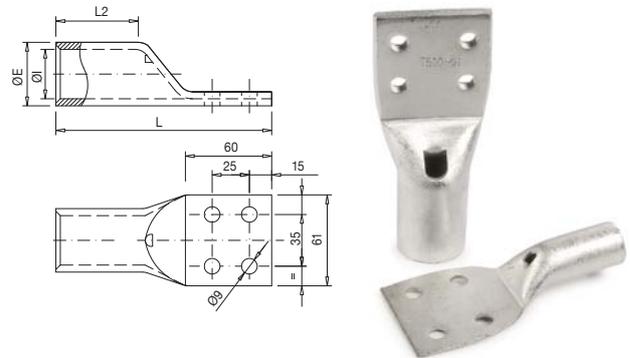
Code	Ref.	Section (mm ²)		Dimensions (mm)							Kg x100	Bag	Box
				ØE	ØI	L	ØT	A	C1	L2			
009220	TT-6/5	6	5	5.5	3.3	30.50	5.3	13.0	8.0	11.0	0.243	100	1200
009230	TT-6/6		6			32.50	6.5				8.0	0.366	100
009270	TT-10/6	10	6	6.8	4.3	30.50	6.5	15.0	6.5	12.0	0.598	100	800
009280	TT-10/8		8			37.00	8.5				10.0	0.485	100
009320	TT-16/6	16	6	8.0	5.3	33.30	6.5	12.0	6.3	14.0	0.712	100	500
009330	TT-16/8		8			37.50	8.5				8.5	0.752	100
009360	TT-25/6	25	6	9.5	6.6	36.30	6.5	13.0	6.3	15.0	0.874	50	300
009370	TT-25/8		8			42.00	8.5				10.0	1.022	50
009380	TT-25/10	10	46.00	10.5	18.0	12.0	1.139	50	250				
009420	TT-35/8	35	8	11.0	7.9	44.00	8.5	17.0	10.0	17.0	1.591	50	200
009430	TT-35/10		10			49.00	10.5				17.0	1.592	50
009510	TT-50/8	50	8	12.5	9.2	47.00	8.5	18.0	10.0	19.0	2.109	20	140
009520	TT-50/10		10			52.00	10.5				18.0	2.264	20
009530	TT-50/12	12	54.00	13.0	13.0	2.101	20	120					
009570	TT-70/8	70	8	15.0	11.0	51.00	8.5	21.0	10.0	21.0	2.241	20	100
009580	TT-70/10		10			55.00	10.5				21.0	3.357	20
009590	TT-70/12	12	59.00	13.0	22.0	3.449	20	80					
009640	TT-95/10	95	10	17.0	13.1	60.00	10.5	25.0	12.0	22.0	4.518	20	60
009650	TT-95/12		12			62.00	13.0				13.0	4.292	20
009660	TT-95/14	14	66.50	15.0	14.5	4.354	20	60					
009670	TT-95/16	16	70.00	17.0	16.0	4.714	20	60					
009710	TT-120/12	120	12	19.0	14.5	66.00	13.0	28.0	13.0	26.0	6.544	10	50
009720	TT-120/14		14			69.50	15.0				14.5	5.972	10
009730	TT-120/16	16	72.00	17.0	16.0	6.198	10	50					
009760	TT-150/12	150	12	21.0	16.2	73.00	13.0	30.0	15.0	30.0	8.578	10	40
009770	TT-150/14		14			73.00	15.0				15.0	8.069	10
009780	TT-150/16	16	75.00	17.0	16.0	7.865	10	40					
009810	TT-185/12	185	12	23.0	18.0	81.00	13.0	33.5	16.0	32.0	10.255	10	40
009830	TT-185/16		16			87.00	17.0				19.0	10.596	10
009860	TT-240/12	240	12	26.0	20.6	93.50	13.0	38.0	21.5	35.0	14.383	5	25
009880	TT-240/16		16			93.50	17.0				21.5	14.240	5
009920	TT-300/16	300	16	28.0	23.0	102.00	17.0	41.0	19.0	44.0	16.270	5	10
009950	TT-400/16	400	16	32.0	26.0	115.00	17.0	46.5	19.0	44.0	26.819	4	8

10106 T4H

Copper 4-hole palm terminal

T-4H terminals are manufactured from electrolytic copper with a tin-plated surface finish, which improves electrical contact and provides protection against corrosion.

The 4-hole palm ensures reinforced mechanical fastening and uniform current distribution, making these terminals particularly suitable for connections on transformers, flat bars and copper busbars.



Code	Ref.	Section (mm ²)	Dimensions (mm)				Kg x 100	Bag	Box
			ØE	ØI	L	L2			
001100	T-185/4H	185	23.7	18.8	124.0	46.0	14.924	1	30
001110	T-240/4H	240	26.2	21.2	128.0	48.0	17.328	1	15
001120	T-300/4H	300	28.6	23.4	133.0	50.0	21.280	1	15
001130	T-400/4H	400	32.8	26.8	134.0	50.0	28.570	1	10
001140	T-500/4H	500	38.4	29.8	139.0	54.0	51.860	1	8
001150	T-630/4H	630	44.7	34.5	145.0	60.0	76.075	1	4
001160	T-800/4H	800	52.0	40.0	160.0	70.0	115.175	1	3

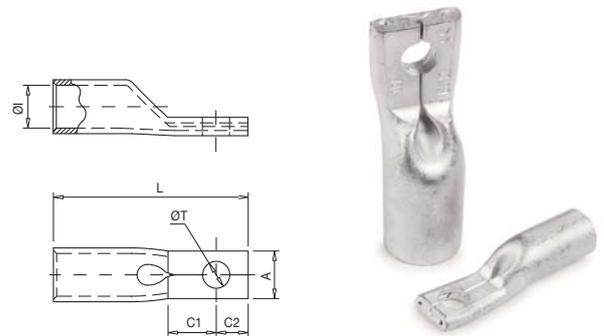
10108 TPE

Copper cable lug narrow palm

TPE terminals are manufactured from electrolytic copper tube with a tin-plated surface finish to ensure excellent conductivity.

Their narrow blade design allows installation in space-constrained applications, ensuring a reliable electrical connection even in demanding environments.

According to IEC 61238-1-1 standard.



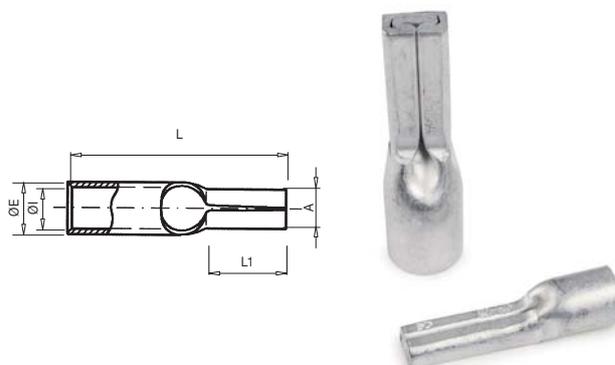
Code	Ref.	Section (mm ²)		Dimensions (mm)						Kg x 100	Bag	Box
				ØI	L	ØT	A	C1	C2			
032125	TPE-50/8	50	8	9.8	50.0	8.5	15.0	10.0	8.0	1.826	20	160
032126	TPE-50/10		10			10.5				1.724	20	160
032131	TPE-70/8	70	8	11.5	55.0	8.5	15.0	12.0	8.0	2.800	20	100
032132	TPE-70/10		10			10.5				2.730	20	100
032140	TPE-95/8	95	8	13.5	60.0	8.5	15.0	11.0	10.0	3.739	20	80
032145	TPE-95/10		10			10.5				3.763	20	80
032149	TPE-120/8	120	8	15.6	65.0	8.5	21.0	10.0	11.0	6.186	10	60
032150	TPE-120/10		10			10.5				6.105	10	60
032155	TPE-150/8	150	8	16.5	72.0	8.5	21.0	13.0	12.0	8.112	10	40
032160	TPE-150/10		10			10.5				7.284	10	40
032161	TPE-150/12	12	12.5	7.178	10	40						
032170	TPE-185/10	185	10	18.9	75.0	10.5	26.0	13.0	12.0	9.710	10	30
032171	TPE-185/12		12			12.5				9.570	10	30
032180	TPE-240/10	240	10	21.2	85.0	10.5	26.0	13.0	12.0	12.772	5	25
032181	TPE-240/12		12			12.5				12.584	5	25

10109 CP

Pin terminal

CP pin terminals are manufactured from electrolytic copper tubing with a tin-plated surface finish to improve electrical contact.

Its design provides a firm and secure connection between the conductor and the terminal, ensuring optimal electrical contact in all types of industrial and wiring applications.



Code	Ref.	Section (mm ²)	Dimensions (mm)					Kg x 100	Bag	Box
			ØE	ØI	L	A	L1			
025100	CP-1,5	1.5	3.4	1.7	16.8	1.9	12.0	0.600	100	2000
025110	CP-2,5	2.5	4.1	2.3	16.8	1.9	12.0	0.700	100	2000
025120	CP-6	6	5.6	3.4	19.0	2.8	13.0	1.490	100	1500
025130	CP-10	10	6.8	4.7	25.0	5.0	12.0	0.423	100	1000
025140	CP-16	16	7.8	5.6	31.0	6.0	15.0	0.573	100	800
025150	CP-25	25	9.4	7.1	34.0	7.0	18.0	0.829	100	500
025160	CP-35	35	11.3	8.7	42.0	9.0	18.0	1.420	100	300
025170	CP-50	50	12.6	9.8	46.0	10.0	21.0	1.849	50	200

10109 CPP

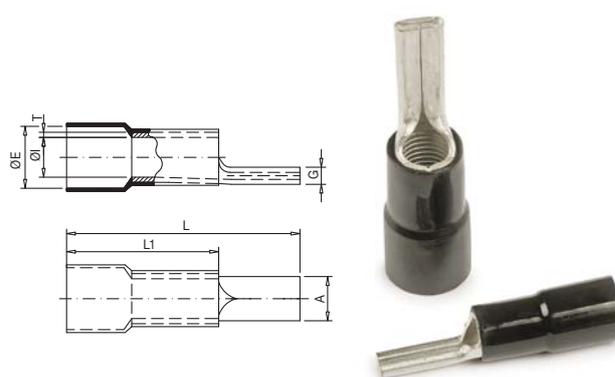
Connection tip isolated

CPP connectors are made from electrolytic copper tubing with a tin-plated surface finish for improved electrical contact.

The design facilitates connection of the cable lugs in the terminals.

The shape of the cable end facilitates cable insertion.

The insulation provides an additional degree of protection.



 UL certified.

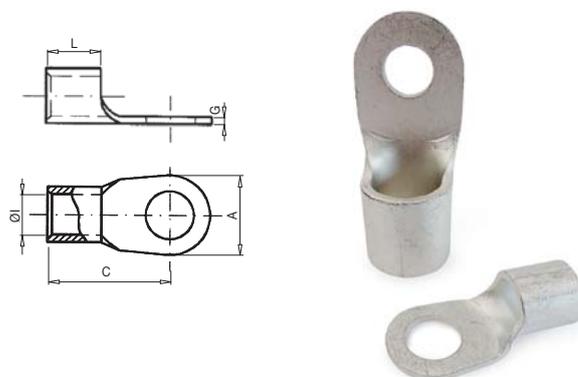
Code	Ref.	Section (mm ²)	Dimensions (mm)							Kg x 100	Bag	Box
			ØE	ØI	L	L1	G	A	T			
025180	CPP-10	10	9.0	4.5	29.5	15.5	2.4	4.3	1.1	0.290	100	600
025190	CPP-16	16	10.5	5.9	35.0	19.0	2.6	5.5	1.2	0.470	100	300
025200	CPP-25	25	11.5	7.0	44.5	24.5	2.6	6.8	1.2	0.750	100	200
025210	CPP-35	35	14.0	8.7	54.0	29.5	3.2	8.0	1.5	1.320	50	150
025220	CPP-50	50	15.8	9.8	61.0	35.0	3.8	9.5	1.8	2.040	50	100
025230	CPP-70	70	18.0	11.6	75.0	44.0	4.2	11.0	2.0	3.310	25	50
025240	CPP-95	95	21.6	13.5	75.0	44.0	5.2	12.5	2.5	4.740	20	40

10112 TD

Welded copper cable lug

TD cable lugs are manufactured from welded copper strip with a tin-plated surface finish to protect against oxidation. Their flat and compact design makes them ideal for space-constrained installations, especially in electrical panels and industrial equipment.

According to DIN 46234 standard.



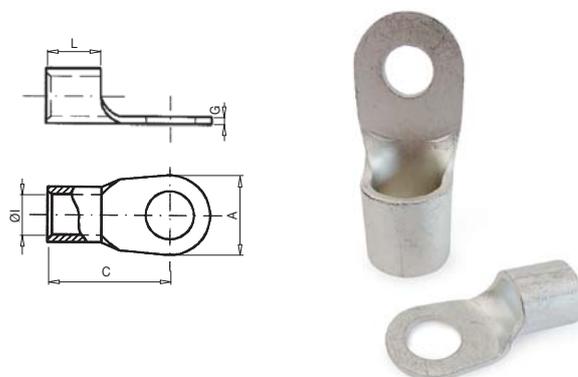
Code	Ref.	Section (mm ²)		Dimensions (mm)					Kg x 100	Bag	Box
				ØI	L	A	C	G			
020100	TD-1,5/3	1.5	3	1.6	5.0	6.0	11.0	0.8	0.055	100	4000
020110	TD-1,5/4		4			8.0	12.0				
020120	TD-1,5/5		5			10.0	13.0				
020130	TD-2,5/3	2.5	3	2.3	5.0	6.0	11.0	0.8	0.064	100	3000
020140	TD-2,5/4		4			8.0	12.0				
020150	TD-2,5/5		5			10.0	14.0				
020160	TD-2,5/6		6			11.0	16.0				
020170	TD-2,5/8		8			14.0	17.0				
020180	TD-6/4	6	4	3.6	6.0	8.0	14.0	1.0	0.139	100	800
020190	TD-6/5		5			10.0	15.0				
020200	TD-6/6		6			11.0	16.0				
020210	TD-6/8		8			14.0	19.0				
020220	TD-6/10		10			18.0	21.0				
020230	TD-10/5	10	5	4.5	8.0	11.0	16.0	1.1	0.229	100	600
020240	TD-10/6		6			11.0	17.0				
020250	TD-10/8		8			14.0	20.0				
020260	TD-10/10		10			18.0	21.0				
020270	TD-10/12		12			22.0	23.0				
020280	TD-16/5	16	5	5.8	10.0	10.0	20.0	1.2	0.406	100	600
020290	TD-16/6		6			11.0	20.0				
020300	TD-16/8		8			14.0	22.0				
020310	TD-16/10		10			18.0	24.0				
020320	TD-16/12		12			22.0	26.0				
020330	TD-25/6	25	6	7.5	11.0	12.0	25.0	1.5	1.400	50	300
020340	TD-25/8		8			16.0	25.0				
020350	TD-25/10		10			18.0	26.0				
020360	TD-25/12		12			22.0	31.0				
020370	TD-25/16		16			28.0	35.0				
020380	TD-35/6	35	6	9.0	12.0	15.0	26.0	1.6	1.920	50	200
020390	TD-35/8		8			26.0	26.0				
020400	TD-35/10		10			18.0	27.0				
020410	TD-35/12		12			22.0	31.0				
020420	TD-35/16		16			28.0	36.0				

10112 TD

Welded copper cable lug

TD cable lugs are manufactured from welded copper strip with a tin-plated surface finish to protect against oxidation. Their flat and compact design makes them ideal for space-constrained installations, especially in electrical panels and industrial equipment.

According to DIN 46234 standard.



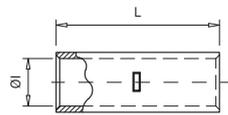
Code	Ref.	Section (mm ²)		Dimensions (mm)					Kg x 100	Bag	Box
				ØI	L	A	C	G			
020430	TD-50/6	50	6	11.0	16.0	18.0	34.0	1.8	1.760	25	150
020440	TD-50/8		8			18.0	34.0		1.720	25	150
020450	TD-50/10		10			18.0	34.0		1.680	25	150
020460	TD-50/12		12			22.0	36.0		1.840	25	150
020470	TD-50/16		16			28.0	40.0		2.120	25	100
020480	TD-70/6	70	6	13.0	18.0	22.0	38.0	2.0	2.600	10	80
020490	TD-70/8		8			22.0	38.0		2.600	10	80
020500	TD-70/10		10			22.0	38.0		2.600	10	80
020510	TD-70/12		12			22.0	38.0		2.600	10	80
020520	TD-70/16		16			22.0	38.0		2.600	10	80
020530	TD-95/8	95	8	15.0	20	24.0	42.0	2.5	4.100	10	60
020540	TD-95/10		10			24.0	42.0		4.100	10	60
020550	TD-95/12		12			24.0	42.0		4.000	10	60
020560	TD-95/16		16			28.0	44.0		4.100	10	60
020570	TD-120/8		120			8	16.5		22	24.0	44.0
020580	TD-120/10	10		24.0	44.0	6.200		10		60	
020590	TD-120/12	12		24.0	44.0	5.400		10		60	
020600	TD-120/16	16		28.0	48.0	5.700		10		40	
020610	TD-150/10	150		10	19.0	24		30.0		50.0	3.2
020620	TD-150/12		12	30.0			50.0	8.600	5	25	
020630	TD-150/16		16	30.0			50.0	7.700	5	20	
020640	TD-185/10	185	10	21.0	28	36.0	50.0	3.5	11.100	5	20
020650	TD-185/12		12			36.0	50.0		10.800	5	20
020660	TD-185/16		16			36.0	50.0		10.700	5	20
020670	TD-240/10	240	10	23.5	32	38.0	56.0	4.0	15.200	5	20
020680	TD-240/12		12			38.0	56.0		15.000	5	20
020690	TD-240/16		16			38.0	56.0		14.700	5	15

10110 M

Copper butt-connector

M copper butt connectors are manufactured from electrolytic copper tubing with a tin-plated surface finish to improve electrical contact. They incorporate a central stop to facilitate correct cable positioning, ensuring a secure and reliable connection.

According to IEC 61238-1-1 standard.



Code	Ref.	Section (mm ²)	Dimensions (mm)		Kg x 100	Bag	Box
			ØI	L			
015100	M-1,5	1.5	1.8	15.0	0.072	100	5000
015110	M-2,5	2.5	2.7	15.0	0.109	100	3500
015120	M-4	4	3.3	22.0	0.204	100	1600
015130	M-6	6	3.8	22.0	0.227	100	1300
015140	M-10	10	4.7	25.0	0.397	100	800
015150	M-16	16	5.6	27.0	0.516	100	600
015160	M-25	25	7.1	29.0	0.730	50	400
015170	M-35	35	8.7	33.0	1.127	50	250
015190	M-50	50	9.8	35.0	1.434	20	200
015200	M-70	70	11.5	39.0	2.149	20	120
015210	M-95	95	13.5	43.0	2.906	20	80
015220	M-120	120	15.6	47.0	4.730	10	60
015230	M-150	150	16.5	58.0	6.375	10	50
015240	M-185	185	18.9	64.0	8.929	10	40
015250	M-240	240	21.2	75.0	11.834	5	30
015260	M-300	300	23.4	90.0	16.082	5	15
015270	M-400	400	26.8	90.0	20.998	5	10
015280	M-500	500	29.8	98.0	40.235	1	5
015290	M-630	630	34.5	105.0	64.730	1	1

10113 TCD

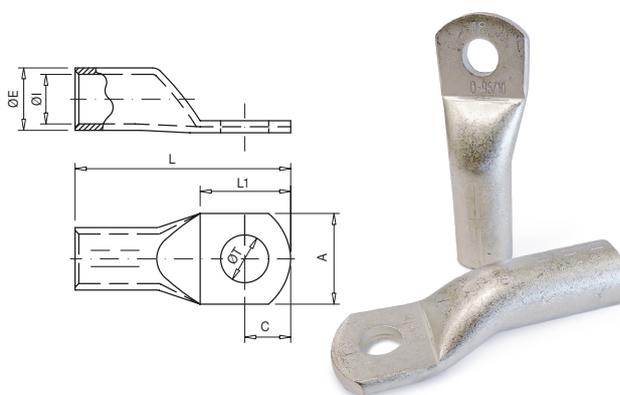
DIN 46235 copper cable lug

TCD copper cable lugs are manufactured from electrolytic copper tin-plated surface finish to protect against oxidation. Their reinforced design makes them particularly suitable for installations exposed to vibration or high mechanical stress.

According to DIN 46235 standard.



UL certified.



Code	Ref.	Section (mm ²)		Dimensions (mm)							Kg x100	Bag	Box
				ØE	ØI	L	ØT	A	L1	C			
005270	TCD-10/6	10	6	6.0	4.5	37.5	6.4	9.0	19.5	9.5	0.350	100	700
005280	TCD-10/8	10	8	6.0	4.5	40.0	8.4	13.0	21.0	11.0	0.354	100	600
005320	TCD-16/6	16	6	8.5	5.5	46.5	6.4	13.0	18.5	9.5	1.194	50	250
005330	TCD-16/8	16	8	8.5	5.5	49.0	8.4	13.0	23.0	11.0	1.206	50	250
005370	TCD-25/8	25	8	10.0	7.0	51.0	8.4	16.0	23.0	12.0	1.551	50	200
005380	TCD-25/10	25	10	10.0	7.0	53.0	10.5	17.0	27.0	14.0	1.543	50	200
005420	TCD-35/8	35	8	12.5	8.2	55.0	8.4	17.5	23.0	12.0	3.010	20	120
005430	TCD-35/10	35	10	12.5	8.2	57.0	10.5	19.0	27.0	14.0	2.997	20	120
005520	TCD-50/10	50	10	14.5	10.0	67.0	10.5	22.0	27.0	14.0	4.497	20	100
005530	TCD-50/12	50	12	14.5	10.0	68.0	13.0	24.0	29.0	15.0	4.403	20	100
005580	TCD-70/10	70	10	16.5	11.5	70.0	10.5	24.0	27.0	14.0	6.029	20	60
005590	TCD-70/12	70	12	16.5	11.5	71.0	13.0	24.0	27.0	14.0	6.065	20	60
005650	TCD-95/12	95	12	19.0	13.5	78.0	13.0	28.0	26.0	13.0	8.373	10	40
005660	TCD-95/14	95	14	19.0	13.5	79.5	15.0	32.0	29.0	14.5	8.357	10	40
005670	TCD-95/16	95	16	19.0	13.5	81.0	17.0	32.0	32.0	16.0	8.596	10	40
005700	TCD-120/10	120	10	21.0	15.5	85.0	10.5	30.0	27.0	14.0	10.728	10	30
005710	TCD-120/12	120	12	21.0	15.5	86.0	13.0	30.0	29.0	15.0	10.436	10	30
005720	TCD-120/14	120	14	21.0	15.5	88.0	15.0	30.0	31.0	16.0	10.820	10	30
005730	TCD-120/16	120	16	21.0	15.5	89.0	17.0	30.0	35.0	18.0	10.650	10	30
005760	TCD-150/12	150	12	23.5	17.0	94.0	13.0	34.0	29.0	15.0	13.374	10	20
005770	TCD-150/14	150	14	23.5	17.0	96.0	15.0	34.0	31.0	16.0	15.514	10	20
005780	TCD-150/16	150	16	23.5	17.0	97.0	17.0	34.0	35.0	18.0	15.436	10	20
005810	TCD-185/12	185	12	25.5	19.0	98.0	13.0	37.0	29.0	15.0	18.167	10	20
005820	TCD-185/14	185	14	25.5	19.0	100.0	15.0	37.0	31.0	16.0	17.852	10	20
005830	TCD-185/16	185	16	25.5	19.0	101.0	17.0	37.0	35.0	18.0	18.227	10	20
005860	TCD-240/12	240	12	29.0	21.5	108.0	13.0	42.0	29.0	15.0	25.766	5	10
005870	TCD-240/14	240	14	29.0	21.5	110.0	15.0	42.0	31.0	16.0	25.780	5	10
005880	TCD-240/16	240	16	29.0	21.5	111.0	17.0	42.0	35.0	18.0	26.587	5	10
005920	TCD-300/16	300	16	32.0	24.5	119.0	17.0	48.0	35.0	18.0	31.472	5	10
005950	TCD-400/16*	400	16	38.5	27.5	140.0	17.0	55.0	45.0	24.0	53.380	2	4
005980	TCD-500/16*	500	16	42.0	31.0	150.0	17.0	60.0	45.0	24.0	78.187	1	4

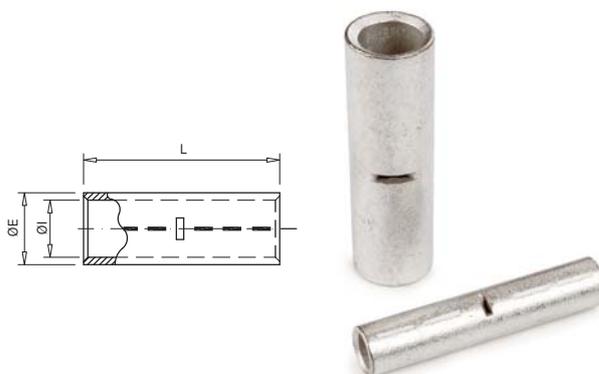
*Not according to UL certified.

10114 MCD

DIN 46267 copper butt-connector

MCD butt connectors are manufactured from electrolytic copper with a tin-plated surface finish to protect against oxidation. They are designed for joining copper conductors by crimping.

Manufactured according to the standardized dimensions of DIN 46267.



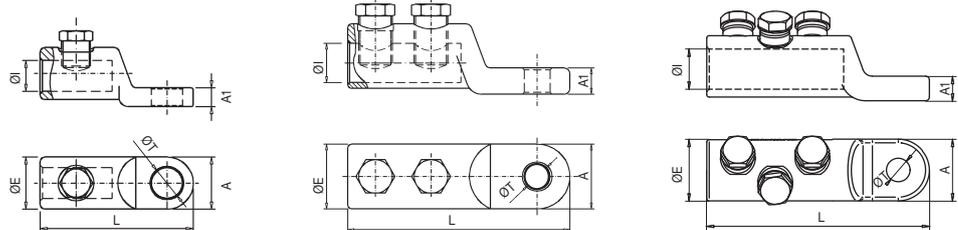
Code	Ref.	Section (mm ²)	Dimensions (mm)			Kg x100	Bag	Box
			ØE	ØI	L			
004130	MCD-6	6	5.5	3.8	30	0.317	100	1000
004140	MCD-10	10	6.0	4.5	30	0.320	100	700
004150	MCD-16	16	8.5	5.5	50	1.387	100	200
004160	MCD-25	25	10.0	7.0	50	1.683	50	150
004170	MCD-35	35	12.5	8.2	50	2.988	20	120
004190	MCD-50	50	14.5	10.0	56	4.073	20	80
004200	MCD-70	70	16.5	11.5	56	5.169	20	60
004210	MCD-95	95	19.0	13.5	70	8.157	10	40
004220	MCD-120	120	21.0	15.5	70	8.231	10	40
004230	MCD-150	150	23.5	17.0	80	13.810	10	30
004240	MCD-185	185	25.5	19.0	85	16.332	5	25
004250	MCD-240	240	29.0	21.5	90	22.368	5	15
004260	MCD-300	300	32.0	24.5	100	27.634	5	10
004270	MCD-400	400	38.5	27.5	150	73.500	2	6
004280	MCD-500	500	42.0	31.0	160	86.740	1	2
004290	MCD-625	625	44.0	34.5	160	79.900	1	2
004300	MCD-800	800	52.0	40.0	200	151.616	1	8
004310	MCD-1000	1000	58.0	44.0	200	197.510	1	8

10201 TTG

Shear head bolt cable lug

TTG cable lugs are manufactured by injection molding high-conductivity aluminum (purity $\geq 99.5\%$) with an electrolytic tin-plated finish covering the entire surface. They are designed for connecting aluminum cables to copper or aluminum busbars using shear-off screws, which break automatically when the correct torque is applied, ensuring a safe installation without the need for crimping tools.

According to standards UNE 211024-3 and IEC 61238-1 and certified with the AENOR  mark.*



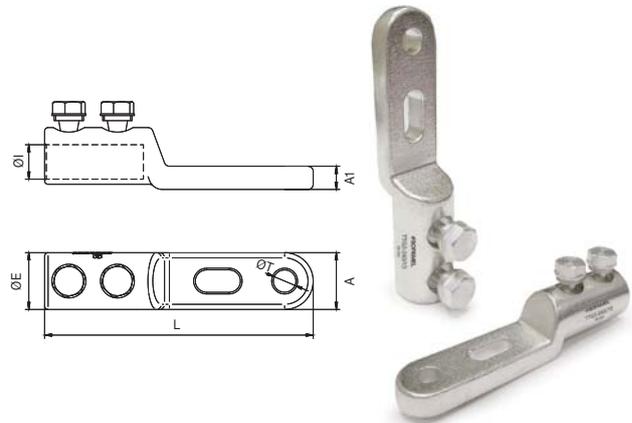
Code	Ref.	Section (mm ²)		Strip length			Dimensions (mm)					Kg x100			
							ØE	ØI	L	ØT	A				A1
101102	TTG-16/50/8	16 - 50	1	35	1 x M12	12	24	9.5	65	9	22	8	4.500	1	100
101103	TTG-16/50/10						24	9.5	65	11	22	8	4.300	1	100
101104	TTG-16/50/12						24	9.5	65	13	22	8	4.300	1	100
101105	TTG-50/8*	25 - 50	1	35	1 x M12	12	24	9.5	65	9	22	8	4.500	1	100
101106	TTG-50/10*						24	9.5	65	11	22	8	4.300	1	100
101107	TTG-50/12*						24	9.5	65	13	22	8	4.300	1	100
101113	TTG-95/8*	50 - 95	1	35	1 x M12	12	24	13	65	9	22	8	4.400	1	100
101114	TTG-95/10*						24	13	65	11	22	8	4.300	1	100
101115	TTG-95/12*						24	13	65	13	22	8	4.000	1	100
101135	TTG-150/10*	95 - 150	2	60	2 x M17	17	26	16	100	11	26	10	11.000	1	50
101136	TTG-150/12*						26	16	100	13	26	10	10.800	1	50
101099	TTG-240/10*	95 - 240	2	60	2 x M17	17	33	20	112	11	33	13.5	17.300	1	45
101100	TTG-240/12*						33	20	112	13	33	13.5	17.400	1	45
101119	TTG-400/12	240 - 400	2	75	2 x M22	22	40	26	135	13	40	13.5	27.500	1	30
101120	TTG-400/16						40	26	135	17	40	13.5	28.500	1	30
101124	TTG-630/12/T3	400 - 630	3	92	3 x M24	24	52	32.5	165	13	52	20	70.940	1	-
101125	TTG-630/16/T3						52	32.5	165	17	52	20	70.560	1	-
101126	TTG-630/20/T3						52	32.5	165	21	52	20	64.560	1	-
101127	TTG-1000/20/T4	630 - 1000	4	120	4 x M22	19	65	41	200	21	65	17	126.400	1	-

10201 TTG2

Shear head bolt cable lug

TTG/2 cable lugs are manufactured by injection molding from high-conductivity aluminium with a purity of 99.5% or higher, and feature an electrolytic tin-plated surface finish covering the entire lug.

Manufactured according to UNE 211024-3 standard.

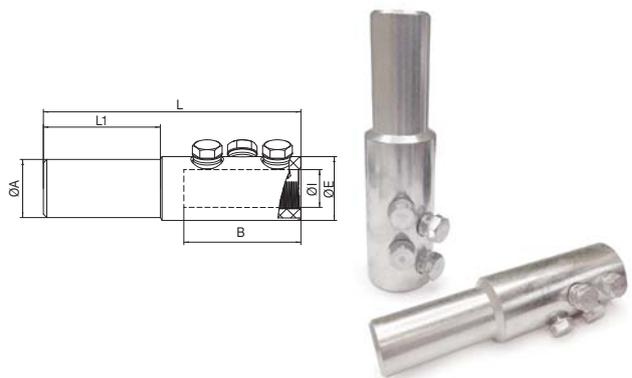


Code	Ref.	Section (mm ²)	Strip length	Bolts	Hexagon	Dimensions (mm)						Kg x 100	Bag	Box
						ØE	ØI	L	ØT	A	A1			
101180	TTG/2-240/10	95 - 240	60	2 x M17	17	33	20	155	11	33	13.5	22.300	1	-
101185	TTG/2-240/12					33	20	155	13	33	13.5	21.700	1	-
10201001	TTG2-400/12	240 - 400	75	2 x M22	22	40	26	180	13	40	13.5	29.700	1	-
10201002	TTG2-400/16					40	26	180	17	40	13.5	29.700	1	-
10201003	TTG/2-630/12	400 - 630	95	2 x M24	24	55	32	215	13	55	21.0	74.000	1	-

10202 BTF

Bimetallic cable lug

BTF cable lugs are manufactured from high conductivity aluminium. Shear head bolts are designed to be broken by suitable torque as per conductor section, being perfectly flush against the connector wall. 15 µm tinned surface finish giving a greater protection against corrosion.



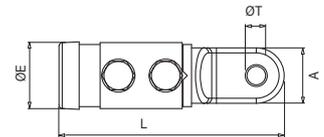
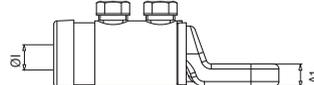
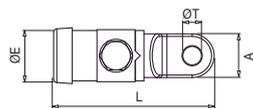
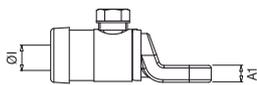
Code	Ref.	Section (mm ²)	Strip length	Bolts	Hexagon	Dimensions (mm)								Kg x 100	Bag	Box
						ØA	B	ØE	ØI	L	L1	M	P			
101380	BTF-400/630	400 - 630	105	3 x M24	22	50	100	55	32.5	220	100	M24	22	1,16	1	-
101385	BTF-800/1000	800 - 1000	120	4 x M22			115	65	42	250		M22		1,53	1	-

10203 TTGA

Insulated terminals with shear head bolts

TTGA cable lugs are manufactured from high-conductivity aluminium, with a tin-plated finish that covers the entire surface of the cable lug. They feature an insulated cover and different-coloured bands to differentiate between phases: black, brown and grey and neutral in blue.

According to UNE 211022 standard and certified with the AENOR  mark.



Code	Ref.	Section (mm ²)	T1/T2		T3		Strip length	Dimensions (mm)						Kg x100	Bag	Box
								ØE	ØI	L	ØT	A	A1			
10203002	TTGA-16/50/8*				8	13		29	13	79	9	22	8	6.600	1	50
10203003	TTGA-16/50/10*	16 - 50	1 x M12	12	10	17	35	29	13	79	11	22	8	6.700	1	50
10203004	TTGA-16/50/12*				12	19		29	13	79	13	22	8	7.100	1	50
101400	TTGA-50/8				8	13		29	13	79	9	22	8	6.600	1	50
101405	TTGA-50/10	25 - 50	1 x M12	12	10	17	35	29	13	79	11	22	8	6.700	1	50
101410	TTGA-50/12				12	19		29	13	79	13	22	8	7.100	1	50
101415	TTGA-95/8				8	13		29	13	79	9	22	8	6.400	1	50
101420	TTGA-95/10	50 - 95	1 x M12	12	10	17	35	29	13	79	11	22	8	6.600	1	50
101425	TTGA-95/12				12	19		29	13	79	13	22	8	7.000	1	50
101438	TTGA-150/10	95 - 150	2 x M17	17	10	17	60	33	16	118	11	26	10	11.300	1	30
101439	TTGA-150/12				12	19		33	16	118	13	26	10	11.100	1	30
101450	TTGA-240/10	150 - 240	2 x M17	17	10	17	60	40	20	133	11	33	13,5	21.000	1	25
101455	TTGA-240/12				12	19		40	20	133	13	33	13,5	21.700	1	25
10203000	TTGA-400/12*	240 - 400	2 x M22	22	12	19	75	48	26	135	13	40	13,5	27.500	1	-
10203001	TTGA-400/16*				16	24		48	26	135	17	40	13,5	28.500	1	-

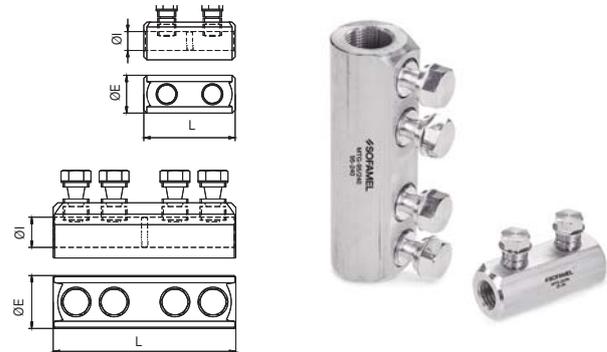
* Not certified with the AENOR mark.

10202 MTG

Shear head bolt connector

MTG connector manufactured from high conductivity aluminium. Shear head bolts are designed to be broken by suitable torque as per conductor section, being perfectly flush against the connector wall, 15 µm tinned surface finish giving a greater protection against corrosion.

According to UNE 211024-3 standard.

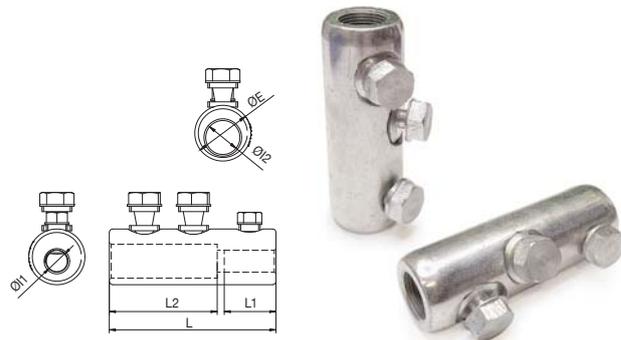


Code	Ref.	Section		Dimensions (mm)			Kg x 100		
				ØE	ØI	L			
101204	MTG-25/95	25 - 95	2	25	12.5	60	9.000	1	-
101200	MTG-95/240	95 - 240	4	35	20	120	21.800	1	40
101201	MTG-240/400	240 - 400	6	42	26	170	60.180	1	-
101202	MTG-400/630	400 - 630	6	55	32.5	200	88.810	1	-
101203	MTG-630/1000	630 - 1000	8	65	42	220	151.250	1	-

10202 MTG/R

Shear head bolt connector reducer

MTG/R sleeves are manufactured from high-conductivity aluminium with a 20 µm tin-plated surface finish, ensuring excellent corrosion resistance. The integrated shear-head bolts are designed to break automatically when the correct torque for the conductor cross-section is reached, remaining flush with the connector and ensuring a reliable, long-lasting connection.



Code	Ref.	Section		Dimensions (mm)						Kg x 100		
		S1	S2	ØE	ØI1	ØI2	L	L1	L2			
101230	MTG/R-240/95	95 - 240	16 - 95	35	12.5	20	100	31	66	22.500	1	75

10202 MBPT-95/50

Shear head bolt connector

Bimetallic earthing connector for 95 mm² aluminium to 50 mm² aluminium or solid copper conductors. Recommended for underground networks not subject to mechanical stress. Installed by tightening a shear-off bolt. 20 µm tin-plated surface finish. Suitable for bimetallic applications.



Code	Ref.	Section		Dimensions (mm)					Kg x 100		
		Al	Al	ØE	ØI1	ØI2	L	B			
101210	MBPT-95/50	95	50	25	9	12.6	80	15	10.300	1	75

10204 MTSA

Insulated shear head bolt connector

Splice sleeve for aluminium conductors with cross-sections from 25 to 240 mm², especially recommended for low-voltage underground networks. Designed for a rated voltage of 0.6/1 kV, the splice is installed using insulated shear-head bolts, ensuring a quick and reliable connection.

Manufactured from high-strength aluminium alloy, the sleeve includes an insulating cover and sealing grommets at both ends, providing excellent protection against moisture and corrosion.

According to UNE 211022 standard and certified with the AENOR  mark.



25 - 50 mm²



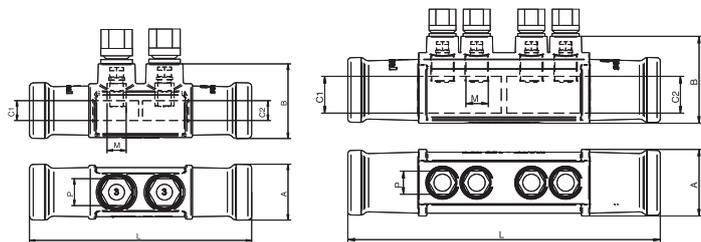
50 - 95 mm²



95 - 150 mm²



150 - 240 mm²



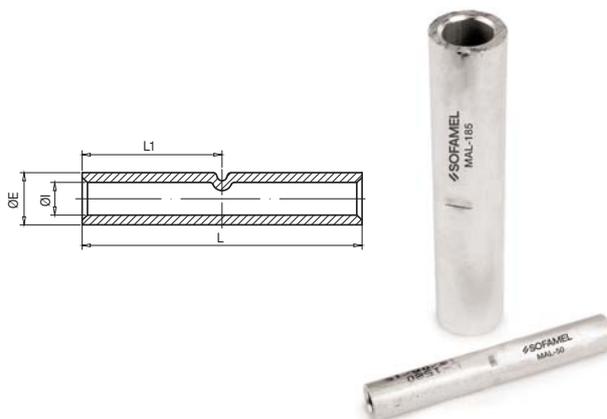
Code	Ref.	Section (mm ²)	Cable cross-section		Dimensions (mm)						Kg x 100	Bag	Box
			C1	C2	A	B	L	M	P	Par Nm			
101250	MTSA-50	25-50	25-50	25-50							16.000	1	-
101255	MTSA-95	50-95	50-95	50-95	35	47	139	2 x M12	17	22 ±2	16.000	1	-
101270	MTSA-25/95	25-95	25-50	50-95							16.000	1	-
101260	MTSA-150	95-150	95-150	95-150							51.000	1	-
101265	MTSA-240	150-240	150-240	150-240	48	64	229	4 x M17	17	30 ±3	51.000	1	-
101275	MTSA-95/240	95-240	95-150	150-240							51.000	1	-

10301 MAL

DIN aluminium butt-connector

MAL butt connectors are manufactured from aluminium tubing with a purity of 99.5% or higher. They feature a central stop that divides the connector into two equal parts. Neutral grease is applied internally to prevent aluminium oxidation.

According to DIN 46267 standard.



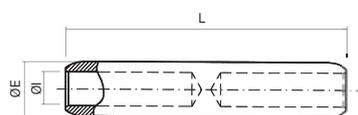
Code	Ref.	Section (mm ²)	Dimensions (mm)				Kg x 100	Bag	Box
			ØE	ØI	L	L1			
080100	MAL-25	25	12.0	6.8	70.0	35.0	1.880	1	250
080110	MAL-35	35	14.0	8.2	85.0	42.5	2.660	1	200
080120	MAL-50	50	16.0	9.8	85.0	42.5	2.840	1	200
080130	MAL-70	70	18.5	11.2	105.0	52.5	3.700	1	100
080140	MAL-95	95	22.0	13.2	105.0	52.5	4.700	1	100
080150	MAL-120	120	23.0	14.7	105.0	52.5	9.200	1	90
080160	MAL-150	150	25.0	16.5	125.0	62.5	12.300	1	60
080170	MAL-185	185	28.5	18.5	125.0	62.5	13.800	1	60
080180	MAL-240	240	32.0	21.3	145.0	72.5	18.800	1	50
080190	MAL-300	300	34.0	23.6	145.0	72.5	25.000	1	50

10304 RJA

Aluminium joint

RJA butt connectors are manufactured from aluminium tubing with a purity of 99.5% or higher. They feature a stop that allows the conductors to be centred, dividing the connector into two symmetrical sections to facilitate crimping. Both ends are filled with neutral conductive grease to prevent aluminium oxidation and improve electrical conductivity.

According to UNE 211024 standard and certified with the AENOR  mark.*

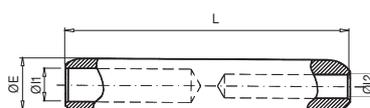


Code	Ref.	Section (mm ²)	Dimensions (mm)			Kg x 100	Bag	Box
			ØE	ØI	L			
095100	RJ1A-25	25	20.0	6.5	106.5	7.900	1	125
095110	RJ1A-35	35	20.0	8.0	106.5	7.600	1	125
095120	RJ1A-50*	50	20.0	9.0	106.5	7.160	1	125
095130	RJ1A-70	70	20.0	11.0	106.5	7.000	1	125
095140	RJ1A-95*	95	20.0	12.5	106.5	5.700	1	125
095150	RJ2A-120	120	25.0	13.7	133.0	13.000	1	90
095160	RJ2A-150*	150	25.0	15.5	133.0	11.300	1	90
095170	RJ4A-185	185	32.0	17.0	143.5	22.000	1	50
095180	RJ4A-240*	240	32.0	19.5	143.5	19.000	1	50
095190	RJ5A-300	300	40.0	23.3	218.0	48.000	1	15
095200	RJ5A-400*	400	40.0	26.0	218.0	43.000	1	15

10305 RJA

Reducer aluminium joint

RJA reducing butt connectors are manufactured from aluminium tubing with a purity of 99.5% or higher. They incorporate a stop that divides the connector into two distinct sections and facilitates the centring of the conductors. Each end is filled with neutral conductive grease to prevent oxidation and ensure optimal electrical contact. Designed for Al-Al or Al-Cu connections, the aluminium conductor is always inserted into the larger section and the copper conductor into the smaller section. The ends must be properly sealed to prevent moisture or contaminants from causing oxidation.



Code	Ref.	Al section (mm ²)		Dimensions (mm)				Kg x 100	Bag	Box
		1	2	ØE	ØI1	ØI2	L			
100100	RJ1A-50/25	50	25	20	9.0	6.5	106.5	7.450	1	125
100140	RJ1A-95/50	95	50	20	12.5	9.0	106.5	6.340	1	125
100150	RJ2A-150/50	150	50	25	15.5	9.0	133.0	11.880	1	90
100160	RJ2A-150/95	150	95	25	15.5	12.5	133.0	10.900	1	90
100165	RJ4A-240/50	240	50	32	19.5	9.0	143.5	21.030	1	50
100170	RJ4A-240/95	240	95	32	19.5	12.5	143.5	20.080	1	50
100180	RJ4A-240/150	240	150	32	19.5	15.5	143.5	19.010	1	50

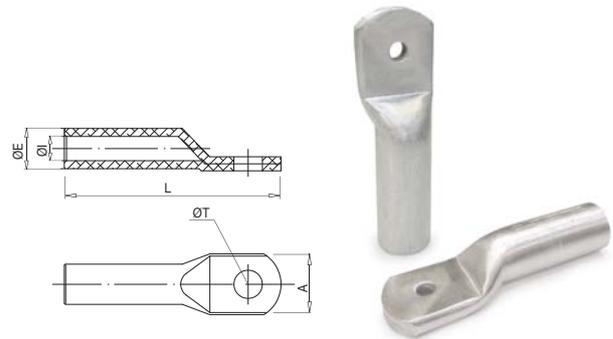
* Consult for other sizes.

10401 TBE

Tinned aluminium cable lug

TBE cable lugs are manufactured from aluminium tubing with a purity of 99.5% or higher, featuring a tin-plated surface finish to improve electrical contact. Neutral grease is applied internally to prevent aluminium oxidation.

Tube dimensions comply with DIN 46329 standard.

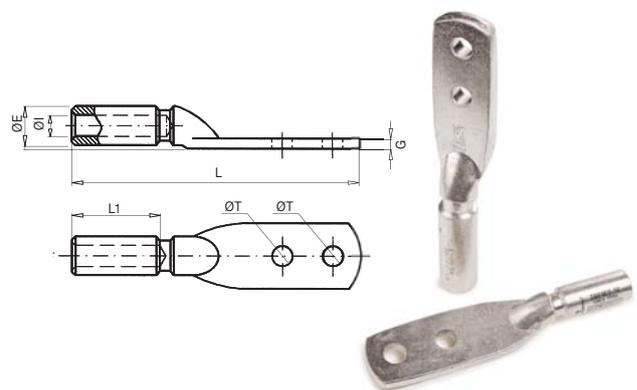


Code	Ref.	Section (mm ²)	Dimensions (mm)					Kg x 100	Bag	Box
			ØE	ØI	ØT	L	A			
115090	TBE-16	16	12.0	5.8	8.5	48.0	18.0	0.437	1	400
115100	TBE-25	25	12.0	6.8		50.0	18.0	0.860	1	300
115110	TBE-35	35	14.0	8.2		66.0	21.0	1.360	1	250
115120	TBE-50	50	16.0	9.8		68.0	25.0	1.880	1	200
115130	TBE-70	70	18.5	11.2	13.0	84.0	28.0	2.700	1	150
115140	TBE-95	95	22.0	13.2		87.0	32.0	3.880	1	150
115150	TBE-120	120	23.0	14.7		88.0	32.0	5.600	1	100
115160	TBE-150	150	25.0	16.5		101.0	35.0	8.200	1	75
115170	TBE-185	185	28.5	18.5	15.0	103.0	40.0	10.600	1	50
115180	TBE-240	240	32.0	21.3		114.0	45.0	17.200	1	50
115190	TBE-300	300	34.0	23.6		120.0	49.0	20.700	1	40

10402 TBEM/S

Tinned bimetallic cable lug

TBEM/S bimetallic cable lugs are manufactured from aluminium bars with a purity of 99.5% or higher. The entire connector surface features a tin-plated finish applied by electrolytic plating. Neutral grease is applied internally to prevent aluminium oxidation. Designed for underground cable connections.



Underground cables

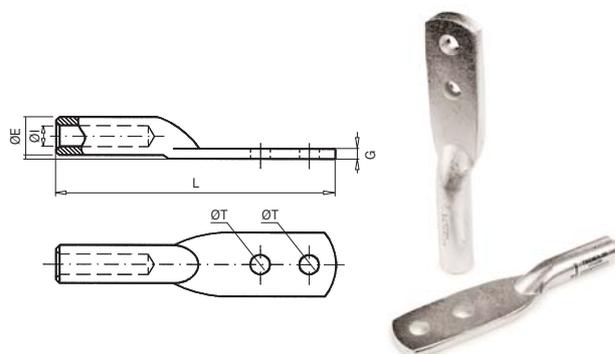
Code	Ref.	Section (mm ²)	Dimensions (mm)						Kg x 100	Bag	Box
			ØE	ØI	ØT	L1	G	L			
125120	TBEM/S-50	50	20.0	9.0	13.0	47.5	7.7	170	12.000	1	60
125140	TBEM/S-95	95	20.0	12.5	13.0	47.5	7.7	170	11.200	1	50
125160	TBEM/S-150	150	25.0	15.5	13.0	64.5	11.6	190	19.400	1	40
125180	TBEM/S-240	240	32.0	19.5	13.0	64.5	11.6	199	27.800	1	30

* For other sizes, please inquire. Supplied without screws.

10402 TBEM/A

Tinned bimetallic cable lug

TBEM/A bimetallic cable lugs are manufactured from aluminium bars with a purity of 99.5% or higher. The entire connector surface features a tin-plated finish applied by electrolytic plating. Neutral grease is applied internally to prevent aluminium oxidation. Designed for overhead cable connections.



Overhead cables

Code	Ref.	Section (mm ²)	Dimensions (mm)					Kg x 100	Bag	Box
			ØE	ØI	ØT	G	L			
125190	TBEM/A-30	LA-30	20.0	7.6	13.0	7.7	170	12.200	1	80
125200	TBEM/A-56	LA-56	20.0	10.0	13.0	7.7	170	11.800	1	80
125210	TBEM/A-78	LA-78	20.0	12.0	13.0	7.7	170	10.600	1	80
125230	TBEM/A-110	LA-110	25.0	14.5	13.0	11.6	190	19.800	1	40
125250	TBEM/A-180	LA-180	32.0	18.3	13.0	11.6	199	32.500	1	30

* For other sizes, please inquire. Supplied without screws.

10402 Screw kit

Kits composed of stainless steel screws, nuts, and washers, ideal for fastening terminals, connectors, or electrical accessories. Available in various lengths depending on application.



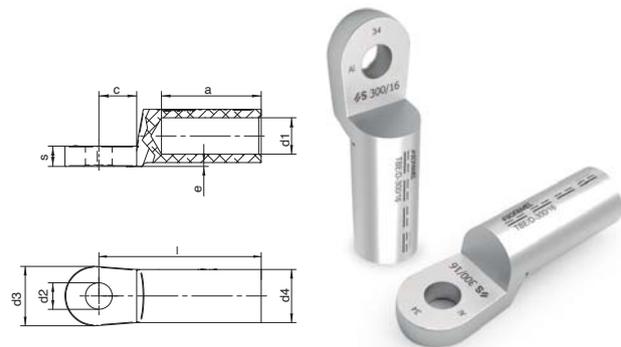
Code	Ref.	Content
125500	SCREW KIT M-12 x 40 INOX	2 screws, 4 nuts and 4 stainless steel washers.
125600	SCREW KIT M-12 x 50 INOX	

10412 TBE/D

DIN 46329 tinned aluminium cable lug

TBE/D bimetallic cable lugs are manufactured from aluminium bars with a purity of 99.5% or higher. The entire cable lug surface features a tin-plated finish applied by electrolytic plating. Neutral grease is applied internally to prevent aluminium oxidation. Designed for underground cable connections.

According to DIN 46329 standard.



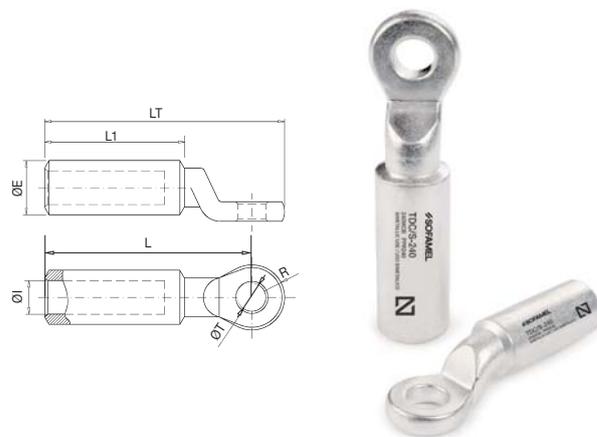
Code	Ref.	Section (mm ²)	Screw \varnothing	Dimensions (mm)									Kg x100	Bag	Box
				a	c	d1	d2	d3	d4	e	l	s			
115351	TBE/D-25/8	25	8	30	15.5	6.8	8.4	25	12	2	50	4	-	1	-
115352	TBE/D-25/10		10	30	15.5	6.8	10.5	25	12	2	50	4	-	1	-
115353	TBE/D-25/12		12	30	15.5	6.8	13	25	12	2	50	4	-	1	-
115354	TBE/D-35/8	35	8	42	15.5	8	8.4	25	14	2	62	4	-	1	-
115355	TBE/D-35/10		10	42	15.5	8	10.5	25	14	2	62	4	-	1	-
115356	TBE/D-35/12		12	42	15.5	8	13	25	14	2	62	4	-	1	-
115357	TBE/D-50/8	50	8	42	15.5	9.8	8.4	25	16	2	62	5.5	-	1	-
115358	TBE/D-50/10		10	42	15.5	9.8	10.5	25	16	2	62	5.5	-	1	-
115359	TBE/D-50/12		12	42	15.5	9.8	13	25	16	2	62	5.5	-	1	-
115360	TBE/D-70/8	70	8	52	15.5	11.2	8.4	25	18.5	2	72	5.5	-	1	-
115361	TBE/D-70/10		10	52	15.5	11.2	10.5	25	18.5	2	72	5.5	-	1	-
115319	TBE/D-70/12		12	52	15.5	11.2	13	25	18.5	2	72	5.5	-	1	-
115363	TBE/D-95/10	95	10	56	15.5	13.2	10.5	25	22	2	75	6	-	1	-
115364	TBE/D-95/12		12	56	15.5	13.2	13	25	22	2	75	6	-	1	-
115366	TBE/D-120/10	120	10	56	20	14.7	10.5	30	23	2	80	7.5	-	1	-
115367	TBE/D-120/12		12	56	20	14.7	13	30	23	2	80	7.5	-	1	-
115368	TBE/D-120/16		16	56	20	14.7	17	30	23	2	80	7.5	-	1	-
115369	TBE/D-150/10	150	10	60	20	16.3	10.5	30	25	2.5	90	8	-	1	-
115370	TBE/D-150/12		12	60	20	16.3	13	30	25	2.5	90	8	-	1	-
115371	TBE/D-150/16		16	60	20	16.3	17	30	25	2.5	90	8	-	1	-
115372	TBE/D-185/10	180	10	60	20	18.3	10.5	30	28.5	2.5	91	8	-	1	-
115339	TBE/D-185/12		12	60	20	18.3	13	30	28.5	2.5	91	8	-	1	-
115373	TBE/D-185/16		16	60	20	18.3	17	30	28.5	2.5	91	8	-	1	-
115374	TBE/D-240/12	240	12	70	24	21	13	38	32	2.5	103	11	-	1	-
115375	TBE/D-240/16		16	70	24	21	17	38	32	2.5	103	11	-	1	-
115376	TBE/D-240/20		20	70	24	21	21	38	32	2.5	103	11	-	1	-
115349	TBE/D-300/12	300	12	70	24	23.3	13	38	34	2.5	103	13	-	1	-
115377	TBE/D-300/16		16	70	24	23.3	17	38	34	2.5	103	13	-	1	-
115378	TBE/D-300/20		20	70	24	23.3	21	38	34	2.5	103	13	-	1	-
115379	TBE/D-400/12	400	12	73	24	26	13	38	38.5	4	116	14	-	1	-
115380	TBE/D-400/16		16	73	24	26	17	38	38.5	4	116	14	-	1	-
115381	TBE/D-400/20		20	73	24	26	21	38	38.5	4	116	14	-	1	-
115382	TBE/D-500/12	500	12	79	24	29	13	44	44	5	122	15	-	1	-
115383	TBE/D-500/16		16	79	24	29	17	44	44	5	122	15	-	1	-
115384	TBE/D-500/20		20	79	24	29	21	44	44	5	122	15	-	1	-

10403 TDC/S

Bimetallic cable lug

TDC/S bimetallic cable lug are manufactured from aluminum alloy bar (purity $\geq 99.5\%$), entirely tinned via electrolytic bath. Neutral grease is applied internally to prevent oxidation.

According to UNE 211024 standard and certified with the AENOR  mark.*



Code	Ref.	Section (mm ²)	Dimensions (mm)							Kg x 100	Bag	Box
			ØE	ØI	ØT	R	L1	L	LT			
111085	TDC/S-16/10 ¹	16	16.0	5.5	10.7	13.0	47.1	75.0	88.0	-	1	125
111090	TDC/S-16/12	16			12.9					5.300	1	125
111099	TDC/S-25/10 ¹	25			10.7					-	1	125
111100	TDC/S-25/12	25	16.0	6.5	12.9	13.0	48.0	75.0	88.0	5.000	1	125
111110	TDC/S-35/12 ¹	35			8.0					4.800	1	125
111118	TDC/S-50/8 *	50	20.0	9.0	10.7	13.0	48.0	75.0	88.0	4.940	1	125
111119	TDC/S-50/10 *	50			12.9					4.890	1	125
111120	TDC/S-50/12 * ¹	50			11.0					4.840	1	125
111130	TDC/S-70/12 ¹	70	25.0	11.0	12.9	15.0	65.0	98.0	113.0	4.300	1	125
111139	TDC/S-95/10 *	95			10.7					4.250	1	125
111140	TDC/S-95/12 * ¹	95			12.5					4.240	1	125
111150	TDC/S-120/12 ¹	120	32.0	13.7	12.9	18.0	65.0	104.0	122.0	9.210	1	80
111159	TDC/S-150/10 *	150			15.5					8.740	1	80
111160	TDC/S-150/12 * ¹	150			10.7					8.640	1	80
111170	TDC/S-185/12 ¹	185	40.0	17.0	12.9	20.0	100.0	145.0	165.0	15.000	1	50
111179	TDC/S-240/10 *	240			10.7					14.625	1	50
111180	TDC/S-240/12 * ¹	240			19.5					14.500	1	50
111184	TDC/S-300/10	300	26.0	23.3	10.7	20.0	100.0	145.0	165.0	30.750	1	32
111185	TDC/S-300/12	300			12.9					30.600	1	32
111186	TDC/S-300/16 ¹	300			16.7					28.400	1	32
111189	TDC/S-400/10	400	26.0	10.7	12.9	20.0	100.0	145.0	165.0	28.250	1	32
111190	TDC/S-400/12	400			12.9					-	1	32
111191	TDC/S-400/16 ¹	400			16.7					-	1	32

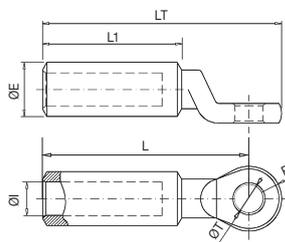
(*) Dimensions and tolerances according to UNE 211024.

(1) Dimensions according to DMA-C33-853/N.

10403 TDC/A

Bimetallic cable lug

TDC/A terminals are manufactured from aluminium bars with a purity of 99.5% or higher. The entire terminal surface features a tin-plated finish applied by electrolytic plating. Neutral grease is applied internally to prevent aluminium oxidation. Designed for overhead cable connections.



For overhead cable

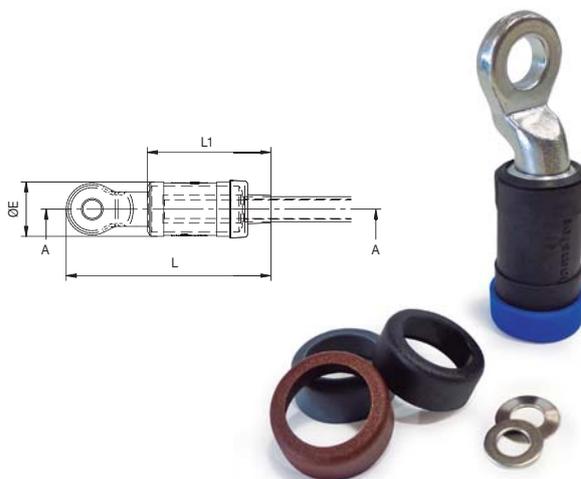
Code	Ref.	Section (mm ²)	Dimensions (mm)							Kg x 100	Bag	Box
			ØE	ØI	ØT	R	L1	L	LT			
111200	TDC/A-30/12	LA-30	20.0	7.6	12.9	13.0	53.0	80.0	93.0	5.400	1	125
111207	TDC/A-56/8	LA-56		10.0	9.0					-	1	-
111210	TDC/A-56/12	LA-56			12.9					12.9	4.800	1
111220	TDC/A-78/12	LA-78		12.0						4.520	1	125
111225	TDC/A-80/12	LA-80		12.5						4.480	1	125
111230	TDC/A-110/12	LA-110	25.0	14.5	12.9	15.0	70.0	103.0	118.0	9.300	1	80
111235	TDC/A-145/12	LA-145		16.5						-	1	-
111240	TDC/A-180/12	LA-180	32.0	18.3	12.9	18.0	70.7	109.0	127.0	15.900	1	50

10404 TDC/S KIT

Insulated bimetallic terminal

The kit consists of:

- TDC/S terminal manufactured from aluminium bars with a purity of 99.5% or higher, featuring an electrolytic tin-plated surface finish. It complies with UNE 211024-2 and holds the AENOR  certification.
- Insulating cover made of synthetic rubber.
- Phase or neutral identification rings.
- Connection washers.



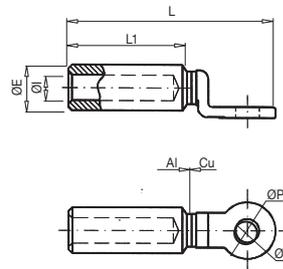
Code	Ref.	Section (mm ²)	Strip length	Dimensions (mm)			Kg x 100	Bag	Box
				ØE	L	L1			
111118 K	TDC/S-50/8 K	50	45	26	100	51	8.000	1	40
111119 K	TDC/S-50/10 K						8.700	1	40
111120 K	TDC/S-50/12 K	95	45	31	128	68	8.300	1	40
111139 K	TDC/S-95/10 K						8.100	1	40
111140 K	TDC/S-95/12 K						7.800	1	40
111159 K	TDC/S-150/10 K	150	60	38	140	86	12.000	1	30
111160 K	TDC/S-150/12 K						12.700	1	30
111180 K	TDC/S-240/12 K	240	60				19.300	1	25

10405 TBF

Bimetallic cable lug

TBF bimetallic cable lugs are manufactured from aluminium alloy with a purity of 99.5% or higher. The palm is made from forged copper. Both parts of the bimetallic cable lug are joined using a friction stir welding process. Neutral grease is applied internally to protect the aluminium from oxidation.

According to NF C33-090-1 standard and tested under IEC 61238-1.

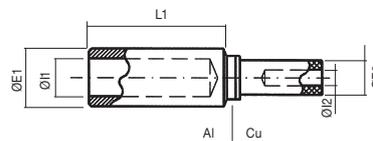


Code	Ref.	Section (mm ²)	Dimensions (mm)						Kg x 100	Bag	Box
			ØE	ØI	L1	L	ØT	ØP			
110100	TBF-16/12	16	20.0	5.5	47.5	86.0	12.8	25.0	7.600	1	125
110110	TBF-25/12	25	20.0	6.5	47.5	86.0	12.8	25.0	7.200	1	125
110120	TBF-35/12	35	20.0	8.0	47.5	86.0	12.8	25.0	7.200	1	125
110130	TBF-50/12	50	20.0	9.0	47.5	86.0	12.8	25.0	7.000	1	125
110140	TBF-70/12	70	20.0	11.0	47.5	86.0	12.8	25.0	7.000	1	125
110150	TBF-95/12	95	20.0	12.5	47.5	86.0	12.8	25.0	6.300	1	125
110160	TBF-120/12	120	25.0	13.7	64.0	110.0	12.8	30.0	13.500	1	80
110170	TBF-150/12	150	25.0	15.5	64.0	110.0	12.8	30.0	12.200	1	80
110180	TBF-185/12	185	32.0	17.0	64.0	110.0	12.8	30.0	20.100	1	50
110190	TBF-240/12	240	32.0	19.5	64.0	110.0	12.8	30.0	22.600	1	50
T110004	TBF-300/12	300	40.0	23.3	100.0	154.0	12.8	36.0	33.400	1	32
110200	TBF-300/16	300	40.0	23.3	100.0	154.0	16.5	36.0	33.400	1	32
T110011	TBF-400/12	400	40.0	26.0	100.0	154.0	12.8	36.0	30.200	1	32
110210	TBF-400/16	400	40.0	26.0	100.0	154.0	16.5	36.0	30.200	1	32

10407 MBI

Bimetallic joint

MBI bimetallic joints are manufactured from aluminium alloy (purity ≥ 99.5%) and electrolytic copper bars. The two parts of the bimetallic connector are joined using a friction stir welding process. Neutral grease is applied internally in the aluminium part to prevent oxidation.



Code	Ref.	Section (mm ²)		Dimensions (mm)					Kg x 100	Bag	Box
		Al	Cu	ØE1	ØI1	L1	ØE2	ØI2			
130100	MBI-50/25	50	25	20.0	9.0	48.0	12.2	7.0	6.700	1	30
130110	MBI-95/50	95	50	20.0	12.5	48.0	12.2	9.5	5.100	1	30
130120	MBI-150/50	150	50	25.0	15.5	65.0	12.2	9.5	8.500	1	20
130130	MBI-150/95	150	95	25.0	15.5	65.0	21.0	13.0	14.300	1	20
130135	MBI-240/50	240	50	32.0	19.5	65.0	12.2	9.5	12.900	1	10
130137	MBI-240/95	240	95	32.0	19.5	65.0	21.0	13.0	18.000	1	10
130140	MBI-240/150	240	150	32.0	19.5	65.0	21.0	16.0	16.500	1	10

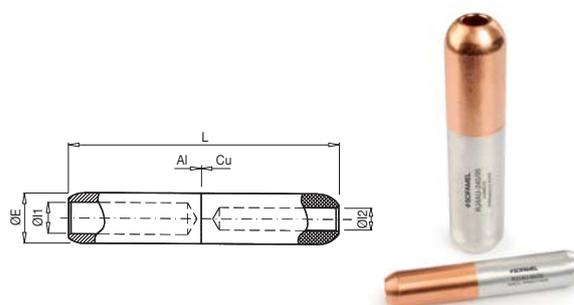
* Other sections under request.

10408 RJAU

Bimetallic joint

RJAU bimetallic joint manufactured from aluminum alloy (purity $\geq 99.5\%$) and electrolytic copper bar. Both parts of the bimetallic connector are joined through a friction stir welding process. Neutral grease is applied internally to protect the aluminum from oxidation.

According to NF C33-090-1 standard.



Code	Ref.	Section (mm ²)		Dimensions (mm)				Kg x 100	Bag	Box
		Al	Cu	ØE	ØI1	ØI2	L			
135100	RJ1AU50/25	50	25	20	9.0	7.0	106.5	18.402	1	25
135110	RJ1AU95/50	95	50	20	12.5	9.5	106.5	15.930	1	25
135120	RJ2AU150/50	150	50	25	15.5	9.5	133.0	28.130	1	15
135130	RJ2AU150/95	150	95	25	15.5	13.0	133.0	25.080	1	15
135134	RJ4AU240/50	240	50	32	19.5	9.5	143.5	49.590	1	8
135137	RJ4AU240/95	240	95	32	19.5	13.0	143.5	46.409	1	8
135140	RJ4AU240/150	240	150	32	19.5	16.0	143.5	43.009	1	8

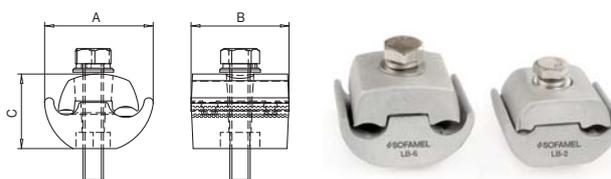
* Other sections under request.

10501 LB

Bolt-fastened compression clamp

LB clamps are manufactured from cast aluminium with stainless steel screws to ensure high corrosion resistance.

They are used for fast and secure electrical branching in aluminium lines, suitable for both overhead installations and distribution boards.

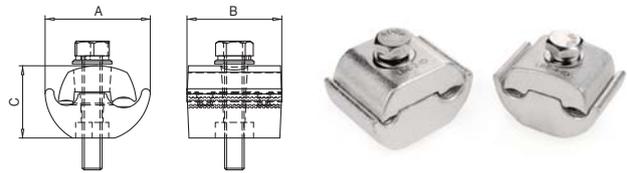


Code	Ref.	Main		Tap		Dimensions (mm)			Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	A	B	C			
155100	LB-1	50	6	35	6	34	29	25	4.060	10	40
155110	LB-2	120	50	35	6	49	35	32	10.950	10	20
155120	LB-3	185	50	70	10	55	44	38	18.250	10	10
155130	LB-4	70	25	70	25	46	32	31	9.400	10	20
155140	LB-5	150	95	95	25	55	44	38	16.600	5	10
155150	LB-6	150	70	150	70	57	39	39	16.550	5	10
155160	LB-7	240	95	240	50	68	49	40	27.300	5	5

10502 LBE-ID

Bolt-fastened tinplated compression clamp

LBE-ID clamps are manufactured from cast aluminium with a 20 µm tin-plated surface finish to enhance electrical contact and prevent oxidation. The screws are made of stainless steel, providing excellent mechanical strength and corrosion resistance. Ideal for Al-Al and Al-Cu connections.

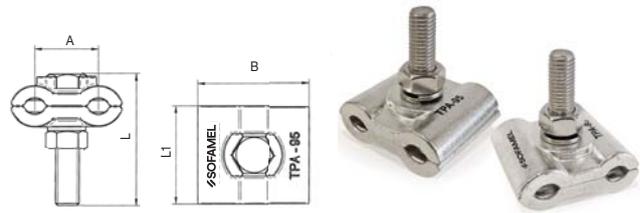


Code	Ref.	Main		Tap		Dimensions (mm)			Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	A	B	C			
155001	LBE-2-ID	120	50	35	6	49	35	32	10.950	1	25
155002	LBE-3-ID	185	50	70	10	55	44	38	18.250	1	10
155003	LBE-4-ID	70	25	70	25	46	32	31	9.400	1	25

10501 TPA

Bolt-fastened compression clamp

TPA clamps are manufactured from aluminium alloy with a 20 µm tin-plated surface finish, enhancing both electrical contact and corrosion resistance. Stainless steel M12 screws provide high mechanical strength and allow direct mounting onto metal structures or supports.

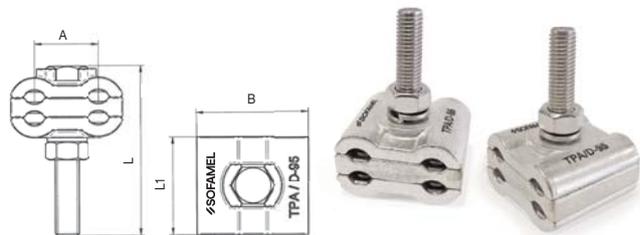


Code	Ref.	Section	Dimensions (mm)				Kg x 100	Bag	Box
			A	B	L	L1			
156100	TPA-95	2 x 95	33	57	68	50	18.48	1	10

10501 TPA/D

Bolt-fastened compression clamp

TPA/D clamps are manufactured from aluminium alloy with a 20 µm tin-plated surface finish, enhancing both electrical contact and corrosion resistance. Stainless steel M12 screws provide high mechanical strength and allow direct mounting onto metal structures or supports.

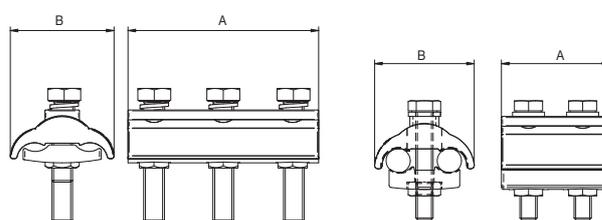


Code	Ref.	Section	Dimensions (mm)				Kg x 100	Bag	Box
			A	B	L	L1			
156110	TPA/D-95	4 x 95	33	57	88	50	50	1	5

10503 PGC/A

Bolt-fastened compression clamp

PGC/A mechanical clamps are manufactured from cast aluminium with stainless steel screws, ensuring high mechanical strength and durability. Designed for secure electrical branching in overhead aluminium lines, particularly for aluminium conductors.

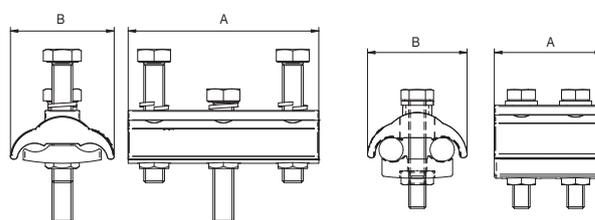


Code	Ref.	Main		Dimensions (mm)		Kg x 100	Bag	Box
		Min.	Max.	A	B			
155206	PGC/A2-8	16	150	80	50	13.5	1	0
155201	PGC/A3-10	35	300	110	60	54.8	1	0

10503 PGC/B

Bolt-fastened tinned compression clamp

PGC/B bimetallic clamps are manufactured from cast aluminium with a 20 µm tin-plated surface finish, enhancing both electrical contact and corrosion resistance. The screws are made of stainless steel. These clamps are suitable for bimetallic connections in overhead lines, enabling safe and reliable aluminium-to-copper conductor joints.

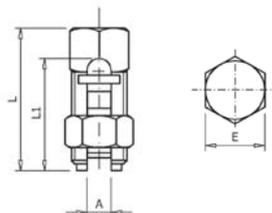


Code	Ref.	Main Al		Tap Cu		Dimensions (mm)		Kg x 100	Bag	Box
		Min.	Max.	Min.	Max.	A	B			
155205	PGC/B2-8	25	150	10	95	80	50	14.0	1	0
155203	PGC/B3-10	35	300	25	240	110	60	55.4	1	0

10504 APB

Bimetallic split-bolt connector

APB split-bolt connectors are manufactured from brass with a tin-plated surface finish to improve electrical contact. They feature a buffer stop to differentiate cable connections.

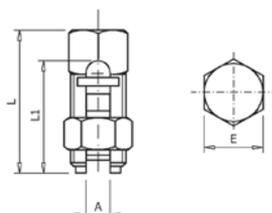


Code	Ref.	Main		Tap		Dimensions (mm)				Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	L	L1	E	A			
160100	APB-25/25	25	16	25	2.5	42.0	34.0	16.9	7.2	7.480	10	60
160110	APB-35/35	35	16	35	2.5	42.0	34.0	16.9	7.4	8.034	10	60
160120	APB-50/50	50	25	50	2.5	46.6	37.6	18.0	9.6	8.800	10	40
160130	APB-70/70	70	35	70	2.5	49.0	42.5	20.0	11.0	9.600	10	40
160140	APB-120/120	120	50	120	10	61.1	53.2	26.9	15.3	11.200	5	15

10505 APC

Copper split-bolt connector

APC split-bolt connectors are manufactured from brass with a copper-plated surface finish to improve electrical contact. They feature a separator to distinguish cable connections.

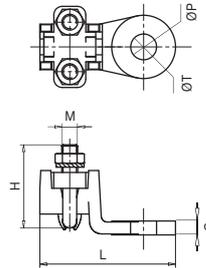


Code	Ref.	Main		Tap		Dimensions (mm)				Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	L	L1	E	A			
165010	APC-6/6	6	4	6	1.5	24.0	19.0	10.0	3.6	1.670	25	200
165020	APC-10/6	10	6	10	2.5	27.4	21.8	12.0	4.5	2.790	25	150
165030	APC-16/16	16	10	16	2.5	34.0	22.7	13.0	5.6	3.820	25	100
165040	APC-25/25	25	16	25	2.5	41.8	33.1	17.0	7.2	6.840	10	50
165090	APC-35/35	35	16	35	2.5	41.8	33.8	17.0	7.4	6.640	10	40
165100	APC-50/50	50	25	50	2.5	46.4	38.0	18.0	9.6	7.780	10	40
165110	APC-70/70	70	35	70	2.5	49.4	42.2	20.0	10.8	8.500	10	30
165115	APC-95/95	95	50	95	10	53.7	46.4	24.0	12.1	9.300	10	20
165120	APC-120/120	120	50	120	10	60.5	53.5	26.7	15.3	10.100	5	15
165130	APC-185/185	185	70	185	70	69.1	61.0	30.0	17.6	11.000	5	10
165140	APC-240/240	240	70	240	70	75.6	68.0	35.4	21.5	12.500	5	10

10601 TR

Setscrew joint straight entry

TR screw terminals are manufactured from brass with galvanized steel screws and clamps. They are designed for connecting copper conductors to ground rods or metal elements via mechanical fastening.

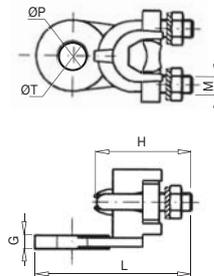


Code	Ref.	Ø Bar (mm)		Cable (mm ²)		Dimensions (mm)						Kg x100	Bag	Box	
		Max.	Min.	Max.	Min.	H	L	M	ØP	ØT	G				
180100	TR-10/50	10	4	70	10	31	52	5	26.5	13	5	33.0	6.500	-	40
180110	TR-25/120	14	6	120	16	42	68	8	32.5	13	6	41.0	18.600	-	20
180120	TR-70/150	16	10	150	25	54	77	8	35.5	13	6	50.0	23.400	-	15
180130	TR-150/240	20	14	240	120	42	78	8	41.0	16	6	43.0	22.100	-	10
180140	TR-240/400	24	20	400	240	53	105	10	54.0	18	8	55.0	47.700	-	5

10602 TRE

Setscrew 90° joint entry

TRE screw terminals are manufactured from brass with galvanized steel screws and clamps. Their specific orientation makes them suitable for installations where a precise positioning of the connection is required.

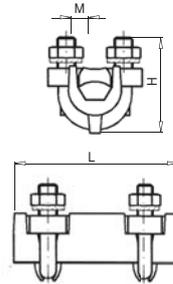


Code	Ref.	Ø Bar (mm)		Cable (mm ²)		Dimensions (mm)						Kg x100	Bag	Box
		Max.	Min.	Max.	Min.	H	L	M	ØP	ØT	G			
185100	TRE-10/50	10	4	70	10	31	57	5	26.5	12.5	5.5	6.700	-	40
185110	TRE-25/120	14	6	120	16	42	68	8	32.5	12.5	6.0	18.500	-	20

10603 TRM

Tap setscrew joint

TRM setscrew joints are manufactured from brass with galvanized steel screws and clamp. They are used for making simple branches on copper lines and provide a practical solution for grounding applications.

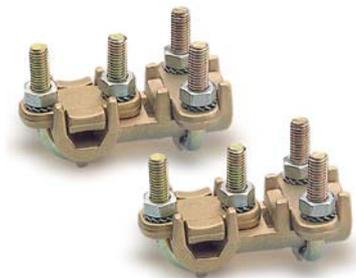
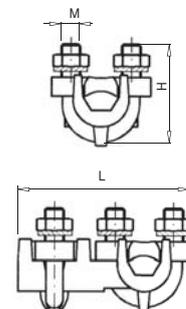


Code	Ref.	Ø Bar (mm)		Cable (mm ²)		Dimensions (mm)			Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	H	L	M			
190100	TRM-10/50	10	4	50	10	31	47	5	8.600	-	35
190110	TRM-25/120	14	6	120	16	42	65	8	25.350	-	15
190120	TRM-70/150	16	10	150	25	55	70	8	33.800	-	10

10604 TRT

Tap setscrew joint

TRT setscrew joints are manufactured from brass with galvanized steel screws and clamp. They are specifically designed for T-shaped branching, allowing perpendicular secondary conductor connections to the main conductor. Ideal for grounding network installations.

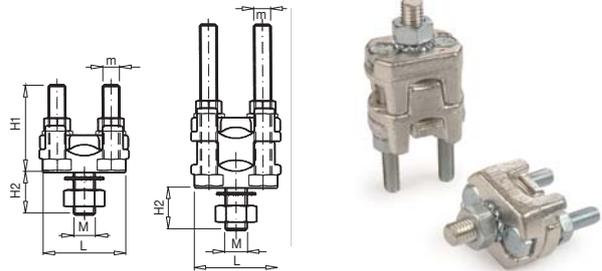


Code	Ref.	Ø Bar (mm)		Cable (mm ²)		Dimensions (mm)			Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	H	L	M			
195100	TRT-10/50	10	4	50	10	31	52.0	5	8.800	-	35
195110	TRT-25/120	14	6	120	16	42	73.0	8	26.700	-	15
195120	TRT-70/150	16	10	150	25	52	82.5	8	34.700	-	10

10605 TRF

Turret bimetallic clamp

TRF and TRF/D bimetallic clamps are manufactured from brass with a tin-plated surface finish to improve electrical contact. They are suitable for electrical panel board connections.

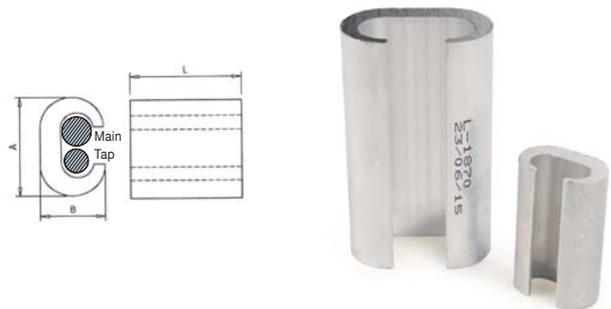


Code	Ref.	Ø Bar (mm)		Cable (mm ²)		Dimensions (mm)					Kg x100	Bag	Box
		Max.	Min.	Max.	Min.	H1	H2	L	M	m			
200100	TRF-25/50	10	3	50	4	29	15.5	29	6	5	5.840	-	50
200110	TRF-50/80	12	4	95	6	34	1.08	33	8	6	9.900	-	30
200120	TRF-80/150	16	7	150	25	41	18.5	42	10	8	17.500	-	20
200130	TRF-150/240	20	10	240	50	48	20.0	52	12	10	32.800	-	10
200140	TRF/D-25/50	10	3	50	4	34	15.5	29	6	5	7.400	-	40
200150	TRF/D-50/80	12	4	95	6	65	16.5	33	8	6	15.700	-	20
200160	TRF/D-80/150	16	7	150	25	76	18.5	42	10	8	27.000	-	15
200170	TRF/D-150/240	20	10	240	50	88	20.0	52	12	10	57.000	-	6

10701 CRA

Aluminium compression clamp

CRA compression clamps are manufactured from aluminium alloy with a purity of 99.5% or higher. They offer high versatility for various applications.



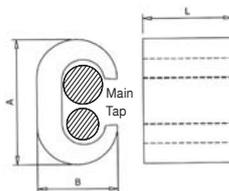
Code	Ref.	Main		Tap		Dimensions (mm)			Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	A	B	L			
140100	CRA-1	35	25	35	25	25.0	16.4	38.5	2.525	1	150
140110	CRA-2	70	50	50	50	35.0	22.0	65.0	6.880	1	100
140120	CRA-3	120	95	35	10	41.0	25.5	65.0	11.350	1	75
140122	CRA-3A	120	95	120	95	-	-	-	11.650	1	75
140130	CRA-4	185	150	95	70	51.9	31.5	65.0	12.150	1	50

10702 CRC

Copper compression clamp

CRC branch connectors are manufactured from electrolytic copper and are used for copper-to-copper (Cu-Cu) connections and branches, mainly in earthing installations.

According to EN 62561-1 standard.



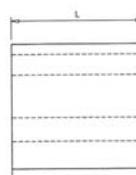
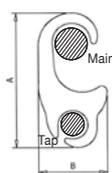
Code	Ref.	Main		Tap		Dimensions (mm)			Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	A	B	L			
145120	CRC-3	25	10	6	4	18.6	11.7	17.5	1.918	50	300
145130	CRC-4	25	16	10	4	19.5	11.8	17.6	1.774	50	300
145140	CRC-5	25	16	25	16	20.5	12.0	17.7	1.790	50	250
145150	CRC-6	35	35	25	4	25.2	15.5	21.1	3.848	25	125
145160	CRC-7	35	35	35	16	26.7	15.2	21.3	3.612	25	125
145170	CRC-8	70	50	35	4	33.3	20.4	27.2	9.315	10	60
145180	CRC-9	70	50	70	35	34.2	20.5	27.2	8.545	10	60
145190	CRC-10	95	70	35	16	41.9	23.8	29.1	14.795	10	40
145200	CRC-11	95	70	70	35	41.0	25.1	29.4	14.002	10	40
145210	CRC-12	95	95	95	95	39.8	25.0	29.1	12.039	10	40
145220	CRC-13	120	120	120	25	44.1	27.2	30.0	15.579	10	40
145230	CRC-14	185	150	95	50	44.5	27.2	27.5	13.105	10	50
145240	CRC-15	150	150	150	70	45.1	27.9	30.2	10.685	5	30
145250	CRC-16*	185	120	185	95	53.7	33.2	35.2	25.700	5	25

* With rigid copper cable, it can also be used with the 240 mm² section (in the maximum of the principal).

10703 CRS

Bimetallic compression clamp

CRS compression clamps are manufactured from high-purity aluminium profile ($\geq 99.5\%$) and are designed for aluminium-to-aluminium (Al-Al) or aluminium-to-copper (Al-Cu) connections. For Al-Cu connections, the smaller cross-section conductor must always be copper, never aluminium.

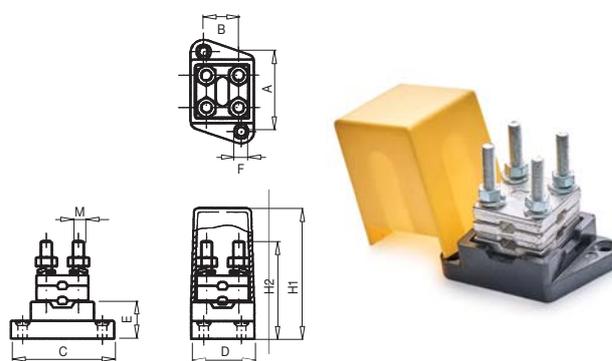


Code	Ref.	Main		Tap		Dimensions (mm)			Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	A	B	L			
151090	CRS-0	35	10	35	10	42.5	19.5	46.0	1.500	1	100
151100	CRS-1	35	16	10	2.5	24.8	14.0	18.0	0.840	1	200
151120	CRS-3	120	50	70	10	53.0	25.9	50.0	0.874	1	75
151170	CRS-8	120	95	120	70	50.0	22.1	50.0	0.747	1	75
151180	CRS-9	185	120	70	10	57.0	29.0	50.0	1.028	1	65
151190	CRS-10	240	120	150	70	56.0	28.7	100.0	1.998	1	40
151200	CRS-11	240	95	240	95	56.0	31.3	100.0	1.772	1	35
151210	CRS-12	300	240	70	10	56.6	31.7	50.0	1.088	1	60

10801 BEB

Bimetallic clamp

BEB bimetallic clamps are manufactured from brass with a tin-plated surface finish. The base is made of bakelite, providing high temperature resistance.



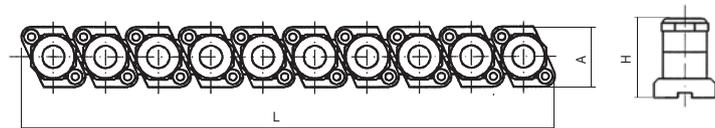
Code	Ref.	Sections (mm ²)		Dimensions (mm)									Kg x 100	Bag	Box
		Max.	Min.	A	B	C	D	E	F	H1	H2	M			
220100	BEB-63	70	70	42	22	56	34	20	4.0	63	53	6	16.200	-	12
220110	BEB-95	95	95	54	30	72	44	22	5.5	76	72	7	30.800	-	6
220120	BEB-150	150	150	66	40	84	54	25	5.5	87	82	7	45.600	-	3
220130	BEB-240	240	240	82	45	101	64	26	6.5	102	96	8	72.200	-	2

10802 ADRI

Polyamide strip block

ADRI strip blocks are manufactured from 6.6 self-extinguishing polyamide in accordance with the CE Directive. All terminals are supplied in ten-pole strips and are suitable for connections and panel board applications.

CE



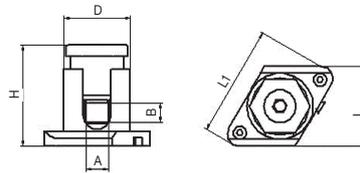
Code	Ref.	Section (mm ²)	Dimensions (mm)			Kg x 100	Bag	Box
			A	H	L1			
231100	ADRI-6	6	28.5	19.5	164	5.340	-	10
231110	ADRI-10	10	28.5	24.0	204	11.600	-	10
231120	ADRI-16	16	28.5	27.2	214	14.540	-	10
231130	ADRI-25	25	28.5	29.3	224	16.660	-	10
231140	ADRI-35	35	28.5	34.2	261	28.660	-	10

10803 BUS

Polyamide one-pole strip block

The BUS terminal blocks are manufactured from self-extinguishing polyamide 6.6 in compliance with the CE Directive. All terminal blocks are interconnectable and are ideal for use in electrical panels.

CE



Code	Ref.	Section (mm ²)	Dimensions (mm)						Kg x100	Bag	Box
			A	B	D	H	L	L1			
233130	BUS-10/16	10/16	6.5	10.0	25.0	40.0	33.0	48.0	2.600	-	50
233150	BUS-25/35	25/35	8.5	12.0	25.0	43.0	33.0	48.0	3.400	-	40
233160	BUS-50	50	10.0	14.5	31.5	52.0	40.0	58.0	5.300	-	25
233170	BUS-70	70	12.0	26.0	38.0	68.0	47.0	69.0	8.000	-	20
233180	BUS-95	95	13.0	30.0	45.0	56.0	51.0	83.0	11.300	-	15
233190	BUS-120	120	14.0	34.0	48.0	61.0	54.0	83.0	75.700	-	15
233200	BUS-150	150	21.0	34.0	52.0	80.0	73.5	122.0	14.100	-	4

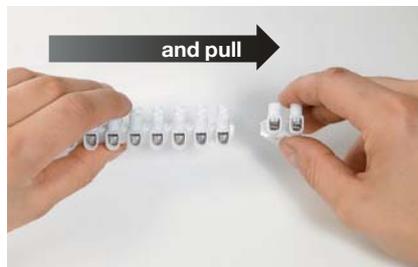
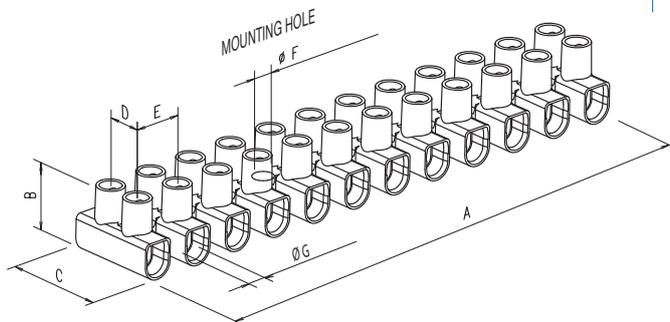
10804 SKL

Terminals strips

SKL terminal strips are manufactured from polypropylene with additives, in accordance with the RoHS Directive.

They are easy to separate and are certified with the AENOR  mark.

CE



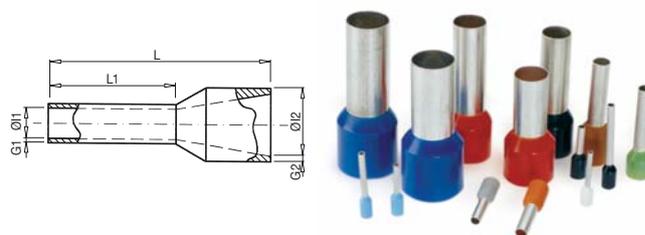
In accordance to 60998-1 standard and EN 60998-2-1 standard and all main european certificate.

Code	Ref.	Color	Section (mm ²)	Metrics	Dimensions (mm)							Kg x 100	Bag	Box
					A	B	C	ØG	E	D	ØF			
315350	SKL-4	◇	4	M2.6	94.9	13.0	16.6	3.2	8.1	6.4	2.6	19.0	10	500
315360	SKL-6	◇	6	M3.0	116.5	14.9	18.9	3.6	10.0	7.3	3.4	26.5	10	250
315370	SKL-10	◇	10	M3.5	133.8	17.3	23.4	4.3	11.5	10.0	3.7	43.6	10	250
315380	SKL-16	◇	16	M4.0	174.5	20.7	25.0	5.5	15.0	11.0	4.9	76.8	10	100
315390	SKL-25	◇	25	M5.0	187.3	28.0	30.0	7.0	16.0	11.5	4.5	116.0	10	50
315410	SKL-4N	◆	4	M2.6	94.9	13.0	16.6	3.2	8.1	6.4	2.6	19.0	10	500
315420	SKL-6N	◆	6	M3.0	116.5	14.9	18.9	3.6	10.0	7.3	3.4	26.5	10	250
315430	SKL-10N	◆	10	M3.5	133.8	17.3	23.4	4.3	11.5	10.0	3.7	43.6	10	250
315440	SKL-16N	◆	16	M4.0	174.7	20.7	25.0	5.5	15.0	11.0	4.9	76.8	10	100
315450	SKL-25N	◆	25	M5.0	187.3	28.0	30.0	7.0	16.0	11.5	4.5	116.0	10	50

10901 APF

Cord end terminal

APF cord end terminals are manufactured from electrolytic copper capillary tube with a tin-plated finish to improve electrical contact. The insulating sleeve is made of nylon (PA). They feature an “Easy Enter” design that facilitates the insertion of flexible copper wire, improving efficiency and accuracy during the crimping process.

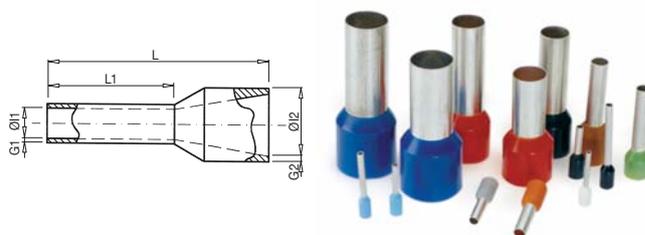


Sec. (mm ²)	L1	Code	Ref.	Colour F	Dimensions (mm)						Kg x1.000	Bag	Box
					L	L1	Ø1	G1	Ø2	G2			
0.50	8	245100	APF-0,50/8	WHITE	14.5	8	1.0	0.15	2.6	0.25	0.088	100	4000
	10	260100	APF-0,50/10		16.0	10	1.0	0.15	2.6	0.25			
0.75	8	245110	APF-0,75/8	BLUE	14.6	8	1.2	0.15	2.8	0.25	0.100	100	4000
	12	260110	APF-0,75/12		18.4	12	1.2	0.15	2.8	0.25			
1	8	245120	APF-1,00/8	RED	14.6	8	1.4	0.15	3.0	0.25	0.116	100	3500
	12	260120	APF-1,00/12		18.4	12	1.4	0.15	3.0	0.25			
1.5	8	245130	APF-1,50/8	BLACK	14.6	8	1.7	0.15	3.5	0.25	0.134	100	3000
	18	260130	APF-1,50/18		24.4	18	1.7	0.15	3.5	0.25			
2.5	8	245140	APF-2,50/8	GREY	15.2	8	2.2	0.15	4.0	0.25	0.165	100	2500
	18	260140	APF-2,50/18		25.0	18	2.2	0.15	4.0	0.25			
4	10	245150	APF-4,00/10	ORANGE	16.5	10	2.8	0.20	4.4	0.30	0.231	100	2000
	18	260150	APF-4,00/18		25.5	18	2.8	0.20	4.4	0.30			
6	12	245160	APF-6,00/12	GREEN	20.0	12	3.5	0.20	6.3	0.30	0.388	100	1000
	18	260160	APF-6,00/18		26.0	18	3.5	0.20	6.3	0.30			
10	12	245170	APF-10,00/12	BROWN	21.5	12	4.5	0.20	7.6	0.40	0.556	100	800
	18	260170	APF-10,00/18		27.5	18	4.5	0.20	7.6	0.40			
16	12	245180	APF-16,00/12	IVORY	22.2	12	5.8	0.20	8.8	0.40	0.762	100	500
	18	260180	APF-16,00/18		28.2	18	5.8	0.20	8.8	0.40			
25	16	245190	APF-25,00/16	BLACK	29.0	16	7.3	0.20	11.2	0.40	1.134	50	350
	22	260190	APF-25,00/22		35.0	22	7.3	0.20	11.2	0.40			
35	16	245200	APF-35,00/16	RED	30.0	16	8.3	0.20	12.5	0.50	1.308	50	250
	22	260200	APF-35,00/22		39.0	22	8.3	0.20	12.5	0.50			
50	20	245210	APF-50,00/20	BLUE	36.0	20	10.3	0.30	15.0	0.60	2.300	50	150
	25	260210	APF-50,00/25		40.0	25	10.3	0.30	15.0	0.60			

10902 APF

Cord end terminal

APF cord end terminals are manufactured from electrolytic copper capillary tube with a tin-plated finish to improve electrical contact. The insulating sleeve is made of nylon (PA). They feature an “Easy Enter” design that facilitates the insertion of flexible copper wire, improving efficiency and accuracy during the crimping process.

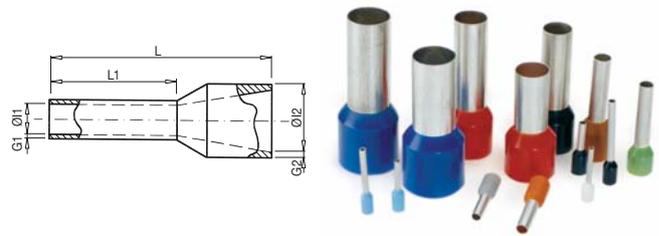


Sec. (mm ²)	L1	Code	Ref.	Colour W	Dimensions (mm)						Kg x1.000	Bag	Box
					L	L1	Ø11	G1	Ø12	G2			
0.50	8	246100	APF-0,50W/8	ORANGE	14.5	8	1.0	0.15	2.6	0.25	0.088	100	4000
	10	261100	APF-0,50W/10		16.0	10	1.0	0.15	2.6	0.25			
0.75	8	246110	APF-0,75W/8	WHITE	14.6	8	1.2	0.15	2.8	0.25	0.100	100	4000
	12	261110	APF-0,75W/12		18.4	12	1.2	0.15	2.8	0.25			
1	8	246120	APF-1,00W/8	YELLOW	14.6	8	1.4	0.15	3.0	0.25	0.116	100	3500
	12	261120	APF-1,00W/12		18.4	12	1.4	0.15	3.0	0.25			
1.5	8	246130	APF-1,50W/8	RED	14.6	8	1.7	0.15	3.5	0.25	0.134	100	3000
	18	261130	APF-1,50W/18		24.4	18	1.7	0.15	3.5	0.25			
2.5	8	246140	APF-2,50W/8	BLUE	15.2	8	2.2	0.15	4.0	0.25	0.165	100	2500
	18	261140	APF-2,50W/18		25.0	18	2.2	0.15	4.0	0.25			
4	10	246150	APF-4,00W/10	GREY	16.5	10	2.8	0.20	4.4	0.30	0.231	100	2000
	18	261150	APF-4,00W/18		25.5	18	2.8	0.20	4.4	0.30			
6	12	246160	APF-6,00W/12	BLACK	20.0	12	3.5	0.20	6.3	0.30	0.388	100	1000
	18	261160	APF-6,00W/18		26.0	18	3.5	0.20	6.3	0.30			
10	12	246170	APF-10,00W/12	IVORY	21.5	12	4.5	0.20	7.6	0.40	0.556	100	800
	18	261170	APF-10,00W/18		27.5	18	4.5	0.20	7.6	0.40			
16	12	246180	APF-16,00W/12	GREEN	22.2	12	5.8	0.20	8.8	0.40	0.762	100	500
	18	261180	APF-16,00W/18		28.2	18	5.8	0.20	8.8	0.40			
25	16	246190	APF-25,00W/16	BROWN	29.0	16	7.3	0.20	11.2	0.40	1.134	50	350
	22	261190	APF-25,00W/22		35.0	22	7.3	0.20	11.2	0.40			
35	16	246200	APF-35,00W/16	BEIGE	30.0	16	8.3	0.20	12.5	0.50	1.308	50	250
	22	261200	APF-35,00W/22		39.0	22	8.3	0.20	12.5	0.50			
50	20	246210	APF-50,00W/20	OLIVE	36.0	20	10.3	0.30	15.0	0.60	2.300	50	150
	25	261210	APF-50,00W/25		40.0	25	10.3	0.30	15.0	0.60			

10903 APF

Cord end terminal

APF cord end terminals are manufactured from electrolytic copper capillary tube with a tin-plated finish to improve electrical contact. The insulating sleeve is made of nylon (PA). They feature an “Easy Enter” design that facilitates the insertion of flexible copper wire, improving efficiency and accuracy during the crimping process.



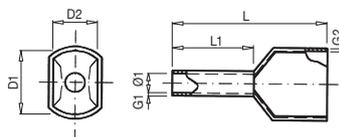
UL certified.

Sec. (mm ²)	L1	Code	Ref.	Colour D	Dimensions (mm)						Kg x1.000	Bag	Box
					L	L1	Ø11	G1	Ø12	G2			
0.50	8	245100	APF-0,50/8	WHITE	14.5	8	1.0	0.15	2.6	0.25	0.088	100	4000
	10	260100	APF-0,50/10		16.0	10	1.0	0.15	2.6	0.25			
0.75	8	250110	APF-0,75D/8	GREY	14.6	8	1.2	0.15	2.8	0.25	0.100	100	4000
	12	262110	APF-0,75D/12		18.4	12	1.2	0.15	2.8	0.25			
1	8	245120	APF-1,00/8	RED	14.6	8	1.4	0.15	3.0	0.25	0.116	100	3500
	12	260120	APF-1,00/12		18.4	12	1.4	0.15	3.0	0.25			
1.5	8	245130	APF-1,50/8	BLACK	14.6	8	1.7	0.15	3.5	0.25	0.134	100	3000
	18	260130	APF-1,50/18		24.4	18	1.7	0.15	3.5	0.25			
2.5	8	246140	APF-2,50W/8	BLUE	15.2	8	2.2	0.15	4.0	0.25	0.165	100	2500
	18	261140	APF-2,50W/18		25.0	18	2.2	0.15	4.0	0.25			
4	10	246150	APF-4,00W/10	GRIS	16.5	10	2.8	0.20	4.4	0.30	0.231	100	2000
	18	261150	APF-4,00W/18		25.5	18	2.8	0.20	4.4	0.30			
6	12	250160	APF-6,00D/12	YELLOW	20.0	12	3.5	0.20	6.3	0.30	0.388	100	1000
	18	262160	APF-6,00D/18		26.0	18	3.5	0.20	6.3	0.30			
10	12	250170	APF-10,00D/12	RED	21.5	12	4.5	0.20	7.6	0.40	0.556	100	800
	18	262170	APF-10,00D/18		27.5	18	4.5	0.20	7.6	0.40			
16	12	250180	APF-16,00D/12	AZUL	22.2	12	5.8	0.20	8.8	0.40	0.762	100	500
	18	262180	APF-16,00D/18		28.2	18	5.8	0.20	8.8	0.40			
25	16	250190	APF-25,00D/16	YELLOW	29.0	16	7.3	0.20	11.2	0.40	1.134	50	350
	22	262190	APF-25,00D/22		35.0	22	7.3	0.20	11.2	0.40			
35	16	245200	APF-35,00/16	RED	30.0	16	8.3	0.20	12.5	0.50	1.308	50	250
	22	260200	APF-35,00/22		39.0	22	8.3	0.20	12.5	0.50			
50	20	245210	APF-50,00/20	BLUE	36.0	20	10.3	0.30	15.0	0.60	2.300	50	150
	25	260210	APF-50,00/25		40.0	25	10.3	0.30	15.0	0.60			

10904 APF/D

Twin cord end terminal

APF/D cord end terminals are manufactured from electrolytic copper capillary tube with a tin-plated finish to improve electrical contact. The insulating part is made of nylon (PA). They are designed for use in electrical panels.



 UL certified.

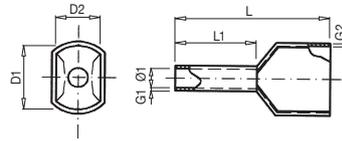
Sec. (mm ²)	L1	Code	Ref.	Colour F	Dimensions (mm)						Kg x1.000	Bag	Box	
					ØI	D2	D1	L	L1	G1				G2
0.50	8	255100	APF/D-0,50D	WHITE	1.5	2.5	4.7	15.0	8.0	0.15	0.25	0.110	100	3500
0.75	8	258110	APF/D-0,75	BLUE	1.8	2.8	5.0	15.0	8.0	0.15	0.25	0.140	100	3000
1	8	255120	APF/D-1,00D	RED	2.3	3.4	5.4	15.0	8.0	0.15	0.30	0.160	100	2500
1.5	8	255130	APF/D-1,50D	BLACK	2.3	3.6	6.6	16.0	8.0	0.15	0.30	0.200	100	2000
2.5	10	258140	APF/D-2,50	GREY	2.9	4.2	7.8	18.5	10.0	0.20	0.30	0.300	100	1000
4	12	258150	APF/D-4,00	ORANGE	3.8	4.9	8.8	23.0	12.0	0.20	0.30	0.460	100	800
6	14	258160	APF/D-6,00	GREEN	4.9	6.9	10.0	26.0	14.0	0.20	0.40	0.640	100	500
10	14	258170	APF/D-10,00	BROWN	6.5	7.2	13.0	26.0	14.0	0.20	0.40	0.990	100	400
16	14	258180	APF/D-16,00	IVORY	8.3	9.6	18.4	30.0	14.0	0.30	0.40	1.450	100	200

Sec. (mm ²)	L1	Code	Ref.	Colour W	Dimensions (mm)						Kg x1.000	Bag	Box	
					ØI	D2	D1	L	L1	G1				G2
0.50	8	256100	APF/D-0,50W	ORANGE	1.5	2.5	4.7	15.0	8.0	0.15	0.25	0.110	100	3500
0.75	8	256110	APF/D-0,75W	WHITE	1.8	2.8	5.0	15.0	8.0	0.15	0.25	0.140	100	3000
1	8	256120	APF/D-1,00W	YELLOW	2.3	3.4	5.4	15.0	8.0	0.15	0.30	0.160	100	2500
1.5	8	256130	APF/D-1,50W	RED	2.3	3.6	6.6	16.0	8.0	0.15	0.30	0.200	100	2000
2.5	10	255140	APF/D-2,50D	BLUE	2.9	4.2	7.8	18.5	10.0	0.20	0.30	0.300	100	1000
4	12	255150	APF/D-4,00D	GREY	3.8	4.9	8.8	23.0	12.0	0.20	0.30	0.460	100	800
6	14	256160	APF/D-6,00W	BLACK	4.9	6.9	10.0	26.0	14.0	0.20	0.40	0.640	100	500
10	14	256170	APF/D-10,00W	IVORY	6.5	7.2	13.0	26.0	14.0	0.20	0.40	0.990	100	400
16	14	256180	APF/D-16,00W	GREEN	8.3	9.6	18.4	30.0	14.0	0.30	0.40	1.450	100	200

10904 APF/D

Twin cord end terminal

APF/D cord end terminals are manufactured from electrolytic copper capillary tube with a tin-plated finish to improve electrical contact. The insulating part is made of nylon (PA). They are designed for use in electrical panels.



UL certified.

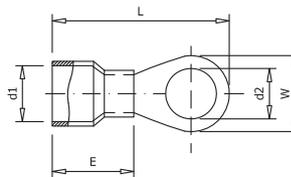
Sec. (mm ²)	L1	Code	Ref.	Colour D	Dimensions (mm)							Kg x1.000	Bag	Box
					Ø	D2	D1	L	L1	G1	G2			
0.50	8	255100	APF/D-0,50D	WHITE	1.5	2.5	4.7	15.0	8.0	0.15	0.25	0.110	100	3500
0.75	8	255110	APF/D-0,75D	GREY	1.8	2.8	5.0	15.0	8.0	0.15	0.25	0.140	100	3000
1	8	255120	APF/D-1,00D	RED	2.3	3.4	5.4	15.0	8.0	0.15	0.30	0.160	100	2500
1.5	8	255130	APF/D-1,50D	BLACK	2.3	3.6	6.6	16.0	8.0	0.15	0.30	0.200	100	2000
2.5	10	255140	APF/D-2,50D	BLUE	2.9	4.2	7.8	18.5	10.0	0.20	0.30	0.300	100	1000
4	12	255150	APF/D-4,00D	GREY	3.8	4.9	8.8	23.0	12.0	0.20	0.30	0.460	100	800
6	14	255160	APF/D-6,00	YELLOW	4.9	6.9	10.0	26.0	14.0	0.20	0.40	0.640	100	500
10	14	255170	APF/D-10,00D	RED	6.5	7.2	13.0	26.0	14.0	0.20	0.40	0.990	100	400
16	14	255180	APF/D-16,00D	BLUE	8.3	9.6	18.4	30.0	14.0	0.30	0.40	1.450	100	200

11001 AT

Insulated ring terminal

AT terminals are manufactured from tinned electrolytic copper and insulated with flame-retardant PVC.

Color-coded according to DIN 46237 standard.



UL certified.

Code	Ref.	Section (mm ²)	Metric	Dimensions (mm)					Kg x1.000	Bag	Box
				d2	W	E	d1	L			
270100	AT-1,5/3	1.5	3	3.2	5.5	10.0	1.7	17.5	0.580	100	1600
270110	AT-1,5/4		4	4.3	6.6			19.4	0.620	100	1600
270120	AT-1,5/5		5	5.3	8.0			20.8	0.680	100	1600
270130	AT-1,5/6		6	6.4	10.0			23.0	0.850	100	1000
270140	AT-1,5/8		8	8.4	11.6			26.8	0.930	100	1000
270150	AT-1,5/10		10	10.5	13.6			30.5	-	100	1000
270160	AT-2,5/3	2.5	3	3.2	6.6	10.0	2.3	17.8	0.708	100	1400
270170	AT-2,5/4		4	4.3	6.6			19.4	0.710	100	1400
270180	AT-2,5/5		5	5.3	8.5			21.8	0.829	100	1200
270190	AT-2,5/6		6	6.4	11.0			26.8	1.172	100	1000
270200	AT-2,5/8		8	8.4	11.8			26.8	1.000	100	1000
270210	AT-2,5/10		10	10.5	13.6			30.5	-	100	1000
270220	AT-6/4	6.0	4	4.3	7.2	13.0	3.4	22.7	1.341	100	800
270230	AT-6/5		5	5.3	9.5			26.0	1.623	100	700
270240	AT-6/6		6	6.4	12.0			29.5	1.927	100	600
270250	AT-6/8		8	8.4	15.0			34.0	2.374	100	500
270260	AT-6/10		10	10.5	15.0			34.0	-	100	400

11002 AU

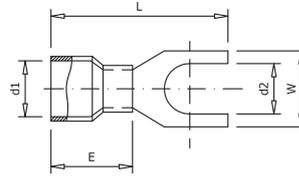
Insulated fork terminal

Ideal for quick screw connections without complete removal. Manufactured from tinned electrolytic copper with flame-retardant PVC insulation.

Color-coded according to DIN 46237 standard.



UL certified.



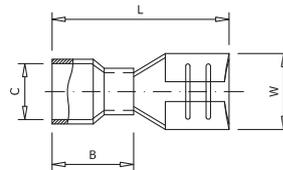
Code	Ref.	Section (mm ²)	Metric	Dimensions (mm)					Kg x1.000	Bag	Box
				d2	W	E	d1	L			
275100	AU-1,5/3	1.5	3	3.2	5.7	10.0	1.7	21.0	0.660	100	1600
275110	AU-1,5/4		4	4.3	6.4			21.0	0.650	100	1600
275120	AU-1,5/5		5	5.3	8.1			21.0	0.680	100	1400
275130	AU-1,5/6		6	6.4	9.5			21.0	0.680	100	1400
275140	AU-1,5/8		8	-	-			-	1.000	100	1000
275160	AU-2,5/3	2.5	3	3.2	5.7	10.0	2.3	21.0	0.771	100	1400
275170	AU-2,5/4		4	4.3	6.4			21.0	0.748	100	1400
275180	AU-2,5/5		5	5.3	7.9			21.0	0.786	100	1200
275190	AU-2,5/6		6	6.4	9.3			21.0	0.781	100	1200
275200	AU-2,5/8		8	-	-			-	0.946	100	800
275220	AU-6/4	6.0	4	4.3	8.3	13.0	3.4	25.5	1.542	100	800
275230	AU-6/5		5	5.3	9.0			25.5	1.523	100	800
275240	AU-6/6		6	6.4	9.0			25.5	1.417	100	700
275250	AU-6/8		8	8.4	14.0			30.5	2.116	100	600

11003 AFH

Insulated female connector

Faston-type female terminals for quick and secure connections. Manufactured from tinned electrolytic copper with PVC insulation and an internal metal sleeve for vibration resistance.

Color-coded according to DIN 46237 standard.

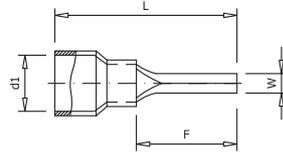


Code	Ref.	Section (mm ²)	Dimensions (mm)				Kg x1.000	Bag	Box
			W	L	B	C			
280100	AFH-1,5/2,8	1.5	3.2	19.0	10.5	1.7	0.604	100	1600
280120	AFH-1,5/4,8		5.0	19.4	10.5	1.7	0.754	100	1400
280130	AFH-1,5/6,3		6.6	20.8	10.5	1.7	0.874	100	1200
280140	AFH-2,5/4,8	2.5	5.0	19.4	10.5	2.3	0.942	100	1400
280150	AFH-2,5/6,3		6.6	20.8	10.5	2.3	1.022	100	1000
280160	AFH-6/6,3	6.0	6.6	23.3	13.0	3.4	1.534	100	700
280170	AFH-6/9,5		10.0	28.6	13.0	3.4	2.534	100	500

11004 AP

Insulated pin terminal

Ferrule-type terminals designed for secure and durable connections of multi-strand conductors. Manufactured from tinned electrolytic copper with flame-retardant PVC insulation.

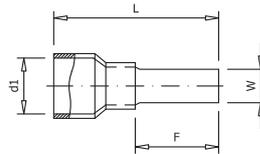


Code	Ref.	Section (mm ²)	Dimensions (mm)				Kg x1.000	Bag	Box
			W	F	L	d1			
285100	AP-1,5	1.5	1.9	10.0	20.0	1.7	0.670	100	2000
285130	APL-1,5		1.9	12.0	21.8	1.7	0.720	100	2000
285110	AP-2,5	2.5	1.9	10.0	20.0	2.3	0.752	100	1800
285140	APL-2,5		1.9	12.0	21.8	2.3	0.806	100	1800
285120	AP-6	6.0	2.8	13.0	27.0	3.4	1.639	100	800

11004 APP

Insulated blade terminal

Terminals designed for quick and secure connections in European-style terminals. The flat pin ensures easy insertion and removal. Manufactured from tinned electrolytic copper strip with flame-retardant PVC insulation.



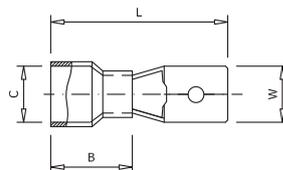
 UL certified.

Code	Ref.	Section (mm ²)	Dimensions (mm)				Kg x1.000	Bag	Box
			W	F	L	d1			
290100	APP-1,5	1.5	2.8	9.0	18.8	1.7	0.580	100	1600
290130	APPL-1,5		2.2	18.0	27.8	1.7	0.660	100	1400
290110	APP-2,5	2.5	2.8	9.0	18.8	2.3	0.670	100	1600
290140	APPL-2,5		2.2	18.0	27.8	2.3	0.766	100	1400
290120	APP-6	6.0	2.8	10.0	23.0	3.4	1.221	100	900
290150	APPL-6		4.5	18.0	31.0	3.4	1.693	100	700

11003 AFM

Insulated male connector

AFM connectors are manufactured from electrolytic copper strap with PVC insulation. They incorporate an internal sleeve that provides enhanced security against potential mechanical vibrations.



Code	Ref.	Section (mm ²)	Dimensions (mm)				Kg x1.000	Bag	Box
			W	L	B	C			
295100	AFM-1,5	1.5	6.35	21.8	10.5	1.7	0.794	100	1600
295110	AFM-2,5	2.5	6.35	21.8	10.5	2.3	0.882	100	1400
295120	AFM-6,0	6.0	6.35	24.0	13.0	3.4	1.494	100	800

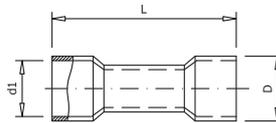
11005 AML

Insulated butt-connector

AML butt-connectors are manufactured from electrolytic copper strap with PVC insulation. They incorporate an internal sleeve that provides enhanced security against potential mechanical vibrations.



UL certified.

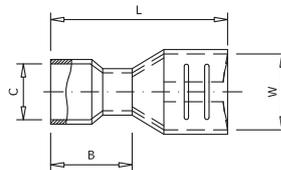


Code	Ref.	Section (mm ²)	Dimensions (mm)			Kg x1.000	Bag	Box
			L	D	L			
300100	AML-1,5	1.5	24.2	4.0	1.7	0.840	100	1000
300110	AML-2,5	2.5	24.2	4.5	2.3	1.010	100	800
300120	AML-6	6.0	26.0	6.3	3.4	2.130	100	500

11003 AFH/A

Fully insulated female connector

AFH/A connectors are manufactured from electrolytic copper strap with PVC insulation. They incorporate an internal sleeve that provides enhanced security against potential mechanical vibrations.

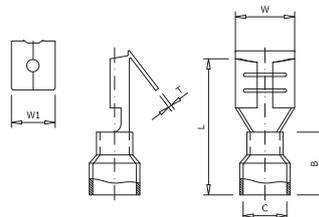


Code	Ref.	Section (mm ²)	Dimensions (mm)				Kg x1.000	Bag	Box
			W	L	B	C			
305100	AFH/A-1,5	1.5	6.6	21.8	10.5	1.7	1.094	100	800
305110	AFH/A-2,5	2.5		22.2	10.5	2.3	1.282	100	800
305120	AFH/A-6	6.0		24.2	12.5	3.4	1.764	100	500

11003 AFH/M

Insulated piggyback terminal

AFH/M terminals are manufactured from electrolytic copper strap with PVC insulation. They incorporate an internal sleeve that provides enhanced security against potential mechanical vibrations.

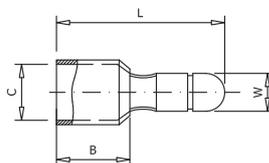


Code	Ref.	Section (mm ²)	Dimensions (mm)							Kg x1.000	Bag	Box
			W	W1	L	B	C	T	Thickness			
305130	AFH/M-1,5	1.5	6.6	6.35	22.5	10.5	1.7	3.5	0.8	1.294	100	700
305140	AFH/M-2,5	2.5	6.6	6.35	22.5	10.5	2.3	4.3	0.8	1.442	100	700

11003 ACM

Insulated male bullet terminal

ACM terminals are manufactured from electrolytic copper strap with PVC insulation. They incorporate an internal sleeve that provides enhanced security against potential mechanical vibrations.

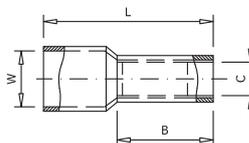


Code	Ref.	Section (mm ²)	Dimensions (mm)				Kg x1.000	Bag	Box
			W	L	B	C			
305150	ACM-1,5	1.5	4.0	21.0	10.0	1.7	100	1600	
305160	ACM-2,5	2.5				2.3			

11003 ACH

Insulated socket connector

ACH connectors are manufactured from electrolytic copper strap with PVC insulation. They incorporate an internal sleeve that provides enhanced security against potential mechanical vibrations.



Code	Ref.	Section (mm ²)	Dimensions (mm)				Kg x1.000	Bag	Box
			W	L	B	C			
305170	ACH-1,5	1.5	3.9	23.8	10.0	2.7	100	1000	
305180	ACH-2,5	2.5				3.2			

11101 ABT

Insulating piercing connector

ABT connectors are manufactured from PA 6.6 with fiberglass, providing excellent mechanical and thermal resistance. The tinned brass teeth ensure excellent electrical conductivity. They allow safe piercing connections of main and tap cables without stripping. Suitable for low-voltage overhead cables. IP65 protection rating, suitable for outdoor use.



ABT/CT-150/150

ABT/CT-185/185-2
ABT/CT-240/240-2



ABT/CT-95/35
ABT/CT-95/95
ABT/CT-150/35
ABT/CT-240/120

ABT/CT-35/6
ABT/CT-95/10

Code	Ref.	Section (mm ²)				Kg x 100	Bag	Box
		Main		Tap				
136090	ABT/CT-35/6	10	35	1.5	6	6.150	1	-
136091	ABT/CT-95/10	10	95	1.5	10	6.180	1	-
136120	ABT/CT-95/35	16	95	2.5	35	14.840	1	-
136130	ABT/CT-150/35	35	150	6	35	15.810	1	-
136140	ABT/CT-95/95	25	95	25	95	15.890	1	-
136142	ABT/CT-150/150	35	150	35	150	34.630	1	-
136150	ABT/CT-185/185-2	35	185	35	185	54.460	1	-
136152	ABT/CT-240/240-2	95	240	95	240	59.330	1	-

11102 PA-1000 and PA-1500

Line connection anchor

The PA-1000 and PA-1500 line connection anchors are designed for securing overhead service conductors. They are made with a body of fiberglass-reinforced thermoplastic material, with UV-resistant additives. The fastening plate is made of stainless steel and includes a protective thimble.



Code	Ref.	Section (mm ²)		Load daN	Kg x 100	Bag	Box
		Min.	Max.				
137099	PA-1000	29.5	35	1000	44.000	1	-
137100	PA-1500	54.6	80	1500	46.450	1	15

11102 PA-2000

Line connection anchor

The PA-2000 line connection clamp is designed for securing service lines subject to higher mechanical stresses. The body is made of aluminum alloy, with a stainless steel fastening plate and a UV-resistant fiberglass-reinforced polymer clamping wedge.



Code	Ref.	Section (mm ²)		Load daN	Kg x 100	Bag	Box
		Min.	Max.				
137105	PA-2000	54.6	80	2000	73.420	1	15

11102 PA-25

Line connection anchor

PA-25 anchor for service drop installations. Made of reinforced thermoplastic with polymer wedge. Stainless steel fixing strap.



Code	Ref.	Section (mm ²)		Load daN	Kg x 100	Bag	Box
		Min.	Max.				
137120	PA-25	2x16	4x25	200	10.820	1	20

11103 ES-1500

Suspension unit

The ES-1500 suspension assembly consists of an aluminum alloy bracket and a suspension clamp with a movable fastening blade made of reinforced plastic. It is designed to simplify installation and ensure secure attachment of overhead service lines.



Code	Ref.	Section (mm ²)		Load daN	Kg x 100	Bag	Box
		Min.	Max.				
361100	ES-1500	54.6	80	1500	27.080	1	-

11103 CA-1500

Console

High-strength aluminum console with central anchoring eye. Allows attachment of suspension clamps via pin.



Code	Ref.	Load daN	Kg x 100	Bag	Box
361130	CA-1500	1500	47.160	1	-

11103 RA-25

Console

Made of high-strength thermoplastic, designed for anchoring at suspension points or direction changes. Includes a stainless steel ring for secure conductor fastening.



Code	Ref.	Section (mm ²)		Load daN	Kg x 100	Bag	Box
		Min.	Max.				
361140	RA-25	2x16	4x25	250	8.000	1	-

11106 BRPF

Synthetic wall-mount support for nail fixing

BRPF clamps are designed for the installation of braided cables on facades. They are manufactured from thermoplastic material and feature an expansion-pin anchoring system.



Code	Ref.	Capacity (Ø mm)	Wall separation (mm)	 x 100	 Bag	 Box
363100	BRPF-1	25 - 55	10	8.300	-	50
363110	BRPF-6		60	8.600	-	50

11106 BRPV

Synthetic wall-mount support for screw fixing

BRPV clamps are designed for the installation of braided cables on facades. They are manufactured from thermoplastic material and feature a screw-and-plastic-expansion-plug anchoring system.



Code	Ref.	Capacity (Ø mm)	Wall separation (mm)	 x 100	 Bag	 Box
364100	BRPV-1	25 - 55	10	6.800	-	50
364110	BRPV-6		60	8.300	-	50
364120	BRPV-10		100	8.300	-	50

11105 ARC

Plasticized support for lines

ARC supports are manufactured from plastic-coated stainless steel. No tools are required for installation. They are reusable.



Code	Ref.	Nail plug	Capacity (Ø mm)	Wall separation (mm)	 x 100	 Bag	 Box
366100	ARC-1	CD-12	45	10	4.400	-	100
366110	ARC-2	CD-12	45	60	5.900	-	100
366120	ARC-3	CD-14	45	100	12.600	-	75
366130	ARC-25	CD-12	52	10	4.900	-	100
366140	ARC-225	CD-12	52	60	6.000	-	75
366150	ARC-2250	CD-14	52	100	13.500	-	75
366160	ARC-35	CD-12	68	10	5.400	-	150
366170	ARC-335	CD-12	68	60	6.400	-	50
366180	ARC-3350	CD-14	68	100	14.400	-	50

11105 BIP

Plasticized support for line connections

BIP supports are manufactured from plastic-coated stainless steel. No tools are required for installation. They are reusable.



For concrete poles

Code	Ref.	Capacity (Ø mm)	Wall separation (mm)	 x 100	 Bag	 Box
367100	BIP-120 CF	10 - 22	10	10	-	100
367110	BIP-180 CF	10 - 42	10	10	-	100



For concrete or wooden poles

Code	Ref.	Capacity (Ø mm)	Wall separation (mm)	 x 100	 Bag	 Box
367120	BIP-120 CV	10 - 22	10	10	-	100
367130	BIP-180 CV	10 - 42	10	10	-	100

Nail plug included.

11107 MULTI

Plasticized tie

MULTI supports are manufactured from plasticized steel. No tool required for tightening. They are reusable.

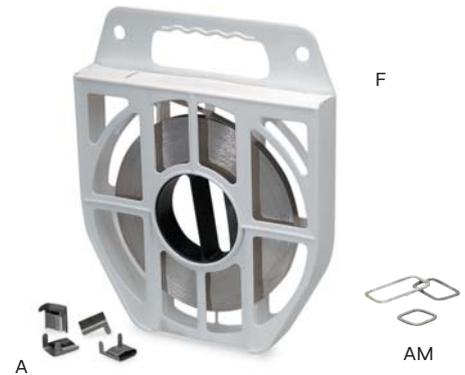


Code	Ref.	Capacity (Ø mm)	Length x Width (mm)	 x 100	 Bag	 Box
368100	MULTI-50	8 - 17	110x10	0.800	100	-
368110	MULTI-100	18 - 25	125x10	0.900	100	-
368120	MULTI-150	26 - 35	150x20	1.800	50	-
368130	MULTI-200	36 - 42	175x20	2.000	50	-
368140	MULTI-300	43 - 52	225x20	1.380	50	-
368150	MULTI-400	53 - 62	250x20	1.520	50	-

11109 F / A / AM

Band and fittings

The Z12 CN 1707 stainless steel band and its accessories are primarily used to secure and fasten elements in various industrial and construction applications. It can be cut to the desired length and is used in combination with accessories such as closures and tensioning tools to secure loads or structures. It includes a dispenser that facilitates transport and handling.



Code	Ref.	Width x Thickness (mm)	Length (m)	x 1	Bag	Box
371100	F-104	10x0.4	50	1.600	-	1
371110	F-107	10x0.7	50	2.700	-	1
371120	F-204	20x0.4	50	3.400	-	1
371130	F-207	20x0.7	50	5.800	-	1

Code	Ref.	Width (mm)	x 1	Bag	Box
371140	A-100	10	0.500	100	-
371150	A-200	20	0.900	100	-

Code	Ref.	Dimensions (mm)	x 1	Bag	Box
371160	AM-25	25x25	1.400	100	-
371170	AM-40	25x40	1.900	100	-
371180	AM-60	25x60	2.450	100	-

20106 OPL

Strapping tool

Easy-to-use tool for stainless steel cable strapping.



Code	Ref.	x 100	Bag	Box
406100	OPL	145	-	1

20106 OPC

Strap cutter

Cutter tool for stainless steel band.



Code	Ref.	x 100	Bag	Box
406110	OPC	70	-	1

11201 TPF

Thin-walled universal heat shrink tube

Sofamel's thin-walled heat shrink tubing is a versatile solution for electrical applications requiring insulation and protection. Its shrinkage capability allows for precise fitting to different cable sizes and connections, ensuring a secure and long-lasting seal. Available in various colors, this tubing facilitates the identification and organization of cables.



Code	Ref.	Contraction (Ø mm)	Colour	Length (m)	Thickness (mm)	Bag	Box
376100	TPF-2,4/1,2 N	2.4 - 1.2	Black	10	0.50	-	1
376110	TPF-2,4/1,2 A		Blue	10	0.50	-	1
376120	TPF-2,4/1,2 G		Grey	10	0.50	-	1
376130	TPF-2,4/1,2 M		Brown	10	0.50	-	1
376140	TPF-3,2/1,6 N	3.2 - 1.6	Black	10	0.50	-	1
376150	TPF-3,2/1,6 A		Blue	10	0.50	-	1
376160	TPF-3,2/1,6 G		Grey	10	0.50	-	1
376170	TPF-3,2/1,6 M		Brown	10	0.50	-	1
376180	TPF-4,8/2,4 N	4.8 - 2.4	Black	8	0.50	-	1
376190	TPF-4,8/2,4 A		Blue	8	0.50	-	1
376200	TPF-4,8/2,4 G		Grey	8	0.50	-	1
376210	TPF-4,8/2,4 M		Brown	8	0.50	-	1
376220	TPF-6,4/3,2 N	6.4 - 3.2	Black	6	0.60	-	1
376230	TPF-6,4/3,2 A		Blue	6	0.60	-	1
376240	TPF-6,4/3,2 G		Grey	6	0.60	-	1
376250	TPF-6,4/3,2 M		Brown	6	0.60	-	1
376260	TPF-9,5/4,8 N	9.5 - 4.8	Black	5	0.60	-	1
376270	TPF-9,5/4,8 A		Blue	5	0.60	-	1
376280	TPF-9,5/4,8 G		Grey	5	0.60	-	1
376290	TPF-9,5/4,8 M		Brown	5	0.60	-	1
376300	TPF-12,7/6,4 N	12.7 - 6.4	Black	5	0.60	-	1
376310	TPF-12,7/6,4 A		Blue	5	0.60	-	1
376320	TPF-12,7/6,4 G		Grey	5	0.64	-	1
376330	TPF-12,7/6,4 M		Brown	5	0.64	-	1
376340	TPF-19,1/9,5 N	19.1 - 9.5	Black	4	0.80	-	1
376350	TPF-19,1/9,5 A		Blue	4	0.80	-	1
376360	TPF-19,9,5 G		Grey	4	0.80	-	1
376370	TPF-19,9,5 M		Brown	4	0.80	-	1
376380	TPF-25,4/12,7 N	25.4 - 12.7	Black	3	0.90	-	1

* Other colours under request.

11202 TPMA

Medium-walled heat shrink tube with adhesive

TPMA tubes possess an excellent isolation, watertight seal, and abrasion and impact resistance. They are used in low voltage electrical applications and provide an excellent mechanical protection.

Non-flame retardant type. Not self-extinguishing.



Code	Ref.	Contraction (Ø mm)	Colour	Length (m)	Thickness (mm)	Bag	Box
377100	TPMA-12/3	12 - 3	Black	1	2	1	75
377110	TPMA-22/6	22 - 6			2.5	1	75
377120	TPMA-34/7	34 - 7			2.5	1	60
377130	TPMA-40/12	40 - 12			2.5	1	40
377140	TPMA-55/16	55 - 16			2.7	1	25
377150	TPMA-75/22	75 - 22			2.7	1	15
377160	TPMA-95/25	95 - 25			3	1	10
377170	TPMA-115/34	115 - 34			3	1	5
377180	TPMA-140/42	140 - 42			3	1	5

11203 MRA

Heat shrink blanket derivation with adhesive

Heat shrink blanket with adhesive and stainless steel chain. MRA sleeve is used for low voltage cable shunt.

Non-flame retardant type. Not self-extinguishing.



Code	Ref.	Contraction (Ø mm)	Main	Tap	Length (mm)	Thickness (mm)	Bag	Box
378100	MRA-4312/250	43 - 8	150	50	250	2.30	1	-
			150	25				
			95	95				
378110	MRA-7218/250	75 - 15	240	95	250	2.30	1	-
			240	50				
			150	150				
			150	95				
378120	MRA-7218/300	75 - 15	240	240	300	2.30	1	-
378200	MRA-7218/500-E	75 - 15	240	240	500	2.30	1	-
			240	150				

11301 Earthing rods

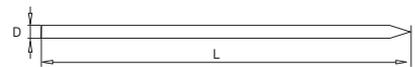
Copper-coated earthing rods
100 or 300 microns

Earthing rods are designed for fixed installations, providing safe, effective, and long-lasting earthing in electrical systems. They are manufactured from calibrated steel and coated with electrolytic copper of 100 or 300 µm, offering excellent corrosion resistance and durability even in harsh conditions.

According to UNE-EN IEC 62561-1:2023 and UNE 202006 standards and carry AENOR  certification.



CE



Earthing rod 100 µm - Ø 14.2 mm

Code	Ref.	Dimensions		Bag	Box	Palet
		L	D			
T101415	Earthing rod 100 µm - Ø 14.2 - Length 1.5 m	1.5 m	14.2 mm	10	100	400
T101420	Earthing rod 100 µm - Ø 14.2 - Length 2.0 m	2.0 m	14.2 mm	10	100	400

Earthing rod 100 µm - Ø 18.2 mm

Code	Ref.	Dimensions		Bag	Box	Palet
		L	D			
T101820	Earthing rod 100 µm - Ø 18.2 - Length 2.0 m	2.0 m	18.2 mm	5	100	400

Earthing rod 300 µm - Ø 14.6 mm

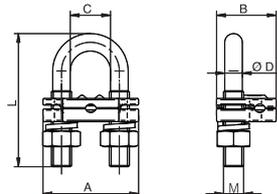
Code	Ref.	Dimensions		Bag	Box	Palet
		L	D			
T301420	Earthing rod 300 µm - Ø 14.6 - Length 2.0 m	2.0 m	14.6 mm	10	100	400

11302 TGT142

Earthing rod clamp

Earthing rod clamp manufactured from brass with a galvanized steel ring. Suitable for Ø 14.2 mm and 14.6 mm earthing rods.

According to UNE-EN IEC 62561-1:2023 and UNE 202006 standards.

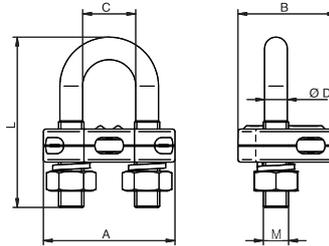


Code	Ref.	Cable cross-section		Dimensions (mm)						Kg x 100	Bag	Box
		Min.	Max.	A	B	C	ØD	L	M			
TGT142	Earthing rod clamp TGT142	16	50	38	23.7	16	7	53	M8	8.300	10	40

11302 TGT142 RF

Reinforced earthing rod clamp

The TGT142 RF earth clamps are manufactured from brass with a galvanized steel strap. The reinforced design ensures a more secure and durable fastening of the conductor to the earth rod. Suitable for earth rods up to 18.6 mm in diameter.

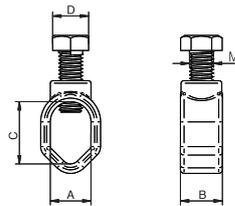


Code	Ref.	Cable cross-section		Dimensions (mm)						Kg x 100	Bag	Box
		Min.	Max.	A	B	C	ØD	L	M			
TGT142 RF	Reinforced earthing rod clamp TGT142 RF	35	150	52	39	21	9	65	M10	19.200	5	15

11302 TGT142C

Closed earthing rod

The TGT142C is manufactured from brass with zinc-plated steel screws. Ideal for grounding cable connections to earth rods. Suitable for earth rods up to 14.6 mm in diameter.



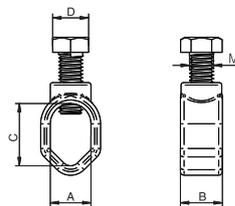
Code	Ref.	M	15	Dimensions (mm)					Kg x 100	Bag	Package
				A	B	C	D	M			
TGT142C	Closed earthing rod TGT142C	M-10	15	17	17.5	26	15	M10	7.200	10	50

11302 TGT142C-A2

New

Closed earthing rod

Closed clamp designed for connecting conductors to Ø 18.6 mm earth rods. Manufactured from brass and equipped with a stainless steel screw to ensure a secure, corrosion-resistant, and long-lasting connection.

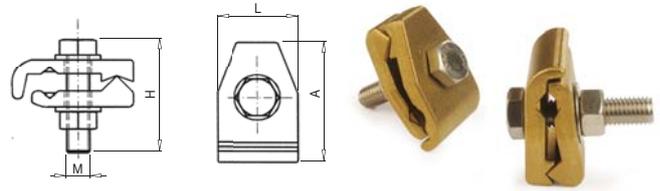


Code	Ref.	M	15	Dimensions (mm)					Kg x 100	Bag	Package
				A	B	C	D	M			
TGT142C-A2	Closed earthing rod TGT142C-A2	M-10	15	20	20	31	16.75	M10	7.300	10	50

11302 GTR

Earthing rod clamp

GTR clamps are manufactured from brass with stainless steel screws. Highly robust and designed for grounding connections.

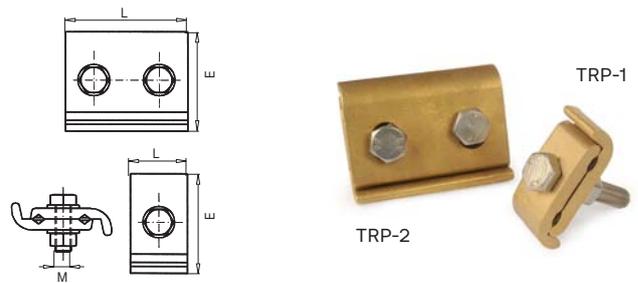


Code	Ref.	Main		Tap		Dimensions (mm)				Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	A	L	H	M			
170100	GTR-50/150	150	50	16	10	61	40	67	12	33,000	-	15

11302 TRP

Copper parallel earthing clamp

TRP clamps are manufactured from brass with stainless steel screws. They are available with one or two screws and in two different lengths depending on the application. Highly robust, they are designed for copper overhead line cables.

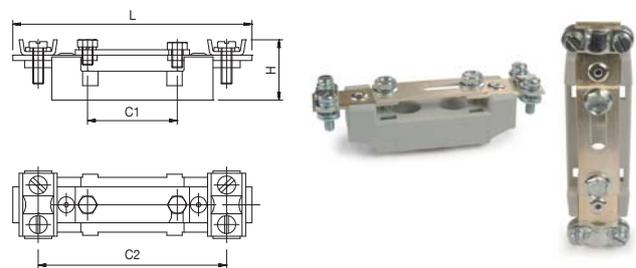


Code	Ref.	Main		Tap		Dimensions (mm)			Kg x 100	Bag	Box
		Max.	Min.	Max.	Min.	E	L	M			
175100	TRP-1-25/150	150	25	150	25	68	30	12	29.000	-	15
175110	TRP-2-25/150	150	25	150	25	68	62	12	58.000	-	6
175120	TRP-2-25/150-R	150	25	150	25	68	90	12	81.000	-	5

11302 PTR

Neutral earthing switch

The PTR earth bridge is ideal for ensuring safe grounding connections in electrical installations, providing high durability and mechanical strength. It is manufactured from polyester and accommodates a maximum conductor cross-section of 70 mm².



Code	Ref.	Dimensions (mm)				Kg x 100	Box	Palet
		L	H	C1	C2			
240100	PTR	117.5	23	25	103	-	1	10

11304 TMV-8

Multiple terminal for copper rod 8 mm Ø

Equipped with M8x35 stainless steel screw, nut, and pressure washer. Manufactured from tinned copper with a 15 µm tin coating. Ideal for earthing circuits inside transformer substations.



Code	Ref.	Description	 x 100	 Bag	 Box
171100	TMV-8	Multiple terminal for copper rod 8 mm Ø	-	1	-

11304 CDCC-50

Tap-off connectors for 50 mm² cable crossovers

Manufactured from tinned copper with a 15 µm tin coating. Ideal for earthing circuits inside transformer substations.



Code	Ref.	Description	 x 100	 Bag	 Box
171110	CDCC-50	Tap-off connectors for 50 mm ² cable crossovers	-	1	-

11304 GDC

Earthing clamp

Simple fastening for fixing the cable to a wall or metal structure. Manufactured from tinned copper with a 15 µm tin coating. Includes plug and screw.



Code	Ref.	Description	 x 100	 Bag	 Box
171120	GDC-25	Earthing clamp Cu 16-25 mm ² 15 µm	-	1	-
171121	GDC-50	Earthing clamp Cu 35-50 mm ² 15 µm	-	1	-
171122	GDC-95	Earthing clamp Cu 75-95 mm ² 15 µm	-	1	-

11401 SCF/C

MC4 type connectors for 1000 V and 1500 V

MC4-type connectors, male and female, ensure a reliable connection and watertight sealing between cable terminations and the various components of a photovoltaic installation.

SCF/C-1000V for cross-sections from 2.5 to 6 mm²

SCF/C-1500V-A for cross-sections from 2.5 to 6 mm²

SCF/C-1500V-B for 10 mm² cross-sections

A MC4 crimping tool is required for proper installation.



Code	Ref.	Cable cross-section (mm ²)	 x 100	 Bag	 Box
501010	SCF/C-1000V	2.5-6	-	-	-
501020	SCF/C-1500V-A	2.5-6	-	-	-
501030	SCF/C-1500V-B	10	-	-	-

11401 SCF/D-TL

Tap-off connectors with flexible hose

MC4-type flexible connectors for parallel string connections.

The SCF/D-2TL-1500V model allows 2-to-1 connections and provides 1500 V insulation.



Code	Ref.	Cable cross-section (mm ²)	Unions	 x 100	 Bag	 Box
505030	SCF/D-2TL-1500V	2.5 - 4	2 - 1	-	-	-

11402 SCF/FUSE

MC4 Type fuse holder for 1000 V and 1500 V

Integrated, watertight fuse in MC4 connector.

Available in 15/20/30 A depending on the model.

SCF/FUSE-1000V female-male

SCF/FUSE-1500V female-male



Code	Ref.	Amps (A)	 x 100	 Bag	 Box
501043	SCF/FUSE-1000V 15A	15	-	-	-
501044	SCF/FUSE-1000V 20A	20	-	-	-
501046	SCF/FUSE/L-1500V 15A	15	-	-	-
501047	SCF/FUSE/L-1500V 20A	20	-	-	-

 SOFAMEL



Tools mechanical

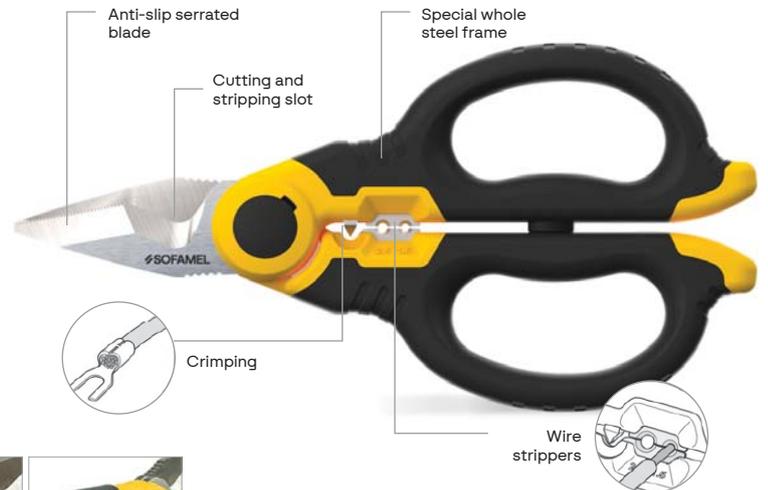
Multifunctional electrician scissors	72
Cable cutters	74
Crimping tools for non insulated terminals	77
Crimping tools for insulated and non-insulated ferrules	80
Crimping tools for insulated terminals	83
Crimping tool for solar connectors	83
Multipurpose tools	84
Stripping tools	85
Other tools	87
Stripping tools for MV cables	89

20101 TS-50

Scissors with triple function, crimping, stripping and cutting

Premium professional scissors 3 in 1: crafted with stainless steel for super high resistance and durability. Featuring high-hardness blades and an anti-slip serrated edge for precise cutting. The handles are lightweight, robust, and made from impact-resistant plastic material, with anti-slip ridges for a secure grip.

- 1 crimping function.
- 2 stripping functions.
- Cutting wire function.
- Anti-slip serrated blade.
- Special whole steel frame.
- Blades are whole frame.
- Scissor carrying case included. (belt-adjustable)



3 in 1 crimping stripping cutting

Code	Ref.	Max. cutting range	Crimping range	Stripping capacity between handles	Length	Weight
316000	TS-50	50 mm ²	2.5-6 mm ²	1.5/2.5 mm ²	160 mm	0.15 kg

20101 TS-70

Scissors with multi-holding way

Premium professional scissors 3 in 1: crafted with the stainless steel for super high resistance and durability. Featuring high-hardness blades and an anti-slip serrated edge for precise cutting. Ergonomically-designed for comfortable, precise, and durable use. Extended capacity for stripping, crimping and cutting.

- 2 crimping functions.
- 3 stripping functions.
- Cutting wire function.
- Blades are whole frame.
- Handles crafted from impact-resistant plastic.
- Anti-slip ridges made of TPR.
- Ergonomic design.
- Scissor carrying case included. (belt-adjustable)



3 in 1 crimping stripping cutting

Code	Ref.	Max. cutting range	Crimping range	Stripping capacity between handles	Length	Weight
316001	TS-70	70 mm ²	2.5-6 mm ²	1.5/2.5/4 mm ²	170 mm	0.18 kg

20101 TS-95

Multi-function heavy duty electrician scissors, crimping, stripping and cutting

New model of professional scissors:

capable of cutting cables up to 95 mm². These scissors are equipped with a convenient stripping function compatible with cable sizes ranging from 0.34 mm² to 6 mm² in the slots between the handles. Stripping function for larger-section cables in the cutting slot. Made from high-quality, durable stainless steel, they are designed to withstand the demands of daily use.

- 2 crimping functions.
- 7 stripping functions.
- 3 cutting functions.
- Blades are whole frame.
- High Hardness Blades.
- Enhanced Grip and ergonomic design.
- Scissor carrying case included. (belt-adjustable)



4 in 1 crimping stripping cutting

Code	Ref.	Max. cutting range	Crimping range	Stripping capacity between handles	Length	Weight
316002	TS-95	95 mm ²	2.5-6 mm ²	0.34-6 mm ² (AWG 22-10)	204 mm	0.26 kg

30701 BP-7/18

Universal belt pouch

- Superior quality, strong and durable
- Sold separately

Code	Ref.	Dimensions
600165	BP-7/18	180x74x37 mm



For low voltage copper and aluminium cables



20101 SF-21

- For copper and aluminium cables up to 16 mm².
- Not for cutting steel or steel wire.

Code	Ref.	Length	Weight
380120	SF-21	160 mm	0.19 kg



20101 SF-30

- For copper and aluminium cables up to 35 mm².
- Not for cutting steel or steel wire.

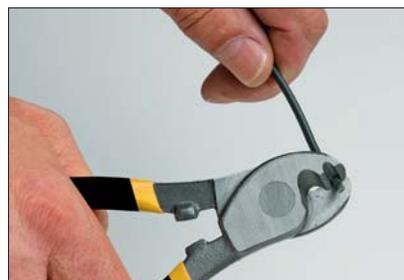
Code	Ref.	Length	Weight
380130	SF-30	210 mm	0.36 kg



20101 SF-31

- For copper and aluminium cables up to 50 mm².
- Not for cutting steel or steel wire.

Code	Ref.	Length	Weight
380140	SF-31	235 mm	0.50 kg



For low voltage copper and aluminium cables



20101 SF-36A

- Light weight, compact structure, easy operation.
- Suitable for narrow space work.
- Clean and smooth cut without crushing and deformation.
- Innovative two-stage ratchet drive and high torque transmission, one hand or two hands easy operation.

Code	Ref.	Max. cutting range	Length	Weight
380010	SF-36A	≤Ø 36 mm 300 mm ²	250 mm	0.61 kg



Single conductor cable, solid



Single conductor cable, fine and multiple strands



Multiple conductor cable, multiple strands and solid

20101 SF-60A

- Light weight, compact structure, easy operation.
- Suitable for narrow space work.
- Clean and smooth cut without crushing and deformation.
- Innovative two-stage ratchet drive and high torque transmission, one hand or two hands easy operation.

Code	Ref.	Max. cutting range	Length	Weight
380020	SF-60A	≤Ø 60 mm 500 mm ²	310 mm	0.84 kg



For low voltage copper and aluminium conductors and communication cables



20101 SF-240

- For cutting copper and aluminium conductors as well as multiple stranded cables.
- Favourable transmission ratio due to double lever.
- Blade: high-grade chrome vanadium electric steel, forged, hardened, replaceable blades.
- Handles material: steel.

Code	Ref.	Max. cutting range	Length	Weight
380028	SF-240	≤Ø 35 mm 240 mm ²	565 mm	2.15 kg

20101 SF-500

- For cutting copper and aluminium conductors as well as multiple stranded cables.
- Favourable transmission ratio due to double lever.
- Blade: high-grade chrome vanadium electric steel, forged, hardened, replaceable blades.
- Handles material: steel.

Code	Ref.	Max. cutting range	Length	Weight
380029	SF-500	≤Ø 55 mm 500 mm ²	745 mm	4.48 kg



Single conductor cable, solid



Single conductor cable, fine and multiple strands



Multiple conductor cable, multiple strands and solid

Manual crimping tool with deep-indent mechanism



Manual crimping tool, designed for robust performance and enhanced comfort.

Ergonomic handle: the tool's ergonomic handle provides a comfortable grip, reducing hand fatigue during extended use.

Robust construction: built to withstand rigorous use, this crimping tool is crafted from high-quality materials, ensuring long-lasting durability.

Indent crimping: with advanced punch mechanism, specifically designed for tubular terminals made of copper and aluminum.

20102 SF-P70

- For copper and aluminum tubular terminals (type T, TL, TBE) from 6 to 70 mm².
- Adjustment by section screw.
- Steel alloy handles.
- Not suitable for solid bimetallic terminals.

20102 SF-P150

- For copper and aluminum tubular terminals (type T, TL, TBE) from 10 to 150 mm².
- Adjustment by section screw.
- Steel alloy handles.
- Not suitable for solid bimetallic terminals.

Code	Ref.	Crimping range	Length	Weight
385015	SF-P70	6-70 mm ²	462 mm	2.08 kg

Code	Ref.	Crimping range	Length	Weight
385020	SF-P150	10-150 mm ²	706 mm	3.34 kg

Tubular connectors



Hexagonal crimping tools

The crimping tools SF-70 and SF-120 are used for standard electrical connections.

The crimping dies are made from the most durable steel and feature a long service life, precise crimping diameter, and exceptional crimping effectiveness. Specially designed for our tubular terminals, series T, TL, TBE, among others.



20102 SF-70

- For tubular copper terminals from 6 to 70 mm².
- Section adjustment by revolver system.
- Hexagonal compression.
- Not suitable for solid bimetallic terminals.

Code	Ref.	Crimping range	AWG	Length	Weight
380024	SF-70	6-70 mm ²	10-2/0	430 mm	1.75 kg

20102 SF-120

- For tubular copper terminals from 10 to 120 mm².
- Section adjustment by revolver system.
- Hexagonal compression.
- Not suitable for solid bimetallic terminals.

Code	Ref.	Crimping range	AWG	Length	Weight
380025	SF-120	10-120 mm ²	7-4/0	625 mm	3.2 kg

Tubular connectors



Ratchet terminal crimping tools

Tools with a ratchet mechanism guarantee precise, uniform, and secure crimping in every operation. Their progressive locking system ensures that the crimping cycle is fully completed before releasing the pressure, preventing connection errors.
Available in various models according to terminal size.

20102 SF-6D

- For cable lugs from 0.5 to 6 mm².
- Punch-type compression.
- Not suitable for solid bimetallic terminals.



Code	Ref.	Crimping range	AWG	Length	Weight
380021	SF-6D	0.5-6 mm ²	20-10	180 mm	0.25 kg

20102 SF-16D

- For cable lugs from 2.5 to 16 mm².
- Punch-type compression.
- Not suitable for solid bimetallic terminals.



Code	Ref.	Crimping range	AWG	Length	Weight
380022	SF-16D	2.5-16 mm ²	13-5	275 mm	0.44 kg

20102 SF-35D

- For cable lugs from 10 to 35 mm².
- Punch-type compression.
- Not suitable for solid bimetallic terminals.



Code	Ref.	Crimping range	AWG	Length	Weight
380023	SF-35D	10-35 mm ²	8-1/0	335 mm	0.65 kg

Tubular connectors



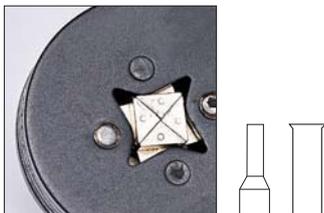
Mini-Type self-adjustable crimping plier
Insulated and non-insulated ferrules



20104 SF-42

- Lugs are effortlessly inserted into the crimping pliers from the side. They are compatible with all types of ferrules, including double ferrules.
- Compression system by squared diaphragm.

Code	Ref.	Crimping range	AWG	Length	Weight
390125	SF-42	0.25-10 mm ²	26-7	175 mm	0.4 kg



Quick pressure adjustment button. It offers three pressure output levels: 0.25-2.5 mm², 4-6 mm², and 10 mm².

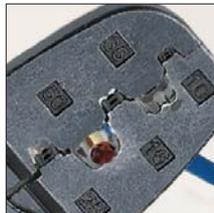


Automatic adjustment to the terminal's cross-sectional area during crimping, facilitating operation with different sizes. Ensures optimal contact surface and complies with DIN standards.



When the crimp size needs to be changed, simply pull the adjustment knob up, turn it to the required setting, and release.

These crimping tools for ferrules feature punch-type compression and combine simplicity with ease of use. Their durable, ergonomic design ensures reliable performance and long service life, making them ideal for applications requiring precision and efficiency.



20104 SF-55

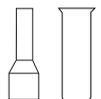
- For insulated and non-insulated ferrules of 10, 16, 25, 35, and 50 mm².
- Equipped with a ratchet mechanism
- Punch-type compression.



Code	Ref.	Crimping range	AWG	Length	Weight
390180	SF-55	10-50 mm ²	8-1/0	320 mm	0.72 kg

20104 SF-6

- For insulated and non-insulated ferrules from 0.5 to 16 mm²



Code	Ref.	Crimping range	AWG	Length	Weight
390100	SF-6	0.5-16 mm ²	22-6	220 mm	0.29 kg

Compression using ratchet mechanism

20104 SF-10W

- For insulated and non-insulated ferrules from 0.25 to 10 mm².
- Compression via ratchet mechanism.



Code	Ref.	Crimping range	AWG	Length	Weight
380031	SF-10W	0.25-10 mm ²	23-7	205 mm	0.48 kg



20104 SF-35W

- Insulated and non-insulated ferrules from 10 to 35 mm².
- Compression via ratchet mechanism.



Code	Ref.	Crimping range	AWG	Length	Weight
380032	SF-35W	10-35 mm ²	5-2	205 mm	0.55 kg

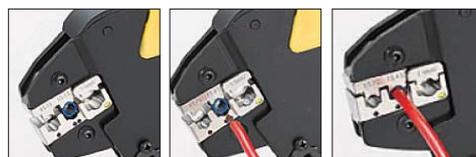


20104 SF-6J

- For insulated terminals from 0.5 to 6 mm².
- Compression via ratchet mechanism.

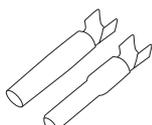


Code	Ref.	Crimping range	AWG	Length	Weight
380034	SF-6J	0.5-6 mm ²	20-10	205 mm	0.48 kg



20103 SF-MC4

- Crimping tool for solar connectors.



Code	Ref.	Crimping range	Length	Weight
380033	SF-MC4	2.5-6 mm ²	205 mm	0.49 kg
20103000	SF-MC4/10	4-10 mm ²	205 mm	0.49 kg



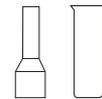
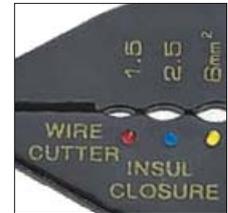
Multipurpose tool 5 in 1

20104 SF-5

The 5-in-1 multipurpose tool offers versatility by combining several functions while optimizing toolbox space. It increases efficiency by reducing tool changeover times and enhances productivity. Its ergonomic design ensures comfort, reduces fatigue, and improves work precision. The compact design makes it easy to transport for professionals on the go. Manufactured with high-quality materials, it guarantees durability and long-lasting, reliable performance.

5-in-1 multipurpose tool functions:

- Wire cutter
- Crimping insulated terminals from 1.5 to 6.0 mm²
- Crimping non-insulated terminals from 1.5 to 6.0 mm²
- Wire stripper from 0.75 to 6.0 mm²
- Iron screw cutter from M2.6 to M5



Code	Ref.	Crimping range	Length	Weight
395100	SF-5	1.5-6 mm ²	220 mm	0.48 kg

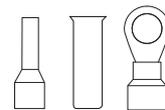
Multipurpose tool that includes 5 sets of dies

20104 SF-C

The SF-C includes five sets of interchangeable dies. This versatility makes it an all-in-one solution for various crimping tasks, offering efficiency and convenience in a single device.

Multipurpose tool with 5 sets of dies:

- Insulated terminals: 0.5-6 mm²
- Cord end terminals: 0.25-10 mm²
- Cord end terminals: 10-35 mm²
- Twin cord end terminals from 2X (0.5-6 mm²)
- Non-insulated terminals from 0.5-10 mm²



Supplied with a carrying bag and screwdriver to facilitate changing dies.



Code	Ref.	Crimping range	Length	Weight
380035	SF-C	According to the die	243 mm	0.75 kg

For stripping the plastic or rubber insulation

20105 SF-D10

- For stripping the plastic or rubber insulation from single or multi-strand cables and wires from 0.02 to 6 mm².
- Includes a wire cutter for copper and aluminum wires, multi-strand up to 6 mm².
- Does not damage the conductor core.



Code	Ref.	Stripping range	Length	Weight
380026	SF-D10	0.02-6 mm ²	190 mm	0.15 kg

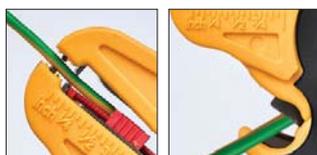


For stripping the plastic or rubber insulation

20105 PL-6

- The stripping diameter adjusts automatically for different wire cross-sections.
- Precision blade design ensures the conductor cores are not damaged.
- During stripping, the wire is held firmly by clamping jaws.
- Equipped with an adjustable length stop and a spring that returns the stripper to the starting position.

Code	Ref.	Stripping range	Length	Weight
380030	PL-6	0.25-2.5 mm ²	170 mm	0.25 kg



For stripping plastic or rubber insulation

20105 SF-22 New

- Wire stripper with built-in stop for cables from 0.5 to 6 mm².
- The automatic action mechanism allows stripping without additional adjustments, saving time and effort with each use. Comfortable to use and durable.

Code	Ref.	Stripping range	Length	Weight
400100	SF-22	0.5-6 mm ²	170 mm	0.34 kg



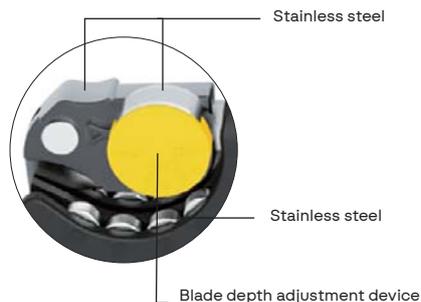
For stripping the plastic or rubber insulation

20105 SF-D30

- Minimizes the risk of injury while stripping cables, ensuring safe operation every time.
- Its simple design allows for quick and easy use.
- Ergonomically designed handle provides a comfortable and firm grip, reducing hand fatigue during prolonged use.
- For stripping the plastic or rubber insulation of single or multiple cables and wires from 10 to 300 mm².
- Does not damage the conductor core and offers long-lasting durability.

Code	Ref.	Stripping range	Length	Weight
380027	SF-D30	Ø 8-30 mm / 10-300 mm ²	176 mm	0.13 kg

Code	Model
380037	Spare blade for SF-D30



Wire stripper

20105 SF-38

- Designed for fast, safe, and precise stripping of PE, PVC, rubber, and other materials.
- Ideal for fibre optic cables, providing accurate stripping on multi-fibre cables.
- Suitable for cable diameters from 4 to 25 mm.
- Allows rotary or longitudinal cuts along the length of the cable for end stripping.
- Spiral cut facilitates removal of tougher jackets.
- Spring-loaded bracket secures the cable firmly to the blade for controlled cutting.
- Ergonomic design ensures ease of use and convenient storage.
- Long-lasting blade with easy depth adjustment.

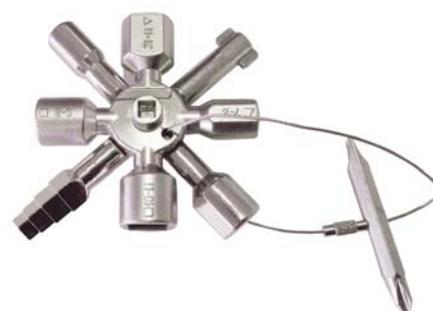
Code	Ref.	Stripping range	Length	Weight
400110	SF-38	4-25 mm	136 mm	0.13 kg



10-in-1 multifunction cross key

20106 SF-LC10-1

- 10-in-1 multifunction industrial tool, designed for accessing electrical distribution boards, gas meter cabinets, technical enclosures, toolboxes, and other standard locking systems. It incorporates multiple key profiles within a single tool, making it a practical and versatile solution for a wide range of applications.
- Also includes screwdriver bits for tightening and loosening operations, compatible with Phillips PH2 and slotted PL7, extending its functionality for installation and maintenance tasks.
- Ideal for electrical technicians, building maintenance personnel, installers, and utility service operatives requiring a compact and efficient tool for rapid interventions.
- Material: high-quality zinc alloy.
- Structure: robust and durable, designed for prolonged use.
- Design: compact, lightweight, and easy to carry.



Code	Ref.	 (mm)	 (mm)	 (mm)	 (mm)	 (mm)	 (mm)	 (mm)	Weight
20106004	SF-LC10-1	5 6-7 8-9 10-11	7-8 9-10 11-12	3-5	6	SL 7	PH 2	6-10	0,142 kg

Cable tie tool

20106 SF-39

- The SF-39 tensioning tool is designed for efficiently tensioning and cutting plastic ties. It provides consistent performance over many cycles and features padded, non-slip handles for enhanced comfort and control.

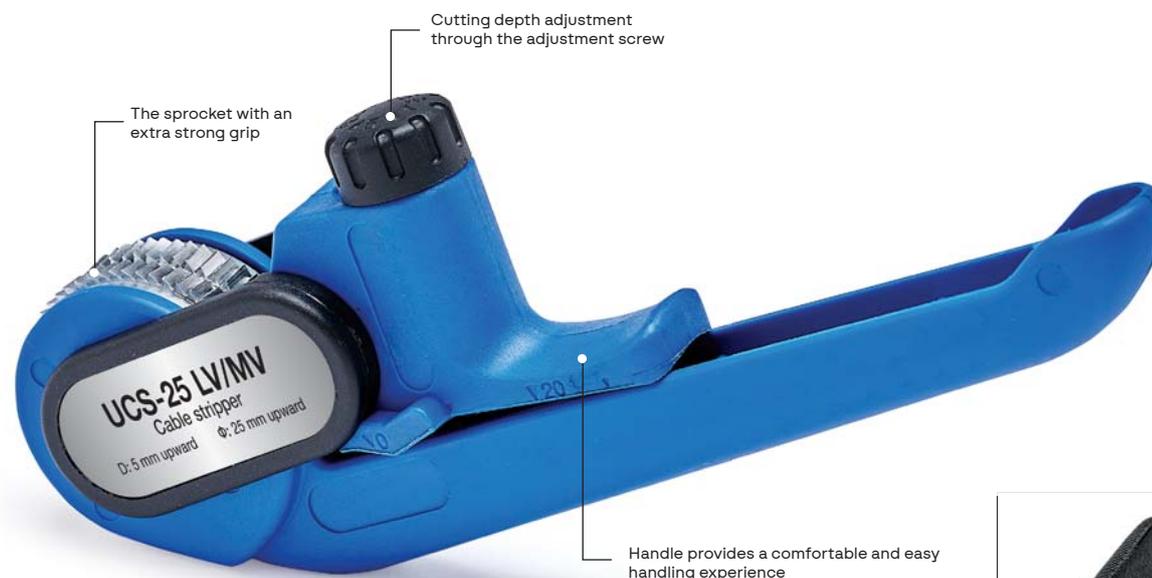
Code	Ref.	Tie width	Length	Weight
405100	SF-39	2.4-9.0 mm	195 mm	0.3 kg



20105 UCS-25-LV/MV

- Universal wire stripper for external BT/MT cable insulation.
- Includes a replaceable blade.
- Comes with a tool holder case for attaching to a belt.

Not suitable for live-line work.



Applicable for:



Communication cable



LV cable (PLV insulation)



MV cable (PVC constructed)



MV cable (PLV insulation)

Includes a tool pouch for the belt, designed to keep the UCS-25 always within reach, making work easier and improving efficiency. High-quality, sturdy, and durable.

Code	Ref.	Cable Ø	Cutting thickness	Length	Weight
400006	UCS-25-LV/MV	≥25 mm	0-5 mm	160 mm	0.2 kg
Code	Ref.	Description			
400007	SB UCS-25	Replacement blade			

Cable stripper for strippable semi-conductor layer

20105 CSSL-40

- Application: For stripping the semiconducting layer of 10/11 kV or 20/22 kV cables.
- Adjustable cutting depth: maximum 2 mm; rotary knob adjustment range: 0-0.9 mm, with 0.1 mm increments.
- Applicable cable diameter: 16-41 mm.
- Minimum blade hardness: 52 HRC.
- Supplied with pliers and a carrying case.

Compatible accessory: CST-40
 Application: Limiting the stripping length on non-vulcanized semiconductive layers.

The CST-40 model is a mechanical stripping stop designed as an accessory for the CSSL-40 layer stripping tool. Its function is to set a fixed cutting length, allowing the operator to stop the stripping process precisely at the desired point without the need to pre-mark the cable. Available separately.



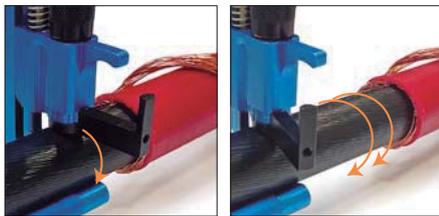
CST-40
Code: 20105005



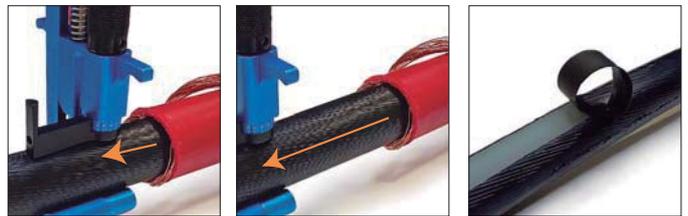
Stripping process

There are two methods for removing the semiconducting layer:

1. Spiral cutting



2. Longitudinal cutting



Code	Ref.	Layer Ø	Cutting thickness	Tool dimensions	Briefcase dimensions	Tool Weight	Briefcase Weight
400008	CSSL-40	16-41 mm	5 mm	120x60x50 mm	240x210x70 mm	0.21 kg	0.43 kg

Code	Ref.	Model	Hardness
400009	CSSL-40	Spare blade for CSSL-40	52 HRC

20105 EPS-50 NP NEW

A tool designed to remove the vulcanized semiconductive layer adhered to medium-voltage (MV) cables with cross-linked polyethylene (XLPE) insulation. Suitable for 10-35 kV cables with either copper (Cu) or aluminium (Al) conductors, it ensures precision and safety during use.

Supplied with a carrying case.



Code	Ref.	Layer Ø	Stripping depth	Dimensions (mm)	Weight
20105002	EPS-50 NP	10-50 mm	0.1-1.4 mm	160x95x40 mm	0.35 kg
Code	Ref.	Model			
20105006	CR-EPS-50NP	Replacement blade for EPS-50 NP			

Tool for stripping primary insulation

20105 EPM-52 New

Suitable for stripping the primary insulation layer of medium-voltage (MV) cables.

Provides precise cutting-angle adjustment and efficient stripping speed to meet different requirements. Can also be used to strip the outer jacket of various types of MV cables.

- The adjustable cutting angle ensures precise and safe operation.
- Compact design, ideal for working in confined spaces.
- High-quality, robust, and durable blades for long-term use.
- Stripping speed adjustable in 6 levels for optimal control.

Supplied with a carrying case.



Code	Ref.	Layer Ø	Stripping depth	Dimensions (mm)	Weight
20105003	EPM-52	15-52 mm	≤15 mm	180x105x55 mm	0.6 kg
Code	Ref.	Model			
20105007	CR-EPM-52	Replacement blade for CR-EPM-52			

Cable stripper for primary insulation

20105 CSML-25/240

The tool is designed to remove the insulation from ethylene-propylene rubber (G7) or cross-linked polyethylene (XLPE) cables rated 10/11 kV or 20/22 kV, with cross-sectional areas of 25, 35, 50, 70, 95, 120, 150, 185, and 240 mm².

Supplied with a carrying case.



Code	Ref.	Working range	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
400023	CSML-25/240	20 kV	234x122x46 mm	440x360x125 mm	0.35 kg (handle + a peeling head)	0.6 kg

20105 CSML-H

Cable stripper for main insulation layer (Handle only)

The tool is designed to remove the insulation from ethylene-propylene rubber (G7) or cross-linked polyethylene (XLPE) cables rated 10/11 kV or 20/22 kV, with cross-sectional areas of 25, 35, 50, 70, 95, 120, 150, 185, and 240 mm².



Code	Ref.	Working range	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
400013	CSML-H	20 kV	234x122x46 mm	440x360x125 mm	0.35 kg (handle + a peeling head)	0.6 kg

Inserts

Code	Ref.	Working range	Use with CSML	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
400014	CSML-I 25	20 kV	25 mm ²	234x122x46 mm	440x360x125 mm	0.35 kg (handle + a peeling head)	0.6 kg
400015	CSML-I 35		35 mm ²				
400016	CSML-I 50		50 mm ²				
400017	CSML-I 70		70 mm ²				
400018	CSML-I 95		95 mm ²				
400019	CSML-I 120		120 mm ²				
400020	CSML-I 150		150 mm ²				
400021	CSML-I 185		185 mm ²				
400022	CSML-I 240		240 mm ²				

Cable stripping tool for non-removable semiconductor layer

20105 CSNL-54

Tool for stripping non-removable semiconductor layers of 10, 20, and 35 kV power cables. It features a small rotation radius (maximum 90 mm) and can be used on cables with more than three cores. The bearings are flexible and rotate smoothly, facilitating the stripping process.

- Equipped with a chamfered blade that leaves a chamfer on the semiconductor layer.
- One-way stripping.
- Ensures secure fixation.
- Lightweight design.

Supplied with a carrying case.



Code	Ref.	Cable Ø	Stripping depth	Dimensions	Weight
400010	CSNL-54	30-54 mm	0-1.5 mm	180x95x47 mm	0.6 kg
Code	Ref.	Model			
400011	SB CSNL-54	Spare blade for CSNL-54			

Cable stripper for primary insulation

20105 CSML-54

Suitable for stripping the main insulation of 10 kV, 20 kV, and 35 kV cables. Features both rotary and slicing cutting functions, with adjustable blade angles for added versatility.

- Equipped with a replaceable blade for extended service life.
- Lightweight design.

Supplied with a carrying case.



Code	Ref.	Cable Ø	Stripping depth	Dimensions	Weight
400024	CSML-54	15-54 mm	0-15 mm	180x95x47 mm	0.7 kg
Code	Ref.	Model			
400025	SB CSML-54	Spare blade for CSML-54			

Tool for chamfering primary insulation

20105 TCML-60

The TCML-60 tool is essential for ensuring cable safety, efficiency, and durability, as well as for compliance with electrical safety regulations.

Application range: Ø 15-54 mm

Recommended use: Suitable for all types of primary insulation.

Designed for precise chamfered cuts (3 x 45°) on medium-voltage (MV) cables.

Secure positioning on the cable with a clamp system.

Equipped with PTFE plates for smooth sliding on the cable, eliminating the need for silicone paste.

Replaceable blade for prolonged use.

Maximum rotation diameter: 200 mm.

Note: Not intended for pencilling.



Included in the set:

- TCML-60: Tool for chamfered cuts of primary insulation.
- Supplied with a carrying case.

Code	Ref.	Cable Ø	Dimensions	Weight
400027	TCML-60	15-54 mm	180x95x47 mm	0.39 kg

20105 TCA-76

Universal chain cutter for cable armor
Ø 20-76 mm

Chain cutter made of steel, designed for stripping aluminum armored cables (AWA) with diameters from 20 to 76 mm. Cuts efficiently with just a quarter turn for a complete cut.

Not suitable for cutting steel armoring, including SWA (Steel Wire Armour) or similar types.



Code	Ref.	Cable Ø	Dimensions	Weight
400005	TCA-76	20-76 mm	250x80x22 mm	0.58 kg

4-in-1 stripping tool

20105 HP-4PRO

New

This multifunctional tool is designed for a wide range of cable preparation tasks on medium- and high-voltage cables (10-220 kV).

It is specifically developed for removing the outer sheath, the semiconductor layer (both bonded and strippable types), and the primary insulation layer. It also allows for precise beveling of insulation edges.

Included in the set:

- One spare blade for each medium-voltage cable layer.
- Hex keys for adjustment and maintenance.
- Supplied with a carrying case.



Code	Ref.	Cable Ø	Minimum length of the semiconductor layer	Dimensions	Weight
20105004	HP-4PRO	15-50 mm	25 mm	240x207x86 mm	1.2 kg

Maximum cutting depth

Bonded semiconducting layer	Unbonded semiconducting layer	Main insulation layer and outer sheath
1.5 mm	0.9 mm	10 mm

KIT 1 MV-SP. Stripping tools
 MV cable with strippable semiconductor layer

20105 KIT 1 MV-SP

This tool kit is designed for stripping medium-voltage (MV) cables with a strippable semiconducting layer. Its operation is simple and efficient, ensuring proper cable preparation for electrical installation.

The standard kit includes:

- 400006 universal cable stripper for external LV/MV insulation.
- 400013 cable stripper for the main insulation layer.
- 400008 cable stripper for strippable semiconductor layer.
- 316000 TS-50 scissors.
- 400016 CSML head 50 mm².
- 400018 CSML head 95 mm².
- 400020 CSML head 150 mm².
- 400022 CSML head 240 mm².
- 400029 grease tube.
- 410115 190 mm insulated knife.
- 570140 hydroalcoholic towelette.
- High-quality case with foam.



The case can accommodate up to eight inserts, with selectable cross-sectional sizes ranging from 25 mm² to 240 mm².

Code	Ref.	Dimensions	Weight
400030	KIT 1 MV-SP	465x355x145 mm	3.5 kg



KIT 2 MV-SN. Stripping tools
 MV cable with non-strippable semiconductor layer

20105 KIT 2 MV-SN

This tool kit is designed for stripping medium-voltage (MV) cables with a non-strippable semiconducting layer. Its operation is straightforward and efficient, ensuring proper cable preparation for electrical installation.

The standard kit includes:

- 400006 universal cable stripper for LV/MV external insulation.
- 400010 cable stripper for non-strippable semiconductor layer.
- 400024 cable stripper for main layer Ø 54 mm.
- 570140 hydroalcoholic towelette.
- 400029 grease tube.
- High-quality case with foam.



Code	Ref.	Dimensions	Weight
400031	KIT 2 MV-SN	465x355x145 mm	3.5 kg

20105 KIT 3 MV-A-SP

This toolkit ensures high-quality work, facilitating the process of preparing cables for subsequent connection and use.

The standard kit includes:

- 400006 universal cable stripper for LV/MV external insulation.
- 400008 wire stripper for peelable semiconducting layer Ø 16-41 mm.
- 400024 wire stripper for main layer Ø 54 mm.
- 400027 tool for chamfering the main layer Ø 15-60 mm.
- 570140 hydroalcoholic wipe.
- 400029 grease tube.
- 400005 universal chain cutter for armored cable Ø 20-76 mm.
- High-quality carrying case with foam.



Code	Ref.	Dimensions	Weight
400032	KIT 3 MV-A-SP	465x355x145 mm	4.0 kg





Tools hydraulic

Hydraulic hand-tools	100
Electrohydraulic tools	104
Battery wire ratchet cutter	111
Mini battery powered crimping tools	112
Hydraulic heads and pumps	114
Accessories	124
Use guide for dies	126

Hydraulic crimping

20201 EC-5

- The buckle-type design offers a combination of lightness and strength for quick installation and removal.
- Its rotating crimping head adapts effortlessly to different angles.
- A dual-speed hydraulic system with a built-in safety valve ensures fast, precise crimping.
- Automatic pressure release at preset levels guarantees consistent quality, speed, and operator safety.
- An external manual pressure relief valve allows easy pressure release.
- The hydraulic valve, made from special steel, ensures durability and long service life.
- Its compact size allows operation in confined spaces.
- Supplied with a carrying case.



Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
411000	EC-5	50 kN	60 MPa	380x130x65 mm	530x420x130 mm	2.7 kg	3.0 kg

Crimping range

Copper lugs	10-240 mm ²
Thin-walled Al lugs	16-150 mm ²
Crimpis (CRC, CRS, CRA)	up to 70 mm ²

Available dies



HD5 copper and aluminium lugs, butt-connectors, and pin terminals for hexagonal compression
 Copper: up to 240 mm²
 Aluminium: up to 150 mm²



CDC5 copper and aluminium compression clamps for elliptical/circular compression
 Up to 70 mm²

Hydraulic crimping

20201 EC-13C

- The C-shaped opening design allows for fast crimping, facilitating handling and positioning.
- 180° rotary head with quick opening.
- Incorporates an audible safety valve that limits the maximum working force to 130 kN.
- Two-speed operation: fast approach and slow crimping.
- The handle features a self-locking mechanism to ensure the tool is fully depressurized after use, prolonging service life.
- The hydraulic valve is made of special steel, robust and durable.
- Supplied with a carrying case.



Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
411001	EC-13C	130 kN	70 MPa	630x135x71 mm	875x340x130 mm	6.9 kg	3.5 kg

Crimping range

Copper lugs and splices	up to 400 mm ²
Aluminium lugs and splices	up to 300 mm ²
H type, C type clamps and bimetallic lugs (hexagonal crimp only)	up to 240 mm ²

Available dies



HD13 copper and aluminium lugs and butt-connectors for hexagonal compression
 Copper: up to 400 mm²
 Aluminium: up to 300 mm²
 Bimetallic: up to 240 mm²



CD13 copper and aluminium compression clamps for circular compression
 Copper: main and tap up to 185 mm²
 Aluminium: main up to 300 mm² and tap up to 70 mm²

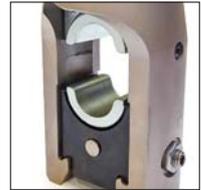
Hydraulic crimping

20201 EC-13U

- Universal head for all types of crimping, including deep stepped crimping.
- 180° rotary head with quick-opening mechanism.
- Incorporates an audible safety valve that limits the maximum working force to 130 kN.
- Two speeds: one fast for approach and one slow for crimping.
- Supplied with a carrying case.



Includes adapter to convert "H" head to "C" head.



Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
411002	EC-13U	130 kN	70 MPa	587x72x144 mm	875x340x130 mm	5.84 kg	3.5 kg

Crimping range

Copper lugs and splices	up to 400 mm ²	Bimetallic lugs (Stepped deep punching)	up to 240 mm ²
Aluminium lugs and splices	up to 300 mm ²	H type, C type clamps	up to 240 mm ²

Available dies



HD13 copper and aluminium lugs and butt connectors with hexagonal compression.
Copper: up to 400 mm²
Aluminium: up to 300 mm²



CD13 copper and aluminium compression clamps with circular compression.
Copper: up to 185 mm²
Aluminium: main up to 300 mm², tap up to 70 mm²



MP-L/PP bimetallic cable lugs with deep punched compression.
Up to 240 mm²



MP-S/PP aluminium multi-voltage joints with deep punched compression.
Up to 240 mm²

Note: Select the adapter according to the cable cross-section. Use it together with the corresponding punch and die.

Hydraulic cutting tool

Suitable for cutting ACSR cables, copper, aluminum, steel wire, and steel rope up to Ø 45 mm.

20201 ET-45

- Latch head with a two-blade design.
- Two-stage hydraulic action.
- Automatic retraction when maximum pressure is reached.
- Blades made of heat-treated special steel.
- Lightweight and compact structure.
- Cutting head with snap closure and blade guide, rotating 270°.
- Rapid feed with dual hydraulic cylinders.
- Automatic pressure relief valve.
- Manual return in any position.
- Supplied with a carrying case.



Code	Ref.	Nominal pressure	Maximum cutting force	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
411004	ET-45	70 MPa	90 kN	646x152x75 mm	875x340x130 mm	6.25 kg	3.5 kg

Crimping range

ACSR, copper and aluminium	With a diameter less than 45 mm ($\leq 1000\text{mm}^2$)
Steel strand	150 mm ² Ø 20 mm

Spare blades



Fixed cutting blade
Weight: 120 g



Moveable cutting blade
Weight: 100 g

Battery-powered hydraulic crimping tool

20202 EBC-5

- 180° swivel head.
- Two-speed hydraulic system.
- Independently designed oil-return system that can safely retract without power.
- The trigger switch and return button are separate and can be operated with one hand.
- Built-in chip with memory function allows the tool to stop automatically when crimping is completed, enabling intelligent crimping.
- Crimping cycle data is automatically stored on a memory card for transfer to a PC via USB cable interface (Bluetooth available separately).
- OLED display shows battery capacity, crimping cycles, maintenance information, Bluetooth status, and more.
- Automatic retraction when maximum pressure is reached.
- LED lighting for working in dark environments.
- Rubber-coated housing to reduce noise and vibration.
- Supplied with a carrying case.



Battery type	Battery changer
18 V 4.0 Ah, Li-ion	ASC 55

Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
412000	EBC-5	50 kN	60 MPa	325x313x94 mm	670x470x135 mm	4.6 kg (incl. battery)	4.5 kg

Crimping range

Copper lugs	10-240 mm ²
Thin-walled Al lugs	16-150 mm ²
Crimpis (CRC, CRS, CRA)	up to 70 mm ²

Available dies



HD5 copper and aluminium lugs, butt-connectors, and pin terminals for hexagonal compression
 Copper: up to 240 mm²
 Aluminium: up to 150 mm²



CDC5 copper and aluminium compression clamps for elliptical/circular compression
 Up to 70 mm²

Battery-powered hydraulic crimping tool

20202 EBC-13C

- C-shaped head that rotates 180 degrees.
- Two-speed hydraulic system. Independently designed oil-return system that can safely retract without power.
- The trigger switch and return button are separate and can be operated with one hand.
- Built-in chip with memory function allows the tool to stop automatically when crimping is completed, enabling intelligent crimping.
- Crimping cycle data is automatically stored on a memory card for transfer to a PC via USB interface.
- OLED display provides information on battery capacity, crimping cycles, and service intervals.
- Automatic retraction when maximum pressure is reached.
- LED lighting for working in dark environments.
- Rubber-coated housing to reduce noise and minimise vibration.
- Supplied with a carrying case.



Battery type	Battery changer
18 V 4.0 Ah, Li-ion	ASC 55

Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
412001	EBC-13C	130 kN	70 MPa	385x325x95 mm	670x470x135 mm	7.7 kg (incl. battery)	4.5 kg

Crimping range

Copper terminals and sleeves	up to 400 mm ²
Aluminium terminals and sleeves	up to 300 mm ²

Available dies



HD13 copper and aluminium lugs and butt-connectors for hexagonal compression

Copper: up to 400 mm²
 Aluminium: up to 300 mm²
 Bimetallic: up to 240 mm²



CD13 copper and aluminium compression clamps for circular compression

Copper: main and tap up to 185 mm²
 Aluminium: main up to 300 mm² and tap up to 70 mm²

Battery operated insulated hydraulic crimping tool 22 kV



20202 EBC-13LW

- Ideal for operations near power sources, including substations, medium-voltage lines, catenary systems, and similar environments.
- The C-type head allows crimping at various angles, adapting to diverse crimping requirements.
- Equipped with both automatic and mechanical oil-return systems (oil return without power), ensuring equipment safety during power outages without affecting subsequent use.
- Enables data transmission between the tool and a host computer via Bluetooth or USB cable.
- The OLED screen, combined with touch buttons, provides real-time display of various tool states, enhancing operational intelligence.
- The housing contains rubber to minimise noise and vibration.
- High-intensity LED lamp beads cover the entire crimping area, ensuring visibility for night-time work.
- Supplied with a carrying case.



Battery type	Battery charger
18 V 4.0 Ah, Li-ion	ASC 55

Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
412002	EBC-13LW	130 kN	70 MPa	390x325x94 mm	670x470x135 mm	7.8 kg (incl. battery)	4.5 kg

Crimping range

Terminales y manguitos de empalme para cables de cobre	400 mm ²
Terminales y manguitos de empalme para cables de aluminio	300 mm ²

Available dies



HD13 copper and aluminium lugs and butt-connectors for hexagonal compression
 Copper: up to 400 mm²
 Aluminium: up to 300 mm²
 Bimetallic: up to 240 mm²



CD13 copper and aluminium compression clamps for circular compression
 Copper: main and tap up to 185 mm²
 Aluminium: main up to 300 mm² and tap up to 70 mm²

Battery operated hydraulic crimping tool

20202 EBC-13U

- Universal crimping head for all types of crimping, including deep staggered punch crimping.
- 180° swivel head.
- Two-speed hydraulic system.
- Independently designed oil-return system that can safely retract without power.
- The trigger switch and return button are separate and can be operated with one hand.
- Built-in chip with memory function allows the tool to stop automatically when crimping is completed, enabling intelligent crimping.
- Crimping cycle data is automatically stored on a memory card for transfer to a PC via USB interface or Bluetooth.
- OLED display provides battery capacity, operational and service crimping cycles, Bluetooth information, and more.
- Automatic retraction when maximum pressure is reached.
- LED lighting for working in dark environments.
- Rubber-coated housing to reduce noise and minimise vibration.
- Supplied with a carrying case.



Battery type	Battery changer
18 V 4.0 Ah, Li-ion	ASC 55

The EBC-13U tool comes with the "C" adapter for hexagonal crimping. Other adapters and dies are available separately.

Includes AD-13U/13C adapter to convert the "H" head into a "C" head.

Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
412003	EBC-13U	130 kN	70 MPa	363x334x95 mm	670x470x135 mm	6.7 kg (incl. battery)	4.5 kg

Crimping range

Copper lugs and splices	400 mm ²	Bimetallic lugs (Stepped deep punching)	240 mm ²
Aluminium lugs and splices	300 mm ²	H type, C type clamps	240 mm ²

Available dies



HD13 copper and aluminium lugs and butt-connectors for hexagonal compression
 Copper: up to 400 mm²
 Aluminium: up to 300 mm²
 Bimetallic: up to 240 mm²



CD13 copper and aluminium compression clamps for circular compression
 Copper: Up to 185 mm²
 Aluminium: Main up to 300 mm² and tap up to 70 mm²



MP-L/PP bimetallic cable lugs for deep punch compression
 Up to 240 mm²

MP-S/PP aluminium multi-voltage joints for deep punch compression
 Up to 240 mm²

Note: choose the adapter according to the cable section, to be used together with the corresponding punch and die.

Battery operated hydraulic crimping tool without dies



20202 EBC-14SM New

- Punch that adapts to the cable cross-section used, requiring no additional dies.
- 180° swivel head for greater convenience in confined spaces.
- Automatic retraction upon reaching maximum pressure, optimising the work cycle.
- OLED display showing key information: battery charge, crimp cycles, and maintenance alerts.
- Advanced connectivity (USB and optional Bluetooth) for data management.
- Dual-speed system: fast approach movement and slow final crimping.
- Safety valve limits maximum pressure with audible release.
- Pressure release button accessible from both sides (for right- and left-handed users).
- Integrated LED light improves visibility in low-light areas.
- 18 V / 4.0 Ah Li-Ion battery with high capacity and reduced charging times.



Supplied with a carrying case and a rubber hammer to free the punch, which may become temporarily stuck in the connector during deep punch crimps due to aluminium deformation.



Battery type	Battery changer
18 V 4.0 Ah, Li-ion	ASC 55

Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
20202001	EBC-14SM	114 kN	70 MPa	485x295x94 mm	670x470x135 mm	5.63 kg (incl. battery)	4.5 kg

Crimping range

Terminals and sleeves of copper, aluminium and bimetallic materials	35-630 mm ²
---	------------------------

Battery-powered hydraulic cutting tool



20202 EBT-45

- The head is adjustable to facilitate cutting at various angles.
- The independently designed oil-return system ensures safe retraction without relying on electricity.
- A two-speed hydraulic system guarantees swift, high-quality cutting.
- After cutting, the conductor surface remains perfect with no loose strands.
- Equipped with a built-in high-pressure safety valve that automatically releases pressure when maximum levels are reached, safeguarding both tools and operators.
- LED lighting enhances convenience and safety during cutting operations.
- Extra-comfortable handling.
- Rubber-coated housing to reduce noise and minimise vibration.
- Supplied with a carrying case.



Battery type	Battery changer
18 V 4.0 Ah, Li-ion	ASC 55

Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
412031	EBT-45	130 kN	70 MPa	460x325x95 mm	670x470x135 mm	8 kg (incl. battery)	4.5 kg

Crimping range

ACSR, copper and aluminium	With a diameter less than 45 mm ($\leq 1000\text{mm}^2$)
Steel strand	150 mm ² Ø 20 mm

Spare blades



Fixed cutting blade
Weight: 120 g

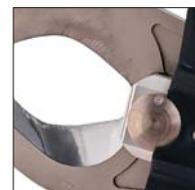


Moveable cutting blade
Weight: 100 g

Electro-hydraulic cable cutter tool with remote control

20202 EBT-106-VOLTCUT

New



- Professional cutting tool for armoured copper or aluminium cables up to Ø 106 mm.
- Operates via an electro-hydraulic system with mechanical return.
- Includes wireless remote control (up to 60 m), 180° swivel head, and dual LED lighting for work in low-visibility areas.
- OLED display provides real-time information (battery status, Bluetooth, light, etc.).
- Operates with an 18 V - 5.0 Ah battery or mains power adapter.
- Clean, deformation-free cuts without affecting cable conductivity.
- The head can be grounded, and special clamps are available for secure operation.
- Supplied with a carrying case.



Remote control operation.

Battery type	Battery charger
18 V 4.0 Ah, Li-ion	ASC 55

Code	Ref.	Cutting force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
20202002	EBT-106-VOLTCUT	197 kN	78 MPa	590x457x94 mm	670x470x135 mm	8.7 kg (incl. battery)	4.5 kg

* Available on request

Crimping range

Armoured copper or aluminium cables	up to Ø 106 mm
-------------------------------------	----------------

Battery wire ratchet cutter

20202 EBT-54

- Cuts the cable in seconds, without any effort, optimising time and significantly reducing operator working hours.
- Ensures a precise, clean cut that preserves the internal conductors, maintaining the cable's integrity and functionality.
- Designed for class 1, 2, and 5 copper and aluminium cables, as well as armoured and ACSR cables.
- The blade, made from forged steel alloy and subjected to a specialised heat treatment, withstands prolonged and demanding use.
- With a rational, lightweight, and portable design, it offers efficient performance and effortless operation.
- Includes either two 3.0 Ah batteries or one 5.0 Ah battery, subject to availability.
- Supplied with a carrying case.



Battery type	Battery charger
DC 18 V 5.0 Ah 54 Wh Li-ion	AC 220 V 50-60 Hz

Code	Ref.	Cutting force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
412006	EBT-54	62 kN	54 MPa	340x190x110 mm	450x400x150 mm	2.6 kg	1.8 kg

Crimping range

Copper cables, aluminum cables, armored cables, and ACSR cables	up to 54 mm, ≤560 mm ²
---	-----------------------------------

Battery-powered hydraulic crimping tool, mini series

20202 EBC-6M

- Suitable for crimping operations in confined spaces, such as electrical cabinets, narrow boxes, and similar environments.
- Extremely lightweight and easy to handle, this tool ensures maximum efficiency and comfort.
- Flip-top design for easy access to fittings.
- The head rotates 360 degrees.
- Automatic pressure relief.
- External smart LED display, easy to read and to record usage information.
- High-performance, high-capacity 18 V lithium battery with power indicator, equipped with a fast charger.
- Two LED work lights make operation easier in dark areas.
- PP plastic housing and carrying case, sturdy and durable.
- Supplied with a carrying case.



Battery type

18 V 4.0 Ah, Li-ion

Battery charger

ASC 55

Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
412004	EBC-6M	63 kN	55 MPa	415x125x90 mm	530x420x130 mm	2.99 kg (incl. battery)	4.5 kg

Crimping range

Copper tubular terminals and sleeves	up to 300 mm ²
Aluminum tubular terminals and sleeves	up to 185 mm ²

Battery-powered hydraulic crimping tool, mini series, without dies

20202 EBC-6SM

- No dies needed; crimping is carried out with a self-adjusting punch that automatically adapts to the cable cross-section used.
- Suitable for pressing operations in confined spaces.
- Lightweight, with fast pressing speed and easy operation.
- All data can be easily viewed on the smart display.
- Connection to a computer via USB allows convenient management of various parameters.
- The closed head is fully rotatable.
- High-performance, high-capacity 18 V lithium battery with power indicator, supplied with a fast charger from Metabo.
- Two LED work lights make operation easier in dark areas.
- PP plastic housing, durable and robust.
- Supplied with a carrying case.



Battery type

18 V 4.0 Ah, Li-ion

Battery changer

ASC 55

Code	Ref.	Crimping force	Nominal pressure	Tool dimensions	Briefcase dimensions	Tool weight	Briefcase weight
412007	EBC-6SM	63 kN	55 MPa	418x121x90 mm	530x420x130 mm	2.8 kg	4.5 kg

Crimping range

Copper terminal	10-300 mm ²
Aluminum terminal	16-240 mm ²

Hydraulic head 13T

20203 CH-13C

- Hydraulic C-type head with quick connection to a hydraulic drive with a maximum pressure of 700 bar.
- Made of specially treated, sealed steel.
- Interchangeable dies.
- Supplied with a carrying case.



Available dies



HD13 copper and aluminium lugs and butt-connectors for hexagonal compression

Copper: up to 400 mm²
 Aluminium: up to 300 mm²
 Bimetallic: up to 240 mm²



CD13 copper and aluminium compression clamps for circular compression

Copper: main and tap up to 185 mm²
 Aluminium: main up to 300 mm² and tap up to 70 mm²

Code	Ref.	Crimping force	Rated pressure	Head dimensions	Briefcase dimensions	Head weight	Briefcase weight
413001	CH-13C	130 kN	700 bar	289x119x72 mm	450x370x120 mm	5.5 kg	2.5 kg

Hydraulic head 13T

20203 CH-13U

- Universal crimping head for all types of crimping, including deep stepped crimping.
- Made of specially treated steel.
- Flip-top head for easy positioning and insertion of the dies.
- Quick-lock, quick-release connection.
- Supplied with an adapter for hexagonal crimping.
- Supplied with a tool holder briefcase.



Available dies



HD13 copper and aluminium lugs and butt-connectors for hexagonal compression

Copper: up to 400 mm²
 Aluminium: up to 300 mm²
 Bimetallic: up to 240 mm²



CD13 copper and aluminium compression clamps for circular compression

Copper: Up to 185 mm²
 Aluminium: Main up to 300 mm² and tap up to 70 mm²



MP-L/PP bimetallic cable lugs for deep punch compression

Up to 240 mm²

MP-S/PP aluminium multi-voltage joints for deep punch compression

Up to 240 mm²

Note: choose the adapter according to the cable section, to be used together with the corresponding punch and die.

Code	Ref.	Crimping force	Rated pressure	Head dimensions	Briefcase dimensions	Head weight	Briefcase weight
413000	CH-13U	130 kN	700 bar	248x93x76 mm	450x370x120 mm	3.5 kg	2.5 kg

Universal hydraulic head 20T

20203 CH-20P

- This 20-ton universal hydraulic head is designed for all types of crimping applications, including hexagonal, deep indent, and circular crimping.
- It accommodates all sections up to 630 mm² using different adapters, ensuring versatile compatibility.
- Despite its powerful capabilities, the head is lightweight, easy to handle, and of exceptional quality.
- Supplied with a carrying case for convenient transport and storage.



Available dies

Hexagonal compression on copper or aluminium conductors, according to various regulations or specifications, from 10 mm² to 630 mm².

Circular compression on copper and aluminium clamps, such as CRC, CRA, and CRS, across all ranges. Performed in a round shape to achieve a compact, circular form.

Deep stepped punching on bimetallic terminals and sleeves up to 630 mm²

Code	Ref.	Crimping force	Rated pressure	Briefcase dimensions	Briefcase dimensions	Head weight	Briefcase weight
413003	CH-20P	200 kN	700 bar	305x116x95 mm	450x370x120 mm	6 kg	2.5 kg

Hydraulic head 25T

20203 CH-25

- U-type crimping head, sturdy and durable.
- Pin-style opening for easy access to the fitting.
- Quick coupler for easy disassembly.
- Powered by a single-acting hydraulic pump.
- Lightweight, suitable for overhead line work.
- Supplied with a carrying case.



Available dies



HD25 hexagonal dies
Up to 630 mm² copper



Adapter
for transitioning to small sections 13T

Code	Ref.	Crimping force	Rated pressure	Briefcase dimensions	Briefcase dimensions	Head weight	Briefcase weight
413002	CH-25	250 kN	700 bar	360x130x130 mm	450x400x150 mm	5 kg	1.8 kg

Hydraulic head with die set
for bimetallic terminals 300/400 mm²



20203 KIT CH-20P New

- The universal CH-20P 20-ton hydraulic head is designed for all types of crimping applications, including hexagonal crimping, deep punching, and circular crimping. Suitable for conductor cross-sections up to 630 mm² Cu/Al, and, with the use of different adapters, it ensures versatile compatibility.
- The KIT 413009 includes the adapter, die, and punch for crimping bimetallic terminals of 300 and 400 mm² (TDC/S-300, TDC/S-400, TBF-300, and TBF-400) in accordance with standards UNE 211024-2 and NF C33-090-1.
- Supplied with a carrying case.



Available dies



DPA-300/630 adapter for deep punching,
300/630 mm²
Code: 406013



DPD-300/400L deep punch die,
300/400 mm²
Code: 406014



DPP-300/400 5E punch for deep punching,
300/400 mm²
Code: 406015

Code	Ref.	Crimping force	Rated pressure	Head dimensions	Briefcase dimensions	Weight cabezal	Head weight
413009	KC-CH-20P	200 kN	700 bar	305x116x95 mm	450x370x120 mm	6 kg	2.5 kg

Hydraulic head 60T

20203 CH-60

- Ideal for ACSR overhead lines, splice sleeves, and clamps for power transmission lines from 110 kV to 220 kV.
- The head features a fixed upper die seat that can be quickly rotated and opened, facilitating crimping operations on mid-span and end fittings. Equipped with a quick coupler for easy disassembly.
- Operates on a single-acting hydraulic system.
- Supplied with a steel carrying case.



Available dies



HD60 hexagonal dies
Cu/Al up to Ø 60 mm
Stell up to Ø 26 mm

Code	Ref.	Crimping force	Rated pressure	Head dimensions	Briefcase dimensions	Head weight	Briefcase weight
413005	CH-60	600 kN	700 bar	270x160x320 mm	295x220x350 mm	25 kg	4 kg

* Available upon request

Crimping range

Copper and aluminium terminals	Ø 60 mm
Steel terminals	Ø 26 mm

Hydraulic head 100T

20203 CH-100/SA New

- Single-acting hydraulic head designed for high-capacity crimping of aluminium and copper connectors.
- Ideal for overhead line splices, repair sleeves, and crimping of large-section cables.
- Supplied in a wooden carrying case.



Available dies



HD100
Cu/Al up to Ø 76 mm
Stell up to Ø 36 mm

Code	Ref.	Crimping force	Rated pressure	Head dimensions	Head weight
20203005	CH-100/SA	1000 kN	700 bar	228x180x376 mm	33.2 kg

* Available upon request

Crimping range

Copper and aluminium terminals	Ø 76 mm
Steel terminals	Ø 36 mm

Hydraulic cutting head 6T

20203 CT-45 New

- Hydraulic cutting head designed for use with an external hydraulic pump (manual, electric, or battery-powered), providing the required force for clean and fast cuts.
- Ideal for cutting low-, medium-, and high-voltage cables, particularly those used in power transmission and distribution.
- Suitable for high-strength materials, including aluminium-steel combinations such as ACSR cables.
- The CT-45 head is compact and robust, making it perfect for working in confined spaces and demanding environments.
- Supplied with a carrying bag.



Code	Ref.	Cutting force	Rated pressure	Head dimensions	Head weight
20203003	CT-45	60 kN	700 bar	310x100x70 mm	3.8 kg

* Available upon request

Cutting range

Copper cables, aluminium cables, and ACSR conductor cables	up to Ø 45 mm
Steel cables	up to Ø 20 mm

Hydraulic cutting head 8T

20203 CT-85 New

- Hydraulic cutting head designed for use with an external hydraulic pump (manual, electric, or battery-powered), providing the necessary force for clean and fast cuts.
- Ideal for cutting low-, medium-, and high-voltage cables, especially those used in power transmission and distribution.
- Designed to work with high-strength materials, including aluminium-steel combinations such as ACSR cables, or lightly armoured cables up to Ø 85 mm in diameter (aluminium armour or thin steel tape).
- Supplied with a carrying case.



Code	Ref.	Cutting force	Rated pressure	Head dimensions	Head weight
20203004	CT-85	80 kN	700 bar	310x200x75 mm	4.8 kg

* Available upon request

Cutting range

Copper cables and aluminium cables with light armour	up to Ø 85 mm
--	---------------

KIT KC-13/45 CT.
Crimping and cutting heads

20105 KC-13/45 CT New

- This KIT combines the CH-13C and CT-45 hydraulic heads, offering a versatile solution for crimping and cutting tasks.
- Designed for use with external hydraulic pumps, it is ideal for the EB-7 model but is also compatible with other hydraulic pumps operating at 700 bar. Its design allows the operator to switch easily between heads according to the task, maximising efficiency and reducing costs.
- This KIT is the perfect solution for professionals who need a compact, efficient, and versatile hydraulic tool compatible with a wide range of external pumps.
- Supplied with a secure and organised carrying case, including additional space for crimping dies (not included in this KIT).



Code	Ref.	Weight	Dimensions
413010	KC-13/45 CT	7.8 kg	450x400x150 mm

KIT components:



CH-13C Head

Code 413001

Hydraulic "C"-shaped head designed for high-pressure crimping of copper, aluminium, and bimetallic terminals and connectors (hexagonal crimping only).

- Crimping force: up to 130 kN
- Crimping range: up to 400 mm² (copper), 300 mm² (aluminium), 240 mm² (bimetallic)
- Branch sleeves: up to 300 mm² (Al), 240 mm² (Cu)
- Max pressure: 700 bar
- Dimensions: 289 x 119 x 72 mm
- Weight: 5.43 kg

CT-45 Head

Code 20203003

Hydraulic cutting head, ideal for cutting copper, aluminium, and ACSR cables.

- Cutting force: 60 kN
- Cutting capacity: up to Ø 45 mm (Cu, Al, ACSR); steel bars up to Ø 20 mm
- Max pressure: 700 bar
- Dimensions: 310 x 100 x 70 mm
- Weight: 3.8 kg



20105 KC-13/45 CT + EBT-7

Ideal compatibility

This KIT is designed to make the most of the features of the portable EB-7 hydraulic pump, highlighting its efficiency, ease of use, and portability. However, it can also be used with other hydraulic pumps operating at pressures up to 700 bar, ensuring maximum flexibility.

Advantages

Interchangeability: Allows quick switching between cutting and crimping tasks, adapting to a wide range of operational needs.

Robustness and durability: Built with high-quality materials to withstand demanding working conditions.

This KIT is the perfect solution for professionals who require a versatile, compact, and efficient hydraulic tool compatible with a wide range of external hydraulic pumps.

Battery-operated hydraulic tool

20202 EB-7

The EB-7 is a hydraulic pump designed for crimping terminals and sleeves, offering excellent handling and significant time savings. This tool provides efficiency and ease of use for all crimping applications. Ideal for 13-ton heads.



Head not included.



Code	Ref.	Rated pressure	Pump dimensions	Briefcase dimensions	Pump weight	Briefcase weight
412015	EB-7	700 bar	240x334x95 mm (hose not included)	670x470x135 mm	4.4 kg	4.5 kg

20204 BH-700

Hydraulic pedal pump designed to operate hydraulic heads for both cutting and crimping.

- Includes a 2-meter high-pressure flexible hose with automatic lock.
- Automatic double-acting mechanism.
- Operates with hydraulic heads at 700 bar.
- Robust and ergonomic design.
- Supplied with a tool holder briefcase for easy transport and storage.



Code	Ref.	Rated pressure	Pump dimensions	Briefcase dimensions	Pump weight	Briefcase Weight
415000	BH-700	700 bar	560x180x205 mm (hose not included)	705x200x215 mm	8.8 kg	5 kg

Portable hydraulic pump operated by battery

20204 BHM-7

Portable next-generation electrohydraulic pump, powered by a 24 V 5.0 Ah Li-Ion battery for extended operation. A full charge allows approximately 150 crimps of 120 mm² copper terminals

Technical features:

- 1-hour fast charging.
- Remaining battery power displayed after each crimp.
- Pressure release button to release pressure at any time.
- Automatic shut-off and pressure retention when maximum pressure is reached.
- Suitable for heads up to 100 T.

Includes:

- 24 V 5.0 Ah battery.
- Charger.
- Wired controller.
- 2 m hose with quick couplers.
- Carrying backpack.



Code	Ref.	Rated pressure	Voltaje	Li-ion battery protection	Dimensions	Weight
415004	BHM-7	70 MPa / 700 bar	24 V	24 V / 5,0 Ah	391x335x162 mm	9.2 kg

Cutting unit

20203 KH-140-VOLTCUT

New



The KH-140-VOLTCUT model is a battery-powered hydraulic cutting tool designed for precise and safe cutting of copper and aluminium cables, including armoured cables and live cables up to 220 kV.

Includes:

- Hydraulic cutting head: Ø 140 mm, 25 tonnes, rotary-locking design.
- Battery hydraulic pump: Provides an operating pressure of 70 MPa.
- High-pressure insulated hose: 10 m, prefilled with insulating oil.
- Wireless remote control: Enhances operator safety thanks to its extended range.
- Earthing cable: 6 m copper cable with a reinforced terminal at one end and a clamp at the other.
- Earthing rod: 1 m length with carrying bag.
- Carrying backpack: Offers comfort, durability, and protection for the hydraulic pump.
- Plastic transport case: With wheels for easy movement, designed for the cutting head and hose.
- Nylon protective bag: For the earthing rod.
- Nylon bag: For the hose and earthing cable.



Battery type

24V / 5.0 Ah, Li-ion

Charger power supply

ASC 55

Code	Ref.	Nominal Pressure	Shear force	Operating voltage	Length of the insulating hose	Dimension of hydraulic pump	Total weight
20203000	KH-140-VOLTCUT	70/85 MPa	25 T	220 kV	10 m	391x163x335 mm	28.8 kg

* Available upon request

Cutting range

Copper cables, aluminium cables, and armoured cables

up to Ø 140 mm

Double-acting Electrohydraulic pump

20204 BGD-8

Equipped with a pressure gauge to monitor working pressure at all times.

Automatically switches between high and low pressure according to job requirements to enhance efficiency.

Compatible with a wide range of hydraulic heads.

Includes:

- Multifunctional operation handle.
- 2 m hose with quick couplers.

Bluetooth transmission.

4G module for transmitting data over the network.



Code	Ref.	Rated pressure	High pressure flow	Low pressure flow	Reservoir capacity	Dimension of hydraulic pump	Hydraulic pump weight
415003	BGD-8	80 MPa	1.2 L/min.	5-8 L/min.	≥2.3 L	582x372x395 mm	44 kg

* Available upon request

20205 Insulated hoses

Insulated hoses are used to connect hydraulic cutting or crimping heads to the hydraulic pump, ensuring safe distances and keeping the operator out of harm's way. They provide essential protection and reliability for a wide range of hydraulic applications.



Code	Ref.	Length
413050	AM-05	5 m
413100	AM-10	10 m
413150	AM-15	15 m

* Available upon request

20205 Hydraulic connection hoses

New

High-pressure hoses designed to connect hydraulic cutting or crimping heads to manual, electric, or battery-operated pumps. Made from durable and flexible materials, they ensure safe and efficient flow throughout the entire work process. Fitted with quick-connect couplings and dust caps, they are available in various lengths depending on the application and type of tool.



Code	Ref.	Length
413015	MR-3	3 m
413020	MR-5	5 m
413025	MR-10	10 m

30901 Earthing lead

Earthing lead featuring a lug at one end and a reinforced terminal at the other. Specifically designed for grounding the cutting or crimping head, this essential component ensures a secure connection to an earthing rod. Made with 25 mm² copper cable, 6 m in length.



Code	Ref.	Section	Length
667060	P-TR12-02506	25 mm ²	6 m

30911 Hexagonal earthing rod



The ER-1Z hexagonal earthing rod is designed for easy insertion into the ground, featuring a pointed end that allows effortless driving. Made of galvanized F-111 material, it provides durability and reliable grounding performance.

Code	Ref.	Length
667150	ER-1Z	1 m

30911 Suitcase Sofabox

Ideal for transporting hydraulic kits or earthing and short-circuiting equipment. Ensures easy and convenient mobility, providing a reliable solution for safely moving equipment between job sites.

On wheels

Code	Ref.	Dimensions
620061	SOFABOX	860x570x392 mm



Folding steel leg
Allow horizontal storage of the suitcase.



Folding handles
The suitcase has handles on the top, bottom, and one side to make transport easy at all times.





CABLE LUGS AND TUBULAR CONNECTORS

DIE	COPPER								ALUMINIUM	
 HD5 Cross-section (mm ²)	 T	 TL	 T45°	 T90°	 TT	 TPE	 CP	 M	 MAL	 TBE
	Ref. dies			Footprint width (mm)					Ref. dies	Footprint width (mm)
10	HD5-07								-	-
16	HD5-08								HD5-11	
25	HD5-10								HD5-11	7
35	HD5-11			7					HD5-14	
50	HD5-13								MK16-C5	
70	HD5-14			5					HD5-18	5
95	HD5-17			7					HD5-22	7
120	HD5-18								HD5-22	5
150	HD5-20			5					HD5-25	
185	HD5-22								-	-
240	HD5-25								-	-

TDT CABLE LUGS

DIE	COPPER	
 HD5 Cross-section (mm ²)	 TDT	Footprint width (mm)
50	HD5-14	
70	HD5-14	
95	HD5-18	5
120	HD5-20	
150	HD5-22	
185	HD5-22	



RJU, BT, RBT, RJA, TBF, AND TBEM CONNECTORS AND CABLE LUGS

DIE	COPPER		ALUMINIUM / BIMETALLICS	
	Ref. dies	Footprint width (mm)	Ref. matrices	Footprint width (mm)
 HD5 Cross-section (mm ²)	 RJU		 BT RBT RJA TBF TBEM	
25	HD5-20	5	HD5-20	5
35				
50				
70				
95	HD5-25		-	-
120				
150	-	-	HD5-20	5
185				
30				
56				
78	HD5-25			
110				

BIMETALLIC CABLE LUGS TDC/S AND TDC/A

DIE	Ref. dies	Footprint width (mm)
 HD5 Cross-section (mm ²)		
16	HD5-20	6
25		
35		
50		
70	HD5-25	5
95		
120	HD5-20	6
150		
30		
54.6		
56	HD5-25	5
78		
80	HD5-25	5
110		
145		

COMPRESSION CLAMPS

DIE	Ref. dies	Footprint width (mm)
 CDC5 Reference		
CRC-3	CDC5-25	5
CRC-4		
CRC-5		
CRC-6		
-	CDC5-35	5
-		
CRC-7	CDC5-70	
CRA-1		
CRS-1		
CRC-8		
CRC-9	CDC5-70	
-		
-		



CABLE LUGS AND TUBULAR CONNECTORS

DIE	COPPER							ALUMINIUM		
 HD6	 T	 TL	 T45°	 T90°	 TT	 TPE	 CP	 M	 MAL	 TBE
Cross-section (mm ²)	Ref. dies			Footprint width (mm)				Ref. dies	Footprint width (mm)	
10	HD6-07			7				-	-	
16	HD6-08			7				HD6-11	-	
25	HD6-10			7				HD6-11	12	
35	HD6-11			12				HD6-14	-	
50	HD6-13			12				MK16-C6	10	
70	HD6-14			10				HD6-18	9	
95	HD6-17			9				HD6-22	8	
120	HD6-18			8				HD6-22	12	
150	HD6-20			6				HD5-25	-	
185	HD6-22			6				HD5-28	5	
240	HD6-25			5				-	-	
300	HD6-28			5				-	-	

TDT CABLE LUGS

DIE	COPPER	
 HD6	 TDT	
Cross-section (mm ²)	Ref. dies	Footprint width (mm)
50	HD6-14	10
70	HD6-18	8
95	HD6-20	8
120	HD6-22	6
150	HD6-22	6
185	HD6-22	6
240	HD6-28	5



RJU, BT, RBT, RJA, TBF, AND TBEM CONNECTORS AND CABLE LUGS

DIE	COPPER		ALUMINIUM / BIMETALLICS		
 HD6 Cross-section (mm ²)	 RJU Ref. dies Footprint width (mm)		 BT RBT RJA TBF TBEM Ref. dies Footprint width (mm)		
25	HD6-20	6	HD6-20	6	
35			HD6-20		
50			HD6-20		
70			HD6-20		
95			HD6-20		
120	HD6-25	5	HD6-25	5	
150			HD6-25		
185	-	-	-	-	
30			HD6-20		
56			HD6-20		6
78			HD6-20		
110	HD6-25	5	HD6-25	5	

BIMETALLIC CABLE LUGS TDC/S AND TDC/A

DIE	TDC/S	
 HD6 Cross-section (mm ²)	 TDC/S Ref. dies Footprint width (mm)	
16	-	-
25		
35		
50		
70		
95	HD6-20	6
120		
150	HD6-25	5
30		
54.6	HD6-20	6
56		
78		
80		
110	HD6-25	5
145		

COMPRESSION CLAMPS

DIE	COMPRESSION CLAMPS	
 CDC6 Reference	 CRC CRA CRS Ref. dies Footprint width (mm)	
CRC-3	CDC6-25	5
CRC-4		
CRC-5		
CRC-6		
CRC-10		
CRC-11	CDC6-35	5
CRC-12		
CRC-7	CDC6-70	5
CRA-1		
CRS-1		
CRC-8		
CRC-9	-	-
CRA-2		
-	-	-



DIN STANDARD

DIE	COPPER		ALUMINIUM	
 MK-C	 TCD (DIN 46235)	 MCD (DIN 46267)	 TBE/D (DIN 46329)	
Cross-section (mm ²)	Ref. dies	Footprint width (mm)	Ref. dies	Footprint width (mm)
10	MK6-C	7	-	-
16	MK8-C			
25	MK10-C	12	MK12-C	
35	MK12-C	14	MK14-C	
50	MK14-C		MK16-C	12
70	MK16-C		MK18-C	
95	MK18-C	12	MK22-C	
120	MK20-C		MK25-C	
150	MK22-C		MK28-C	10
185	MK25-C	10	MK32-C	
240	MK28-C	7	MK34-C	7
300	MK32-C			

CABLE LUGS AND TUBULAR CONNECTORS

DIE	COPPER								ALUMINIUM	
 HD13	 T	 TL	 T45°	 T90°	 TT	 TPE	 CP	 M	 MAL	 TBE
Cross-section (mm ²)	Ref. dies				Footprint width (mm)				Ref. dies	Footprint width (mm)
10	HD13-07				7				-	-
16	HD13-08								MK12-C	
25	HD13-10								MK12-C	
35	HD13-11								MK14-C	
50	HD13-13								MK16-C	12
70	HD13-14								MK18-C	
95	HD13-17				12				MK22-C	
120	HD13-18								MK22-C	
150	HD13-20								MK25-C	
185	HD13-22								MK28-C	10
240	HD13-25								MK32-C	7
300	HD13-28				10				MK34-C	
400	HD13-32				7				-	-



TDT CABLE LUGS		
DIE	COPPER	
 HD13	 TDT	
Cross-section (mm ²)	Ref. dies	Footprint width (mm)
50	HD13-14	
70		
95	HD13-18	
120	HD13-20	12
150		
185	HD13-22	
240	HD13-28	10
300	HD13-32	
400	HD13-34	7

COPPER AND ALUMINIUM CONNECTORS AND CABLE LUGS RJU, BT, RBT, RJA, TBF, AND TBEM				
DIE	COPPER		ALUMINIUM / BIMETALLICS	
 HD13	 RJU		 BT RBT RJA TBF TBEM	
Cross-section (mm ²)	Ref. dies	Footprint width (mm)	Ref. dies	Footprint width (mm)
25				
35				
50			HD13-20	
70	HD13-20	12		
95				
120			HD13-25	
150	HD13-25			12
185	HD13-32		HD13-32	
240		7		
30			HD13-20	
56				
78	-	-		
110			HD13-25	
180			HD13-32	7



BIMETALLIC CABLE LUGS TDC/S AND TDC/A HEXAGONAL CRIMPING

DIE		
  HD13	 TDC/S	
Cross-section (mm ²)	Ref. dies	Footprint width (mm)
50	HD13-20	12
70		
95		
120		
150	HD13-25	
185		
240	HD13-32	
30		
54.6		
56	HD13-20	
78		
80		
110		
145	HD13-25	7
180		

COMPRESSION CLAMPS

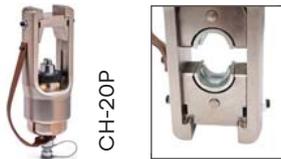
DIE									
  CD13	 CRC			 CRA CRS					
Reference COPPER	Ref. dies	Footprint width (mm)	Reference ALUMINIUM	Ref. dies	Footprint width (mm)				
CRC-3	CD13-25	35	CRS-0	CD13-70	35				
CRC-4									
CRC-5									
CRC-6									
CRC-7									
CRC-8									
CRC-9									
CRC-10									
CRC-11									
CRC-12									
CRC-13									
CRC-14									
CRC-15									
CRC-16									
							CRA-2	CD13-35	
							CRS-1		
			CRA-1	CD13-120 AL					
			CRS-3						
			CRA-3						
			CRS-8						
			CRA-3A						
			CRS-9						
			CRA-4	CD13-300					
			CRS-10						
			CRS-11						
			CRS-12						

According to UNE 211024-2 and NF C33-090-1 standards - Series 130



TDC/S CABLE LUGS							
ADAPTER	DIE	PUNCH					
							
AD	MP-L	PP	TDC/S				
	Cross-section (mm ²)		Ref. adapters	Ref. dies	Ref. punches	Ref. mark	
	16						
	25			MP35L	PP35	0E	
	35						
	50		AD150	MP95L	PP95	1E	
	70						
	95						
	120			MP150L	PP150	2E	
	150						
	185		AD240	MP240L	PP240	4E	
	240						

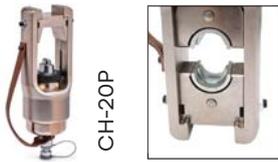
ALUMINIUM AND BIMETALLIC CONNECTORS AND CABLE LUGS										
ADAPTER	DIES	PUNCH	ALUMINIUM				ALUMINIUM			
										
AD	MP-L MP-S	PP	BT	RBT	TBF	TBEM/S	RJA			
	Cross-section (mm ²)		Ref. adapt.	Ref. dies	Ref. punches	Ref. mark	Ref. adapt.	Ref. dies	Ref. punches	Ref. mark
	16									
	25									
	35									
	50		AD150	MP95L	PP95	1E	AD150	MP95S	PP95	1E
	70									
	95									
	120			MP150L	PP150	2E		MP150S	PP150	2E
	150									
	185		AD240	MP240L	PP240	4E	AD240	MP240S	PP240	4E
	240									



CH-20P

CABLE LUGS AND TUBULAR CONNECTORS			
DIES		ADAPTER	COPPER
HD13	HD20	AD-20T-13T HEX	T TL T45° T90° TT TPE CP M
Cross-section (mm ²)		Ref. adapters	Ref. dies
10		AD-20T-13T HEX	HD13-07
16			HD13-08
25			HD13-10
35			HD13-11
50			HD13-13
70			HD13-14
95			HD13-17
120			HD13-18
150			HD13-20
185			HD13-22
240			HD13-25
300			HD13-28
400			HD13-32
500		HD20-38	
630		-	HD20-44
			Footprint width (mm)
			7
			12
			10
			7
			17

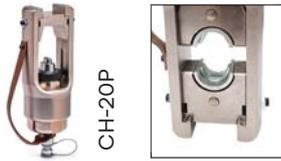
CABLE LUGS AND TUBULAR CONNECTORS				
DIE	ADAPTER	ALUMINIUM		
MK-C	AD-20T-13T HEX	MAL	TBE	
Cross-section (mm ²)		Ref. adapters	Ref. dies	
10		-	-	
16		AD-20T-13T HEX	MK12-C	
25			MK12-C	
35			MK14-C	
50			MK16-C	
70			MK18-C	
95			MK22-C	
120			MK22-C	
150			MK25-C	
185			MK28-C	
240			MK32-C	
300			MK34-C	
				Footprint width (mm)
				-
			12	
			10	
			7	



CH-20P

DIN STANDARD						
DIES		ADAPTER	COPPER			
MK-C	HD20	AD-20T-13T HEX	TCD (DIN 46235)	MCD (DIN 46267)		
Cross-section (mm ²)		AD-20T-13T HEX	Ref. adapters	Ref. dies	Footprint width (mm)	
10			AD-20T-13T HEX	AD-20T-13T HEX	MK6-C	7
16					MK8-C	
25					MK10-C	12
35					MK12-C	14
50			AD-20T-13T HEX	AD-20T-13T HEX	MK14-C	
70					MK16-C	
95					MK18-C	12
120					MK20-C	
150			AD-20T-13T HEX	AD-20T-13T HEX	MK22-C	
185					MK25-C	
240					MK28-C	10
300		MK32-C			7	
400		AD-20T-13T HEX	AD-20T-13T HEX	MK38-200		
500				MK42-200	17	

DIN STANDARD						
DIES		ADAPTER	ALUMINIUM			
MK-C	HD20	AD-20T-13T HEX	TBE/D (DIN 46329)			
Cross-section (mm ²)		AD-20T-13T HEX	Ref. adapters	Ref. dies	Footprint width (mm)	
25			AD-20T-13T HEX	AD-20T-13T HEX	MK12-C	14
35					MK14-C	
50					MK16-C	
70					MK18-C	12
95			AD-20T-13T HEX	AD-20T-13T HEX	MK22-C	
120					MK25-C	
150					MK28-C	10
185					MK32-C	7
240			AD-20T-13T HEX	AD-20T-13T HEX	MK34-C	
300					MK38-200	
400					MK44-200	17
500						



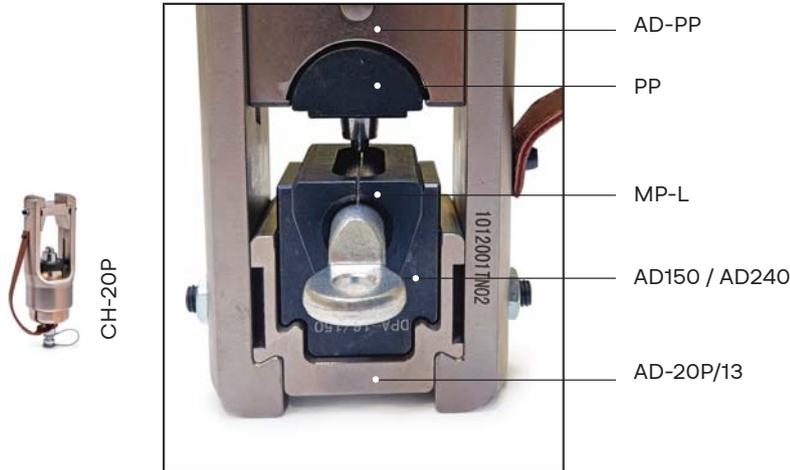
RJU CONNECTOR

DIE	ADAPTER	COPPER		
 HD13	 AD-20T-13T HEX	 RJU		
Cross-section (mm²)		Ref. adapters	Ref. dies	Footprint width (mm)
25		AD-20T-13T HEX	HD13-20	12
35				
50				
70				
95				
120				
150			HD13-25	
185			HD13-32	7
240				

BT, RBT, RJA, TBF, TBEM, AND TDC CONNECTORS AND CABLE LUGS

DIES		ADAPTER									
 HD13	 HD20	 AD-20T-13T HEX	 BT	 RBT	 RJA	 TBF	 TBEM	 TDC/S	 TDC/A		
Cross-section (mm²)			Ref. adapters	Ref. dies	Footprint width (mm)	Cross-section (mm²)	Ref. adapters	Ref. hexagonal die	Footprint width (mm)		
25		AD-20T-13T HEX		HD13-20	12	25	AD-20T-13T HEX		-	-	
35											
50											
70											
95											
120											
150				HD13-25	7			HD13-25	12		
185				HD13-32	7			HD13-32	7		
240											
300		-		HD20-40	17	300	-		HD20-40	17	
400											
500				HD20-46				HD20-46			
30		AD-20T-13T HEX		HD13-20	12	30	AD-20T-13T HEX		HD13-20	12	
56											
78											
110											
180				HD13-25	7			HD13-25			
				HD13-32				HD13-32	7		
						110					
						145					
						180					

According to UNE 211024-2 and NF C33-090-1 standards - Series 200



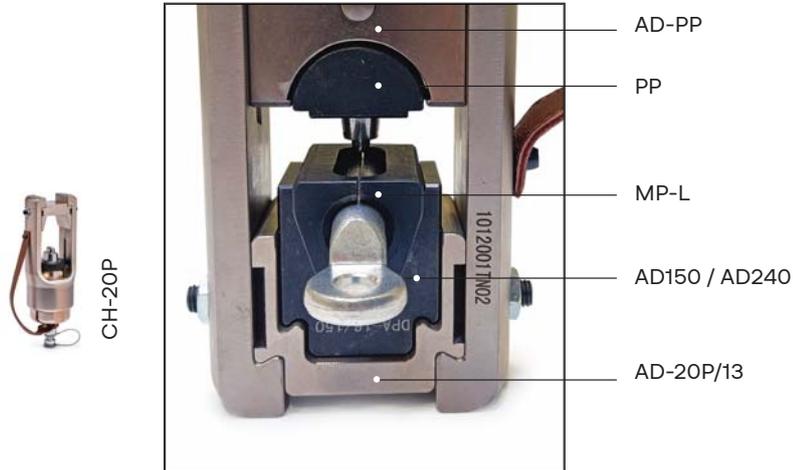
TDC/S AND TDC/A CABLE LUGS		
ADAPTERS	DIE	PUNCH
 AD-20P/13  AD  AD-PP	 MP-L  DPD	 PP  DPP

BIMETALLICS



Cross-section (mm ²)	Ref. adapters	Ref. adapters	Ref. deep punching dies	Ref. adapters	Ref. punches	Ref. mark
16	AD-20P/13	AD150	MP35L	AD-PP	PP35	0E
25			MP95L		PP95	1E
35			MP150L		PP150	2E
50		AD240	MP240L		PP240	4E
70			DPD-300/400L		PP300/400	5E
95		-	DPA-300/630		-	-
120	DPD-500/630L			DPP-500/630	6E	
150						
185						
240						
300						
400						
500						
630						

According to UNE 211024-2 and NF C33-090-1 standards - Series 200



BT, RBT, TBF AND TBEM CONNECTORS AND TERMINALS

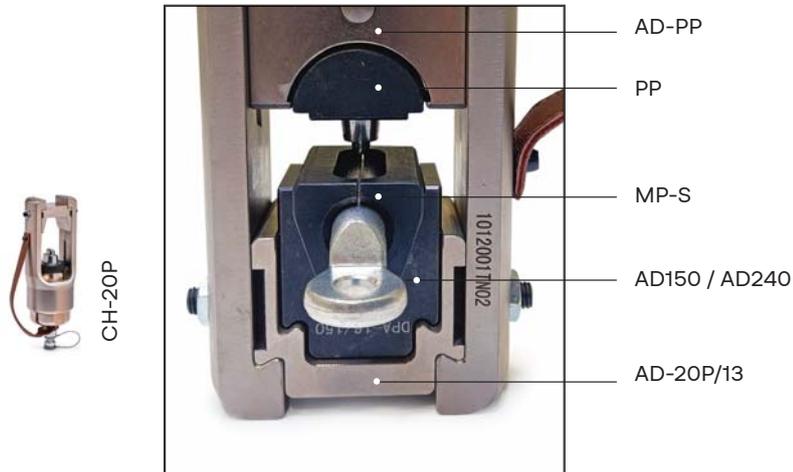
ADAPTERS			DIE		PUNCH	
AD-20P/13	AD	AD-PP	MP-L	DPD	PP	DPP

ALUMINIUM



Cross-section (mm ²)	Ref. adapters	Ref. adapters	Ref. deep punching dies	Ref. adapters	Ref. punches	Ref. mark
16	AD-20P/13	AD150	MP95L	AD-PP	PP95	1E
25						
35						
50		AD240	MP150L		PP150	2E
70						
95						
120	-	DPA-300/630	MP240L	PP240	4E	
150						
185			DPD-300/400L	PP300/400	5E	
240			-	-		
300			DPD-500/630L	DPP-500/640		
400						
500						
630						

According to UNE 211024-2 and NF C33-090-1 standards - Series 200



RJ4 CONNECTORS					
ADAPTERS			DIE		PUNCH
AD-20P/13	AD	AD-PP	MP-S		PP

ALUMINIUM



RJA

Cross-section (mm ²)	Ref. adapters	Ref. adapters	Ref. deep punching dies	Ref. adapters	Ref. punches	Ref. mark
16	AD-20P/13	AD150	MP95S	AD-PP	PP95	1E
25						
35						
50		AD240	MP150S		PP150	2E
70						
95						
120	-	DPA-300/630	MP240S	-	PP240	4E
150						
185						
240	-	-	DPD-300/400S	-	PP300/400	5E
300						
400						
500	-	-	-	-	-	-



COMPRESSION CLAMPS

DIE	ADAPTER						
 CD13	 AD-20T-13T HEX	 CRC			 CRA CRS		
Footprint width (mm)		Reference COPPER	Ref. adapters	Ref. dies	Reference ALUMINIUM	Ref. adapters	Ref. dies
35		CRC-3	AD-20T-13T HEX	CD13-25	CRS-0	AD-20T-13T HEX	CD13-70
	CRC-4	CRA-2			CD13-35		
	CRC-5	CRS-1			CD13-120 AL		
	CRC-6	CRA-1					
	CRC-7	CRS-3					
	CRC-8	CRA-3					
	CRC-9	CRS-8					
	CRC-10	CRA-3A					
	CRC-11	CRS-9					
	CRC-12	CRA-4					
	CRC-13	CRS-10					
	CRC-14	CRS-11					
	CRC-15	CRS-12					
	CRC-16			CD13-300			



CABLE LUGS AND TUBULAR CONNECTORS

DIES		ADAPTER	COPPER							
HD13	HD25	AD-25H-13H	T	TL	T45°	T90°	TT	TPE	CP	M
Cross-section (mm ²)			Ref. adapters	Ref. dies	Footprint width (mm)					
10			AD-25H/13H	HD13-07	7					
16				HD13-08						
25				HD13-10						
35				HD13-11						
50				HD13-13						
70				HD13-14						
95				HD13-17						
120				HD13-18						
150				HD13-20						
185				HD13-22						
240			HD13-25	12						
300			HD13-28							
400			HD13-32	10						
500			HD25-38	7						
630			-	HD25-44	17					

CABLE LUGS AND TUBULAR CONNECTORS

DIES		ADAPTER				
MK-C	MK	AD-25H-13H	MAL	TBE		
Cross-section (mm ²)			Ref. adapters	Ref. dies	Footprint width (mm)	
16			AD-25H/13H	MK12-C	12	
25				MK12-C		
35				MK14-C		
50				MK16-C		
70				MK18-C		
95				MK22-C		
120				MK22-C		
150				MK25-C		
185				MK28-C		10
240				MK32-C		7
300			MK34-C	17		



DIN STANDARD				
DIE	ADAPTER	COPPER		
				
MK	AD-25H-13H	TCD (DIN 46235)	MCD (DIN 46267)	
	Cross-section (mm ²)	Ref. adapters	Ref. dies	Footprint width (mm)
	10	AD-25H/13H	MK6-C	7
	16		MK8-C	
	25		MK10-C	12
	35		MK12-C	14
	50		MK14-C	
	70		MK16-C	12
	95		MK18-C	
	120		MK20-C	
	150		MK22-C	
	185		MK25-C	
	240	MK28-C	10	
	300	MK32-C	7	
	400	-	MK38-250	17
	500		MK42-250	

DIN STANDARD				
DIES	ADAPTER	ALUMINIUM		
				
MK	AD-25H-13H	TBE/D (DIN 46329)		
	Cross-section (mm ²)	Ref. adapters	Ref. dies	Footprint width (mm)
	25	AD-25H/13H	MK12-C	14
	35		MK14-C	
	50		MK16-C	12
	70		MK18-C	
	95		MK22-C	
	120		MK22-C	
	150		MK25-C	
	185		MK28-C	10
	240		MK32-C	7
	300		-	MK34-230
	400		MK38-250	
	500		MK44-250	



COPPER RJU CONNECTORS

DIE	ADAPTER	COPPER		
 HD13	 AD-25H-13H	 RJU		
Cross-section (mm²)		Ref. adapters	Ref. dies	Footprint width (mm)
25		AD-25H/13H	HD13-20	12
35				
50				
70				
95				
120				
150			HD13-25	
185			HD13-32	7
240				

BT, RBT, RJA, TBF AND TBEM ALUMINIUM AND BIMETALLIC CONNECTORS AND CABLE LUGS

DIES	ADAPTER	ALUMINIUM					
 HD13	 HD25	 AD-25H-13H					
Cross-section (mm²)			Ref. adapters	Ref. dies	Footprint width (mm)		
25		AD-25H/13H	AD-25H/13H	HD13-20	12		
35							
50							
70							
95							
120							
150			HD13-25	7			
185							
240			HD13-32	7			
300							
400			HD25-40	17			
500							
30		AD-25H/13H	AD-25H/13H	HD25-46	12		
56							
78							
110							
180				HD13-20	7		
				HD13-25			
				HD13-32			



BIMETALLIC CABLE LUGS TDC/S AND TDC/A

DIES		ADAPTER	BIMETALLIC		
HD13	HD25	AD-25H-13H	TDC/S	TDC/A	
Cross-section (mm ²)			Ref. adapters	Ref. dies	Footprint width (mm)
50			AD-25H/13H	HD13-20	12
70				HD13-25	
95				HD13-32	
120				HD25-40	26
150				HD25-46	
185			AD-25H/13H	HD13-20	12
240				HD13-25	
300				HD13-32	
400				HD13-25	26
500				HD13-32	
30					
54.6					
56					
78					
80					
110					
145					
180					

COMPRESSION CLAMPS

DIES		ADAPTER	COPPER			ALUMINIUM			
CD13	HD25	AD-25H-13H	CRC	CRA	CRS				
Footprint width (mm)			Ref. COPPER	Ref. adapters	Ref. dies	Ref. ALUMINIUM	Ref. adapters	Ref. dies	
35			CRC-3	AD-25H/13H	CD13-25	CRS-0	AD-25H/13H	CD13-70	
		CRC-4	CD13-35		CRA-2	CD13-35			
		CRC-5	CD13-70		CRS-1	CD13-70		CRA-1	CD13-120 AL
		CRC-6	CD13-95		CRS-3	CD13-95		CRA-3	CD13-300
		CRC-7	CD13-150		CRS-8	CD13-150		CRA-8	
		CRC-8	CD13-300		CRS-3A	CD13-300		CRA-3A	
		CRC-9			CRS-9			CRA-4	
		CRC-10			CRS-10			CRS-10	
		CRC-11			CRS-11			CRS-11	
		CRC-12			CRS-12			CRS-12	
		CRC-13							
		CRC-14							
		CRC-15							
		CRC-16							

Code	Ref.	Code	Ref.	Code	Ref.
DIES					
20304000	MK20-C	402006	HD13-17 95CU/70AL	407005	HD6-14
20304001	MK16-C	402007	HD13-18 120CU/95AL	407006	HD6-17
20304002	MK18-C	402008	HD13-20	407007	HD6-18
20304003	MK10-C	402009	HD13-21 120AL	407008	HD6-20
20304004	MK14-C	402010	HD13-22 185CU/120AL	407009	HD6-21
20304006	MK34-C	402011	HD13-25 240CU/150AL	407010	HD6-22
20304007	MK6-C	402012	HD13-28 300CU/185AL	407011	HD6-25
20304008	MK8-C	402013	HD13-32 400CU/240AL	407012	HD6-28
20306002	RD20-240	402014	HD13-34 300AL	407013	CDC6-25
20306003	RD20-300	402015	CD13-25	407014	CDC6-35
20306004	RD20-400	402016	CD13-35	407015	CDC6-70
20307000	DPD-500/630L	402017	CD13-70	407016	CDC6-95
20309000	HD100-70/SA	402018	CD13-95 CU		
401000	HD5-07 10CU	402019	CD13-150 CU	ADAPTERS	
401001	HD5-08 16CU	402020	CD13-120 AL	375000	AD-13U-13C
401002	HD5-10 25CU/16AL	402021	CD13-300	375001	AD-20T-13T HEX
401003	HD5-11 35CU/25AL	402022	MK12-C	375002	AD-PP
401004	HD5-13 50CU/35AL	402023	MK22-C	403000	AD-25H/13H
401005	HD5-14 70CU/50AL	402024	MK25-C	406000	AD-150
401006	HD5-17 95CU/70AL	402025	MK28-C	406009	AD-240
401007	HD5-18 120CU/95AL	402026	MK32-C	406013	DPA-300/630
401008	HD5-20 150CU	403005	HD20-40	406016	AD-20P/13
401009	HD5-21 120AL	403006	HD20-46		
401010	HD5-22 185CU/120AL	406001	MP-35L	PUNCHES	
401011	HD5-25 240CU/150AL	406003	MP-95L	20307001	DPP-500/630 6E
401012	CDC5-25 25-25CU/35-1	406004	MP-95S	406002	PP-35 0E
401013	CDC5-35 35-35CU/AL	406006	MP-150L	406005	PP-95 1E
401014	CDC5-70 70-70CU/70-5	406007	MP-150S	406008	PP-150 2E
402000	HD13-07 10CU	406010	MP-240L	406012	PP-240 4E
402001	HD13-08 16CU	406011	MP-240S	406015	DPP-300/400 5E
402002	HD13-10 25CU/16AL	406014	DPD-300/400L	406017	DPD-300/400S
402003	HD13-11 35CU/25AL	407000	HD6-07		
402004	HD13-13 50CU/35AL	407001	HD6-08		
402005	HD13-14 70CU/50AL	407002	HD6-10		
		407003	HD6-11		
		407004	HD6-13		

SOFAMEL



Safety

Gloves	148
Personal protection equipment	157
Insulation	169
Insulating poles	179
Earthing devices	206
Voltage detectors	263
Rescue and first aid	297
Shears	304
Padlocks	305
Signalization and beacons	313
1000 V insulated tools	324
Polyester-fiber ladders	340

30201 SG

The natural latex base provides excellent dielectric properties. The greater the glove thickness, the higher its electrical resistance.

The ergonomic design enhances comfort, offering superior softness and flexibility, and makes both donning and removal easier.

Insulating gloves are considered one of the most important items of personal protective equipment for electrical work. They form the first line of defence against contact with live components or energised conductors.



CE IEC 60903 | EN 60903

The natural latex glove is available in beige.

Code	Ref.	Class	Thickness (mm)		Size	Length (mm)	Categories	Working voltage (V) max.	Proof test voltage (V) max.	Withstand voltage (V) max.
			max.	medium						
530110	SG-25 T9	00	< 1.1	0.6		360	AZC	500 V AC	2.500 V AC	5.000 V AC
530120	SG-25 T10									
530150	SG-50 T9	0	< 1.6	1.0	7*	280 - 360	AZC	1.000 V AC	5.000 V AC	10.000 V AC
530160	SG-50 T10				8*	410 - 460				
530190	SG-10 T9	1	< 2.1	1.6	9		RC	7.500 V AC	10.000 V AC	20.000 V AC
530200	SG-10 T10									
530230	SG-20 T9	2	< 2.9	2.3	10	360	RC	17.000 V AC	20.000 V AC	30.000 V AC
530240	SG-20 T10									
530270	SG-30 T9				11					
530280	SG-30 T10	3	< 3.5	2.9	12*		RC	26.500 V AC	30.000 V AC	40.000 V AC
530290	SG-30 T11									
530320	SG-40 T10	4	< 4.2	3.8		410	RC	36.000 V AC	40.000 V AC	50.000 V AC
530330	SG-40 T11									

Meaning of letters in 'Categories': A: Acid / Z: Ozone / H: Oil / C: Very low temperature / R: A+Z+H resistance.

* For sizes 7, 8 and 12 consult.

USE: Recommended for work in electricity generation, transmission, transformation, and distribution, as well as in the railway, telecommunications, construction, industrial maintenance, photovoltaic panel, and hybrid vehicle battery sectors, among others.

RECOMMENDATIONS: Depending on the task, it is advisable to use the insulating latex gloves together with appropriate leather over-gloves to provide additional mechanical protection against abrasion, cutting, tearing, and punctures.

MECHANICAL AND THERMAL REQUIREMENTS

- Average tensile strength: ≥ 16 MPa
- Average elongation at break: $\geq 600\%$
- Puncture resistance: ≥ 18 N/mm
- Tension set: $\leq 15\%$
- Resistance to very low temperatures: Gloves conditioned for 24 hours at -40 °C ± 3 °C.
- Flame-retardant test: Application of a flame for 10 seconds at the fingertip.

Available in sizes:



Recommended size

	9	10	11
Circumference in cm	21	24	26

Measured with the hand closed.

3 in 1 Protection:
Electrical
Mechanical
Arc-flash

30202 SGM

Composite insulating gloves provide electrical, mechanical, and arc-flash protection; therefore, it is not necessary to use them in combination with a separate mechanical protective over-glove. The Composite glove range is made using a natural latex base coated with an outer layer of polychloroprene, combining mechanical resistance and comfort with a high level of electrical protection.

Arc-flash protection: the glove is manufactured from a material that provides a high level of protection against arc flash.



IEC 60903 | IEC 61482-1-2
ASTM F2675/F2675M:23



Red external finish with beige internal finish.

Code	Ref.	Class	Thickness (mm)		Working voltage (V) max.	Proof test voltage (V) max.	Size	Length (mm)	Category
			max.	medium					
531110	SGM-25 T9	00	< 2.4	1.5	500 V AC	2.500 V AC	7*	360	RC
531120	SGM-25 T10								
531150	SGM-50 T9	0	< 2.9	1.6	1.000 V AC	5.000 V AC	8*		
531160	SGM-50 T10								
531190	SGM-10 T9	1	< 3.4	1.8	7.500 V AC	10.000 V AC	9		
531200	SGM-10 T10								
531230	SGM-20 T9	2	< 3.9	2.5	17.000 V AC	20.000 V AC	10		
531240	SGM-20 T10								
531270	SGM-30 T9	3	< 4.2	3.1	26.500 V AC	30.000 V AC	11		
531280	SGM-30 T10								
531310	SGM-40 T10	4	< 4.8	3.8	36.000 V AC	40.000 V AC	12*		
531320	SGM-40 T11								

Meaning of letters in 'Categories': A: Acid / Z: Ozone / H: Oil / C: Very low temperature / R: A+Z+H resistance.

* For sizes 7, 8 and 12 consult.

MECHANICAL AND THERMAL REQUIREMENTS

- Average tensile strength: ≥ 16 MPa
- Average elongation at break: $\geq 600\%$
- Tension set: $\leq 15\%$
- **Complementary tests and performance levels to be achieved:**
 - Cutting resistance: > 20 mm and 5 N, according to ISO 13997. (equivalent to level 2 according to EN 388)
 - Abrasion resistance: ≥ 0.05 mg/t
 - Tear resistance: > 25 N (equivalent to level 2 according to EN 388)
 - Puncture resistance: > 60 N (equivalent to level 2 according to EN 388)
 - Resistance to very low temperatures: Gloves conditioned for 24 hours at -40 °C \pm 3 °C.
 - Flame-retardant test: Application of a flame for 10 seconds to the fingertip.

Available in sizes:



Recommended size

	9	10	11
--	---	----	----

Circumference in cm	21	24	26
---------------------	----	----	----

Measured with the hand closed.

Ultra-thin, high-sensitivity insulating glove (Class 0)

30201 SGC COMFORT

New



The new SGC Comfort glove combines exceptional tactile sensitivity with full Class 0 electrical protection, while also maintaining excellent mechanical resistance.

Its special formulation of high-purity natural latex allows for a reduced thickness without compromising safety, providing a soft, precise, and highly flexible feel.

The ergonomic design significantly enhances user comfort, making donning and removal easy—even during prolonged tasks. Thanks to its high sensitivity, it is ideal for operations that require great precision and the handling of small components.

IEC 60903 | EN 60903
 The natural latex glove is available in green.

Code	Ref.	Class	Thickness (mm)		Size	Length (mm)	Categories	Working voltage (V) max.	Proof test voltage (V) max.	Withstand voltage (V) max.
			max.	medium						
30201001	SGC-50	0	< 1.6	0.8	9	360	AZC	1.000 V AC	5.000 V AC	10.000 V AC
30201002	SGC-50				10					

Meaning of letters in 'Categories': A: Acid / Z: Ozone / H: Oil / C: Very low temperature / R: A+Z+H resistance.
 * Available on request.

The SGC Comfort model is certified according to EN 388 with the following levels:
Abrasion: 1 Cut (blade): 1 Tear: 2 Puncture: 2
ISO 13997 cut resistance: A

This mechanical protection makes it an excellent choice for environments where precision tasks are combined with the risk of friction or minor mechanical impacts.

RECOMMENDED APPLICATIONS

- Maintenance and repair of electric and hybrid vehicles (EV/HEV)
- Assembly, inspection, and handling in photovoltaic installation.
- Work in control centres and electrical panels
- Low-voltage operations with delicate components
- Diagnostic, adjustment, and fine-connection tasks
- Industrial applications requiring maximum tactile sensitivity

Available in sizes:



Manufactured and tested according to IEC 60903 and EN 60903, the SGC Comfort model guarantees the highest level of Class 0 protection with superior comfort in every use.



Recommended size	9	10
Circumference in cm	21	24
Measured with the hand closed.		

3 in 1 Protection: Electrical Mechanical Arc-flash

Thin dielectric glove with arc-flash protection (Class 0)

30201 SGE New



The new SGE glove is designed to provide high tactile sensitivity without compromising Class 0 electrical protection. Made from high-purity natural latex, it offers an optimal balance of safety, comfort, and precision for delicate tasks.

Thanks to its reduced thickness and the excellent elasticity of the latex, the SGE model delivers a soft, precise, and extremely flexible feel, making it ideal for tasks that require fine dexterity and handling of small components.




 IEC 60903 | IEC 61482-1-2
 
Red exterior with beige interior.

Code	Ref.	Class	Thickness (mm)		Size	Length (mm)	Categories	Working voltage (V) max.	Proof test voltage (V) max.	Withstand voltage (V) max.
			max.	medium						
30201010	SGE-50	0	< 1.6	1.2	7-8-9	360	AZC	1.000 V AC	5.000 V AC	10.000 V AC
30201011	SGE-50				10-11-12					

Meaning of letters in 'Categories': A: Acid / Z: Ozone / H: Oil / C: Very low temperature / R: A+Z+H resistance.
 * Available on request in the specified length of 360 mm. If required, it can also be manufactured in a length of 410 mm.

The SGE model also provides certified mechanical protection in accordance with EN 388, with the following performance levels:

Abrasion: 2 Cut (blade): 1 Tear: 2 Puncture: 2
ISO 13997 cut resistance: A

This mechanical resistance makes it suitable for assembly and handling tasks where there is a risk of friction, minor scrapes, or accidental punctures.

ARC FLASH PROTECTION

The SGE glove provides additional protection against electric arc, offering:

- CAT 2 according to IEC 61482-1-2,
- CAT1 (ATPV) according to ASTM F2675/F2675M:23, thus providing extra safety in environments where there may be a combined electrical and arc risk. The glove has also been additionally tested for ignition, showing no signs of flaming or combustion after exposures exceeding 20 cal/cm².

Manufactured and tested in accordance with IEC 60903 and ASTM F2675/F2675M:23, the SGE model ensures reliable Class 0 protection with an excellent balance of comfort, flexibility, and safety.

Available in sizes:



Recommended size	9	10	11
Circumference in cm	21	24	26

Measured with the hand closed.

MANUFACTURING AND RETESTING OF INSULATING GLOVES

At Sofamel, we operate a fully dedicated production line for the manufacture of latex insulating gloves. Our processes are certified to the ISO 9001:2015 quality standard and comply with the requirements of EN 60903:2003 and IEC 60903:2014.

We also have a specially designed glove retesting booth for carrying out electrical tests, enabling us to provide all our customers with the best after-sales service for dielectric gloves.



YOUR SAFETY IS VITAL

THEREFORE, REGULAR INSPECTIONS OF INSULATING GLOVES ARE ESSENTIAL

RECOMMENDATIONS FOR THE MAINTENANCE AND VERIFICATION OF INSULATING GLOVES

Insulating gloves for live working are personal protective equipment (PPE) that prevent electrical hazards and are classified as Category III (fatal risk) under EU Directive 2016/425. The reference standards (EN 60903 and IEC 60903) define the recommendations for their use and inspection.

CLASS 0 and 00 GLOVES	Air leakage test and visual inspection	RECOMMENDED BEFORE EACH USE
	Dielectric properties test	UPON CUSTOMER REQUEST
CLASS 1 and 4 GLOVES	Air leakage test and visual inspection	RECOMMENDED BEFORE EACH USE
	Dielectric properties test	MANDATORY <ul style="list-style-type: none"> • Every 6 months from the start of service. • Maximum of 12 months from the date of manufacture if not used.

THE DEFINITION OF A GLOVE'S LIFESPAN IN NO WAY EXEMPTS THE RECOMMENDATIONS FOR PERIODIC INSPECTIONS.

Storage conditions

According to EN 60903 and IEC 60903 standards for Class C, gloves can be used at ambient temperatures between -40 °C and +55 °C. They are delivered in a UV-resistant plastic bag suitable for transport and storage. Store the gloves in a dry, dark place at temperatures between 10 °C and 21 °C. Do not compress, fold, or store them near sources of heat, light, or ozone.

30301 SG

Leather overgloves must be worn over dielectric gloves to protect them against mechanical risks and potential electric-arc hazards. These cowhide leather gloves with winged thumbs feature a 10 cm cuff with an adjustable Velcro tightening strap on the back of the hand.

The full-grain cowhide leather is silicone-treated to enhance its water-repellent properties.

☑ According to EN 388:2016/A1:2018, EN 407:2020 and EN ISO 21420:2020 standards. Category III PPE.



Code	Ref.	Cross-reference utilization with dielectric gloves							EN 388	EN ISO 21420:2020	EN 407	
		Dielectric gloves size and class										
		Size	00	0	1	2	3	4				
540113	SG-B	7	●	●	●	●				 Levels of mechanical resistance: Abrasion: 3 Blade cut: 1 Tear: 2 Puncture: 1 Cut by sharp object: A	Ergonomics, design, safety, comfort and dexterity.	Technical resistance levels: Molten metal mass: X Molten metal splash: 4 Radiant heat: 2 Convective heat: 2 Contact heat: 1 Flame: 4
		8	●	●								
		9	●	●								
540114	SG-C	8			●	●						
		9			●	●						
		10	●	●								
540115	SG-D	10			●							
		11	●	●								
540116	SG-E	8					●	●				
		9					●	●				
		10				●						
		11			●							
540117	SG-F	10					●	●				
		11				●						
		12			●							
540118	SG-G	11					●	●				
		12				●	●	●				

30302 SG-37

Gloves made of NOMEX® fibre with flame-resistant properties. They are intended to be worn under dielectric gloves to protect the skin from possible contact with molten latex in the event of an electric arc.

☑ According to EN 407 standard.

Code	Ref.	Size
535100	SG-37-T08	8
535101	SG-37-T09	9
535102	SG-37-T10	10



30303 SG-38/39

Working gloves designed to protect hands against mechanical risks. Suitable for a wide range of tasks where hand protection is required. Made of high-quality cowhide leather, available in grey (SG-38) or yellow (SG-39).

CE According to EN 388-2144 and EN 407 standards, they ensure an optimal level of safety in the most demanding working conditions.

Code	Ref.	Size
540100	SG-38 T-10	10
540101	SG-38 T-9	9
540102	SG-38 T-8	8
540103	SG-38 T-11	11

Code	Ref.	Size
540110	SG-39 T-10	10
540111	SG-39 T-9	9



SG-38



SG-39

Polyethylene glove case resistant to impacts and UV rays

30304 CGS

Plastic glove case

Protects dielectric gloves from damage and contamination, ensuring they remain in optimal condition for use when needed.

Code	Ref.	Dimensions
545115	CGS	43x23x7.6 cm



30304 SG-36

Waterproof nylon bag

Waterproof nylon bag for carrying dielectric gloves. A rear strap allows the bag to be quickly and securely hung from a belt.

Code	Ref.	Dimensions
545100	SG-36	42.5x22 cm



30304 SG-35

Metallic glove case

Metal case with a methacrylate window. Ideal for carrying, storing, and preserving dielectric gloves. Can be wall-mounted using a ring on the back.

Code	Ref.	Dimensions
545110	SG-35	45.3x19.1x7.2 cm



30304 SGP

Plastic glove case

Plastic case for storing and carrying dielectric gloves.

Code	Ref.	Dimensions
545111	SGP	47.5x17x5 cm



30304 SG-117

Pneumatic gauge tester

Sofamel's pneumatic dielectric glove tester is an essential tool for verifying the integrity and safety of gloves used in electrical work. This device performs air pressure tests to ensure the absence of punctures or defects in the gloves, thus guaranteeing user protection.



Code	Ref.
545120	SF-117

30304 ME-60S

Fuse extractor handle

The ME-60S fuse extractor handle is designed for the safe insertion and removal of low-voltage fuses. This device features an insulated handle and a synthetic leather handguard, providing the operator with additional protection against potential accidents.



Code	Ref.
545131	ME-60S

30304 ME-60S-SM

Fuse extractor handle

The ME-60S-SM fuse extractor handle is designed for the safe insertion and removal of low-voltage fuses. This device features an insulated handle. To ensure maximum safety, it is essential to use this model of fuse extractor in combination with a Class 0 dielectric glove.



Code	Ref.
545132	ME-60S-SM

30401 SO-71

Fall-arrest harness with belt

Full-body fall-arrest harness with two attachment points for climbing and descending: one on the back and one on the abdominal area. Includes adjustable shoulder and leg straps, as well as a work positioning belt compliant with EN 358, with two side attachment points for connecting an anchorage element.

Supplied with mod. SO-07 adjustable rope and mod. SO-74 karabiner.

 Compliant with EN 361 and EN 358 standards.

Code	Ref.
550110	SO-71



30401 S/ATC

Safety harness with belt

Full-body fall-arrest harness with belt, designed for use in all work environments at height. Equipped with foam back support and quick-fit buckles on the leg straps, with four equipment attachment loops.

Includes four attachment points:

- Chest attachment point
- Stomach attachment point, for suspension or positioning
- Back attachment point
- Two foldable lateral positioning rings

 According to EN 361 and EN 358 standards.

Code	Ref.
550111	S/ATC



30401 SO-06

Support belt with rope

Support belt with padded strap. Includes a ring at each end for attaching an anchorage element.

Supplied with one SO-07 adjustable rope and one SO-74 karabiner.

 According to EN 358 standard.

Code	Ref.
550100	SO-06



30401 SO-45

Low back pain and anti-vibration belt

The low back pain and anti-vibration belt is designed to protect the dorso-lumbar area against all types of strain. Made of red canvas fabric with a 100% cotton lining on the inner side. Quick adjustment with Velcro strap and high-security closure. Waist perimeter: 100 cm.



CE

Code	Ref.	Size
550120	SO-45 T6	6 (90 cm)
550121	SO-45 T9	9 (105 cm)

30401 SO-07

Adjustable rope



Adjustable-length anchorage element from 0.85 m to 1.35 m, manufactured with 14 mm diameter polyamide rope. Supplied without karabiners.

Code	Ref.
550170	SO-07

CE According to UNE-EN 354 standard.

30401 S/ELAR-354

Adjustable rope



Anchorage element with adjustable length from 0.85 m to 1.35 m, manufactured with 11 mm diameter semi-static polyamide rope. Supplied with one integrated karabiner.

Code	Ref.
550174	S/ELAR-354

CE According to UNE-EN 354 standard.

30401 S/ABE-355

Energy absorber



Energy absorber with integrated Y-type anchorage element, with a total length of 1.75 m. Designed for permanent connection, even when passing intermediate anchor points, thanks to its two straps.

Code	Ref.
550175	S/ABE-355

CE According to UNE-EN 355 standard.

30401 SO-28

Sliding fall-arrest device

Fall-arrest device for flexible anchorage line with 14 mm rope. Equipped with a safety lock and a system that prevents incorrect placement of the device. Allows the user to move vertically without changing position. Locks automatically in the event of a fall.

☞ According to EN 353-2 standard.

Code	Ref.
550140	SO-28



30401 SO-75

Lifeline cord

20 m roll of 14 mm diameter rope with thimbles at each end. To be used with the SO-28 sliding fall-arrest device.

☞ According to EN 353-2 standard.

Code	Ref.
550150	SO-75



30401 S/ADM-353

Sliding fall-arrest device

Fall-arrest device for a flexible anchorage line with 11 mm rope, allowing the user to move vertically without changing position. Automatically locks in the event of a fall.

☞ According to EN 353-2 standard.

Code	Ref.
550176	S/ADM-353



30401 S/CSE-353

Sliding fall-arrest device rope

Roll of 20 m of 11 mm diameter semi-static "rock-climbing" rope. Designed to be used as a progression line with the sliding fall-arrest device model S/ADM-353.

☞ According to EN 353-2 standard.

Code	Ref.
550177	S/CSE-353



30401 SO-74

Steel symmetrical karabiner

Steel symmetrical karabiner with a safety lock.

CE According to EN 362 standard.

Code	Ref.
550160	SO-74



30401 S/MOAL

Aluminium asymmetrical karabiner

Aluminium asymmetrical karabiner with a safety lock.

CE According to EN 362 standard.

Code	Ref.
550161	S/MOAL



30403 SO-26

Climbing irons

Set of climbing irons specially designed for use on wooden electrical and telecommunication poles. They are circular and feature eight welded spikes with a special curved shape that facilitates both ascending and descending.

They are secured with 1.15 m long, 30 mm wide polyester straps and zinc-plated steel buckles.

Code	Ref.	Ø
555100	SO-26	260 mm



30403 SO-27

Small climbing devices

Made from a single welded spike on a curved carbon steel plate. Equipped with four 65 cm long polyester support straps and leather-cushioned pads with metal buckles and eyelets. Designed for use on wooden poles.

Code	Ref.
555110	SO-27



**Climbing irons for fiberglass poles
(Ø 85–330 mm)**

30403 CLIMB-F New

Climbing irons

The new CLIMB-F climbing irons have been specifically developed for safe ascent and descent on fiberglass poles, which are increasingly used in electrical, lighting, and telecommunications networks. Their optimized design ensures a firm grip on smooth, non-porous surfaces, providing maximum stability even under demanding working conditions.

Manufactured in accordance with the health and safety requirements of Directive 89/686/EEC, the CLIMB-F offers a robust, ergonomic solution suitable for intensive use. In addition to fiberglass poles, they can also be used on circular steel or concrete poles.

For concrete poles, it is recommended to periodically check the wear of the support rubbers and replace them when necessary to maintain optimal adhesion.

The new geometry of the arch and support system provides superior grip, increased stability, and notable comfort during long working days.



Code	Ref.
30403000	CLIMB-F

**For poles with a diameter
between 85 and 265 mm**

30403 AIRCLIMB

Climbing irons

The set of climbing irons for circular poles has been manufactured in compliance with the health and safety requirements specified in Directive 89/686/CEE of 21 December 1989.

They allow easy climbing up and down circular poles made of fiberglass, steel, and concrete (for concrete poles, it is necessary to monitor the wear of the rubber supports and replace them if needed) used in electrical and telecommunications installations. They can also be used on poles made of other materials, provided the user ensures proper and safe adherence.

Specially designed for climbing poles with obstacles such as telecommunications cables and other installations.



Code	Ref.
555125	AIRCLIMB



**Class 1 – BOX TEST 4 kA/0,5 s.
EN 166 and GS-ET-29**

30404 ARMOUR-1 Safety Helmet

Electrically insulating safety helmet with integrated face shield. Basic protection against electric arcs, Class 1 according to BOX TEST, 4 kA/0.5 s. According to EN 166 and GS-ET-29 standards.

HELMET

- Technical adhesives on the shell provide resistance to molten metal splashes (MM) according to EN 397 and enhance visibility in low-light conditions.
- Manufacturing and expiration dates are permanently marked.
- Smooth head circumference adjustment, suitable for 53–63 cm.
- Electrical Class E (**20 kV AC**) according to ANSI Z89.1.
- Electrical Class O (1000 V AC / 1500 V DC) according to EN 50365.
- According to ANSI Z89.1, EN 397, and EN 50365 standards.

FACE SHIELD

- Full-face, chin, and neck protection against thermal hazards caused by electric arc flashes.
- Premium anti-fog and anti-scratch protection.
- Comfortable to wear with eyeglasses.
- Protection against electric arc flash (**Class 1 – BOX TEST 4 kA/0.5 s**).
- According to EN 166 and GS-ET-29 standards.

CHIN STRAP

- 4-point chin strap recommended for work at height.
- Quick-release clasp, easy to operate while wearing protective gloves.



Code	Ref.
565090	ARMOUR-1

CE EN 397:2012+A1:2012
EN 50365:2002
EN 166:2001
GS-ET-29:2010
ANSI/ISEA Z89.1.2014



**Class 2 – BOX TEST 7 kA/0,5 s.
EN 166 and GS-ET-29**

30404 ARMOUR-2 Safety helmet

Electrically insulating helmet with integrated face shield.
Extended protection against arc flash, Class 2 according to BOX TEST, 7 kA/0.5 s. EN 166, GS-ET-29.

HELMET

- Technical adhesives on the shell provide resistance to molten metal splashes (MM) in accordance with EN 397, and also enhance user visibility in low-light conditions.
- Manufacturing and Utilization Dates are permanently marked.
- Smooth head circumference adjustment, range 53–63 cm.
- Electrical Class E (20 kV AC) according to ANSI Z89.1.
- Electrical Class 0 (1000 V AC / 1500 V DC) according to EN 50365.
- According to ANSI Z89.1, EN 397 and EN 50365 standards.

FACE SHIELD

- Full protection of the face, chin and neck against thermal hazards caused by electric arc flash.
- Premium anti-fog and anti-scratch protection.
- Easy to wear with eyeglasses.
- Protection against electric arc (**Class 2 – BOX TEST 7 kA / 0.5 s**).
- According to EN 166 and GS-ET-29 standards.

CHIN STRAP

- 4-point strap recommended for working at height.
- Quick-release clasp, easy to operate while wearing protective gloves.



Code	Ref.
565091	ARMOUR-2

CE EN 397:2012+A1:2012
 EN 50365:2002
 EN 166:2001
 GS-ET-29:2010
 ANSI/ISEA Z89.1.2014



**Class 2 – according to GS-ET-29,
BOX TEST, 7 kA / 0.5 s**
**Cat. 3 – according to ASTM F2178, ATPV
36 cal/cm²**
EN 166, GS-ET-29 and ASTM F2178

30404 ARMOUR-2 ATPV 36

Safety helmet

Electrically insulating helmet with integrated face shield.
Highest protection against arc flash: Class 2 – according to GS-ET-29 (BOX TEST, 7 kA / 0.5 s) and Category 3 – according to ASTM F2178 (ATPV 36 cal/cm²).
According to EN 166, GS-ET-29, ASTM F2178

HELMET

- Technical adhesives on the shell provide resistance to molten metal splashes (MM) in accordance with EN 397, and also enhance user visibility under low-light conditions.
- Manufacturing date and utilization date permanently marked.
- Smooth head circumference adjustment, range 53–63 cm.
- Electrical Class E (**20 kV AC**) according to ANSI Z89.1.
- Electrical Class O (1000 V AC / 1500 V DC) according to EN 50365.
- According to ANSI Z89.1, EN 397, EN 50365.

FACE SHIELD

- Full face, chin and neck protection against thermal hazards caused by electric arc flash.
- Premium anti-fog and anti-scratch protection.
- Easy to wear with eyeglasses.
- Protection against electric arc:
 - Class 2 – according to GS-ET-29 (BOX TEST, 7 kA / 0.5 s) and
 - Category 3 – according to ASTM F2178 (ATPV 36 cal/cm²).
 - According to EN 166, GS-ET-29, ASTM F2178.

CHIN STRAP

- 4-point strap recommended for working at height.
- Quick clasp — easy operation when wearing protective gloves.



Code	Ref.
565093	ARMOUR-2 ATPV36

CE EN 397:2012+A1:2012
EN 50365:2002
EN 166:2001
GS-ET-29:2010
ANSI/ISEA Z89.1.2014
ASTM-F2178

30404 CEN-7 New

Ear and neck cover

The CEN-7 ear and neck cover is designed to protect the ears, parts of the face and the neck against thermal hazards caused by electric arc exposure. The cover provides protection against electric arc (APC 2 – Box Test). It is made of two layers of flame-retardant and antistatic fabric in navy blue. It is compatible with ARMOUR helmets and is available in a single adaptable size.



CE According to standards: EN ISO 11611:2015, EN ISO 11612:2015, EN 61482-2:2020, GS-ET-29:2019-06.



Code	Ref.
565140	CEN-7



30404 PO-AR New

Ear protector

Manufactured with insulating material. It includes pads with foam inserts for increased comfort. It is mounted using specially designed adapters that are fitted onto the helmet. Allows adjustment of the wearing height. Sound attenuation level (SNR): 23 dB.



CE According to EN 352-3 standard.

Code	Ref.
30404000	PO-AR



30404 BCL-ARC New

Flame-retardant and antistatic balaclava

Category III flame-retardant and antistatic balaclava designed to provide full head and neck protection against thermal hazards caused by electric arc flash, heat, and flames.

Made from a high-performance multi-component technical fabric with HeiQ Smart Temp cooling technology, which enhances thermal comfort and reduces fatigue. Compatible with safety helmets.

CE According to the standards: EN 61482-1-2:2014 — Box Test: Class 1 (4 kA), IEC 61482-1-1, EN ISO 11612, EN 1149-5, NFPA 70E, NFPA 2112.

Code	Ref.
30404001	BCL-ARC



Electrical insulation up to 1000 V

30404 SP-181 / SPE

Safety helmet

Safety helmet made of polyethylene designed to protect the head against mechanical hazards.

Plastic harness adjustable by ratchet wheel or manually.

Electrical insulation up to 1,000 V / Operating temperature: -10 °C to +50 °C.

Supplied in white without chin strap.

Other colours available upon request.

CE According to the standards EN 397 and UNE-EN 50365:2003, as well as the health and safety requirements of Royal Decree 1407/1992.

Code	Ref.	Adjustment
565099	SP-181	Manual
565102	SPE	By ratchet wheel



SPE
By ratchet wheel

30404 S/CABS-397

Safety helmet

Safety helmet for working at heights, manufactured from ABS with high-quality ultraviolet stabilization. Includes a harness consisting of one inner PPE piece and a headband adjustable via ratchet wheel.

The padding in contact with the head incorporates cushions to enhance comfort.

Working temperature: -10°C / +50°C.

Supplied in white with a textile chin strap featuring 4 attachment points. Other colours available upon request.

CE According to EN 12492 standard.

Code	Ref.
565106	S/CABS-397



30404 S/BQ / S/BQM

Chin strap

Chin strap for SP-181 and SPE helmet models.

Code	Ref.
565130	S/BQ
565131	S/BQM



S/BQ

S/BQM

30405 SP-182

Face shield for short-circuit arc

Face shield compliant with EN 166 standard, compatible with most safety helmets without the need for modification. Compatible with SP-181 and SPE models. Not compatible with the S/CABS-397 helmet.

Composed of a nylon adapter and a flip-up visor. Provides protection against high-energy impacts, molten metals, liquid splashes and arc-flash hazards. Includes an IR filter.

CE According to EN 166 standard.

Code	Ref.
570120	SP-182



30406 LTE-CP400

Headlamp

The multifunctional headlamp can be switched on and off with a simple palm gesture. Gesture recognition allows the operator to keep insulating gloves on, making task execution easier and safer.

- Use: indoor / outdoor
- Range: 100 m
- Features: waterproof, shockproof, anti-fog
- Illumination time: 3-8 h
- Material: aluminium / ABS

400 LM
IP64



USB-C charging



Code	Ref.
555010	LTE-CP400



RED LED LIGHT



POWER DISPLAY



GESTURE SENSING



IMPACT RESISTANT



MULTI-LEVEL ADJUSTMENT



WATERPROOF



LONG-LASTING BATTERY



HEAD CAN BE TURNED 45° UP OR DOWN

Adjust the head to easily control the angle of light irradiation

30406 LTE-FM400

Multifunction torch with magnet

Multifunction torch with magnet
Multifunction LED torch with rechargeable battery and magnetic support for use in any work environment.r.

- Mobile and portable
- Rechargeable 3 W LED lamp.
- Compact size adapts to different environments.

Adjustable support

- 180° adjustable support, easy to position in various locations.

400 LM
IP66



USB-C charging



Code	Ref.
555000	LTE-FM400



Magnetic support



Support rotates 180°



30601 DB2

Dielectric boots

- Each boot tested to 20 kV (AC testing as standard, DC testing available on request).
- Leakage current less than 5 mA at 5 kV and less than 18 mA at 20 kV.
- Meets the requirements of ASTM F1117 (20 kV) and ASTM F2413.
- Blue vulcanized rubber sole for maximum grip 30% better than a conventional safety boot sole.
- Slip resistance performance twice that required by SATRA TM144 standard.
- Wear resistance of the sole two to three times higher than conventional soles.



Code	Ref.	Sizes
715155	DB2 T42	42
715160	DB2 T43	43
715165	DB2 T44	44
715170	DB2 T45	45

Class 2

17.5 kV

Maximum working voltage

20 kV

Test voltage



30601 DB3

Dielectric HV3 boots

- Lightweight design for increased wearer comfort.
- Flexible at low temperatures down to -40 °C.
- Durable, slip-resistant vulcanised rubber sole for maximum grip.
- Energy-absorbing tunnel system in the heel and ergonomic cushioning insole (removable and machine washable) for enhanced comfort.
- Cold insulation according to EN ISO 20345.
- Meets the requirements of ASTM F1117 (20 kV) and ASTM F2413.
- Also available with a special sole resistant to fuel, oil, and hot contact (on request).



Code	Ref.	Sizes
715270	DB3 T42	42
715275	DB3 T43	43
715280	DB3 T44	44
715285	DB3 T45	45

Class 3

26.5 kV

Maximum working voltage

30 kV

Test voltage



30602 OB1

Maxi dielectric overboots

- Class 1 electrically insulated dielectric overboots with vulcanised rubber soles for enhanced slip resistance.
- Designed to be worn over safety boots, they are ideal for workers who frequently enter and exit hazardous areas.
- One-piece injection-moulded construction with integral handle ensures no leakage at seams or assembly/handle holes.
- Vulcanised rubber sole provides superior slip resistance in wet and oily conditions (SRC); durable and cut-resistant for significantly extended service life, even on rough terrain; heat resistant to EN 20347:2011 HRO, 60 seconds at 300 °C, and resistant to fuel and oil.
- According to ASTM F1117 requirements (20 kV).



Class 1

7.5 kV
Maximum working voltage

20 kV
Test voltage

Code	Ref.	Sizes
715290	OB1 T-L	L



30602 OB2

Dielectric compact overboots

- Single-piece injection-moulded construction with integral moulded fastener ensures no seams or mounting/fastener holes that could cause leakage.
- No metal fasteners or components are used in the construction.
- Slip-resistant sole made of blue dielectric compound.
- Sole resistant to fuel and oil.
- According to ASTM F1117 requirements (20 kV).



Class 2

17.5 kV
Maximum working voltage

20 kV
Test voltage

Code	Ref.	Sizes
715300	OB2 T-L	L



30602 OB3

Dielectric HV3 maxi overboots

- Ingenious rear-entry design ensures the boot is quick and easy to put on and take off.
- Ideal for personnel who must continually enter and exit high-voltage areas.
- Lightweight.
- Fluorescent green color.
- Seamless construction.
- Heel kick-off lug.
- REACH compliant.



Code	Ref.	Sizes
715340	OB3 T-L	L



Class 3

26.5 kV

Maximum working voltage

30 kV

Test voltage

MEANING OF THE PICTOGRAMS



Category SB safety boots

According to EN ISO 20345:2011 safety footwear requirements.



Thermal Insulation

The thermal insulating properties of the boot ensure that when a boot at 23 °C is placed in a cold chamber at -17 °C, the temperature drop on the upper surface of the insole is less than 10 °C after 30 minutes.

Boot marking: CI



Energy-absorbing heel

Provides a minimum cushioning of 20 J in the heel, reducing the risk of fatigue and injury.

Boot marking: E



Live working

Dielectric boots according to EN 50321 for electrical protection footwear.

Boot marking: Double triangle



Oil and fuel resistant

The outsole is resistant to oil, ensuring that the boot's lifespan is not affected when used in oily environments. Tested by immersing the boot in oil for 22 hours, after which the outsole is checked for excessive swelling, shrinkage, or increased hardness.

Boot marking: FO



Toe cap

Epoxy-coated steel toe cap tested for impact resistance of 200 J and compression strength of 15 kN.



SRA Slip Resistant

Tested and approved for slip resistance on a ceramic floor tile coated with a soapy solution of sodium lauryl sulphate (NaLS). The test measures both forward heel slip and forward flat slip.

Boot marking: SRA



Heat resistant

The sole has been tested for contact heat resistance at 300 °C for 60 seconds.

Boot marking: HRO



Occupational footwear

Category 04

Complies with the basic requirements for occupational footwear according to ISO 20347:2012.



SRC slip resistant

Tested and approved for slip resistance on a ceramic tile coated with a dilute sodium lauryl sulphate (NaLS) soap solution [SRA], and for slip resistance on a steel floor with glycerol [SRB]. The test measures both forward heel slip and forward flat slip.

Boot marking: SRC

Monobloc and stackable insulating stool for indoor use



30501 STM

Insulating stool – monobloc and stackable, for indoor use

Made of high-impact polypropylene. The platform surface is rough and non-slip. Rubber tips are incorporated at the ends of the legs, providing greater adherence to the floor and protection against wear.

Platform: 640 x 640 mm

Surface: 528 x 528 mm

⚠ According to UNE 204001 standard.

High stability
High impact resistance
High slip resistance



Code	Ref.	Height (mm)	Class	Working voltage
580150	STM-36	204	4	36 kV
580155	STM-45	304	5	45 kV
580160	STM-66	304	6	66 kV



Monobloc structure

The monobloc design ensures a stable structure, reducing the risk of breakage or misalignment over time.

Stackable

Facilitates storage and transportation when not in use.

Insulating stool for outdoor use



30501 STE

Insulating stool for outdoor use

Made of high-impact copolymer polypropylene. The platform surface is rough and non-slip. Rubber tips are fitted on the ends of the legs to provide greater adherence to the floor and protection from wear. The legs feature deflecting hoods.

Platform: 525 x 525 mm

⚠ According to UNE 204001 standard.
Legs manufactured from foam-filled tube according to IEC 60855.

High stability
High impact resistance
High slip resistance



Code	Ref.	Height (mm)	Class	Working voltage
580096	STE-26	257	3	26 kV
580111	STE-45	399	5	45 kV
580116	STE-66	449	6	66 kV

30501 ST-79

Insulating slab

Made of high-impact polyethylene. 500 x 500 mm modules can be joined together, making it easier to cover any surface. This material can be easily cut to adapt to any space.

Code	Ref.	Insulation
580130	ST-79	17 kV



30502 AD

Insulating mat

Specific rubber base: natural SBR

Specific weight: 1.51 g/cm³

Hardness: 71 Shore A

Tensile strength: 75.5 kg/cm²

Elongation at break: 362 %

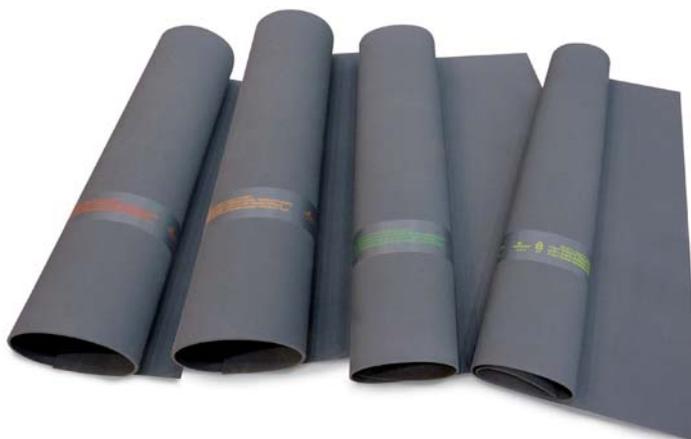
Tear resistance: 20 kg/cm²

Abrasion resistance: 182 mm³

Temperature range: -40 °C / +70 °C

Chemical resistance:

- Diluted acids and bases - Moderate
- Concentrated acids and bases - Not recommended
- Hydrocarbons - Not recommended
- Organic solvents - Not recommended



According to IEC 61111.

Code	Ref.	Dimensions (m)	Class	Thickness (mm)	Weight (kg)	Work voltage (V)	Test voltage (V)	Supported voltage (V)
585180	AD0-0606	0.6 x 0.6	0	2.20 ±0.30	1.18	1.000	5.000	10.000
585181	AD0-0610	0.6 x 1.0			1.98			
585182	AD0-06100	0.6 x 1.0			19.80			
585183	AD0-1010	1.0 x 1.0			3.30			
585184	AD0-10100	1.0 x 1.0			33.00			
585185	AD0-1210	1.2 x 1.0			3.96			
585186	AD0-12100	1.2 x 1.0	39.60					
585200	AD2-0606	0.6 x 0.6	2	2.60 ±0.30	1.404	17.000	20.000	30.000
585210	AD2-0610	0.6 x 1.0			2.34			
585220	AD2-06100	0.6 x 1.0			23.4			
585230	AD2-1010	1.0 x 1.0			3.90			
585240	AD2-10100	1.0 x 1.0			39.00			
585250	AD2-1210	1.2 x 1.0			4.68			
585260	AD2-12100	1.2 x 1.0	46.80					
585300	AD3-0606	0.6 x 0.6	3	3.20 ±0.30	1.72	26.500	30.000	40.000
585310	AD3-0610	0.6 x 1.0			2.88			
585320	AD3-06100	0.6 x 1.0			28.8			
585330	AD3-1010	1.0 x 1.0			4.80			
585340	AD3-10100	1.0 x 1.0			48			
585350	AD3-1210	1.2 x 1.0			5.76			
585360	AD3-12100	1.2 x 1.0	57.60					
585400	AD4-0606	0.6 x 0.6	4	5.20 ±0.30	2.80	36.000	40.000	50.000
585410	AD4-0610	0.6 x 1.0			4.68			
585420	AD4-06100	0.6 x 1.0			46.80			
585430	AD4-1010	1.0 x 1.0			7.80			
585440	AD4-10100	1.0 x 1.0			78.00			
585450	AD4-1210	1.2 x 1.0			9.36			
585460	AD4-12100	1.2 x 1.0	93.6					

30503 MA

Insulating blanket

High-quality, durable rubber insulating blanket. Designed to protect workers from low-voltage electrical hazards. The blanket is brightly coloured for easy identification and visibility in the work area. These blankets are Category AZ, meaning they are certified for resistance to acids (Category A) and ozone present in electrical equipment (Category Z).

Base: Vulcanized elastomer

Minimum tensile strength: 12 MPa

Elongation at break: 300 %

Hardness: 60 Sh A

Mechanical puncture resistance

Flame retardant

Aging tests

Low temperature bending test

According to IEC 61112:2009.

Live working - Electrical insulating mats.



Code	Ref.	Width (m)	Length (m)	Class	Thickness (mm)	Weight (kg/m ²)	Working tension
585001	MA0-1010	1	1	0	1.5 (+/-0.2)	1.6	1 kV CA / 1.5 kV CC
585010	MA0-10100	1	10				

30504 SP-22

Cowl

Insulating rubber cap for the temporary insulation of bare conductors during their passage through low-voltage insulators. Bell-shaped design, with grooves that facilitate the passage and positioning of the conductors.

△ According to IEC 60243-1 standard.

Code	Ref.	Ø
595100	SP-22	90 mm



30505 S/PA

Insulated fixing clamp 1000 V

Clamp made of insulating material for fixing protective covers during insulation work in installations up to 1 kV AC / 1.5 kV DC (switches, cables and overhead lines).

△ According to IEC 60900:2018 standard.

Code	Ref.
595113	S/PA



30505 PA-1,5

1000 V insulated clamp

Insulated clamp for securing insulating blankets during work on installations up to 1 kV AC / 1.5 kV DC.

△ According to IEC 60900:2018 standard.

Code	Ref.	Length
595114	PA-1,5	180 mm



30505 SP-35

Vinyl cloth

0.3 mm thick insulating vinyl sheet, used for the insulation of components in low-voltage installations.

△ According to UNE 61112:2010 and IEC 61112:2009 standards.

Code	Ref.	Rolls
595102	SP-35	50x1.40 m



30705 SP-52

Cowl bag

Nylon bag with reinforcements to facilitate the transport of insulating cowls.

Code	Ref.
600100	SP-52

* Depending on availability, the colour of the bags may vary.



30705 SP-50

Profil bag

Nylon bag with reinforcements to facilitate the carriage of the insulating profil.

Code	Ref.	Ø	Length
600110	SP-50	20 cm	115 cm

* Depending on availability, the colour of the bags may vary.



30701 SO-31

Flat tool-holder bag

250 x 290 mm flat canvas tool bag with synthetic reinforcement at the bottom. It features nylon straps with buckles for attachment to a belt.

Code	Ref.
600120	SO-31

* Depending on availability, the colour of the bags may vary.



30701 SO-32

Circular tool-holder bag

Circular tool bag (Ø 230 x 320 mm) made of canvas with synthetic reinforcement on the base. It features a nylon handle for carrying and lifting.

Code	Ref.
600130	SO-32

* Depending on availability, the colour of the bags may vary.



30702 BA

Insulating mat bag

Nylon bag with reinforcements to facilitate the transport of the insulating mat.

Code	Ref.	Ø	Length
600150	BA-1,0x10	15 cm	110 cm
600151	BA-0,6x10	15 cm	70 cm

* Depending on availability, the colour of the bag may vary.



30703 FP

Pole cover

Nylon bag for the transport and storage of poles

Code	Ref.	Dimensions width x length (mm)
899000	FP-20/140	200x1400
899005	FP-20/210	200x2100
899010	FP-25/125	250x1250
899015	FP-25/175	250x1750
899020	FP-25/225	250x2250
899025	FP-25/275	250x2750
899030	FP-25/325	250x3250

* Depending on availability, the colour of the pole cover may vary.



30703 FE

Pole covers for earthing equipment

Nylon pole covers used to store and transport earthing equipment.

Code	Ref.	Dimensions width x length (mm)
899050	FE-20/120	200x1200

* Depending on availability, the colour of the cover for the poles may vary.



30704 FE

Bag for earthing equipments

Nylon bags used to store and transport earthing equipment.

Code	Ref.	Dimensions width x length (mm)
899055	FE-20/110	200x1100
899060	FE-40/30	400x300

* Depending on availability, the colour of the bag and the cover for earthing poles may vary.



FE-40/30



FE-20/110

Indoor and outdoor use in a dry environment

Single-section pole made from Ø 32 mm glass fibre reinforced polyester tube. Fitted with anti-moisture end caps on both ends, ensuring watertightness and durability. Equipped with a universal U-type head, compatible with universal coupling accessories.

Designed for use together with voltage detectors with universal coupling, allowing verification of the absence of voltage on overhead lines, busbars, cables, terminals, electrical equipment, and other elements in medium-voltage installations, while maintaining the operator's safety distance at all times.



U
Universal head

30809 PV-36 New

- Insulating element length: 1.35 m
- Total length: 1.30 m
- For INDOOR and OUTDOOR use in dry environment

Code	Ref.	Working voltage
640103P	PV-36	36 kV

30809 PV-66 New

- Insulating element length: 2.05 m
- Total length: 2.00 m
- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Working voltage
640105P	PV-66	66 kV



Indoor and outdoor use in a dry environment

Manoeuvring pole with a single section made of a polyester and fibreglass tube Ø 32 mm, with humidity-proof seals at both ends, a hand guard, grip, ferrule, Universal head and manoeuvring hook.



U
Universal head

30801 BM-45

- Length of the insulating element: 1.60 m
- Total length (without hook): 1.50 m
- For INDOOR and OUTDOOR use in a dry environments

Code	Ref.	Working voltage
605100	BM-45	45 kV

30801 BM-66

- Length of the insulating element: 2.10 m
- Total length (without hook): 2.00 m
- For INDOOR and OUTDOOR use in a dry environments

Code	Ref.	Working voltage
605110	BM-66	66 kV

30801 BM-90

- Length of the insulating element: 2.60 m
- Total length (without hook): 2.50 m
- For INDOOR and OUTDOOR use in a dry environments

Code	Ref.	Working voltage
605115	BM-90	90 kV

30801 BM-132

- Length of the insulating element: 3.10 m
- Total length (without hook): 3.00 m
- For INDOOR and OUTDOOR use in a dry environments

Code	Ref.	Working voltage
605120	BM-132	132 kV



Indoor and outdoor use in dry and humid environment

Manoeuvring pole with a single section made of a polyester and fibreglass tube Ø 32 mm, with humidity-proof seals at each end, three deflecting hoods, hand protector, grip, tip, Universal head, and manoeuvring hook.



U
Universal head

30801 BME-45

- Total length: 1.60 m
- For INDOOR and OUTDOOR use in dry and humid environment

Code	Ref.	Working voltage	Bells
605130	BME-45	45 kV	3

30801 BME-66

- Total length: 2.10 m
- For INDOOR and OUTDOOR use in dry and humid environment

Code	Ref.	Working voltage	Bells
605140	BME-66	66 kV	3

30801 BME-132

- Total length: 3.10 m
- For INDOOR and OUTDOOR use in dry and humid environment

Code	Ref.	Working voltage	Bells
605150	BME-132	132 kV	3



Indoor and outdoor use in a dry environment

Rescue pole with a single section made of a polyester and fibreglass tube Ø 32 mm, with humidity-proof seals at each end, hand protector, grip, tip, M10 metric head and rescue hook

30802 BS-3

- Length of the insulating element: 0.66 m
- Total length (without hook): 1.16 m

Code	Ref.	Working voltage
610090	BS-3	3 kV

30802 BS-25

- Length of the insulating element: 0.82 m
- Total length (without hook): 1.32 m

Code	Ref.	Working voltage
610095	BS-25	25 kV

30802 BS-45

- Length of the insulating element: 1.00 m
- Total length (without hook): 1.50 m

Code	Ref.	Working voltage
610100	BS-45	45 kV

30802 BS-66

- Length of the insulating element: 1.20 m
- Total length (without hook): 2.00 m

Code	Ref.	Working voltage
610110	BS-66	66 kV

30802 BS-90

- Length of the insulating element: 1.70 m
- Total length (without hook): 2.50 m

Code	Ref.	Working voltage
610115	BS-90	90 kV



Indoor and outdoor use in a dry environment

Telescopic pole with two sections, made of reinforced fibreglass tube Ø 37 mm and Ø 30 mm, with humidity-proof seals at both ends, hand guard, grip, tip, and head options: M (Metric-10), U (Universal), B (Bayonet) or P (Hexagonal + Metric-10). The length of each section can be adjusted as required using an adjustment system with locking handles.

30803 BMTS-15/45

- Folded length: 0.85 m
- Extended length: 1.486 m
- For INDOOR and OUTDOOR use in dry environments
- Weight: 0.75 kg

Code	Ref.	Working voltage
615300	BMTS-15/45M	45 kV
615301	BMTS-15/45U	
615302	BMTS-15/45B	
615303	BMTS-15/45P	

30803 BMTS-20/66

- Folded length: 1.10 m
- Extended length: 1.986 m
- For INDOOR and OUTDOOR use in dry environments
- Weight: 0.95 kg

Code	Ref.	Working voltage
615310	BMTS-20/66M	66 kV
615311	BMTS-20/66U	
615312	BMTS-20/66B	
615313	BMTS-20/66P	

30803 BMTS-30/132

- Folded length: 1.65 m
- Extended length: 3.00 m
- For INDOOR and OUTDOOR use in dry environments
- Weight: 1.35 kg

Code	Ref.	Working voltage
615320	BMTS-30/132M	132 kV
615321	BMTS-30/132U	
615322	BMTS-30/132B	
615323	BMTS-30/132P	



Indoor and outdoor use in a dry environment

Telescopic multi-section poles made of reinforced fibreglass and polyester tube with variable circular cross-section that allows each section to lock automatically. Final section of fibreglass and polyester tube filled with polyurethane foam with Universal head and manoeuvring hook.

Stable adjusters.

Final section filled with polyurethane foam according to IEC 60855 standard.

30803 BMTS-4/6

- Folded length: 1.75 m
- Extended length: 5.97 m (4 sections)
- Working voltage: 380 kV (fully extended)
- For INDOOR and OUTDOOR use in dry environments
- Weight: 3.40 kg

Code	Ref.	Sections	Working voltage
615325	BMTS-4/6	C+A	132 kV
		C+B+A	380 kV

30803 BMTS-5/9

- Folded length: 2.00 m
- Extended length: 8.75 m (5 sections)
- Working voltage: 420 kV (fully extended)
- For INDOOR and OUTDOOR use in dry environments
- Weight: 5.20 kg

Code	Ref.	Sections	Working voltage
615330	BMTS-5/9	D+A	132 kV
		D+B+A	380 kV
		D+C+B+A	420 kV

30803 BMTS-6/12

- Folded length: 2.30 m
- Extended length: 11.80 m (6 sections)
- Working voltage: 420 kV (fully extended)
- For INDOOR and OUTDOOR use in dry environments
- Weight: 7.25 kg

Code	Ref.	Sections	Working voltage
615335	BMTS-6/12	E+A	132 kV
		E+B+A	380 kV
		E+C+B+A	420 kV
		E+D+C+B+A	420 kV



Easy adjustment

Indoor and outdoor use in a dry environment

Telescopic multipurpose pole made of polyester tube reinforced with fibreglass, in compliance with IEC 60855.

The final section is filled with polyurethane foam according to IEC 60855, increasing the dielectric safety of the assembly.

The length of each section can be easily adjusted by means of a locking system, which allows the pole to be quickly and securely fixed in the desired position.

High visibility in critical conditions.

The BMTS-4/6U features five high-intensity reflective bands distributed along the pole, providing excellent visibility in:

- Railway catenary and overhead line work.
- Interventions in tunnels, underpasses and technical galleries.
- Operations in low-visibility conditions (night, fog, rain, dawn/dusk).
- Areas with road or rail traffic, where quick detection of the pole and operator position is essential.

Reflective bands enhance the safety of the work team, making it easier to visually locate the pole from long distances and improving manoeuvre control.

30803 BMTS-4/6U New

- 5 reflective bands for increased visibility
- Folded length: 1.86 m
- Extended length: 6.13 m (4 sections)
- Maximum rated working voltage: 380 kV
- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Sections	Working voltage
30803001	BMTS-4/6U	C+A	132 kV
		C+B+A	380 kV



Indoor and outdoor use in a dry environment

Telescopic multi-section pole made of reinforced fibreglass tube with a variable circular section that allows each section to be automatically locked. The final section is filled with foam according to IEC 60855.

The length of each section can be adjusted as needed using an adjustment system with locking handles. Supplied with Universal (U) head and manoeuvring hook.

Section A must always be fully extended during use.

The last section is filled with polyurethane foam in compliance with IEC 60855. Reinforced fibreglass tube.

30803 BMTS-5/7

- Folded length: 1.75 m
- Extended length: 7 m (5 sections)
- Maximum rated voltage (fully extended): 380 kV
- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Sections	Working voltage
T615012	BMTS-5/7	D+A	132 kV
		D+B+A	380 kV
		D+C+B+A	420 kV



Easy adjustment

Indoor and outdoor use in a dry environment

Multi-section telescopic poles manufactured from circular glass fibre reinforced polyester tubes, featuring an automatic locking system between sections that ensures secure engagement during use.

The length of each section can be adjusted according to working requirements. The final section is filled with polyurethane foam in accordance with IEC 60855.

All models are supplied with a universal (U) head.

Section A must always be fully extended during use.

30803 BMTS-7/10,3

- Folded length: 1.80 m
- Extended length: 10.30 m (7 sections)
- Maximum rated voltage when extended: 420 kV
- For INDOOR and OUTDOOR use in dry environments
- Weight: 6.50 kg

Code	Ref.	Sections	Working voltage
615355	BMTS-7/10,3	F+A	132 kV
		F+B+A	220 kV
		F+C+B+A	380 kV
		F+D+C+B+A	380 kV
		F+E+D+C+B+A	420 kV

30803 BMTS-7/11,6

- Folded length: 2.00 m
- Extended length: 11.67 m (7 sections)
- Maximum rated voltage when extended: 420 kV
- For INDOOR and OUTDOOR use in dry environments
- Weight: 7.30 kg

Code	Ref.	Secciones	Working voltage
615350	BMTS-7/11,6	F+A	132 kV
		F+B+A	380 kV
		F+C+B+A	380 kV
		F+D+C+B+A	380 kV
		F+E+D+C+B+A	420 kV



Easy adjustment

Indoor and outdoor use in a dry environment

Connectable poles with two sections, made of polyester and fibreglass tube Ø 32 mm, with humidity-proof seals at both ends, hand guard, grip, tip, and M (Metric-10), U (Universal), B (Bayonet) or P (Hexagonal + Metric-10) head.

30804 BMAI-2

- Total length: 2 m
- Composed of 2 sections of 1 m each
- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Working voltage
616100	BMAI-2/66M	66 kV
616101	BMAI-2/66U	
616102	BMAI-2/66B	
616103	BMAI-2/66P	

30804 BMAI-2,5

- Total length: 2.5 m
- Composed of 1 section of 1 m + 1 section of 1.5 m
- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Working voltage
616110	BMAI-2,5/110M	110 kV
616111	BMAI-2,5/110U	
616112	BMAI-2,5/110B	
616113	BMAI-2,5/110P	

30804 BMAI-3

- Total length: 3 m
- Composed of 2 sections of 1.5 m each
- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Working voltage
616120	BMAI-3/132M	132 kV
616121	BMAI-3/132U	
616122	BMAI-3/132B	
616123	BMAI-3/132P	



M
Metric 10 head



U
Universal head



B
Bayonet head



P
Multipurpose head
(Hexagonal + Metric-10)

Indoor and outdoor use in dry and humid environment

Connectable pole with two sections, made of polyester and fibreglass tube Ø 32 mm, with humidity-proof seals at both ends, hand guard, grip, tip, three deflecting hoods, and head options: M (Metric-10), U (Universal), B (Bayonet) or P (Hexagonal + Metric-10) head.

30805 BMAE-2

- Total length: 2 m
- Composed of 2 sections of 1 m each
- For INDOOR and OUTDOOR use in dry and humid environments

Code	Ref.	Working voltage	Bells
616200	BMAE-2/30M	30 kV	3
616201	BMAE-2/30U		
616202	BMAE-2/30B		
616203	BMAE-2/30P		

30805 BMAE-2,5

- Total length: 2.5 m
- Composed of 1 section of 1 m + 1 section of 1.5 m
- For INDOOR and OUTDOOR use in dry and humid environments

Code	Ref.	Working voltage	Bells
616210	BMAE-2,5/66M	66 kV	3
616211	BMAE-2,5/66U		
616212	BMAE-2,5/66B		
616213	BMAE-2,5/66P		

30805 BMAE-3

- Total length: 3 m
- Composed of 2 sections of 1.5 m each
- For INDOOR and OUTDOOR use in dry and humid environments

Code	Ref.	Working voltage	Bells
616220	BMAE-3/110M	110 kV	3
616221	BMAE-3/110U		
616222	BMAE-3/110B		
616223	BMAE-3/110P		



M
Metric 10 head



U
Universal head



B
Bayonet head



P
Multipurpose head
(Hexagonal + Metric-10)

Indoor and outdoor use in a dry environment

Connectable pole with two or three sections made of polyester and fibreglass tube Ø 38.4 mm, with hand protector, grip, tip, and M (Metric-10), U (Universal), B (Bayonet) or P (Hexagonal + Metric-10) head.

30804 BMAI-3V

- Total length: 3 m
- Composed of 2 sections of 1.5 m each
- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Working voltage
616500	BMAI-3V/132M	132 kV
616501	BMAI-3V/132U	
616502	BMAI-3V/132B	
616503	BMAI-3V/132P	

30804 BMAI-4V

- Total length: 4 m
- Composed of 2 sections of 2 m each
- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Working voltage
616510	BMAI-4V/220M	220 kV
616511	BMAI-4V/220U	
616512	BMAI-4V/220B	
616513	BMAI-4V/220P	

30804 BMAI-5V

- Total length: 5 meters
- Composed of 2 sections of 2 m + 1 section of 1 m
- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Working voltage
616520	BMAI-5V/380M	380 kV
616521	BMAI-5V/380U	
616522	BMAI-5V/380B	
616523	BMAI-5V/380P	

30804 BMAI-6V

- Total length: 6 m
- Composed of 3 sections of 2 m each
- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Working voltage
616530	BMAI-6V/380M	380 kV
616531	BMAI-6V/380U	
616532	BMAI-6V/380B	
616533	BMAI-6V/380P	



M
Metric 10 head



U
Universal head



B
Bayonet head



P
Multipurpose head
(Hexagonal + Metric-10)

Indoor and outdoor use in dry and humid environment

Connectable pole with two or three sections made of polyester and fibreglass tube Ø 38.4 mm, with hand protector, grip, tip, 3 deflecting hoods, and M (Metric-10), U (Universal), B (Bayonet) or P (Hexagonal + Metric-10) head.

30805 BMAE-3V

- Total linked length: 3 m
- Composed of 2 sections of 1.5 m each
- For INDOOR and OUTDOOR use in dry and humid environments

Code	Ref.	Working voltage	Bells
616600	BMAE-3V/110M	110 kV	3
616601	BMAE-3V/110U		
616602	BMAE-3V/110B		
616603	BMAE-3V/110P		

30805 BMAE-4V

- Total linked length: 4 m
- Composed of 2 sections of 2 m each
- For INDOOR and OUTDOOR use in dry and humid environments

Code	Ref.	Working voltage	Bells
616610	BMAE-4V/220M	220 kV	3
616611	BMAE-4V/220U		
616612	BMAE-4V/220B		
616613	BMAE-4V/220P		

30805 BMAE-5V

- Total linked length: 5 m
- Composed of 2 sections of 2 m + 1 section of 1 m
- For INDOOR and OUTDOOR use in dry and humid environments

Code	Ref.	Working voltage	Bells
616620	BMAE-5V/380M	380 kV	3
616621	BMAE-5V/380U		
616622	BMAE-5V/380B		
616623	BMAE-5V/380P		

30805 BMAE-6V

- Total linked length: 6 meters
- Composed of 3 sections of 2 m each
- For INDOOR and OUTDOOR use in dry and humid environments

Code	Ref.	Working voltage	Bells
616630	BMAE-6V/380M	380 kV	3
616631	BMAE-6V/380U		
616632	BMAE-6V/380B		
616633	BMAE-6V/380P		



M
Metric 10 head



U
Universal head



B
Bayonet head



P
Multipurpose head
(Hexagonal + Metric-10)

Indoor and outdoor use in humid environment

Multi-use poles compliant with the EN 50508 standard, made in a single section. Manufactured from a Ø 32 mm polyester and fibreglass tube and filled with polyurethane foam that complies with the IEC 60855 standard.

Head options: U (Universal), B (Bayonet), H (Hexagonal).

Supplied with carrying bags.

30806 BSC-M3

- Total length: 1.5 m
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616700	BSC-M3U	30 kV
616701	BSC-M3B	
616702	BSC-M3H	

30806 BSC-M4

- Total length: 2 m
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616703	BSC-M4U	45 kV
616704	BSC-M4B	
616705	BSC-M4H	

30806 BSC-M5

- Total length: 2.5 m
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616706	BSC-M5U	66 kV
616707	BSC-M5B	
616708	BSC-M5H	

30806 BSC-M6

- Total length: 3 m
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616709	BSC-M6U	132 kV
616710	BSC-M6B	
616711	BSC-M6H	



U
Universal head



B
Bayonet head



H
Hexagonal head

Indoor and outdoor use in humid environment

Multiuse poles compliant with the EN-50508 standard, available in two or three sections. Manufactured from Ø 32 mm polyester and fibreglass tube and filled with polyurethane foam that complies with the IEC 60855 standard.

Head: U (Universal), B (Bayonet), H (Hexagonal).

Supplied with carrying bag.

30807 BSC-M22

- Total linked length: 2 m
- Composed of 2 sections of 1 m each
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616712	BSC-M22U	45 kV
616713	BSC-M22B	
616714	BSC-M22H	

30807 BSC-M32

- Total linked length: 2.5 m
- Composed of 1 section of 1 m + 1 section of 1.5 m
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616715	BSC-M32U	66 kV
616716	BSC-M32B	
616717	BSC-M32H	

30807 BSC-M33

- Total linked length: 3 m
- Composed of 2 sections of 1.5 m each
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616718	BSC-M33U	132 kV
616719	BSC-M33B	
616720	BSC-M33H	

30807 BSC-M222

- Total linked length: 3 m
- Composed of 3 sections of 1 m each
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616721	BSC-M222U	132 kV
616722	BSC-M222B	
616723	BSC-M222H	



U
Universal head



B
Bayonet head



H
Hexagonal head

Indoor and outdoor use in humid environment

Multiuse poles according to EN-50508 standard, with two or three sections. Manufactured with a Ø 38.4 mm polyester and fibreglass tube, filled with polyurethane foam that complies with the IEC 60855 standard.

Head: U (Universal), B (Bayonet).

Supplied with a carrying bag.

30807 BSC-A43

- Total linked length: 3.5 m
- Composed of 1 section of 2 m and 1 section of 1.5 m
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616724	BSC-A43U	132 kV
616725	BSC-A43B	

30807 BSC-A44

- Total linked length: 4 m
- Composed of 2 sections of 2 m each
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616726	BSC-A44U	220 kV
616727	BSC-A44B	

30807 BSC-A54

- Total linked length: 4.5 m
- Composed of 1 section of 2 m + 1 section of 2.5 m
- For INDOOR and OUTDOOR use in humid environment

Code	Ref.	Working voltage
616728	BSC-A54U	220 kV
616729	BSC-A54B	



U
Universal head



B
Bayonet head

Indoor and outdoor use in humid environment

Multiuse poles according to EN-50508 standard, with two or three sections. Manufactured with a Ø 38.4 mm polyester and fibreglass tube, filled with polyurethane foam that complies with the IEC 60855 standard.

Head: U (Universal), B (Bayonet).

Supplied with a carrying bag.

30807 BSC-A55

- Total linked length: 5 m
- Composed of 2 sections of 2.5 m each
- For INDOOR and OUTDOOR use in humid environments

Code	Ref.	Working voltage
616730	BSC-A55U	380 kV
616731	BSC-A55B	

30807 BSC-A66

- Total linked length: 6 m
- Composed of 2 sections of 3 m each
- For INDOOR and OUTDOOR use in humid environment

Code	Ref.	Working voltage
616732	BSC-A66U	380 kV
616733	BSC-A66B	

30807 BSC-A444

- Total linked length: 6 m
- Composed of 3 sections of 2 m each
- For INDOOR and OUTDOOR use in humid environment

Code	Ref.	Working voltage
616734	BSC-A444U	380 kV
616735	BSC-A444B	



U
Universal head



B
Bayonet head

Indoor and outdoor use in humid environment

Multiuse pole according to EN-50508 standard, single-section. Manufactured with a Ø 38.4 mm polyester and fibreglass tube, filled with polyurethane foam that complies with the IEC 60855 standard. Head: H (Hexagonal 22). Supplied with a carrying bag.

30909 BSC-132/BP

Pole downside potential

- Total length: 3 m
- For INDOOR and OUTDOOR use in humid environment

Code	Ref.	Working voltage
672210	BSC-132/BP	132 kV



H
Hexagonal head of 22



Hexagonal of 22

Indoor and outdoor use in a dry environment

30809 BEF-9000

Fuse disconnecting pole

One-section fuse disconnecting pole made of polyester and fibreglass tube Ø 40 mm, featuring a handguard and a grip for operating the sliding mechanism. Designed for fuses with a diameter between 30 and 90 mm. The head has two opening positions to accommodate different diameters.

- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Working voltage	Length
625105	BEF-9000/24	24 kV	1.07 m
625107	BEF-9000/36	36 kV	1.72 m

30809 BDC

Insulating condenser discharging pole

Insulating condenser discharging pole with earthing system. It is also suitable for devices with static electricity. Pole with only one section made of polyester and fibreglass tube Ø 32 mm, with hand protector, grip and tip.

- For INDOOR and OUTDOOR use in dry environments

Code	Ref.	Working voltage	Length
625110	BDC	45 kV	1.6 m
625210	BDC-H 1,6/45-5		



30808 BGT

New

Trigger-operated pole

The BGT trigger-operated pole is manufactured from a fibreglass tube filled with polyurethane foam, providing superior insulation against electrical voltages and optimal weight for handling. The trigger system, commonly known as a “shotgun” mechanism, enables safe hooking, releasing, and manipulation of fittings or components on live lines.

Applications:

- Work on energised overhead lines (live line) and maintenance of medium- and high-voltage networks.
- Earthing operations, releasing fittings, and quick attachment of earthing clamps in substations and line installations.
- Manoeuvres on railway overhead lines, industrial environments, and electrical infrastructure maintenance.
- Tasks requiring the operator to maintain a safe electrical distance and perform precise movements of fittings.

Main features:

- Reinforced fibreglass tube with a polyurethane foam core, ensuring excellent insulation and rigidity.
- “Trigger/shotgun” mechanism with a sliding handle that opens or closes the hook at the end, enabling safe manipulation of energised metallic components.

Code	Ref.	Length	Ø	Weight
625112	BGT	2.60 m	32 mm	2000 gr

Available on request. Please enquire about other customised lengths or diameters.



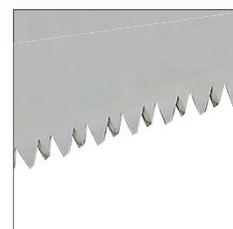
30810 SC33

Curved pruning saw

The SC33 pruning saw is used for cutting tree branches located near overhead lines. It can be fitted to any pole equipped with a universal head.

- Metal saw blade with serrated tip
- Bidirectional cutting teeth
- According to EN 60832-2:2010

Code	Ref.	Length	Espesor hoja	Weight
625113	SC-33	330 mm	1.2 mm	140 gr



30809 PLD-1 New

Cleaning Poles

Manufactured from high-quality insulating fibreglass. Designed and developed in collaboration with Helion Technologies to provide an efficient and safe solution for the maintenance of insulators and wind turbines. Its design allows integration with cleaning drones operating with pressurised water, optimising maintenance processes and ensuring safety during work at height.

- Total length: 2120-2500 mm
- Tube diameter: 32 mm
- Use: INDOOR and OUTDOOR
- Fixing system: Universal head and nozzle adapter
- Adapters: Manufactured using 3D powder-based nylon technology, offering an optimal combination of strength and lightness
- Humidity-proof seals: At both ends to prevent moisture absorption
- Compatibility: Suitable for integration with cleaning drones for insulators and wind turbines

Applications:

- Cleaning of insulators on high-voltage networks
- Maintenance of wind turbines
- Integration with cleaning drones for increased efficiency
- Removal of dirt and contaminants from electrical installations

Code	Ref.
30803005	PLD-1



30810 CPS New

Insulating pole tester

The portable CPS tester allows quick and safe verification of the dielectric condition of insulating poles before use. It provides an immediate PASS / FAIL result, equivalent to an applied voltage of 100 kV over 30 cm. Lightweight and self-contained, it operates with a rechargeable lithium battery via USB, with no need for auxiliary equipment. Ideal for routine testing of insulating poles.



Code	Ref.
635410	CPS

30812 AVPM

Detector adapter for maneuvering pole

The AVPM adapter allows a voltage detector to be fitted onto the manoeuvring hook already installed on the pole. In this way, the detector remains in place during operations on the electrical installation, warning of any possible reappearance of voltage without interfering with the operator's work.

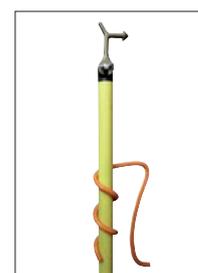


Code	Ref.
630175	AVPM

30810 GSP

Hook for pole suspension

PVC hook designed to be fitted onto manoeuvring poles, allowing them to be suspended on the installation during work.



Code	Ref.	Ø
630170	GSP-32	32 mm

30812 GPB

Coil holder hook

Insulating hook for holding insulating tape coils, with Universal-K connection.



Code	Ref.
630177	GPB

30810 JSP-40

Wall support for poles

Wall-mounted support for the fixing and storage of insulating poles, allowing them to be kept organised, easily accessible, and protected when not in use. Suitable for installation in workshops, warehouses, and work areas.

Code	Ref.	Ø
615206	JSP-40	40 mm



30903 JSF-2

Fuse holder

Support designed for the orderly storage of fuses, facilitating their organisation and quick identification. Suitable for industrial and electrical maintenance environments.

Code	Ref.
545135	JSF-2



30811 SM-02R

Metric-10 maneuvering hook

Manoeuvring hook compatible with insulating poles, intended for the handling and operation of components in electrical installations, allowing controlled operations to be carried out at a safe distance.

Code	Ref.
630100	SM-02R



30811 SM-02C

Hexagonal-12 manoeuvring hook

Manoeuvring hook compatible with insulating poles, intended for the handling and operation of components in electrical installations, allowing controlled operations to be carried out at a safe distance.

Code	Ref.
630110	SM-02C



30811 SM-02K

Universal-K manoeuvring hook

For general manoeuvring with a pole: hooking, pushing and pulling accessible elements in a straight line.

Code	Ref.
630120	SM-02K



30811 SM-03K

Straight Universal-K manoeuvring hook

Hook with a curved profile, ideal for hooking and retaining elements during manoeuvring, reducing the risk of slipping.

Code	Ref.
630122	SM-03K



30811 SM-90K

Universal-K 90° manoeuvring hook

90° hook, suitable for angled manoeuvres when pushing or pulling is required from a lateral position or with limited access.

Code	Ref.
630123	SM-90K



30812 AP U-C New

Retractable cutting accessory for manoeuvring poles

Specially designed blade for fitting onto insulating poles equipped with a universal head, used for maintenance, cleaning, and the removal of objects on railway or electrical networks. Its retractable system allows for precise and safe cutting from a distance. Manufactured from Nylon 12 and high-strength steel, it ensures durability even in extreme weather conditions.

Compatible with manoeuvring poles for medium- and high-voltage operations.

Code	Ref.
30810000	AP U-C



30812 ADAP. B-UK

Bayonet-to-Universal-K adapter

Allows a pole with a bayonet connection to be converted to Universal-K, expanding its compatibility with accessories for this head.

Code	Ref.
630107	ADAP. B-UK



30812 ADAP. B-M10

Bayonet-to-M10 adapter

Adapter that allows accessories with an M10 thread to be used on poles with a bayonet connection.

Code	Ref.
630108	ADAP. B-M10



30812 ADAP. B-P

Bayonet-to-Hexagonal adapter

Converts a pole with a bayonet connection into a hexagonal one, allowing the use of hexagonal clamps and accessories.

Code	Ref.
630167	ADAP. B-P



30812 ADAP. H12-M10

Hexagonal-12 to M-10 adapter

Allows M10-threaded accessories to be fitted to poles with a Hexagonal-12 connection.

Code	Ref.
630101	ADAP. H12-M10



30811 GA-TML

Operating hook for PATL-TML device

Hook designed for the remote operation of the PATL-TML device using an insulating pole.

Code	Ref.
630116	GA-TML



30812 ADAP. UK-B

Universal-K to Bayonet adapter

Converts a Universal-K pole (testing pole) into a pole suitable for grounding clamps with a bayonet connection.

Código	Ref.
630162	ADAP. UK-B



30812 ADAP. UK-P

Universal-K to Hexagonal adapter

Allows a Universal-K pole to be converted into a pole compatible with hexagonal clamps and accessories, expanding its applications..

Code	Ref.
630163	ADAP. UK-P



30812 ADAP. H12-UK

Hexagonal-12 to Universal-K adapter

Allows a pole for grounding clamps (Hexagonal-12) to be converted into a Universal-K testing pole.

Code	Ref.
630109	ADAP. H12-UK



30812 ADAP. M10-UK

M10 to Universal-K adapter

Converts a rescue pole with an M10 thread into a Universal-K testing pole.

Code	Ref.
630106	ADAP. M10-UK



30812 ADAP. M10-B

New

M10 to Bayonet adapter

Allows grounding clamps with a bayonet connection to be used on poles with an M10 thread.

Code	Ref.
T630016	ADAP. M10-B



30812 ADAP. UK-M10

Universal-K to M10 adapter

Allows a Universal-K (testing) pole to be converted into a pole compatible with M10-threaded accessories, such as rescue hooks or other tools.



Code	Ref.
630102	ADAP. UK-M10

30812 ADAP. H12-B

Hexagonal-12 to Bayonet adapter

Converts a pole with a Hexagonal-12 connection into a bayonet connection, allowing the use of grounding clamps with a bayonet connection.



Code	Ref.
630166	ADAP. H12-B

30812 U-ESC New

Universal-K to broom adapter

Adapter designed to quickly and securely attach a broom to an insulating pole with a Universal-K threaded head. Especially suitable for cleaning and maintenance tasks in railway environments, where carriages or catenary elements may be live.



Ensures a firm connection of the broom to the pole, guaranteeing operator safety and facilitating work at height or in hard-to-reach areas.

Code	Ref.
630180	U-ESC

30811 GS-49

Rescue hook

Rescue hook with M10 thread.

Code	Ref.
630130	GS-49

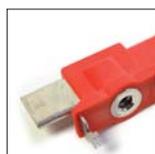


Earthing and short-circuit equipment for NH fuse low-voltage electric panels

30902 ECBT-NH

Equipment designed for low-voltage electrical panels with NH-type fuses. It features disconnecting blades that allow fuses to be safely removed and reconnected, establishing earthing directly on the fuse holder. The equipment includes an insulated pole for extracting the blades using an M10 screw.

According to IEC 61230 standard.



NH1-3



TT-38A

Composed of:

- 3 NH1-3 disconnecting and earthing blades.
- 3 copper PVC-insulated cables, 25 mm² cross-section, 0.2 m, 0.4 m, and 0.6 m long for phase short-circuiting.
- 1 copper PVC-insulated cable, 25 mm² cross-section, 0.5 m long for earthing.
- 1 4-way branch connector.
- 1 insulated pole for placing the blades.
- 1 TT-38A earthing lathe.
- 1 plastic case for storing and transporting the equipment.

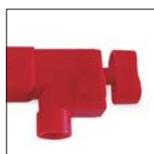
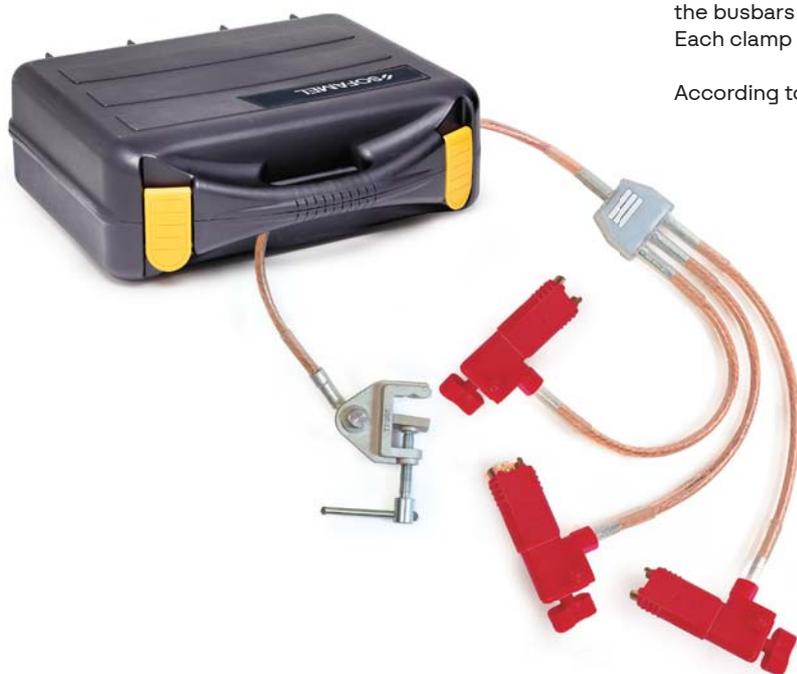
Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
659130	ECBT-NH	25	0.2 - 0.4 - 0.6 / 0.5	6.9 kA/1s

Earthing and short-circuit equipment with 3 insulated PTA clamps

30902 ECBT-PTA3

Equipment features three insulated PTA-type clamps, designed to connect onto screw heads mounted on the busbars or strips of electrical panels. Each clamp provides a fast and secure connection.

According to IEC 61230 standard.



PTA



TT-38A

Composed of:

- 3 insulated PTA earth clamps for phase short-circuiting.
- 3 copper PVC-insulated cables, 25 mm² cross-section, 0.4 m long for phase short-circuiting.
- 1 copper PVC-insulated cable, 25 mm² cross-section, 1 m or 2 m long (depending on model) for earthing.
- 1 4-way branch connector.
- 1 TT-38A earthing lathe.
- 1 plastic case for storing and transporting the equipment.

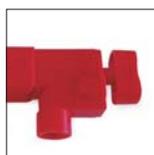
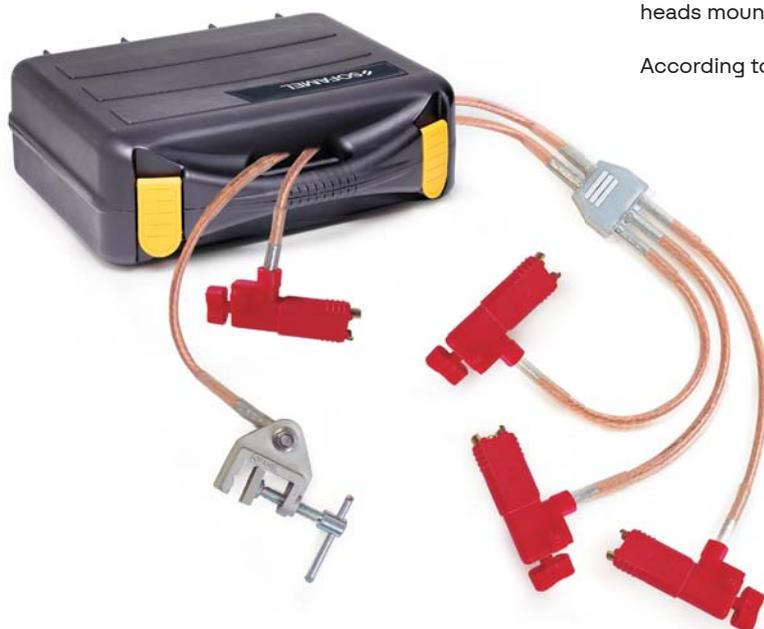
Code	Ref.	Cable section (mm ²)	Length (m)	□ / Ø max.	Short-circuit current Max. ICC
659140	ECBT-PTA3-1	25	1	8 - 22 mm	6.9 kA/1s
659141	ECBT-PTA3-2		2		

Earthing and short-circuit equipment with 4 insulated PTA clamps

30902 ECBT-PTA4

Version with four PTA clamps, designed for short-circuiting the three phases and the neutral, for connection to screw heads mounted on the bars or busbars of electric panels.

According to IEC 61230 standard.



PTA



TT-38A

Composed of:

- 4 insulated PTA earth clamps for phase and neutral short-circuiting.
- 3 copper PVC-insulated cables, 25 mm² cross-section, 1.2 m long for phase short-circuiting.
- 1 copper PVC-insulated cable, 25 mm² cross-section, 1.5 m long for neutral earthing.
- 1 copper PVC-insulated cable, 25 mm² cross-section, 2 m long for earthing.
- 1 5-way branch connector.
- 1 TT-38A earthing lathe.
- 1 plastic case for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	⬡ / ⌀ max.	Short-circuit current Max. ICC
659150	ECBT-PTA4	25	1.2 / 1.5 / 2	8 - 22 mm	6.9 kA/1s

Earthing and short-circuiting equipment with 3 SHUNT

30902 ECBT-SHUNT3

Equipment with three SHUNT clamps, type SHCD or SHPL, suitable for connection to bare wire or busbar. Ideal for low-voltage switchboards requiring a direct and conductive connection.

According to IEC 61230 standard.



SHUNT SHCD
SHUNT SHPL



TT-38A

Composed of:

- 3 insulated SHUNT clamps for phase short-circuiting.
- 3 copper PVC-insulated cables, 25 mm² cross-section, 0.4 m long for phase short-circuiting.
- 1 copper PVC-insulated cable, 25 mm² cross-section, 1 m long for earthing.
- 1 4-way branch-joint connector.
- 1 TT-38A earthing lathe.
- 1 plastic case for storing and transporting the equipment.

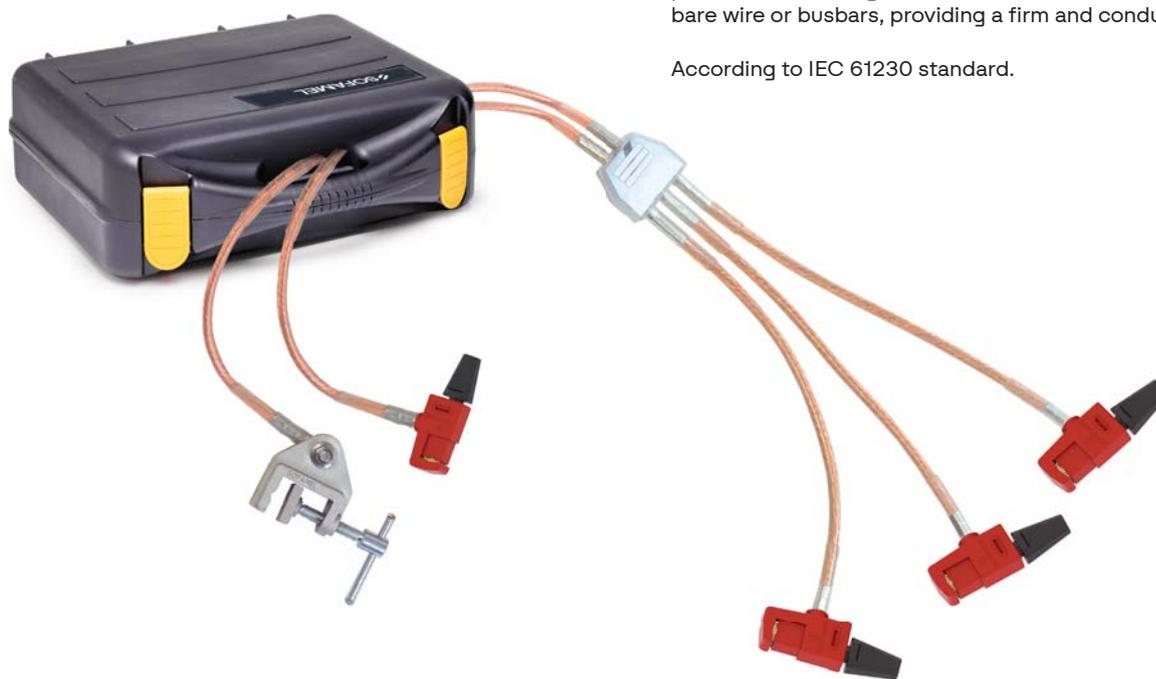
Code	Ref.		 	Capacity	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
659040	ECBT-SHCD3	Bare wire	•	25-240 mm ²	25	0.4 / 1	200 A
659045	ECBT-SHPL3	Busbar	•	⌀ 2-25 mm			

Earthing and short-circuiting equipment with 4 SHUNT

30902 ECBT-SHUNT4

Four SHUNT clamp version, for short-circuiting the three phases and earthing the neutral. SHCD or SHPL clamps for bare wire or busbars, providing a firm and conductive grip.

According to IEC 61230 standard.



SHUNT SHCD
SHUNT SHPL



TT-38A

Composed of:

- 4 insulated SHUNT earth clamps for short-circuiting the phases and neutral.
- 3 copper PVC-insulated cables, 25 mm² cross-section, 1.2 m long for phase short-circuiting.
- 1 copper PVC-insulated cable, 25 mm² cross-section, 1.5 m long for neutral earthing.
- 1 copper PVC-insulated cable, 25 mm² cross-section, 2 m long for earthing.
- 1 5-way branch-joint connector.
- 1 TT-38A earthing lathe.
- 1 plastic case for storing and transporting the equipment.

Code	Ref.		 	Capacity	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
659050	ECBT-SHCD4	Bare wire	•	25-240 mm ²	25	1.2 / 1.5 / 2	200 A
659055	ECBT-SHPL4	Busbar	•	□ 2-25 mm			

Earthing and short-circuiting equipment with NH and MPUCN blades

30902 ECBT-ID

Equipment with NH and MPUCN-type disconnecting blades, designed for low-voltage switchboards. Allows simultaneous connection of phases and neutral using an insulated pole, ensuring safe operation.

According to IEC 61230 standard.



NH00



NH1-3



MPUCN



PTA



TT-38A

Composed of:

- 3 NH00 disconnecting and earthing blades.
- 3 NH1-3 disconnecting and earthing blades.
- 3 copper PVC-insulated cables, 25 mm² cross-section, 0.45 m, 0.60 m, and 0.85 m long for phase short-circuiting.
- 1 copper PVC-insulated cable, 25 mm² cross-section, 0.75 m long for neutral.
- 1 copper PVC-insulated cable, 25 mm² cross-section, 1 m long for earthing.
- 1 insulated PTA neutral clamp.
- 1 MPUCN neutral clamp.
- 1 insulated pole for placing the blades.
- 1 TT-38A earthing lathe.
- 1 plastic case for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
659160	ECBT-ID	25	0.45 - 0.60 - 0.85 / 0.75	6.9 kA/1s

Earthing and short-circuiting equipment with NH and MPUC blades

30902 ECBT-GNF

Equipment with NH1-3 and MPUC blades for short-circuiting and earthing in low-voltage switchboards. Allows fast operation using an insulated pole.

According to IEC 61230 standard.



MPUC



NH1-3



TT-38A

Composed of:

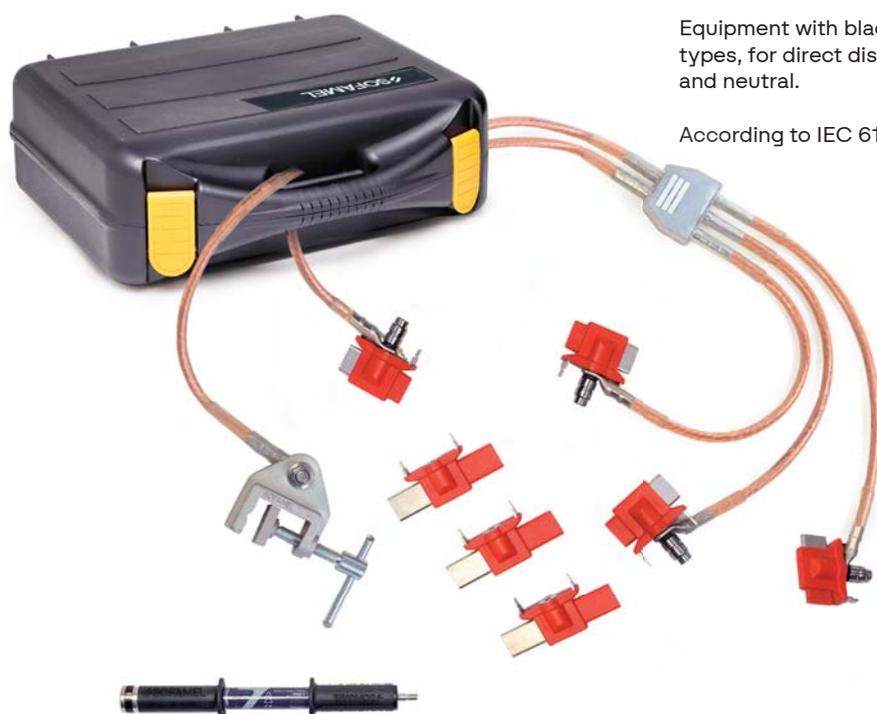
- 3 NH1-3 disconnecting and earthing blades.
- 4 MPUC earth clamps for phases and neutral.
- 3 copper PVC-insulated cables, 35/50 mm² cross-section, 0.45 m, 0.60 m, and 0.85 m long for phase short-circuiting.
- 1 copper PVC-insulated cable, 35/50 mm² cross-section, 0.75 m long for neutral.
- 1 copper PVC-insulated cable, 35/50 mm² cross-section, 1 m long for earthing.
- 1 5-way branch-joint connector.
- 1 insulated pole for placing the blades.
- 1 TT-38A earthing lathe.
- 1 nylon bag for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
659170	ECBT-GNF/35	35	0.45 / 0.75 / 1	9 kA/1s
659180	ECBT-GNF/50	50		12 kA/1s

* Depending on availability, the colour of the bag may vary.

Earthing and short-circuiting equipment with blades for NH fuses

30902 ECBT-ID-NH



Equipment with blades adapted to NH fuse holders of all types, for direct disconnection and earthing of the phases and neutral.

According to IEC 61230 standard.



NH00

NH1-3

TT-38A

Composed of:

- 4 NH00 disconnecting and earthing blades.
- 4 NH1-3 disconnecting and earthing blades.
- 3 copper PVC-insulated cables, 16 mm² cross-section, 0.50 m long for phase short-circuiting.
- 1 copper PVC-insulated cable, 16 mm² cross-section, 0.50 m long for neutral.
- 1 copper PVC-insulated cable, 16 mm² cross-section, 1 m long for earthing.
- 1 5-way branch-joint connector.
- 1 insulated pole for placing the blades.
- 1 TT-38A earthing lathe.
- 1 plastic case for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
659217	ECBT-ID-NH	16 / 16 / 16	0.5 / 0.5 / 1	4.3 kA/1s

30903 BLADES

The NH blades allow direct earthing on NH-type fuse holders, ensuring safe disconnection before performing electrical work.

30903 NH00 / NH000

Code	Ref.	Description	Short-circuit current Max. ICC
659185	NH00 / NH000	Earthing	12 kA/1s
659126	NH000/A	Fully isolated	



30903 NH0

Code	Ref.	Description	Short-circuit current Max. ICC
659186	NH0	Earthing	12 kA/1s
659127	NH0/A	Fully isolated	



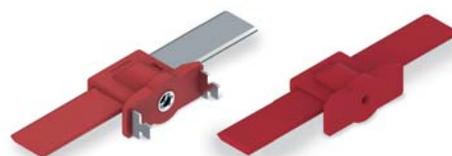
30903 NH1-3

Code	Ref.	Description	Short-circuit current Max. ICC
659187	NH1-3	Earthing	12 kA/1s
659128	NH1-3/A	Fully isolated	



30903 NH4

Code	Ref.	Description	Short-circuit current Max. ICC
659188	NH4	Earthing	12 kA/1s
659129	NH4/A	Fully isolated	



30903 PC

Insulated pole for placing blades

Insulated pole for the installation and removal of clamps and blades of low-voltage earthing and short-circuiting equipment, ensuring safe handling. Compatible with Sofamel accessories for low-voltage switchboards.

Code	Ref.
659131	PC



30903 EARTHING CLAMPS

30903 MPUC

Quick-clamp for busbars or conductors

The MPUC clamp is designed for fast and secure connection to busbars or bare conductors. Its screw-tightening system ensures optimal and stable electrical contact during testing or temporary earthing.



Code	Ref.	Dimensions	Capacity	Short-circuit current Max. ICC	Weight
659133	MPUCN	148x55x33 mm	∅ 35 mm	12 kA/1s	250 g
659139	MPUCF	148x55x33 mm	∅ 20 mm		

30903 PTA

Clamp for screw heads on bars or busbars

The PTA clamp allows connection of earthing and short-circuiting equipment to screw heads mounted on bars or busbars in electrical panels.



Code	Ref.	∅ / Ø max.	Short-circuit current Max. ICC	Weight
659132	PTA	8 - 22 mm	6.9 kA/1s	325 g

30903 SHUNT

SHPC clamp for insulated cable

Designed to pierce the conductor insulation without the need for stripping. It provides a direct and secure connection on low-voltage cables. Fully insulated, with retractable protection.

SHCD clamp for bare cable

Specially designed for direct connection onto bare conductors. It provides a firm and secure contact. Fully insulated, with retractable protection.

SHPL clamp for busbars

Suitable for connection on busbars or flat bars. Its design ensures a stable and conductive grip. Ideal for electrical panels and substations.



SHUNT
(SHPC, SHCD and SHPL)

Code	Ref.	Dimensions	Capacity	Point proof	Splice				Max. working current	Voltage Max.	Weight
659020	SHPC	143x54x26 mm	25-240 mm ²			•			200 A	1000 V	250 g
659021	SHCD	143x54x26 mm	25-240 mm ²	Taking 4 mm	Connector M8		•				
659022	SHPL	143x54x26 mm	∅ 2-25 mm					•			

30903 SHPC2-035015

By-pass kit for insulated cable

Equipped with SHPC clamps that pierce the cable insulation, it allows the electrical continuity of an individual conductor (phase or neutral) to be maintained during maintenance work. No cable stripping is required, ensuring a quick, safe connection without service interruption.



Code	Ref.	Length cable	Capacity	Point test		Maximum working current	Voltage Max.	Weight
659030	SHPC2-035015	1.5 m	25-240 mm ²	Toma 4 mm	•	200 A	1000 V	-

30903 Flexible SHUNT cable M8/M8

By-pass cable

Designed for use with various types of SHUNT clamps (SHPC, SHCD, or SHPL), this cable allows temporary connection during maintenance operations. It must not be used independently; it is part of a complete earthing and short-circuiting system.



Code	Ref.	Length cable	Maximum working current	Voltage Max.	Weight
659035	SH035015	1.5 m	200 A	1000 V	-

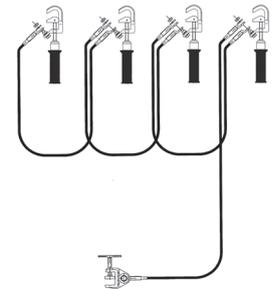
* Consult for other lengths.

Equipment with MPUE clamps

30902 ECBT-4MPUE

Equipment with MPUE quick-clamp clamps, designed for low-voltage switchboards. Provides a firm and secure connection to busbars or conductors, ensuring excellent electrical conductivity.

According to IEC 61230 standard.



 4-35 mm	 5-35 mm
 Max. 45 mm	 0-35 mm
 Max. 45 mm	ICC 12 kA/1s
 20-25 mm	
ICC 12 kA/1s	

- 4 MPUE aluminium-alloy clamps with screw tightening and insulated handle.
- 3 copper PVC-insulated cables, 35 mm² cross-section, 0.6 m long.
- 1 copper PVC-insulated cable, 25 mm² cross-section, 2 m long.
- 1 TT-38A earthing lathe.
- 1 plastic case for storing and transporting the equipment.

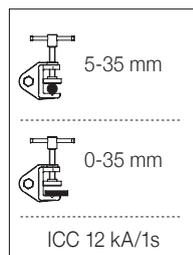
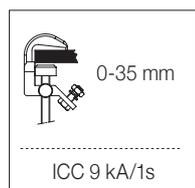
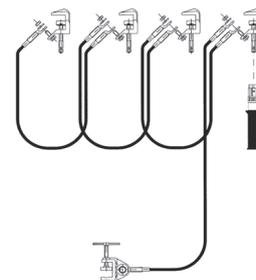
Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
659000	ECBT-4MPUE-3525	35 / 25	0.6 / 2	9 kA/1s

Equipment with MPUBT/H clamps for LV busbars

30902 ECBT-4MPUBTH

Four MPUBT/H screw-tightening clamps, optimized for direct attachment to busbars in low-voltage switchboards. Each connection point features an insulated handle and flexible cables to simplify operation.

According to IEC 61230 standard.



Composed of:

- 4 MPUBT/H aluminium-alloy clamps with screw tightening.
- 1 insulated handle with multipurpose head.
- 3 copper PVC-insulated cables, 35 mm² cross-section, 0.6 m long (or 1 m depending on model).
- 1 copper PVC-insulated cable, 25 mm² cross-section, 2 m long.
- 1 TT-38A earthing lathe.
- 1 plastic case for storing and transporting the equipment.

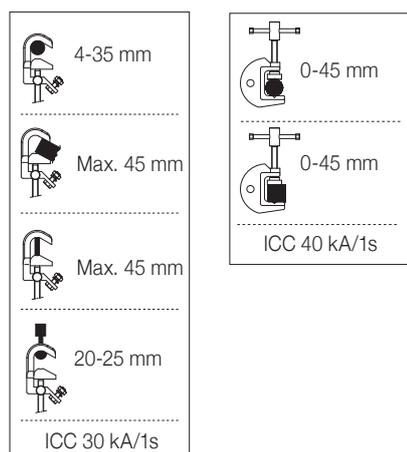
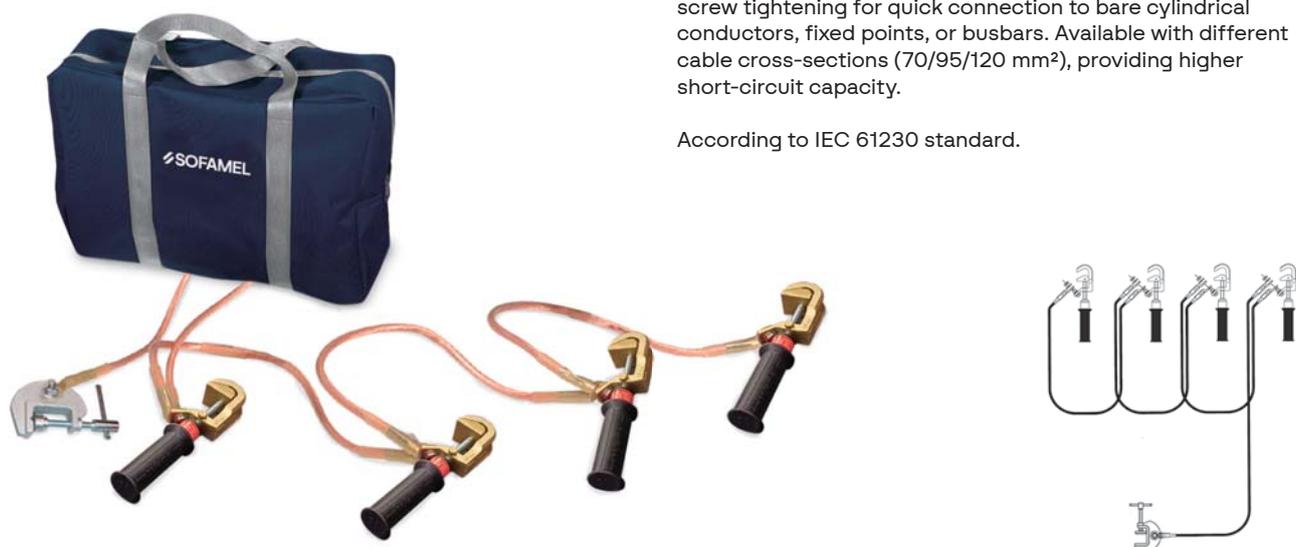
Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
659001	ECBT-4MPUBTH-3525-0.6-2	35 / 25	0.6 / 2	9 kA/1s
T659206	ECBT-4MPUBTH-3525-0102	35 / 25	1 / 2	

Equipment with MPUL clamps with integrated handle

30902 ECBT-4MPUL

MPUL clamps with integrated insulated handle and screw tightening for quick connection to bare cylindrical conductors, fixed points, or busbars. Available with different cable cross-sections (70/95/120 mm²), providing higher short-circuit capacity.

According to IEC 61230 standard.



Composed of:

- 4 MPUL aluminium-alloy clamps with screw tightening and insulated handle.
- 3 copper PVC-insulated cables, 70/95/120 mm² cross-section (depending on model), 0.6 m long.
- 1 copper PVC-insulated cable, 70/95/120 mm² cross-section (depending on model), 2 m long.
- 1 TT-50 earthing lathe.
- 1 nylon bag for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
659201	ECBT-4MPUL-7070	70 / 70		19 kA/1s
659209	ECBT-4MPUL-9595	95 / 95	0.6 / 2	25.5 kA/1s
659210	ECBT-4MPUL-120120	120 / 120		30 kA/1s

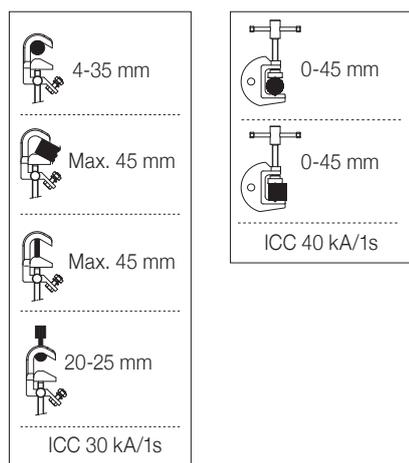
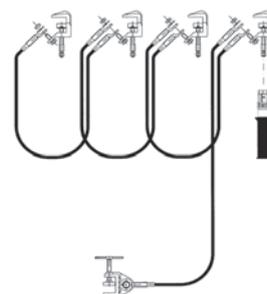
* Depending on availability, the colour of the bag may vary.

Reinforced equipment with MPUH-L clamps and 120 mm² cable

30902 ECBT-4MPUHL

High-capacity LV version with MPUH-L clamps and 120 mm² cabling, suitable for applications requiring higher short-circuit current (ICC). Insulated handle with multipurpose head for safe and precise operation.

According to IEC 61230 standard.



Composed of:

- 4 MPUH-L aluminium-alloy clamps with screw tightening
- 1 insulated handle with multipurpose head.
- 3 copper PVC-insulated cables, 120 mm² cross-section, 0.6 m long.
- 1 copper PVC-insulated cable, 120 mm² cross-section, 2 m long.
- 1 TT-50 earthing lathe.
- 1 nylon bag for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
659200	ECBT-4MPUHL-120120	120 / 120	0.6 / 2	30 kA/1s

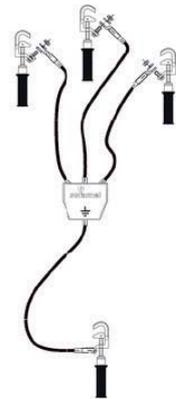
* Depending on availability, the colour of the bag may vary.

Three-phase equipment for LV/MV substations with MPUL clamps

30906 PATC-3MPUL

Set with three MPUL clamps (screw tightening and insulated handle) and protected branch connector. Designed for busbars or cylindrical conductors in transformer substation cells.

According to IEC 61230 standard



	4-35 mm
	Max. 45 mm
	Max. 45 mm
	20-25 mm
ICC 30 kA/1s	

Composed of:

- 4 MPUL aluminium-alloy clamps with screw tightening and insulated handle.
- 3 copper PVC-insulated cables, 95 mm² cross-section, 1 m, 0.7 m, and 0.55 m long.
- 1 copper PVC-insulated cable, 95 mm² cross-section, 0.75 m long.
- 1 protected branch connector with rubber housing.
- 1 bag for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
662012	PATC-3MPUL-9595	95 / 95	1 - 0.7 - 0.55 / 0.55	25 kA/1s

* Depending on availability, the colour of the bag may vary.

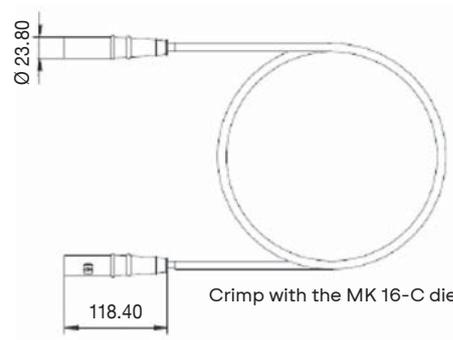
By-pass cable set with female bayonet connectors

30901 KIT SHUNT New
KS-2FB-05016



The KS-2FB-05016 kit is designed for temporary current by-passes, provisional bridging, and measurement operations in low-voltage systems. It includes a flexible 50 mm² shunt cable with female bayonet connectors, protected with Santoprene insulating sleeves, and supplied in a rigid carrying case.

Its robust construction and ease of installation make it an essential tool for maintenance work, testing, and commissioning on low-voltage overhead lines.



Main features:

- 50 mm² shunt cable, 1.6 m long.
- Female bayonet connectors in tinned brass.
- Santoprene insulating sleeves.
- Total weight (including case): 3.1 kg.

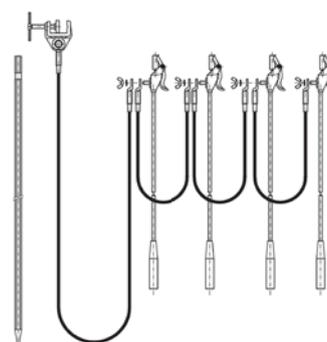
Code	Ref.	Cable section (mm ²)	Length (m)	Set weight (kg)
30901021	KS-2FB-05016	50	1.6	3.1

Equipment for LV overhead lines with PEPT spring clamps

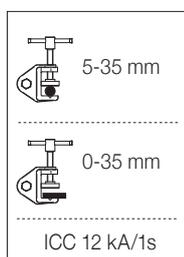
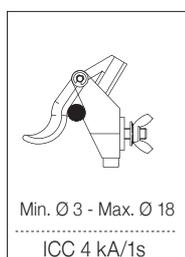
30904 ELBT-PAT/CC

Four PEPT clamps mounted on 70 cm poles, which attach by pressure onto the conductor; the mechanism ensures a permanent and firm contact

According to IEC 61230 standard.



* Depending on availability, the colour of the bag and cover may vary.



Composed of:

- 4 PEPT spring clamps with 70 cm poles for cylindrical conductors with diameters between 3 and 18 mm.
- 3 copper PVC-insulated cables, 16 mm² cross-section, 0.6 m long.
- 1 copper PVC-insulated cable, 16 mm² cross-section, 15 m long.
- 1 TT-38A earthing lathe.
- 1 earthing rod.
- 2 nylon bags for storing and transporting the equipment.

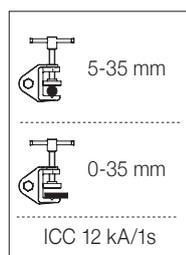
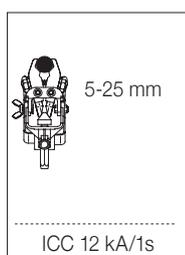
Code	Ref.	Cable section (mm ²)	Length (m)	Set weight (kg)
658120	ELBT-PAT/CC	16 / 16	0.6 / 15	4 kA/1s

Equipment with 5014H steerable clamps

30906 PATC-5014H

Multidirectional head that allows adjusting the clamp angle to access busbars or conductors in different positions. Includes a branch connector with rubber housing.

According to IEC 61230 standard.



Composed of:

- 3 5014H brass steerable clamps with screw tightening and Hex-12 shaft, for cylindrical conductors with diameters between 5 and 25 mm.
- 3 copper PVC-insulated cables, 25/35/50 mm² cross-section (depending on model), 0.75 m long.
- 1 copper PVC-insulated cable, 25/35/50 mm² cross-section (depending on model), 2 m long.
- 1 insulated trifurcating connector with rubber housing.
- 1 TT-38A earthing lathe.
- 1 1.5 m telescopic pole, three sections.
- 1 plastic case for storing and transporting the equipment (optional with wheels).

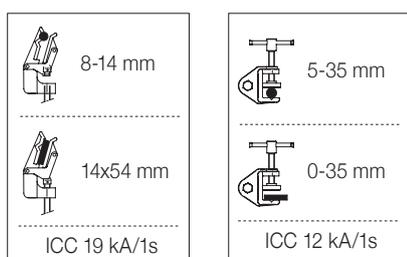
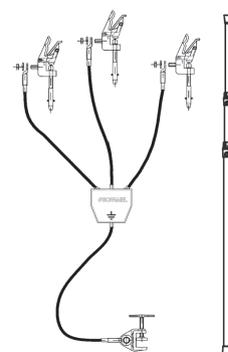
Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
665250	PATC-5014H/2525	25 / 25		6.9 kA/1s
665255	PATC-5014H/3535	35 / 35	0.75 / 2	9.0 kA/1s
665260	PATC-5014H/5050	50 / 50		12.0 kA/1s

Equipment with PP15 clamps for vertical connection to busbars or conductors

30906 PATC-PP15

Clamps designed to be connected vertically to distribution busbars or cylindrical conductors, ensuring a stable support and easy contact inspection. Includes a trifurcating connector with rubber housing.

According to IEC 61230 standard.



Composed of:

- 3 PP15 aluminium-alloy clamps with bayonet screw fixing, for cylindrical conductors with diameters between 8 and 14 mm and flat bars up to 14 x 54 mm.
- 3 copper PVC-insulated cables, 25/35/50 mm² cross-section (depending on model), 0.75 m long.
- 1 copper PVC-insulated cable, 25/35/50 mm² cross-section (depending on model), 2 m long.
- 1 insulated trifurcating connector with rubber housing.
- 1 TT-38A earthing lathe.
- 1 1.5 m telescopic pole, three sections.
- 1 plastic case for storing and transporting the equipment (optional with wheels).

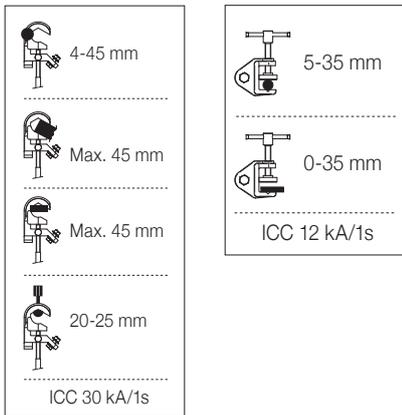
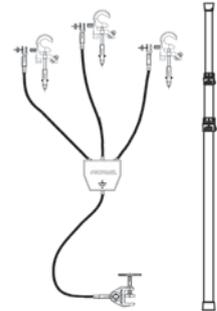
Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
665270	PATC-PP15/2525	25 / 25		6.9 kA/1s
665275	PATC-PP15/3535	35 / 35	0.75 / 2	9.0 kA/1s
665280	PATC-PP15/5050	50 / 50		12.0 kA/1s

Multipurpose earthing and short-circuiting equipment for substations

30906 PATC-MPLE New

Equipment with MPLE screw clamps, suitable for horizontal or vertical busbars as well as cylindrical conductors. The set allows a conductor-to-earth section smaller than that of the phase-to-phase cables, as the short-circuit current between phases is higher than the earthing current. This design optimises the equipment's weight without compromising electrical safety, making it easier to handle in confined spaces.

According to IEC 61230 standard.



Composed of:

- 3 MPLE aluminium-alloy clamps with screw tightening and bayonet shaft (MPL/E) or Hex-12 shaft (MPL/E). For cylindrical conductors with diameters between 4 and 45 mm; flat bars up to 45 mm; fixed points from 20 to 25 mm.
- 3 copper PVC-insulated cables, 50/70/95/120 mm² cross-section, 1.5 m long.
- 1 copper PVC-insulated cable, 35/50/95 mm² cross-section, 2.5 m long.
- 1 protected trifurcating connector with rubber housing.
- 1 TT-38L earthing lathe.
- 1 1.5 m telescopic pole, three sections.
- 1 plastic case for storing and transporting the equipment (optional with wheels).

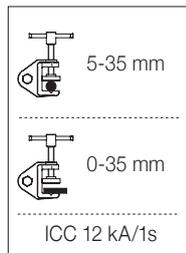
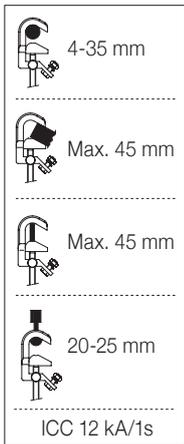
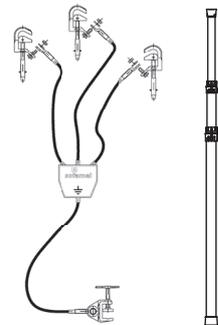
Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
T665149	PATC-MPLE/5035	50 / 35	1.5 / 2.5	12.0 kA/1s
T665150	PATC-MPLE/7035	70 / 35		19.0 kA/1s
T665151	PATC-MPLE/9550	95 / 50		25.0 kA/1s
T665152	PATC-MPLE/9595	95 / 95		25.0 kA/1s
T665176	PATC-MPLE/12050	120 / 50		30.0 kA/1s

Equipment with MPU (screw) clamps

30906 PATC-MPU

MPUB/MPUH screw clamps for cylindrical conductors, busbars, or fixed points in substations.

According to IEC 61230 standard.



Composed of:

- 3 MPU aluminium-alloy clamps with screw tightening and bayonet shaft (MPU/B) or Hex-12 shaft (MPU/H). For cylindrical conductors with diameters between 4 and 35 mm; flat bars up to 45 mm; fixed points from 20 to 25 mm.
- 3 copper PVC-insulated cables, 25/35/50 mm² cross-section, 0.75 m long.
- 1 copper PVC-insulated cable, 25/35/50 mm² cross-section, 2 m long.
- 1 protected trifurcating connector with rubber housing.
- 1 TT-38A earthing lathe.
- 1 1.5 m telescopic pole, three sections.
- 1 plastic case for storing and transporting the equipment (optional with wheels).

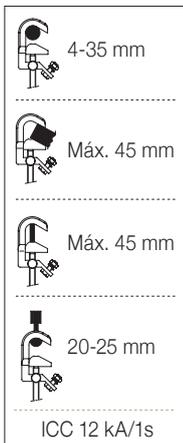
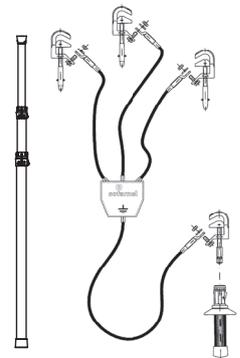
Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
665220	PATC-MPUB/2525	25	0.75 / 2	6.9 kA/1s
665225	PATC-MPUB/3535	35		9.0 kA/1s
665230	PATC-MPUB/5050	50		12.0 kA/1s
665235	PATC-MPUH/2525	25		6.9 kA/1s
665240	PATC-MPUH/3535	35		9.0 kA/1s
665245	PATC-MPUH/5050	50		12.0 kA/1s

Equipment with MPU clamps and EMP insulated handle

30906 PATCPF-MPU

With an earthing clamp instead of a lathe. An insulated handle with a multipurpose head is added to facilitate positioning the earthing clamp and improve ergonomics.

According to IEC 61230 standard.



Composed of:

- 3 MPU aluminium-alloy clamps with screw tightening and bayonet shaft (MPU/B). For cylindrical conductors with diameters between 4 and 35 mm; flat bars up to 45 mm; fixed points from 20 to 25 mm.
- 1 MPU/H clamp.
- 3 copper PVC-insulated cables, 25/35/50 mm² cross-section, 0.75 m long.
- 1 copper PVC-insulated cable, 25/35/50 mm² cross-section, 2 m long.
- 1 protected trifurcating connector with rubber housing.
- 1 1.5 m telescopic pole, three sections.
- 1 insulated handle with multipurpose head.
- 1 plastic case for storing and transporting the equipment (optional with wheels).

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
665310	PATCPF-MPU/2525	25		6.9 kA/1s
665315	PATCPF-MPU/3535	35	0.75 / 2	9.0 kA/1s
665320	PATCPF-MPU/5050	50		12.0 kA/1s

Safety note:

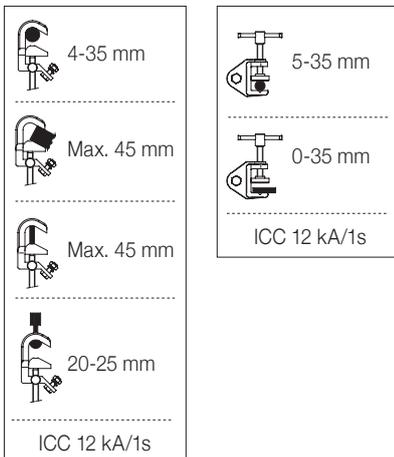
The insulated EMP handle is intended exclusively for positioning the earth clamp. Under no circumstances should it be used for positioning phase clamps. For installing clamps on live phases, the use of an insulated hot stick suitable for the operating voltage is mandatory. The higher the voltage, the greater the length of the hot stick, in accordance with the applicable regulations.

Equipment with MPUB clamps and carrying clamp

30905 PATL-MPUB

Two MPUB screw clamps for cylindrical conductors; the MPUP carrying clamp allows both clamps to be lifted and positioned simultaneously, reducing installation time on overhead lines.

According to IEC 61230 standard.



Composed of:

- 2 MPUB aluminium-alloy screw clamps for cylindrical conductors with diameters between 4 and 35 mm.
- 1 MPUP aluminium-alloy carrying clamp with screw tightening, for cylindrical conductors with diameters between 4 and 35 mm.
- 2 copper PVC-insulated cables, 2.5 m long, cross-section depending on model (16, 25, 35 mm²).
- 1 copper PVC-insulated cable, 15 m long, cross-section depending on model (16, 16, 25 mm²).
- 1 TT-38A earthing lathe.
- 1 earthing rod.
- 1 telescopic pole (1.10 m retracted, 2 m extended).
- 1 plastic case for storing and transporting the equipment (optional with wheels).
- 1 carrying cover for the pole and earthing rod.

Code	Ref.	Cable section (mm ²)	Length (m)	Maximum short-circuit current ICC between phases
660290	PATL-MPUB/1616	16 / 16		4.0 kA/1s
660300	PATL-MPUB/2516	25 / 16	2.5 / 15	6.9 kA/1s
660310	PATL-MPUB/3525	35 / 25		9.0 kA/1s

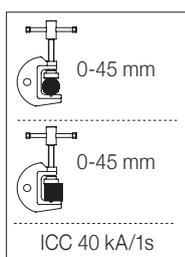
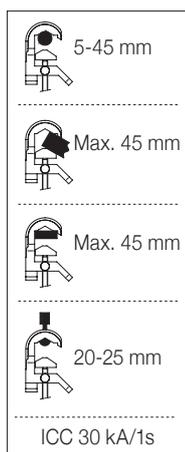
* Depending on availability, the colour of the cover may vary.

Equipment with 2 MPL clamps + 1 MPLP carrying clamp

30905 PATL-MPLB

Two MPL screw clamps and one MPLP carrying clamp for lifting all three clamps together. A quick solution for overhead lines with specified conductor diameters.

According to IEC 61230 standard.



Composed of:

- 2 MPL aluminium-alloy screw clamps for cylindrical conductors with diameters between 5 and 45 mm.
- 1 MPLP aluminium-alloy carrying clamp with screw tightening, for cylindrical conductors with diameters between 5 and 45 mm.
- 2 copper PVC-insulated cables, 2.5 m long, 70 mm² cross-section.
- 1 copper PVC-insulated cable, 15 m long, 70 mm² cross-section.
- 1 TT-50 earthing lathe.
- 1 earthing rod.
- 1 telescopic pole (1.10 m retracted, 2 m extended).
- 1 bag for storing and transporting the equipment.
- 1 carrying cover for the pole and earthing rod.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
665285	PATL-MPLB/7070	70 / 70	2.5 / 15	19 kA/1s

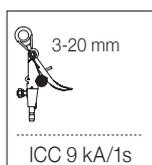
* Depending on availability, the colour of the bag and the cover may vary.

Equipment with MC automatic clamps - 3 clamps

30905 PATL-MC-3

MC clamps with automatic spring closure (pressure on conductor) and removal via recovery hook. The clamp holder plate allows simultaneous positioning.

According to IEC 61230 standard.



Composed of:

- 3 MC aluminium-alloy clamps with automatic spring activation. For cylindrical conductors with diameters between 3 and 20 mm.
- 1 clamp holder plate with recovery hook.
- 2 copper PVC-insulated cables, 2.5 m long, cross-section depending on model (16, 25, 35 mm²).
- 1 copper PVC-insulated cable, 15 m long, cross-section depending on model (16, 16, 25 mm²).
- 1 metal reel to house the 15 m earthing cable.
- 1 telescopic pole (1.10 m retracted, 2 m extended).
- 1 earthing rod.
- 1 plastic case for storing and transporting the equipment (optional with wheels).
- 1 carrying cover for the pole and earthing rod.

Code	Ref.	Cable section (mm ²)	Length (m)	Maximum short-circuit current ICC between phases
660225	PATL-MC-3/1616	16 / 16		4.0 kA/1s
660230	PATL-MC-3/2516	25 / 16	2.5 / 15	6.9 kA/1s
660240	PATL-MC-3/3525	35 / 25		9.0 kA/1s

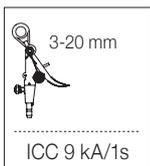
* Depending on availability, the colour of the cover may vary.

Equipment with MC automatic clamps - 4 clamps

30905 PATL-MC-4

Four-MC-clamp configuration for tasks requiring earthing and short-circuiting of two spans or two points.

According to IEC 61230 standard.



Composed of:

- 4 MC aluminium-alloy clamps with automatic spring activation. For cylindrical conductors with diameters between 3 and 20 mm.
- 1 clamp holder plate with recovery hook.
- 3 copper PVC-insulated cables, 2.5 m long, cross-section depending on model (16, 25, 35 mm²).
- 1 copper PVC-insulated cable, 15 m long, cross-section depending on model (16, 16, 25 mm²).
- 1 metal reel to house the 15 m earthing cable.
- 1 telescopic pole (1.10 m retracted, 2 m extended).
- 1 earthing rod.
- 1 plastic case for storing and transporting the equipment (optional with wheels).
- 1 carrying cover for the pole and earthing rod.

Code	Ref.	Cable section (mm ²)	Length (m)	Maximum short-circuit current ICC between phases
660245	PATL-MC-4/1616	16 / 16		4.0 kA/1s
660246	PATL-MC-4/2516	25 / 16	2.5 / 15	6.9 kA/1s
660247	PATL-MC-4/3525	35 / 25		9.0 kA/1s

* Depending on availability, the colour of the cover may vary.

Equipment with PCA-25 automatic clamps - 3 clamps

30905 PATL-PCA25-3

PCA-25 clamps with pressure spring and recovery hook;
high-speed installation thanks to the clamp holder plate.

According to IEC 61230 standard.



Composed of:

- 3 PCA-25 aluminium-alloy clamps with automatic activation and mechanically secured closing. For cylindrical conductors with diameters between 6 and 25 mm.
- 1 clamp holder plate with recovery hook.
- 2 copper PVC-insulated cables, 2.5 m long, cross-section depending on model (16, 25, 35 mm²).
- 1 copper PVC-insulated cable, 15 m long, cross-section depending on model (16, 16, 25 mm²).
- 1 metal reel to house the 15 m earthing cable.
- 1 telescopic pole (1.10 m retracted, 2 m extended).
- 1 earthing rod.
- 1 plastic case for storing and transporting the equipment (optional with wheels).
- 1 carrying cover for the pole and earthing rod.

Code	Ref.	Cable section (mm ²)	Length (m)	Maximum short-circuit current ICC between phases
660250	PATL-PCA25-3/1616	16 / 16	2.5 / 15	4.0 kA/1s
660260	PATL-PCA25-3/2516	25 / 16		6.9 kA/1s
660270	PATL-PCA25-3/3525	35 / 25		9.0 kA/1s

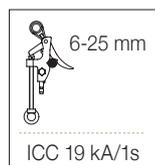
* Depending on availability, the colour of the cover may vary.

Equipment with PCA-25 automatic clamps - 4 clamps

30905 PATL-PCA25-4

PCA-25 clamps with pressure spring and recovery hook;
fast installation thanks to the clamp holder plate.

According to IEC 61230 standard.



Composed of:

- 4 PCA-25 aluminium-alloy clamps with automatic spring closure and mechanical securing. For cylindrical conductors with diameters between 6 and 25 mm.
- 1 clamp holder plate with recovery hook.
- 3 copper PVC-insulated cables, 2.5 m long, cross-section depending on model (16, 25, 35 mm²).
- 1 copper PVC-insulated cable, 15 m long, cross-section depending on model (16, 16, 25 mm²).
- 1 metal reel to house the 15 m earthing cable.
- 1 telescopic pole (1.10 m retracted, 2 m extended).
- 1 earthing rod.
- 1 plastic case for storing and transporting the equipment (optional with wheels).
- 1 carrying cover for the pole and earthing rod.

Code	Ref.	Cable section (mm ²)	Length (m)	Maximum short-circuit current ICC between phases
660280	PATL-PCA25-4/1616	16 / 16		4.0 kA/1s
660281	PATL-PCA25-4/2516	25 / 16	2.5 / 15	6.9 kA/1s
660282	PATL-PCA25-4/3525	35 / 25		9.0 kA/1s

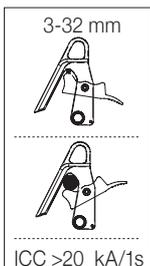
* Depending on availability, the colour of the cover may vary.

Equipment with MCL automatic clamps - 3 clamps, Ø 3-32 mm

30905 PATL-MCL-3

MCL clamps with a larger diameter range (3–32 mm), featuring automatic closure and clamp holder plate.

According to IEC 61230 standard.



Composed of:

- 3 MCL aluminium-alloy clamps with automatic spring activation. For cylindrical conductors with diameters between 3 and 32 mm.
- 1 clamp holder plate with recovery hook.
- 2 copper PVC-insulated cables, 2.5 m long, cross-section depending on model (16, 25, 35, 50, 70 mm²).
- 1 copper PVC-insulated cable, 15 m long, cross-section depending on model (16, 16, 25, 35, 50 mm²).
- 1 metal reel to house the 15 m earthing cable.
- 1 telescopic pole (1.10 m retracted, 2 m extended).
- 1 earthing rod.
- 1 plastic case for storing and transporting the equipment (optional with wheels).
- 1 carrying cover for the pole and earthing rod.

Code	Ref.	Cable section (mm ²)	Length (m)	Maximum short-circuit current ICC between phases
660330	PATL-MCL-3/1616	16 / 16	2.5 / 15	4.0 kA/1s
660335	PATL-MCL-3/2516	25 / 16		6.9 kA/1s
660340	PATL-MCL-3/3525	35 / 25		9.0 kA/1s
660345	PATL-MCL-3/5035	50 / 35		12.0 kA/1s
660350	PATL-MCL-3/7050	70 / 50		19.0 kA/1s

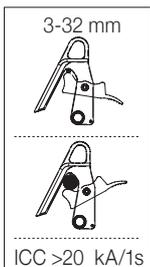
* Depending on availability, the colour of the cover may vary.

Equipment with MCL automatic clamps - 4 clamps, Ø 3-32 mm

30905 PATL-MCL-4

Four-MCL-clamp version for tasks involving multiple connection points.

According to IEC 61230 standard.



Composed of:

- 4 MCL aluminium-alloy clamps with automatic spring activation. For cylindrical conductors with diameters between 3 and 32 mm.
- 1 clamp holder plate with recovery hook.
- 3 copper PVC-insulated cables, 2.5 m long, cross-section depending on model (16, 25, 35, 50, 70 mm²).
- 1 copper PVC-insulated cable, 15 m long, cross-section depending on model (16, 16, 25, 35, 50 mm²).
- 1 metal reel to house the 15 m earthing cable.
- 1 telescopic pole (1.10 m retracted, 2 m extended).
- 1 earthing rod.
- 1 plastic case for storing and transporting the equipment (optional with wheels).
- 1 carrying cover for the pole and earthing rod.

Code	Ref.	Cable section (mm ²)	Length (m)	Maximum short-circuit current ICC between phases
660355	PATL-MCL-4/1616	16 / 16	2.5 / 15	4.0 kA/1s
660360	PATL-MCL-4/2516	25 / 16		6.9 kA/1s
660365	PATL-MCL-4/3525	35 / 25		9.0 kA/1s
660370	PATL-MCL-4/5035	50 / 35		12.0 kA/1s
660375	PATL-MCL-4/7050	70 / 50		19.0 kA/1s

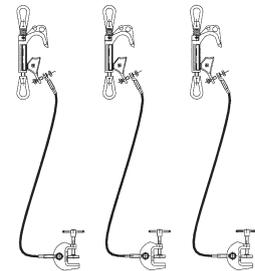
* Depending on availability, the colour of the cover may vary.

Equipment with TML screw clamps - Ø 10-70 mm

30905 PATL-TML

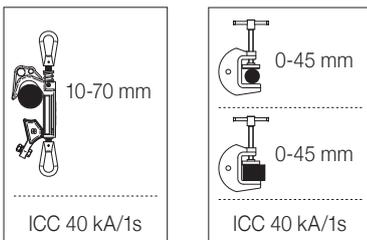
TML screw clamps for cylindrical conductors; wide range of cable cross-sections and lengths to suit different short-circuit currents (ICC).

According to IEC 61230 standard



Composed of:

- 3 TML aluminium-alloy screw clamps. For cylindrical conductors with diameters between 10 and 70 mm.
- 3 copper PVC-insulated cables. Cross-section and length depending on model.
- 3 TT-50 earthing lathes.
- 3 bags for storing and transporting the equipment.



Cod. 630116
Operating hook.
Not included in the equipment.

Selection of the hot stick:
High-voltage earthing equipment is supplied without an insulating hot stick. The hot stick must be selected according to the system voltage, in accordance with applicable regulations, to ensure safe distances and proper ergonomics during operations.

Code	Ref.	Cable section (mm ²)	Length (m)	Short circuit current Max. ICC
670176	PATL-TML/05006	50	6	12 kA/1s
670177	PATL-TML/05007		7	
670178	PATL-TML/05008		8	
670179	PATL-TML/05009		9	
670180	PATL-TML/05010		10	
670181	PATL-TML/05011		11	
670186	PATL-TML/07006	70	6	19 kA/1s
670187	PATL-TML/07007		7	
670188	PATL-TML/07008		8	
670189	PATL-TML/07009		9	
670190	PATL-TML/07010		10	
670191	PATL-TML/07011		11	
670196	PATL-TML/09506	95	6	25 kA/1s
670197	PATL-TML/09507		7	
670198	PATL-TML/09508		8	
670199	PATL-TML/09509		9	
670200	PATL-TML/09510		10	
670201	PATL-TML/09511		11	
670206	PATL-TML/12006	120	6	30 kA/1s
670207	PATL-TML/12007		7	
670208	PATL-TML/12008		8	
670209	PATL-TML/12009		9	
670210	PATL-TML/12010		10	
670211	PATL-TML/12011		11	
670216	PATL-TML/15006	150	6	40 kA/1s
670217	PATL-TML/15007		7	
670218	PATL-TML/15008		8	
670219	PATL-TML/15009		9	
670220	PATL-TML/15010		10	

* Depending on availability, the colour of the bag may vary.

Equipment with PA40-B Bayonet clamps for large diameters

30905 PATL-PA40

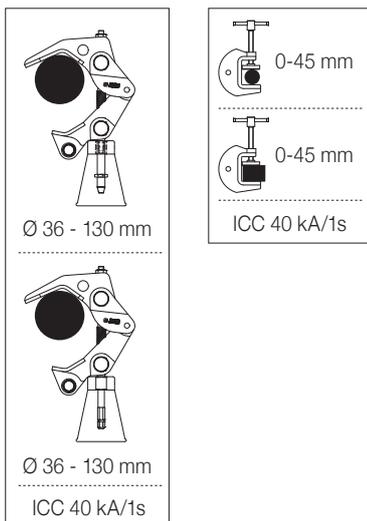
PA40-B screw-type clamps with bayonet spindle for conductors or tubes with diameters from 36 to 130 mm, suitable for HV applications.

According to IEC 61230 standard.



Composed of:

- 3 PA40-B (Bayonet) aluminium alloy clamps with screw tightening, for cylindrical conductors with diameters between 36 and 130 mm.
- 3 copper cables with PVC insulation, section and length depending on model.
- 3 TT-50 earthing lathes.
- 3 nylon bags for storing and transporting the equipment.



Selection of the hot stick:

High-voltage earthing equipment is supplied without an insulating hot stick. The hot stick must be selected according to the system voltage, in accordance with applicable regulations, to ensure safe distances and proper ergonomics during operations.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
674176	PATL-PA40/05006	50	6	12 kA/1s
674177	PATL-PA40/05007		7	
674178	PATL-PA40/05008		8	
674179	PATL-PA40/05009		9	
674180	PATL-PA40/05010		10	
674186	PATL-PA40/07006	70	6	19 kA/1s
674187	PATL-PA40/07007		7	
674188	PATL-PA40/07008		8	
674189	PATL-PA40/07009		9	
674190	PATL-PA40/07010		10	
674196	PATL-PA40/09506	95	6	25 kA/1s
674197	PATL-PA40/09507		7	
674198	PATL-PA40/09508		8	
674199	PATL-PA40/09509		9	
674200	PATL-PA40/09510		10	
674206	PATL-PA40/12006	120	6	30 kA/1s
674207	PATL-PA40/12007		7	
674208	PATL-PA40/12008		8	
674209	PATL-PA40/12009		9	
674210	PATL-PA40/12010		10	
674216	PATL-PA40/15006	150	6	40 kA/1s
674217	PATL-PA40/15007		7	
674218	PATL-PA40/15008		8	
674219	PATL-PA40/15009		9	
674220	PATL-PA40/15010		10	

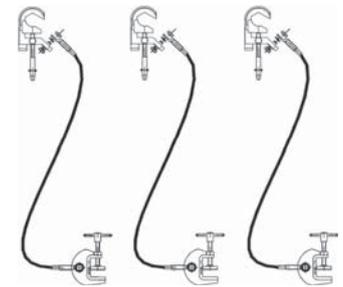
* Depending on availability, the colour of the bag may vary.

Set with MPL clamps for substations

30906 PAT-MPL

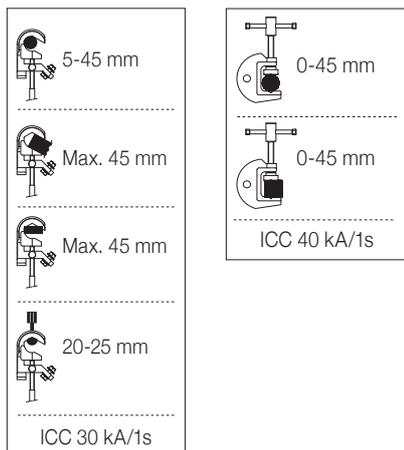
MPL aluminium clamps with screw tightening; wide range of cable sections and Lengths available to suit ICC requirements and reach.

According to IEC 61230 standard.



Composed of:

- 3 MPL aluminium alloy clamps with screw tightening. For cylindrical conductors with diameters between 5 and 45 mm, and flat bars.
- 3 copper cables with PVC insulation. Section and length depending on model.
- 3 TT-50 earthing lathes.
- 3 bags for storing and transporting the equipment.



Selection of the hot stick:

High-voltage earthing equipment is supplied without an insulating hot stick. The hot stick must be selected according to the system voltage, in accordance with applicable regulations, to ensure safe distances and proper ergonomics during operations.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
680176	PAT-MPL/05006	50	6	12 kA/1s
680177	PAT-MPL/05007		7	
680178	PAT-MPL/05008		8	
680179	PAT-MPL/05009		9	
680180	PAT-MPL/05010		10	
680186	PAT-MPL/07006	70	6	19 kA/1s
680187	PAT-MPL/07007		7	
680188	PAT-MPL/07008		8	
680189	PAT-MPL/07009		9	
680190	PAT-MPL/07010		10	
680196	PAT-MPL/09506	95	6	25 kA/1s
680197	PAT-MPL/09507		7	
680198	PAT-MPL/09508		8	
680199	PAT-MPL/09509		9	
680200	PAT-MPL/09510		10	
680206	PAT-MPL/12006	120	6	30 kA/1s
680207	PAT-MPL/12007		7	
680208	PAT-MPL/12008		8	
680209	PAT-MPL/12009		9	
680210	PAT-MPL/12010		10	

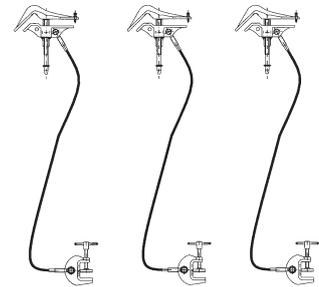
* Depending on availability, the colour of the bag may vary.

TMC clamp set for conductor and bar up to 90 x 100 mm

30906 PATC-TMC

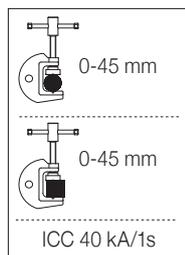
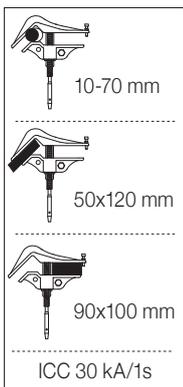
TMC clamps suitable for cylindrical conductors (Ø 10-70 mm) and flat bars (max. 90 x 100 mm), with wide jaw opening.

According to IEC 61230 standard.



Composed of:

- 3 TMC aluminium alloy clamps with screw tightening. For cylindrical conductors with diameters between 10 and 70 mm, flat bars up to 90 x 100 mm, and inclined plates up to 50 x 120 mm.
- 3 copper cables with PVC insulation. Section and length depending on model.
- 3 TT-50 earthing lathes.
- 3 bags for storing and transporting the equipment.



Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
675176	PATC-TMC/05006	50	6	12 kA/1s
675177	PATC-TMC/05007		7	
675178	PATC-TMC/05008		8	
675179	PATC-TMC/05009		9	
675180	PATC-TMC/05010		10	
675186	PATC-TMC/07006	70	6	19 kA/1s
675187	PATC-TMC/07007		7	
675188	PATC-TMC/07008		8	
675189	PATC-TMC/07009		9	
675190	PATC-TMC/07010		10	
675196	PATC-TMC/09506	95	6	25 kA/1s
675197	PATC-TMC/09507		7	
675198	PATC-TMC/09508		8	
675199	PATC-TMC/09509		9	
675200	PATC-TMC/09510		10	
675206	PATC-TMC/12006	120	6	30 kA/1s
675207	PATC-TMC/12007		7	
675208	PATC-TMC/12008		8	
675209	PATC-TMC/12009		9	
675210	PATC-TMC/12010		10	

Selection of the hot stick:

High-voltage earthing equipment is supplied without an insulating hot stick. The hot stick must be selected according to the system voltage, in accordance with applicable regulations, to ensure safe distances and proper ergonomics during operations.

* Depending on availability, the colour of the bag may vary.

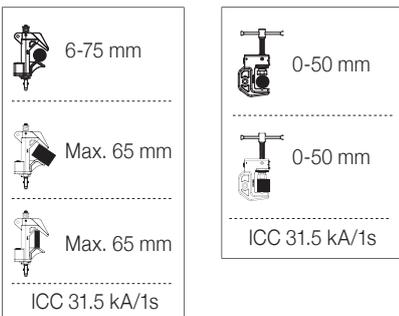
MPS clamp and key-operated lathes set (access control)

30906 PATL-3MPS/9510

New

System with three MPS clamps and three TTS lathes with locks, ensuring controlled handling of the equipment through independent keys.

According to IEC 61230 standard.



The clamps can be fixed to cylindrical conductors, flat plates, or flexible busbars, or attachment points using screw tightening. Short-circuit current: 31.5 kA (120 mm² cable).

Composed of:

- 3 MPS aluminium alloy clamps with screw tightening, for cylindrical conductors with diameters between 6 and 75 mm, flat plates up to 65 mm, and flexible busbars up to 65 mm.
- 3 copper cables with PVC insulation, 95 mm² cross-section and 10 m length.
- 3 key-operated earthing lathes.
- 3 independently coded keys and a copy of each key for the equipment manager.
- 3 bags for storing and transporting the equipment.

Selection of the hot stick:

High-voltage earthing equipment is supplied without an insulating hot stick. The hot stick must be selected according to the system voltage, in accordance with applicable regulations, to ensure safe distances and proper ergonomics during operations.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
676010	PATL-3MPS/9510	95	10	31.5 kA/1s

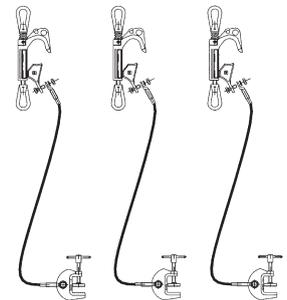
* Depending on availability, the colour of the bag may vary.

TML clamp and aluminium cable set

30907 PATL-AL-3/TML

Equipment for HV lines with screw-type TML clamps and aluminium cables; reduces weight while maintaining electrical continuity (theoretical ICC according to table).

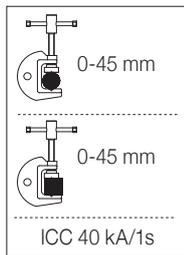
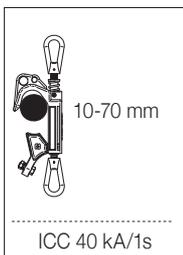
According to IEC 61230 standard.



Cod. 630116

Operating hook.

Not included in the equipment.



Composed of:

- 3 TML aluminium alloy clamps with screw tightening, for cylindrical conductors with diameters between 10 and 70 mm.
- 3 aluminium cables with PVC insulation. Cross-section and length depending on the model.
- 3 TT-50 earthing lathes.
- 3 bags for storing and transporting the equipment

Selection of the hot stick:

High-voltage earthing equipment is supplied without an insulating hot stick. The hot stick must be selected according to the system voltage, in accordance with applicable regulations, to ensure safe distances and proper ergonomics during operations.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
680120	PATL-AL-3/TML/12007	120	7	17.5 kA/1s* – 24 kA/0.5s*
680130	PATL-AL-3/TML/12008		8	
680140	PATL-AL-3/TML/12010		10	

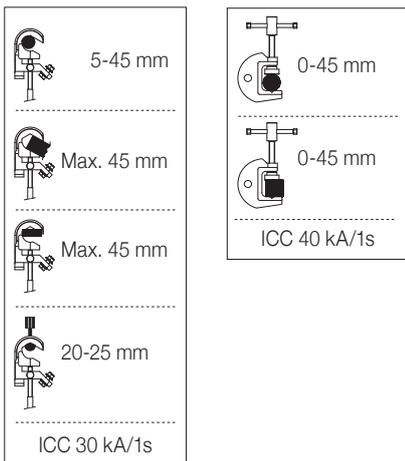
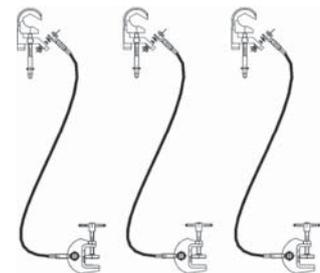
* Rated theoretical current. / * Depending on availability, the colour of the bag may vary.

MPL clamp and aluminium cable equipment

30908 PAT-AL-3/MPL

Lightweight HV configuration with MPL clamps and aluminium cables. Available in various lengths.

According to IEC 61230 standard.



Composed of:

- 3 MPL aluminium alloy clamps with screw tightening, for cylindrical conductors with diameters between 5 and 45 mm and flat plates.
- 3 aluminium cables with PVC insulation. Cross-section and length depending on the model.
- 3 TT-50 earthing lathes.
- 3 bags for storing and transporting the equipment.

Selection of the hot stick:

High-voltage earthing equipment is supplied without an insulating hot stick. The hot stick must be selected according to the system voltage, in accordance with applicable regulations, to ensure safe distances and proper ergonomics during operations.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC
680150	PAT-AL-3/MPL/12007		7	
680160	PAT-AL-3/MPL/12008	120	8	17.5 kA/1s* – 24 kA/0.5s*
680170	PAT-AL-3/MPL/12010		10	

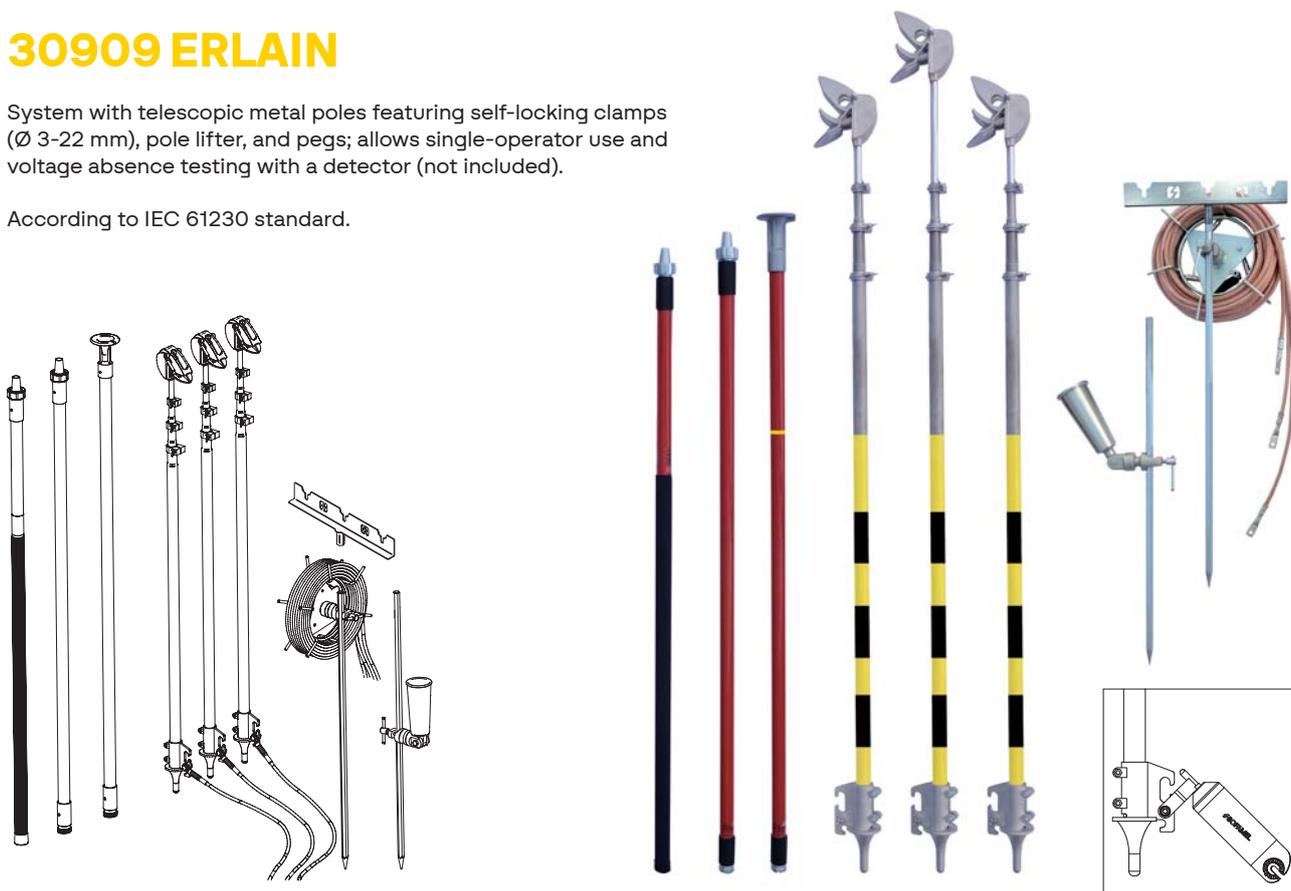
* Rated theoretical current. / * Depending on availability, the colour of the bag may vary.

Earthing equipment for overhead lines (single-operator operation)

30909 ERLAIN

System with telescopic metal poles featuring self-locking clamps (Ø 3-22 mm), pole lifter, and pegs; allows single-operator use and voltage absence testing with a detector (not included).

According to IEC 61230 standard.



Composed of:

- 3 telescopic metal poles, each composed of 3 sections, with a self-locking fixed contact clamp for conductors with diameters between 3 and 22 mm.
- 1 insulating fiberglass pole with epoxy resin, filled with polyurethane foam, in 3 sections of 1.72 + 1.65 + 1.63 m; certified according to IEC 60855. Total length: 5 m (option to use without the middle section, giving a total length of 3.4 m).
- 1 pole holder.
- 1 reel with 3 copper cables, 35 mm² cross-section, 10 m length.
- 2 galvanised steel earthing rods, hexagonal section, 1 m each.
- 1 insulating pole support.
- 1 carrying bag.



Note: Maximum tightening torque of the reel is 15 Nm

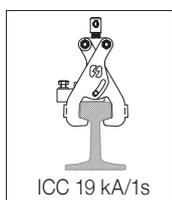
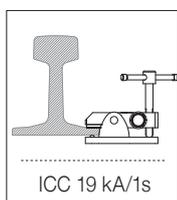
Code	Ref.	Extended length of the metal pole	Folded length of the metal pole	Number of sections of the metal pole	Short-circuit current Max. ICC
660400	ERLAIN-3/11	6.00 m	2.20 m	3	8 kA/1s
660405	ERLAIN-4/10	5.10 m	1.50 m	4	8 kA/1s

Railway equipment with PC clamp (bayonet)

30910 PATF-PC

Screw-type PC clamp with bayonet shaft for catenaries/double catenaries; supplied with TTR or TTSR reel depending on reference, and 50 mm² cable.

According to IEC 61230 standard.



Composed of:

- 1 PC aluminium alloy clamp with screw tightening and bayonet fitting, for cylindrical conductors up to 35 mm diameter.
- 1 copper cable with PVC insulation, 50 mm² cross-section and 7 m length.
- 1 TTR or TTRS earthing lathes.
- 1 nylon bag for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC	Clamping capacity
666120	PATF-PC/05007-TTR	50	7	12 kA/1s	Ø 35 mm
666130	PATF-PC/05007-TTSR				

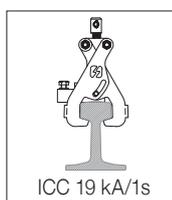
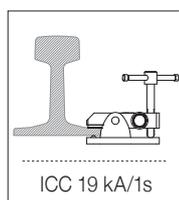
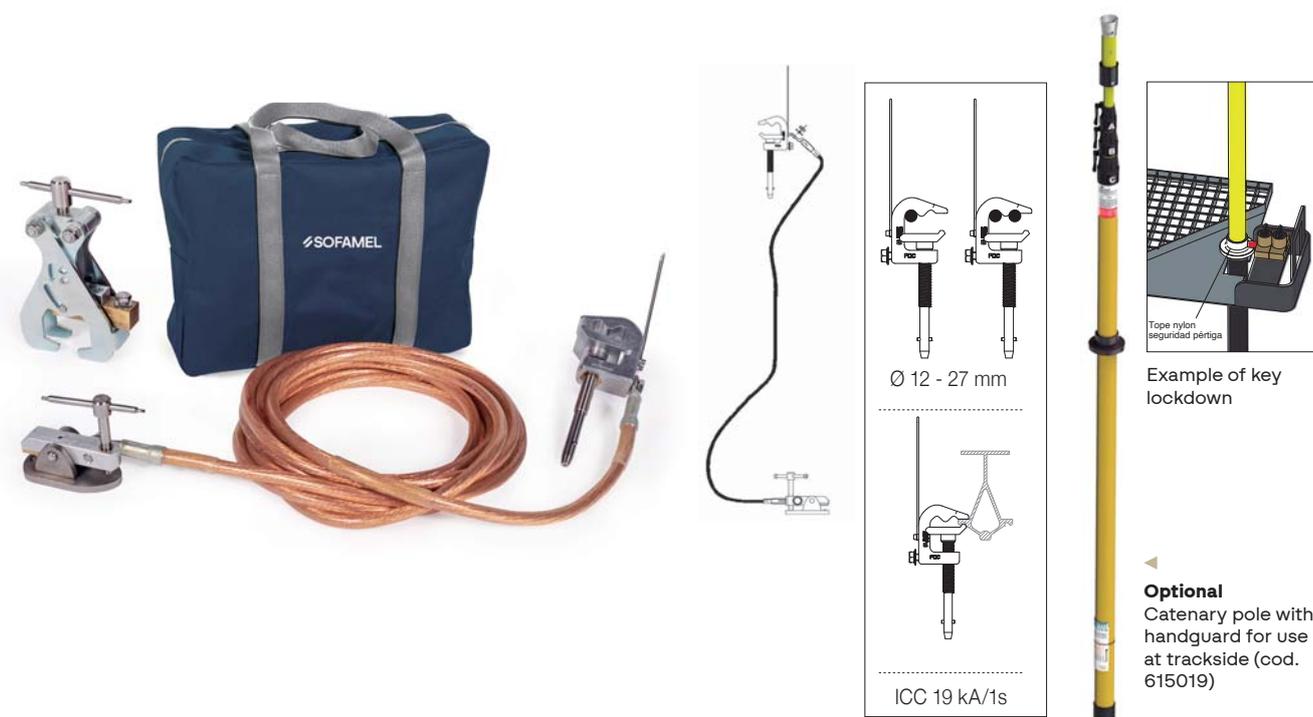
* Depending on availability, the colour of the bag may vary.

Railway equipment with PDC clamp (Ø 12–27 mm)

30910 PATF-PDC

Spring-type PDC clamp for cylindrical conductors with diameters between 12 to 27 mm; available with TTR or TTSR reel and 50 mm².

According to IEC 61230 standard.



Composed of:

- 1 PDC aluminium alloy clamp with screw tightening and bayonet fitting, for cylindrical conductors with diameters between 12 and 27 mm.
- 1 copper cable with PVC insulation, 50 mm² cross-section and 7 m length.
- 1 TTR or TTRS earthing lathes.
- 1 nylon bag for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC	Clamping capacity
666140	PATF-PDC/05007-TTR	50	7	12 kA/1s	Ø 12-27 mm
666150	PATF-PDC/05007-TTSR0				

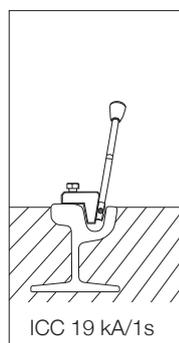
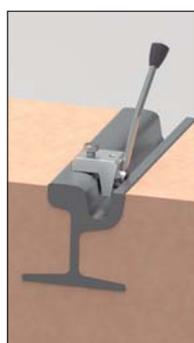
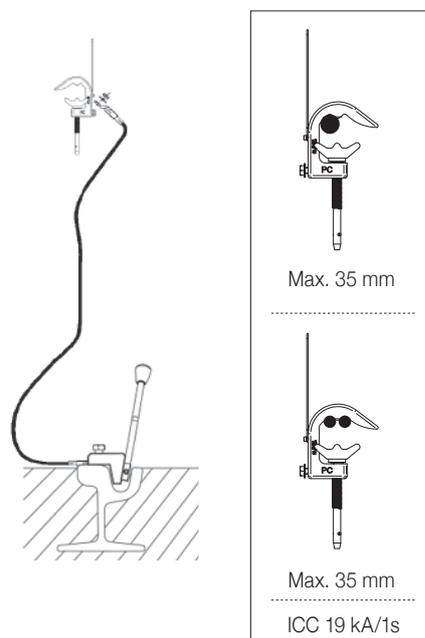
* Depending on availability, the colour of the bag may vary.

Railway equipment with PC clamp and TTIR

30910 PATF-PC-TTIR

Configuration with TTIR reel for tram rail connection; screw-type PC clamp with bayonet shaft and 50 mm² cable - 7 m.

According to IEC 61230 standard.



Composed of:

- 1 PC aluminium alloy clamp with screw tightening and bayonet fitting, for cylindrical conductors up to 35 mm diameter.
- 1 copper cable with PVC insulation, 50 mm² cross-section, 7 m length.
- 1 TTIR earthing lathe.
- 1 nylon bag for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	Short-circuit current Max. ICC	Clamping capacity
666110	PATF-PC/05007-TTIR	50	7	12 kA/1s	Ø 35 mm

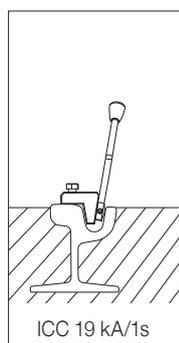
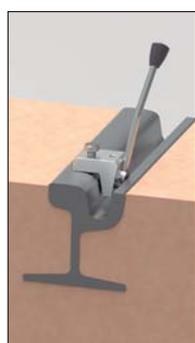
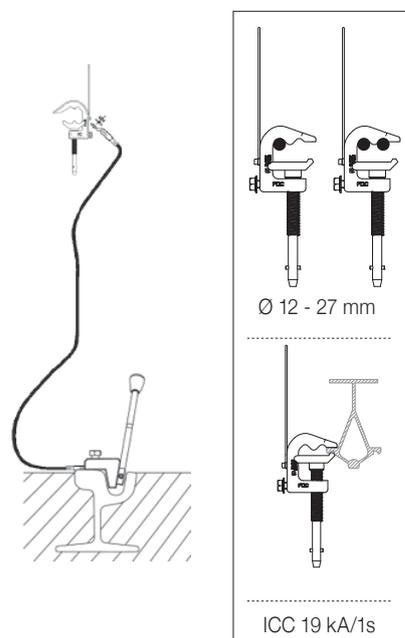
* Depending on availability, the colour of the bag may vary.

Railway equipment with PDC clamp and TTIR reel (Ø 12–27 mm)

30910 PATF-PDC-TTIR

Version with TTIR reel for tram rails and spring-type PDC clamp; 50/70 mm² cables - 7 m depending on the model.

According to IEC 61230 standard.



Composed of:

- 1 PDC aluminium alloy clamp with screw tightening and bayonet fitting, for cylindrical conductors with a diameter between 12 and 27 mm.
- 1 copper cable with PVC insulation, 50 or 70 mm² cross-section and 7 m long.
- 1 TTRS or TTR earthing lathes.
- 1 nylon bag for storing and transporting the equipment.

Code	Ref.	Cable section (mm ²)	Length (m)	Short circuit current Max. ICC	Clamping capacity
666160	PATF-PDC/05007-TTIR	50	7	12 kA/1s	Ø 12-27 mm
666161	PATF-PDC/07007-TTIR	70		19 kA/1s	

* Depending on availability, the colour of the bag may vary.



F-600
Insulating clamp

Earthing and short-circuit equipment for electric/hybrid vehicles

30901 PAT-2/F-600

With two F-600 insulated clamps for discharging potential electrostatic accumulations during maintenance work.

According to IEC 61230 standard.

Composed of:

- 2 F-600 insulated clamps.
- 1 16 mm² copper cable with PVC insulation (length depending on the model).
- 1 bag for storing and transporting the equipment.

Code	Ref.	Length (m)	Maximum operating current
657010	PAT-2/F-600/L/01606	6	600 A
657020	PAT-2/F-600/L/01607	7	
657030	PAT-2/F-600/L/01608	8	

* Depending on availability, the colour of the bag may vary.



TT-38L
Earth lathe

Earthing and short-circuit equipment for trucks

30901 PAT-TT38L/03515

With two TT-38L earthing reels and 35 mm² cable; designed for earthing heavy vehicles during maintenance.

According to IEC 61230 standard.

Composed of:

- 2 TT-38L earthing reels.
- 1 15 m copper cable with PVC insulation.
- 1 bag for storing and transporting the equipment.

Code	Ref.	Length (m)	Short-circuit current
657040	PAT-TT38L/03515	15	9 kA/1s

* Depending on availability, the colour of the bag may vary.

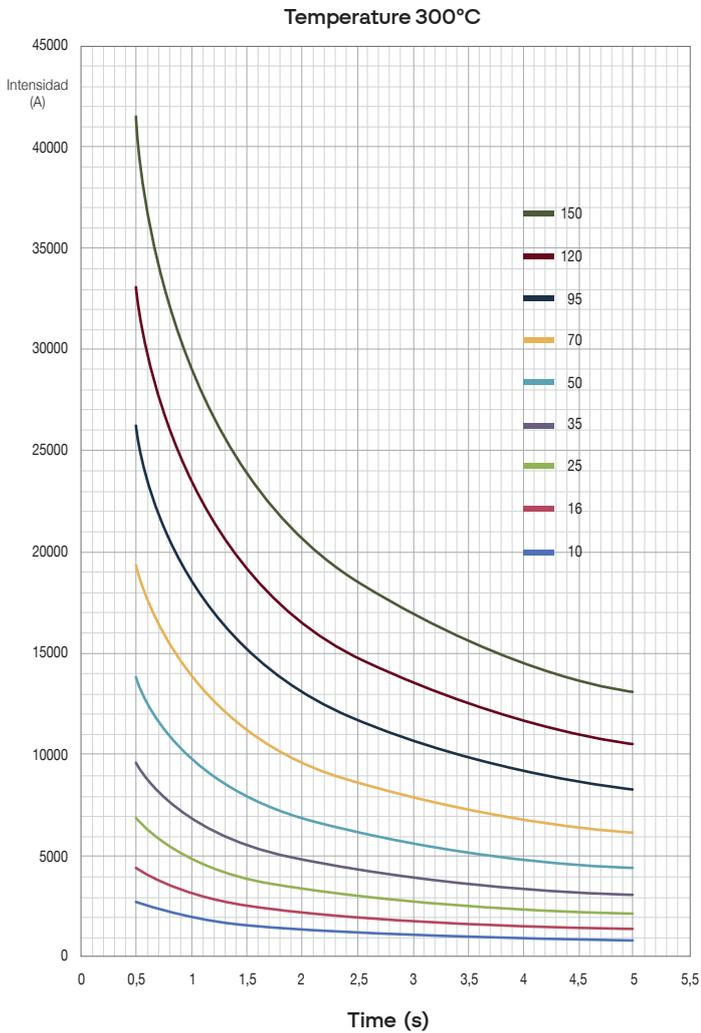


Fig. 1 - Melting point curve for copper cable.

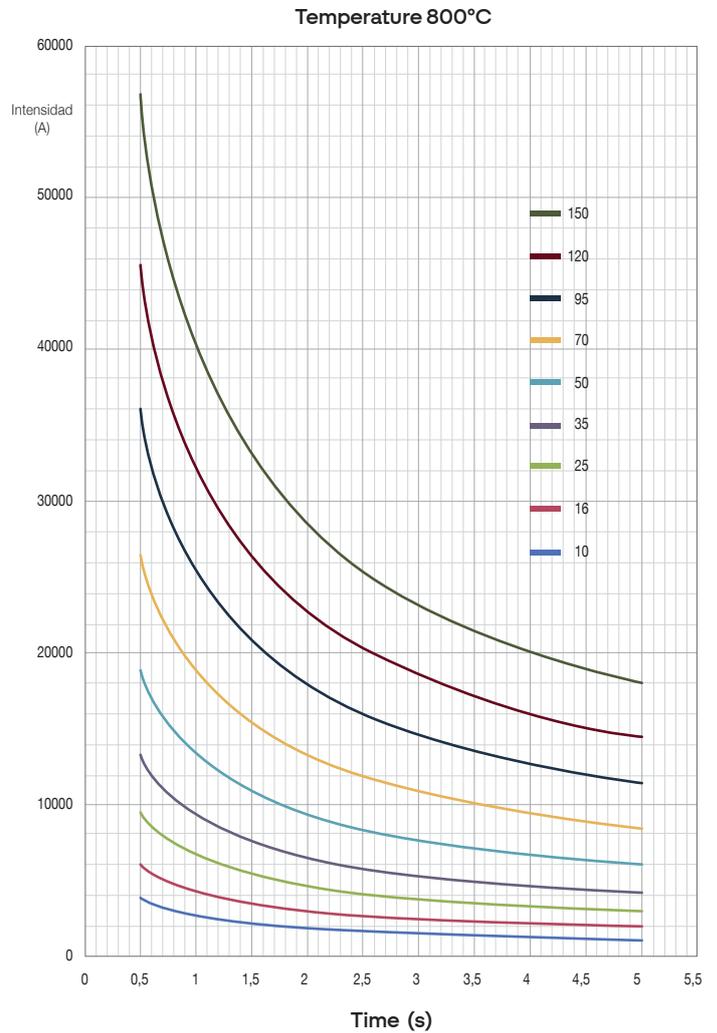


Fig. 2 - Heating curve (at 800°C) for copper cable.

Example: Choosing cable for a short circuit rating of 15 kA/1 sec.
Beginning with the curve in fig. 1, if a 50 mm² cable is used for more than 1 sec, cable burn-out will occur. If this is not permissible, a 70 mm² cable must be selected.

Fig. 2 shows if a 70 mm² cable conducts 15 kA for 1 sec, its temperature will rise to more than 300°C. Any cable which heats to 300°C will not be entirely destroyed, but should never be reused.

Safer manoeuvres and lifting with less effort

30810 SERPAT

Lifting accessory

The SERPAT lifting accessory is designed to facilitate the installation of portable earthing equipment when the connection points are at height. It allows manoeuvres to be carried out with greater safety and less effort, ensuring a quick, reliable, and ergonomic placement using insulating poles.

Includes:

- 25.5 m braided rope
- 1 base clamp
- 1 secondary clamp
- 1 lifting hook
- 1 large ring
- 1 small ring
- 1 steel carabiner
- 1 aluminium carabiner
- 1 clamp
- 1 pole anchoring assembly
- 1 plastic box for storing and transporting the equipment



Code	Ref.
630305	SERPAT



It is supplied in a plastic box for easy transportation and storage of the equipment.





Earthing and short circuit cable information

Extra-flexible braided copper cable, coated with transparent PVC. Manufactured according to IEC 61138 (cables for portable earthing and short-circuiting in accordance with IEC 61230).

Extra-flexible class 6 aluminium cable, coated with transparent PVC (EN 50363-4-2).
Manufactured according to IEC 60228, EN 61138 and IEC 61230.

Copper

Code	Cable cross-section (mm ²)	ICC (kA)	Weight (kg/m)	Ø Ext. (mm)	
				Min.	Max.
M-03.016.00	16	6 kA / 0.5 s – 4.3 kA / 1 s	0.18	7.10	8.60
M-03.025.00	25	9.4 kA / 0.5 s – 6.9 kA / 1 s	0.26	8.40	10.60
M-03.035.00	35	13.2 kA / 0.5 s – 9.4 kA / 1 s	0.36	9.70	11.70
M-03.050.00	50	18.9 kA / 0.5 s – 13.4 kA / 1 s	0.52	11.70	14.20
M-03.070.00	70	26.4 kA / 0.5 s – 19 kA / 1 s	0.71	13.40	16.20
M-03.095.00	95	35.9 kA / 0.5 s – 25.5 kA / 1 s	0.95	15.50	18.70
M-03.120.00	120	45.4 kA / 0.5 s – 32.1 kA / 1 s	1.17	17.10	20.60
M-03.150.00	150	56.7 kA / 0.5 s – 40.2 kA / 1 s	1.45	18.60	22.50

Aluminium

Code	Cable cross-section (mm ²)	ICC (kA)	Weight (kg/m)	Ø Ext. (mm)	
				Min.	Max.
M-04.035.00	35	7 kA / 0.5 s – 5 kA / 1 s	0.154	9.70	11.70
M-04.050.00	50	10 kA / 0.5 s – 7 kA / 1 s	0.228	11.70	14.20
M-04.070.00	70	14 kA / 0.5 s – 10 kA / 1 s	0.307	13.40	16.20
M-04.095.00	95	19 kA / 0.5 s – 13.5 kA / 1 s	0.412	15.50	18.70
M-04.120.00	120	24 kA / 0.5 s – 17.5 kA / 1 s	0.502	17.10	20.60
M-04.150.00	150	30 kA / 0.5 s – 21.4 kA / 1 s	0.623	18.60	25.50

30911 SP-PAT

Wall-mounted earthing equipment holder

Metal holder with lacquered finish.

Code	Ref.
671179	SP-PAT

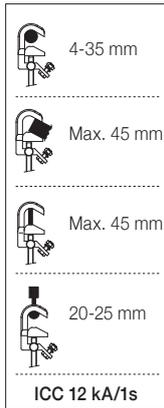


30911 Low voltage clamps

MPUE

Code 671112

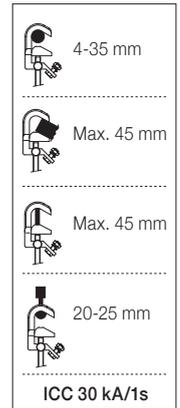
Dimensions: 335 x 81 x 52 mm
Weight: 0.6 kg



MPUL

Code 671113

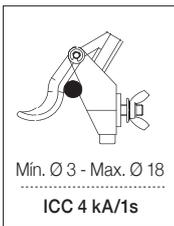
Dimensions: 335 x 81 x 52 mm
Weight: 1.2 kg



PEBT

Code 658115

Dimensions: 815 x 58 x 40 mm
Weight: 0.35 kg



MPUBT

Code 659001P

Dimensions: 160 x 82 x 40 mm
Weight: 0.36 kg



30911 Medium voltage clamps

MPUH

Code 671110

Dimensions: 202 x 81 x 40 mm
Weight: 0.48 kg



MPUH-L

Code 671117

Dimensions: 202 x 81 x 40 mm
Weight: 1.16 kg



MPUB

Code 671115

Dimensions: 240 x 81 x 40 mm
Weight: 0.53 kg



MPUB-L

Code 671118

Dimensions: 240 x 81 x 40 mm
Weight: 1.65 kg



PC

Code 666005

Dimensions: 440 x 157 x 54 mm
Weight: 1.3 kg



MPUP

Code 671116

Dimensions: 240 x 81 x 156 mm
Weight: 0.7 kg

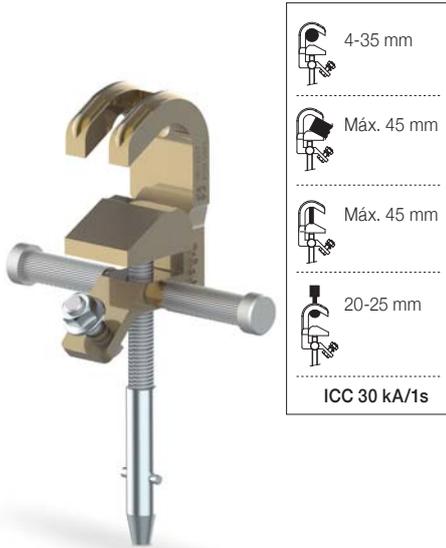


30911 Medium voltage clamps

MPUP-L

Code 671119

Dimensions: 240 x 81 x 156 mm
Weight: 1.34 kg



PDC

Code 666010

Dimensions: 413 x 105 x 52 mm
Weight: 0.85 kg



MCL

Code 671121

Dimensions: 182 x 128 x 68 mm
Weight: 0.67 kg



5014H

Code 671100

Dimensions: 167 x 91 x 83 mm
Weight: 0.8 kg



MC

Code 671120

Dimensions: 226 x 102 x 62 mm
Weight: 0.4 kg



PCA-25

Code 671171

Dimensions: 276 x 123 x 74 mm
Weight: 0.81 kg



PP15

Code 671166

Dimensions: 241 x 95 x 47 mm
Weight: 0.68 kg

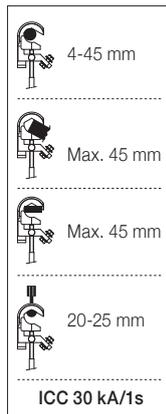


30911 High voltage clamps

MPL

Code 671172

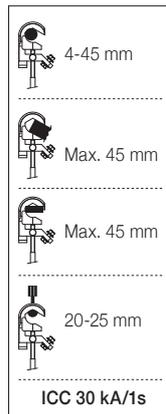
Dimensions: 263 x 105 x 62 mm
Weight: 0.97 kg



MPL

Code 671178

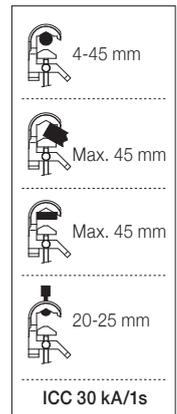
Dimensions: 263 x 110 x 62 mm
Weight: 1 kg



MPLP

Code 671173

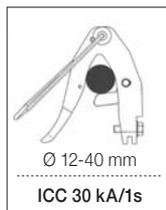
Dimensions: 263 x 105 x 204 mm
Weight: 1.1 kg



PAV-48

Code 673100

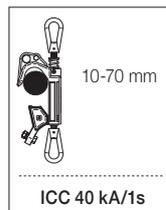
Dimensions: 380 x 170 x 120 mm
Weight: 1.6 kg



TML

Code 670100P

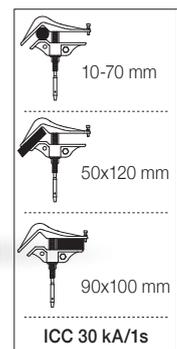
Dimensions: 428 x 133 x 53 mm
Weight: 1.56 kg



TMC

Code 675100P

Dimensions: 273 x 248 x 45 mm
Weight: 1.18 kg

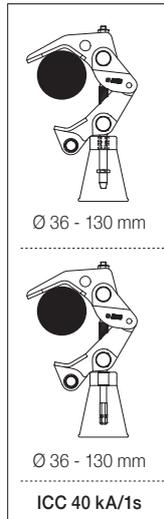


30911 High voltage clamps

PA40A

Code 674100 - Bayonet
Code 674102 - Hexagonal

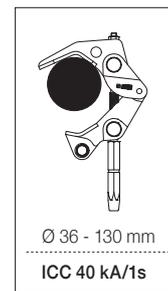
Dimensions: 331 x 206 x 80 mm
Weight: 1.7 kg



PA40ABP

Code 674105 - Hexagonal H22

Dimensions: 341 x 206 x 80 mm
Weight: 1.6 kg



30911 Low voltage handles

EMB

Code 671106

Dimensions: 198 x Ø 52 mm
Weight: 0.3 kg



EMP

Code 659001E

Dimensions: 218 x Ø 52 mm
Weight: 0.25 kg

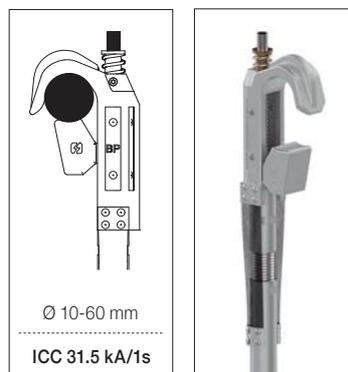


30911 Potential drop clamp

BPGA

Code 672205

Dimensions: 3262 x 141 x 298 mm
Weight: 7.8 kg

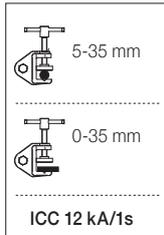


30911 Earthing lathe

TT-38A

Code 671141

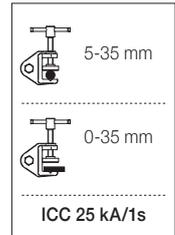
Dimensions: 158 x 92 x 35 mm
Weight: 0.48 kg



TT-38L

Code 671145

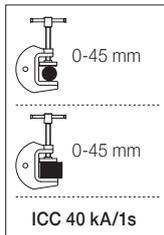
Dimensions: 158 x 92 x 35 mm
Weight: 0.93 kg



TT-50

Code 671152

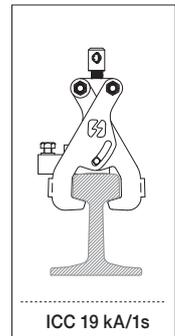
Dimensions: 250 x 147 x 40 mm
Weight: 0.95 kg



TTSR

Code 666015

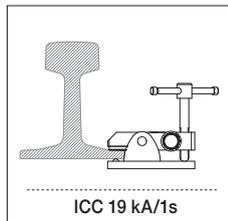
Dimensions: 280 x 214 x 55 mm
Weight: 3.45 kg



TTR

Code 671153

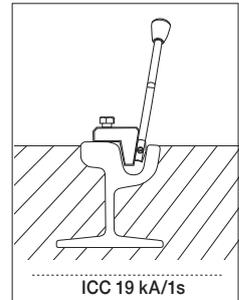
Dimensions: 115 x 117 x 60 mm
Weight: 1.1 kg



TTIR

Code 671154

Dimensions: 54 x 65 x 50 mm
Weight: 0.95 kg

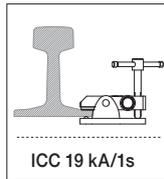


30911 Vandal-proof earthing lathe

TTR-AN

Code 30911000

Dimensions: 115 x 117 x 60 mm
Weight: 1.1 kg



The TTR-AN vandal-proof earthing lathe is specially designed for portable earthing equipment, providing secure fastening in areas exposed to the public or where there is a risk of unauthorized handling.

Its design includes a removable pin, which the operator inserts during installation and then removes and stores. Once the pin is removed, the turnstile cannot be opened or disassembled, preventing third parties from tampering with the earthing connection.

Manufactured with high-strength materials and a robust clamping system, the TTR-AN ensures reliable, safe, and long-lasting use in maintenance, repair, and operational tasks.

30911 Earthing lathe

PEP

EQUIPOTENTIAL CLAMP FOR POST

Code P-671180

Dimensions: 420 x 202 x 70 mm
Weight: 4.5 kg



Max. Ø 400 mm



Min. Ø 90 mm



PEP-ECO

EQUIPOTENTIAL CLAMP FOR POST

Code P-671185

Dimensions: 325 x 200 x 60 mm
Weight: 3.7 kg



Max. Ø 400 mm



Min. Ø 90 mm



30911 Articulated dispenser heads

The PPA clamp holder plates have been designed to enhance ergonomics and speed during the installation of earthing equipment. Unlike standard models, these plates feature articulated dispenser heads that allow each clamp to be positioned individually, better conforming to the geometry

of the support or connection point. This articulation ensures more comfortable, faster, and precise positioning, reducing the operator's handling time and facilitating assembly even in complex configurations or confined spaces.

PPA-3

Code 30911005



New

PPA-4

Code 30911006



New

PPA-3U

Code 30911007



New

PPA-4U

Code 30911008



New

30911 Dispenser heads

PP-3

Code 671126



PP-4

Code 671127



PP-3U

Code 671128



PP-4U

Code 671129



PP-3 MCL

Code 671131



PP-4 MCL

Code 671132



PP-3U MCL

Code 671122



PP-4U MCL

Code 671123



PP-1U MCL

Code 630168



30911 Wheeled suitcase

SOFABOX

Code 620061

Dimensions: 855 x 577 x 400 mm

Ideal for transporting earthing and short-circuiting devices. It ensures easy and convenient mobility, offering a reliable solution for safely moving equipment to different job sites.



Foldable steel leg
Allowing horizontal storage of the case.



Foldable handles
The suitcase has handles on the top, bottom, and side to allow easy transport at all times.

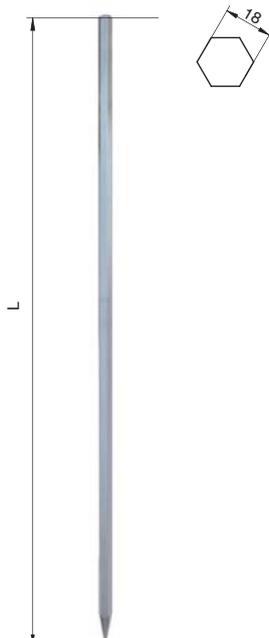


30911 Earthing rod

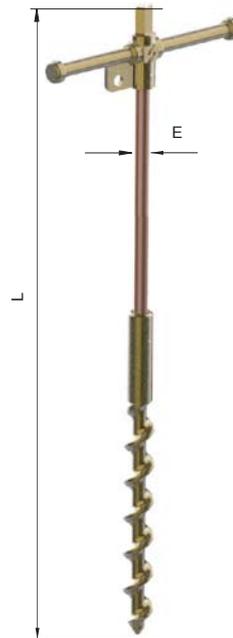
Hexagonal earthing rod

Code 667150

Dimensions: 1 m
Weight: 2.150 kg



Helical earthing rod



Code	Ref.	L	ØE	kg
P-671190	PTB14-1000	1000		2.7
P-671191	PTB14-1300	1300	14.6	2.85
P-671192	PTB14-1500	1500		3
P-671193	PTB18-1000	1000		3.2
P-671194	PTB18-1300	1300	18.2	3.55
P-671195	PTB18-1500	1500		3.86

Fixed ball point

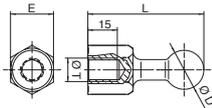
Used in electrical installations to connect and securely fasten the clamps of PAT equipment.

According to DIN 48088 part 1.

Material: 20 micron tinned brass and stainless hardware.

30912 Straigh fixed ball point - Female

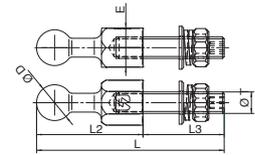
INTERNAL THREAD



Code	Ref.	ØD	ICC Max. kA/1s	E	L	ØT
P-665020 P-665022	PFRH-20M12 PFRH-20M16	20	12	SW22	59	M12 M16
P-665024 P-665026	PFRH-20M12 PFRH-20M16	25	25	SW27	69	M12 M16

30913 Straigh fixed ball point - Male

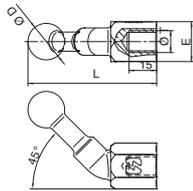
EXTERNAL THREAD



Code	Ref.	ØD	ICC Max. kA/1s	E	L	L2	L3	ØT
P-665030 P-665032 P-665034 P-665036	PFRM-20M12x35 PFRM-20M12x45 PFRM-20M16x35 PFRM-20M16x45	20	12	SW22	94 104 94 104	35 59	M12 M12 M16 M16	
P-665038 P-665040 P-665042 P-665044	PFRM-25M12x35 PFRM-25M12x45 PFRM-25M16x35 PFRM-25M16x45	25	25	SW27	104 114 104 114	35 45 35 45	M12 M12 M16 M16	

30912 Fix ball point 45° - Female

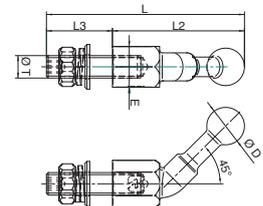
INTERNAL THREAD



Code	Ref.	ØD	ICC Max. kA/1s	E	L	ØT
P-665050 P-665052	PF45H-20M12 PF45H-20M16	20	12	SW22	70	M12 M16
P-665054 P-665056	PF45H-25M12 PF45H-25M16	25	25	SW27	82	M12 M16

30913 Fix ball point 45° - Male

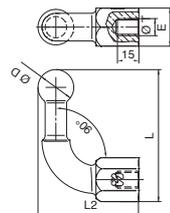
EXTERNAL THREAD



Code	Ref.	ØD	ICC Max. kA/1s	E	L	L2	L3	ØT
P-665060 P-665062	PF45M-20M12x35 PF45M-20M16x45	20	12	SW22	105 115	70	M12 M16	
P-665064 P-665066	PF45M-25M12x45 PF45M-25M16x45	25	25	SW27	127	82	M12 M16	

30912 Fix ball point 90° - Female

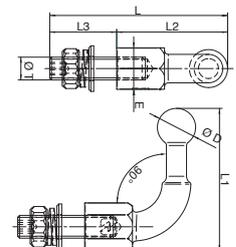
INTERNAL THREAD



Code	Ref.	ØD	ICC Max. kA/1s	E	L	L2	ØT
P-665070 P-665072	PF90H-20M12 PF90H-20M16	20	12	SW22	75	58	M12 M16
P-665074 P-665076	PF90H-25M12 PF90H-25M16	25	25	SW27	93	70	M12 M16

30913 Fix ball point 90° - Male

EXTERNAL THREAD



Code	Ref.	ØD	ICC Max. kA/1s	E	L	L2	L3	ØT
P-665080 P-665082 P-665084 P-665086	PF90M-20M12x35 PF90M-20M16x45 PF90M-25M12x45 PF90M-25M16x45	20	12	SW22	93 103	58	M12 M16 M12 M16	

VTO

Analog voltage detector without pole Medium voltage - Optical

Voltage presence is indicated by LED lights.
Self-checking is performed via an integrated piezoelectric generator.
Operates without a battery.
For indoor use with an insulating pole suitable for the detector's rated voltage.
Connection to the pole via a universal head.
Supplied with a metal case for storing and transporting the voltage detector.



31001 VTO-U

Voltage detector without pole

Code	Ref.	Voltage ranges	Frequency
640200	VTO-5/36-U	5 - 36 kV	50 / 60 Hz
640205	VTO-5/66-U	5 - 66 kV	



Analog voltage detector with pole Medium voltage - Optical

Voltage presence is indicated by LED lights.
Self-checking is performed via an integrated piezoelectric generator.
Operates without a battery.
For indoor use with an insulating pole suitable for the detector's rated voltage (included).
Connection to the pole via a universal head.
Supplied with a carrying bag for the pole and a metal case for storing and transporting the voltage detector.



31001 VTO-P

Voltage detector with pole

Code	Ref.	Voltage ranges	Frequency	Insulating pole length
640210	VTO-5/36-P	5 - 36 kV	50 / 60 Hz	1.25 m
640215	VTO-5/66-P	5 - 66 kV		2 m



PEKE

Compact voltage detector with pole Medium voltage - Optical

Voltage presence is indicated by three red LED lights.
 Self-checking system by means of an integrated piezoelectric generator.
 Operates without batteries.
 For indoor use with the integrated insulating telescopic pole (included).
 Insulating pole compliant with RD 614/2001 standard.
 Outdoor use only in dry conditions.
 Supplied with a carrying bag for transporting the voltage detector, which can be attached to the belt.



VOLTAGE RANGES from 5 to 36 kV

31001 PEKE

Code	Ref.	Voltage ranges	Frequency	Length extended pole	Length folded pole
640104	PEKE-5/36	5 - 36 kV	50 / 60 Hz	950 mm (detector included)	326 mm (detector included)



SPECTRA

Standard compact voltage detector with pole Medium voltage - Optical and acoustic

Self-verification device with push button.
 Powered by two AAA batteries.
 Indoor use via integrated insulated telescopic pole.
 Insulated pole According to standard RD 614/2001 standard (included).
 Outdoor use only in dry conditions.
 Operating temperature range: -25 °C to 55 °C.
 Voltage presence indication: Two LED lamps and intermittent acoustic signal (buzzer).
 Supplied with a bag for transporting the complete set.



VOLTAGE RANGES
 from 200 V to 5 kV or
 from 50 V to 1 kV

31001 SPECTRA

Code	Ref.	Voltage ranges	Frequency	Length extended pole	Length folded pole
640175	SPECTRA-200/5000	200 V - 5 kV	50 / 60 Hz	1062 mm (without detector)	276 mm (without detector)
640177	SPECTRA-50/1000	50 V - 1 kV			



Detector with the pole retracted.

ACCESSORIES (INCLUDED)

- Universal pole adapter.
- Bag for transporting the detector with pole.

VTE

High-voltage electronic detector Medium voltage - Optical and acoustic

The VTE voltage detector is equipped with a state-of-the-art microcontroller and a direct-contact detection system, providing clear and precise optical and acoustic indication of voltage presence. Its advanced acquisition technology ensures reliable detection even in environments with strong electrical or climatic interference.

The compact and robust design, together with excellent mechanical and environmental resistance, allows safe use in outdoor work and medium-voltage networks.

It features integrated self-checking, high-intensity red LED signal, and a loud acoustic alarm. Automatic shutdown after a few minutes of inactivity optimises power consumption and extends battery life.

The device operates with a 9 V alkaline battery (model 6LR61, included) and connects to the pole via the Sofamel Universal head, ensuring compatibility with the brand's entire range of poles.

CE  According to standard IEC 61243-203:2003 +A1:2009 and UNE-EN 61243-1:2000 +A1:2011 (except for the voltage range).



VOLTAGE RANGES from 5 to 36 or 5 to 66 kV

31002 VTE-U

Detector without pole

Code	Ref.	Voltage ranges	Frequency
641113	VTE-5/36-U	5 - 36 kV	50 / 60 Hz
641115	VTE-5/66-U	5 - 66 kV	

31002 VTE-P

Detector with pole

Code	Ref.	Voltage ranges	Frequency	Insulating pole length
641103	VTE-5/36-P	5 - 36 kV	50 / 60 Hz	1.30 m
641105	VTE-5/66-P	5 - 66 kV		2 m

VTE-25

Electronic AC voltage detector for overhead catenary systems Medium voltage - Optical and acoustic

The VTE-U 25 kV voltage detector has been specially designed for maintenance and intervention on high-speed railway lines, where reliable and safe detection of AC voltage in overhead catenaries is required.

Its state-of-the-art microcontroller technology and direct-contact detection ensure maximum precision and safety, even in environments with electromagnetic interference typical of railway systems.

The device provides dual high-visibility optical and acoustic signalling, automatically activating upon voltage detection. It incorporates an integrated self-checking system and a long-life LED battery to ensure continuous operation.

Designed for intensive use, the VTE-U 25 features high mechanical and environmental resistance, with an operating temperature range of -25 °C to +45 °C, and automatically shuts down after a few minutes of inactivity to optimise power consumption.

It connects to the pole via the Sofamel Universal head and is supplied with a metal carrying case and battery included.

CE  According to IEC 61243:2003+A1:2009 and UNE-EN 61243-1:2006+A1:2011 standards (except for the voltage range).



VOLTAGE RANGE from 25 kV

31002 VTE-25-U

Code	Ref.	Voltage ranges	Frequency
641120	VTE-25-U	25 kV	50 / 60 Hz

Specially developed
for railway applications



VTM

IEC electronic voltage detector Medium voltage - Optical and acoustic

The VTM is an electronic voltage detector with a microcontroller and direct-contact detection.

Its advanced acquisition technology ensures precise, fast and safe detection, even in environments with intense electric fields.

Voltage presence is indicated by a high-intensity red LED and a powerful acoustic buzzer, while voltage absence is indicated by a green LED.

The device includes an integrated self-checking system that allows verification of the complete circuit by pressing the test button.

The detector automatically activates when voltage is detected and automatically switches off after a few minutes of inactivity, optimising power consumption.

Its operating temperature range is from -25 °C to +45 °C.

Designed for indoor and outdoor use, it connects to the pole via the Sofamel Universal head and is supplied with a metal carrying case and battery included.

CE  Fully in accordance with IEC 61243-203:2009 +A1:2009 and UNE-EN 61243-1:2000 +A1:2011 standards, including all specified voltage ranges.



VOLTAGE RANGES from 3 to 10 kV up to 22 to 66 kV depending on the model

31002 VTM

Code	Ref.	Voltage ranges	Frequency
645220	VTM-3/10-U	3 - 10 kV	50 / 60 Hz
645225	VTM-4/12-U	4 - 12 kV	
645230	VTM-10/30-U	10 - 30 kV	
645235	VTM-11/33-U	11 - 33 kV	
645240	VTM-15/45-U	15 - 45 kV	
645245	VTM-22/66-U	22 - 66 kV	

POWER SALVACANE

Voltage detector Medium voltage – Optical and acoustic

The SALVACANE is a portable voltage detector specially designed for the detection of hazardous voltages in inspection chambers, underground chambers and paved areas with metal covers, where cable insulation may deteriorate over time due to moisture, vibrations and ageing of the installation.

Thanks to its design with rolling wheels and its use in conjunction with an insulating pole, it allows the inspection of floors and hard-to-reach areas without the need to bend down or enter confined spaces, while always maintaining a safe distance.



VOLTAGE RANGES from 24 V to 5 kV

31003 POWER SALVACANE

New

Code	Ref.	Voltage ranges	Frequency
31003001	POWER SALVACANE-5	24 V - 5 kV	50 / 60 Hz



Insulating pole in accordance with Royal Decree RD 614/2001 (not included).

POWER LIGHT

IEC electronic voltage detector Medium voltage – Optical and acoustic

The Power Light combines, in a single device, a medium-voltage electronic voltage detector and an integrated high-intensity torch, providing a complete solution for outdoor work, tunnels or low-light environments.

The upper torch, equipped with high-power, low-consumption LEDs, can operate independently of the detection system, providing continuous illumination during operations.

Voltage presence is indicated by multiple red LEDs visible through 360° and a high-intensity acoustic buzzer, ensuring clear signalling from any angle.

Voltage absence is indicated by green LEDs, also visible omnidirectionally.

It features a complete circuit self-checking system via a test button.

The detector automatically activates when voltage is detected and switches off after a few minutes of inactivity to optimise power consumption.

It operates with two 1.5 V AA alkaline batteries, providing long operating autonomy.
Operating temperature range: -25 °C to +45 °C.

The Power Light connects to the pole via the Sofamel Universal head and is supplied with a metal carrying case and batteries included.

CE  Manufactured in accordance with IEC 61243-203:2009 +A1:2009 and UNE-EN 61243-1:2000 +A1:2011 standards



With integrated lighting for low-visibility environments.



VOLTAGE RANGES
from 1–3.3 kV up to 22–79 kV
depending on the model

31003 POWERLIGHT

Code	Ref.	Voltage ranges	Frequency
645266	POWER-1/3,3	1 - 3.3 kV	50 / 60 Hz
645260	POWER-3/10	3 - 10 kV	
645261	POWER-4/12	4 - 12 kV	
645262	POWER-10/30	10 - 30 kV	
645263	POWER-11/33	11 - 33 kV	
645267	POWER-10/36	10 - 36 kV	
645268	POWER-13/45	13 - 45 kV	
645264	POWER-15/45	15 - 45 kV	
645265	POWER-22/66	22 - 66 kV	
645269	POWER-22/79	22 - 79 kV	

POWER LIGHT

IEC electronic voltage detector + accessories Medium voltage - Optical and acoustic

The Power Light 10/20 kV is a medium-voltage electronic voltage detector with integrated lighting and NFC connectivity, specially designed for professional maintenance and verification work in distribution networks and substations.

The built-in torch, located on the top part of the device, is equipped with high-power, low-consumption LEDs, providing additional illumination in low-visibility environments.

The lighting system operates independently of the detection circuit, allowing continuous use during operations.

Voltage presence is indicated by multiple high-intensity red LEDs visible through 360° and a powerful acoustic buzzer, while voltage absence is indicated by high-intensity green LEDs.

Low battery is indicated by an orange LED. The detector includes a complete circuit self-checking system activated via the test button.

The detector automatically activates when voltage is present and automatically powers down after a few minutes of inactivity to optimise power consumption. It operates with two 1.5 V AA alkaline batteries and has an operating temperature range of -25 °C to +45 °C.

Compatible with poles using the Sofamel Universal head, and supplied in a metal carrying case with batteries included and specific accessories.

CE  According to IEC 61243-203:2009 +A1:2009 and UNE-EN 61243-1:2000 +A1:2011 standards.



The model features NFC (Near Field Communication) technology, which enables digital identification and traceability of the equipment, facilitating inspection and maintenance management using compatible devices.



VOLTAGE RANGES from 10 to 20 kV

31003 POWERLIGHT

Code	Ref.	Voltage ranges	Frequency
T645049	POWER-10/20	10 - 20 kV	50 / 60 Hz



Kit contents:

- 1 Power Light 10/20 kV detector
- 1 Nevers electrode adapter
- 1 standard Power Light electrode
- 1 hook adapter
- 1 Hexagonal-12 to Universal head adapter

POWER LIGHT

Electronic voltage detector Medium voltage - Optical and acoustic

The Power Light features high-power LED lighting, ideal for work in low-visibility environments or during night operations.

Its optical and acoustic detection system provides a clear, visible signal all around the detector (360°), ensuring maximum operator safety even at a distance.

Voltage presence is indicated by multiple high-intensity red LEDs and an intermittent acoustic buzzer, while voltage absence is indicated by highly visible green LEDs.

It includes automatic self-checking of the circuit via a test button and a low battery indicator using an orange LED.

The Power Light automatically activates when voltage is detected and powers down after a few minutes of inactivity to optimise energy consumption.

It operates with two 1.5 V AA alkaline batteries, providing long service autonomy.
Operating temperature range: -25 °C to +45 °C.

Compatible with poles using the Sofamel Universal head, and supplied in a metal carrying case with batteries included.

CE  Manufactured in accordance with IEC 61243-203:2009 +A1:2009 and UNE-EN 61243-1:2000 +A1:2011 standards (except for the voltage range).



VOLTAGE RANGES from 1 to 5 kV or from 5 to 79 kV

31003 POWERLIGHT

Code	Ref.	Voltage ranges	Frequency
645280	POWER-1/5	1 - 5 kV	50 / 60 Hz
645285	POWER-5/79	5 - 79 kV	



With integrated lighting and 360° visibility.

POWER LIGHT DUAL

IEC electronic voltage detector Medium voltage – Optical and acoustic

The Power Light is a dual-range electronic voltage detector for medium-voltage networks, with optical and acoustic indication, designed to reliably verify the presence or absence of voltage. Each model incorporates two distinct voltage ranges, allowing a single device to be used across different installations, reducing the need for multiple detectors and simplifying operator workflow.

The dual-range system provides specific visual and acoustic indications for each voltage level, so the user can immediately identify the range in use. In the first range, the detector emits slow red LED flashes and a slow intermittent acoustic signal; in the second range, the flashes and alarm accelerate, providing a clear and unambiguous reading even in noisy or low-visibility environments.

In addition, the Power Light features a microcontroller and direct-contact detection, a complete circuit self-checking function via a test button, automatic activation upon voltage presence, and automatic standby mode after two minutes without voltage, with a consumption of less than 1 µA to maximise battery life. A 360° ring of high-intensity green LEDs indicates voltage absence, while the high-brightness top torch, independent of the detection system, facilitates work in substations and poorly lit areas.

The device is designed for indoor and outdoor use, connected to an insulating pole via a Universal head, and supplied with AAA alkaline batteries and a reinforced carrying case, providing a robust, field-ready solution.

CE  Manufactured in accordance with IEC 61243-203:2009 +A1:2009 and UNE-EN 61243-1:2000 +A1:2011 standards (except for the voltage range).



VOLTAGE RANGES
6.6 kV / 15–31.5 kV
or 22 kV / 31.5–60 kV

New

31003 POWER LIGHT DUAL

Code	Ref.	Voltage ranges	Frequency
31003000	POWER 6.6 / 15-31.5 kV	6,6 / 15-31.5 kV	50 / 60 Hz
645282	POWER 22 / 31.5-60 kV	22 / 31.5-60 kV	



With integrated lighting and 360° visibility.

FUNCTIONALITY

Electronic voltage detector with microcontroller and direct-contact detection, designed to verify the presence or absence of voltage in medium-voltage networks. This model is available in two dual-range versions, allowing the detection of two distinct voltage ranges with specific visual and acoustic indications according to the voltage level:

Modelo 6.6 / 15-31.5 kV

- First range: 6.6 kV
- Optical indicator: slow flashing red LEDs
- Acoustic indicator: slow intermittent sound.

- Second range: 15–31.5 kV
- Optical indicator: fast flashing red LEDs
- Acoustic indicator: fast intermittent sound

Modelo 22 / 31.5-60 kV

- First range: 22 kV
- Optical indicator: slow flashing red LEDs
- Acoustic indicator: slow intermittent sound

- Second range: 31.5–60 kV
- Optical indicator: fast flashing red LEDs
- Acoustic indicator: fast intermittent sound

HIGH-VOLTAGE DETECTOR

Optical and acoustic

The best detector
for high-voltage work

- New technology acquisition
- Direct-contact detector
- 100% immune to electromagnetic field interference
- Freedom of movement
- Perfect detection from any angle
- Long-life battery
- According to standards IEC 61243:2003 +A1:2009 and UNE-EN 61243-1:2006 +A1:2011



VTA

IEC high-tech voltage detector High voltage – Optical and acoustic

The VTA is a high-voltage electronic voltage detector with a state-of-the-art microcontroller and direct-contact detection, designed to provide maximum safety and reliability for indoor and outdoor high-voltage work.

Its advanced optical acquisition system ensures fast and stable detection, even in environments with intense electric fields.

It features complete circuit self-checking via a test button, allowing correct operation of the device to be verified before use.

The detector automatically activates when voltage is detected and automatically switches off after a few minutes of inactivity to reduce power consumption.

During detection, voltage presence is indicated by a high-intensity red LED and a powerful intermittent acoustic signal. Voltage absence is indicated by a green LED visible from a long distance.

The VTA features very low power consumption (< 1 µA) and operates with a 9 V alkaline battery, type 6LR61 (included). Its operating temperature range is from -25 °C to +55 °C, making it suitable for demanding environmental conditions.

It is used with an insulating pole fitted with a Sofamel Universal head, adapted to the voltage range of the corresponding model. Supplied in a metal carrying case.

CE  According to standard IEC 61243-203:2009 +A1:2009 and UNE-EN 61243-1:2000 +A1:2011 standards.



VOLTAGE RANGES from 63 to 150 kV up to 225 to 420 kV depending on the model

31004 VTA

Code	Ref.	Voltage ranges	Frequency
645162	VTA-63/150-U	63 - 150 kV	50 / 60 Hz
645164	VTA-66/220-U	66 - 220 kV	50 Hz
645165	VTA-66/220-U	66 - 220 kV	60 Hz
645172	VTA-90/225-U	90 - 225 kV	50 / 60 Hz
645184	VTA-45/420-U*	45 - 420 kV	50 / 60 Hz
645182	VTA-150/420-U	150 - 420 kV	50 / 60 Hz
645186	VTA-225/420-U*	225 - 420 kV	50 / 60 Hz

* According to standards IEC 61243:2003 +A1:2009 and UNE-EN 61243-1:2006 +A1:2011 (except for the voltage range).

DC voltage detector with AC induced voltage indication
Optical and acoustic



VTC-OAD I
 model with magnet

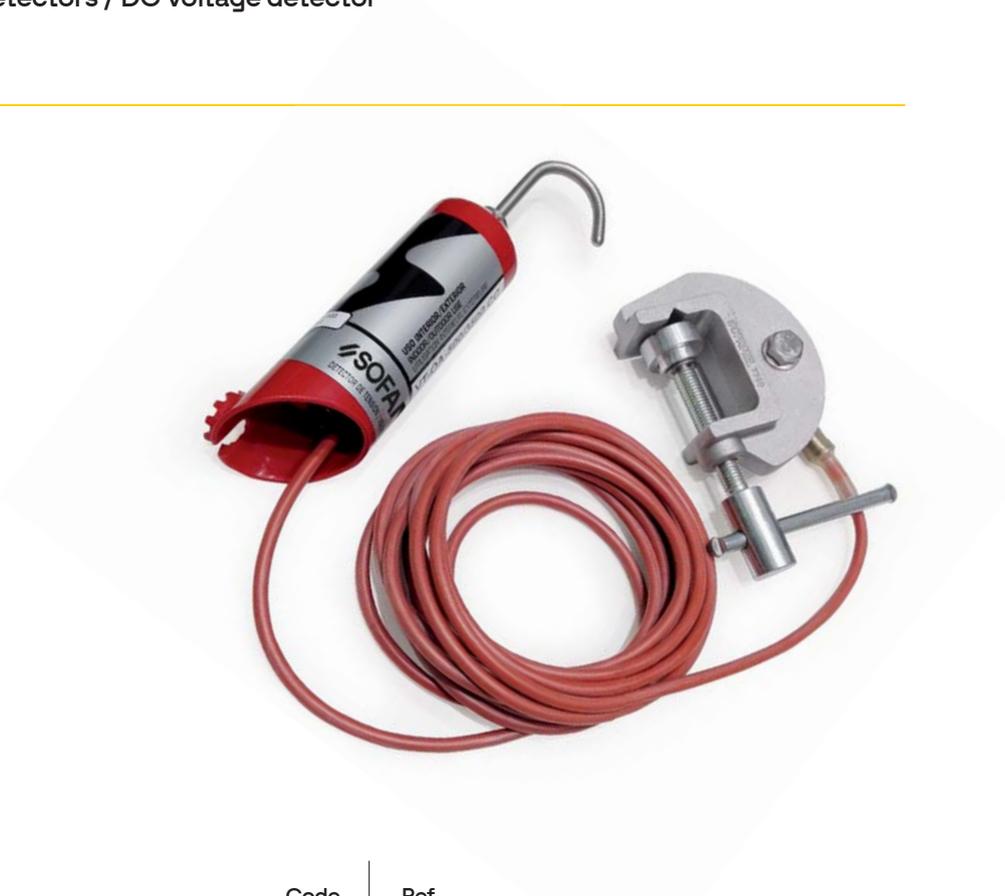
Code	Ref.
645215	VTC-OAD
645216	VTC-OAD I *



31005 VTC-OAD

Field of application:	To be used in DC electrical systems of up to 5000 V DC, where there are adjacent AC systems of up to 25 kVA. Not to be used in installations with AC service voltage only.
Working voltage range:	Direct current: 500 V < V _{dc} < 5000 V AC induced voltage: 500 V < V _{ac} < 5000 V
Frequency of use:	Direct current Alternating current 50–60 Hz
Operating temperature:	-25 °C to 55 °C
Humidity range:	20 to 96 %. Not suitable for use in rainfall.
Alert status indication:	High-brightness green LED. No voltage detected or voltage below detection thresholds.
Voltage presence indication:	Optical: Fixed amber LED indicates DC voltage presence Flashing red LED indicates AC induced voltage presence Acoustic: Fixed buzzer indicates DC voltage presence Alternating buzzer indicates AC voltage presence
Battery:	9 V, type 6LR61 Low battery indicated by flashing green LED; LED off when battery is critically low
Ground cable:	Extra-flexible cable with silicone sheath, 6 m long (other lengths available upon customer request)
Insulation pole attachment:	With universal head
Self-checking:	Full self-checking system with automatic disconnection after 2 minutes WITHOUT DETECTION
Automatic start-up:	Automatic start-up system triggered by voltage detection (approx. 400 V DC)
Electrode:	Non-replaceable, L type (without contact electrode extension)
Threshold voltage:	Between 350 and 490 V

DC voltage detector
Optical and acoustic



VTC-OAI
model with magnet

Code	Ref.
645210	VTC-OA
645211	VTC-OA I *



31005 VTC-OA

Working voltage range:	500 V < Vt < 5000 V
Frequency of use:	Direct current
Operating temperature:	-25 °C to 55 °C
Humidity range:	20 to 96 %
Alert status indication:	High-brightness green LED. No voltage detected or voltage below detection thresholds.
Voltage presence indication:	Optical/Acoustic: High-brightness red LED and high-intensity buzzer.
Battery:	9 V, type 6LR61 Low battery indicated by flashing green LED; LED off when battery is critically low
Ground cable:	Extra-flexible cable with silicone sheath, 6 m long (other lengths available upon customer request)
Insulation pole attachment:	With universal head
Self-checking:	Full self-checking system. Automatic disconnection after 2 minutes WITHOUT DETECTION
Automatic start-up:	Automatic start-up system triggered by voltage detection (approx. 400 V DC)
Electrode:	Interchangeable electrode possible
Threshold voltages:	Threshold 1: 350–490 V: Red LED Threshold 2: 900–1100 V: Orange and red LEDs

D-TUERI

The new era of Personal Voltage Detectors

MAXIMUM SAFETY



SOFAMEL



Omnidirectional detection



USB-C connection



Medium / High voltage



Acoustic signal



**Omnidirectional personal electric field detector
Medium and high voltage – Optical and acoustic**

31006 D-TUERI

Additional individual safety device designed for personnel working in areas with electrical voltage, such as inspection tasks, cleaning operations, maintenance, or any work performed near live components.

When the user approaches an electric field, the detector emits a warning signal. The signal's frequency increases as the user gets closer to the live point. The alarm remains active while the user is within the hazardous zone and stops only when they move away from it.



General characteristics

- Utilization range: According to model
- Operating frequency: 50 and 60 Hz
- Degree of protection: IP65
- Luminous power: 2 W
- Power supply: Li-ion battery 3.7 V, 1050 mAh

It is supplied in an insulated box that includes the detector, helmet mounting accessories, a nylon carrying case, a charger, and a USB cable.

D-TUERI PRO
7.9/69 kV

D-TUERI EXPERT
10/66 kV

D-TUERI PRO
66/138 kV

D-TUERI PRO
25 kV

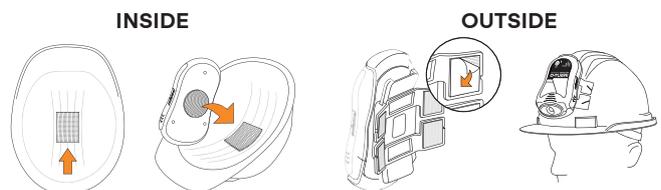


Code	Ref.	Operating range	Detection distance	Use
645257	D-TUERI PRO	7.9 - 69 kV	≈ 2 m for 7.9 kV and ≈ 5 m for 69 kV	In distribution/transformation centres and overhead power lines
645255	D-TUERI EXPERT	10 - 66 kV	≈ 1 m for 10 kV and ≈ 3 m for 66 kV	
645258	D-TUERI PRO 66/138 kV	66 - 138 kV	≈ 1.4 m for 66 kV and ≈ 4 m for 138 kV	
654256	D-TUERI PRO 25 kV	25 kV	2.7 m for 25 kV	In high-speed railway facilities



Placement

The detector can be positioned either on the **INSIDE** or the **OUTSIDE** of the helmet, depending on the helmet's characteristics and requirements.



**Omnidirectional personal electric field detector
Medium and high voltage – Optical and acoustic**

31006 D-TUERI

Additional individual safety device designed for personnel working in areas with electrical voltage, such as inspection tasks, cleaning operations, maintenance, or any work performed near live components.

When the user approaches an electric field, the detector emits a warning signal. The signal's frequency increases as the user gets closer to the live point. The alarm remains active while the user is within the hazardous zone and stops only when they move away from it.



General characteristics

- Utilization range: According to model
- Operating frequency: 50 and 60 Hz
- Degree of protection: IP65
- Luminous power: 2 W
- Power supply: Li-ion battery 3.7 V, 1050 mAh

It is supplied in an insulated box that includes the detector, helmet mounting accessories, a nylon carrying case, a charger, and a USB cable.

D-TUERI DUAL
7.9/69 kV - 66 kV

D-TUERI DUAL
7.9/69 kV - 110 kV

D-TUERI DUAL
7.9/69 kV - 220 kV

D-TUERI DUAL
7.9/69 kV - 400 kV

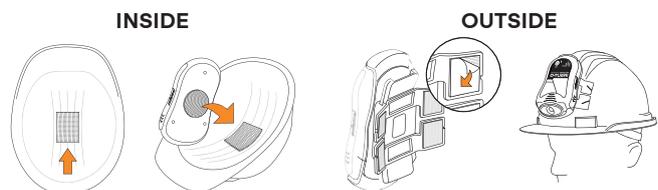


Code	Ref.	Operating range	Detection distance	Use
648300	D-TUERI DUAL 7.9/69 kV - 66 kV	Mode 1: 7.9 – 69 kV Mode 2: 66 kV	Mode 1: ≈ 2 m for 7.9 kV and ≈ 5 m for 69 kV Mode 2: ≈ 1.4 m for 66 kV	In distribution/transformation centres and overhead power lines
648310	D-TUERI DUAL 7.9/69 kV - 110 kV	Mode 1: 7.9 – 69 kV Mode 2: 110 kV	Mode 1: ≈ 2 m for 7.9 kV and ≈ 5 m for 69 kV Mode 2: ≈ 3 m for 110 kV	
648320	D-TUERI DUAL 7.9/69 kV - 220 kV	Mode 1: 7.9 - 69 kV Mode 2: 220 kV	Mode 1: ≈ 2 m for 7.9 kV and ≈ 5 m for 69 kV Mode 2: ≈ 5 m for 220 kV	
648330	D-TUERI DUAL 7.9/69 kV - 400 kV	Mode 1: 7.9 - 69 kV Mode 2: 400 kV	Mode 1: ≈ 2 m for 7.9 kV and ≈ 5 m for 69 kV Mode 2: ≈ 5 m for 400 kV	



Placement

The detector can be positioned either on the **INSIDE** or the **OUTSIDE** of the helmet, depending on the helmet's characteristics and requirements.



D-WATCH

Detectors for use in distribution centres and areas with limited mobility

Medium voltage – Acoustic



1-10 kV

Additional individual safety device.

When the operator approaches an electric field between 1 kV and 10 kV, at an approximate distance of 40 cm for 1 kV and 2 m for 10 kV, the detector emits an audible warning to indicate that the operator is in a hazardous area. The alarm continues until the operator moves away from the voltage source. The device remains constantly active.

31006 D-WATCH

- Utilization range: between 1 kV and 10 kV
- Operating frequency: 50 and 60 Hz
- Power supply: 1 × CR2032 battery

Supplied in an insulated box that includes the detector and a nylon carrying case for transport.

Code	Ref.	Operating range	Detection distance	Use
645680	D-WATCH	1 - 10 kV	≈ 40 cm for 1 kV and ≈ 2 m for 10 kV	In distribution/transformation centres and switchgear cells

COMBO PRO

D-TUERI PRO 7.9/66 kV + D-WATCH 1/10 kV



The kit is sold in a special metal box.

Kit contents:

- 1 D-Tueri PRO personal detector
- Helmet mounting accessories
- Charger and USB cable
- 1 nylon carrying bag for the D-Tueri
- 1 D-Watch personal detector
- 1 nylon carrying bag for the D-Watch



31006 COMBO PRO

Code	Ref.
648250	COMBO PRO

COMBO EXPERT

D-TUERI EXPERT + D-WATCH 1/10 kV



The kit is sold in a special metal box.

Kit contents:

- 1 D-Tueri EXPERT personal detector
- Helmet mounting accessories
- Charger and USB cable
- 1 nylon carrying bag for the D-Tueri
- 1 D-Watch personal detector
- 1 nylon carrying bag for the D-Watch



31006 COMBO EXPERT

Code	Ref.
648260	COMBO EXPERT

COMBO PRO 66/138 kV

D-TUERI PRO 66/138 kV + D-WATCH 1/10 kV



The kit is sold in a special metal box.

Kit contents:

- 1 D-Tueri PRO 66/138 kV personal detector
- Helmet mounting accessories
- Charger and USB cable
- 1 nylon carrying bag for the D-Tueri
- 1 D-Watch personal detector
- 1 nylon carrying bag for the D-Watch



31006 COMBO PRO 66/138 kV

Code	Ref.
648270	COMBO PRO 66/138 kV

COMBO DUAL

D-TUERI DUAL + D-WATCH 1/10 kV



The kit is sold in a special metal box.

Kit contents:

- 1 D-Tueri DUAL personal detector
- Helmet mounting accessories
- Charger and USB cable
- 1 nylon carrying bag for the D-Tueri
- 1 D-Watch personal detector
- 1 nylon carrying bag for the D-Watch



31006 COMBO DUAL

Code	Ref.
648290	COMBO DUAL 7.9/69 kV - 66 kV
648220	COMBO DUAL 7.9/69 kV - 110 kV
648230	COMBO DUAL 7.9/69 kV - 220 kV
648240	COMBO DUAL 7.9/69 kV - 400 kV

COMBO PRO 25 kV

D-TUERI PRO 25 kV + D-WATCH 1/10 kV



The kit is sold in a special metal box.

Kit contents:

- 1 D-Tuери PRO 25 kV personal detector
- Helmet mounting accessories
- Charger and USB cable
- 1 nylon carrying bag for the D-Tuери
- 1 D-Watch personal detector
- 1 nylon carrying bag for the D-Watch



31006 COMBO PRO 25 kV

Code	Ref.
648275	COMBO PRO 25 kV

Voltage detector pole – Low and medium voltage, Optical and acoustic

Bipolar voltage detector with OLED digital display for MV networks. Suitable for indoor and outdoor use in dry environments. Voltage range: 0 kV to 6 kV AC. Auto shut-off after two minutes of no voltage, leaving the detector in standby mode. Only 1 μ A consumption in this mode. Dual indication of phase agreement and disagreement via LEDs and digital display reading. Detachable antennas. Powered by a 9 V alkaline battery, type 6LR61.



Features:

- Phase comparator
- Voltage measurement (True RMS)

31007 PV0/6

- Voltage range: 0 kV to 6 kV AC
- Optical indication: via LED
- Frequency: 50 Hz AC
- Type: Resistive
- Class S: with extended contact electrode
- Climatic category: N – operating and storage conditions: temperature from -25 °C to +55 °C, humidity from 20 % to 96 %
- Suitable for indoor and outdoor use in dry environments
- Supplied in a metal box

Code	Ref.	Cable length	Hz	kV
650450	PV0/6	2 m	50	0 - 6

For other frequencies, please consult.



SYNCRO

VOLTAGE DETECTOR FOR PHASE CONCORDANCE

MAXIMUM CONTROL IN THREE-PHASE NETWORKS
From 1 to 79 kV

Optical and acoustic

- Wide operating voltage range (from 1 kV to 79 kV)
- Clear 360° indication thanks to housing illumination
- Long detection distance (up to 50 m)
- Lightweight and compact design
- Easy to use
- Voltage indication on the transmitter
- 16-bit microcontroller
- 2.4 GHz wireless communication
- Response time < 500 ms
- Phase comparison based on zero-crossing algorithm



SYNCRO

Wireless voltage detector for phase concordance
Medium and high voltage – Optical and acoustic

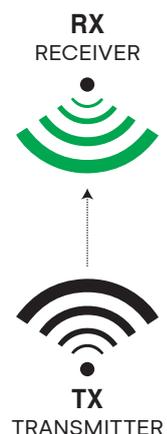


Wireless detector for phase concordance verification in electrical networks. It allows the monitoring of all types of three-phase networks from 1 to 79 kV. The absence of a connecting cable eliminates all hazards associated with its use and allows operation in high-temperature environments. Measurement through obstacles such as walls, doors, etc. is possible. Guaranteed detection distance of up to 50 m.

According to standard UNE-EN 61481-1:2015.

31003 SYNCRO

- Voltage range: 1 to 79 kV
- Frequency: 50–60 Hz
- Use: Indoor/outdoor use with an insulating pole appropriate to the model and voltage range of the tester used.
- Signalling: Optical and acoustic via LED diodes and buzzer.
- Class A: $\pm 10^\circ < \phi_p \leq \pm 30^\circ$
- Climatic category: N – operating and storage conditions: temperature from -25°C to $+55^\circ\text{C}$, humidity from 20 % to 96 %.
- Power supply: AA LRO6 battery, with automatic disconnection (sleep mode) for battery saving.
- Self-verification: Integrated self-test device to verify correct operation.

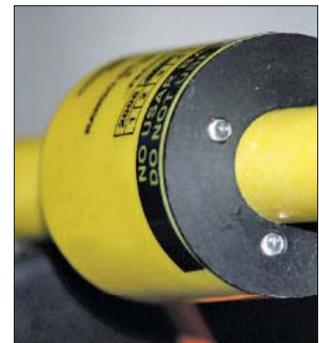


Code	Ref.
645287	SYNCRO

Bipolar voltage detector
Low and medium voltage – Optical

Bipolar voltage detector with impedance probes for MV networks and optical indication of the presence of voltage. Operates without a battery. External verification device with battery included. Supplied with a carrying pouch for storage and transport of the equipment.

According to standard IEC 61481.



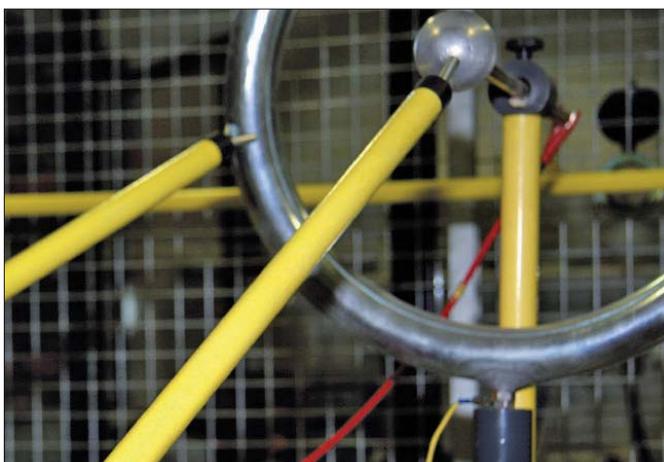
31007 VTBR-3/36 New

- Nominal voltage: 3 to 36 kV AC
- Optical indication: via LED
- Frequency: 50 Hz
- Indoor use

Code	Ref.	Cable length
650101	VTBR-3/36	2 m



External verification device with battery included.



CUSTODIAN

PERMANENT

For use in distribution centres
Medium and high voltage – Optical

The Custodian is a permanently installed detector that indicates the presence of voltage via a light.
Intended for indoor use in medium- and high-voltage rooms of transformation centres.
It is mounted on bars or cables with voltages from 5 to 138 kV.
The contact electrode can be replaced by the user.

31001 CUSTODIAN

- Phase-to-earth operating voltage: 2.9 – 79.6 kV
- Phase-to-phase operating voltage: 5 – 138 kV
- Clamp opening: 22 – 53 mm
- Connection interface: M8 female
- Rotatable orientation: 30° in any direction
- Indoor use
- Protection degree: IP65 (test pending)
- Supplied in a cardboard box



Code	Ref.
640250	CUSTODIAN

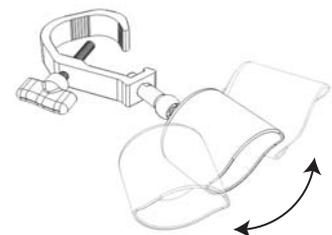
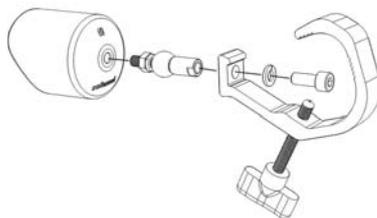
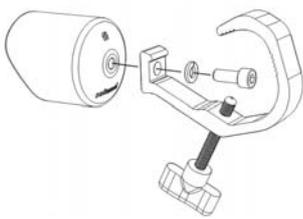


Assembly

Anchored to busbars or cables with voltages from 5 to 138 kV

Option 1 - Fixed

Option 2 - Adjustable



31009 PTL-1000

Tester
Optical and acoustic

Non-contact voltage tester, easy to handle and operate.
Adjustable voltage detection range.
Automatically distinguishes between neutral and phase wires.
Distinct alarm sounds and LEDs in different colours indicate high, medium, and low voltage levels.
Suitable for a wide range of applications.



31009 BTL-600

True RMS tester
Optical and acoustic

Compact and accurate digital multimeter with manual and automatic range adjustment.
Pen-style design for easy handling and operation.
Non-contact voltage detection (NCV) function for increased user safety and confidence.
Illuminated display and integrated torch for use in low-light environments.
Includes diode test and continuity test functions, as well as data hold.



Code	Ref.	 Box
635330	Tester PTL-1000	1

Code	Ref.	 Box
635300	Tester BTL-600	1

Technical information

- Alarm mode: Acoustic and visual
- Measuring range: 12 VAC – 1000 VAC / 48 VAC – 1000 VAC
- Power supply: 2 x 1.5 V AAA batteries
- Frequency: 50 Hz / 60 Hz
- Overload category: CAT III 1000 V / CAT IV 600 V
- Certificates: CE, RoHS
- Torch: White LED lamp
- Colour: Yellow
- Dimensions: 156 x 20 x 20 mm
- Weight: 45 g

Supplied in a cardboard box for transport and storage.
According to standards EN 61010-1, IEC 62321 and EN 61326-1.

Technical information

- Screen: 2000 digits
- Voltage: 600 V AC/DC (automatic or manual range)
- Current: 200 mA DC / 200 mA AC
- Resistance: 20 MΩ
- Additional functions: Diode test, continuity test, and non-contact voltage detection (NCV)
- Safety category: CAT III 600 V
- Power supply: 2 x 1.5 V AAA batteries
- Certificates: CE, RoHS
- Colour: Yellow
- Dimensions: 248 x 42 x 34 mm
- Weight: 110 g

Supplied with a nylon case for transport and storage.
According to standards EN 61010-1, EN 61010-2-033, EN 61326 and IEC 62321.

31009 Voltage tester screwdriver

Voltage detector up to 500 V



Code	Ref.	 mm	 mm	Voltage
635500	BF-65	140	65	100 to 500 V
635510	BF-100	190	105	

31009 CTL-1000

**Professional multimeter with True RMS
Optical and acoustic**

Digital AC/DC clamp meter with True RMS measurement, automatic and manual range, and VFD frequency converter. Equipped with a 6000-digit HD display and backlight for comfortable reading in any environment. Includes non-contact voltage detection (NCV), temperature measurement, capacitance, resistance, and continuity test. Ideal for electrical and industrial maintenance applications.



Code	Ref.	 Box
635360	Multimeter CTL-1000	1

Technical Information

- True RMS measurement
- Voltage: 1000 V AC/DC
- Current: 600 A AC/DC
- Resistance: 60 MΩ
- Capacitance: 60 mF
- Frequency: 100 kHz
- Temperature: -20 °C to +1000 °C / -4 °F to +1832 °F
- LowZ DCV function: Up to 1000 V AC/DC
- VFD function: Up to 200 μA
- Clamp diameter: 40 mm
- Other functions: NCV detection, temperature measurement, continuity test, max./min. and peak value memory, data hold, backlight, and integrated LED torch
- Power supply: 3 x 1.5 V AAA batteries
- Dimensions: 246 x 85 x 41 mm
- Weight: 370 g
- Safety category: CAT III 1000 V / CAT IV 600 V

Supplied with a nylon case for transport and storage. According to standards EN 61010-1, EN 61010-2-033 and EN 61326.



Accessories included.

31007 BVD-1000

Tester Optical and acoustic

Multifunction tester for AC/DC voltage, including three-phase AC voltage testing, phase sequence indication, RCD testing, continuity testing, and non-contact voltage detection.

Provides optical indication via LEDs and acoustic alarm. Integrated flashlight allows convenient use in low-light environments.



31007 BVD-1500

Tester Optical and acoustic

This tester has a measurement capacity of up to 1200 V AC / 1500 V DC, allowing voltage testing in both alternating current (AC) and direct current (DC), including three-phase AC voltage.

Features a backlit LCD display, acoustic alarm, and automatic polarity detection. It also enables RCD testing, continuity testing, phase sequence indication, and non-contact voltage detection, ensuring accurate and safe measurements. The integrated flashlight provides convenient illumination for use in low-light environments.



Code	Ref.	 Box
635430	Tester BVD-1000	1

Code	Ref.	 Box
635440	Tester BVD-1500	1

Technical Information

- Voltage: 1000 V AC/DC
- Display: LED with automatic polarity and voltage indication
- Frequency range: 40 Hz – 1 kHz
- RCD test: Test voltage 230 V AC (40 – 500 Hz); current 30 mA ± 10 mA; test time < 300 ms
- Continuity test: < 100 kΩ with acoustic buzzer
- Phase sequence test: 57 V – 400 V AC, 50 – 60 Hz
- Range selection: Automatic
- Polarity indication: Automatic LED
- Low battery indication: When internal voltage is below 2.5 V
- Power supply: 2 x 1.5 V AAA batteries
- Operating temperature: -10 °C to +40 °C
- Storage temperature: -20 °C to +60 °C
- Operating humidity: < 85 % RH
- Protection category: CAT III 600 V / CAT III 1000 V
- Pollution degree: Level 2
- Water and dust protection: IP65
- Automatic shut-off: After 30 s of inactivity

Supplied with a nylon case for transport and storage. According to standards IEC 61010-1, IEC 61243-3:2014, EN 60529 and EN 61326-1.

Technical Information

- Voltage: 1200 V AC / 1500 V DC
- Display: Backlit LCD
- Frequency range: 40 Hz – 1 kHz (resolution 1 Hz, error ±(3 % + 5 d))
- Buzzer: Dual mode (continuous and intermittent)
- Voltage polarity indication: Automatic
- Range selection: Automatic
- RCD test: Test voltage 230 V AC (40 – 500 Hz), current 30 mA ± 10 mA, test time < 300 ms
- Continuity test: < 100 kΩ with acoustic buzzer
- Phase sequence test: 57 V – 400 V AC, 50 – 60 Hz
- Power supply: 2 x 1.5 V AAA batteries
- Low battery indication: When internal voltage is below 2.5 V
- Operating temperature: -10 °C to +40 °C
- Storage temperature: -20 °C to +60 °C
- Operating humidity: < 85 % RH
- Protection category: CAT III 600 V / CAT III 1000 V
- Pollution degree: Level 2
- Water and dust protection: IP65
- Impact and dust resistance: Level 2
- Automatic shut-off: After 30 s of inactivity

Supplied with a nylon case for transport and storage. According to standards IEC 61010-1, IEC 61243-3:2014, EN 60529 and EN 61326-1.

31009 DM-600

Digital multimeter
Optical

Portable digital multimeter with backlit LCD display, allowing comfortable reading even in low-light environments. Designed for accurate measurement of voltage, current, resistance, capacitance, frequency, and diodes, and includes non-contact voltage detection (NCV). Its compact design and rubber protective case make it ideal for electrical work and general maintenance tasks.



31009 IPR-400

Phase/Rotation indicator
Optical

The IPR-400 indicator allows quick and safe verification of the magnetic field direction in three-phase systems and the rotation direction of electric motors. No cables or probes are required: simply place it on the motor or drive shaft for an immediate reading. Its compact, lightweight, and durable design makes it an ideal tool for maintenance and diagnostic work in industrial installations. Rotation direction is indicated by clearly visible LED signals.



Code	Ref.	 Box
635380	Multimeter DM-600	1

Code	Ref.	 Box
635320	Phase/Rotation indicator IPR-400	1

Technical Information

- Voltage: 600 V AC/DC
- Current: 10 A AC/DC
- Resistance: 20 MΩ
- Capacitance: 2 mF
- Frequency: 20 kHz
- Display: 3½-digit LCD with backlight
- Overload protection: PTC circuit (for resistance and frequency)
- NCV function: Non-contact voltage detection
- Data hold: Available
- Min/Max measurement: Yes
- Low battery indication: < 2.2 V
- Automatic shut-off: After 15 minutes of inactivity
- Power supply: 9 V (6F22 or 1604A battery)
- Operating temperature: -10 °C to +50 °C
- Storage temperature: -20 °C to +60 °C
- Operating humidity: < 80 % RH
- Dimensions: 147.5 x 74 x 42.5 mm
- Weight: 174 g (approx.)

Supplied with a nylon case for transport and storage. According to standards EN 61010-1, EN 61010-2-032, EN 61326 and IEC 62321.

Technical Information

- Measurement: Non-contact, via magnetic field detection
- LED indication: Phase sequence and rotation direction
- Operating voltage: 120 V – 400 V AC
- Operating frequency: 2 Hz – 400 Hz
- Overvoltage category: CAT III 600 V
- Power supply: 3 x 1.5 V AAA batteries
- Dimensions: 128 x 70 x 30 mm
- Weight: 168 g
- Operating temperature: 0 °C to +40 °C

Supplied with a nylon case for transport and storage. According to standards EN 61010-1, EN 61010-2-032, EN 61326 and IEC 62321.



Accessories included.



31009 IER-4000

Earth resistance meter Digital

The high-performance IER-4000 earth meter is a professional instrument for testing ground resistance using 2- or 3-pole methods. It also allows preliminary verification of earth voltage, protecting the user from hazardous voltages. Designed and manufactured in compliance with the safety requirements of IEC 61010-1 for electronic test instruments.

31009 CIT-10

Insulation tester Digital

Used to measure the quality of electrical insulation in cables, motors, transformers, etc., both in new installations and during maintenance, suitable for basic and professional use. It also detects DC voltage, AC voltage, and performs continuity checks. Designed and manufactured in compliance with the safety requirements of IEC 61010-1 for electronic test instruments.

Code	Ref.	 Box
635340	Digital earth resistance meter IER-4000	1

Code	Ref.	 Box
635390	Digital insulation tester CIT-10	1

Technical Information

- Display: Digital LCD
- Data storage: 100 groups
- Resistance ranges: 0 ~ 29.99 Ω / 30.0 ~ 99.9 Ω / 100 ~ 999 Ω / 1.00 k ~ 4.00 kΩ
- Voltage ranges: 0 V ~ 200 V (50 / 60 Hz)
- Continuity check: Yes
- Values: MAX / MIN / PRO, relative measurements
- Result memory: Stored in internal memory
- Other features: Auto shut-off, backlit display, and low battery indication
- Category: CAT III 600 V
- Certificates: CE, RoHS
- Power supply: 6 x 1.5 V AA batteries
- Dimensions: 180 x 140 x 65 mm
- Weight: 950 g

Supplied with a carrying case for transport and storage. According to standards EN 61010-1, EN 61010-2-032, EN 61326 and IEC 62321.

Technical Information

- Display: Backlit LCD
- Resistance range: 0.01 MΩ – 10.00 GΩ
- Insulation test voltages: 50 V, 100 V, 250 V, 500 V and 1000 V
- Automatic shut-off: For power saving
- Data storage: Available
- Timer function: For insulation testing
- Lock function: For insulation testing
- Power supply: 6 x 1.5 V AA batteries
- Dimensions: 190 x 145 x 70 mm
- Weight: 855 g (without batteries)

Supplied with a carrying case for transport and storage. According to standards EN 61010-1, EN 61557-1 and EN 61326-1. CAT III 1000 V and CAT IV 600 V.



Accessories included.



Accessories included.

31009 CRT-1200

Earth resistance testing clamp Optical and acoustic

The clamp can check grounding in hard-to-reach areas, including indoor or fully paved locations where auxiliary test rods cannot be used. It can determine the resistance without the need to disconnect and reconnect the grounding installation. It is ideal for use in the fields of electrical power distribution, telecommunications, construction, and industrial electronic equipment.



Code	Ref.	Box
635370	Clamp CRT-1200	1

Technical Information

- Resistance range: 1200 MΩ
- Test voltage: 3700 V
- Current: 40 A
- Creepage distance: 6.5 mm
(complies with IEC 1010 double insulation, CAT III 600 V)
- Overload limitation: 40 A RMS current
- Average consumption: 50 mA
- Range: Automatic
- Display type: 4-digit, 9999 count, liquid crystal display (LCD)
- Low power indicator:
- Power supply: 9 V 6F22 battery
- Individual measurement time: 1 s
- Operating temperature: -10 °C to 50 °C (14 °F to 122 °F)
- Storage temperature: -20 °C to 60 °C (-4 °F to 140 °F)
- Conductor size: Ø 32 mm
- Dimensions: 54 x 104 x 32 mm
- Weight: Approx. 1050 g (including batteries)

Supplied with a carrying case for transport and storage.
According to standards EN 61010-1, EN 61010-2-032,
EN 61326 and IEC 62321.

ECHO GUARD 4

New

Ultrasonic detector

Portable ultrasonic system for detecting obstacles in blind spots, designed to reduce collision risks during mobile machinery manoeuvres. Includes control unit, 4 ultrasonic sensors, warning buzzer and 12 V power cable (cigarette lighter/USB). Tested with good results on backhoe loaders and forklifts.



KIT CONTENT:

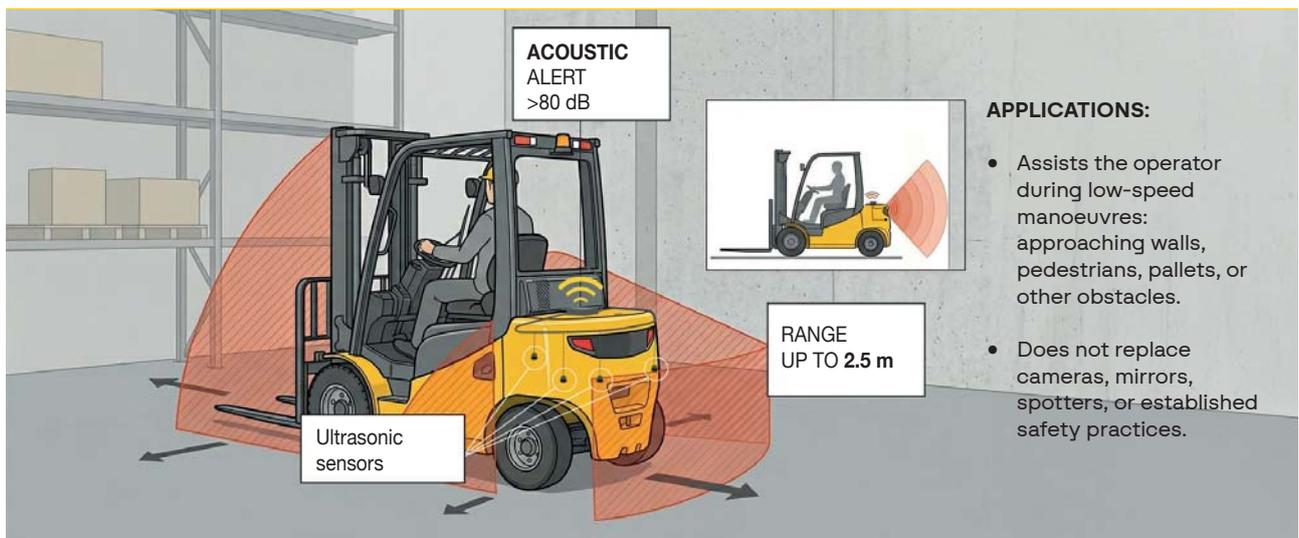
- Control box / unit
- 4 ultrasonic sensors
- Warning buzzer
- 12 V power wiring with USB terminal + cigarette lighter socket

TECHNICAL SPECIFICATIONS:

- Technology: ultrasonic, 40 kHz frequency
- Detection range: 0 cm – 2.5 m
- Power supply: 9–16 V DC
- Current consumption: 20–200 mA
- Acoustic level (buzzer): >80 dB
- Environmental conditions: rain and frost resistant
- Operating temperature: –30 °C to +70 °C

MAIN FEATURES:

- Obstacle detection using ultrasonic sensors
- Acoustic alert >80 dB via buzzer
- Portable system: can be mounted and removed without permanent installation
- Powered directly from 12 V cigarette lighter socket or USB



Code	Ref.	Cable length			
		Main	Buzzer	USB / cigarette lighter power supply	Sensors
31010000	ECHO GUARD 4	2 m	5 m	5 m	1,1 / 1,3 / 1,8 / 2,1 m

In the event of an electrical accident, rapid intervention is essential. The rescue kit contains all rescue equipment in a single, easily accessible location, allowing all users to respond quickly when needed.

Customised configuration available

31101 SZ-51S

Composed of a 1 x 1.6 m board containing the following items:

- 1 BS-45 rescue pole
- 1 plastic storage box for gloves
- 1 pair of Class 3 insulating gloves
- 1 VC-300/25 insulated cable cutter
- 1 resuscitator
- 1 45 kV insulating platform
- 1 first aid sign
- 1 instruction sign

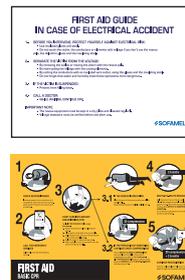
Product supplied with screws and nails (for mounting).

Code	Ref.	Description
690100	SZ-51S	Spanish
690100 I	SZ-51S	English
690100 F	SZ-51S	French

* For other configurations, please contact us.



Code	Ref.
ES X690165	SZ08 E
EN X690166	SZ08 I
FR X690167	SZ08 F



Code	Ref.
ES X690170	PA-29P E
EN X690171	PA-29P I
FR X690172	PA-29P F



Code: 695100
Ref.: SZ-02

In the event of an electrical accident, rapid intervention is essential. The rescue kit contains all rescue equipment in a single, easily accessible location, allowing all users to respond quickly when needed.

Customised configuration available

31101 SZ-51B

Composed of a 1 x 1.6 m board containing the following items:

- 1 BS-45 rescue pole
- 1 voltage detector with insulating pole, 5–36 kV
- 1 plastic storage box for gloves
- 1 pair of Class 3 insulating gloves
- 1 VC-300/25 insulated cable cutter
- 1 resuscitator
- 1 45 kV insulating platform
- 1 pair of Class 2 insulating boots
- 1 first aid sign
- 1 instruction sign

Product supplied with screws and nails (for mounting).



Code	Ref.	Description
690130	SZ-51B	Spanish
690130 I	SZ-51B	English
690130 F	SZ-51B	French

* For other configurations, please contact us.



Code: 580155
Ref.: STM-45



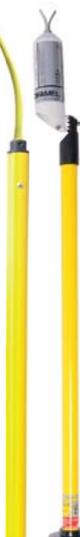
Code: 715121
Ref.: VC-300/25



Code: 545115
Ref.: CGS



Code: 530270
Ref.: SG-30



Code: 640210
Ref.: VTO-5/36-P



Code: 610100
Ref.: BS-45



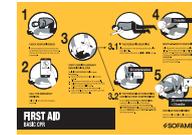
Code Ref.
ES X690165 SZ08 E
EN X690166 SZ08 I
FR X690167 SZ08 F



Code: 715160 (Talla 43)
Tallas disponibles: 42-45
Ref.: DB2 T43



Code: 695100
Ref.: SZ-02



Code Ref.
ES X690170 PA-29P E
EN X690171 PA-29P I
FR X690172 PA-29P F

In the event of an electrical accident, rapid intervention is essential. The rescue kit contains all rescue equipment in a single, easily accessible location, allowing all users to respond quickly when needed.

Customised configuration available

31101 SZ-51M

Composed of a 1 x 1.6 m board containing the following items:

- 1 BS-45 rescue pole
- 1 voltage detector with insulating pole, 5–36 kV
- 1 plastic storage box for gloves
- 1 pair of Class 3 insulating gloves
- 1 VC-300/25 insulated cable cutter
- 1 resuscitator
- 1 45 kV insulating platform
- 1 pair of insulating overshoes
- 1 first aid sign
- 1 instruction sign

Product supplied with screws and nails (for mounting).

Code	Ref.	Description
690110	SZ-51M	Spanish
690110 I	SZ-51M	English
690110 F	SZ-51M	French

* For other configurations, please contact us.



Code: 580155
Ref.: STM-45

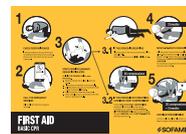
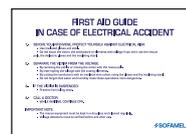
Code: 715121
Ref.: VC-300/25

Code: 545115
Ref.: CGS

Code: 530270
Ref.: SG-30

Code: 610100
Ref.: BS-45

Code	Ref.
ES X690165	SZ08 E
EN X690166	SZ08 I
FR X690167	SZ08 F



Code	Ref.
ES X690170	PA-29P E
EN X690171	PA-29P I
FR X690172	PA-29P F



Code: 715110
Ref.: SZ-56



Code: 695100
Ref.: SZ-02

In the event of an electrical accident, rapid intervention is essential. The rescue kit contains all rescue equipment in a single, easily accessible location, allowing all users to respond quickly when needed.

Customised configuration available

31101 SZ-51AC

Composed of a 1 x 1.6 m board containing the following items:

- 1 36 kV insulating platform
- 1 BS-45 rescue pole
- 1 plastic storage box for gloves
- 1 pair of Class 0 insulating gloves
- 1 insulating mat, 60 cm x 1 m, 1 kV working voltage
- 1 SG-117 pneumatic glove tester
- 1 SZ-06 first aid kit case
- 1 fire-resistant blanket, 1.2 x 1.8 m
- 1 resuscitator
- 1 red ABS padlock C/ABS-25
- 1 first aid sign
- 1 "Five Golden Rules" sign for automotive applications

Product supplied with screws and nails (for mounting).



Code	Ref.	Description
690230	SZ-51AC	Spanish
690230 I	SZ-51AC	English
690230 F	SZ-51AC	French

* For other configurations, please contact us.



Code: 580155
Ref.: STM-45



Code: 585181
Ref.: AD0-0610



Code: 545120
Ref.: SG-117



Code: 545115
Ref.: CGS



Code: 710120
Ref.: SZ-180



Code: 610100
Ref.: BS-45



Code: 530160
Ref.: SG-50 T-10



Code: 695100
Ref.: SZ-02



Code: 700110
Ref.: SZ-06



Code: 761103
Ref.: C/ABS-25 FJ

	Code	Ref.
ES	X690165	SZ08 E
EN	X690166	SZ08 I
FR	X690167	SZ08 F

	Code	Ref.
ES	X690170	PA-29P E
EN	X690171	PA-29P I
FR	X690172	PA-29P F

In the event of an electrical accident, rapid intervention is essential. The rescue kit contains all rescue equipment in a single, easily accessible location, allowing all users to respond quickly when needed.

Customised configuration available

31101 SZ-51AB

Composed of a 1 x 1.6 m board containing the following items:

- 1 36 kV insulating platform
- 1 BS-25 rescue pole
- 1 CTL-1000 professional multimeter with True RMS
- 1 plastic storage box for gloves
- 1 pair of Class 0 insulating gloves
- 1 insulating mat, 60 cm x 1 m, 1 kV working voltage
- 1 resuscitator
- 1 first aid sign
- 1 "Five Golden Rules" sign for automotive applications

Product supplied with screws and nails (for mounting).



Code	Ref.	Description
690209	SZ-51AB	Spanish
690209 I	SZ-51AB	English
690209 F	SZ-51AB	French

* For other configurations, please contact us.



Code: 580155
Ref.: STM-45



Code: 585181
Ref.: AD0-0610



Code: 635360
Ref.: CTL-10000



Code: 545115
Ref.: CGS



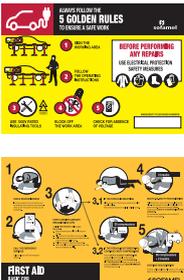
Code: 530160
Ref.: SG-50 T-10



Code: 610095
Ref.: BS-25



Code: 695100
Ref.: SZ-02



Code Ref.
ES X725000 CRO-29P
EN X725001 CRO-29P I
FR X725002 CRO-29P F

Code Ref.
ES X690170 PA-29P E
EN X690171 PA-29P I
FR X690172 PA-29P F

The essential and handy safety kit

31102 KRM-4001

The kit is supplied in a special black plastic case.

Contents:

- 1 three-section folding pole, 1.5 m
- 1 optical and acoustic detector, 5–36 kV, in a nylon bag
- 1 rescue hook with universal head
- 1 pair of SG-40 T10 insulating gloves, stored in a nylon bag
- 1 insulating mat, 60 cm x 1 m, 36 kV working voltage
- 1 resuscitator
- 1 neck immobiliser
- 1 fire-resistant blanket, 1.2 x 1.8 m
- 1 stretcher



Code	Ref.
690114	KRM-4001

* For other configurations, please contact us.



Fire resistant blanket
SZ-180



Optical & Acoustical
Detector VTE-5/36U



Dielectric gloves
SG-40 T10



Rescue hook,
resuscitator and neck
immobilizer



Insulating mat
AD4-0610/40C



Stretcher

Telescopic pole

31103 SZ-02

Standard resuscitator

Portable resuscitator designed for use in emergency situations. Provides pulmonary ventilation for people with impaired respiratory function. Includes a transparent mask with a pneumatic edge and an oxygen connection. Supplied with a carrying bag.

Code	Ref.
695100	SZ-02



31103 SZ-05

First aid kit

Material included.
Box which contains the necessary items for first aid.

Code	Ref.	Wraparound	Dimensions
700100	SZ-05	Metallic	37 x 30 x 13 cm



31103 SZ-06

First aid kit

Material included.
Box which contains the necessary items for first aid.

Code	Ref.	Wraparound	Dimensions
700110	SZ-06	Plastic	38 x 26 x 13 cm



31103 SZ-07

Stretcher

180 x 55 cm canvas stretcher with metal bars that can be taken apart into three parts. Folded 70 x 10 x 10 cm. Supplied with carrying bag.

Code	Ref.
705100	SZ-07



CEE 93/42 Sanitary products

30503 SZ

Fire-Resistant Blanket

Fire-resistant blanket made of flameproof fiberglass fabric, coated on both sides with a special high-temperature-resistant silicone. Ready-to-use device.

Can withstand temperatures up to 1100 °C for more than 15 minutes. Particularly effective in situations where the use of fire extinguishers is inadvisable.

Supplied in a rigid red plastic case.

According to standard UNE-EN 1869:97.



Code	Ref.	Dimensions
710100	SZ-100	100 x 100 cm
710110	SZ-120	120 x 120 cm
710120	SZ-180	120 x 180 cm

31104 SZ-57

Wire cutter

Insulated wire cutter suitable for cutting aluminium cables with a steel core up to Ø 25 mm.

Features metal blades and two handles made of 32 mm diameter polyester tube reinforced with fibreglass.

Code	Ref.	Length (mm)	Insolation	Weight
715120	SZ-57/25	670	25 kV	2.700 kg
715125	SZ-57/36	830	36 kV	2.900 kg



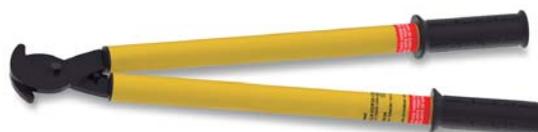
31104 VC-300

Wire cutter

Insulated wire cutter suitable for cutting aluminium cables up to Ø 25 mm.

Features metal blades and two handles made of 32 mm diameter polyester tube reinforced with fibreglass.

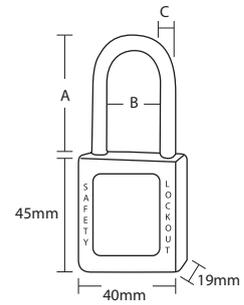
Code	Ref.	Length (mm)	Insolation	Weight
715121	VC-300/25	620	25 kV	1.180 kg
715126	VC-300/36	720	36 kV	1.300 kg



Metal shackle padlocks

Padlock for locking a single work area and/or de-energised zone.

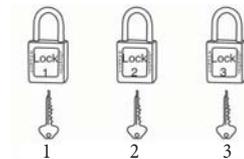
Available in three different colours depending on the intended use.



31201 C/ABS-25

ABS safety padlocks

Body made of high-impact resistant ABS, UV protected, and resistant to both low and high temperatures. Includes "Danger" and "Property of" markings. Available in blue, red, and yellow. Dimensions: 40 x 45 x 19 mm. Each padlock comes with a unique key.



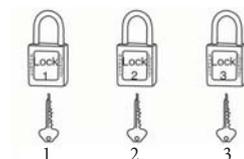
DIFFERENT KEYS

Code	Ref.	Colours	A	B	C
761100	C/ABS-25 AZ		25	20	6
761103	C/ABS-25 RJ		25	20	6
761106	C/ABS-25 AM		25	20	6

31201 C/ABS-38

ABS safety padlocks

Body made of high-impact resistant ABS, UV protected, and resistant to both low and high temperatures. Includes "Danger" and "Property of" markings. Available in blue, red, and yellow. Dimensions: 40 x 45 x 19 mm. Each padlock comes with a unique key.



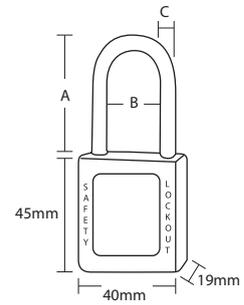
DIFFERENT KEYS

Code	Ref.	Colours	A	B	C
761101	C/ABS-38 AZ		25	20	6
761108	C/ABS-38 RJ		25	20	6
761110	C/ABS-38 AM		25	20	6

Nylon Shackle Padlocks

Padlock for locking a single work area and/or de-energised zone.

Available in three different colours depending on the intended use.

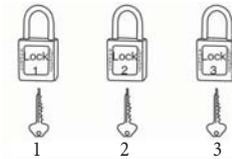


31201 C/COM-38-DK

Composite security padlock

Body made of composite with a nylon shackle. Non-conductive. Does not produce sparks. Dielectric tested. Suitable for use in flammable or explosive environments. Available in blue, red, and yellow. Dimensions: 40 x 45 x 19 mm. Each padlock comes with a unique key.

Code	Ref.	Colours	A	B	C
761102	C/COM-38-DK AZ		38	20	6
761107	C/COM-38-DK RJ		38	20	6
761109	C/COM-38-DK AM		38	20	6



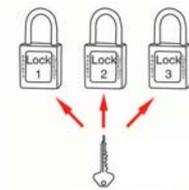
DIFFERENT KEYS

31201 C/COM-38-SK

Composite security padlock

Body made of composite with a nylon shackle. Non-conductive. Does not produce sparks. Dielectric tested. Suitable for use in flammable or explosive environments. Available in blue, red, and yellow. Dimensions: 40 x 45 x 19 mm. All padlocks come with the same key.

Code	Ref.	Colours	A	B	C
761113	C/COM-38-SK AZ		38	20	6
761112	C/COM-38-SK RJ		38	20	6
761114	C/COM-38-SK AM		38	20	6



1
SINGLE KEYS

31202 P/PU-29

Protective cover for pushbutton

Made of transparent resin.
Prevents accidental operation. Suitable for pushbuttons up to Ø 29 mm.

Code	Ref.
762100	P/PU-29

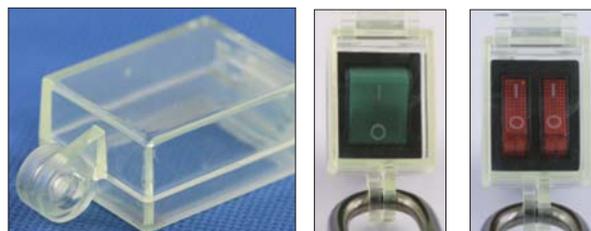


31202 P/IN-28

Protective cover for switch

Made of transparent resin.
Prevents accidental operation. Suitable for switches measuring 28 mm long x 22.5 mm wide.

Code	Ref.
762101	P/IN-28



31202 P/EM

Pushbutton cover

Made of transparent resin.
Prevents accidental operation.

Code	Ref.	Installation hole Ø
762102	P/EM-22	22 mm
762103	P/EM-30,5	30,5 mm



31202 P/DMT

Switch lockout

Made of nylon.
Lockout for circuit breakers using a stainless steel screw mechanism.
Adjustable to accommodate a wider range of switches.

Code	Ref.	Dimensions
762110	P/DMT	47 x 32 x 15 mm

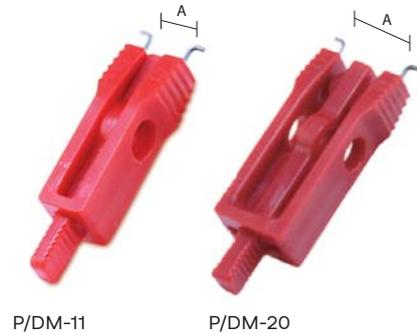


31202 P/DM

Switch lockout

Made of nylon.
Lockout for switches, circuit breakers, residual current devices (RCDs), and main power switches (ICP).

Code	Ref.	Dimensions	A
762104	P/DM-11	57.4 x 14.5 x 14 mm	11 mm
762105	P/DM-20	68.3 x 23.3 x 31.4 mm	20 mm



P/DM-11

P/DM-20

31202 P/DIG-41

Switch lockout

Made of nylon.
Lockout for automatic switches using a stainless steel saw-tooth mechanism.
Fully adjustable to accommodate a wider range of switches.

Code	Ref.	Dimensions
762106	P/DIG-41	68.3 x 48.3 x 27.6 mm

Description: For circuit breakers up to 41 x 15.8 mm



31202 P/DIP-9

Switch lockout

The housing is made of ABS resin, and the main body is constructed from durable material.
Its design allows for quick and easy installation.

Code	Ref.	Dimensions
762107	P/DIP-9	68.5 x 23.5 x 14 mm

Description: For circuit breakers ≤ 10 mm, with no width limitation



31202 P/DIPA-9

Switch lockout

Made of nylon.
Lockout for automatic switches using a stainless steel saw-tooth mechanism.
Fully adjustable to accommodate a wider range of switches.

Code	Ref.	Dimensions
762108	P/DIPA-9	93 x 34.3 x 28 mm



31102 P/BOL-450

Pouch for storing plugs

Made of tear-resistant nylon.
Ideal for storing electrical connectors of any size.

Code	Ref.	Dimensions
762109	P/BOL-450	450 x 250 mm

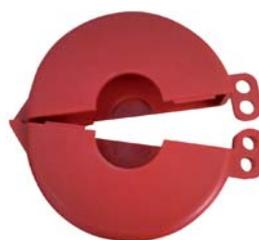


31203 P/VAL

Valve protector

Made of impact-resistant ABS with high wear resistance.
Performs efficiently under extreme conditions.
Temperature range: -20 °C to 100 °C.
Prevents accidental valve opening.
Includes a label for identifying the responsible person.

Code	Ref.	Dimensions
763100	P/VAL-63R	25 mm - 63 mm
763101	P/VAL-127	63 mm - 127 mm
763102	P/VAL-165	127 mm - 165 mm
763103	P/VAL-254	165 mm - 254 mm



31203 EV-52

Lockout hasps

Used for locking gate valves of different sizes as well as multiple valves simultaneously.

Lighter than chains, the device is easy to transport and use.

Cable made of 5 mm Ø plastic-coated steel, 2.0 m long.

Holds up to six padlocks.



Code	Ref.
763104	EV-52

31203 EV-318

Lock-and-tag device with adjustable cable

Consists of a safety clamp and a strong, flexible 4 mm multi-strand steel cable insulated with a clear plastic coating (PVC-free).

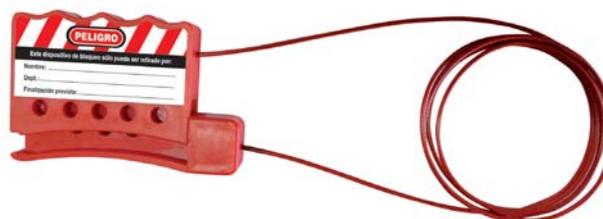
Includes an adhesive safety label to identify the person responsible for installing the device.

Used to lock gate valves of different sizes, as well as multiple valves simultaneously.

Lighter than chains, the device is easy to carry and use.

Cable made of plastic-coated steel, Ø 3 mm, 1.8 m long.

Holds up to five padlocks.



Code	Ref.
763105	EV-318

31204 EN-6

Lockout hasps

Protects equipment against accidental opening.
Holds up to six padlocks.
Steel jaw with a polypropylene-coated handle.

Code	Ref.	Dimensions	Ø Ring
764100	EN-6/25	115 x 45 mm	26 mm
764101	EN-6/38	130 x 60 mm	39 mm

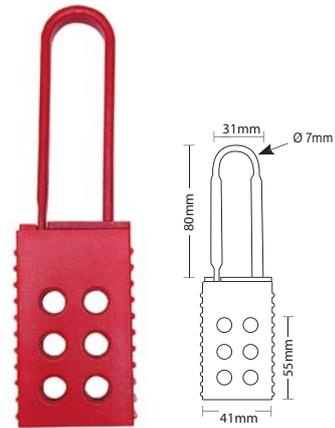


31204 EA-7818

Lockout hasps

Protects equipment against accidental opening.
Holds up to six padlocks.
Fully insulated lockout.
Made of polyamide.
Dielectric protection.
Non-conductive.
Anti-spark.

Code	Ref.	Dimensions	Dimensions ring
764102	EA-7818	157 x 45 mm	78 x 78 mm



31204 EAL-3628

Lockout hasps

Made of anodised aluminium with high corrosion resistance.
Identification by label for name, department and comments.
Holds up to six padlocks.

Code	Ref.	Dimensions	Dimensions ring
764103	EAL-3628	188 x 76 mm	36 x 28 mm



31205 SB-12

Lockout box

After machines or processes have been locked out, the keys can be stored in the lockout box. Each authorised person can place their personal padlock on the box to prevent it from being opened. This ensures that no one can access the lockout keys unless all personnel have removed their padlocks from the box.

Capacity for 12 padlocks + 1 master padlock.
Supplied without contents.



Code	Ref.	Dimensions
765100	SB-12	260 x 103 x 152 mm

Lockout station

Panel made of ABS.
Polycarbonate label holder.
Used to keep the daily use of padlocks,
tags and lockout devices organised.



LS-4

LS-10

31205 LS-4

Code	Ref.	Dimensions	Capacity
765101	LS-4	300 x 210 x 60 mm	Supplied without contents
765111	LS-4-D	300 x 210 x 60 mm	Supplied with: 4 padlocks (code 761108) 2 lockout hasps (code 764101) 25 labels (code 765103)

31205 LS-10

Code	Ref.	Dimensions	Capacity
765102	LS-10	486 x 300 x 60 mm	Supplied without contents
765112	LS-10-D	486 x 300 x 60 mm	Supplied with: 10 padlocks (code 761108) 3 lockout hasps (code 764101) 25 labels (code 765103)

31301 Electrical hazard

Code	Ref.	Dimensions
720100	AE-10S	105 mm
720110	AE-14S	148 mm
720120	AE-21S	210 mm
720130	AE-29S	297 mm

Triangle with screen-printed lightning bolt, black border and yellow background.

UNE-EN ISO 7010



31301 High voltage

Code	Ref.	Dimensions
720140	CE-10S	105 mm
720150	CE-14S	148 mm
720160	CE-21S	210 mm
720170	CE-29S	297 mm

Triangle with screen-printed lightning bolt, black border and yellow background. Text: "HIGH VOLTAGE DANGER OF DEATH".

UNE-EN ISO 7010



31301 Return voltage

Code	Ref.	Dimensions
720180	CR-10S	105 mm
720190	CR-14S	148 mm
720200	CR-21S	210 mm
720210	CR-29S	297 mm

Triangle with screen-printed lightning bolt, black border and yellow background. Text: "RETURN VOLTAGE DANGER OF DEATH".

UNE-EN ISO 7010



31301 Manoeuvring Forbidden

Code	Ref.	Dimensions
720220	PM-10S	105 mm
720230	PM-21S	210 mm

Circular sign indicating manoeuvring prohibition.

UNE-EN ISO 7010



31302 Electrical hazard

Code	Ref.	Dimensions
725100	AE05ADH	52 mm
725110	AE10ADH	105 mm
725115	AE21ADH	210 mm

Triangle with screen-printed lightning bolt, black border and yellow background.

UNE-EN ISO 7010



31302 Electrical hazard 230 V

Code	Ref.	Dimensions
725120	VT230V55	52 mm
725130	VT230V10	105 mm

Triangle with lightning bolt and 230 V, screen-printed, black border and yellow background.

UNE-EN ISO 7010



31302 Electrical hazard 400 V

Code	Ref.	Dimensions
725140	VT400V55	52 mm
725150	VT400V10	105 mm

Triangle with lightning bolt and 400 V, screen-printed, black border and yellow background.

UNE-EN ISO 7010



31302 Earthing

Code	Ref.	Dimensions
725155	TT05ADH	52 mm
725160	TT10ADH	105 mm

Triangle with earthing symbol, screen-printed, black border and yellow background.

UNE-EN ISO 7010



31302 Photovoltaic installation

Code	Ref.	Dimensions
725170	IF10ADH	105 mm

Screen-printed triangle with photovoltaic identification symbol, black outline and yellow background.

UNE-EN ISO 7010



31302 Risk electric / hybrid car

Code	Ref.	Dimensions
725010	SA-HEV	280 x 210 mm

Self-adhesive label for placement on the windows and windshields of damaged electric and hybrid vehicles.

UNE-EN ISO 7010



Prohibition of manoeuvre

31302 Type A signs

Code	Ref.	Dimensions
725180	PC120A	85 x 120 mm

Rectangular self-adhesive signs, printed on one side.
Dimensions: 85 x 120 mm.

UNE-EN ISO 7010



31303 Type B signs

Code	Ref.	Dimensions
730180	PC200B	150 x 200 mm

Rectangular PVC signs, printed on one side.
Dimensions: 150 x 200 mm,
1 mm thick.

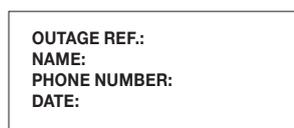
UNE-EN ISO 7010

31302 Neutral identification label

Code	Ref.	Dimensions
725185	EN50A	120 x 50 mm

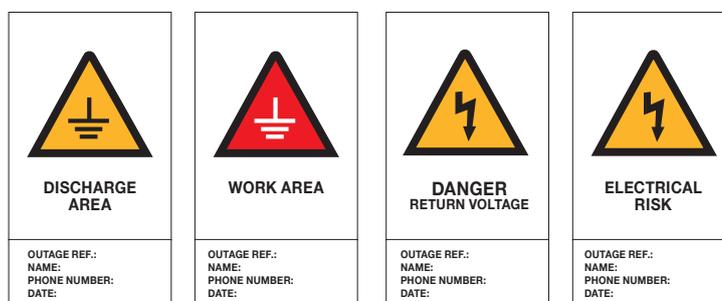
Rectangular adhesive signs, printed on one side.
Dimensions: 120 x 50 mm.

UNE-EN ISO 7010



Warning signals

The rectangular warning signs may be either Type A or Type B, depending on the installation to be signposted and its location.



31302 Type A signs

Rectangular adhesive signs, printed on one side, measuring 85 x 120 mm.

UNE-EN ISO 7010

Code	Ref.	Description
725181	ZD120A	Discharge area
725182	ZT120A	Work area
725183	PTR120A	Return voltage hazard
725184	RE120A	Electrical risk

31303 Type B signs

Rectangular PVC signs, printed on one side, measuring 150 x 200 mm with a thickness of 1 mm.

UNE-EN ISO 7010

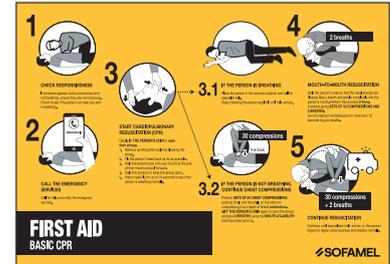
Code	Ref.	Description
730181	ZD200B	Discharge area
730182	ZT200B	Work area
730183	PTR200B	Return voltage hazard
730184	RE200B	Electrical risk

31303 First aid

Sofamel

Code	Ref.	Language	Dimensions
730100	PA-42P	Spanish	297 x 420 mm
730101	PA-42P	English	297 x 420 mm
730102	PA-42P	French	297 x 420 mm
730110	PA-29P	Spanish	210 x 297 mm
730111	PA-29P	English	210 x 297 mm
730112	PA-29P	French	210 x 297 mm

UNE-EN ISO 7010



Endesa

Code	Ref.	Language	Dimensions
730103	PA-EN	Spanish	420 x 297 mm

UNE-EN ISO 7010



Iberdrola

Code	Ref.	Language	Dimensions
730104	PA-ID	Spanish	420 x 297 mm

UNE-EN ISO 7010



31303 Prerequisites

Code	Ref.	Language	Dimensions
730120	RTE-42P	Spanish	297 x 420 mm
730121	RTE-42P	English	297 x 420 mm
730122	RTE-42P	French	297 x 420 mm
730130	RTE-29P	Spanish	210 x 297 mm
730131	RTE-29P	English	210 x 297 mm
730132	RTE-29P	French	210 x 297 mm

UNE-EN ISO 7010

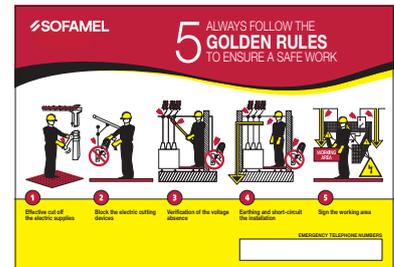


31303 Five golden rules

Sofamel

Code	Ref.	Language	Dimensions
730140	CRO-42P	Spanish	420 x 297 mm
730144	CRO-42P	English	420 x 297 mm
730146	CRO-42P	French	420 x 297 mm

UNE-EN ISO 7010



Endesa

Code	Ref.	Language	Dimensions
730143	CRO-EN	Spanish	420 x 297 mm

UNE-EN ISO 7010

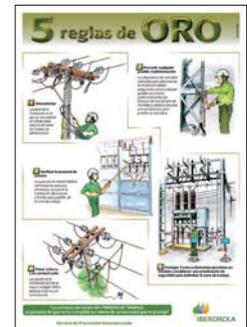


Iberdrola

Code	Ref.	Language	Dimensions
730141	CRO-IB	Spanish	297 x 420 mm

Printed on cardstock.

UNE-EN ISO 7010



31303 Five golden rules for electric / hybrid vehicles

Code	Ref.	Language	Dimensions
730003	CRO-HEV	Spanish	297 x 420 mm
730003I	CRO-HEV	English	297 x 420 mm
730003F	CRO-HEV	French	297 x 420 mm

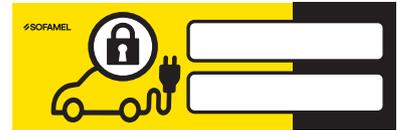
UNE-EN ISO 7010



31303 For electric / hybrid vehicles

Code	Ref.	Dimensions
730001	CP-HEV	450 x 150 mm

UNE-EN ISO 7010



31303 Signal for electric / hybrid car risk post

Code	Ref.	Dimensions
730002	SS-HEV	450 x 150 mm

UNE-EN ISO 7010



31304 High voltage

Code	Ref.	Dimensions
735100	CE-14PCI	148 mm
735110	CE-21PCI	210 mm

Triangle with lightning bolt screen-printed, black border and yellow background. Text: "HIGH VOLTAGE DANGER OF DEATH".

UNE-EN ISO 7010



31305 Sign tape

For underground cable signalling. Made of 150 mm wide yellow PVC. Supplied in 500 m rolls. Text: "WARNING! ELECTRIC CABLES UNDERGROUND".

Code	Ref.	Marking	Dimensions
740100	CCS-01AM	Neutral	150 mm x 500 m
740110	CCS-01AM/IB	Iberdrola	150 mm x 500 m
740140	CCS-01AM/UF	Fenosa	150 mm x 500 m
740153	CCS-01AM/END	Endesa	150 mm x 500 m



UNE-EN ISO 7010

31305 ST-62A

Work area delimitation tape

25 m work area signalling tape reel. Please enquire for other lengths.

Code	Ref.
740180	ST-62A

UNE-EN ISO 7010



Beacon tapes

Tapes for purposes other than work area delimitation. Suitable for locations where access cannot be restricted but there is a specific work zone to mark. These tapes do not replace official work area cordons. Made from 80 mm wide polyethylene laminate and printed on both sides with yellow/black and white/red stripes.



31305 ST-63

Beacon tapes

Red and white polyethylene beacon tape. Rolls 250 m long x 8 cm wide.

Code	Ref.	Colour
740160	ST-63	Red and white

UNE-EN ISO 7010



31305 ST-64

Beacon tapes

Black and yellow polyethylene beacon tape. Rolls 250 m long x 8 cm wide.

Code	Ref.	Colour
740170	ST-64	Black and yellow

UNE-EN ISO 7010



31306 Polyethylene chain

High-strength red and white signalling chain. 25 m roll.

Code	Ref.	Dimensions
745110	SP-52A	29 x 52 x 7,5 mm
745100	SP-35A	20 x 35 x 5 mm



31306 SP-01A

Chain support

Code	Ref.	Model	Height	Ø	Weight
745140	SP-01A	With base	1 m	60 mm	10 kg



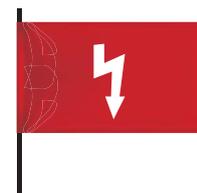
31306 ST-70

Signs flags

Code	Ref.	Dimensions
750100	ST-70	60 x 35 cm

Red pennant with lightning bolt.

UNE-EN ISO 7010



31306 ST-71

Banner

Code	Ref.	Dimensiones
750110	ST-71	60 x 35 cm

Red banner with lightning bolt.

UNE-EN ISO 7010



31306 ST-72

Hangings signs

Code	Ref.	Length
750120	ST-72	1.20 m



UNE-EN ISO 7010

31306 ST-73

Hangings signs

Code	Ref.	Length
750130	ST-73	1.20 m



UNE-EN ISO 7010

31306 ST-74

Hangings signs

Code	Ref.	Length
750140	ST-74	1.20 m



UNE-EN ISO 7010

31306 ST-75

Hangings signs

Code	Ref.	Length
750150	ST-75	1.20 m



UNE-EN ISO 7010

31306 VS-80

Extending barriers

Iron extending barrier with 3.5 m reflective band.

Code	Ref.
755100	VS-80



31307 SAE-400

Beacon for cable

Daytime marker beacon for overhead line installations, designed to warn aircraft of the presence of aerial conductors and prevent potential collisions. Made from fibreglass-reinforced polyethylene, it offers high resistance to ultraviolet (UV) radiation and extreme weather conditions. The beacon has an aerodynamic profile and comes with mounting hardware for quick and secure installation and adjustment. Suitable for use on live conductors, earth wires, and fibre optic cables.

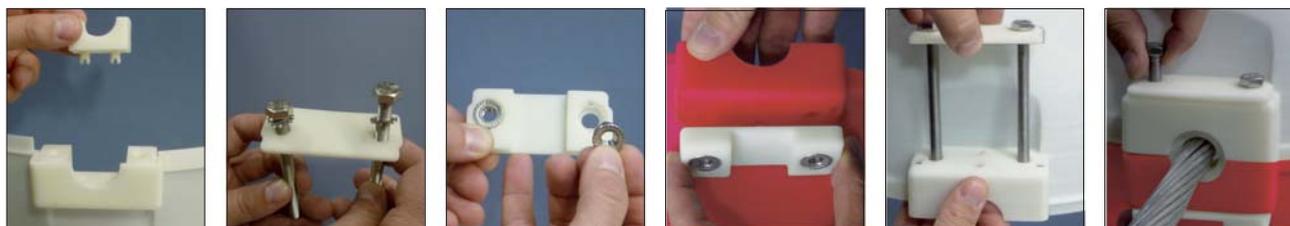
External diameter: 400 mm.

For cables with diameters from 9 to 30 mm.

Available colours: RED-WHITE / RED-RED.



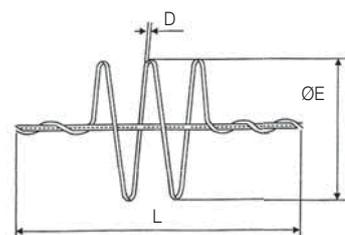
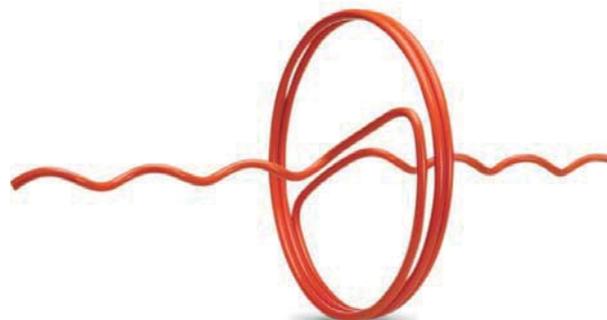
Code	Ref.	Ø	Weight
590100	SAE-400	400 mm	2.5 kg



31401 SPD

Bird anti-collision devices

Double-fix spiral made of orange PVC, used to mark overhead lines in migratory bird flight paths. UV-resistant.



Code	Ref.	UNE type	Cable diameter		ØE (mm)	L (mm)	D (mm)
			Min. (mm)	Max. (mm)			
591120	SPD-7,00/9,50	LA-30	7.00	9.50	350	1000	12
		LA-40					
		LA-56					
591125	SPD-9,51/13,40	LA-78	9.51	13.40			
		LA-80					
591130	SPD-13,41/17,50	LA-110	13.41	17.50			
		LA-145					
591135	SPD-17,51/21,80	LA-180	17.51	21.80			
		LA-240					
		LA-280					
591140	SPD-42-7/9,5	LA-30	7.00	9.50	420		
		LA-40					
		LA-56					
591145	SPD-42-9,51/13,40	LA-78	9.51	13.40			
		LA-80					
591150	SPD-42-13,41/17,50	LA-110	13.41	17.50			
		LA-145					
591155	SPD-42-17,51/21,80	LA-180	17.51	21.80			
		LA-240					
		LA-280					

30701 BEC-5

Compact tool bag without flap

Content:

Code	Description
410005	Insulated universal plier 180 mm
410046	Insulated flathead screwdriver 3 x 100 mm
410047	Insulated flathead screwdriver 4 x 100 mm
410051	Insulated "Phillips" screwdriver 1 x 80 mm
316000	TS-50 scissors

Insulated tools 1000 V
(According to EN 60900, IEC 900 VDE 0682-201)



Code	Ref.	Flap	Dimensions
600171	BEC-5 tool bag with equipment	X	180x270x50 mm
600170	BEC-5-V tool bag without equipment		

30701 BEC-6

Compact tool bag with flap

Content:

Code	Description
410005	Insulated universal plier 180 mm
410046	Insulated flathead screwdriver 3 x 100 mm
410047	Insulated flathead screwdriver 4 x 100 mm
410051	Insulated "Phillips" screwdriver 1 x 80 mm
316000	TS-50 scissors

Insulated tools 1000 V
(According to EN 60900, IEC 900 VDE 0682-201)



Code	Ref.	Flap	Dimensions
600176	BEC-6 tool bag with equipment	√	180x270x50 mm
600174	BEC-6-V tool bag without equipment		

30121 KBT-1000/19

Compact electrician's kit 1000 V

Complete insulated tool kit for live working up to 1000 V, compliant with EN 60900 and IEC 900 / VDE 0682-201 standards.

Includes 19 tools, comprising pliers, screwdrivers, spanners and a multimeter, supplied in an OHB-350 organiser case with individual pockets for safe, orderly storage.

Designed for electrical and maintenance professionals, it ensures maximum safety, durability and ergonomic performance for all types of low-voltage work.



Content:

Code	Description
410005	Insulated universal plier 180 mm
410015	Insulated needle nose plier 200 mm
410025	Insulated wire-cutting plier 180 mm
410115	Insulated knife 190 mm
410046	Insulated flathead screwdriver 3 x 100 mm
410047	Insulated flathead screwdriver 4 x 100 mm
410048	Insulated flathead screwdriver 5.5 x 125 mm
410050	Insulated "Phillips" screwdriver 0 x 60 mm
410051	Insulated "Phillips" screwdriver 1 x 80 mm
410052	Insulated "Phillips" screwdriver 2 x 100 mm
410096	Insulated open-ended spanner 10 mm
410203	Insulated open-ended spanner 12 mm
410097	Insulated open-ended spanner 13 mm
410098	Insulated open-ended spanner 14 mm
410100	Insulated open-ended spanner 17 mm
410101	Insulated open-ended spanner 19 mm
410105	Insulated wire-cutting plier 230 mm
635360	CTL-1000 multimeter
600162	OHB-350 tool organiser case with pockets

Code	Ref.	Dimensions
410200	KBT-1000/19	200x350x50 mm
600162	OHB-350 case without equipment	



30121 QUICKFIT-15 TC

Insulated tool case

The QUICKFIT-15 TC kit is a set of insulated tools certified for electrical work up to 1000 V, compliant with IEC 60900 standards. It is designed to provide safety and efficiency for maintenance and assembly tasks in electrical environments. The kit includes a selection of wrenches, sockets and extensions designed to facilitate access to connections and fasteners in confined spaces. It is supplied in a high-strength rigid case with pre-cut technical foam for proper organisation and protection of the tools.

Content:

T-handle insulated socket wrench for 3/8" sockets – Ref. LVT-210

Dimensions: 158 x 210 mm

Material: chrome vanadium steel with PP/TPR safety insulation.

Insulated socket wrench for 3/8" sockets – Ref. LC-3/8

Dimensions: 38 x 61 x 198 mm

Ratchet mechanism for working in confined spaces.

Insulated extensions for 3/8" ratchet – Ref. EL-3/8

Lengths: 142 mm and 267 mm (codes 125 and 300)

Facilitates access to hard-to-reach areas.

3/8" insulated hex/socket set – Ref. 410085

Sizes: 8, 10, 13, 14, 17 and 19 mm

Dielectric insulation to prevent electrical arcs.

3/8" insulated Allen sockets – Ref. LVA-4, LVA-5, LVA-6 and LVA-8

Sizes: 4, 5, 6 and 8 mm

Designed for electrical systems up to 1000 V.



Code	Ref.
410235	QUICKFIT-15 TC

Insulated tools 1000 V

(According to EN 60900, IEC 900 VDE 0682-201)

30121 KT-1000/37

Kit de herramientas aisladas 1000 V

Comprehensive insulated tool kit for electrical work up to 1000 V, compliant with EN 60900 and IEC 900 / VDE 0682-201 standards.

Includes 37 professional tools, comprising pliers, screwdrivers, spanners, socket wrenches and accessories, supplied in a rigid MAF-430 case with front opening and organiser trays for easy access and orderly storage of tools. Ideal for low-voltage maintenance and assembly tasks, providing safety, durability and comfort for daily work.



Content:

Code Description

410005	Insulated universal plier 180 mm		
410015	Insulated needle nose plier 200 mm		
410025	Insulated wire-cutting plier 180 mm		
410115	Insulated knife 190 mm		
410046	Insulated flathead screwdriver 3 x 100 mm		
410047	Insulated flathead screwdriver 4 x 100 mm		
410048	Insulated flathead screwdriver 5.5 x 125 mm		
410049	Insulated flathead screwdriver 8 x 175 mm		
410050	Insulated "Phillips" screwdriver 0 x 60 mm		
410051	Insulated "Phillips" screwdriver 1 x 80 mm		
410052	Insulated "Phillips" screwdriver 2 x 100 mm		
410053	Insulated "Phillips" screwdriver 3 x 150 mm		
410056	Insulated 4 mm hex key	410096	Insulated open-ended spanner 10 mm
410057	Insulated 5 mm hex key	410203	Insulated open-ended spanner 12 mm
410058	Insulated 6 mm hex key	410097	Insulated open-ended spanner 13 mm
410059	Insulated 8 mm hex key	410098	Insulated open-ended spanner 14 mm
410060	Insulated 9 mm hex key	410100	Insulated open-ended spanner 17 mm
410061	Insulated 10 mm hex key	410101	Insulated open-ended spanner 19 mm
410065	Ratchet wrench 3/8"	410105	Insulated wire-cutting plier 230 mm
410075	Insulated long extension 3/8" 300 mm	600161	Small front-opening tool case MAF-430
410086	Insulated 8 mm socket spanner 3/8"		
410088	Insulated 10 mm socket spanner 3/8"		
410083	Insulated 11 mm socket spanner 3/8"		
410001	Insulated 12 mm socket spanner 3/8"		
410089	Insulated 13 mm socket spanner 3/8"		
410090	Insulated 14 mm socket spanner 3/8"		
410093	Insulated 19 mm socket spanner 3/8"		
410094	Insulated 17 mm socket spanner 3/8"		



Code	Ref.	Dimensions
410220	KT-1000/37	300x430x200 mm
600161	MAF-430 case without tools	





SOFAMEL

30121 KTS-1000/56

Complete electrician's kit 1000 V

Complete insulated tool and personal protective equipment kit for electrical work up to 1000 V, compliant with EN 60900 and IEC 900 / VDE 0682-201 standards.

Includes 56 items, comprising insulated tools, measuring instruments, dielectric gloves, insulating mat, and safety accessories, all supplied in a high-strength BKE-1680D M transport bag.

Specifically designed for emergency services, firefighters, and electrical intervention teams, providing a comprehensive and safe solution for low-voltage operations.



Content:

Code Description

- 410005 Insulated universal plier 180 mm
- 410015 Insulated needle nose plier 200 mm
- 410025 Insulated wire-cutting plier 160 mm
- 410035 Insulated knife 190 mm
- 410046 Insulated flathead screwdriver 3 x 100 mm
- 410047 Insulated flathead screwdriver 4 x 100 mm
- 410048 Insulated flathead screwdriver 5.5 x 125 mm
- 410049 Insulated flathead screwdriver 8 x 175 mm
- 410051 Insulated "Phillips" screwdriver 1 x 80 mm
- 410052 Insulated "Phillips" screwdriver 2 x 100 mm
- 410053 Insulated "Phillips" screwdriver 3 x 150 mm
- 410105 Insulated wire-cutting plier 230 mm
- 410072 Insulated 3 mm Allen key
- 410073 Insulated 4 mm Allen key
- 410074 Insulated 6 mm Allen key
- 410081 Insulated adjustable spanner 250 mm
- 410082 Insulated pliers wrench 250 mm
- 410065 Ratchet wrench 3/8"
- 410075 Insulated long extension 3/8" 300 mm
- 410086 Insulated 8 mm socket spanner 3/8"
- 410088 Insulated 10 mm socket spanner 3/8"
- 410001 Insulated 12 mm socket spanner 3/8"
- 410089 Insulated 13 mm socket spanner 3/8"
- 410090 Insulated 14 mm socket spanner 3/8"
- 410093 Insulated 19 mm socket spanner 3/8"
- 410094 Insulated 17 mm socket spanner 3/8"
- 410201 Insulated open-ended spanner 8 mm
- 410096 Insulated open-ended spanner 10 mm
- 410202 Insulated open-ended spanner 11 mm
- 410203 Insulated open-ended spanner 12 mm
- 410097 Insulated open-ended spanner 13 mm
- 410098 Insulated open-ended spanner 14 mm
- 410100 Insulated open-ended spanner 17 mm
- 410101 Insulated open-ended spanner 19 mm
- 565099 White helmet SP-181
- 570120 Face shield SP-182

- 600151 Holdall bag BA-0.6 x 10
- 585001 Insulating blanket class 0 MAO-1010 1 x 1 m
- 595114 6 Insulated clamps for blankets 50 mm 1 kV AC / 1.5 kV DC
- 595200 5 Insulating cable caps class 0 6-16 mm²
- 530160 Dielectric glove SG-50 T10
- 540114 Leather over glove SG-C
- 635360 Multimeter CTL-1000
- 595010 Black insulating tape 10 m 0.15 mm PVC
- 595030 Yellow/green insulating tape 10 m 0.15 mm PVC
- 595040 Blue insulating tape 10 m 0.15 mm PVC
- 595060 Grey insulating tape 10 m 0.15 mm PVC
- 595070 Brown insulating tape 10 m 0.15 mm PVC
- 595080 Red insulating tape 10 m 0.15 mm PVC
- 600160 Bag for insulated tools and electrical kits BKE-1680D M

Code	Ref.	Dimensions
410210	KTS-1000/56	
600160	BKE-1680D M bag without tools	280x430x250 mm



30102 PH

Insulated "Phillips" screwdriver

Code	Ref.	 mm	 mm
410050	PH0x60	0	60
410051	PH1x80	1	80
410052	PH2x100	2	100
410053	PH3x150	3	150

 1000 V / 22 - IEC 60900



30104 PL

Insulated flathead screwdriver

Code	Ref.	 mm	 mm	 mm
410041	PL2.5x75	2.5	0.4	75
410046	PL3x100	3	0.5	100
410042	PL3.5x100	3.5	0.6	100
410047	PL4x100	4	0.8	100
410048	PL5.5x125	5.5	1	125
410043	PL6.5x150	6.5	1.2	150
410049	PL8x175	8	1.2	175

 1000 V / 22 - IEC 60900



30103 POZ

Insulated "Pozidriv" screwdriver

Code	Ref.	 mm	 mm
410110	POZ-0X60	0	60
410111	POZ-1X75	1	80
410112	POZ-2X100	2	100
410113	POZ-3X150	3	150

 1000 V / 22 - IEC 60900



30107 TX

Insulated "TORX" screwdriver

Código	Ref.	 mm	 mm
410130	TX-10X80	10	60
410131	TX-15X80	15	100
410132	TX-20X100	20	100
410133	TX-25X100	25	100
410134	TX-30X110	30	100

 1000 V / 22 - IEC 60900



30111 Screwdriver set

Insulated flathead and "Phillips" screwdrivers

Content:

Flathead Screwdrivers:

- 410046 Insulated flathead screwdriver PL3x100 mm
- 410047 Insulated flathead screwdriver PL4x100 mm
- 410048 Insulated flathead screwdriver PL5,5x125 mm
- 410049 Insulated flathead screwdriver PL8x175 mm

"Phillips" Screwdrivers:

- 410050 Insulated "Phillips" screwdriver PH0x3x60 mm
- 410051 Insulated "Phillips" screwdriver PH1x4,5x80 mm
- 410052 Insulated "Phillips" screwdriver PH2x6x100 mm
- 410053 Insulated "Phillips" screwdriver PH3x8x150 mm

Code	Ref.
410045	Set of insulated flathead and "Phillips" screwdrivers

 1000 V / 22 - IEC 60900



30110 A-PFC-200

Insulated bent needle nose pliers - 200 mm

Code	Ref.	Capacity	Length
410021	Plier A-PFC-200	Ø 3.2 mm Ø 2.2 mm	200 mm

- For gripping, bending, cutting, and manipulating wires or cables in confined or hard-to-reach spaces.
- Its curved tip design allows for access to difficult angles and provides greater precision when working with small or delicate components.

 1000 V / 22 - IEC 60900



30110 AU

Insulated universal pliers

Code	Ref.	Length
410005	Plier AU-180	180 mm
410010	Plier AU-200	200 mm

- With gripping zones for flat and round materials, very versatile.
- For cutting soft and hard wire.
- Head with extra flat shape and laterally rounded.
- Made of tempered steel and chrome finish.

 1000 V / 22 - IEC 60900



30110 AC-160

Insulated wire-cutting pliers - 160 mm

Code	Ref.	Capacity	Length
410026	Plier AC-160	Ø 1.6 mm	160 mm

- To cut cable, nails, metal mesh and plates.
- Suitable for cutting copper and aluminum cables.
- Its compact design allows for use in tight spaces.

 1000 V / 22 - IEC 60900



30110 AC-200

Insulated wire-cutting pliers - 200 mm

Code	Ref.	Capacity	Length
410025	Plier AC-200	Ø 1.6 mm	200 mm

- To cut cable, nails, metal mesh and plates.
- Suitable for cutting copper and aluminum cables.
- Its compact design allows for use in tight spaces.

 1000 V / 22 - IEC 60900



30110 PF

Insulated needle nose pliers - 200 mm

Code	Ref.	Length
410015	Plier PF-200	200 mm



- Stretched gripping surface.
- For holding cables, thin parts or small components size.
- To access narrow places that are difficult to access.

 1000 V / 22 - IEC 60900

30110 AC-230

Insulated wire-cutting pliers - 230 mm

Code	Ref.	Length
410105	Plier AC-230	230 mm



- Suitable for cutting copper and aluminum cables.
- Ergonomic bi-material handles for a comfortable grip.
- It allows repetitive operations to be carried out, without causing fatigue.

 1000 V / 22 - IEC 60900

30110 AP-180

New

Insulated wire stripper

Code	Ref.	Length	Stripping capacity
410032	AP-180	180 mm	Ø 6 mm



- Insulated wire stripper made of chrome-vanadium steel with satin finish.
- According to DIN ISO 5743 standard.
- Designed to strip cables up to Ø 6 mm.

 1000 V / 22 - IEC 60900

30117 LAJ

Adjustable spanner - 250 mm

Code	Ref.	Length
410081	LAJ-250	250 mm



- Excellent performance and long service life.
- It has a manual adjustment screw for a fast and precise adjustment of the width of the mouth.
- For fixing elements of all sizes, thanks to its mobile jaw.

 1000 V / 22 - IEC 60900

30110 APL

Pliers wrench - 250 mm

Code	Ref.	Length
410082	APL-250	250 mm



- Large opening capacity, to hold rods/tubes.
- Easy access to nuts and connections.
- High resistance to torsion and bending.

 1000 V / 22 - IEC 60900

30113 CA-180

Insulated flat-blade knife - 180 mm

Code	Ref.	Length
410035	Knife CA-180	180 mm

- Blade specially adapted to cut the outer sheath of cables without damaging the inner conductors.
- With hook blade.
- Double edged blade.
- Comfortable dual component handle.

 1000 V / 22 - IEC 60900



30113 CA-190

Insulated knife - 190 mm

Code	Ref.	Length
410115	Knife CA-190	190 mm

- Suitable for cutting cables of various sizes and types without damaging the internal wires.
- Ideal for use in electrical panels and other installations where active circuits are handled.
- The handle is ergonomically designed for a comfortable grip, reducing fatigue during prolonged use.
- The knife blade is durable and sharp, allowing for precise and long-lasting cuts. It is partially coated and the handle is insulated, which prevents the risk of accidental short circuits and enhances safety while working with electrical components.

 1000 V / 22 - IEC 60900



30117 LF

Insulated open-ended spanner

Code	Ref.	Spanner	Length
410201	Llave LF-8	8	80 mm
410096	Llave LF-10	10	100 mm
410202	Llave LF-11	11	110 mm
410203	Llave LF-12	12	120 mm
410097	Llave LF-13	13	130 mm
410098	Llave LF-14	14	140 mm
410099	Llave LF-16	16	160 mm
410100	Llave LF-17	17	170 mm
410101	Llave LF-19	19	190 mm



- The LF insulated open-end wrenches are essential tools for professionals working in the electrical sector, offering safety and efficiency in various applications related to the installation and maintenance of electrical systems.
- Angled head to facilitate tightening.
- Material: hardened steel.
- Insulation material: PP/TPR.

1000 V / 22 - IEC 60900

30117 Set of insulated open-ended spanners

Insulated fixed wrench set

Code	Ref.
410095	Set of insulated open-ended spanners

Contents:

- 8 mm open-ended spanner - 80 mm long.
- 10 mm open-ended spanner - 100 mm long.
- 11 mm open-ended spanner - 110 mm long.
- 12 mm open-ended spanner - 120 mm long.
- 13 mm open-ended spanner - 130 mm long.
- 14 mm open-ended spanner - 140 mm long.
- 15 mm open-ended spanner - 150 mm long.
- 17 mm open-ended spanner - 170 mm long.
- 19 mm open-ended spanner - 190 mm long.

1000 V / 22 - IEC 60900



30115 T HEX

Insulated T shaped hex key

Code	Ref.	Key	Dimensions
410056	Llave T HEX - 4	4	90x200 mm
410057	Llave T HEX - 5	5	
410058	Llave T HEX - 6	6	
410059	Llave T HEX - 8	8	
410060	Llave T HEX - 9	9	
410061	Llave T HEX - 10	10	



- T-handle HEX wrenches are designed for tasks that require efficient and comfortable force application, making them ideal for jobs that need precise torque application.
- Material: hardened steel.
- Insulation material: PP/TPR.

1000 V / 22 - IEC 60900

30111 Kit LHT

Set of insulated T shaped hex keys

Código	Ref.
410055	Set of insulated T shaped hex keys



Contents:

410056 4 mm T shaped hex key - 90 x 200 mm 410059 8 mm T shaped hex key - 90 x 200 mm
 410057 5 mm T shaped hex key - 90 x 200 mm 410060 9 mm T shaped hex key - 90 x 200 mm
 410058 6 mm T shaped hex key - 90 x 200 mm 410061 10 mm T shaped hex key - 90 x 200 mm

1000 V / 22 - IEC 60900

30117 LA75

New

Insulated ring spanner

Code	Ref.	Ring
30120000	Insulated offset ring spanner 1000 V - 75° ring, 10 mm	10 mm
30120001	Insulated offset ring spanner 1000 V - 75° ring, 13 mm	13 mm



- Offset ring spanner - 75° angled, made of chrome-vanadium steel with insulation compliant with IEC 60900 for live work up to 1000 V AC / 1500 V DC.
- Its offset design allows easy access to screws or nuts in confined spaces. Features a 12-point ring for a secure grip and a satin non-slip finish.
- Ideal for electrical maintenance, switchboards, renewable energy, and industrial installations.

1000 V / 22 - IEC 60900

30119 LA90

L-shaped hex key

Code	Ref.	Length
410072	Insulated key LA90-3	3 mm
410073	Insulated key LA90-4	4 mm
410074	Insulated key LA90-6	6 mm
30119000	Insulated key LA90-8	8 mm
30119001	Insulated key LA90-10	10 mm



- Allen wrenches LA90 are used in various applications, especially where direct access to hexagonal screws is limited or uncomfortable. The 90° design allows access to screws located in tight or hard-to-reach spaces where a straight wrench would not be practical.
- Material: hardened steel.
- Insulation material: PP/TPR.

1000 V / 22 - IEC 60900

30116 EL

Insulated extension bar for 3/8" ratchet

Code	Ref.	Length
410240	Extension EL-3/8	125 mm
410075	Extension EL-3/8	300 mm



- Used to access nuts and bolts located in hard-to-reach places.
- Particularly useful in electrical panels and distribution boxes where access may be limited.
- Material: hardened steel.
- Insulation material: PP/TPR.

1000 V / 22 - IEC 60900

30115 LVT-210

Insulated T-handle wrench - 3/8" drive

Code	Ref.	Dimensions
410102	LVT-210	158x210 mm



- Ergonomic T-shaped design for better grip and force application.
- Quick-release function.
- Suitable for electrical work and use on live cables or installations.
- Material: chrome vanadium steel.
- Finish: matte chrome.

1000 V / 22 - IEC 60900

30116 LC-3/8

Insulated ratchet wrench for 3/8" ratchet

Code	Ref.	Dimensions
410065	Insulated key LC-3/8	3/8"



- Facilitates work in confined spaces where continuous back-and-forth movement is required.
- The ratchet mechanism allows for fast and efficient work by eliminating the need to constantly reposition the tool.
- The handle design provides a comfortable and secure grip, reducing fatigue during extended use.
- Material: hardened steel.
- Insulation material: PP/TPR.

1000 V / 22 - IEC 60900

30116 Set of insulated 3/8" drive sockets

Insulated female hex sockets



Code	Ref.
410085	Set of insulated 3/8" sockets Hexagon/female sockets

Contents:

Code	Ref.		mm	mm
410086	LVA-8	8	22.8	77
410088	LVA-10	10		
410083	LVA-11	11		
410001	LVA-12	12		
410089	LVA-13	13		
410090	LVA-14	14		
410094	LVA-17	17		
410093	LVA-19	19		

Insulated collar on each socket to prevent arcing.

1000 V / 22 - IEC 60900

30116 LVA

Insulated Allen sockets - 3/8" drive



Code	Ref.		mm	mm
410106	LVA-4	4	22.8	77
410107	LVA-5	5		
410108	LVA-6	6		
410109	LVA-8	8		

These tools are designed to work with electrical systems of up to 1000 V, offering additional protection against electric shocks.

- Standards: DIN 7422, DIN 3120.
- Material: chrome vanadium steel.
- Finish: matte chrome.

1000 V / 22 - IEC 60900

31501 COMPACT

Step ladder with platform and wide aluminium steps

- Cone-shaped manufacture to increase support at base.
- Polyester side rails with fibreglass reinforcement and aluminium steps with 80mm tread. Aluminium support section.
- Reinforced non-slip polypropylene platform.
- Tool tidy top tray.
- Locking spreader bars and anti-bend reinforcements on the steps.

 EN 131 - UNE-EN 50528
 UNE-EN 61478, electrical insulation tested between rungs - 30 kV

Code	Ref.	Height (mm)		Steps	Weight
		Total	Platform		
					
505100	COMPACT 1,45/0,69	1450	690	3	7
505110	COMPACT 1,70/0,92	1700	920	4	8
505120	COMPACT 1,95/1,15	1950	1150	5	9
505130	COMPACT 2,20/1,38	2200	1380	6	10
505140	COMPACT 2,45/1,61	2450	1610	7	12



31502 EF/T

Escalera de tijera de doble subida

- Rails and rungs entirely in fibreglass.
- Includes two spreader locks between the two sections of the ladder to prevent it opening up.
- 72° opening of each section in relation to ground.
- Rung marked in red as per EN-131 standard to indicate highest rung limit.

 EN 131 - UNE-EN 50528
 UNE-EN 61478, electrical insulation tested between rungs - 100 kV

Code	Ref.	Height (mm)	Width (mm)		Steps	Weight
			Ladder	Base		
						
510000	EF/T-1505	1490	400	580	2x5	9
510010	EF/T-2007	2050	400	620	2x7	12
510020	EF/T-2709	2660	400	680	2x9	15
510035	EF/T-3512	3500	400	770	2x12	19
510055	EF/T-4516	4620	400	890	2x16	29



31503 EF/S

Single-section ladder

- Rails and rungs entirely in fibreglass.
- Swivel feet as added safety element.
- Rung marked in red as per EN-131 standard to indicate highest rung limit and not for use.

 EN 131 - UNE-EN 50528
 UNE-EN 61478, electrical insulation tested between rungs - 100 kV

Code	Ref.	Height (mm)	Width (mm)	Steps	Weight
					
515000	EF/S-1505	1545	400	5	5,5
515015	EF/S-2408	2385	400	8	7
515025	EF/S-3010	2990	400	10	8,5
515035	EF/S-3512	3550	400	12	10,5
515045	EF/S-4114	4110	400	14	12
515060	EF/S-4917	4950	400	17	15
515080	EF/S-6021	6070	400	21	19



31504 EF/E

Manually extendable two-section ladder

- Rails and rungs entirely in fibreglass.
- With top wheels for ease of movement.
- The two sections can be used separately.
- Swivel feet as added safety element.
- Solid rungs for those most susceptible to wear and tear, increasing ladder's durability (first section of base part and last section of extendable part).
- Rung marked in red as per EN-131 standard to indicate highest rung limit and not for use.

 EN 131 - UNE-EN 50528
 UNE-EN 61478, electrical insulation tested between rungs - 100 kV

Code	Ref.	Height (mm)		Width (mm)	Steps	Weight
		Folded	Extended			
						
520000	EF/E-3006	1880	3000	450	2x6	14
520010	EF/E-4108	2440	4120	450	2x8	17
520020	EF/E-5010	3000	4960	450	2x10	21
520030	EF/E-6012	3560	6080	450	2x12	24
520040	EF/E-7014	4120	7200	450	2x14	27



31505 EF/C

Two-section extension ladder using a cord

- Rope-extendable two-section fibreglass ladder.
- Rails and rungs entirely in fibreglass.
- System actuated by rope and pulley to deploy the second section, for ease of use by operator.
- With top wheels for ease of movement.
- Swivel feet as added safety element.
- Solid rungs for those most susceptible to wear and tear, increasing ladder's durability (first section of base part and last section of extendable part).
- Rung marked in red as per EN-131 standard to indicate highest rung limit and not for use.

 EN 131 - UNE-EN 50528
 UNE-EN 61478, electrical insulation tested between rungs - 100 kV

Code	Ref.	Height (mm)		Width (mm)	Steps	Weight
		Folded	Extended			
						
525000	EF/C-5010	3000	4960	450	2x10	24
525010	EF/C-6012	3560	6080	450	2x12	27
525020	EF/C-7014	4120	7200	450	2x14	30
525030	EF/C-8016	4680	8320	500	2x16	40
525035	EF/C-9017	4960	8880	500	2x17	42
525045	EF/C-1019	5520	10000	500	2x19	46



31506 EF/M

Combined fibreglass ladder

- Rails and rungs entirely in fibreglass.
- Ladder with different possible applications, such as scissor, extendable in two separate sections.
- Features two locking spreader tapes between the two sections of the ladder to prevent it opening up when used in scissor format.
- With top wheels for ease of movement.
- Solid rungs for those most susceptible to wear and tear, increasing ladder's durability (first section of base part and last section of extendable part).
- Rung marked in red as per EN-131 standard to indicate highest rung limit and not for use.

 EN 131 - UNE-EN 50528
 UNE-EN 61478, electrical insulation tested between rungs - 100 kV

Code	Ref.	Height (mm)		Width (mm)		Steps	Weight
		Scissor format	Extended	Ladder	Base		
							
526000	EF/M-3006	1780	3000	450	645	2x6	15
526010	EF/M-4008	2340	4120	450	735	2x8	18
526020	EF/M-5010	2940	4960	450	825	2x10	21
526030	EF/M-6012	3500	6080	450	915	2x12	24



31507 EF/3

Step ladder with extendable section

- Rails and rungs entirely in fibreglass.
- Two-sided step ladder with third extendable section.
- The extra section can be used separately, and is fitted with a blocking system.
- Rung marked in red as per EN-131 standard to indicate highest rung limit and not for use.

 EN 131 - UNE-EN 50528
 UNE-EN 61478, electrical insulation tested between rungs - 100 kV

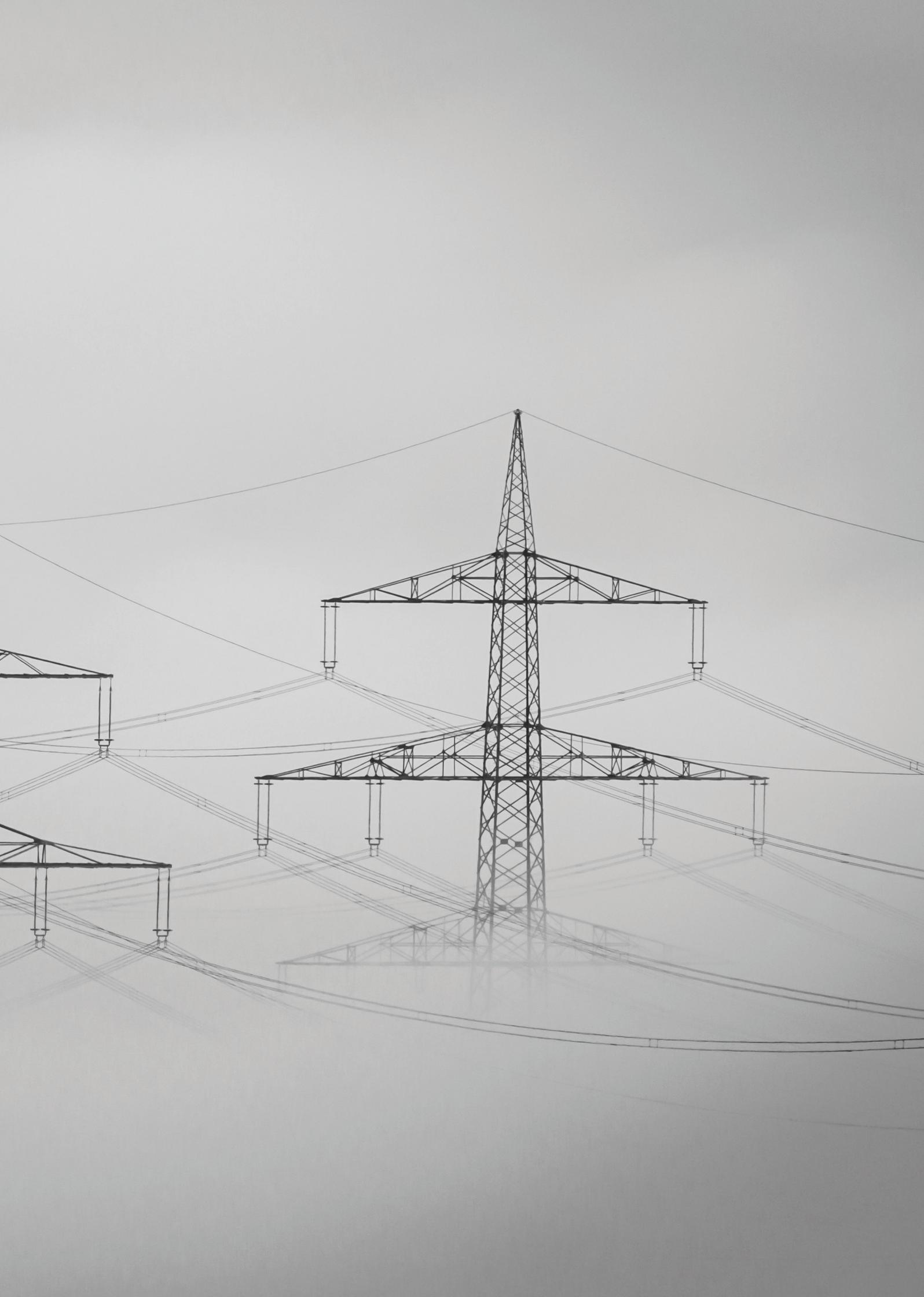
Code	Ref.	Height (mm)		Width (mm)		Steps	Weight
		Scissor format	Extended	Ladder	Base		
							
527000	EF/3-2505	1490	2395	400	650	(2x5)+5	14
527015	EF/3-3808	2330	3795	400	740	(2x8)+8	20
527025	EF/3-5010	2940	4960	400	800	(2x10)+10	24





1000 V AC / 1500 V DC
INSULATION TESTED TO: **100 kV** 
ACORDING TO UNE-EN 61478 STANDARD





Sofamel, with you, ever.



OFFICE AND WAREHOUSE
C. Thomas Alva Edison, 16-17
Pol. Industrial Plans d'Arau
08787 La Pobla de Claramunt - BCN
Spain

FACTORY AND LABORATORY
C. Thomas Alva Edison, 12-13
Pol. Industrial Plans d'Arau
08787 La Pobla de Claramunt - BCN
Spain

CUSTOMER SERVICE
T. + 34 93 808 79 80
export@sofamel.es
www.sofamel.com