

TERMINAL BLOCKS, FLEXIBLE BUSBAR, BRAIDS AND DISTRIBUTION BLOCKS



symbol description

terminal blocks



Polycarbonate body



Zinc plated Steel screws



Polyamide PA6.6 body



Chrome plated Steel screws



Polypropylene body



Brass clamp



Steatite body



Operating temperature range



Polyvinylchloride insulating sheath



Italian Institute of the Quality Mark type approval



Electrolytically Tin plated Copper interconnections



Lloyd's Register Marine type approval



Electrolytically Tin plated to avoid oxidation



Italian Naval Register type approval



Nominal voltage V



USR-CNR type approval valid for USA and CANADA



Degree of Protection IP20



CE marking



Self-extinguishing class V0 UL94



UKCA marking

example applications

terminal blocks

type
ZETApiù®

Z35T-11 uninterrupted,
main earth loop, terminal block.
Used for equipotential bonding



UNINTERRUPTED
MAIN EARTH
LOOP



Z6-10D terminal blocks
used in a control panel.

SUITABLE
FOR DIN RAIL
MOUNTING



Z16-8D and Z6-6D
mounted on DIN rails.
Used in control panels

type
ZETAmini®

ZETAmini terminal blocks
used for domestic/commercial
applications.



type
ZETAblock®

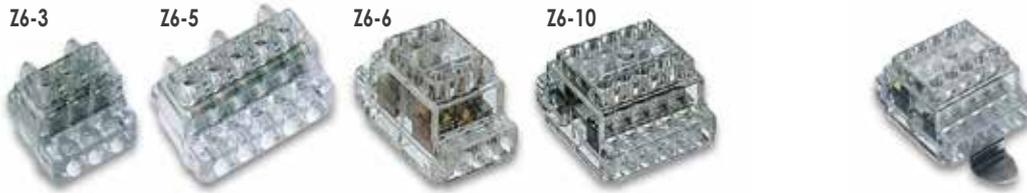
A typical application of the
Z50-DP12-160 and Z35-DP14B-125
installed in a distribution panel



Z6

SINGLE POLE TERMINAL BLOCKS

indirect clamping - nominal section 6 sqmm



type
ZETApiù®

The "Z...D" version has been designed for mounting on DIN rails



3, 5, 6 and 10 way, single pole terminal blocks for conductor section 1 to 6 sqmm.

Self contained and robust, they are quick and easy to install for both industrial and domestic use. The indirect clamping of the "ZETApiù" terminal blocks guarantees a low and stable contact resistance.

Indirect clamping eliminates damage to the conductor strands. The easy-entry receptacles also grant a fast and reliable insertion of the cable.

Connecting Capacity sqmm	Type	No. of Ways	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
(3 way) 1÷6	Z6-3	3	450	85	IP20	V-0 (UL 94)	23x23xh27,5	15,0	30
	Z6-3D						23x40xh36,5	18,5	10
(5 way) 1÷6	Z6-5	5	450	85	IP20	V-0 (UL 94)	35x23xh27,5	23,0	20
	Z6-5D						35x40xh36,5	26,5	10
(6 way) 1÷6	Z6-6	6	450	85	IP20	V-0 (UL 94)	23x43xh28,5	26,0	15
	Z6-6D						23x53xh33	31,0	10
(10 way) 1÷6	Z6-10	10	450	85	IP20	V-0 (UL 94)	35x43xh28,5	41,0	10
	Z6-10D						35x53xh33	46,0	15

D= Version with clamp for DIN rail

Technical features:

- Self-extinguishing Polycarbonate body
- Tempered Steel clamps
- Electrolytically Tin plated Copper interconnections

Z16

SINGLE POLE TERMINAL BLOCKS

indirect clamping - nominal section 16 sqmm



type
ZETApiù®



3, 4, 5, 8 and 12 way, single pole terminal blocks.

Ideal for use as an equipotential bonding connector for both industrial and domestic use.

Connecting Capacity sqmm	Type	No. of Ways	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
16	Z16-3	3	450	85	IP20	V-0 (UL 94)	38x31,3xh38	52,0	20
	Z16-3D						38x50xh44	55,5	15
16	Z16-4	4	450	85	IP20	V-0 (UL 94)	27x54xh37	50,0	15
	Z16-4D						27x58xh43	54,0	10
16	Z16-5N	5	450	85	IP20	V-0 (UL 94)	61x31,5xh38	64,5	10
	Z16-5ND						61x50xh44	68,0	4
(2 way) 16 + (6 way) 6	Z16-8	8 (2÷6)	450	85	IP20	V-0 (UL 94)	35,5x50xh36,5	50,0	15
	Z16-8D						35,5x57xh42	56,0	10
(2 way) 16 + (10 way) 6	Z16-12	12 (2÷10)	450	85	IP20	V-0 (UL 94)	104,5x32,5xh36,5	115,0	8
	Z16-12D						104,5x50xh42	125,0	5

D= Version with clamp for DIN rail

SINGLE POLE TERMINAL BLOCKS

indirect clamping - nominal section 35 sqmm

type
ZETApiù®

Z35-3



Z35-4



Z35-6



Connecting Capacity sqmm	Type	No. of Ways	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
35	Z35-3	3	450	85	IP20	V-0 (UL 94)	53x48,5xh42	110	10
	Z35-3D						53x50xh48	114	5
35	Z35-4	4	450	85	IP20	V-0 (UL 94)	37x85xh42	129	5
	Z35-4D						37x85xh48	133	5
(2 way) 35 + (4 way) 16	Z35-6	6 (2÷4)	450	85	IP20	V-0 (UL 94)	83x41xh43	130	8
	Z35-6D						83x49xh52	140	5

D= Version with clamp for DIN rail



3, 4 and 6 way, single pole terminal blocks. Ideal for use as an equipotential bonding connector for both industrial and domestic use.

SINGLE POLE TERMINAL BLOCKS

indirect clamping - for earthing applications ⚡

type
ZETApiù®

Z50-10D



Z35T-11
Z35T-11D



Z35-26D



Connecting Capacity sqmm	Type	No. of Ways	Maximum Operating Temperature °C	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
(1 way) 35 + (10 way) 6	Z35T-11	11	85	V-0 (UL 94)	58x43xh42	70	10
	Z35T-11D	(1+10)			58x53xh47	75	10
(2 way) 35 + (24 way) 10	Z35-26D	26 (2+24)	85	V-0 (UL 94)	151x52xh48	379	4
(2 way) 50 + (8 way) 25	Z50-10D	10 (2+8)	85	V-0 (UL 94)	77,5x55xh49	320	6

D= Version with clamp for DIN rail



10, 11 and 26 way, single pole terminal blocks. Ideal for use as an equipotential bonding connector for both industrial and domestic use.

CONNECTING CAPACITY OF TERMINAL BLOCKS

indirect clamping

type
ZETApiù®

Type	Nominal Section	No. of Ways x Nominal Section	Connecting Capacity of Each Way* No. of Conductors x Section	Markings
Z6-3 Z6-3D	6□	3 x 6□		   6 mm ² 450 V T 85°C  
Z6-5 Z6-5D	6□	5 x 6□	1 x 6□ R/F 1 x 4□ R/F	
Z6-6 Z6-6D	6□	6 x 6□	1÷2 x 2,5□ R/F 1÷2 x 1,5□ R/F 1÷4 x 1□ R/F	   6 mm ² 450 V T 85°C 
Z6-10 Z6-10D	6□	10 x 6□		
Z16-3 Z16-3D	16□	3 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷4 x 2,5□ R/F 1÷8 x 1,5□ R/F	   16 mm ² 450 V T 85°C  
Z16-4 Z16-4D	16□	4 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F 1÷3 x 4□ F 1÷4 x 2,5□ F 1÷8 x 1,5□ F	
Z16-5N Z16-5ND	16□	5 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷4 x 2,5□ R/F 1÷8 x 1,5□ R/F	   16 mm ² 450 V T 85°C 
Z16-8 Z16-8D	16□ / 6□	2 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷4 x 2,5□ R/F 1÷8 x 1,5□ R/F	
		6 x 6□	1 x 6□ R/F 1 x 4□ R/F 1÷2 x 2,5□ R/F 1÷2 x 1,5□ R/F 1÷4 x 1□ R/F	   16~6 mm ² 450 V T 85°C 
Z16-12	16□ / 6□	2 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F 1÷3 x 4□ F 1÷4 x 2,5□ F	
Z16-12D	16□ / 6□	10 x 6□	1 x 6□ F 1 x 4□ F 1÷2 x 2,5□ F 1÷2 x 1,5□ F 1÷4 x 1□ F	   16~6 mm ² 450 V T 85°C 

* A mixture of conductor sizes may be connected to the terminal block provided that the sum of their sections is less than the nominal section.
R = Rigid conductor F = Flexible conductor

CONNECTING CAPACITY OF TERMINAL BLOCKS

indirect clamping

type
ZETApìù®

Type	Nominal Section	No. of Ways x Nominal Section	Connecting Capacity of Each Way* No. of Conductors x Section	Markings
Z35-3 Z35-3D	35□	3 x 35□	1 x 35□ R/F 1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷5 x 6□ R/F	CE UK CA 35 mm² 450 V T 85°C
Z35-4 Z35-4D	35□	4 x 35□	1 x 35□ F 1 x 25□ F 1÷2 x 16□ F 1÷3 x 10□ F 1÷6 x 6□ F	CE UK CA 35 mm² 450 V T 85°C
Z35-6 Z35-6D	35□ / 16□	2 x 35□	1 x 35□ R/F 1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷6 x 6□ F	CE UK CA 35~16 mm² 450 V T 85°C
		4 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷5 x 2,5□ F	
Z35T-11 Z35T-11D	35□ / 6□	1 x 35□	1 x 35□ R/F 1 x 25□ R/F 1 x 16□ R/F 1 x 10□ R/F	CE UK CA 35~6 mm² T 85°C
		10 x 6□	1 x 6□ R/F 1 x 4□ R/F 1÷2 x 2,5□ R/F 1÷2 x 1,5□ R/F 1÷4 x 1□ R/F	
Z35-26D	35□ / 10□	2 x 35□	1 x 35□ R/F 1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷6 x 6□ R/F	CE UK CA 35~10 mm² T 85°C
		24 x 10□	1 x 10□ R/F 1 x 6□ R/F 1÷2 x 4□ R/F 1÷4 x 2,5□ R/F	
Z50-10D	50□ / 25□	2 x 50□	1 x 50□ R/F 1 x 35□ R/F 1÷2 x 25□ R/F 1÷4 x 16□ R/F	CE UK CA ** 50~25 mm² T 85°C
		8 x 25□	1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷6 x 6□ R/F 1÷9 x 4□ R/F	

* A mixture of conductor sizes may be connected to the terminal block provided that the sum of their sections is less than the nominal section.
R = Rigid conductor F = Flexible conductor

MARKINGS



Italian Institute of the Quality Mark
type approval



Lloyd's Register Marine
type approval



Italian Naval Register
type approval



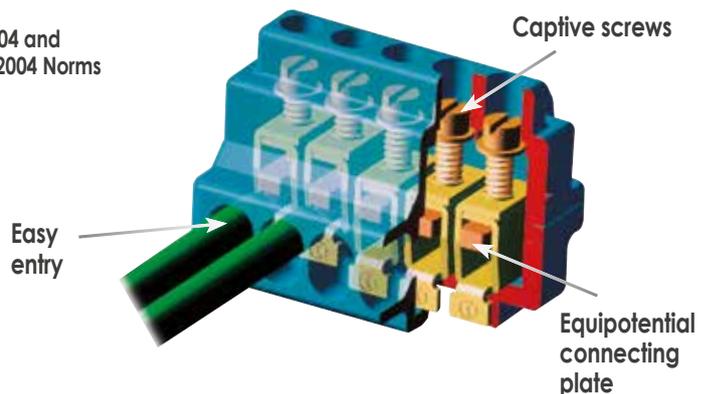
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EN60947-1: 2007+A1: 2011: 2014
and EN 60947-7-1: 2002 Norms



Conforms to:

Directive 2014/35/UE

EN 60998-1: 2004 and
EN 60998-2-1: 2004 Norms



indirect clamping

type
ZETAblock®

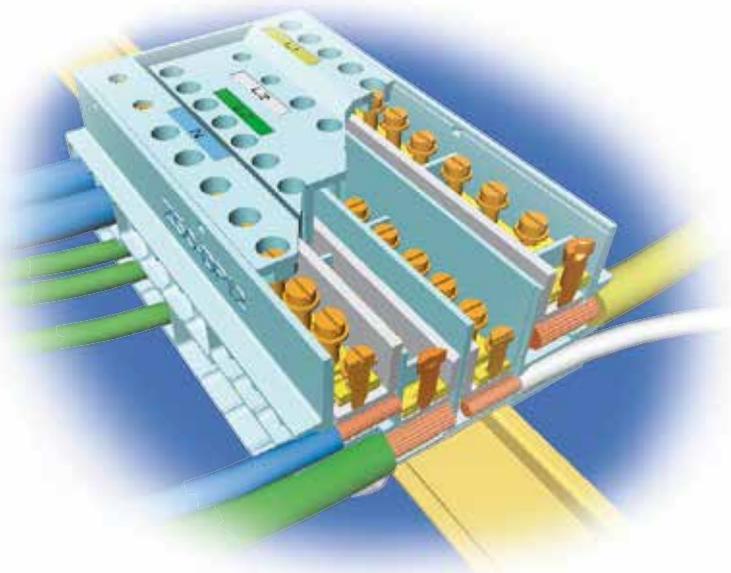


Type	No. of poles	No. of Ways per pole	Nominal CSA for each pole sqmm	Maximum operating voltage (Ui)	Impulse voltage (Uimp)	Maximum operating current (In)	Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Self Extinguishing Specification	Dimensions mm	Weight g	Qty
Z25-DP7-100	4	7 (2+5)	(2 way) 25 + (5 way) 6	800 V	8 kV	100 A	3 kA	18 kA	V-0 (UL 94)	70x84xh45	290	2
Z35-DP14-125	4	14 (2+2+10)	(2 way) 35 + (2 way) 16 + (10 way) 6	800 V	8 kV	125 A	4,2 kA	18 kA	V-0 (UL 94)	137x83xh46	700	1
Z35-DP14B-125	2	14 (2+2+10)	(2 way) 35 + (2 way) 16 + (10 way) 6	800 V	8 kV	125 A	4,2 kA	18 kA	V-0 (UL 94)	137x44xh46	360	2
Z50-DP12-160	4	12 (2+4+6)	(2 way) 50 + (4 way) 25 + (6 way) 16	800 V	8 kV	160 A	6 kA	18 kA	V-0 (UL 94)	150x84xh48	780	1

100, 125 and 160A, 2-4 pole distribution blocks with 7, 14 and 12 ways per pole respectively. Accepting a wide cable CSA range (1 - 50 sqmm) and of compact size, Zetablocks are ideal for control cabinets and distribution panels. The lateral arrangement of terminals on upper and lower faces (Z35-DP14B one face only), simplifies connection and promotes tidy, homogeneous cable routing to assist subsequent wiring operations. Easy entry apertures provide quick, effective cable insertion while the indirect clamping feature eliminates damage to cable strands and assures a low, stable contact resistance.

Technical features:

- Self extinguishing antishock Polycarbonate body
- Tempered Steel captive clamping screws and plates
- Electrolytically Tin plated Copper interconnectors



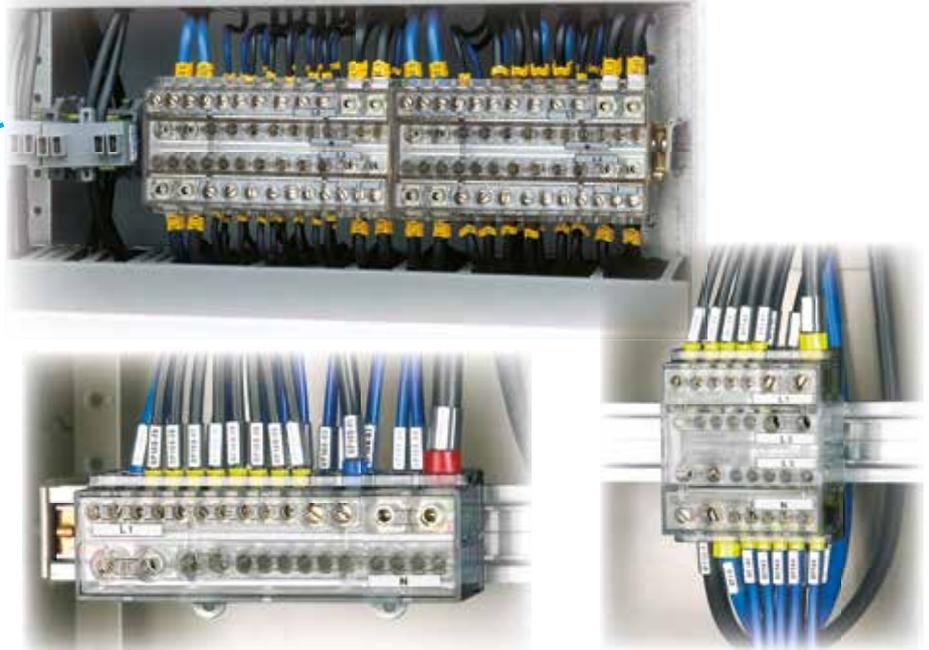
POWER DISTRIBUTION BLOCK

Z-DP

indirect clamping

type

ZETAblock®



CONNECTING CAPACITY OF POWER DISTRIBUTION BLOCK

indirect clamping

Type	Nominal Section	No. of Ways x Nominal Section	Connecting Capacity of Each Way No. of Conductors x Section	Markings
Z25-DP7-100	25□/6□	2 x 25□	1 x 25□ F 1 x 16□ F 1÷2 x 10□ F	   25÷6 sqmm
		5 x 6□	1 x 6□ F 1 x 4□ F 1÷2 x 2,5□ F 1÷2 x 1,5□ F 1÷4 x 1□ F	
Z35-DP14-125	35□/16□/6□	2 x 35□	1 x 35□ F 1 x 25□ F 1÷2 x 16□ F 1÷3 x 10□ F	   35÷16÷6 sqmm
		10 x 6□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F 1÷3 x 4□ F 1÷4 x 2,5□ F	
Z50-DP12-160	50□/25□/16□	2 x 50□	1 x 50□ F 1 x 35□ F 1÷2 x 25□ F	   50÷25÷16 sqmm
		4 x 25□	1 x 25□ F 1 x 16□ F 1÷2 x 10□ F	
		6 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F	

F = Flexible conductor

MARKINGS



Italian Institute of the Quality Mark
type approval

Conforms to:
Directive 2014/35/UE

EN 60947-7-1: 2009 Norms

indirect clamping

type
ZETAmini®



Connecting Capacity sqmm	Type	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
2,5	Z2.5-1	450	85	IP20	V-0 (UL 94)	7,6x20xh23,5	3	500/25
6	Z6-1	450	85	IP20	V-0 (UL 94)	11,5x28xh29	6	250/25
10	Z10-1	450	85	IP20	V-0 (UL 94)	15,6x32xh32,5	11	80/10
16	Z16-1	450	85	IP20	V-0 (UL 94)	18x34xh38	15	60/10
25	Z25-1	450	85	IP20	V-0 (UL 94)	20,8x42,5xh43,5	29	50/10
35	Z35-1	450	85	IP20	V-0 (UL 94)	25x45xh51,5	37	40/10

One way, single pole terminal blocks for conductors sections from 0.5 to 35 sqmm.

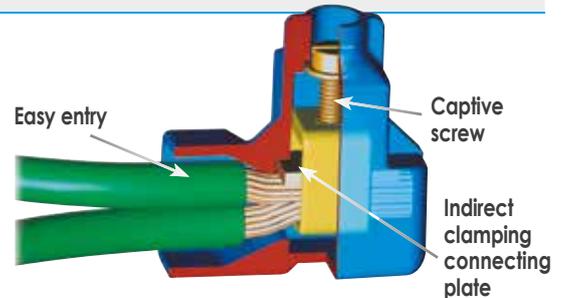
Self contained and robust, they are ideal for the fast and safe installation for industrial and domestic applications.

The indirect clamping of the "ZETAmini" terminal blocks guarantees a low and stable contact resistance.

The easy-entry receptacle also grants a fast and reliable insertion of the cable.

Technical features:

- Self-extinguishing Polycarbonate body
- Electrolytically Zinc plated, tempered Steel clamp and screw
- Electrolytically Tin plated Steel connection plate



Type	Nominal Section	Connecting Capacity of Each Way* No. of Conductors x Section	Markings
Z2.5-1	2,5□	2 x 2,5□ R/F 2÷3 x 1,5□ R/F 2÷5 x 1,0□ R/F 2÷6 x 0,75□ R/F 2÷10 x 0,5□ R/F 2÷18 x Ø 0,4÷0,6 mm communication type wire	CE UK CA IP20 2,5 sqmm 450V T 85°C IP 20 APPROVED R
Z6-1	6□	2 x 6□ R/F 2÷3 x 4□ R/F 2÷4 x 2,5□ R/F 2÷6 x 1,5□ R/F 2÷6 x 1□ R/F 2÷10 x 0,75□ R/F 2÷12 x 0,5□ R/F (1 x 6□ F) + (4 x 1,5□ F) (1 x 6□ F) + (2 x 2,5□ F)	CE UK CA IP20 6 sqmm 450V T 85°C IP 20 APPROVED R
Z10-1	10□	2 x 10□ R/F 2÷3 x 6□ R/F 2÷5 x 4□ R/F 2÷8 x 2,5□ R/F 2÷12 x 1,5□ R/F 2÷20 x 1□ R/F 2÷25 x 0,75□ R/F (1 x 6□ F) + (1 x 4□ F) + (2 x 2,5□ F) + (3 x 1,5□ F)	CE UK CA IP20 10 sqmm 450V T 85°C IP 20 APPROVED R
Z16-1	16□	2 x 16□ R/F 2÷3 x 10□ R/F 2÷5 x 6□ R/F 2÷8 x 4□ R/F 2÷12 x 2,5□ R/F 2÷18 x 1,5□ R/F	CE UK CA IP20 16 sqmm 450V T 85°C IP 20 APPROVED R
Z25-1	25□	2 x 25□ R/F 2÷3 x 16□ R/F 2÷4 x 10□ R/F 2÷8 x 6□ R/F 2÷11 x 4□ R/F 4÷16 x 2,5□ R/F	CE UK CA IP20 25 sqmm 450V T 85°C IP 20 APPROVED R
Z35-1	35□	2 x 35□ R/F 2÷3 x 25□ R/F 2÷4 x 16□ R/F 2÷7 x 10□ R/F 2÷11 x 6□ R/F 4÷17 x 4□ R/F 5÷28 x 2,5□ R/F	CE UK CA IP20 35 sqmm 450V T 85°C IP 20 APPROVED R

*A mixture of conductor sizes may be connected to the terminal block provided that the sum of their sections is less than twice the nominal section.

R = Rigid conductor F = Flexible conductor

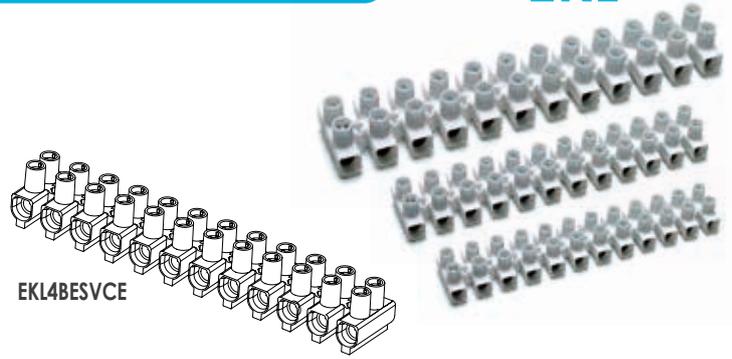
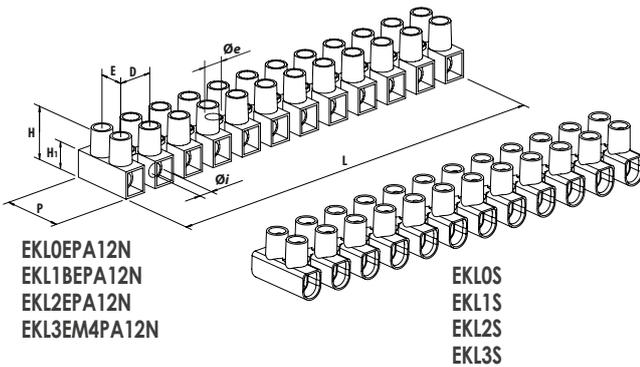
Conforms to:

Directive 2014/35/UE

EN 60998-1: 2004 and
EN 60998-2-1: 2004 Norms

TERMINAL BLOCK TYPE EKL

EKL



Type 12 Poles of Polyamide (PA6.6)

Type	Nominal section sqmm	Dimensions mm								Screw	Quantity
		Øi	Øe	L 12 poles	H	H1	P	E	D		
□ EKLOEPA12N	2,5	3,0	2,6	94,0	14,5	9,2	16,4	6,0	8,0	M3	50
□ EKL1BEPA12N	4	3,4	3,2	116,2	15,7	8,3	20,2	10,0	10,0	M3	30
□ EKL2EPA12N	10	4,3	3,2	139,8	20,0	10,8	23,1	10,0	12,0	M3,5	20
□ EKL3EM4PA12N	16	5,8	4,1	171,8	24,8	14,7	32,1	13,0	14,5	M4**	25

□ Nominal voltage: 450 V
Ambient temperature: max 110°C

* Pending approval ** Combination head screws



Material:

- Block made of chromium plated Brass
- Screw made of chromium plated Steel

Variants upon request for version en Polyamide PA6.6

N° of poles from 1 to 11:

- replace reference 12 with n° of required poles
- Versions with protection plate: add reference "DSN"

Type 12 Poles of Polypropylene (PP)

Type	Nominal section sqmm	Dimensions mm								Screw	Quantity
		Øi	Øe	L 12 poles	H	H1	P	E	D		
● EKLOS	4	3,2	2,65	94,9	13,0	-	16,6	6,4	8,1	M2,6	50
● EKL1S	6	3,5	3,4	116,5	14,9	-	18,9	7,3	10,0	M3	30
● EKL2S	10	4,3	3,7	133,8	17,3	-	23,4	10,0	11,5	M3,5	15
● EKL3S	16	5,5	4,9	174,5	25,0	-	20,7	11,0	15,0	M4	25
◇ EKL4BESVCE	25	7,0	4,0	187,3	28,0	-	30,0	11,0	16,0	M5	25

● Nominal voltage: 450 V
Ambient temperature: max 80°C

◇ Nominal voltage: 750 V
Ambient temperature: max 80°C



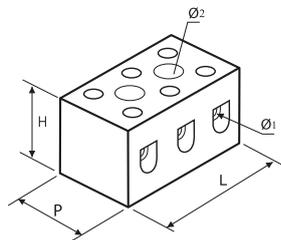
EKL OE PA XX XX

N° poles DSN version with protective blade

DSN

TERMINAL BLOCK TYPE ZS

ZS



Type	Nominal section sqmm		No. of poles	Dimensions mm					Quantity
	Low Str.	Flex		Ø1	Ø2	L	H	P	
ZS-U6	4/6	4	1	2,8	-	9	18	19	200
ZS-B6	4/6	4	2	2,8	4,0	22	18	19	80
ZS-T6	4/6	4	3	2,8	4,0	36	18	19	60
ZS-U10	10	6	1	4,3	-	13	20	21	200
ZS-B10	10	6	2	4,3	4,8	24	20	21	80
ZS-T10	10	6	3	4,3	4,8	36	20	21	70
ZS-U16	16	10	1	6,1	-	15	22	27	100
ZS-B16	16	10	2	6,1	5,0	31	22	27	50
ZS-T16	16	10	3	6,1	5,0	48	22	27	30



Material:

- insulating body in STEATITE
- screw in GALVANIZED STEEL
- BRASS clamp

Nominal voltage: 450 V
Operating temperature: 350°C

DB/1N



UNIPOLAR DISTRIBUTION BLOCKS

direct clamping

DBLOCK UNIPOLAR SERIES

- 80, 125, 160, 250, 400, 500 A distribution blocks
- Versions available with 6, 7 or 11 outputs (see table)
- Wire entry facilitated by chamfered entry holes and clamping screws
- Terminals maintain excellent stability of the connection over time
- Connection can be expanded through dedicated unipolar jumpers (can be used for types DB125-7/1N and DB160-7/1N)



Type	N° inputs	Connecting Capacity in mm ²	N° outputs	Connecting Capacity out mm ²	IEC* 60947-7-1		UL* 1059		Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Self Extinguishing Specification	Dimensions mm	Weight g	Qty
					Nominal voltage	Nominal Current	Nominal voltage	Nominal Current						
DB80-6/1N	1	6÷16	6 (4+2)	(4) 2,5÷6 (2) 2,5÷16	1000 V	80 A	600 V	85 A	3 kA	22 kA	V-0 (UL 94)	66x27xh46	70	5
DB125-7/1N	1	10÷35	7 (6+1)	(6) 2,5÷16 (1) 6÷16	1000 V	125 A	600 V	150 A	4.2 kA	30 kA	V-0 (UL 94)	77x29xh46	142	5
DB160-7/1N	1	10÷70	7 (6+1)	(6) 2,5÷16 (1) 6÷16	1000 V	160 A	600 V	200 A	11.8 kA	30 kA	V-0 (UL 94)	77x29xh46	136	5
DB250-11/1N	1	35÷120	11 (2+5+4)	(2) 6÷35 (5) 2,5÷16 (4) 2,5÷10	1000 V	250 A	600 V	255 A	24.5 kA	51 kA	V-0 (UL 94)	96x46xh50	423	3
DB400-11/1N	1	95÷185	11 (2+5+4)	(2) 6÷35 (5) 2,5÷16 (4) 2,5÷10	1000 V	400 A	600 V	335 A	24.5 kA	51 kA	V-0 (UL 94)	96x46xh50	402	3
DB500-11/1N	1	8x24 Flex. Busbar	11 (2+5+4)	(2) 6÷35 (5) 2,5÷16 (4) 2,5÷10	1000 V	500 A	600 V	335 A	24.5 kA	51 kA	V-0 (UL 94)	96x46xh50	388	3

DB/2



BIPOLAR DISTRIBUTION BLOCKS

direct clamping

DBLOCK BIPOLAR SERIES

- 40, 100, 125 A bipolar distribution blocks
- Versions available with 6, 13, 14 or 15 outputs (see table)
- Wire entry facilitated by chamfered entry holes
- Terminals maintain excellent stability of the connection over time



Type	N° inputs	Connecting Capacity in mm ²	N° outputs	Connecting Capacity out mm ²	Nominal voltage	Nominal Current	Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
DB100-6/2	1	10÷25	6 (3+3)	(3) 1,5÷4 / 0,75÷4 (3) 2,5÷6 / 1,5÷6	500 V	100 A	4.5 kA	20 kA	V-0 (UL 94)	50x64xh50	110	1
DB100-13/2	2	10÷25	13 (6+7)	(6) 1,5÷4 / 0,75÷4 (7) 2,5÷6 / 1,5÷6	500 V	100 A	4.5 kA	20 kA	V-0 (UL 94)	50x130xh50	208	1
DB125-6/2	1	10÷35	6 (5+1)	(5) 2,5÷6 / 1,5÷6 (1) 10÷25 / 6÷16	690 V	125 A	4.5 kA	18 kA	V-0 (UL 94)	50x94xh50	160	1
DB125-14/2	1	10÷35	14 (11+3)	(11) 2,5÷6 / 1,5÷6 (3) 10÷25 / 6÷16	690 V	125 A	4.5 kA	18 kA	V-0 (UL 94)	50x162xh50	266	1
DB125-14/2C	2	10÷35 10÷16	13 (11+2)	(11) 2,5÷6 / 1,5÷6 (2) 10÷25 / 6÷16	500 V	125 A	4.5 kA	20 kA	V-0 (UL 94)	50x130xh50	204	1

TETRAPOLAR DISTRIBUTION BLOCKS

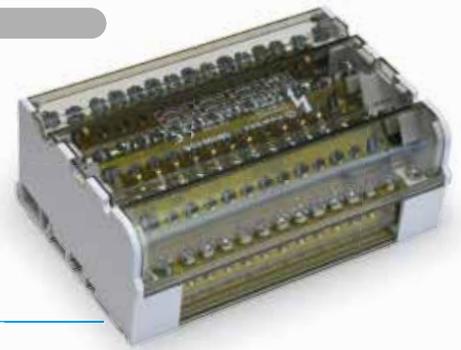
DB/4

direct clamping



DBLOCK TETRAPOLAR

- 40, 100, 125, 160 A distribution blocks
- Versions available with 6, 13, 14 or 15 outputs (see table)
- Wire entry facilitated by chamfered entry holes
- Terminals maintain excellent stability of the connection over time



Type	N° inputs	Connecting Capacity in mm²	N° outputs	Connecting Capacity out mm²	Nominal voltage	Nominal Current	Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
DB40-11/4	2	6÷16 4÷10	11	1,5÷4 / 0,75÷4	500 V	40 A	4.5 kA	22 kA	V-0 (UL 94)	90x100xh50	351	1
DB100-6/4	1	10÷25	6 (3+3)	(3) 1,5÷4 / 0,75÷4 (3) 2,5÷6 / 1,5÷6	500 V	100 A	4.5 kA	20 kA	V-0 (UL 94)	90x64xh50	230	1
DB100-13/4	2	10÷25	13 (6+7)	(6) 1,5÷4 / 0,75÷4 (7) 2,5÷6 / 1,5÷6	500 V	100 A	4.5 kA	20 kA	V-0 (UL 94)	90x130xh50	444	1
DB125-6/4	1	10÷35	6 (5+1)	(5) 2,5÷6 / 1,5÷6 (1) 10÷25 / 6÷16	690 V	125 A	4.5 kA	20 kA	V-0 (UL 94)	90x109xh50	326	1
DB125-10/4	1	10÷35	10 (7+3)	(7) 2,5÷6 / 1,5÷6 (3) 10÷25 / 6÷16	690 V	125 A	4.5 kA	20 kA	V-0 (UL 94)	90x147xh50	440	1
DB125-10/4C	2	10÷35 10÷16	9 (7+2)	(7) 2,5÷6 / 1,5÷6 (2) 10÷25 / 6÷16	500 V	125 A	4.5 kA	20 kA	V-0 (UL 94)	90x100xh50	306	1
DB125-14/4	1	10÷35	14 (11+1+2)	(11) 2,5÷6 / 1,5÷6 (1) 10÷25 / 6÷16 (2) 10÷35 / 10÷25	690 V	125 A	4.2 kA	14.5 kA	V-0 (UL 94)	90x182xh50	586	1
DB125-14/4C	2	10÷35 10÷16	13 (11+2)	(11) 2,5÷6 / 1,5÷6 (2) 10÷25 / 6÷16	500 V	125 A	4.5 kA	20 kA	V-0 (UL 94)	90x130xh50	398	1
DB160-11/4	1	10÷50	11 (3+7+1)	(3) 10÷35 / 10÷25 (7) 2,5÷6 / 1,5÷6 (1) 2,5÷6 / 1,5÷6	690 V	160 A	8.2 kA	35 kA	V-0 (UL 94)	96x175xh50	738	1



ACCESSORIES

neutral bars



Type	N° inputs	Connecting Capacity in mm²	N° outputs	Connecting Capacity out mm²	Nominal voltage	Nominal Current	Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Type Application	Length mm	Weight g	Quantity
DNB125-9	4	10÷25 / 6÷16	9	2,5÷6 / 1,5÷6	-	125 A	4.5 kA	30 kA	DB125-10/4 DB125-14/4	142	172	1
DNB160-10	4	10÷35 / 10÷25	10	2,5÷16 / 1,5÷16	-	160 A	6.2 kA	35 kA	DB160-11/4	168	192	1



unipolar jumper



Type	Nominal Current	Type Application	Length mm	Weight g	Quantity
DJ160	125 A - 160 A	DB125-7/1N - DB160-7/1N	37	29	5



DJ160



Designation

SFI	8	x 24	x 1
Insulated flexible busbar	Number of strips	Strip width mm	Strip thickness mm

Advantages

Insulated flexible busbar is a self-contained system combining convenient layout and connection with assured insulation and self-supporting construction, resulting in reduced cost installations with extreme ease of use.

Compared to plain busbar:

- Higher current capacity size for size
- Space saving as individual insulated busbars may be positioned in closer proximity
- Layout easier and quicker due to flexibility
- Insulated support not required.

Compared to cables:

- Simple and rapid installation
- Space saving due to tighter bend radius
- Insulated support not required.

Principle of selection

The following charts allow selection of the appropriate configuration based on:

- ambient temperature of 35°C
- required current carrying capacity in Amps
- maximum permitted temperature increase

Example of selection

Required current carrying capacity per phase is 630A. Maximum permitted temperature in the equipment enclosure is 85°C:

- ambient temperature is 35°C
- maximum permitted temperature rise is 85°C - 35°C = 50°C

The possible selections are where the red vertical line (630A) intersects the green temperature band (50°C):

SFI8X24X1
SFI6X32X1
SFI4X40X1

The final selection will depend on limitations relating to connection palm width.

Technical features

PVC Insulation (for width 9 - 50mm):

- Colour: Black
- Density: 1,36 g/cm³
- Hardness: 86 Shore A
- Breaking resistance: ≈ 18 MPa
- Breaking elongation: ≈ 300 %
- Self-extinguishing class: Vo (UL94)

Strip:

- Copper designation: Cu-ETP
- Copper purity min: 99,9%
- Max electrical resistivity at 20°C: 1,7241 μΩ/cm (100% IACS)
- Breaking resistance min: 200MPa
- Breaking elongation min: 30%
- Hardness: <55 HV
- Surface protection: Sm 99
- Thickness of tin plating: 2 ÷ 4 μm

Insulated flexible busbar:

- max working voltage: 1000 V AC /1500 V DC
- Working temperature: -40°C ÷ +105°C
- Average thickness of extruded PVC: 2mm
- Average dielectric strength between conductor and earth: 15 kV/mm (50Hz)
- between conductors: 30 kV/mm (50Hz)

Total conductor c.s.a. sqmm	Type
21,6	SFI3X9X0.8
43,2	SFI6X9X0.8
13,0	SFI2X13X0.5
19,5	SFI3X13X0.5
26	SFI4X13X0.5
39	SFI6X13X0.5
24,8	SFI2X15.5X0.8
37,2	SFI3X15.5X0.8
49,6	SFI4X15.5X0.8
74,4	SFI6X15.5X0.8
124	SFI10X15.5X0.8
40	SFI2X20X1
60	SFI3X20X1
80	SFI4X20X1
100	SFI5X20X1
120	SFI6X20X1
48	SFI2X24X1
72	SFI3X24X1
96	SFI4X24X1
120	SFI5X24X1
144	SFI6X24X1
192	SFI8X24X1
240	SFI10X24X1
64	SFI2X32X1
96	SFI3X32X1
128	SFI4X32X1
160	SFI5X32X1
192	SFI6X32X1
256	SFI8X32X1
320	SFI10X32X1
160	SFI4X40X1
200	SFI5X40X1
240	SFI6X40X1
320	SFI8X40X1
400	SFI10X40X1
200	SFI4X50X1
250	SFI5X50X1
300	SFI6X50X1
400	SFI8X50X1
500	SFI10X50X1
315	SFI5X63X1
378	SFI6X63X1
504	SFI8X63X1
630	SFI10X63X1
320	SFI4X80X1
400	SFI5X80X1
480	SFI6X80X1
640	SFI8X80X1
800	SFI10X80X1
1000	SFI10X100X1



Concept and design

CEMBRE SFI series insulated flexible busbar comprises a set of Cu strips within an insulated sleeve - for widths 9-50mm this is extruded PVC, for widths 63-100mm it is heat shrunk material.

The dielectric strength of the insulation is guaranteed independent of the eventual formation of the busbar and its working conditions (humidity, temperature and environmental aggressors).

Dimensions

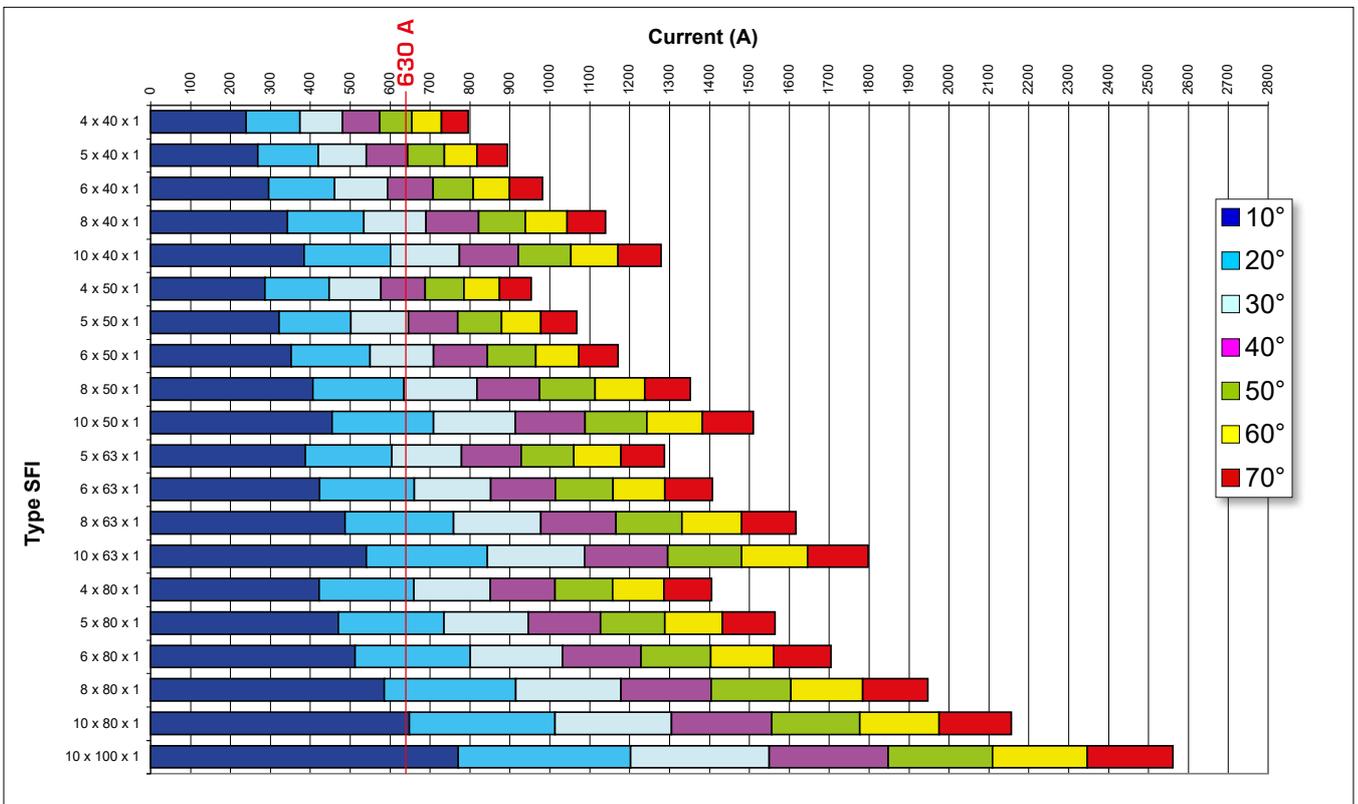
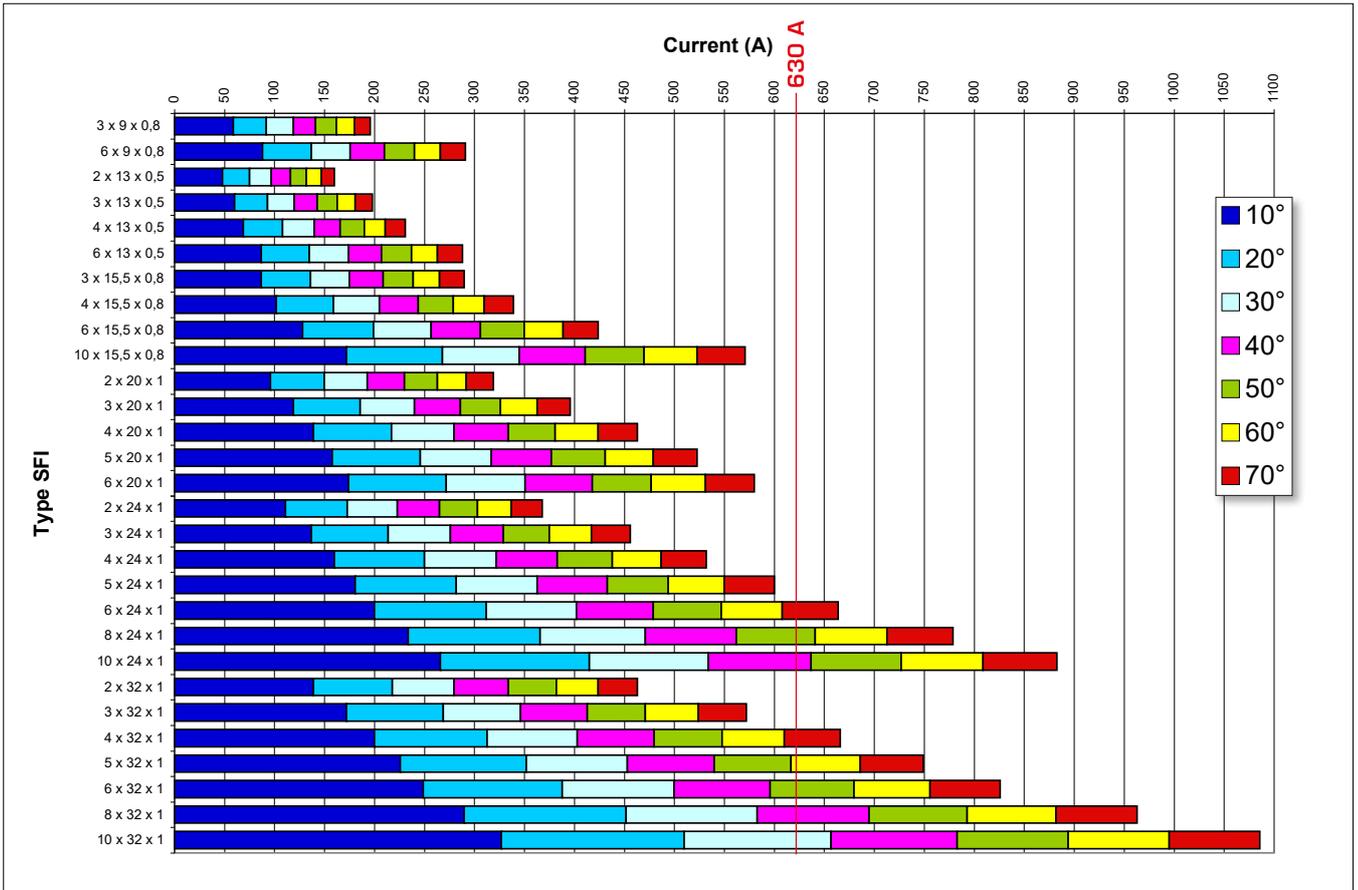
Standard length: 2000 mm (consult us for other lengths)
Strip thickness: 0,5 - 1 mm
Number of strips: 2 - 12.

Applications

- Power distribution, substituting cable with extruded insulation and rigid busbar
- Electrical equipment (racks, circuit breakers, rectifiers)
- Transformers

Current carrying capacity (A)

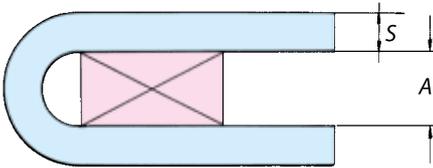
Temperature increase for each configuration based on an ambient temperature of 35°C



Mechanical bending and torsion testing

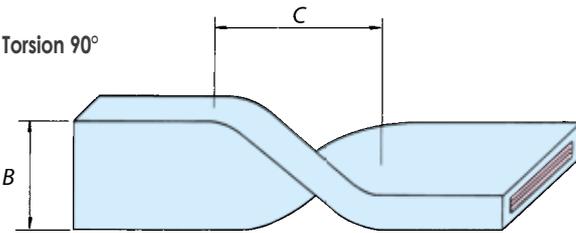
Test temperatures: -10°C and $+80^{\circ}\text{C}$.

Bending 180°



S = Bar thickness (conductor + insulation)
 $A = 2 \times S$

Torsion 90°



B = Bar width (conductor + insulation)
 $C = 1,5 \times B$

In both cases the tests do not show damage to the insulation



Insulated flexible busbar installation

Bending:

Small section configurations may be bent manually. When tooling is used, protect the insulated sleeve of the busbar from damage. As the Cu strips move relative to each other during bending, this operation should be completed before drilling.

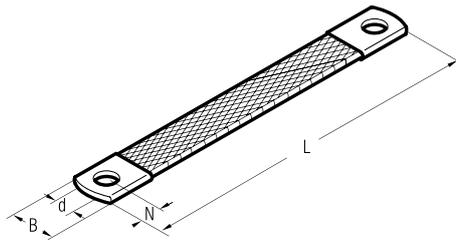
Drilling:

Drilling templates type **MFB 13-40** and type **MFB 50-63** (available as optional extras) are designed to facilitate accurate location of fixing holes in the busbar of $\varnothing 8, 10, 12$ mm.

It is recommended that the insulation of the busbar is not removed before drilling is completed, as it assists the operation.

Template type	includes drilling inserts	for bar width mm
MFB 13-40	SFB13-16	for bar width 13÷15,5 mm
	SFB20-24	for bar width 20÷24 mm
MFB 50-63	SFB32-40	for bar width 32÷40 mm
	SFB50-63	for bar width 50÷63 mm





Size sqmm	Ø Stud mm	Type	Dimensions mm				Quantity
			B	N	L	d	
10	8	FL10-150	17	10	150	8,5	50
	8	FL10-200	17	10	200	8,5	50
	8	FL10-250	17	10	250	8,5	50
16	8	FL16-150	17	10	150	8,5	50
	8	FL16-200	17	10	200	8,5	50
	8	FL16-250	17	10	250	8,5	50
	8	FL16-320	17	10	320	8,5	50
	8	FL16-350	17	10	350	8,5	50
	8	FL16-420	17	10	420	8,5	25
	8	FL16-570	17	10	570	8,5	25
	8	FL16-660	17	10	660	8,5	25
25	8	FL25-150	21	10	150	8,5	50
	8	FL25-200	21	10	200	8,5	50
	8	FL25-250	21	10	250	8,5	50
	8	FL25-300	21	10	300	8,5	50



Flexible braids are manufactured from electrolytic Copper wire. Braids of different conductor sizes or lengths are available on request. Standard finish - bright Copper. Flexible braids can be supplied Tin plated, in this case add the suffix "ST" to reference.

E.g.:
 - FL10-150 (Bright Copper)
 - FL10-150-ST (Tin plated)



CABLE TIES

G series, PA6.6 Polyamide

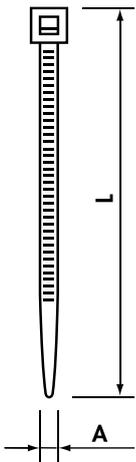
PA 6.6



HF
HALOGEN
FREE



Material: PA6.6 Polyamide
Self-extinguishing V2 (UL 94)
Humidity absorption:
2,5% (at 50% relative humidity)
Operating temperature:
From -40°C to +85°C (continuous)
From -40°C to +120°C (short periods)
Resistant to:
oils, greases, oil products, chlorinated solvents.
Colour: Natural or Black (Ral 2005)



Black ties have higher UV resistance due to increased carbon black loading



Natural ties offer rapid installation due to the low friction coefficient of the material



Cable Ties in PA6.6

Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity			
G80X2.4	80	2,4	15	8	100			
G80X2.4N					1000			
G80X2.4/M			16		100			
G80X2.4N/M					1000			
G90X2.4	90	2,4	16		100			
G90X2.4N					1000			
G100X2.5			100		2,5	22	100	
G100X2.5N							1000	
G100X2.5/M	30	100						
G100X2.5N/M		1000						
G120X2.5	120	2,5	30	100				
G120X2.5N				1000				
G140X2.5			140	2,5	33	1000		
G140X2.5N						1000		
G140X2.5/M	40	100						
G140X2.5N/M		1000						
G160X2.5	160	2,5	40	100				
G160X2.5N				1000				
G160X2.5/M			53	1000				
G160X2.5N/M				100				
G200X2.5	200	2,5	53	100				
G200X2.5N				1000				
G200X2.5/M			65	1000				
G200X2.5N/M				100				
G250X2.8	250	2,8	65	14	100			
G250X2.8N					1000			
G300X2.8			76		100			
G300X2.8N					1000			
G120X3.6	120	3,6	30		18	100		
G120X3.6N						1000		
G140X3.6			140			3,6	33	1000
G140X3.6N								1000
G140X3.6/M	35	100						
G140X3.6N/M		1000						
G150X3.6	150	3,6	35	100				
G150X3.6N				1000				
G180X3.6			180	3,6	44	100		
G180X3.6N						1000		
G200X3.6	200	3,6			53	1000		
G200X3.6N						1000		
G200X3.6/M			65	100				
G200X3.6N/M				1000				
G250X3.6	250	3,6	65	100				
G250X3.6N				1000				
G300X3.6			300	3,6	76	1000		
G300X3.6N						1000		
G300X3.6/M	102	1000						
G300X3.6N/M		1000						
G370X3.6	370	3,6	102	100				
G370X3.6N				1000				
G120X4.8	120	4,8	24	22	100			
G120X4.8N					1000			
G160X4.8			160		4,8	38	1000	
G160X4.8N							1000	
G190X4.8	190	4,8				46	100	
G190X4.8N							1000	
G190X4.8/M			50		1000			
G190X4.8N/M					1000			
G200X4.8	200	4,8	50	1000				
G200X4.8N				1000				
G200X4.8/M			60	1000				
G200X4.8N/M				1000				
G250X4.8/M	250	4,8	60	100				
G250X4.8N/M				1000				
G250X4.8			250	4,8	60	100		
G250X4.8N						1000		
G280X4.8	280	4,8			70	100		
G280X4.8N						1000		
G300X4.8			300	4,8	76	100		
G300X4.8N						1000		
G370X4.8	370	4,8			102	100		
G370X4.8N						1000		
G390X4.8			390	4,8	105	100		
G390X4.8N						1000		
G430X4.8	430	4,8	110	100				
G430X4.8N				1000				

Minimum order: 1.000 pcs

Minimum order: 100 pcs

Note: In Type, N = Black

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice

CABLE TIES



G series, PA6.6 Polyamide

Cable Ties in PA6.6

Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity			
G450X4.8	450	4,8	116	22	100			
G450X4.8N								
G530X4.8	530	4,8	140	22				
G530X4.8N								
G150X7.6	150	7,6	33	55				
G150X7.6N								
G200X7.6	200		50			50		
G200X7.6N								
G250X7.6	250		65			65		
G250X7.6N								
G300X7.6	300		76			76		
G300X7.6N								
G370X7.6	370		102			102		
G370X7.6N								
G430X7.6	430		125			125		
G430X7.6N								
G530X7.6	530		140			140		
G530X7.6N								
G430X9.0	430		9,0			110	80	
G430X9.0N								
G530X9.0	530					140		140
G530X9.0N								
G710X9.0	710					190		190
G710X9.0N								
G780X9.0	780				228	228		
G780X9.0N								
G830X9.0	830				239	239		
G830X9.0N								
G920X9.0	920	263		263				
G920X9.0N								
G1020X9.0	1020	295		295				
G1020X9.0N								
G1220X9.0	1220	365		365				
G1220X9.0N								
G230X12.6	230	12,6		50	115			
G230X12.6N								
G380X12.6	380			106		106		
G480X12.6								480
G480X12.6N								
G580X12.6	580			152		152		
G580X12.6N								
G730X12.6	730			204		204		
G730X12.6N								
G880X12.6	880		248	248				
G880X12.6N								
G1030X12.6	1030		295	295				
G1030X12.6N								

Minimum order: 100 pcs



Angled tongue to facilitate easy introduction into the buckle



Rounded corners for increased safety

Note: In Type, N = Black

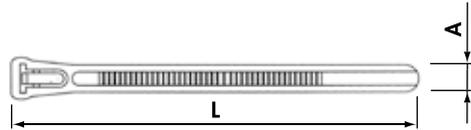
Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice

GR



Same features as G series.
Easy installation without tools.
Released by pressure on the tongue.
Suitable for temporary locking.



Releasable cable ties in PA6.6

Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity
GR100X7.6N	100	7,6	20	22,2	100
GR120X7.6N	120		30		
GR150X7.6N	150		35		
GR200X7.6N	200		50		
GR250X7.6N	250		66		
GR300X7.6N	300		80		
GR370X7.6N	370		102		

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice

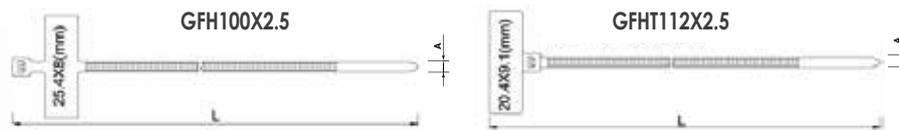
GFH



Same features as G series.
Quick and easy identification of bundled conductors.
Write on panel with Felt tip pen.

CABLE TIES

GFH series, PA6.6 Polyamide



Markable cable ties in PA6.6

Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity
GFH100X2.5	100	2,5	18	8,1	100
GFHT112X2.5	112				

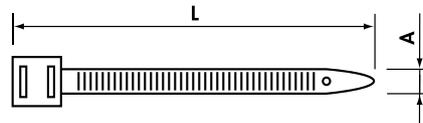
Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice

1600



Resistant to: UV, salt atmosphere, oils, greases, oil products
Colour: Black



Cable Ties in PA12 Polyamide

Type	Head Type	L (mm)	A (mm)	Min. Bundle Ø (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity
1618.90	single	180	9	15	40	40	100
1626.90	double	260	9	30	60	55	100
1636.90	double	360	9	30	93	55	100
1651.90	double	510	9	70	140	55	100
1676.90	double	760	9	70	220	55	100

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice

Material: Elastomerized Polymer on Polyamide base
Self-extinguishing HB (UL94)
Halogen free
Operating temperature:
From -45°C to +85°C (continuous)
From -45°C to +120°C (short periods)

CABLE TIES

GX

GX series, in Stainless Steel AISI 304



STAINLESS
STEEL

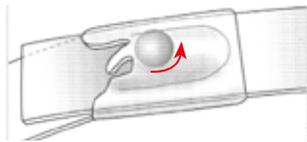
-80°C
+500°C

Cable Ties in Stainless Steel

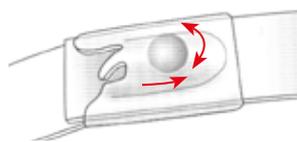
Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity
GX200X4.5	200	4,5	50	46	100
GX300X4.5	300		76		
GX370X4.5	370		102		
GX520X4.5	520		156		
GX370X7.9	370	7,9	102	114	
GX680X7.9	680		207		
GX1020X7.9	1020		312		

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice



Insert the tongue into the buckle. The internal locking ball rolls freely as the tie is tightened.



Once the correct tension is reached, use the specific tool to trim the tongue. The ball then wedges into the buckle locking it tightly against both the top and bottom of the tie.

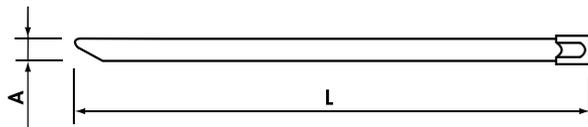


Material:
Stainless Steel AISI 304
Unique ball locking mechanism that allows simple and rapid installation and secure locking.
Operating temperature:
From -80°C to +500°C
High tensile strength.
Non-flammability.
High resistance to acetic acid, alkalies, sulphuric acid, corrosion, etc.
In general very resistant to most hostile environments.

CABLE TIES

GXAC

GXAC series, 316 Stainless Steel coated with Polyester



POLYESTER

STAINLESS
STEEL

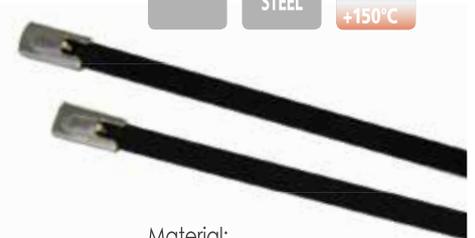
-40°C
+150°C

Coated Stainless Steel cable ties

Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity
GXAC125X4.6	125	4,6	38,0	46	100
GXAC150X4.6	150		46,0		
GXAC200X4.6	200		61,9		
GXAC260X4.6	260		81,0		
GXAC290X4.6	290		90,6		
GXAC360X4.6	360		112,8		
GXAC520X4.6	520		163,8		
GXAC680X4.6	680		214,8		
GXAC840X4.6	840		265,7		
GXAC200X7.9	200		7,9		
GXAC290X7.9	290	90,6			
GXAC360X7.9	360	112,8			
GXAC520X7.9	520	163,8			
GXAC680X7.9	680	214,8			
GXAC840X7.9	840	265,7			

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice



Material:
316 stainless steel for the most corrosive environments coated with Polyester for insulation purpose, and a better outdoor application
Colour: Black
Smooth surface and rounded edges assures cable protection and user safety. Equipped with unique ball locking mechanism that allows simple and rapid installation and secure locking.
Operating temperature:
da -40°C a +150°C
High tensile strength
Very resistant to ultraviolet radiation and chemical corrosion
Non flammable

PA6.6 Polyamide

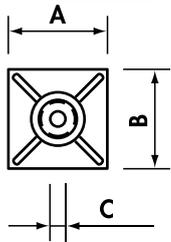
PA 6.6



Material: PA6.6 Polyamide
 Self-extinguishing V2 (UL 94)
 Humidity absorption:
 2,5% (at 50% relative humidity)
 Operating temperature:
 From -40°C to +85°C (continuous)
 From -40°C to +120°C (short periods)

Resistant to:
 oils, bases, greases, oil products,
 chlorinated solvents.
 Colour: Natural

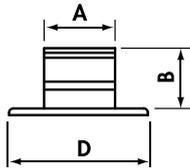
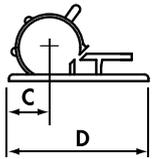
Attention:
acrylic adhesive; to obtain the best result, wait at least 6 - 8 hours before applying the load.



Self adhesive cable tie bases in PA6.6

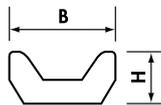
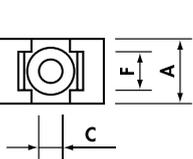
Type	Max Tie (mm)	A (mm)	B (mm)	C (mm)	H (mm)	Fixing screw hole Ø (mm)	Quantity
AB13*	2,8	13,0	13,0	3,2	3,2	-	100
AB19*	3,6	19,0	19,0	4,0	4,4	3,1	100
AB28*	4,8	28,0	28,0	5,3	5,7	5,5	100

*Add to Ref: N for Black



Self adhesive cable clips in PA6.6

Type	Cable Ø (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Quantity
CC8.9	8-9	9,0	12,0	8,0	21,5	100
CC9.12	9-12	12,0	15,0	8,2	21,5	100



Cable tie saddle clamps in PA6.6

Type	Max Tie (mm)	A (mm)	B (mm)	C (mm)	F (mm)	H (mm)	Quantity
SS4.8-3.7	4,8	9,5	15	3,7	5,0	7,2	100
SS4.8-4.5	4,8	9,5	15	4,5	5,0	7,2	100
SS9-4.5	9	16,0	22	4,5	9,2	9,7	100
SS9-5	9	16,0	22	5,0	9,2	9,7	100
SS9-6.4	9	16,0	22	6,4	9,2	9,7	100

GH8

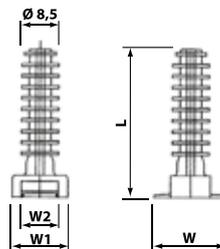
ACCESSORIES

PA6.6 Polyamide

PA 6.6



Same features as G series.
 Push into Ø 8 mm hole.
 Cable tie inserted through slot in head.



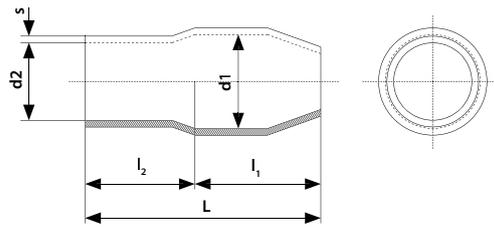
Stud fixing for cable ties in PA6.6

Type	W (mm)	W1 (mm)	W2 (mm)	L (mm)	Fixing hole Ø (mm)	Quantity
GH8	20	15	10	40,5	8	100

INSULATED COVERS

For uninsulated connectors

ES



Insulated covers in PVC for general use with CEMBRE A-M copper tube lugs characterised by environmental tolerance, flexibility, not inflammability & stable performance. Widely used for the insulation and protection of connections and electrical terminations.

General features:

- Material: PVC
- Self extinguishing (UL94): V0
- Working temperature: 85 °C
- Colours: red, yellow, blue, black, grey, brown.

Type	Connectors A-M*	d1 Ø	d2 Ø	l1 ±1	l2 ±1	L ±2	s ±0.2	Quantity	Minimum Order Qty
ES03-..	A03	3.3	3.1	7.0	8.0	15.0	0.6	100	3.000
ES06-..	A06	4.5	3.7	8.0	8.0	16.0	0.7	100	
ES1-..	A1	5.7	4.1	9.0	9.0	18.0	0.8	100	
ES2-..	A2	7.2	6.2	11.0	10.0	21.0	1.0	100	1.000
ES3-..	A3	10.0	8.0	15.0	13.0	28.0	1.1	100	
ES5-..	A5	12.0	9.5	15.0	14.0	29.0	1.2	100	500
ES10-..	A7, A9, A10	14.0	11.8	17.0	17.0	34.0	1.4	100	
ES14-..	A12, A14	17.0	13.9	22.0	20.0	42.0	1.5	100	200
ES19-..	A17, A19	19.0	16.0	25.0	21.0	46.0	1.5	50	
ES24-..	A20, A24	22.0	18.0	31.0	24.0	55.0	1.7	50	100
ES30-..	A29, A30	24.0	20.0	32.0	28.0	60.0	1.8	50	
ES37-..	A35, A37	26.0	22.0	34.0	31.0	65.0	1.8	50	50
ES40-..	A40	32.2	24.0	38.0	31.0	69.0	2.0	50	
ES48-..	A48	36.5	27.2	42.0	33.0	75.0	2.0	50	25
ES80-..	A60, A80	36.7	30.0	42.0	33.0	75.0	2.0	25	

Add the suffix corresponding to the selected colour to the reference:

-BU blue, -GY grey, -BR brown, -BK black, -RE red, -YE yellow,

* See A-M type copper tube lugs on pages 28-29, 31
 ** Depending on the diameter of the insulated cable



Heat-shrinkable Polyolefin tubing coil for general use; is environmentally neutral, flexible, not inflammable and offers fast heat shrinkage and stable performance.

Main uses include insulation and protection of electrical conductors, connectors and terminations; protection of metal tubes from corrosion; protection of antennae and various identification applications.

For general characteristics and technical specifications see page 102.

- Colours: Black, Red, White, Blue, Transparent, Yellow, Green, Grey, Brown, Yellow/Green.
- Packaging: Coil on Reel

Type	Coil Length	before shrinking	after shrinking		Colour	
		Internal Ø mm	Internal Ø mm	Thickness mm		
TCS12X200BK	200 m	Ø 1,1 mm	Ø 0,50 mm	0,33 mm	BLACK	●
TCS16X200BK	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	BLACK	●
TCS24X200BK	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	BLACK	●
TCS32X200BK	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	BLACK	●
TCS48X100BK	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	BLACK	●
TCS64X100BK	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	BLACK	●
TCS95X100BK	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	BLACK	●
TCS127X100BK	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	BLACK	●
TCS160X100BK	100 m	Ø 16,5 mm	Ø 8,00 mm	0,70 mm	BLACK	●
TCS190X100BK	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	BLACK	●
TCS254X50BK	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	BLACK	●
TCS320X50BK	50 m	Ø 31,5 mm	Ø 15,0 mm	1,00 mm	BLACK	●
TCS381X50BK	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	BLACK	●
TCS508X25BK	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	BLACK	●
TCS762X25BK	25 m	Ø 70,0 mm	Ø 36,0 mm	1,30 mm	BLACK	●
TCS1016X25BK	25 m	Ø 100,0 mm	Ø 51,0 mm	1,30 mm	BLACK	●
TCS1260X25BK	25 m	Ø 120,0 mm	Ø 61,0 mm	1,30 mm	BLACK	●
TCS1500X25BK	25 m	Ø 150,0 mm	Ø 76,0 mm	1,30 mm	BLACK	●
TCS16X200RE	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	RED	●
TCS24X200RE	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	RED	●
TCS32X200RE	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	RED	●
TCS48X100RE	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	RED	●
TCS64X100RE	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	RED	●
TCS95X100RE	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	RED	●
TCS127X100RE	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	RED	●
TCS190X100RE	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	RED	●
TCS254X50RE	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	RED	●
TCS16X200WH	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	WHITE	○
TCS20X200WH	200 m	Ø 2,0 mm	Ø 0,85 mm	0,36 mm	WHITE	○
TCS24X200WH	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	WHITE	○
TCS32X200WH	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	WHITE	○
TCS48X100WH	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	WHITE	○
TCS64X100WH	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	WHITE	○
TCS95X100WH	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	WHITE	○
TCS127X100WH	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	WHITE	○
TCS190X100WH	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	WHITE	○
TCS254X50WH	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	WHITE	○
TCS16X200BU	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	BLUE	●
TCS24X200BU	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	BLUE	●
TCS32X200BU	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	BLUE	●
TCS48X100BU	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	BLUE	●
TCS64X100BU	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	BLUE	●
TCS95X100BU	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	BLUE	●
TCS127X100BU	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	BLUE	●
TCS190X100BU	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	BLUE	●
TCS254X50BU	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	BLUE	●
TCS381X50BU	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	BLUE	●
TCS508X25BU	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	BLUE	●

TERMOCOIL HEAT-SHRINKABLE TUBING

TCS

flame-retardant Polyolefin - shrinkage ratio 2÷1



Type	Coil Length	before shrinking		after shrinking		Colour
		Internal Ø mm	Internal Ø mm	Thickness mm		
TCS12X200TR	200 m	Ø 1,1 mm	Ø 0,50 mm	0,33 mm	TRANSPARENT	○
TCS16X200TR	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	TRANSPARENT	○
TCS24X200TR	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	TRANSPARENT	○
TCS32X200TR	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	TRANSPARENT	○
TCS48X100TR	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	TRANSPARENT	○
TCS64X100TR	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	TRANSPARENT	○
TCS95X100TR	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	TRANSPARENT	○
TCS127X100TR	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	TRANSPARENT	○
TCS160X100TR	100 m	Ø 16,5 mm	Ø 8,00 mm	0,70 mm	TRANSPARENT	○
TCS190X100TR	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	TRANSPARENT	○
TCS254X50TR	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	TRANSPARENT	○
TCS320X50BK	50 m	Ø 31,5 mm	Ø 15,0 mm	1,00 mm	TRANSPARENT	○
TCS381X50TR	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	TRANSPARENT	○
TCS508X25TR	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	TRANSPARENT	○
TCS762X25TR	25 m	Ø 70,0 mm	Ø 36,0 mm	1,30 mm	TRANSPARENT	○
TCS1016X25TR	25 m	Ø 100,0 mm	Ø 51,0 mm	1,30 mm	TRANSPARENT	○
TCS1260X25TR	25 m	Ø 120,0 mm	Ø 61,0 mm	1,30 mm	TRANSPARENT	○
TCS1500X25TR	25 m	Ø 150,0 mm	Ø 76,0 mm	1,30 mm	TRANSPARENT	○
TCS16X200YE	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	YELLOW	●
TCS24X200YE	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	YELLOW	●
TCS32X200YE	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	YELLOW	●
TCS48X100YE	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	YELLOW	●
TCS64X100YE	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	YELLOW	●
TCS95X100YE	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	YELLOW	●
TCS127X100YE	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	YELLOW	●
TCS190X100YE	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	YELLOW	●
TCS254X50YE	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	YELLOW	●
TCS16X200GN	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	GREEN	●
TCS24X200GN	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	GREEN	●
TCS32X200GN	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	GREEN	●
TCS48X100GN	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	GREEN	●
TCS64X100GN	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	GREEN	●
TCS95X100GN	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	GREEN	●
TCS127X100GN	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	GREEN	●
TCS190X100GN	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	GREEN	●
TCS254X50GN	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	GREEN	●
TCS16X200GY	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	GREY	●
TCS24X200GY	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	GREY	●
TCS32X200GY	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	GREY	●
TCS48X100GY	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	GREY	●
TCS64X100GY	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	GREY	●
TCS95X100GY	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	GREY	●
TCS127X100GY	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	GREY	●
TCS190X100GY	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	GREY	●
TCS254X50GY	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	GREY	●
TCS381X50GY	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	GREY	●
TCS508X25GY	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	GREY	●
TCS16X200BR	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	BROWN	●
TCS24X200BR	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	BROWN	●
TCS32X200BR	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	BROWN	●
TCS48X100BR	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	BROWN	●
TCS64X100BR	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	BROWN	●
TCS95X100BR	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	BROWN	●
TCS127X100BR	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	BROWN	●
TCS190X100BR	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	BROWN	●
TCS254X50BR	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	BROWN	●
TCS381X50BR	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	BROWN	●
TCS508X25BR	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	BROWN	●
TCS32X200Y/G	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	YELLOW/GREEN	●
TCS48X100Y/G	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	YELLOW/GREEN	●
TCS64X100Y/G	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	YELLOW/GREEN	●
TCS95X100Y/G	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	YELLOW/GREEN	●
TCS127X100Y/G	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	YELLOW/GREEN	●
TCS190X100Y/G	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	YELLOW/GREEN	●
TCS254X50Y/G	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	YELLOW/GREEN	●
TCS381X50Y/G	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	YELLOW/GREEN	●
TCS508X25Y/G	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	YELLOW/GREEN	●



Heat-shrinkable Polyolefin tubing strip for general use; is environmentally neutral, flexible, not inflammable and offers fast heat shrinkage and stable performance.

Main uses include insulation and protection of electrical conductors, connectors and terminations; protection of metal tubes from corrosion; protection of antennae and various identification applications.

For general characteristics and technical specifications see page 102.

- Colours: Black, Red, White, Blue, Transparent, Yellow, Green, Grey, Brown, Yellow/Green.
- Packaging: Strips in Box

Type	Strip Length	before shrinking		after shrinking		Colour	Quantity Strips per box
		Internal Ø mm	Internal Ø mm	Thickness mm	Thickness mm		
TSS12BK	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	BLACK ●	30
TSS16BK	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BLACK ●	30
TSS24BK	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BLACK ●	30
TSS32BK	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BLACK ●	30
TSS48BK	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BLACK ●	30
TSS64BK	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BLACK ●	30
TSS95BK	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BLACK ●	20
TSS127BK	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BLACK ●	15
TSS190BK	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BLACK ●	10
TSS254BK	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BLACK ●	6
TSS380BK	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	BLACK ●	4
TSS510BK	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	BLACK ●	2
TSS12RE	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	RED ●	30
TSS16RE	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	RED ●	30
TSS24RE	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	RED ●	30
TSS32RE	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	RED ●	30
TSS48RE	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	RED ●	30
TSS64RE	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	RED ●	30
TSS95RE	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	RED ●	20
TSS127RE	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	RED ●	15
TSS190RE	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	RED ●	10
TSS254RE	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	RED ●	6
TSS380RE	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	RED ●	4
TSS510RE	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	RED ●	2
TSS12WH	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	WHITE ○	30
TSS16WH	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	WHITE ○	30
TSS24WH	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	WHITE ○	30
TSS32WH	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	WHITE ○	30
TSS48WH	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	WHITE ○	30
TSS64WH	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	WHITE ○	30
TSS95WH	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	WHITE ○	20
TSS127WH	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	WHITE ○	15
TSS190WH	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	WHITE ○	10
TSS254WH	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	WHITE ○	6
TSS380WH	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	WHITE ○	4
TSS510WH	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	WHITE ○	2
TSS12BU	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	BLUE ●	30
TSS16BU	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BLUE ●	30
TSS24BU	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BLUE ●	30
TSS32BU	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BLUE ●	30
TSS48BU	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BLUE ●	30
TSS64BU	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BLUE ●	30
TSS95BU	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BLUE ●	20
TSS127BU	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BLUE ●	15
TSS190BU	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BLUE ●	10
TSS254BU	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BLUE ●	6
TSS380BU	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	BLUE ●	4
TSS510BU	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	BLUE ●	2
TSS12TR	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	TRANSPARENT ○	30
TSS16TR	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	TRANSPARENT ○	30
TSS24TR	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	TRANSPARENT ○	30
TSS32TR	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	TRANSPARENT ○	30
TSS48TR	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	TRANSPARENT ○	30
TSS64TR	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	TRANSPARENT ○	30
TSS95TR	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	TRANSPARENT ○	20
TSS127TR	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	TRANSPARENT ○	15
TSS190TR	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	TRANSPARENT ○	10
TSS254TR	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	TRANSPARENT ○	6
TSS380TR	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	TRANSPARENT ○	4
TSS510TR	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	TRANSPARENT ○	2

TERMOSTRIP HEAT-SHRINKABLE TUBING

TSS

flame-retardant Polyolefin - shrinkage ratio 2÷1

Type	Strip Length	before shrinking		after shrinking		Colour	Quantity Strips per box
		Internal Ø mm	Internal Ø mm	Thickness mm	Thickness mm		
TSS12YE	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	YELLOW	30
TSS16YE	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	YELLOW	30
TSS24YE	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	YELLOW	30
TSS32YE	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	YELLOW	30
TSS48YE	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	YELLOW	30
TSS64YE	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	YELLOW	30
TSS95YE	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	YELLOW	20
TSS127YE	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	YELLOW	15
TSS190YE	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	YELLOW	10
TSS254YE	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	YELLOW	6
TSS380YE	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	YELLOW	4
TSS510YE	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	YELLOW	2
TSS12GN	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	GREEN	30
TSS16GN	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	GREEN	30
TSS24GN	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	GREEN	30
TSS32GN	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	GREEN	30
TSS48GN	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	GREEN	30
TSS64GN	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	GREEN	30
TSS95GN	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	GREEN	20
TSS127GN	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	GREEN	15
TSS190GN	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	GREEN	10
TSS254GN	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	GREEN	6
TSS380GN	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	GREEN	4
TSS510GN	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	GREEN	2
TSS12GY	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	GREY	30
TSS16GY	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	GREY	30
TSS24GY	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	GREY	30
TSS32GY	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	GREY	30
TSS48GY	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	GREY	30
TSS64GY	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	GREY	30
TSS95GY	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	GREY	20
TSS127GY	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	GREY	15
TSS190GY	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	GREY	10
TSS254GY	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	GREY	6
TSS380GY	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	GREY	4
TSS510GY	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	GREY	2
TSS12BR	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	BROWN	30
TSS16BR	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BROWN	30
TSS24BR	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BROWN	30
TSS32BR	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BROWN	30
TSS48BR	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BROWN	30
TSS64BR	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BROWN	30
TSS95BR	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BROWN	20
TSS127BR	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BROWN	15
TSS190BR	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BROWN	10
TSS254BR	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BROWN	6
TSS380BR	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	BROWN	4
TSS510BR	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	BROWN	2
TSS16Y/G	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	YELLOW/GREEN	30
TSS24Y/G	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	YELLOW/GREEN	30
TSS32Y/G	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	YELLOW/GREEN	30
TSS48Y/G	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	YELLOW/GREEN	30
TSS64Y/G	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	YELLOW/GREEN	30
TSS95Y/G	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	YELLOW/GREEN	20
TSS127Y/G	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	YELLOW/GREEN	15
TSS190Y/G	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	YELLOW/GREEN	10
TSS254Y/G	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	YELLOW/GREEN	6
TSS380Y/G	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	YELLOW/GREEN	4



flame-retardant Polyolefin - shrinkage ratio 2÷1



Heat-shrinkable Polyolefin tubing for general use; is environmentally neutral, flexible, not inflammable and offers fast heat shrinkage and stable performance.

Main uses include insulation and protection of electrical conductors, connectors and terminations; protection of metal tubes from corrosion; protection of antennae and various identification applications.

General characteristics:

- Operating temperature: -55°C + 125°C
- Minimum shrinkage temperature: 70°C
- Temperature for complete shrinkage: 110°C
- RoHS compliant
- Colours: Black, Red, White, Blue, Grey, Brown, Yellow/Green.
- Packaging: Roll in Dispenser Box

Technical Specifications:

Property	Test Method	Performance
Traction resistance (MPa):	ASTM D2671	≥10.4
Elongation at failure (%):	ASTM D2671	≥200
Traction resistance after heat aging (MPa):	UL 224 158°Cx168hr	≥7.3
Elongation at failure after heat aging (%):	UL 224 158°Cx168hr	≥100
Heat resistance:	UL 224 250°Cx4hr	No failure
Low temperature flexibility:	UL 224 -30°Cx4hr	No failure
Dielectric strength (kv/mm):	IEC 243	≥15
Insulation resistance:	600V UL 224	No perforation at 2500V
Volume resistance (Ω.cm):	IEC 93	≥1x10 ¹⁴
Corrosive action:	UL 224 158°Cx168hr	Not corrosive
Copper compatibility:	UL 224 158°Cx168hr	Not corrosive
Flammability:	UL 224	VW-1

Type	Reel Length	before shrinking		after shrinking		Colour
		Internal Ø mm	Internal Ø mm	Thickness mm	Thickness mm	
TBS16X20BK	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BLACK ●
TBS24X20BK	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BLACK ●
TBS32X10BK	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BLACK ●
TBS48X10BK	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BLACK ●
TBS64X10BK	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BLACK ●
TBS95X10BK	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BLACK ●
TBS127X10BK	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BLACK ●
TBS190X5BK	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BLACK ●
TBS254X5BK	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BLACK ●
TBS16X20RE	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	RED ●
TBS24X20RE	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	RED ●
TBS32X10RE	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	RED ●
TBS48X10RE	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	RED ●
TBS64X10RE	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	RED ●
TBS95X10RE	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	RED ●
TBS127X10RE	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	RED ●
TBS190X5RE	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	RED ●
TBS254X5RE	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	RED ●
TBS16X20WH	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	WHITE ○
TBS24X20WH	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	WHITE ○
TBS32X10WH	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	WHITE ○
TBS48X10WH	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	WHITE ○
TBS64X10WH	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	WHITE ○
TBS95X10WH	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	WHITE ○
TBS127X10WH	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	WHITE ○
TBS190X5WH	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	WHITE ○
TBS254X5WH	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	WHITE ○
TBS16X20BU	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BLUE ●
TBS24X20BU	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BLUE ●
TBS32X10BU	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BLUE ●
TBS48X10BU	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BLUE ●
TBS64X10BU	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BLUE ●
TBS95X10BU	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BLUE ●
TBS127X10BU	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BLUE ●
TBS190X5BU	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BLUE ●
TBS254X5BU	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BLUE ●

Type	Reel Length	before shrinking		after shrinking		Colour
		Internal Ø mm	Internal Ø mm	Thickness mm	Thickness mm	
TBS16X20GY	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	GREY ●
TBS24X20GY	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	GREY ●
TBS32X10GY	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	GREY ●
TBS48X10GY	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	GREY ●
TBS64X10GY	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	GREY ●
TBS95X10GY	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	GREY ●
TBS127X10GY	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	GREY ●
TBS190X5GY	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	GREY ●
TBS254X5GY	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	GREY ●
TBS16X20BR	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BROWN ●
TBS24X20BR	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BROWN ●
TBS32X10BR	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BROWN ●
TBS48X10BR	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BROWN ●
TBS64X10BR	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BROWN ●
TBS95X10BR	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BROWN ●
TBS127X10BR	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BROWN ●
TBS190X5BR	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BROWN ●
TBS254X5BR	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BROWN ●
TBS16X20Y/G	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	YELLOW/GREEN ●
TBS24X20Y/G	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	YELLOW/GREEN ●
TBS32X10Y/G	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	YELLOW/GREEN ●
TBS48X10Y/G	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	YELLOW/GREEN ●
TBS64X10Y/G	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	YELLOW/GREEN ●
TBS95X10Y/G	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	YELLOW/GREEN ●
TBS127X10Y/G	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	YELLOW/GREEN ●
TBS190X5Y/G	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	YELLOW/GREEN ●
TBS254X5Y/G	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	YELLOW/GREEN ●

CAST RESIN JOINTS

N

cast resin, low voltage through joints



Shells

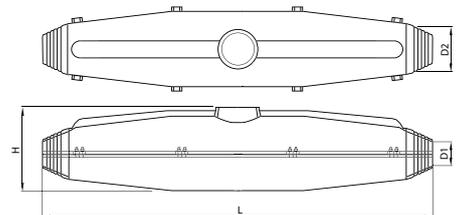
Manufactured from transparent synthetic material which allows a visual check of the connections before and after casting. The halves of the shell are joined by snap closures which avoid further fixing or sealing.

Shells are left on after casting to provide additional protection against mechanical abrasion, chemical agents and severe weather conditions.



STRAIGHT JOINTS

Type	Dimensions mm				Dimensions Cable	
	L	H	D1(1)	D2(1)	Cable Diameter mm	Indicative Cable Section (2) mm ²
N11	200	50	8	26	8 - 25	4C x 1,5 ÷ 10
N12	260	67	16	32	16 - 31	4C x 10 ÷ 25
N13	360	75	21	38	21 - 36	4C x 35 ÷ 50
N14	400	100	26	41	26 - 39	4C x 50 ÷ 70
N15	530	130	35	56	35 - 54	4C x 95 ÷ 150
N16	700	150	47	74	45 - 72	4C x 185 ÷ 300

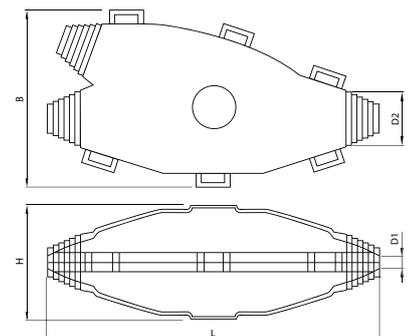


(1) Internal dimension of the shell
 (2) Indicative cable sections are approximate and concern only harmonised, PVC or Rubber insulated cables at a working voltage of 0,6/1 kV



BRANCH JOINTS

Type	Dimensions mm					Dimensions Cable		
	L	H	B	D1(1)	D2(1)	Cable Diameter mm	Indicative Cable Section (2) mm ²	
							Passante	Derivato
NY00	150	47	70	11	20	11 - 20	4C x 1,5 ÷ 2,5	4C x 1,5
NY0	175	60	94	6	22	6 - 21	4C x 4 ÷ 10	4C x 4
NY1	225	75	110	9	26	9 - 24	4C x 6 ÷ 25	4C x 16



(1) Internal dimension of the shell
 (2) Indicative cable sections are approximate and concern only harmonised, PVC or Rubber insulated cables at a working voltage of 0,6/1 kV

Cast resin technology

PUR-cast resin technology was introduced to seal and protect power, signal and telephone cable joints.

This new generation of two component cast resin has been developed for the most demanding environments and circumstances.

CEMBRE cast resin joints meet the requirements of EN50393 and DIN VDE 57291-2 (VDE0291).

Quick setting properties in humid or even cold conditions make it a fast and reliable solution.

No external measuring or mixing is required as this takes place within an Aluminium foil pouch, avoiding spillage and errors during installation.

Unmixed resin components have a 48 month shelf-life even in the most difficult storage conditions.

Shells are made of durable PET resulting in good hydrophobic properties and excellent impact resistance, while good adhesion to PVC and metals assures a watertight seal.

Technical characteristic	Test result	Requirement of DIN VDE 0291
Pot life @ 5°C 23°C 35°C	35 min 20 min 15 min	product conforms ± 30%
Reactant open cup flash point	> 200 °C	> 55
Tensile strength	≥ 8.0 Mpa	≥ 5.0
Hot aging	-5 Shore A	-7
Adhesive	> 1500 CP.S	-
Elongation at break	≥ 100%	≥ 50%
Gel time for 300 ml @ Pouch >1000 ml Pouch <1000 ml	23 °C 26 min 17 min	product conforms ± 10% product conforms ± 10%
Max. reaction temp.	60 °C / 333 K	product conforms ± 10%
Total vol. variability when hardening	6 %	max. 6.5 %
Cast resin component open cup flash point	> 200 °C	> 100
Density	1.07 g / cm ³	-
Impact strength	> 10 kJ / m ²	> 10 kJ / m ²
Hardness	75 Shore A	min. 20 Shore D
Expansion coefficient in temp. range 20-50°C	5.9 x 10 ⁻⁴ K ⁻¹	product conforms ± 15%
Thermal conductivity	0.2W x m ⁻¹ x K ⁻¹	product conforms ± 20%
Flammability	Class II c	acc. to DIN VDE 0304, part 3
Water absorption 42 days@50°C	360 mg	max. 400 mg
Electrolytic corrosion	A1	-
Voltage test @ 23°C 80°C	> 20 kV > 10 kV	no breakdown @ test voltage > 20 kV > 20 kV
Dielectric dissipation factor @ 23°C and 50 Hz 23°C and 1k Hz	0.08 0.05	max. 0.1 -
Relative permittivity @ 23°C and 50 Hz @ 23°C and 1k Hz	5 5.1	< 6 -
Tracking resistance	KA 3c	min KA 3c
After 28 days of immersion in 90°C water		
Tensile strength	8.2N/mm ²	≥ 65% of initial value
Elongation at break	60%	≥ 65% of initial value
Hardness	47 Shore	≥ 80% of initial value