



Short-circuiting and earthing systems (installations)

Insulating sticks for substation use

Short circuiting and earthing systems for substation. Telescopic sticks for voltage detectors and earthing systems for use in dry and wet conditions.

Reference	~	∅ mm	↔ Folded	↔	kg
CE-4-21-(*)	90 kV	41/32	1.15 m	2 m	1.5
CM-7-10-A	Rallonge*	36	-	1 m	1
CE-75-(*)	75 kV	41/32	1.15 m	2 m	1.2

(*) Specify type of mounting when ordering: C or K. Delivered with wall mounted support CI-10-D.
* For CE-4-21.

Standard sticks

For short circuiting and earthing system. For use in dry conditions.

Reference	~	∅ mm	↔	g
CF-3-72...-(*)	72.5 kV	36	1.50 m	880
CF-3-90...-(*)	90 kV	36	2 m	1 060

(*) Specify type of mounting when ordering: C or K. Delivered with wall mounted support CI-10-D.

Sticks with skirts

For short circuiting and earthing system. For use in dry conditions.

Reference	~	∅ mm	↔	kg
CF-5-40-(*)	40 kV	36	1.50 m	1.55
CF-5-90-(*)	90 kV	36	2 m	1.55

(*) Specify type of mounting when ordering: C, K or E.

Short length stick

For MV telescopic sticks.

Reference	~	↔	g
CE-3-24-C	20 kV	Insulating Length = 0.52 Overall Length = 0.80 Folded Length = 0.56	370



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CE-4-21-C

CE-75-C

CF-5

CM-7-10-A

CF-3

CE-3-24-C

∅ Diameter ↔ Total length ⚖ Weight 📏 Dimensions

Telescopic sticks for voltage detector

Suitable for wet conditions.

Reference	~	∅ mm	↔ Folded up	↔	kg
CE-4-21-(*)	90 kV	41/32	1.15 m	2 m	1.5
CE-4-30-C	150 kV	41/32	1.75 m	3 m	2
CM-7-10-A	Extension*	36	—	1 m	1
CE-75-(*)	75 kV	41/32	1.15 m	2 m	2

(*) Please specify type C or K when ordering.
Delivered with wall mounted supports CI-10-D.
* For CE-4-21.

Lockable button.

Fixed length sticks

Suitable for wet conditions.

Reference	~	↔	Skirt nbr	kg
CF-5-40-(*)	40 kV	1.50 m	1	1.15
CF-5-90-(*)	90 kV	2 m	1	1.55
CF-5-110-(*)	110 kV	2.50 m	2	2
CF-5-170-(*)	170 kV	3 m	3	2.4

(*) Please specify type C or K when ordering.

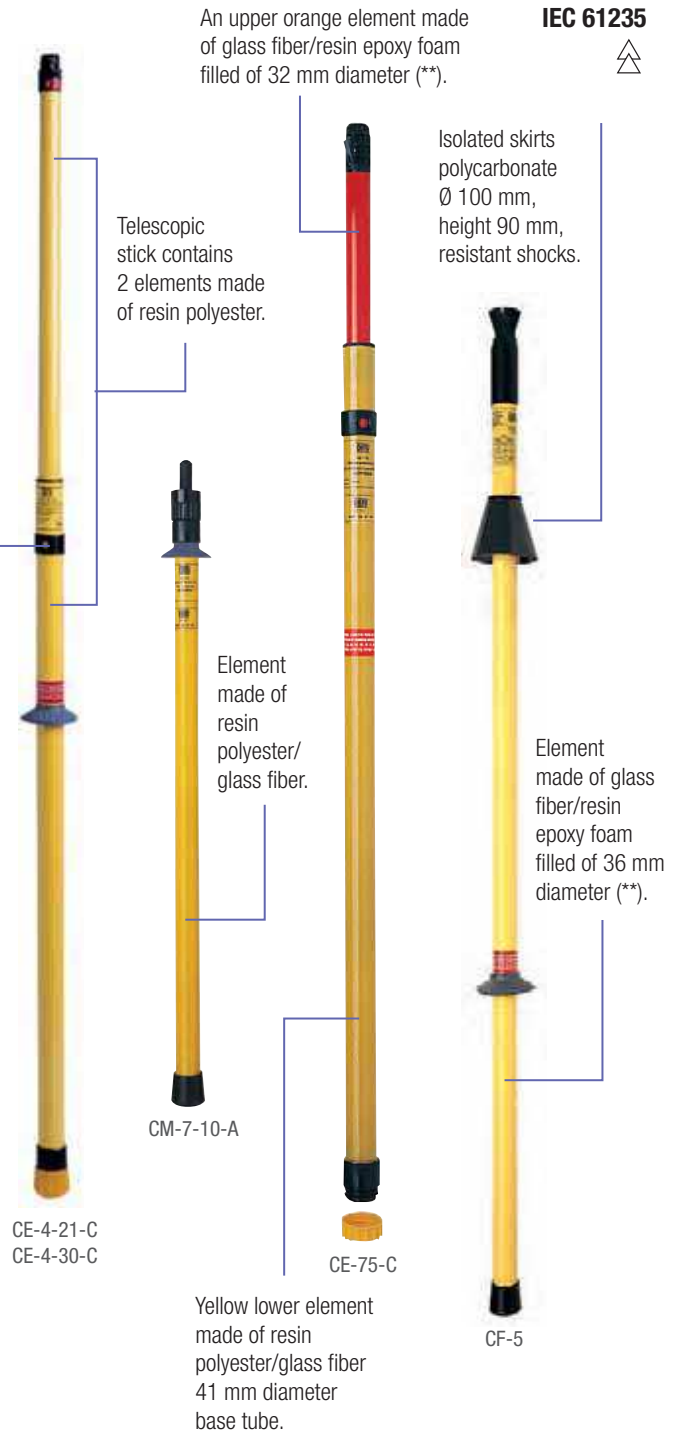
Wall mounted supports

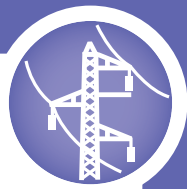
For sticks and voltage detectors. Plastic.

Reference	Top ∅ mm	Bottom ∅ mm
CI-06-D	28-30	36 max
CI-10-D	32-36	58 max
CI-12-D	28-30	56 max
CI-08	16-20	36 max

Delivered with wood screws.

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Insulating sticks

Insulating sticks for short-circuiting and earthing systems

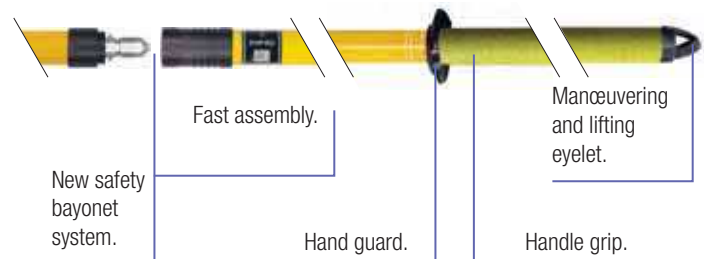
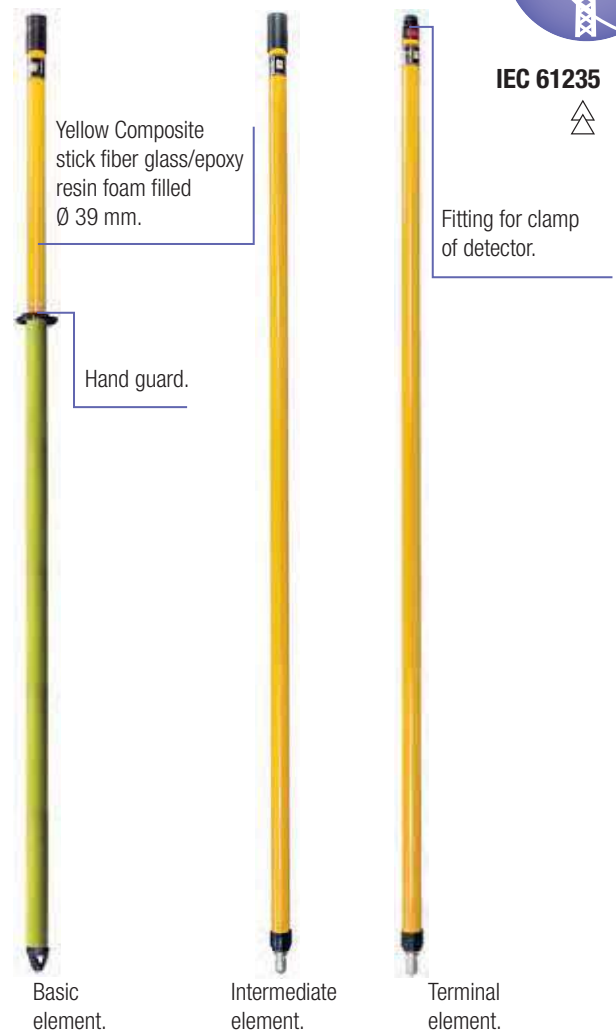
This range allows a stick-length limitation in case of space requirements and carrying capabilities.

For common applications a serie of complete sets including 2 or 3 elements are made to give simple solutions for working distance from 2 to 6 meters.

Reference	↔		isolation	kg
	smallest end fitting	biggest end fitting		
Basic				
CM-4410	1.13 m	–	0.7 m	1.25
CM-4415	1.63 m	–	1 m	1.7
CM-4420	2.13 m	–	1.2 m	2.7
CM-4425	2.63 m	–	1.5 m	3.2
Intermediate				
CM-4410-I	1.165 m	–	0.9 m	1.2
CM-4415-I	1.665 m	–	1.4 m	1.6
CM-4420-I	2.165 m	–	1.9 m	2.5
CM-4425-I	2.665 m	–	2.4 m	3
Terminal				
CM-4410-(*).	1.115 m	1.21 m	0.9-1 m	0.9
CM-4415-(*).	1.615 m	1.71 m	1.4-1.5 m	1.3
CM-4420-(*).	2.115 m	2.21 m	1.9-2 m	2.1
CM-4425-(*).	2.615 m	2.71 m	2.4-2.5 m	2.6

(*) Add end-fitting: B-C-E-H-K-T-D.

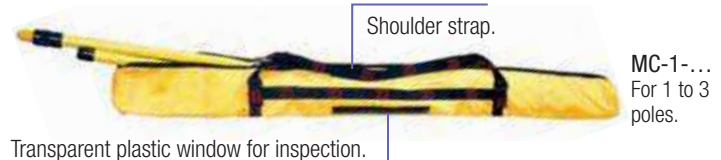
Reference	↔ smallest end fitting	g
CM-4400-J	0.362 m	950



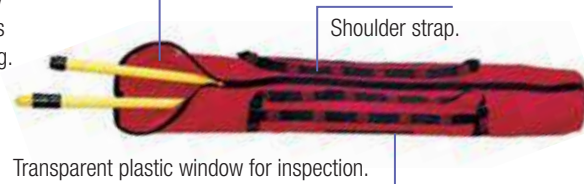
Insulating Stick bags

Strong waterproof canvas cases with a heavy duty zipper closure.

Reference	mm
CM-1-10	1.30 m de Lg
CM-1-15	1.80 m de Lg
CM-1-20	2.40 m de Lg
CM-3-03	0.575 x 1.950 (elmt 1.75 m de Lg)
CM-3-04	0.575 x 2.450 (elmt 2 m de Lg)
CM-3-05	0.575 x 2.850 (elmt 2,50 m de Lg)
CM-3-06	0.575 x 3.400 (elmt 3 m de Lg)



The flared shape allows easy accessories positionning. No need to take them out.



Insulating sticks for manoeuvring detectors & short-circuiting and earthing systems

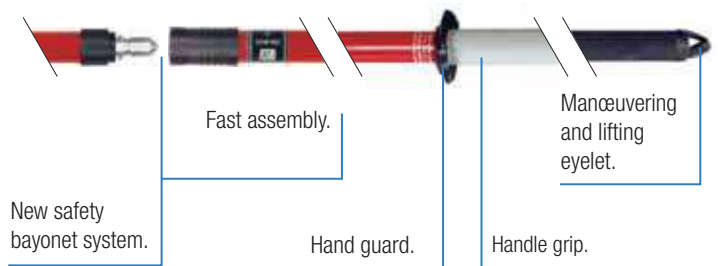
This range thus allows a stick-length limitation in case of space requirements and carrying capabilities.

For common applications a serie of complete sets including 2 or 3 elements are providing simple solutions for working distance from 2 to 6 meters.

Reference	↔ smallest end fitting	↔ biggest end fitting	↔ Insulating	kg
Basic				
CM-4610	1.13 m	–	0.08 m	1.35
CM-4615	1.63 m	–	0.33 m	1.8
CM-4620	2.13 m	–	0.33 m	2.8
CM-4625	2.63 m	–	0.83 m	3.3
Intermediate				
CM-4610-I	1.165 m	–	0.8 m	1.3
CM-4615-I	1.665 m	–	1.3 m	1.7
CM-4620-I	2.165 m	–	1.8 m	2.6
CM-4625-I	2.665 m	–	2.3 m	3.1
Terminal				
CM-4610-(*)	1.115 m	1.21 m	0.78 m	1
CM-4615-(*)	1.615 m	1.71 m	1.28 m	1.4
CM-4620-(*)	2.115 m	2.21 m	1.78 m	2.2
CM-4625-(*)	2.615 m	2.71 m	2.28 m	2.7
Fixed sticks				
CM-4115-(*)	1.575 m	1.675 m	0.82 m	1.35
CM-4120-(*)	2.075 m	2.175 m	1.07 m	1.8
CM-4125-(*)	2.575 m	2.675 m	1.32 m	2.8
CM-4130-(*)	3.075 m	3.175 m	1.82 m	3.3

(*) Reference to be completed by fitting: C-E-H-K-T-D.

Reference	↔ smallest end fitting	g
CM-3900-J	0.36 m	950



Set of sticks

Complete sets of sticks for common applications.

Reference	Composition	↔
CM-4220-(*)	2 elements : CM-4610+CM-4610-(*)	2 m
CM-4230-(*)	2 elements : CM-4615+CM-4615-(*)	3 m
CM-4240-(*)	2 elements : CM-4620+CM-4620-(*)	4 m
CM-4345-(*)	3 elements : CM-4615+CM-4615-I+CM-4615-(*)	4.5 m
CM-4360-(*)	3 elements : CM-4620+CM-4620-I+CM-4620-(*)	6 m

(*) Reference to be completed by fitting: C-E-H-K-T-D.



Insulating sticks for short circuiting and earthing systems

CM-6 series is recommended for cables $\geq 95 \text{ mm}^2$. Yellow colour elements, with superior characteristics, they are connected between them without any prior order of assembly. These elements allow "long length" assemblies which can support short-circuit systems with large cross-section cables Shockproof guard and pole end cap. Yellow colour elements.



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Reference	↔	∅ mm	kg
CM-6-15	1.5 m	47	2.4
CM-6-20	2 m	47	3.2
CM-6-25	2.5 m	47	4
CM-6-30	3 m	47	4.8

Earth clamps for over head live networks and substations

Copper aluminium bronze earth clamps.

Reference	Rating	Use	Connection ∅ (mm)	mm	mm	g
MT-843	40 kA/1 s	Substation/ Overhead line	Hole: ∅ 12.5	45 x 106 x 165	• ∅ 6 -25 — 0 - 35	950
MT-843-P	40 kA/1 s	Substation	3 holes: ∅ 12.5	45 x 106 x 165	• ∅ 6 -35 — 0 - 35	950
MT-847	25 kA/0.5 s	Overhead line	Hole: ∅ 13	45 x 106 x 170	— 0 - 30	1000
MT-852	63 kA/0.5 s	Substation	Hole: ∅ 13	70 x 125 x 155	Fixed points	1400
MT-853	40 kA/0.5 s	Substation	Hole: ∅ 13	65 x 130 x 135	Fixed points	1000



Copper cables

Extra-flexible braided multi-strand copper. Delivered to the meter with a minimum of 5 meters. Available in vinyl or silicone sheath.



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See page 150.