



Test clamps

Made from brass, the test clamp allows the down conductor to be disconnected from the earthing point so that the earth resistance may be measured.

- Suitable for tape or round conductor.
- Supplied with one key and fixing screw.
- Input marked with an earth symbol.

Item	Ref.	L (m)	W (kg)
Test clamp	7001B	0.1	0.50

Protection sheaths

Ensures the down conductor is physically shielded from knocks at ground level. The sheath is usually positioned just below the test clamp.

- Dip-galvanised steel or stainless steel.
- Supplied with 3 stainless steel fixing clamps.

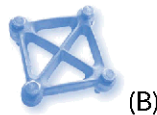
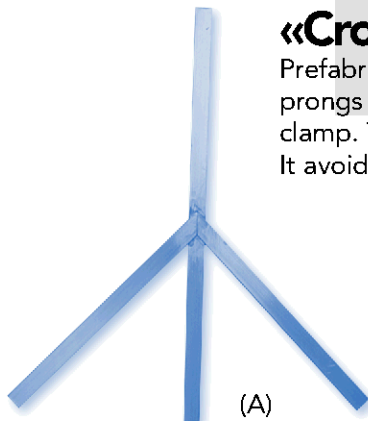


Item	Ref.	L (m)	W (kg)
Galvanised steel protection sheath for flat conductor	7011	2	1.50
Galvanised steel protection sheath for round conductor	7012	2	1.50
Stainless steel protection sheath for flat conductor	7014	2	1.50
Additional stainless steel fixing clamp	7013	-	-

«Crow-foot» earthing systems

Prefabricated in the factory, the «crow-foot» earthing system consists of three 7-metre prongs angled at 45° and a 3-metre long central prong which is connected to the test clamp. This earthing system is easy to unroll and bury.

It avoids mechanical connections which would be prone to corrosion over time.



Item	Ref.	L (m)	W (kg)
Factory-made «crow-foot» tinned copper earthing (A)	7021	22	13.00
Tinned copper tape 28.8x1.85 mm for earthing*	5001	-	0.485
«Crow-foot» clamp (B)	7024	-	0.28

*To NFC 17 - 100 and NF C 17 - 102 standards.

Inspection housings

Used to inspect the earthing conductors' connections to the earthing rods.



(A)



(B)

Item	Ref.	Dia (mm)	W (kg)
Cast iron inspection housing (A)	7051C	200	8.00
Plastic inspection housing (B)	7052	170	0.50



Earth resistance testers

This all-purpose electrical installation set allows the following measurements to be carried out :

- Earth resistance : 2 ranges 20 W and 2000 W.
- Conduction : 0 to 20 W with audible signal.
- Insulation : 20 MW with 500 V D.C.
- A.C. voltages : 750 V.
- A.C. intensity : 16 Amps.
- LCD display.
- Operates on batteries.
- Max. life : 2500 measurements.
- Comes complete with its own carrying case containing :
3 cables with crocodile clips and two auger drills.

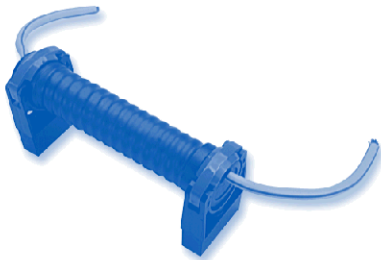


Item	Ref.	W (kg)
Earth resistance tester with accessories	80010	3.00
Earth resistance tester	8002	1.00

Earth coils

The earth coil can be placed between two earthing points to avoid interference or high frequency waves which can flow from one to the other.

- Service inductivity : 20 μ H
- Continuous resistance : 1.5 m Ω
- Resonant frequency : 10 MHz
- Power rating : 100 A
- Output cable cross section : 25 mm²

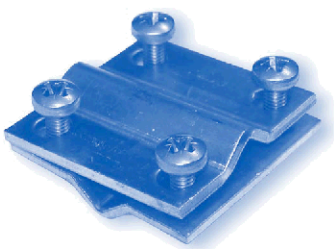


Item	Ref.	W (kg)
Isolating coil	8003	1.00

Earth clamps

Used to fix tape (lightning conductor earthing) to copper cable (mains earth).

- Copper.



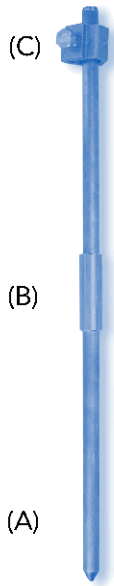
Item	Ref.	W (kg)
Earth clamp	8004	0.175

Copper coated steel earth rods

Steel-centred rods for rigidity, copper-coated by electrolysis (min. thickness 0.25 mm) to ensure perfect and durable contact with the earth. The rods have pointed tips. They can be used equally well :

- By themselves or,
- Connected together in series using cone-shaped brass coupling sleeves, thereby guaranteeing each rod a perfect contact.

The rods can be driven into the ground either by hand or by means of a driving head. The end of the earth conductor can either be soldered to the rod or clamped with Indelec universal rod-to-conductor clamp.



Item	Ref.	dia (mm)	L (m)	W (kg)
Copper coated steel earth rod (A)	7030	15	2	2.60
Copper coated steel earth rod	7031	15	1.5	2.00
Copper coated steel earth rod	7033	17.2	2	4.00
Copper coated steel earth rod	7034	17.2	1.5	2.85
Coupling sleeve (B)	7037	15	-	0.10
Coupling sleeve	7038	17.2	-	0.20
Universal rod-to conductor clamp (C)	7039	15-19	-	0.10
Driving head	7035	15	-	0.20
Driving head	7036	17.2	-	0.30
Self-coupling copper coated steel earth rod	7040	14.3	2	2.50
Self-coupling copper coated steel earth rod	7041	14.3	1	1.50
Driving pin tool to be used with multiple self-coupling earth rods	7047	14.3	-	-

Galvanised steel and stainless steel rods

Item	Ref.	dia (mm)	W (kg)
Self coupling galvanised steel rod - L 1.5 m	7046	20	4.00
Stainless steel earth rod 18/10 - 304 - L 1.5 m	7044	16	2.50

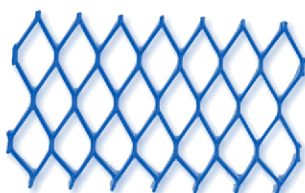
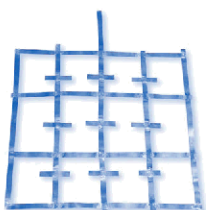
Lattice copper earth mats

The earth mats are used to improve the earthing points where burying ground rods is not possible.

- Tinned copper tape 30x2* or stretched copper.

Item	Ref.	dim. (mm)	W (kg)
Tinned copper lattice earth mat	7022	1 x 1	5.00
Stretched copper lattice earth mat	7025	2 x 1	5.00

*To NFC C 17-100 and NFC 17-102 standards.



Soil conditioning agents

This product is a ionised compound which, once the electrolytes have penetrated the soil, improves the specific resistance of the ground treated by a factor of between 3 and 30.

Procedure :

- Rod : 30 to 40 kg in a dug-out hollow around the rod, then 50 to 60 kg in circular furrows, 1 metre from the rod.
- Conductor : 30 kg per metre run along the bottom of the trench.

The compound should always be covered over with soil and regularly watered.

The product exists in two grades :

- S 92 for use in siliceous soil (sandy or gravelly land).
- C 47 for use in limy or clayey soil.

Item	Ref.	W (kg)
Bag of S92 compound	7061	25.00
Bag of C47 compound	7062	25.00

Technical Manual



Copper earth bars

The earth bar is used to connect different earth conductors or metallic masses together. There are 6 welded bolts (M10) which allow 6 conductors to be connected by lugs (not supplied). There are also 3 backplates allowing 3 separate 30x2 mm tapes to be connected without the need for drilling.
- Red copper 50x5 mm.

Item	Ref.	L (m)	W (kg)
Bare copper earth bar	7053	0.32	1.25



Earth plates

The earth plate allows either 5 or 10 earth cables to be connected by clamping the lugs (not supplied) with M10 bolts.
- Brass width 100 mm, thickness 10 mm.

Item	Ref.	L (m)	W (kg)
Brass earth plate 5 connections	7054	0.15	1.40
Brass earth plate 10 connections	7055	0.25	2.00



Aerial mast diverters

Designed to connect the bottom of metallic aerial masts on a roof to the lightning rod's down conductor. The diverter will provide a temporary earthing for the aerial mast if it happens to be struck by lightning.

Nominal sparkover voltage : 500 V

Nominal discharge current : 25 kA.

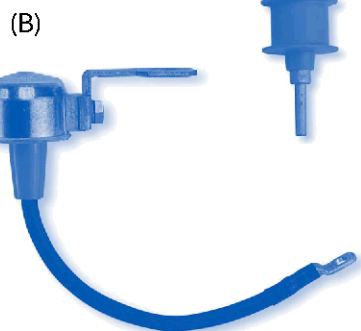
Item	Ref.	W (kg)
Aerial mast diverter	8760	0.20



Isolating spark gaps

This spark gap is designed to be positioned between two, normally insulated metal objects. It provides a temporary connection between the two objects should one of them increase in potential.

This will avoid a dangerous spark being generated.



Item	Ref.	Un*	In**	W (kg)
External isolating spark gap (A)	8770	5 kV	50 kA	0.30
Isolating spark gap -EEx type (B)	8771	2.2 kV	100 kA	0.75

* Nominal sparkover voltage.
** Nominal discharge current.

Equipotential bondings

Waveguide and coaxial cable grounding kit



This universal grounding kit is designed to provide the proper electrical contact between the outer conductor of wave guide or coaxial cables and either a tower member or tower down conductor as lightning path towards earth.

All cable diameters are catered for.

Each kit comes complete and ready for installation (diametre to be precised) :

- At the top end
- Every 30 metres
- At the bottom of the vertical drop
- Where it enters the building.

Item	Ref.	dia (inch)	W (kg)
Grounding kit	7056 A	1/2	0.65
Grounding kit	7056 B	7/8	0.65
Grounding kit	7056 C	1 1/4	0.65
Grounding kit	7056 D	1 5/8	0.65
Grounding kit	7056 E	2 1/4	0.65

Drilled copper earth bars

This copper bracket, 0.5 m long, is used to connect 10 kits (ref. 7056) to the tower's earth.

Standard length of 1.75 m available.

- Red copper.
- Hole diameter : 10.5 mm - two rows for 7158 and 7159.



Item	Ref.	Dim. (mm)	L (m)	W (kg)
Drilled bar	7057	25x5	0.5	0.60
Drilled bar	7157	25x5	1.75	1.70
Drilled bar	7158	80x5	1.75	5.60
Drilled bar	7159	100x5	1.75	7.00

Drilled and tapped copper earth bars

Available in lengths of 990 mm, these copper earth bars contain a series of tapped holes (M6), 25 mm apart.

Item	Ref.	Dim.	dia Drill
Drilled and tapped bar	7200	15x5	0.99
Drilled and tapped bar	7201	20x5	0.99
Drilled and tapped bar	7202	32x5	0.99

Insulators

These insulators are used to fix earth bars and earth plates while guaranteeing insulation from their supports.

- Polyester.
- 2 female inserts (M8).
- Support offset : 50 mm.



Item	Ref.	W (kg)
Insulator	7058	0.16