Earth pit bar (inspection pit earth bar)

300 × 50 × 5 · 4 × Ø12 · PE 3030: 238 × 30 × 5 · 4 × Ø10



KALOT Group's earth pit bar, or simply the pit earth bar, is the common connection point for the earthing system conductors inside the inspection pit: the earth rod conductor, the lightning protection down conductor, the building conductor and the conductor to the next pit each fix to one of its holes with a cable lug. The same bar is also the test point of the earthing system: by removing the cable lug of the earth rod conductor, you isolate the earth rod from the rest of the system and measure its resistance. We make the bar in two models: for the concrete earth pit, in bare copper, tinned copper or stainless steel, 300 × 50 × 5, with two angled ends and four Ø12 holes; and for the PE 3030 polyethylene earth pit, in 304 stainless steel, 238 × 30 × 5, with four Ø10 holes. We also make this bar to order in bare or tinned copper.

- Two models: concrete pit and polyethylene pit PE 3030
- Bare copper, tinned copper or stainless steel
- 4 holes Ø12 or Ø10; holes to order
- Connection and test point of the earthing system

Technical specifications

Type	The connection and test bar inside the earth inspection pit
Concrete earth pit bar	300 × 50 × 5 mm, two bevelled ends (long edge 300, short edge 280); 4 holes Ø12; bare copper, tinned copper or stainless steel
Hole spacing on the concrete pit bar	Along the long edge: 68 mm from one end to the first hole, 55 mm between holes and 67 mm to the other end
Polyethylene earth pit bar	for the pit PE 3030: 238 × 30 × 5 mm, flat ends; 4 holes Ø10 spaced 40 mm (59 mm from each end); stainless steel 304 (standard); bare or tinned copper to order
Holes to order	The concrete pit bar is also made with more holes; on the polyethylene pit bar the number, diameter and spacing of the holes change to order to suit the project
Seating	Concrete pit: on edge in the diagonal slots of the pit, long edge up; polyethylene pit: on edge across the diagonal, in two slots in the inner rim
Connecting conductors	With a cable lug and stainless steel bolt, nut and washers; one conductor per hole
Supply	Separately from the pit, for new installation or replacement. We also supply the stainless steel bolts, nuts and washers separately

Models and sizes

Model	Dimensions L × W × T (mm)	End shape	Standard holes	Material
Concrete earth pit bar	300 × 50 × 5	Two angled ends, short edge 280	4 × Ø12	Bare copper, tinned copper or stainless steel
Polyethylene earth pit bar PE 3030	238 × 30 × 5	Straight ends	4 × Ø10	304 stainless steel (standard); bare or tinned copper to order

Dimensions are in millimetres. We also make the concrete pit bar with more holes; on the polyethylene pit bar the number, diameter and spacing of

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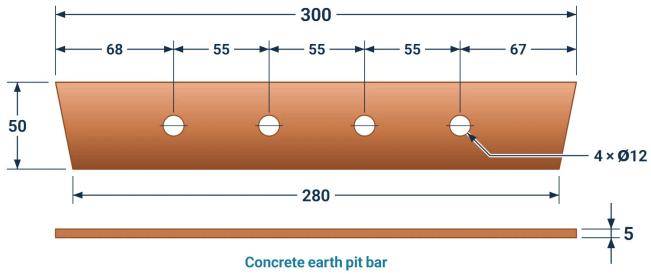
Dimensional drawing

Earth pit bar dimensional drawing

Dimensions in mm · drawing not to scale

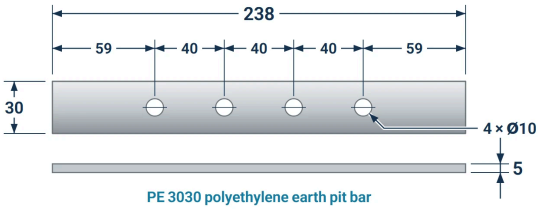
300 × 50 × 5 · 4 × Ø12 · PE 3030: 238 × 30 × 5 · 4 × Ø10

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Concrete earth pit bar

Material: bare copper, tinned copper or stainless steel

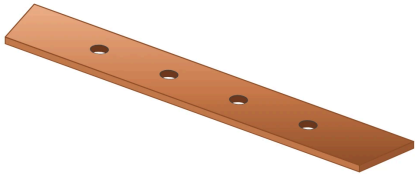


PE 3030 polyethylene earth pit bar

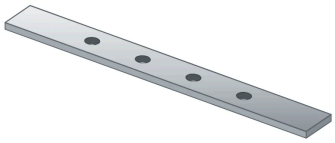
Material: stainless steel 304 (standard); bare or tinned copper to order

Material	Holes Standard	End shape	Dimensions L × W × T (mm)	Model
Bare copper, tinned copper or stainless steel	4 × Ø12	Two bevelled ends, short edge 280	300 × 50 × 5	Earth pit bar concrete
Stainless steel 304 (standard); bare or tinned copper to order	4 × Ø10	Straight ends	238 × 30 × 5	Earth pit bar polyethylene PE 3030

We make the concrete pit bar from bare copper, tinned copper or stainless steel; it has two bevelled ends and sits upright, long edge up, in the slots across the pit diameter. The polyethylene PE 3030 pit bar is stainless steel 304 as standard (bare or tinned copper to order) and sits upright and diagonally in two slots on the inner rim of the pit. Holes to order; each bar is supplied separately.



Isometric view of the concrete earth pit bar



Isometric view of the polyethylene earth pit bar

Our products are continually improved and some dimensions may be updated; please confirm the final dimensions with our specialists before you buy.

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Steps for installing the bar and fixing the conductors

١. Place the bar in the slots of the pit: in the concrete pit, on edge in the diagonal slots with the long edge up; in the polyethylene pit, on edge across the diagonal, in two slots in the inner rim.

٢. Connect the earth rod conductor to the earth rod with a U clamp, a G clamp or exothermic welding. Conductors in the soil and inside the pit are bare copper; only the riser, from ground level to the building, has a green and yellow sheath.

٣. Fit each conductor end with a cable lug matched to the conductor size and the bar hole (Ø12 on the concrete pit bar and Ø10 on the polyethylene pit bar) and crimp it with a suitable tool.

۴. Clean the bar surface and the palm of the cable lug with solvent and let them dry. Do not scrape the tin coating of a tinned bar.

۵. Fit the bolt, flat washer, cable lug, bar, flat washer, spring washer and nut in that order, with only one cable lug per hole. Fix the earth rod conductor to an end hole so that it comes off easily for testing.

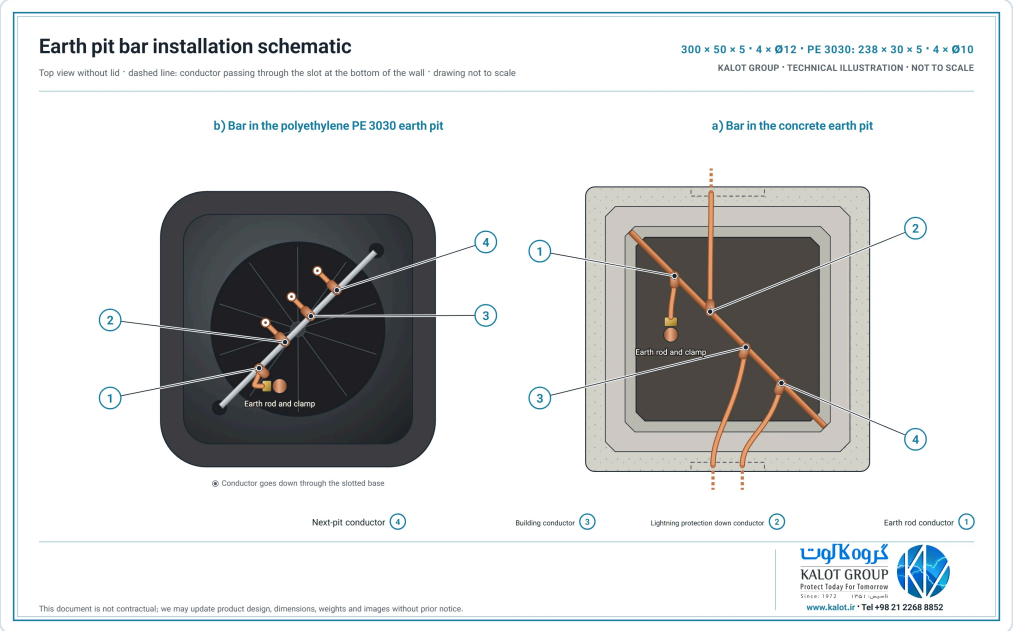
۶. Tighten the bolts according to the manufacturer's instructions.

٧. After installation, undo the cable lug of the earth rod conductor, measure and record the earth rod resistance, and reconnect the joint.

Bar shape and seating

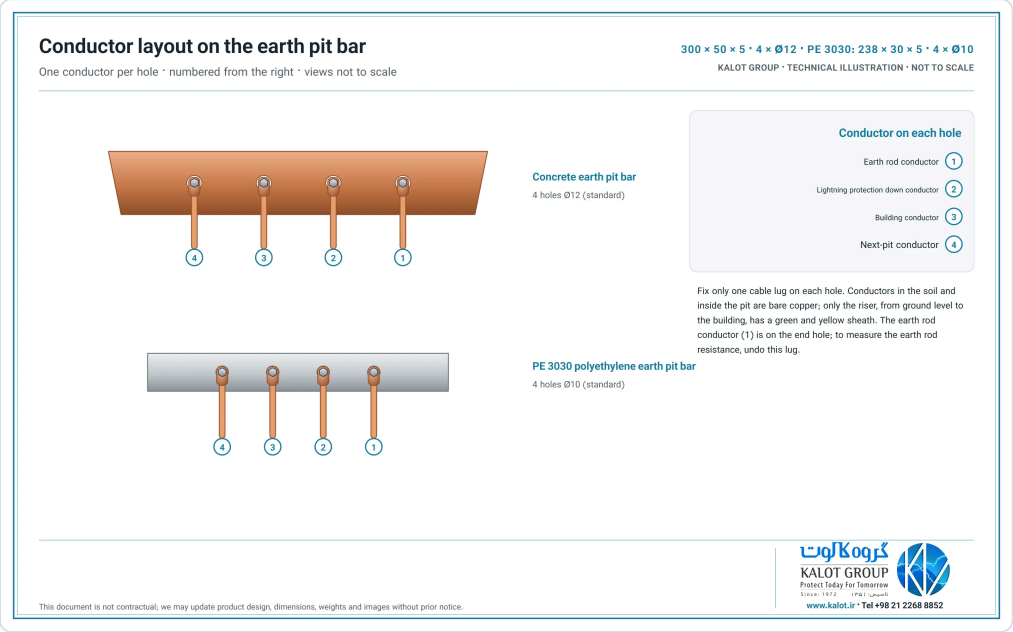
The bar is a flat section with its holes along its long axis. The concrete pit bar is bare copper, tinned copper or stainless steel, with two angled ends, a 300 mm long edge and a 280 mm short edge, so that it sits on edge with the long edge up in the diagonal slots

Installation schematic



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Conductor layout on the bar



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Your choice of earth bar material

We make the concrete pit earth bar in bare copper, tinned copper or stainless steel, and the polyethylene pit earth bar in 304 stainless steel as standard, or to order in bare or tinned copper.

Selection and enquiries

For a quote on earth pit bars, send our specialists the pit type (concrete or polyethylene PE 3030), the bar material (bare copper, tinned copper or stainless steel; the standard bar for the polyethylene pit is stainless steel 304), the number of bars, the number of holes per bar and the number of stainless steel bolts and nuts you need.