Polyethylene earth pit (earth inspection pit)

PE 3030 · 300 × 300 · 250 × 250 · Ø190 · H 205



The KALOT Group polyethylene earth pit (code PE 3030) is installed over the top of an earth rod or earth pit and keeps the joint between the earth electrode and its conductors accessible for inspection, testing and resistance measurement without digging. The body and cover are made of black polyethylene from virgin polymer resin, with no recycled material, and a UV-resistant additive. The reinforced 250 × 250 cover with the KALOT logo and earth symbol sits flush with the ground and closes with two recessed Allen screws. Its standard bar, stainless steel 304 measuring 238 × 30 × 5 with four 10 mm holes, stands upright and diagonally in two slots on the inner rim and connects the earth rod conductor to the building conductor, the lightning protection down conductor or the next pit; we also make bare or tinned copper bars to order. The pit is manufactured to IEC 62561-5; three samples were load tested at Razi Metallurgical Research Centre to IEC 62561-5:2023, and the pit passed heavy class (H) at a load of 30 kN. The polyethylene earth pit is one of KALOT Group's best-selling products and is also exported to markets abroad. We can also recommend the right bar, clamp and cable lug.

- Heavy load class (H), 30 kN; IEC 62561-5:2023 test on three samples
- Open floor for the earth rod to pass through
- 304 stainless steel bar with four holes, set diagonally in two slots on the inner rim
- Lightweight polyethylene (1.8 kg) from virgin resin with a UV-resistant additive

Technical specifications

Type	Earth electrode inspection pit (earth inspection chamber)
Code	PE 3030
Body and cover material	Black polyethylene from virgin polymer resin, no recycled material, with a UV-resistant additive
Pit dimensions	300 × 300 × 205 mm
Cover	Reinforced 250 × 250 mm cover with the KALOT mark and earth symbol, fastened with two recessed stainless steel Allen bolts in opposite corners
Base flange	300 × 300 mm, rounded corners, with reinforcing ribs
Body	Cylindrical, 190 mm diameter and about 150 mm long
Total height	205 mm
Weight	1.8 kg
Standard	As per IEC 62561-5
Tested load rating	Heavy class (H), 30 kN; load test on three samples at Razi Metallurgical Research Centre to IEC 62561-5:2023 (clauses 4.1 and 6.4), no cracking
Bar seating	Diagonal, in two slots on the inner rim; the bar stands upright

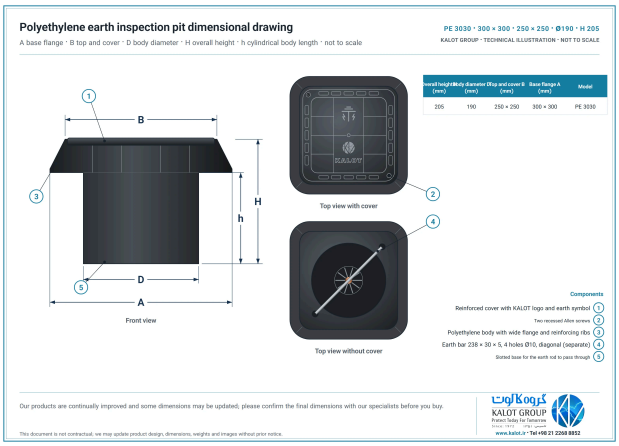
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Sizes

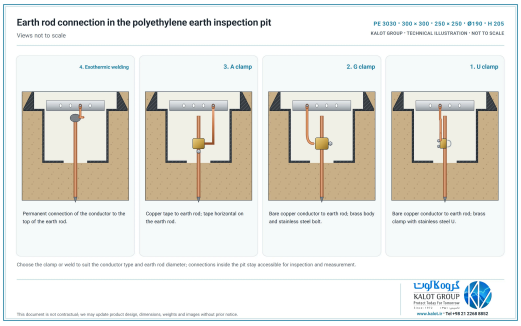
Model	Base flange A (mm)	Top and cover B (mm)	Body diameter D (mm)	Overall height H (mm)
PE 3030	300 × 300	250 × 250	190	205

Dimensions are in millimetres. The cylindrical body extends about 150 mm below the base flange, and after installation the top of the cover is level with the finished ground. We keep improving our products and some dimensions may be updated, so please confirm the final dimensions with our specialists before you buy.

Dimensional drawing



Earth rod connection inside the pit



Installation

1. Dig a hole about 600 × 600 and about 350 mm deep, and drive the earth rod until the design resistance is reached. 2. Spread a gravel bed under and around the earth rod so water can drain. 3. Place the pit over the earth rod so the rod passes through the slotted base and the top of the cover is level with the finished ground. 4. Connect the earth rod to the conductor with a U clamp, G clamp, A clamp or exothermic welding. 5. Set the bar upright and diagonally in the two slots on the inner rim, and fix the earth rod conductor, the down conductor, the building conductor and the conductor to the next pit, each with a cable lug on its own hole, using stainless steel bolts, nuts and washers; put the earth rod conductor on an end hole so it is easy to undo for testing. Tighten the bolts to the manufacturer's instructions. 6. Always pour concrete around the pit so it stays fixed in place and does not tilt over time; build the bedding and surrounding concrete to suit the load at the installation site, and for vehicle routes agree the location with our specialists. Then backfill and level the surroundings. 7. Undo the earth rod conductor's cable lug from the bar to isolate the earth rod from the rest of the system, measure its resistance and record it; then refit the cable lug to the bar and close the cover with the two recessed Allen screws.

Selection and enquiries

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