Single-bolt parallel clamp for connecting two conductors to metal structures and towers (PTEC)

PTEC 1212 · PTEC 2424



The KALOT Group single-bolt parallel clamp (code PTEC) connects two copper earth conductors side by side, with a single bolt, both to each other and to a steel plate, column or angle. The brass body has two halves, each with two semicircular grooves; the two conductors sit in these grooves, and one stainless steel bolt passing through both halves and the hole in the structure clamps the conductors between the halves and the whole clamp onto the structure.

- Two parallel conductors to a structure, with one bolt
- 120 to 300 mm² copper conductors, smaller sizes to order
- Two-piece brass body, stainless steel bolt
- Electrical substations, tower bases and steel structures

Technical specifications

Type	Two-piece cast clamp for the parallel connection of two copper conductors to a metal structure, with one bolt
Body	Cast brass: upper and lower halves, each with two semicircular grooves
Bolt, nut and washer	Stainless steel (bolt marked A2-70); hex bolt M12 × 60 for PTEC 1212 and M14 × 60 for PTEC 2424
Suitable conductor	Stranded copper conductor, both conductors within the range of the same code
Conductor cross-section	120 to 185 or 240 to 300 mm², depending on the code, from 35 mm² to order
Arrangement	Two parallel conductors, either side of the bolt
Structure	Plate, column, tower base angle or steel equipment support, with one hole to suit the bolt diameter
PTEC 2424 dimensions	Width 70.9 mm and depth 40 mm, each half 14 mm thick, overall height with bolt 79.3 mm
PTEC 2424 conductor channel	23 mm in diameter, formed by two semicircular grooves with an 11.5 mm radius
PTEC 2424 bolt hole	14.5 mm at the joint face, with a casting draft up to 16 mm
PTEC 2424 gap between halves	4 mm in the assembly drawing. This gap allows the bolt to press the conductors.
PTEC 2424 weight	431 g (complete assembly): upper half 207 g and lower half 203 g
Marking	KALOT ABHAR and the conductor range, cast into the body
Connection type	Bolted, can be opened and refastened
Main application	Electrical substations, tower bases and steel structures
Codes	PTEC 1212 and PTEC 2424; smaller sizes to order

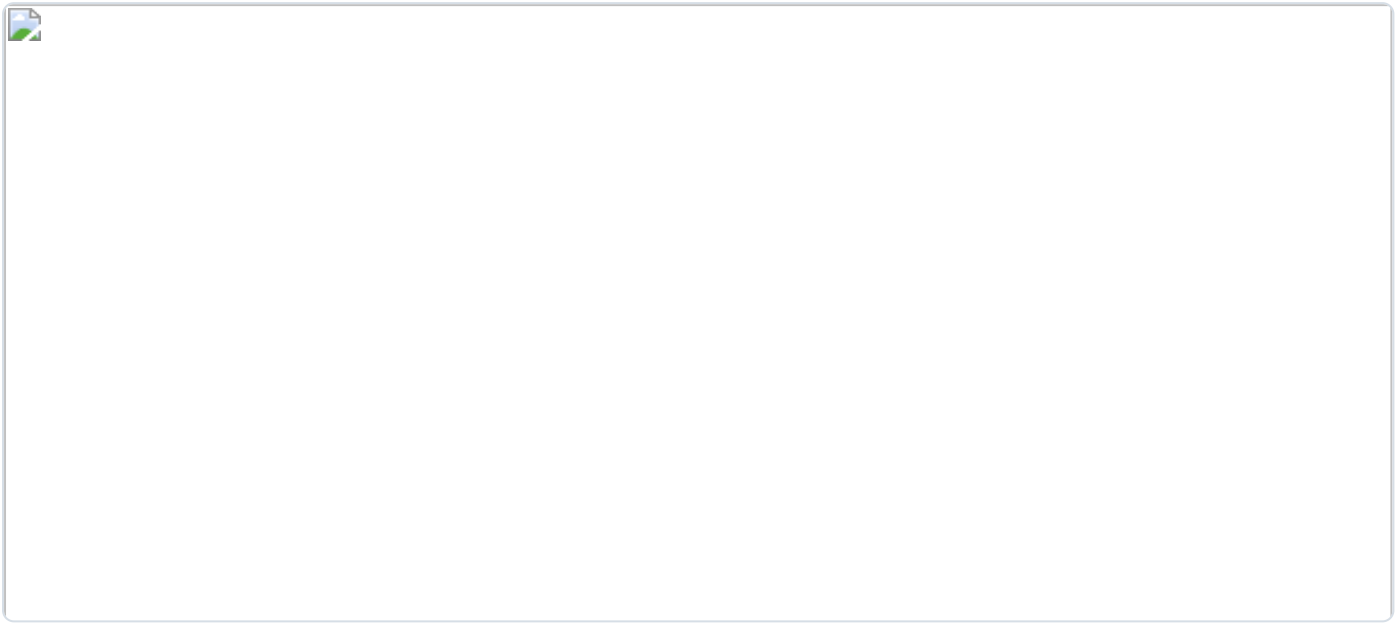
Single-bolt parallel clamp codes (PTEC)

Code	Main conductor (mm²)	Branch conductor (mm²)	Bolt
PTEC 1212	120-185	120-185	M12 × 60
PTEC 2424	240-300	240-300	M14 × 60

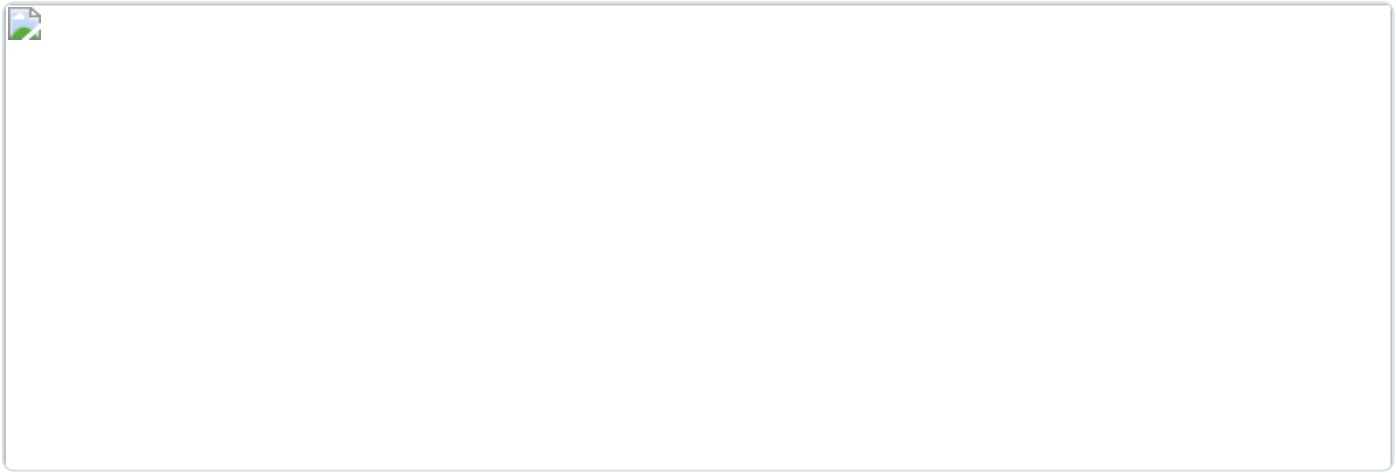
Cross-sections are in mm² and dimensions in mm. "Main conductor" and "branch conductor" are the two conductors that sit in the clamp's two

This document is not contractual; we may update product design, dimensions, weights and images without prior notice.

Dimensional drawing



Connection modes



Installation

1. Choose the clamp code by the cross-section of the two conductors; both conductors must fall within the range of that code. 2. Mark the clamp position on the structure and drill a hole matching the bolt diameter for that code. 3. Remove paint, rust and grease from the contact face of the structure and from the conductors until you reach clean metal. 4. Place the lower half on the structure, lay the two conductors in its grooves and seat the upper half on the conductors. 5. Pass the bolt through both halves and the hole in the structure, fit the washer and nut behind the structure, and tighten the bolt to the manufacturer's instructions. 6. On galvanised steel or in damp outdoor locations, cover the joint with paint or a moisture-proof compound after tightening, so the brass-to-steel contact stays dry. 7. Check that both conductors sit fully in the grooves and that the clamp does not move on the structure.

Selection and enquiries