

TECHNICAL SPECIFICATION

ON Brick plug + hexagon screw TX - RPC

kamfix



Product designation:

RPC d x L / K

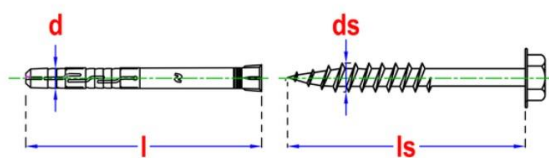
- **RPC** – unique product code
- **d x L** – diameter and length of the PLUG
- **K** – Trademark kamfix

Application of the product:

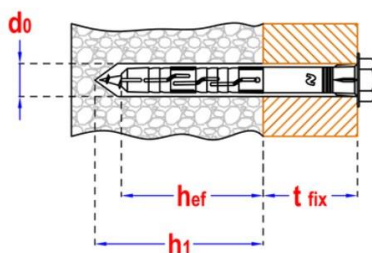
For fastening details to concrete, bricks and aerated concrete blocks. Certified as a universal plug. Has certificate ETA-10/0392 to meet the requirements of ETAG 020.

ETA-10/0392 Issued from:	ITB Poland
Authorized laboratory:	NB 1488
According to the requirements of:	ETAG 020
Declaration of conformity issued by:	ITB
Rating system:	2+

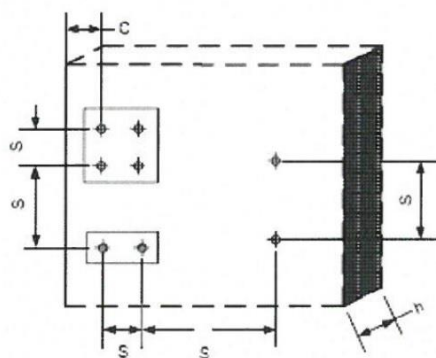
Technical information:



- d – Diameter
- l – Length
- d0 - Drill diameter
- h1- Drilling depth
- tfix - Thickness of the attached element
- hef - Effective anchorage depth
- ds – Diameter of the screw
- ls – Screw length



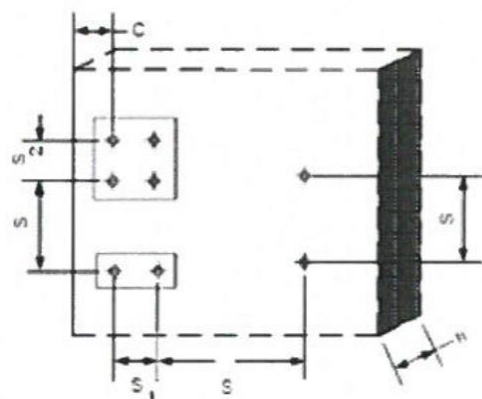
Size	d,mm	l,mm	d0, mm	h1,mm	tfix,mm	hef,mm	ds,mm	ls,mm	Wrench
10x80	10	80	10	80	10	70	7	87	T40
10x100	10	100	10	80	30	70	7	107	T40
10x120	10	120	10	80	50	70	7	127	T40
10x140	10	140	10	80	70	70	7	147	T40
10x160	10	160	10	80	90	70	7	167	T40
10x180	10	180	10	80	110	70	7	187	T40
10x200	10	200	10	80	130	70	7	207	T40
10x230	10	230	10	80	160	70	7	237	T40
10x260	10	260	10	80	190	70	7	267	T40
10x300	10	300	10	80	230	70	7	307	T40



Recommended distances between plugs in concrete

Recommended distances between plugs in brickwork

Plug type	Material base	h _{min} mm	C _{min} mm	S _{min} mm
RPC 10xX	Concrete C16/C20	100	100	80
	Concrete C12/C15	100	140	112



Plug type	Material base	Plug couple			Plug group	
		h _{min} mm	C _{min} mm	S _{min} mm	S _{min1} ²⁾ mm	S _{min1} ³⁾ mm
RPC 10xX	Solid brick	115	120	250	>240	>480
	Brick with cavities	115	120	250	>240	>480
	Aerated concrete	100	80	250	>240	>480

2)- in a direction perpendicular to the edge of the brick
3)- in a direction parallel to the edge of the brick

Characteristic resistance when installed in concrete, pull-out force; percussive drilling

Plug type (abbr.)	RPCØ10
Temperature range	24°C до 80°C
Concrete > C16/20	
Characteristic resistance, NRk,p [kN]	2,5
Safety factor, Y Mc ³⁾	1,8
Concrete C12/15	
Characteristic resistance, NRk,p [kN]	1,5
Safety factor, Y Mc ¹⁾	1,8
1) In the absence of other regional regulations	

Characteristic resistance for installation in brickwork, FRk

Plug/material/base	Density, [kg/dm ³]	Compression class,[N/mm ²]	Photo	Drilling method	FRk ¹⁾ [kN]
RPCØ10					
Solid brick, EN 771-1	≥22,17	≥20		With impact	4,5 ³⁾ (4,0) ⁴⁾
Brick with cavities, EN 771-1 a ¹⁾ = 12 mm	≥1,09	≥25		Without impact	1,5 ³⁾ (1,2) ⁴⁾
Brick with vertical cavities, porous (Porotherm 25 P+W), EN 771-1 a ¹⁾ = 10 mm	≥0,75	≥15		Without impact	0,9 ³⁾ (0,75) ⁴⁾
Brick with vertical cavities, ceramic (Max 250), EN 771-1 a ¹⁾ = 12 mm	≥0,8	≥15		Without impact	4,5 ³⁾ , 4)
Aerated concrete AAC2	360	≥2		Without impact	0,5 ³⁾
Aerated concrete AAC7	660	≥7		Without impact	1,5 ³⁾
Safety factor ²⁾ YMm	2,5				

1) Characteristic resistance FRk in tension, shear or a combination of both

Characteristic resistance is valid for a single plug or for a group of two or four plugs at a distance equal to or greater than the minimum distance Smin defined above in the table

2) In the absence of other regional regulations

3) Temperature range "a" (+24°C to +40°C).

4) Temperature range "b" (+50 °C to +80°C).

Material

- Plug – Polyamide/Nylon
- Screw – Galvanized steel

Installation

1. A hole is drilled in the base.
2. It is recommended that the drilled hole be cleaned of solid debris.
3. When drilling soft materials, the impact-free drilling mode **MUST** be used. Using impact drilling leads to destruction of the structure of the material and the reliable fastening of the plug cannot be guaranteed.
4. Torque the screw to the plug.

When turning the screw, the insert expands in both directions. If the installation is in hollow bricks the plug must be long enough to cover a minimum of 2 sections of the brick. In wooden constructions, the plug with a hidden collar can be used, but in metal constructions, the use of a wide or cylindrical collar plug is recommended.

Advantages

- Quick, easy and economical installation.
- Torx drive provides high torque.
- After installation, it is possible to unscrew the screw and dismantle the attached parts.
- The hex bolt provides a larger clamping area when turning.