FRAME PLUGS Ø12

KPR-FAST 12 K

TX HEX HEAD SCREW

KPS-FAST 12 S

TX COUNTERSUNK HEAD SCREW

POLISH PRODUCER

ETA CE

100% secure fixing

100% pure material nylon

REDUCED THREAD

- precise installation of the screw
- increased expansion force in the second expansion zone

length up to 360 mm

ETAG 020

A B C D

all Directions expansion zone

strong plus

KPR-FAST 12 K
Frame plug Ø12 with hex head screw

KPS-FAST 12 S
Frame plug Ø12 with countersunk head screw

POLISH PRODUCER

CE ETA-12/0272

ETAG 020 A B C D

Description

Frame plug with flanged hex head screw for fixing of metal members, frame plug with countersunk head screw for fixing of wood

Technical data

Type of installation	push-through installation
Substrate	concrete, solid clay brick, perforated clay brick, autoclaved aerated concrete

Sleeve material / Protective coating

100% nylon

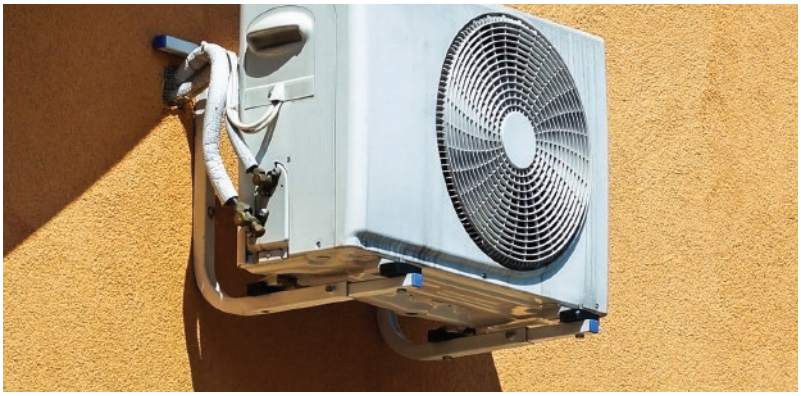
Blue zinc

Features and advantages of the product

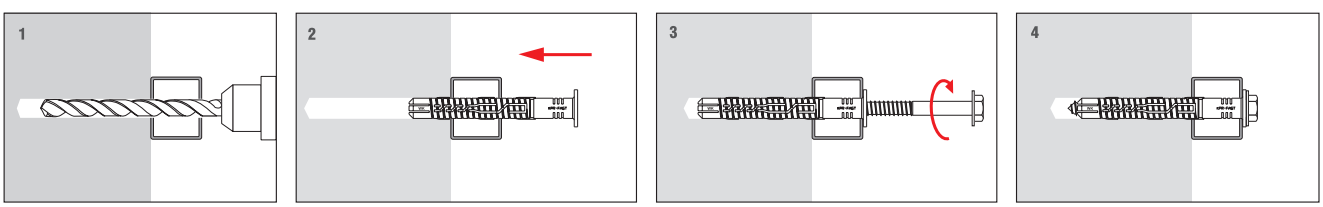
Screw length — **We manufacture screws up to 360 mm long**

Hex head with TX-40/SW-13 drive — TX drive ensures optimum transfer of torque while SW-13 hex head allows for tightening the screw with a given force (e.g. with torque wrench).

Reduced thread — Precise installation of the screw
Increased expansion force in the second expansion zone.



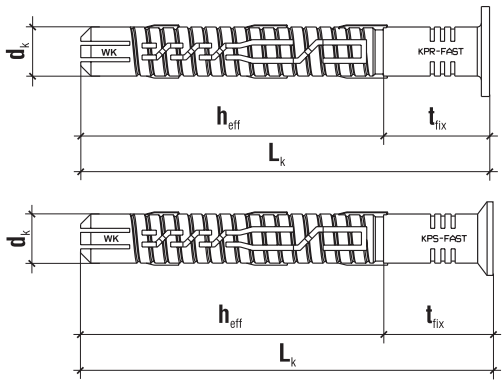
Installation

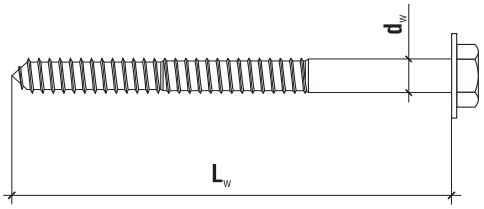


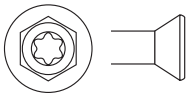
TECHNICAL DATA

Product marking

KPS-FAST	12	080	S
Type	Diameter	Length	Head type







SW-13
TX-40

TX-40

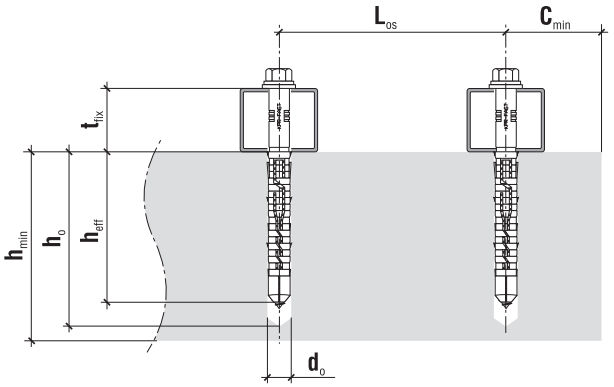
	Code KPR-FAST 12 K	Code KPS-FAST 12 S	d_k x L_k [mm]	d_w x L_w [mm]	Max. fixture thickness t_{fix} [mm]	Drive type KPR-FAST 12 K		Drive type KPS-FAST 12 S	Pcs
ø12	KPR-FAST-12080K	KPS-FAST-12080S	12 x 80	8.0 x 85	10	TX-40	SW-13	TX-40	25
	KPR-FAST-12100K	KPS-FAST-12100S	12 x 100	8.0 x 105	30	TX-40	SW-13	TX-40	25
	KPR-FAST-12120K	KPS-FAST-12120S	12 x 120	8.0 x 125	50	TX-40	SW-13	TX-40	25
	KPR-FAST-12140K	KPS-FAST-12140S	12 x 140	8.0 x 145	70	TX-40	SW-13	TX-40	25
	KPR-FAST-12160K	KPS-FAST-12160S	12 x 160	8.0 x 165	90	TX-40	SW-13	TX-40	25
	KPR-FAST-12180K	KPS-FAST-12180S	12 x 180	8.0 x 185	110	TX-40	SW-13	TX-40	25
	KPR-FAST-12200K	KPS-FAST-12200S	12 x 200	8.0 x 205	130	TX-40	SW-13	TX-40	25
	KPR-FAST-12230K	KPS-FAST-12230S	12 x 230	8.0 x 235	160	TX-40	SW-13	TX-40	25
	KPR-FAST-12260K	KPS-FAST-12260S	12 x 260	8.0 x 265	190	TX-40	SW-13	TX-40	25
	KPR-FAST-12300K	KPS-FAST-12300S	12 x 300	8.0 x 305	230	TX-40	SW-13	TX-40	20
	KPR-FAST-12330K	KPS-FAST-12330S	12 x 330	8.0 x 335	260	TX-40	SW-13	TX-40	20
	KPR-FAST-12360K	KPS-FAST-12360S	12 x 360	8.0 x 365	290	TX-40	SW-13	TX-40	20

TECHNICAL DATA

Parameter	Unit	Value
Plug diameter	d_k [mm]	12
Hole diameter	d_o [mm]	12
Effective anchorage depth	h_{eff} [mm]	70
Depth of drill hole	h_o [mm]	80
Drive type	x	SW-13 / TX-40
Use categories	x	**A B C D**
Sleeve material	x	PA
Screw material	x	Zinc plated steel
Approval	x	**ETA-12/0272**

SUBSTRATE - MINIMUM THICKNESS, DISTANCE

Substrate	Min. member thickness h_{min} [mm]	Min. edge distance c_{min} [mm]
Concrete ≥C16/20	100	100
Solid clay brick	120	100
Solid sand-lime brick	120	100
Perforated clay brick	180	100
Autoclaved aerated concrete	180	100



RESISTANCE KPR-FAST 12 K / KPS-FAST 12 S

Type of substrate according to ETAG020		Description	Density [kg/dm³]	Standard	Characteristic pull-out resistance [kN]	
					KPR-FAST 12 K	KPS-FAST 12 S
A		Concrete C12/15	≥ 1.8	EN 206-1	**3.5***	
		Concrete ≥C16/20	≥ 2.3	EN 206-1	**5.0***	
B		Solid clay brick	≥ 1.7	EN 771-1	**3.5**	
		Solid clay brick (e.g. MZ Rd 2.0/20)	≥ 2.0	EN 771-1	**3.5**	
B		Solid sand-lime brick (e.g. Kalksandstein KS NF 20-2.0 Vollstein - DIN 106)	≥ 2.0	EN 771-2	**3.5**	
C		Solid sand-lime brick (e.g. Kalksandstein KS L-R(P) 8 DF Lochstein - DIN 106)	≥ 1.6	EN 771-2	**3.0**	
C		Vertically perforated clay brick (e.g. Hlz Rd1 1.2/12)	≥ 1.2	EN 771-1	**2.0**	
D		Lightweight concrete hollow blocks (e.g. HBL 2/0.8)	≥ 0.8	EN 771-3	**1.5**	
D		Autoclaved aerated concrete AAC2	≥ 0.35	EN 771-4	**0.75**	
		Autoclaved aerated concrete AAC7	≥ 0.65	EN 771-4	**3.0**	

* cracked concrete