

# FIX EXPANSION PLUG WITH COLLAR AND SCREW

Easy-to-install plug with collar and screw giving exceptional performance in solid base materials



## Product information

### Features and benefits

- Anti-rotation fins prevent spinning during tightening of the screw.
- Engineered grip feature for extra holding power.
- Two-way expansion mechanism provides a strong anchorage in solid base materials.
- Flange ensures flush fit to surface.

### Applications

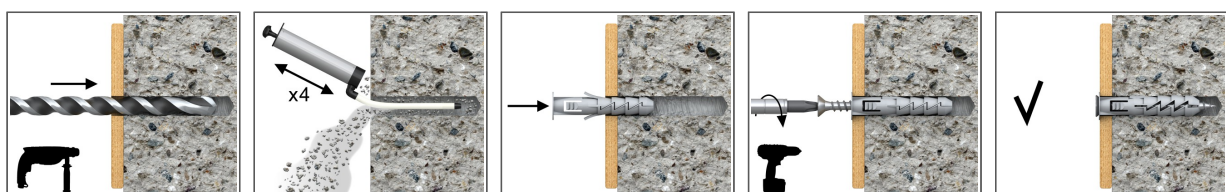
- Pictures
- Lighting
- Skirting / Dado railing
- Shelves
- Trunking
- Cable trays
- Electrical fittings
- Letterboxes

### Base materials

#### Approved for use in:

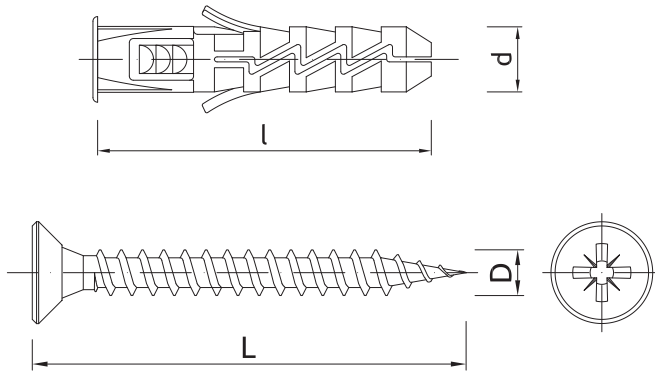
- Concrete
- Solid Brick
- Solid Sand-lime Brick
- Aerated Concrete Block

## Installation guide



1. Drill a hole of required diameter.
2. Insert FIX plug into hole and tap home.
3. Insert screw of required diameter into plug through fixture and tighten.

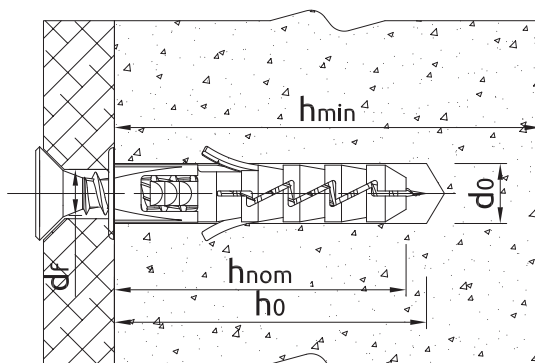
Product information



Product dimensions

Size	Product Code	Plug		Screw		Fixture	
		Diameter	Length	Diameter	Length	Max. thickness	Hole diameter
		d	l	D	L	t <sub>fix</sub>	d <sub>f</sub>
[mm]							
Ø6	FIX-K-06+	6	30	3,5	30	1	4
	FIX-K-06+340	6	30	3,5	40	10	4
	FIX-K-06+350	6	30	3,5	50	20	4
	FIX-K-06+435	6	30	4,0	35	5	5
	FIX-K-06+440	6	30	4,0	40	10	5
	FIX-K-06+450	6	30	4,0	50	20	5
Ø8	FIX-K-08+	8	40	5,0	45	5	6
	FIX-K-08+450	8	40	4,5	50	10	5
	FIX-K-08+460	8	40	4,5	60	20	5
	FIX-K-08+550	8	40	5,0	50	10	6
Ø10	FIX-K-10+560	10	50	5,0	60	10	6
	FIX-K-10+660	10	50	6,0	60	10	7

Installation data



Installation data for countersunk head screw

Size			Ø6	Ø8	Ø10
Fixing diameter	d	[mm]	6	8	10
Hole diameter in substrate	d <sub>0</sub>	[mm]	6	8	10
Min. hole depth in substrate	h <sub>0</sub>	[mm]	40	50	60
Min. installation depth	h <sub>nom</sub>	[mm]	30	40	50
Min. substrate thickness	h <sub>min</sub>	[mm]	60	70	80
Min. spacing	s <sub>min</sub>	[mm]	30	40	30
Min. edge distance	c <sub>min</sub>	[mm]	30	40	40

## Basic performance data

Performance data for single fixing without influence of edge distance and spacing

Substrate		Concrete C20/25 - C50/60	Solid clay brick min 20MPa (eg Mz20/2.0)	Sand-lime solid brick	Aerated concrete 600 Mark V
<b>MEAN ULTIMATE LOAD <math>F_{Ru,m}</math></b>					
Ø6, Embedment depth 30mm	[kN]	0.24	1.11	0.65	0.76
Ø8, Embedment depth 40mm	[kN]	1.02	2.92	1.65	1.17
Ø10, Embedment depth 50mm	[kN]	0.78	1.86	1.62	1.64
<b>CHARACTERISTIC LOAD <math>F_{Rk}</math></b>					
Ø6, Embedment depth 30mm	[kN]	0.15	0.40	0.30	0.40
Ø8, Embedment depth 40mm	[kN]	0.50	2.00	1.20	0.75
Ø10, Embedment depth 50mm	[kN]	0.40	0.90	0.60	0.90
<b>DESIGN LOAD <math>F_{Rd}</math></b>					
Ø6, Embedment depth 30mm	[kN]	0.08	0.16	0.12	0.20
Ø8, Embedment depth 40mm	[kN]	0.27	0.80	0.48	0.37
Ø10, Embedment depth 50mm	[kN]	0.22	0.36	0.24	0.45
<b>RECOMMENDED LOAD <math>F_{Rc}</math></b>					
Ø6, Embedment depth 30mm	[kN]	0.06	0.11	0.09	0.14
Ø8, Embedment depth 40mm	[kN]	0.19	0.57	0.34	0.26
Ø10, Embedment depth 50mm	[kN]	0.16	0.26	0.17	0.32

## Product commercial data

Product Code	Plug	Screw	Quantity [pcs]			Weight [kg]			Bar Codes
	Diameter [mm]	Length [mm]	Box	Outer	Pallet	Box	Outer	Pallet	
FIX-K-06+	6	30	200	6400	153600	0.40	12.8	337.2	5906675072029
FIX-K-06+340	6	40	200	6400	153600	0.54	17.3	444.7	5906675072128
FIX-K-06+350	6	50	200	3200	76800	0.54	8.6	237.4	5906675072227
FIX-K-06+435	6	35	200	6400	153600	0.48	15.4	398.6	5906675072326
FIX-K-06+440	6	40	200	3200	76800	0.55	8.8	241.2	5906675072425
FIX-K-06+450	6	50	200	2400	57600	0.66	7.9	220.1	5906675072524
FIX-K-08+	8	45	200	2400	57600	0.89	10.7	286.3	5906675072623
FIX-K-08+450	8	50	200	2400	57600	0.92	11.0	295.0	5906675072722
FIX-K-08+460	8	60	100	1600	38400	0.55	8.8	241.2	5906675072821
FIX-K-08+550	8	50	100	1600	38400	0.66	10.6	283.4	5906675072920
FIX-K-10+560	10	60	100	1200	28800	0.73	8.8	240.2	5906675073422
FIX-K-10+660	10	60	100	1200	28800	0.97	11.6	309.4	5906675073521