

# FIX NYLON EXPANSION PLUG

Easy-to-install nylon plug 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.
- Small edge distances achievable.

### Applications

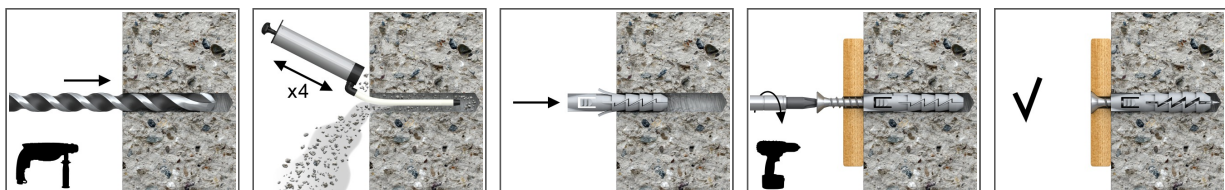
- Pictures
- Lighting
- Skirting / Dado railing
- Shelves
- Trunking
- Cable trays
- Electrical fittings
- Letterboxes

### Base materials

#### Approved for use in:

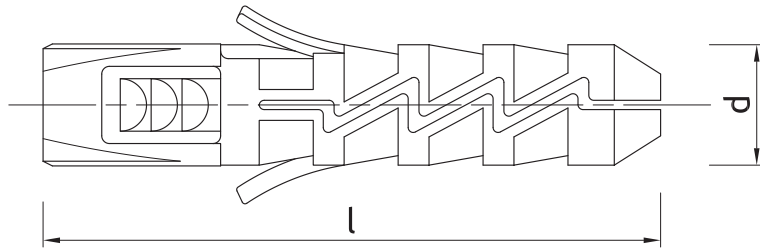
- Concrete
- Solid Brick
- Solid Sand-lime Brick
- Aerated Concrete Block

## 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.

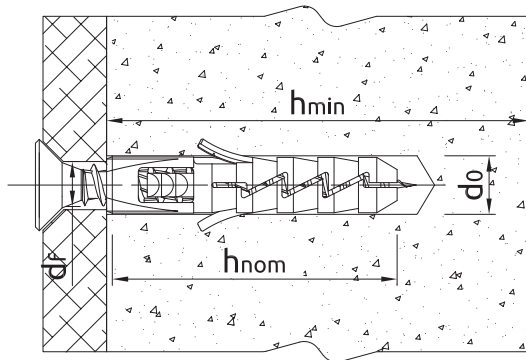
### Product information



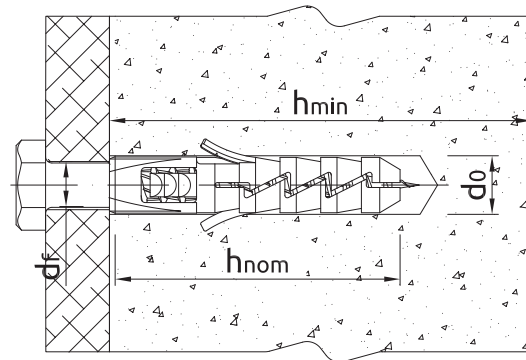
Product dimensions

Size	Product Code	Plug		Screw	Fixture
		Diameter	Length	Diameter	Hole diameter
		d	l	D	d <sub>f</sub>
[mm]					
Ø5	R-FIX-N-05	5	25	3,5	4
Ø6	R-FIX-N-06	6	30	3,5 - 4,0	4,0 - 5,0
Ø8	R-FIX-N-08	8	40	4,5 - 5,0	5,0 - 6,0
Ø10	R-FIX-N-10	10	50	5,0 - 6,0	6,0 - 7,0
Ø12	R-FIX-N-12	12	60	6,0 - 8,0	7,0 - 9,0
Ø14	R-FIX-N-14	14	70	10,0	11,0

### Installation data



Installation data



Installation data

Size			Ø5	Ø6	Ø8	Ø10	Ø12	Ø14
Hole diameter in substrate	d <sub>0</sub>	[mm]	5	6	8	10	12	14
Min. hole depth in substrate	h <sub>0</sub>	[mm]	35	40	50	60	70	80
Min. installation depth	h <sub>nom</sub>	[mm]	25	30	40	50	60	70
Min. substrate thickness	h <sub>min</sub>	[mm]	55	60	70	80	90	100
Min. spacing (countersunk head)	s <sub>min</sub>	[mm]	25	30	40	30	30	-
Min. spacing (HEX head)	s <sub>min</sub>	[mm]	-	-	-	50	60	70
Min. edge distance (countersunk head)	c <sub>min</sub>	[mm]	25	30	40	40	40	-
Min. edge distance (HEX head)	c <sub>min</sub>	[mm]	-	-	-	50	60	70
Fixing diameter	d	[mm]	5	6	8	10	12	14

## 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_{R,m}</math></b>					
Ø5, Embedment depth 25mm	[kN]	0.26	0.32	0.22	0.30
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
Ø12, Embedment depth 60mm	[kN]	1.82	5.80	4.06	2.99
Ø14, Embedment depth 70mm	[kN]	2.29	3.73	2.37	1.80
<b>CHARACTERISTIC LOAD <math>F_{Rk}</math></b>					
Ø5, Embedment depth 25mm	[kN]	0.10	0.15	0.10	0.15
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
Ø12, Embedment depth 60mm	[kN]	1.20	4.00	3.00	2.00
Ø14, Embedment depth 70mm	[kN]	1.20	2.50	1.20	1.15
<b>DESIGN LOAD <math>F_{Rd}</math></b>					
Ø5, Embedment depth 25mm	[kN]	0.05	0.06	0.04	0.07
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
Ø12, Embedment depth 60mm	[kN]	0.66	1.60	1.20	1.00
Ø14, Embedment depth 70mm	[kN]	0.66	1.00	0.48	0.57
<b>RECOMMENDED LOAD <math>F_{rec}</math></b>					
Ø5, Embedment depth 25mm	[kN]	0.04	0.04	0.03	0.05
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
Ø12, Embedment depth 60mm	[kN]	0.47	1.14	0.86	0.71
Ø14, Embedment depth 70mm	[kN]	0.47	0.71	0.34	0.41

## Product commercial data

Product Code	Plug	Quantity [pcs]			Weight [kg]			Bar Codes
	Diameter [mm]	Box	Outer	Pallet	Box	Outer	Pallet	
R-FIX-N-05	5	100	3200	179200	0.05	1.54	116.0	5906675168425
R-FIX-N-06	6	100	3200	179200	0.08	2.5	169.8	5906675168449
R-FIX-N-08	8	100	3200	76800	0.17	5.4	160.6	5906675168463
R-FIX-N-10	10	100	1600	38400	0.31	4.9	147.9	5906675168487
R-FIX-N-12	12	50	800	19200	0.26	4.2	131.4	5906675168500
R-FIX-N-14	14	25	400	9600	0.18	2.9	99.9	5906675009049