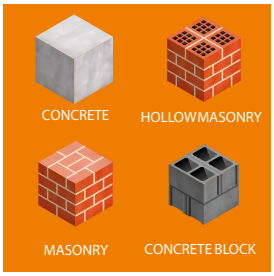
NYLON LONG EXPANSION PLUGS
WITH COUNTERSUNK HEAD SCREW



Available in A4 stainless steel

EUROPEAN TECHNICAL ASSESSMENT
ETA 12/0374
ETAG 020

FB90

FEATURES

- PA6 nylon plug
- Zinc plated or A4 stainless steel screw

features

- ETA for concrete, semi•solid and hollow brick,
- Suitable also for aerated concrete, stone (dense structure, trials recommended)
- Excellent fixing in all materials thanks to long expansion (hnom = 70mm)
- Solid materials: uniform 'swelling' of the plug by quadruple expansion (NK= 120 à 300 daN)
- Hollow materials: the plug forms a 'knot' when expanded
- 100% nylon plug: excellent lifetime, resists to temperature from -20°C to +40°C
- Fire resistant for 90 minutes (FB90) for diameter 10 in concrete and up to 80kg load
- Easy screwing with TORX30 (diam.8) and TORX40 (diam.10) (G•L and G•LH)
- Wide range of application:

screw: countersunk head, hexagonal head, hexagonal head with base

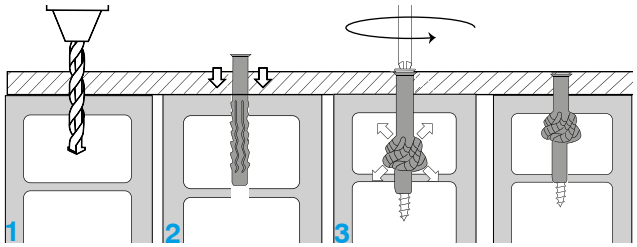
- Screw: zinc plated and stainless steel
- Plug: 8 and 10, length 80-240mm

APPLICATIONS EXAMPLES

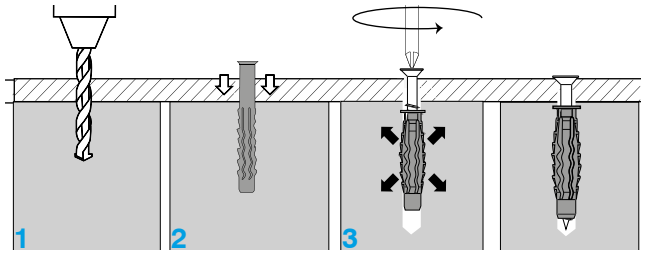
- Short versions
  - light wooden or metal frames
- Long versions
  - -frames and siding
  - -cladding
  - -windows
  - -rafters

INSTALLATION

Hollow walls



Solid walls



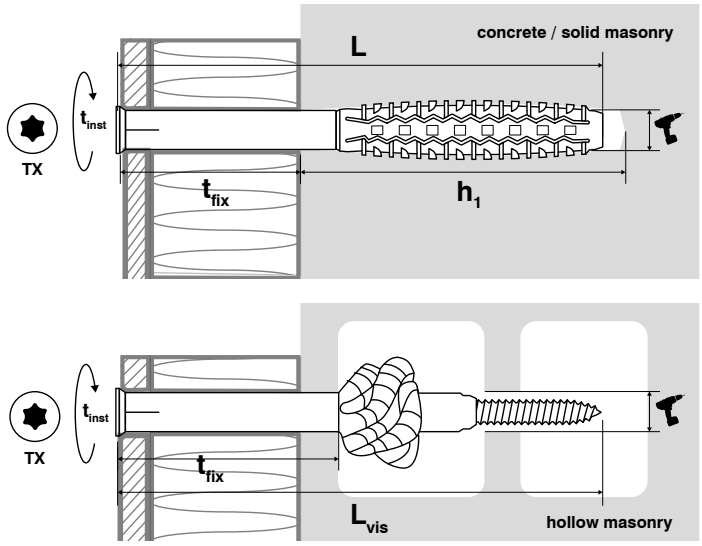
1) • drill without damaging the concrete structure and while respecting the drilling method recommended in annex 6 of the ETA 12/0374.
• Remove dust from the hole

2) The nylon plug is set by light hammer strokes

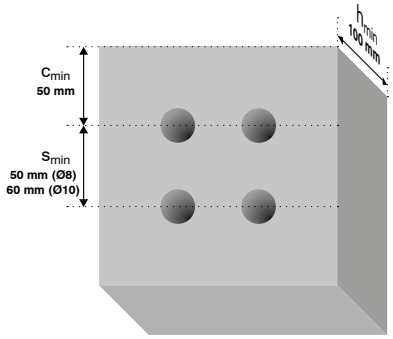
3) Special screw is screwed until the screw head touches the plastic ring. The plug is correctly installed if the plastic ring does not turn in the hole and if no more movement of the screw is possible.

If installing in hollow materials, be sure that the expansion happens (by 'knotting' in the support material)

DIMENSIONS & APPLICATIONS DATAS



In concrete ≥ C16/20

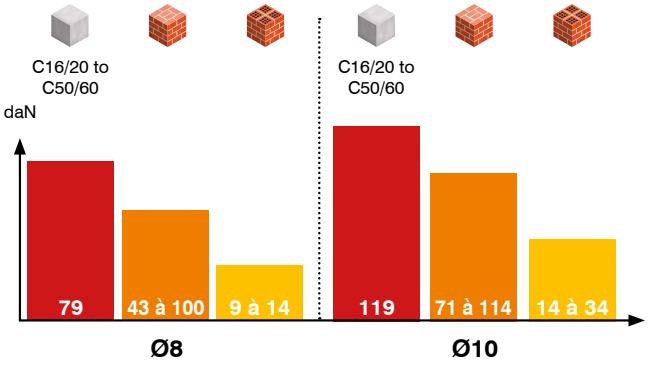


ø	L	t_{fix}		h_1	TX	L_{vis}	$ø_{vis}$	REFERENCES	
Diameter	Length	Tfix	Ø drill	drill depth	socket	screw length	screw diameter	steel screw	A4 stainless steel screw
8	80	10	8	70	TX30	85	5.5	G-L08080	-
	100	30	8	70	TX30	105	5.5	G-L08100	-
	120	50	8	70	TX30	125	5.5	G-L08120	-
	140	70	8	70	TX30	145	5.5	G-L08140	-
	170	100	8	70	TX30	175	5.5	G-L08170	-
	200	130	8	70	TX30	205	5.5	G-L08200	-
10	80	10	10	70	TX40	85	7.0	G-L10080	A4-G-L10080
	100	30	10	70	TX40	105	7.0	G-L10100	A4-G-L10100
	120	50	10	70	TX40	120	7.0	G-L10120	A4-G-L10120
	140	70	10	70	TX40	140	7.0	G-L10140	A4-G-L10140
	160	90	10	70	TX40	165	7.0	G-L10160	A4-G-L10160
	200	130	10	70	TX40	205	7.0	G-L10200	-
	240	170	10	70	TX40	245	7.0	G-L10240	-
	260	190	10	70	TX40	265	7.0	-	-

RECOMMENDED LOADS

The loads below are based on values indicated in ETA n°12/0090 with application of:
- partial security coefficient γ_M of ETA and ETAG 014.
- partial action coefficient γ_F = 1,4.

TENSILE



SHEAR