NSP

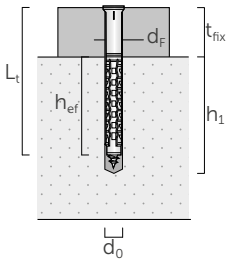
R90 ETA-25/0966

CE NYLON PLUG WITH SCREW

- Certified use for cracked and uncracked concrete, solid and hollow brick masonry (categories of use a, b, c)
- R90 fire resistance for Ø10 mm
- Plastic anchor for use in concrete and masonry, in non-structural applications
- Complete with zinc plated steel screw with countersunk head
- Through fastening

Zn ELECTRO PLATED

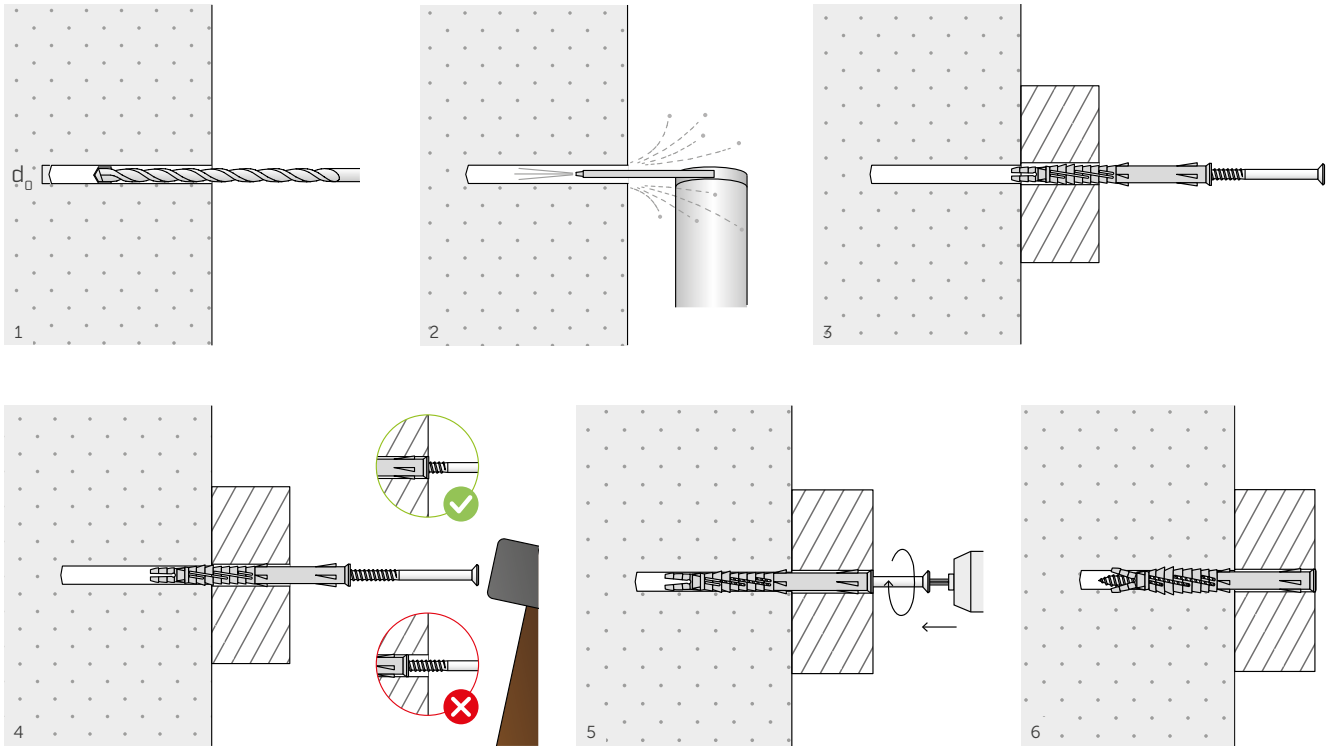
CODE	d_0 [mm]	[in]	L_t [mm]	[in]	d_{SCREW} x L_{SCREW} [mm]	[in]	t_{fix} [mm]	[in]	$h_{1,min}$ [mm]	[in]	h_{ef} [mm]	[in]	d_F [mm]	[in]	bit	pcs
NSP880	8	*0.32*	80	*3 1/8*	6x85	*0.24 x 3 3/8*	10	*3/8*	90	*3 1/2*	70	*2 3/4*	9	*0.355*	TX30	50
NSP8100			100	*4*	6x105	*0.24 x 4 1/8*	30	*1 3/16*	90	*3 1/2*	70	*2 3/4*	9	*0.355*	TX30	50
NSP8120			120	*4 3/4*	6x125	*0.24 x 4 15/16*	50	*1 15/16*	90	*3 1/2*	70	*2 3/4*	9	*0.355*	TX30	50
NSP8140			140	*5 1/2*	6x145	*0.24 x 5 11/16*	70	*2 3/4*	90	*3 1/2*	70	*2 3/4*	9	*0.355*	TX30	50
NSP10100	10	*0.40*	100	*4*	7x105	*0.28 x 4 1/8*	30	*1 3/16*	90	*3 1/2*	70	*2 3/4*	11	*0.434*	TX40	50
NSP10120			120	*4 3/4*	7x125	*0.28 x 4 15/16*	50	*1 15/16*	90	*3 1/2*	70	*2 3/4*	11	*0.434*	TX40	25
NSP10140			140	*5 1/2*	7x145	*0.28 x 5 11/16*	70	*2 3/4*	90	*3 1/2*	70	*2 3/4*	11	*0.434*	TX40	25
NSP10160			160	*6 1/4*	7x165	*0.28 x 6 1/2*	90	*3 1/2*	90	*3 1/2*	70	*2 3/4*	11	*0.434*	TX40	25
NSP10200			200	*8*	7x205	*0.28 x 8 1/16*	130	*5 1/8*	90	*3 1/2*	70	*2 3/4*	11	*0.434*	TX40	25
NSP10230			230	*9 1/16*	7x235	*0.28 x 9 1/4*	160	*6 1/4*	90	*3 1/2*	70	*2 3/4*	11	*0.434*	TX40	25



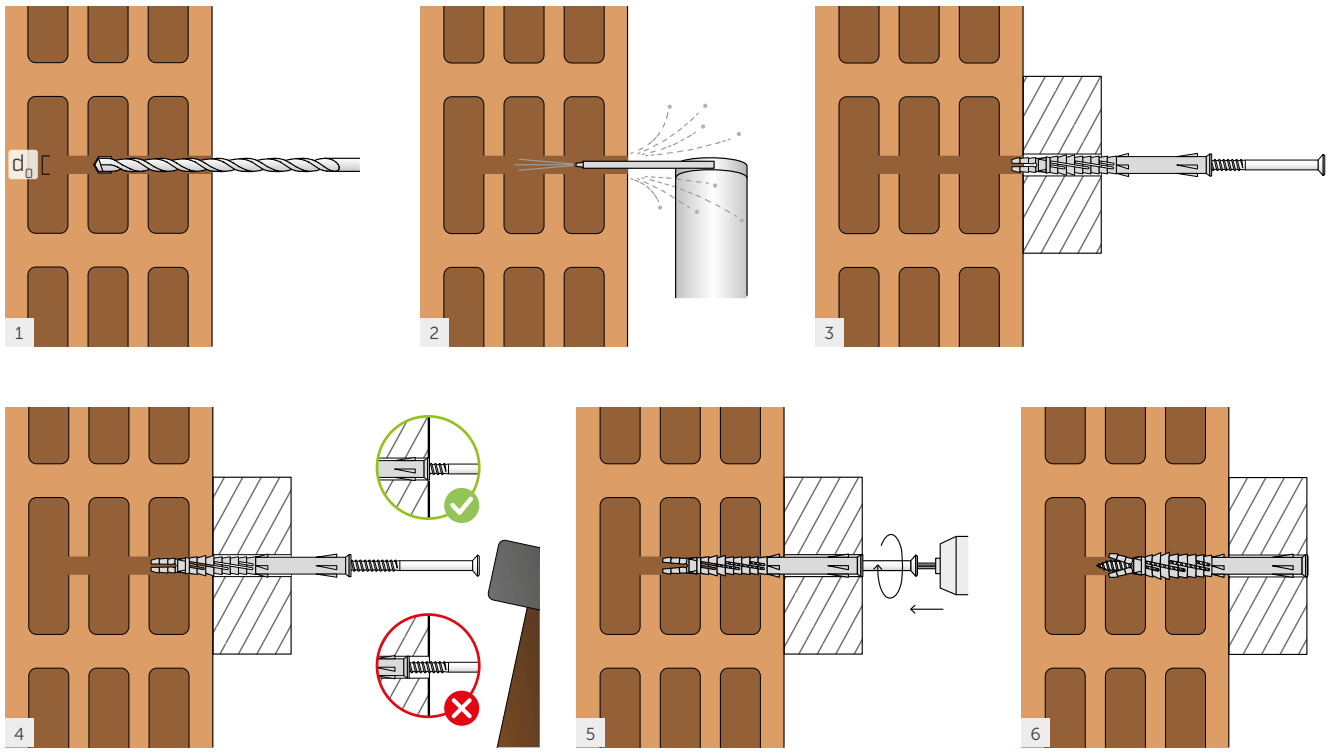
d_0	hole diameter in the concrete support
d_f	diameter hole in the element to be fastened
h_{ef}	effective anchor depth
L	anchor length
t_{fix}	maximum fastening thickness
h_1	minimum hole depth

ASSEMBLY

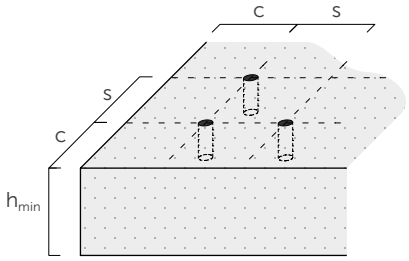
Concrete, solid bricks, autoclaved aerated concrete



Mattone forato



INSTALLATION



			NSP	
Spacing and minimum distances on concrete ≥ C16/20			**Ø8**	**Ø10**
Minimum spacing	s_{min}	[mm]	90	100
Minimum edge distance	c_{min}	[mm]	90	100
Critical spacing	$s_{cr,N}$	[mm]	75	90
Critical edge distance	$c_{cr,N}$	[mm]	105	105
Minimum support thickness	h_{min}	[mm]	110	

Spacing and minimum distances on solid masonry			**Ø8**	**Ø10**
Minimum spacing	$s_{min,\perp}$ (1)	[mm]	240	
	$s_{min,\parallel}$ (2)	[mm]	480	
Minimum edge distance	c_{min}	[mm]	120	
Minimum support thickness	h_{min}	[mm]	110	

Spacing and minimum distances on hollow masonry			**Ø8**	**Ø10**
Minimum spacing	$s_{min,\perp}$ (1)	[mm]	250	
	$s_{min,\parallel}$ (2)	[mm]	500	
Minimum edge distance	h_{ef}	[mm]	125	
Minimum support thickness	$c_{cr,N}$ (1)	[mm]	120	

Spacing and minimum distances on autoclaved aerated concrete bricks			**Ø8**	**Ø10**
Minimum spacing	$s_{min,\perp}$ (1)	[mm]	240	
	$s_{min,\parallel}$ (2)	[mm]	480	
Minimum edge distance	h_{ef}	[mm]	120	
Minimum support thickness	$c_{cr,N}$ (1)	[mm]	240	

(1) spacing perpendicular to the edge
(2) spacing parallel to the edge

STRUCTURAL VALUES[1]

Valid for a single anchor in thick grade concrete when spacing and edge-distance are not limiting parameters.

CHARACTERISTIC VALUES

anchor	tension[2]			shear[3]	
	Temperature range				
	24°C/40°C	50°C/80°C			
	$N_{Rk,p}$ [kN]	$N_{Rk,p}$ [kN]	γ_{Mp}	$V_{Rk,s}$ [kN]	γ_{Ms}
NSP8	3,5	3,0	1,8	5,6	1,25
NSP10	4,5	4,0		7,7	

NOTES

(1) For the anchor calculation in masonry applications, see ETA-25/0966.
(2) Nylon screw anchor pull-out, values valid for C16/20 grade concrete in accordance with EN 206:2013 + A1:2016.
(3) Steel failure mode.

GENERAL PRINCIPLES

- Characteristic values according to ETA-25/0966.
- The design values are obtained from the characteristic values as follows: $R_d = R_k/\gamma_M$.
- Coefficients γ_M are listed in the table in accordance with the failure characteristics and product certificates.
- For the calculation of anchors with reduced spacing, or too close to the edge, please refer to ETA. Similarly, in case of fastening on concrete-supports with a better-grade, limited thickness or a thick reinforcing layer please see ETA.