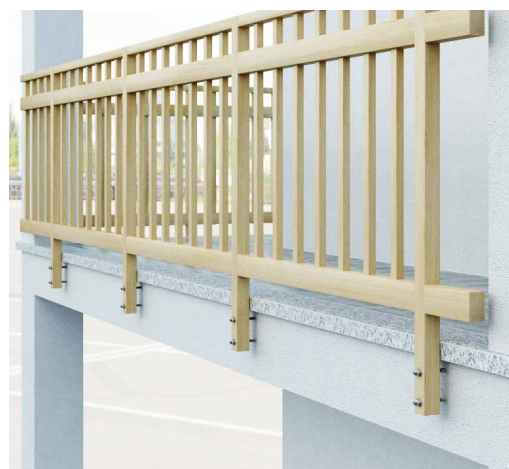
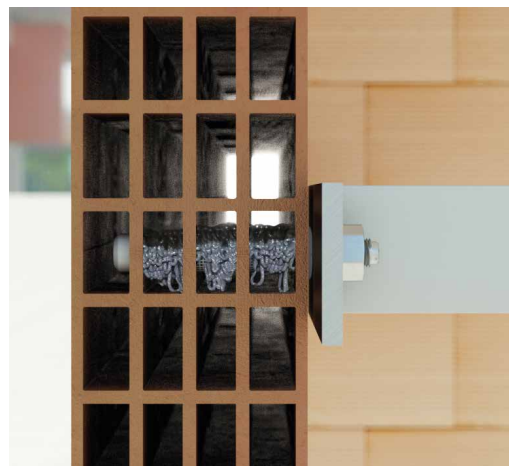


# P-NEX

## POLYESTER CHEMICAL ANCHOR WITHOUT STYRENE

- CE Option 7 for uncracked concrete
- Certified for masonry use in solid and semi-hollow material (categories b, c, d)
- Certified for use on aerated autoclaved concrete blocks (AAC)
- Comply with LEED, IEQ Credit 4.1
- A+ Class: emission of volatile organic compounds (VOC) in living environments
- Dry, wet concrete or submerged holes



CODE	format [mL]	pcs
PNEX300	300	13
PNEX420	420	12

Expiry from date of manufacturing: 12 months for 300 mL, 18 months for 420 mL.  
Storage temperature between +5 and 25° C.  
Nozzle included in the package.

### AVAILABLE ACCESSORIES

CODE	description	pcs
STING	spare nozzle for 300 and 400 ml cartridges	1

### RELATED PRODUCTS



**MAMMOTH**  
SPECIAL GUN FOR 400 mL  
CARTRIDGES



**FLY**  
PROFESSIONAL GUN FOR  
310 mL CARTRIDGES

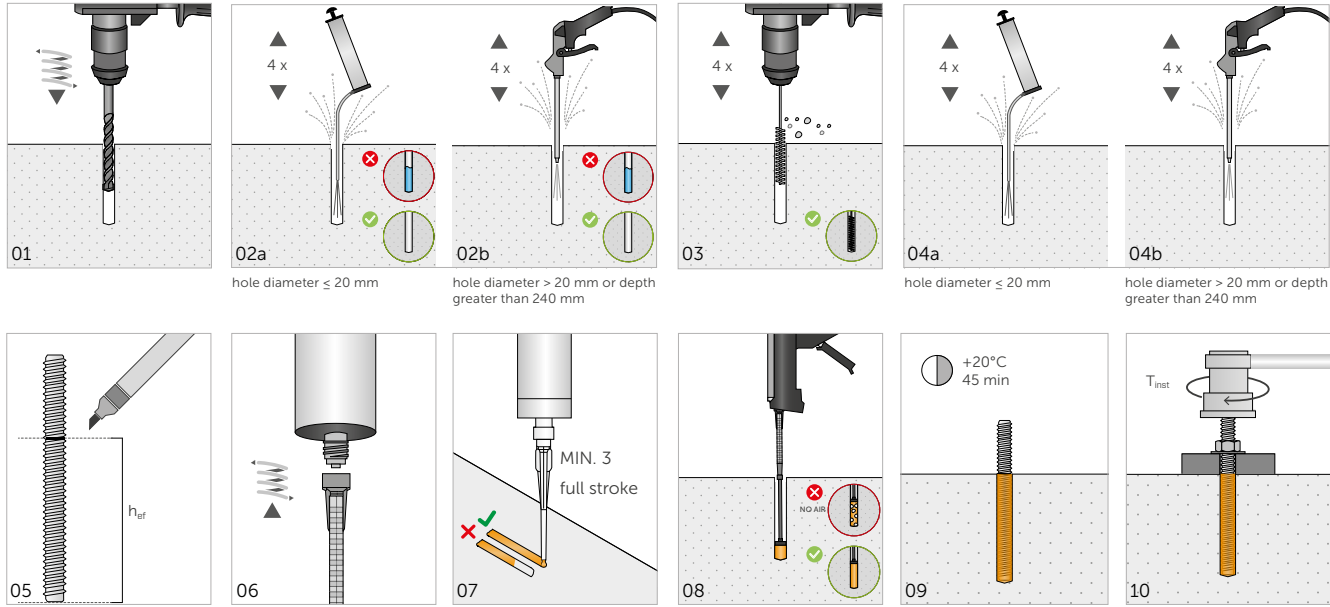


**INA**  
THREADED ROD CL. 5.8  
WITH NUT AND WASHER

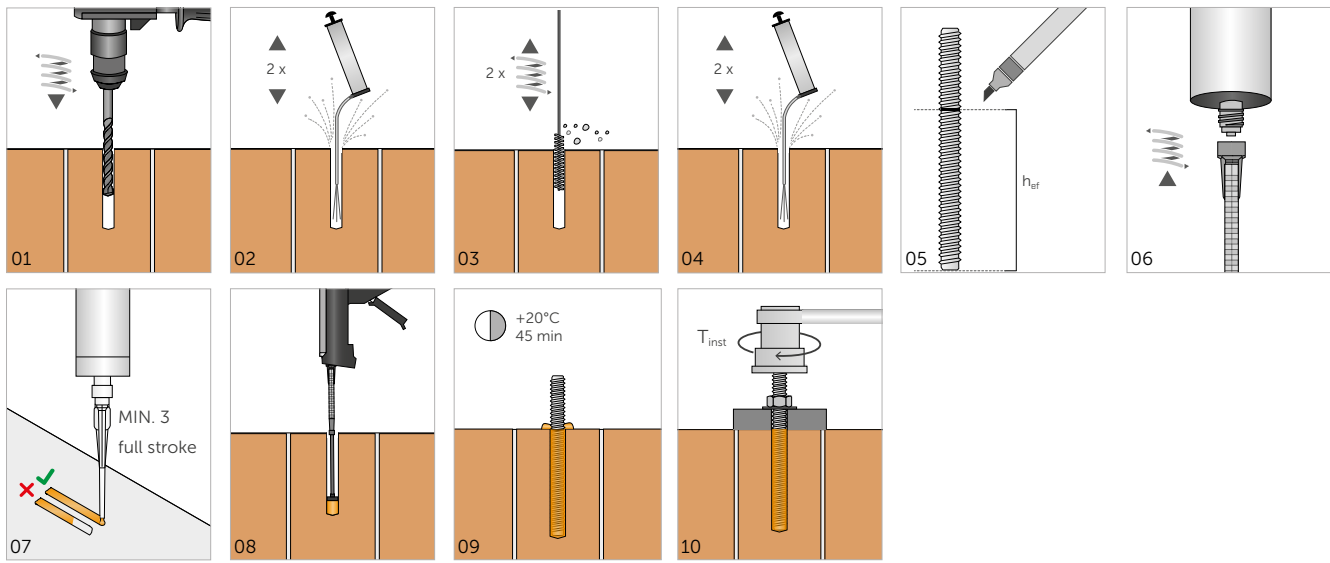


**IHM | IHP**  
BUSHINGS FOR  
PERFORATED MATERIALS

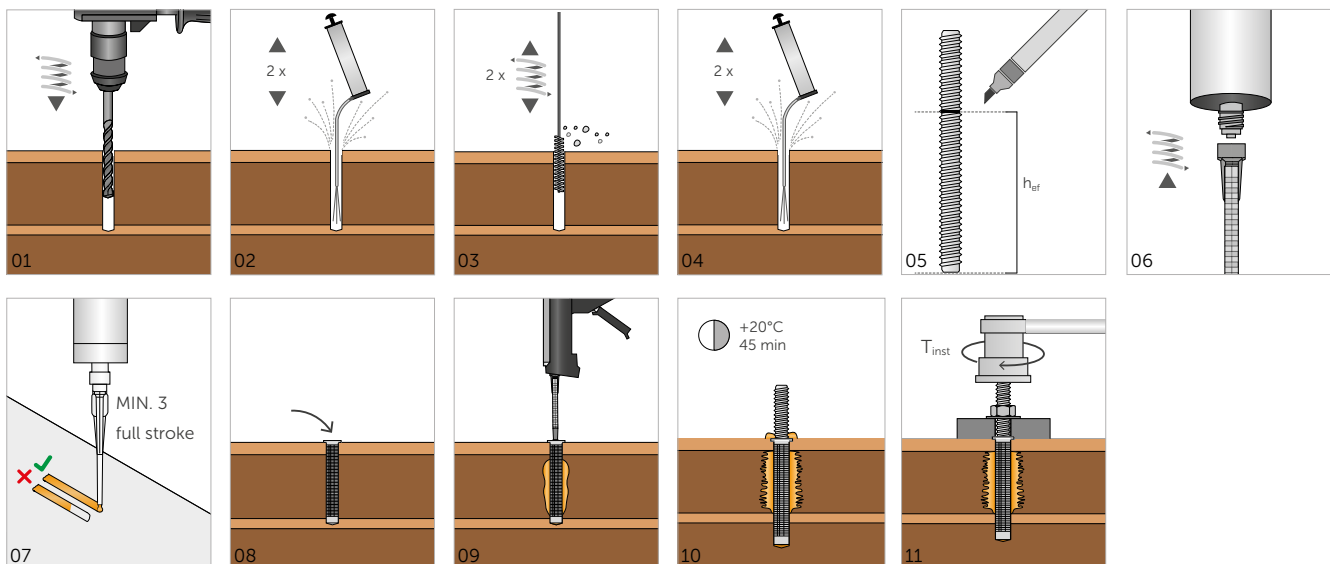
**ASSEMBLY  
 CONCRETE**



**SOLID MASONRY**

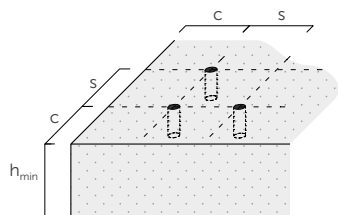
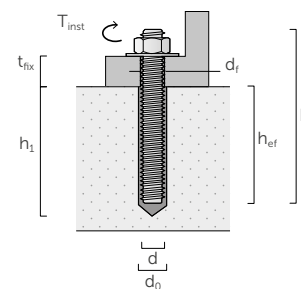


**HOLLOW BRICK MASONRY**



## INSTALLATION

<b>d</b>	anchor diameter
<b>d<sub>0</sub></b>	hole diameter in the concrete support
<b>h<sub>ef,min</sub></b>	effective anchor depth
<b>d<sub>f</sub></b>	diameter hole in the element to be fastened
<b>T<sub>inst</sub></b>	maximum tightening torque
<b>L</b>	anchor length
<b>t<sub>fix</sub></b>	maximum fastening thickness
<b>h<sub>1</sub></b>	minimum hole depth



	<b>d</b>	<b>[mm]</b>	<b>M8</b>	<b>M10</b>	<b>M12</b>	<b>M16</b>	<b>M20</b>	<b>M24</b>
<b>d<sub>0</sub></b>	<b>[mm]</b>		10	12	14	18	24	28
<b>h<sub>ef,min</sub></b>	<b>[mm]</b>		60	60	70	80	90	96
<b>h<sub>ef,max</sub></b>	<b>[mm]</b>		160	200	240	320	400	480
<b>d<sub>f</sub></b>	<b>[mm]</b>		9	12	14	18	22	26
<b>T<sub>inst</sub></b>	<b>[Nm]</b>		10	20	40	80	120	160

			<b>M8</b>	<b>M10</b>	<b>M12</b>	<b>M16</b>	<b>M20</b>	<b>M24</b>
Minimum spacing	<b>s<sub>min</sub></b>	<b>[mm]</b>	40	50	60	80	100	120
Minimum edge distance	<b>c<sub>min</sub></b>	<b>[mm]</b>	40	50	60	80	100	120
Minimum thickness of concrete support	<b>h<sub>min</sub></b>	<b>[mm]</b>	h <sub>ef</sub> + 30 ≥ 100 mm			h <sub>ef</sub> + 2 d <sub>0</sub>		

For spacing and distances smaller than the critical ones, strength values have to be reduced depending on the installation parameters.

## INSTALLATION TIME AND TEMPERATURE

support temperature	cartridge temperature	workability time	curing time before loading
-5 ÷ -1 °C	+5 ÷ +40	90 min	6 h
0 ÷ +4 °C		45 min	3 h
+5 ÷ +9 °C		25 min	2 h
+10 ÷ +14 °C		20 min	100 min
+15 ÷ +19 °C		15 min	80 min
+20 ÷ +29 °C		6 min	45 min
+30 ÷ +34 °C		4 min	25 min
+35 ÷ +39 °C		2 min	20 min

(\*)Temperatures not permitted for masonry.

Component A classification: Skin Sens. 1. May cause an allergic skin reaction.

Component B classification: Eye Irrit. 2; Skin Sens. 1. Causes serious eye irritation. May cause an allergic skin reaction.

## STRUCTURAL CHARACTERISTIC VALUES

Valid for a single threaded rod (INA or MGS) when installed in C20/25 grade concrete with a thin reinforcing layer, considering spacing, edge-distance, and base-concrete thickness as non-limiting parameters.

### UNCRACKED CONCRETE

#### TENSION

rod	$h_{ef,standard}$ [mm]	$N_{Rk,p}^{(1)}$ [kN]				$h_{ef,max}$ [mm]	$N_{Rk,s}^{(2)}$ [kN]			
		5.8 steel	$\gamma_{Mp}$	8.8 steel	$\gamma_{Mp}$		5.8 steel	$\gamma_{Ms}$	8.8 steel	$\gamma_{Ms}$
M8	80	17,1	1,8	17,1	1,8	160	1,5	18	1,5	29
M10	90	22,6		22,6		200		29		46
M12	110	33,2		33,2		240		42		67
M16	128	51,5		51,5		320		79		125
M20	170	85,5		85,5		400		123		196
M24	210	126,7		126,7		480		177		282

#### SHEAR

rod	$h_{ef}$ [mm]	$V_{Rk,s}^{(2)}$ [kN]			
		5.8 steel	$\gamma_{Ms}$	8.8 steel	$\gamma_{Ms}$
M8	$\geq 60$	9	1,25	15	1,25
M10	$\geq 60$	15		23	
M12	$\geq 70$	21		34	
M16	$\geq 80$	39		63	
M20	$\geq 100$	61		98	
M24	$\geq 125$	88		141	

incremental factor for $N_{Rk,p}^{(3)}$		
$\psi_c$	C25/30	1,04
	C30/37	1,08
	C40/50	1,15
	C50/60	1,19

#### NOTES

- (1) Combined pull-out failure and concrete failure.
- (2) Steel failure mode.
- (3) Tensile-strength increment factor (excluding steel failure) for uncracked concrete.

#### GENERAL PRINCIPLES

- Characteristic values according to ETA-21/0894.
- The design values are obtained from the characteristic values as follows:  $R_d = R_k/\gamma_M$ . Coefficients  $\gamma_M$  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.