

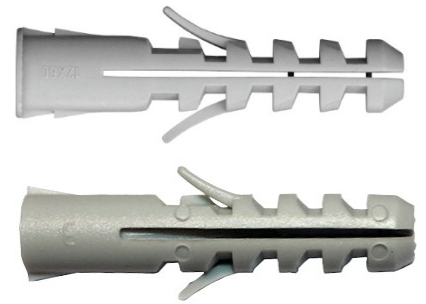
UNIVERSAL EXPANSION SLEEVE TNP

Usage:

- light fittings for hydraulic and electrical installations
- mounting lighting, motion detectors, wall shelves, brackets, mirrors, paintings, letter boxes, curtain rods, plastic pipe and cable holders
- fixing bathroom fittings, shower cabins, washbasins, toilet seats

Advantages:

- classic two-way strut - secure attachment in solid substrates
- nylon stud guarantees durability and safety
- the flange of the pin prevents it from slipping in too deep, the expansion without flange provides through fastening
- special shape prevents the peg from turning in the hole
- resistance to extreme temperatures from -40°C to $+80^{\circ}\text{C}$



Pin material:

Expansion sleeve made of nylon

Substrate material:

Concrete, natural stone, full ceramic brick, full silicate brick, lightweight concrete, aerated concrete

Method of determining TNP pins

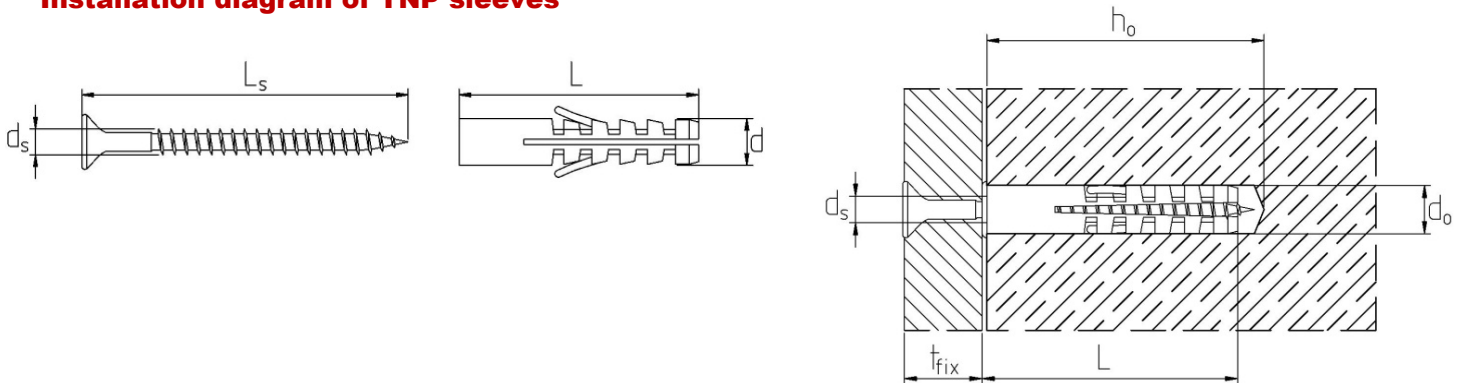
Symbol	Dia. of Sleeve and hole d_0 [mm]	Type of sleeve
TNP	05	-
TNP	05	C - flange version

Technical parameters of the TNP sleeve - flange-free version



Product Code		Diameter of sleeve and hole [mm] d/d_0	Min. hole depth [mm] h_0	Sleeve length [mm] L	Screw diameter [mm] d_s	Max. thickness of the fixed element [mm] t_{fix}	Recommended load capacity for pulling out and shearing N_{rec}			
Collarless version	Collared version						Concrete C20/25 [kN] N_{rec}	Full Brick [kN] N_{rec}	Silicate brick [kN] N_{rec}	Aerated Block [kN] N_{rec}
TNP05	TNP05C	5	30	25	2,5-4,0	-	0,10	0,07	0,07	0,05
TNP06	TNP06C	6	35	30	3,5-4,5	-	0,25	0,15	0,15	0,05
TNP07	TNP07C	7	35	30	4,0-5,5	-	0,30	0,20	0,20	0,10
TNP08	TNP08C	8	45	40	5,0-6,0	-	0,35	0,30	0,30	0,10
TNP10	TNP10C	10	55	50	6,0-8,0	-	0,55	0,65	0,65	0,15
TNP12	TNP12C	12	65	60	8,0-10,0	-	0,80	1,20	1,20	0,30
TNP14	TNP14C	14	80	75	10,0-12,0	-	2,50	2,00	2,00	0,40

Installation diagram of TNP sleeves



TNP pin assembly diagram

