

MQ Quattro® Nylon Plug

Quattro Nylon Plug MQ made from high-quality Polyamide PA 6 for use in solid or hollow building materials. Possible combination with wood screws, chip-board screws and metric screws.



1 SPECIFICATIONS OF INTENDED USE

Futures:

- Made from high-quality polyamide PA6
- Pre installation
- Sound absorption (Polyamide PA 6 absorbs sound transmissions between construction unit and building material)
- Indoor and outdoor applications
- Suitable for use in most kinds of building materials

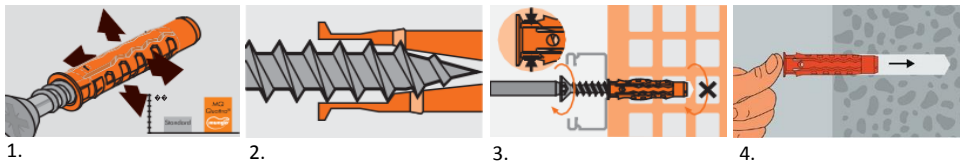
Base materials:

- Concrete
- Clay solid brick
- Clay hollow brick
- Calcium silicate solid brick
- Calcium silicate hollow brick
- Solid light weight concrete
- Autoclaved aerated concrete

Applications:

- Pictures, lamps
- Woodwork
- Sanitary installation
- Profiles, holders
- Substructures
- Electric switches
- Rails

2 CHARACTERISTICS

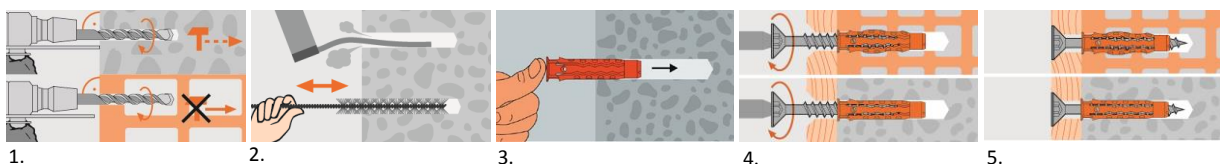


Characteristics:

1. Quattro® Technology - Highest possible retaining values in the lower and middle load area. Particularly suitable for applications with chipboard screws,
2. knock-in protection prevents premature expansion while installing,
3. rotation resistance stops the plug rotating in the drill hole,
4. reduced assembling time - Special plug geometry allows easy installation.

3 INSTALLATION INSTRUCTIONS

Graphic installation guide for MQ Quattro® Nylon Plug



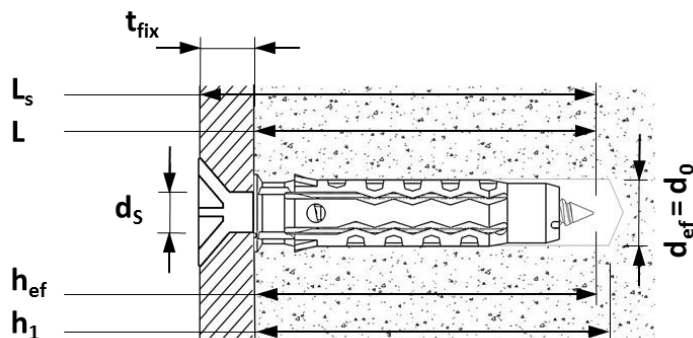
1. Make the drill hole,
2. clean the drill hole (not necessary with hollow brick),
3. push the MQ Quattro® Nylon Plug in the drilled hole (face fixing only),
4. fasten the building material with a screw,
5. tightened fixation.

4 INSTALATION DATA IN CONCRETE OR MASONRY

Installation parameters for Mungo MQ Quattro® Nylon Plug for use in concrete or masonry

Installation parameters for Mungo MQ Nylon Plug

MQ Nylon Plug			5	6	8	10	12	14
Plug length	L	[mm]	25	30	40	50	60	70
Outer diameter	d_0	[mm]	5	6	8	10	12	14
Installation data								
Drill hole diameter in substrate	d_{ef}	[mm]	5	6	8	10	12	14
Drilled hole depth	h_1	[mm]	35	40	50	70	80	90
Screw diameter wood/chipboard	d_s	[mm]	2,6-4	3,5-5	4,5-6	6-8	8-10	10-12
Screw effective anchorage depth	h_{ef}	[mm]	30	35	45	60	70	80
Entire screw length	L_s	[mm]	$30+t_{fix}$	$35+t_{fix}$	$45+t_{fix}$	$60+t_{fix}$	$70+t_{fix}$	$80+t_{fix}$
Screw diameter metric	d_m	[mm]	M3	M4	—	—	—	—



5 BASIC PERFORMANCE DATA

In recommended resistance for MQ Quattro Nylon Plug the safety factor 5 is included

Recommended tension resistance for MQ Quattro Nylon Plug

MQ Nylon Plug			5	6	8	10	12	14
Plug length	L	[mm]	25	30	40	50	60	70
Recommended tension resistance								
Non-cracked concrete $\geq C20/25$	N_{rec}	[kN]	0.45	1.1	1.2	1.9	2.7	3
Clay solid brick	N_{rec}	[kN]	0.45	0.9	1	1.1	1.5	1.8
Aerated concrete	N_{rec}	[kN]	0.12	0.12	0.19	0.3	0.4	0.55
Calcium silicate brick	N_{rec}	[kN]	0.45	0.7	1	1.8	2.1	2.3
Clay hollow brick	N_{rec}	[kN]	0.15 ¹⁾	0.2 ¹⁾	0.4 ¹⁾	0.45 ¹⁾	0.5	0.6

¹⁾Chipboard screw

*The above values refer to a maximum diameter of the wood screw

6 IMPORTANT NOTICE

Values in this document are only valued for Mungo MQ Quattro Nylon Plug. In recommended resistance the partial safety factor $\gamma = 5$ is considered. For combination of tensile loads, shear loads, bending moments as well as reduced edge distances or spacing's (anchor groups) above given values needs to be reduced. The data must be checked by the user under the responsibility of an engineer experienced in anchorage. This is to ensure there are no errors and all data is complete and accurate and complies with all rules and regulations for the actual conditions and application.