

HELIKON - HELICAL BAR



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HELIKON Helical Bar - HELIKON HELICOIDAL BAR is made of AISI 304 stainless steel and is used for connections, anchors and dry seams. It is CE marked according to UNI EN 845-1: 2013

1. CODE REGISTRY

	DESCRIZIONE
TRADE NAME	HELIKON - HELICAL BAR
PRODUCT CODE	BFO02-295/296/297
PRODUCT TYPE	Helical connector for dry insertion
STEEL USED	AISI 304 STAINLESS STEEL
SIZES AVAILABLE	Diameter: \varnothing 9 mm; length: 400 mm, 600 mm, 1000 mm
PACKAGE [pcs]	20
QUALIFY	CE marking according to UNI EN 845-1: 2013

1.1 TECHNICAL FEATURES

PROPERTIES	VALUE
TENSILE STRENGTH [MPa]	1.110
TENSILE BREAKING LOAD [KN]	16,7
SHEAR BREAKING LOAD [KN]	8
ELASTIC MODULARITY EN 13412 [GPa]	160
DEFORMATION AT BREAK [%]	0,56
NOMINAL EQUIPMENT AREA [mm ²]	14,9
NOMINAL DIAMETER [mm]	9
DENSITY [kg/m ³]	7.850

HELIKON - HELICAL BAR

2. USE AND LAYING

2.1 USE

HELIKON HELIKON helical bars are used to carry out reinforced stitching of joints in "face" masonry, connections of masonry and limitation and restoration of cracking frameworks. Some examples of applications are: seams of lesions, connections between masonry panels that are not well adhered to each other, connection between masonry panels and wooden elements, connections on systems used as anti-liftoff garrison of curtain walls and seams from the intrados of arches. They can be applied on a variety of substrates such as solid or semi-full brick, tuff, stone, unfired earth, wood, and concrete without the use of mortars or chemical anchors for grouting.

2.2 ADVANTAGES

Some advantages of HELIKON - HELICAL BAR:

- quick and easy installation;
- mechanical type connection without the use of mortar or chemical anchors;
- specifications for non-invasive interventions;
- high durability and strength;

2.3 LAYING

1. Make appropriate pilot hole of calibrated diameter according to the consistency and type of the substrate to be consolidated and length as per design. For bars with a diameter of 9 mm, on brick, tuff and wood substrates 6 mm pilot holes are recommended, while for stone substrates 8 mm pilot holes are recommended.
2. By means of a dowel driver in percussion mode (exclude rotation) equipped with the appropriate KINK adapter, the helical bar will be inserted into the drill hole. We recommend an insertion and hold test of the bar directly on the structure to be consolidated to better calibrate the amount and mode of consolidation. After the bar has been screwed in, proceed to grout the hole.
3. For reinforced stylation of joints on "exposed" masonry, proceed with deep scarifying of the joint for at least 30 mm until a compact support is obtained. Wash the substrate and apply a first bed of lime-based mortar suitable for use on a wet substrate and, fresh on fresh, apply HELIKON - HELICAL BAR. Complete the intervention by grouting the joint.

3. TIPS

3.1 STORAGE

Store in the original package in a covered and dry place.

3.2 SAFETY INSTRUCTIONS

With reference to the current European regulations (Reg. 1906/2007/EC - REACH) HELIKON - HELIKON HELICOID BAR is an article and does not require a Material Safety Data Sheet. During use, the use of gloves, dust mask and protective goggles is recommended. Follow the safety requirements provided in the workplace.

PRODUCT FOR PROFESSIONAL USE

3.3 WARNINGS

The data given correspond to our current technical and application knowledge for the appropriate use of the product and are to be considered, in any case, indicative and general, therefore not binding for the same. We recommend that a prior practical test be carried out in order to verify the suitability of the product with respect to its intended use, purposes and consumption. The purchaser is responsible for verifying the suitability of the products described in this document for its intended use and purposes. Always refer to updated versions of data sheets available at www.dakota.eu

4. TECHNICAL SPECIFICATION

Item	Description	U.M.	Price
Dak.B.BFO02-xxx	Dry stitching of structural elements with AISI 304 stainless steel helical bars CE marked according to EN 845 standard type HELIKON - HELICAL BAR of DAKOTA or equivalent, in appropriate pilot holes depending on the length of the bar and the nature of the substrate material, including grouting of the hole using mortar based on pure natural hydraulic lime NHL 3.5 type M15 in accordance with EN 998, excluding any remediation of the degraded areas and restoration of the substrate, material acceptance tests, pre- and post-intervention surveys and all necessary aids for the execution of the work: bar diameter 9 mm; tensile strength ≥ 16.7 kN, shear tensile strength ≥ 8 kN; elastic modulus ≥ 160 GPa; ultimate strain at break 0.56%; nominal area 14.90 sq. mm; length 400/600/1000 mm. Steel color	pc.	-
Dak.B.BFO02-295	Length 400 mm		
Dak.B.BFO02-296	Length 600 mm		
Dak.B.BFO02-297	Length 1.000 mm		