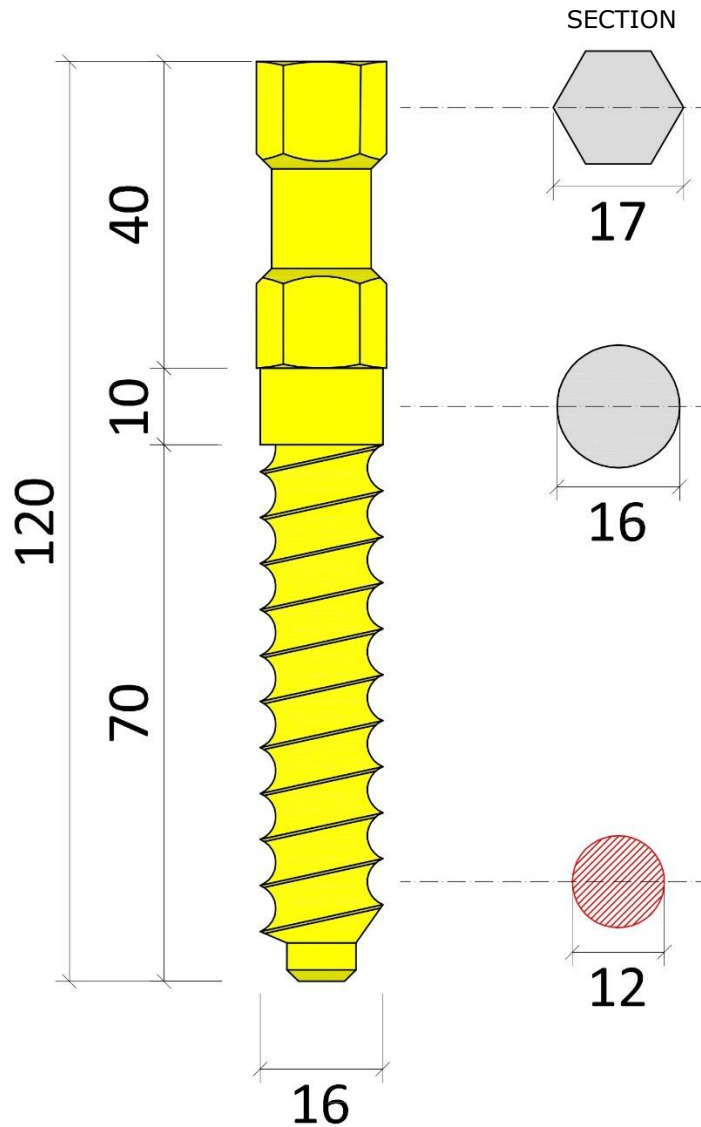




"ALFER SHEAR CONNECTORS PATENT DRY SYSTEM"
THE INNOVATION OF THE CONNECTIONS AND STATIC RECOVERY

CONCRETE



ALFER CONNECTOR CONCRETE-CONCRETE STANDARD TECHNICAL SHEET

CONNECTOR

Material of the connector	9sMnPb36	
Shear resistance diameter	d	16 mm
Characteristic breaking strength	f_{uk}	593 N/mm ²

SPECIFICATION ITEM

Dry connector consisting of a single steel body with a 16 mm diameter, shaped for mechanical hooking to the concrete. The lower part is threaded with a continuous screw pitch 6 R3: external spiral with constant diameter and the tapered internal thread is conical with reverse adaptation. The intermediate part is without thread (maximum shear position) with stop limit and the upper part is shaped with groove gripping the concrete slab.

MECHANICAL VALUES OF THE CONNECTION

NORMAL STRENGTH CONCRETE (NSC)					
Existing concrete	R_{ck}	20 N/mm ²	f_{ck}	16 N/mm ²	
New concrete	R_{ck}	30 N/mm ²	f_{ck}	25 N/mm ²	
Compress strength existing concrete			$P_{Rd,1}$	30764 N	
Compress strength new concrete			$P_{Rd,1}$	29580 N	
Shear resistance of the connector			$P_{Rd,2}$	109451 N	
HIGH STRENGTH CONCRETE (HSC)					
Existing concrete	R_{ck}	30 N/mm ²	f_{ck}	20 N/mm ²	
New concrete	R_{ck}	35 N/mm ²	f_{ck}	28 N/mm ²	
Compress strength existing concrete			$P_{Rd,1}$	35200 N	
Compress strength new concrete			$P_{Rd,1}$	35460 N	
Shear resistance of the connector			$P_{Rd,2}$	109451 N	
LOW STRENGTH CONCRETE (LSC)					
Existing concrete	R_{ck}	10 N/mm ²	f_{ck}	8 N/mm ²	
New concrete	R_{ck}	30 N/mm ²	f_{ck}	20 N/mm ²	
Compress strength existing concrete			$P_{Rd,1}$	20470 N	
Compress strength new concrete			$P_{Rd,1}$	29580 N	
Shear resistance of the connector			$P_{Rd,2}$	109451 N	

SLAB SECTION

