Screw-On Sleeve PERI M16/164

Item no.: 123970

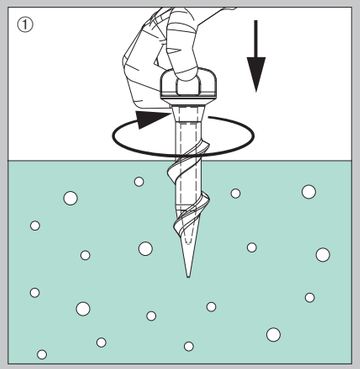
The PERI Screw-On Sleeve is used for temporary mounting of components on reinforced concrete slabs.

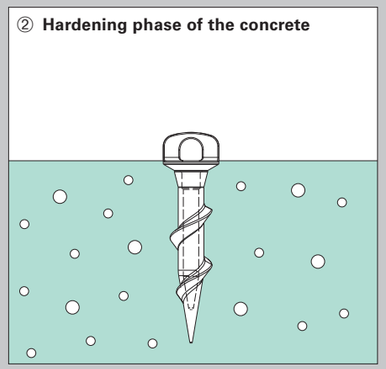
General information
- for use only in connection with Bolt M16-8.8 or higher (not included in the scope of delivery)
- effect of the Screw-On Sleeve: form closure.

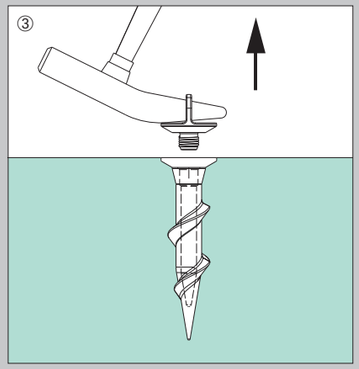
Screw-On Cap

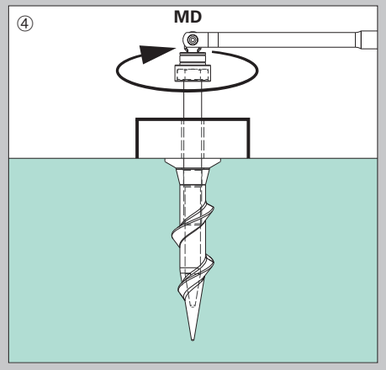
Screw-On Sleeve

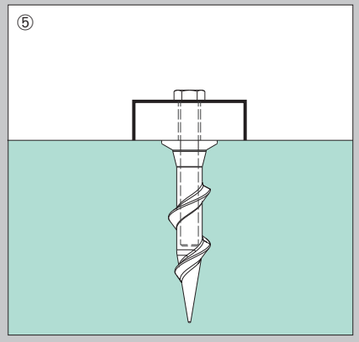
Assembly Instructions











Instructions for mounting
- **Installation time:**
  Immediately after concreting
- **Installation procedure:**
  Insert Screw-On Sleeve into the fresh concrete whilst applying light pressure from above with approx 2 turns until the cover is flush with the fresh concrete slab (compare with Fig. ②)
- **Removing the Screw-On Cap**
  After reaching the required concrete strength according to Table 5 "Load-Bearing Capacity", the Screw-On Cap can be removed. In order to prevent the penetration of, e.g. liquids, the component to be mounted is to be fixed immediately after the removal of the M16 Screw-On Cap by means of the compatible M16 bolt.

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Instructions 1 - 5 must be maintained also if conditions are more favourable (e.g. less applied force).

1. Instructions for installation

Axis spacing	in direction of load	**s**	≥ 600 mm
Distance to edge	in direction of load	**c_1**	≥ 150 mm
	transverse to direction of load	**c_2**	≥ 200 mm
Reinforced concrete member thickness		**d**	≥ 200 mm

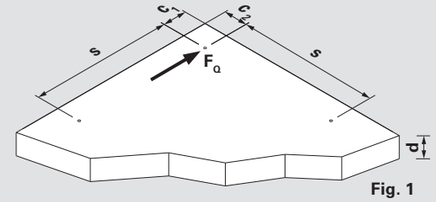

Fig. 1

2. Screw-On Sleeve

Length of Screw-On Sleeve	L_H	155 mm
Length of M18-thread	L_{M18}	16 mm
Length of M16-thread	L_{M16}	80 mm
Height of Screw-On Cap (concrete displacement)	h_K	9 mm
Deflection of the plumb line (set condition)	β	≤ 5°

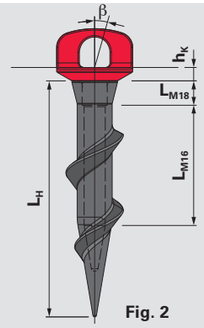

Fig. 2

3. Temporary assembly of construction aid to be mounted

Fixing thickness	t_{fix}	≤ 35 mm
Clearance hole	d_b	16.5 – 18 mm
Clear height	**a**	< t_{fix}

not massive **massive**

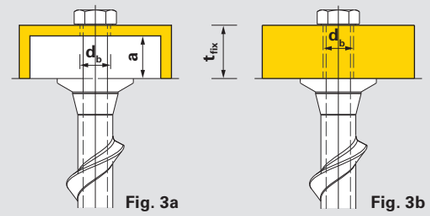

Fig. 3a Fig. 3b

4. Required bolts

Thread		M16
Strength class		≥ 8.8
Length of bolt	L_S	t_{fix} + h_{nom} [mm]
Required embedment depth	h_{nom}	93 – 103 mm
Tightening torque	**MD**	30 Nm

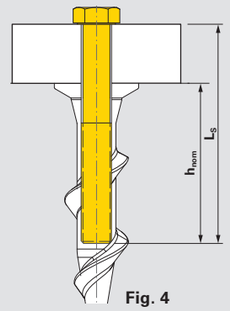

Fig. 4

5. Load-Bearing Capacity

Concrete Strength Class C20/25 to C50/60	**perm. F_Z***	**perm. F_Q****
Cracked concrete/non-cracked concrete		
f_{ck} = 8 N/mm², $f_{ck,cube}$ = 10 N/mm²	10.0 kN	$\frac{30}{30 + a}$ x 4.5 kN

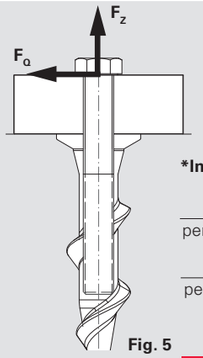

Fig. 5

****Determining perm. F_Q**

If the temporary assembly of construction aid is **not massive** (see Fig. 3a), the following applies: determine a [mm] in accordance with Fig. 3a
→ Reduce perm. F_Q according to the formula taken from Table **5. Load-Bearing Capacity**

If the temporary assembly of construction aid is **massive** (see Fig. 3b), the following applies:
a = 0 mm
→ perm. F_Q = 4.5 kN

***Interaction Equation**

$$\frac{F_Z}{\text{perm. } F_Z} \le 1{,}0 \qquad \frac{F_Q}{\text{perm. } F_Q} \le 1{,}0 \qquad \frac{F_Z}{\text{perm. } F_Z} + \frac{F_Q}{\text{perm. } F_Q} \le 1{,}2$$