

# Through bolt S-KA+ 12/85/65 ZP

SORMAT CODE 9640001346



## Improved premium-quality through bolts for fixing in non-cracked and cracked concrete

- Torque-controlled expansion anchors for pre-, push-through and distance installations.
- When torque is applied the expansion clip expands developing frictional grip with the drill hole walls.
- Anchor diameter and max. fixture thicknesses marked on the body. Anchor length letter code marked on the bolt head.
- M8, M10 and M12 have two different anchorage depths.
- The use of S-KA setting tool makes serial installation safer and quicker.
- Seismic performance category C1/C2 ( $h_{ef, std}$ ).
- ZP for dry indoor use.

## PRODUCT OVERVIEW

<b>Other codes</b>	SNRO 1324092 / LVI 3253678
<b>Material</b>	Steel, zinc plated
<b>Packages</b>	box (bag): 20 / outer carton: 100 / pallet: 5600
<b>Weight</b>	136.8 kg / 1000
<b>GTIN-13</b>	6416031013461

## APPLICATIONS

- Steel structures
- Column base plates
- Seatings
- Barriers
- Cable racks
- Handrails
- Ladders
- Façade systems

## BASE MATERIALS

### APPROVED FOR

- Cracked concrete
- Non-cracked concrete

### ALSO SUITABLE FOR

- Natural stone

## APPROVALS / CERTIFICATES



ETA-16/0934 + DoPs



Fire resistance (ETA-16/0934)



0809-CPR-1252

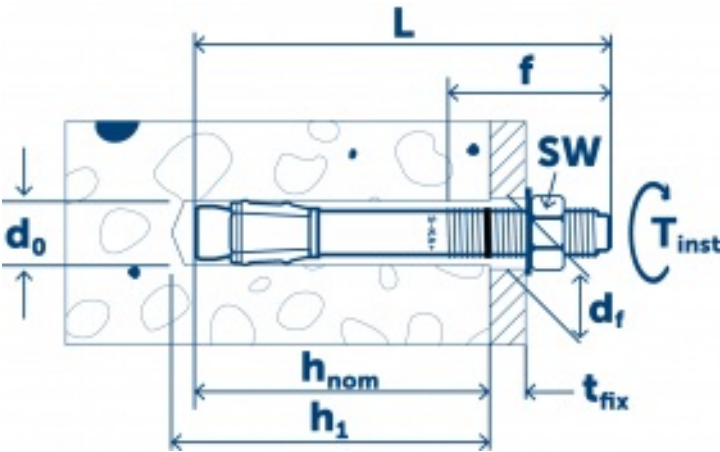


Seismic resistance (ETA-16/0934)

# Technical data

## INSTALLATION DETAILS









Size	M12
Length (L)	163
Thread (f)	113
Width across flats (SW)	19
Max. fixture thickness (T <sub>fix</sub> )	85/65



## INSTALLATION DETAILS

Hole in fixture (D <sub>f</sub> )	14
Drill hole diameter (d <sub>0</sub> ) ∅	12
Minimum drill hole depth	70/90
Drill hole depth (h <sub>1</sub> )	70/90
Nominal setting depth (H <sub>nom</sub> )	61/81
Effective setting depth (H <sub>ef</sub> )	50/70
Installation torque (T <sub>inst</sub> )	60

# Performance data

Base material	Load type	Embedment depth ( $h_{nom}$ )	Load direction	Load value
All				
Non-cracked concrete C20/25	$N_{Rec}$	61 mm		8.3 kN
Non-cracked concrete C20/25	$V_{Rec}$	61 mm		17.1 kN
Non-cracked concrete C20/25	$N_{Rec}$	81 mm		11.9 kN
Non-cracked concrete C20/25	$V_{Rec}$	81 mm		17.1 kN
Cracked concrete C20/25	$N_{Rec}$	61 mm		5.8 kN
Cracked concrete C20/25	$V_{Rec}$	61 mm		16.5 kN
Cracked concrete C20/25	$N_{Rec}$	81 mm		7.6 kN
Cracked concrete C20/25	$V_{Rec}$	81 mm		17.1 kN

# Installation

