

# Through bolt S-KA+ 16/20 ZP

SORMAT CODE 9640001359

## 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.

## APPLICATIONS

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

## APPROVALS / CERTIFICATES



ETA-16/0934 + DoPs



Fire resistance (ETA-16/0934)



0809-CPR-1252



Seismic resistance (ETA-16/0934)

## PRODUCT OVERVIEW

<b>Other codes</b>	SNRO 1324095 / LVI 3253681
<b>Material</b>	Steel, zinc plated
<b>Packages</b>	box (bag): 10 / outer carton: 50 / pallet: 2800
<b>Weight</b>	223.8 kg / 1000
<b>GTIN-13</b>	6416031013591

## BASE MATERIALS

### APPROVED FOR

- Cracked concrete
- Non-cracked concrete

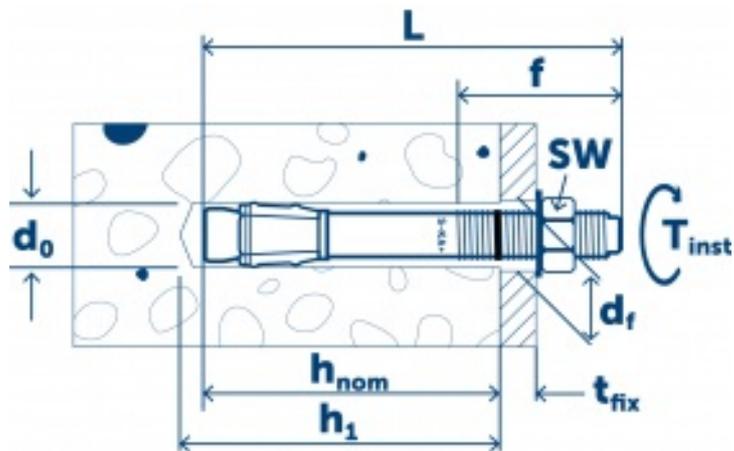
### ALSO SUITABLE FOR

- Natural stone

# Technical data

## INSTALLATION DETAILS

Size	M16
Length (L)	138
Thread (f)	80
Width across flats (SW)	24
Max. fixture thickness ( $T_{fix}$ )	20



## INSTALLATION DETAILS

Hole in fixture ( $D_f$ )	18
Drill hole diameter ( $d_0$ ) $\varnothing$	16
Minimum drill hole depth	110
Drill hole depth ( $h_1$ )	110
Nominal setting depth ( $H_{nom}$ )	97
Effective setting depth ( $H_{ef}$ )	85
Installation torque ( $T_{inst}$ )	110

# Performance data

Base material	Load type	Embedment depth ( $h_{nom}$ )	Load direction	Load value
All				
Non-cracked concrete C20/25	$N_{Rec}$	97 mm		17.1 kN
Non-cracked concrete C20/25	$V_{Rec}$	97 mm		30.9 kN
Cracked concrete C20/25	$N_{Rec}$	97 mm		11.4 kN
Cracked concrete C20/25	$V_{Rec}$	97 mm		30.9 kN

# Installation

