

# Through bolt S-KA+ 16/60 ZP

SORMAT CODE 9640001363

## 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.
- 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.
- 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>	/ LVI 3253683
<b>Material</b>	Steel, zinc plated
<b>Packages</b>	box (bag): 10 / outer carton: 50 / pallet: 2800
<b>Weight</b>	275.3 kg / 1000

## BASE MATERIALS

### APPROVED FOR

- Cracked concrete
- Non-cracked concrete

### ALSO SUITABLE FOR

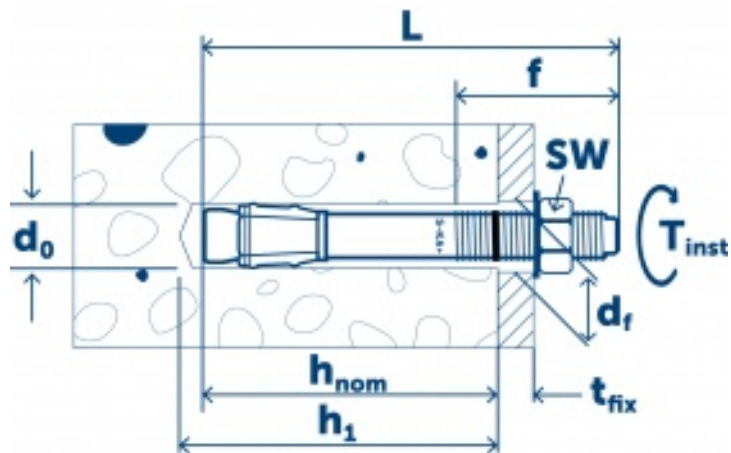
- Natural stone

# Technical data

## INSTALLATION DETAILS

**Size**  
**Length (L)**  
**Thread (f)**  
**Width across flats (SW)**  
**Max. fixture thickness ( $T_{fix}$ )**





M16  
 178  
 115  
 24  
 60



## 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 <input type="text" value="All"/>				
Non-cracked concrete C20/25	$N_{Rec}$	96 mm		17.1 kN
Non-cracked concrete C20/25	$V_{Rec}$	96 mm		30.9 kN
Cracked concrete C20/25	$N_{Rec}$	96 mm		11.4 kN
Cracked concrete C20/25	$V_{Rec}$	96 mm		30.9 kN

## Installation

