

# Through bolt S-KAK+ 10/100/80 HDG

SORMAT CODE 9640003331

## Improved premium-quality hdg 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.
- HDG for dry and humid indoor use, outdoor inland rural areas only.

## 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

## PRODUCT OVERVIEW

<b>Other codes</b>	SNRO 1324108 / LVI 3253693
<b>Material</b>	Steel, hot dip galvanized
<b>Packages</b>	box (bag): 25 / outer carton: 125 / pallet: 7000
<b>Weight</b>	96.0 kg / 1000
<b>GTIN-13</b>	6416031033315

## BASE MATERIALS

### APPROVED FOR

- Cracked concrete
- Non-cracked concrete

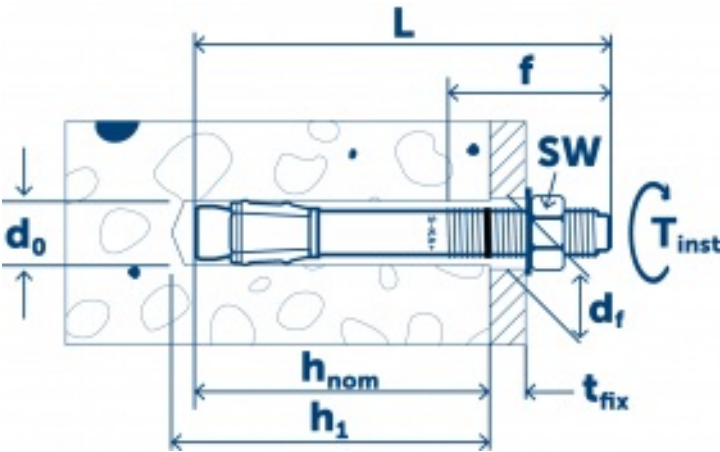
### ALSO SUITABLE FOR

- Natural stone

# Technical data

## INSTALLATION DETAILS









Size	M10
Length (L)	162
Thread (f)	115
Width across flats (SW)	17
Max. fixture thickness (T <sub>fix</sub> )	100/80



## INSTALLATION DETAILS

Hole in fixture (D <sub>f</sub> )	12
Drill hole diameter (d <sub>0</sub> ) ∅	10
Minimum drill hole depth	55/75
Drill hole depth (h <sub>1</sub> )	55/75
Nominal setting depth (H <sub>nom</sub> )	48/68
Effective setting depth (H <sub>ef</sub> )	40/60
Installation torque (T <sub>inst</sub> )	30

# Performance data

Base material	Load type	Embedment depth ( $h_{nom}$ )	Load direction	Load value
All				
Non-cracked concrete C20/25	$N_{Rec}$	48 mm		5.7 kN
Non-cracked concrete C20/25	$V_{Rec}$	48 mm		11.7 kN
Non-cracked concrete C20/25	$N_{Rec}$	68 mm		9.0 kN
Non-cracked concrete C20/25	$V_{Rec}$	68 mm		11.7 kN
Cracked concrete C20/25	$N_{Rec}$	48 mm		4.1 kN
Cracked concrete C20/25	$V_{Rec}$	48 mm		11.7 kN
Cracked concrete C20/25	$N_{Rec}$	68 mm		5.7 kN
Cracked concrete C20/25	$V_{Rec}$	68 mm		11.7 kN

# Installation

