

# Through bolt S-KAK 12/50 HDG (2 DIY)

SORMAT CODE 9640094133



## 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 thickness marked on the body.
- 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-08/0173 + DoPs



0809-CPR-1078



TC 4635-15



Fire resistance (ETA-08/0173)

## PRODUCT OVERVIEW

Other codes	/
Material	Steel, hot dip galvanized
Packages	box (bag): 2 / outer carton: 10
Weight	129.2 kg / 1000

## BASE MATERIALS

### APPROVED FOR

- Cracked concrete
- Non-cracked concrete

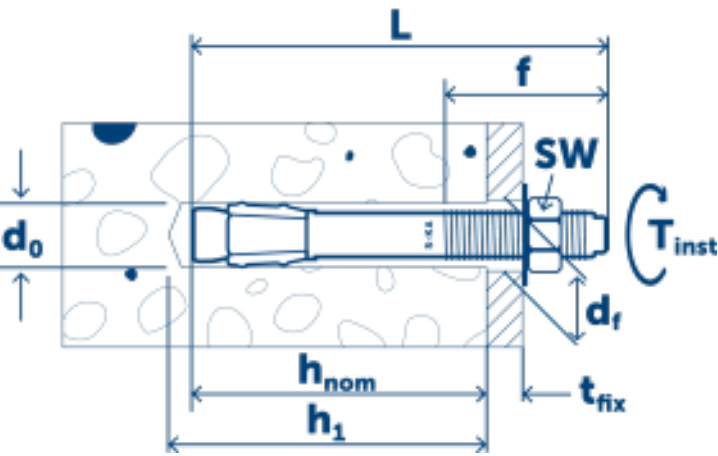
### ALSO SUITABLE FOR

- Natural stone

## Technical data

INSTALLATION DETAILS

Size  
Length (L)  
Thread (f)  
Width across flats (SW)  
Max. fixture thickness (T<sub>fix</sub>)



INSTALLATION DETAILS

M12	Hole in fixture (D <sub>f</sub> )	14
148	Drill hole diameter (d <sub>0</sub> ) ∅	12
98	Minimum drill hole depth	90
19	Drill hole depth (h <sub>1</sub> )	90
50	Nominal setting depth (H <sub>nom</sub> )	81
	Effective setting depth (H <sub>ef</sub> )	70
	Installation torque (T <sub>inst</sub> )	50

# Performance data

Base material	Load type	Embedment depth ( $h_{nom}$ )	Load direction	Load value
All				
Non-cracked concrete C20/25	$N_{Rec}$	81 mm		7.9 kN
Non-cracked concrete C20/25	$V_{Rec}$	81 mm		13.1 kN
Cracked concrete C20/25	$N_{Rec}$	81 mm		4.8 kN
Cracked concrete C20/25	$V_{Rec}$	81 mm		13.1 kN

# Installation

