

# Through bolt S-KAH+ 12/100/80 A4

SORMAT CODE 9640005347



# Improved premium-quality A4 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<sub>ef,std</sub>).
- A4 for indoor, outdoor and industrial use.

#### PRODUCT OVERVIEW

Other codes Material Packages

Weight GTIN-13

SNRO 1324141 / LVI 3253740 Stainless steel, A4 box (bag): 20 / outer carton: 100 / pallet: 5600 0.0 kg / 1000

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#### **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

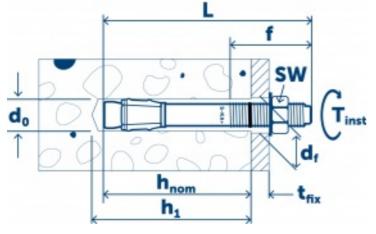


Seismic resistance (ETA-16/0934)

### Technical data

#### **INSTALLATION DETAILS**

# SizeM12Length (L)178Thread (f)115Width across flats (SW)19Max. fixture thickness (T<sub>fix</sub>)100/80



#### **INSTALLATION DETAILS**

Hole in fixture (D <sub>f</sub> )	14
Drill hole diameter (d <sub>0</sub> ) Ø	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 All	Load type	Embedment depth (h <sub>nom</sub> )	Load direction	Load value
Non-cracked concrete C20/25	N <sub>Rec</sub>	61 mm	<b>(</b> €)	8.3 kN
Non-cracked concrete C20/25	V <sub>Rec</sub>	61 mm	<u> </u>	19.7 kN
Non-cracked concrete C20/25	N <sub>Rec</sub>	81 mm	<del>-</del> +	11.9 kN
Non-cracked concrete C20/25	V <sub>Rec</sub>	81 mm	<u> </u>	19.7 kN
Cracked concrete C20/25	N <sub>Rec</sub>	61 mm	<del>-</del> +	5.8 kN
Cracked concrete C20/25	V <sub>Rec</sub>	61 mm		16.5 kN
Cracked concrete C20/25	N <sub>Rec</sub>	81 mm	<b>,</b>	7.6 kN
Cracked concrete C20/25	V <sub>Rec</sub>	81 mm		19.7 kN

## Installation

