

Liebig Safety bolt S M12-20/80/5 ZP

SORMAT CODE 9650080105



Legendary twin-cone heavy duty anchor for hi-power performance

- Torque-controlled twin-cone heavy duty anchor for push-through installations.
- Suitable for heavy loads due to optimal friction resistance.
- Cylindrical, wide expansion of sleeve over entire length.
- Equipped with domed washers providing a visual installation control.
- ZP for dry indoor and temporary outdoor use.

APPLICATIONS

- Steel structures
- Machines
- Guardrails
- Car lifting systems
- Railings
- Base plates
- Warehouse racks

APPROVALS / CERTIFICATES



ETA-06/0108 + DoPs



Fire resistance (ETA-06/0108)

Technical data

INSTALLATION DETAILS

PRODUCT OVERVIEW

Other codes	/
Material	Steel, zinc plated
Packages	box (bag): 10 / outer carton: 50 / pallet: 2800
Weight	208.0 kg / 1000

BASE MATERIALS

APPROVED FOR

- Cracked concrete
- Non-cracked concrete

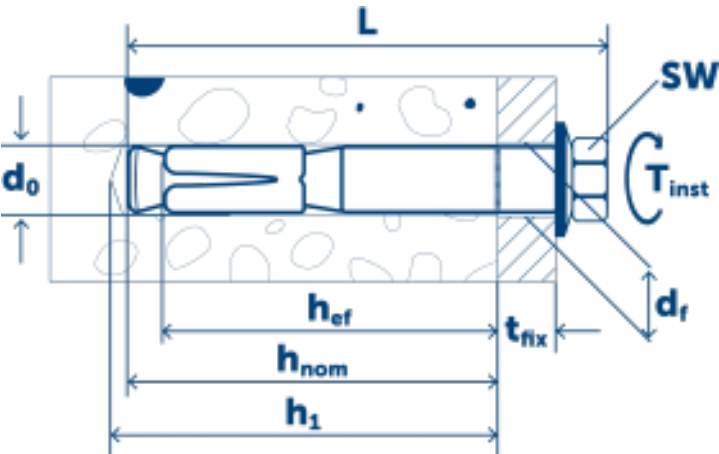
ALSO SUITABLE FOR

- Natural stone



0809-CPR-19006293

Size	M12	Hole in fixture (D_f)	21
Length (L)	113	Drill hole diameter (d_0) \varnothing	20
Width across flats (SW)	19	Minimum drill hole depth	100
Max. fixture thickness (T_{fix})	5	Drill hole depth (h_1)	100
		Nominal setting depth (H_{nom})	92
		Effective setting depth (H_{ef})	80
		Installation torque (T_{inst})	90



Performance data

Base material	Load type	Embedment depth (h_{nom})	Load direction	Load value
All				
Non-cracked concrete C20/25	N_{Rec}	92 mm		17.1 kN
Non-cracked concrete C20/25	V_{Rec}	92 mm		34.3 kN
Cracked concrete C20/25	N_{Rec}	92 mm		12.3 kN
Cracked concrete C20/25	V_{Rec}	92 mm		24.5 kN

Installation

