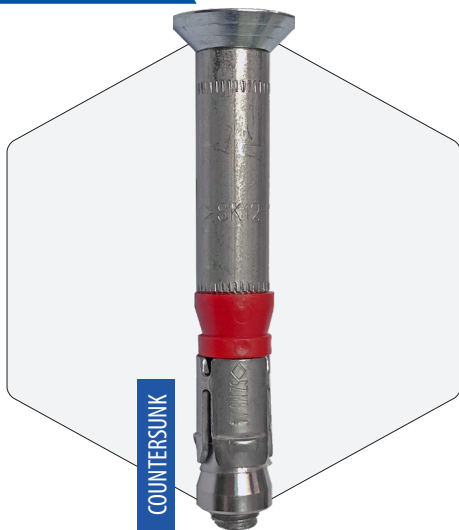
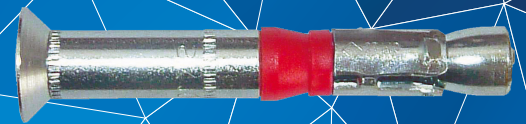




INFORMATION

The torque controlled Heavy Duty Anchor Countersunk is a stainless steel high performance anchor for use in cracked/non-cracked concrete and structural applications such as:

- Columns
- Guard rails
- Façades
- Staircases
- Silo installation
- Machines
- Cantilever beams

The variety of sizes and different embedment depths provide flexibility in selecting the appropriate anchor based on the fixture thickness.

Anchor Calculator Software can be used for detailed verifications based on EN 1992-4 or EOTA guidelines.

BASE MATERIAL

- Concrete C20/25 to C50/60
- Cracked Concrete
- Non-Cracked Concrete

FEATURES

- High Performance
- Wide Range Of Sizes
- Fast And Secure Installation
- Through Fixing
- Three way Expansion Sleeve
- Stainless Steel A4/316
- Close Spacing And Edge Distance
- Performance Data for different embedment depth
- Reaction To Fire Class A1
- Fire Resistant Loading

APPROVALS

European Technical Assessment



ETA-07/0331
Option 1 Structural Applications
C1, C2



Seismic Performance Categories

SOFTWARE



[Click here to download the software](#)

RELATED PRODUCTS

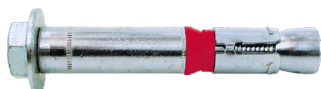


SDS+ Drill Bits



Hole Cleaning Pump

BOP1



Heavy Duty
Hexagon Bolt
BZP



Heavy Duty
Stud and Nut
BZP



Heavy Duty
Hexagon Bolt
A4 Stainless Steel



Heavy Duty
Stud and Nut
A4 Stainless Steel

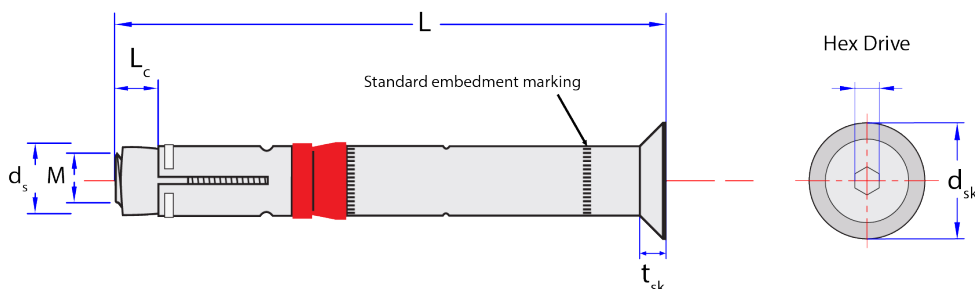


Heavy Duty
Countersunk
BZP





RANGE DATA



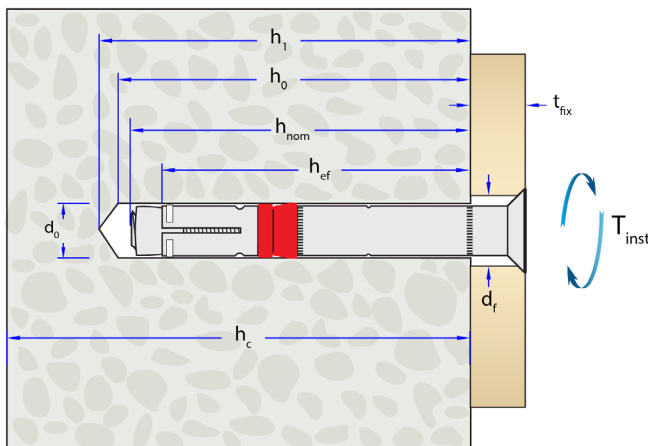
RANGE DATA

Part Number	Size of Thread	Sleeve Diameter	Total Length	Cone Length	Countersunk Thickness	Drive Type	Head Diameter
	M	(ds)	(L)	(Lc)	tsk		dsk
	mm	mm	mm	mm	mm		mm
SLSK12/10SS	M8	12	80	11	5	Hex Drive 5	20
SLSK12/25SS			95				
SLSK12/50SS			120				
SLSK15/15SS	M10	15	100	14	6	Hex Drive 6	25
SLSK15/25SS			110				
SLSK15/50SS			135				
SLSK18/20SS	M12	18	115	16	7	Hex Drive 7	30
SLSK18/40SS			135				





Installation Into Concrete



Installation Parameters

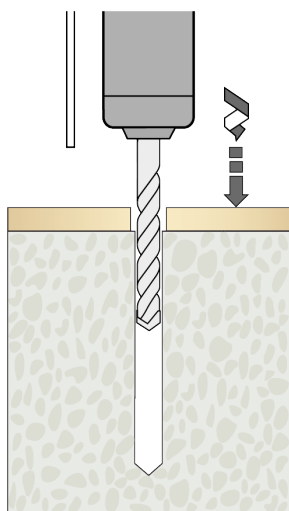
Part Number	Drill Hole Diameter	Standard Embedment				Deep Embedment				Fixture Clearance Hole	Tightening Torque
		Min Hole Depth	Embedment Depth	Anchorage depth	Max Fixture Thickness	Min Hole Depth	Embedment Depth	Anchorage depth	Max Fixture Thickness		
		(d ₀)	(h ₁)	(h _{nom})	(h _{ef})	(t _{fix})	(h ₁)	(h _{nom})	(h _{ef})	(t _{fix})	
		mm	mm	mm	mm	mm	mm	mm	mm	mm	Nm
SLSK12/10	12	80	70	60	10	N/A				14	25
SLSK12/25					25						
SLSK12/50					50	120	110	100	10		
SLSK15/10	15	95	85	71	15	N/A				17	55
SLSK15/25					25						
SLSK15/50					50	130	120	106	15		
SLSK18/20	18	105	95	80	20	N/A				20	70
SLSK18/40					40						



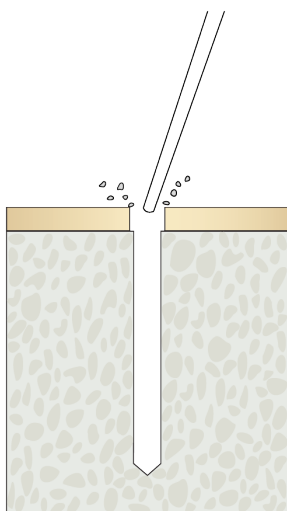


INSTALLATION INSTRUCTIONS

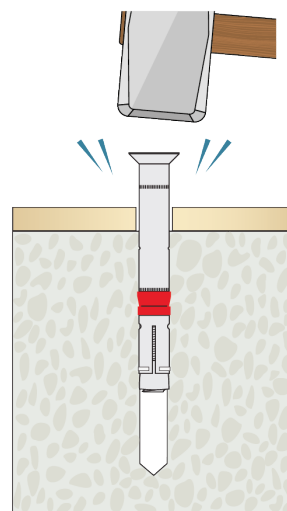
Click on the QR
code or scan it to
watch the video



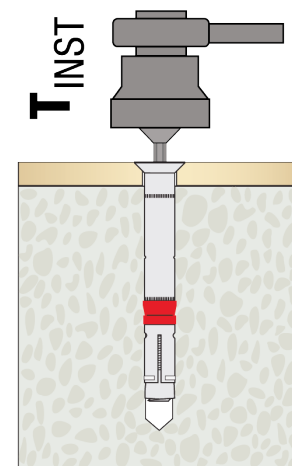
-Position fixture and drill
correct diameter hole to
corresponding depth



-Clean hole by blowing
to remove drilling debris
and dust



-Insert anchor through
fixture into concrete and
lightly hammer into concrete



-Tighten with torque
wrench to recommended
torque

PERFORMANCE DATA FOR STRUCTURAL APPLICATIONS (NON-CRACKED CONCRETE)

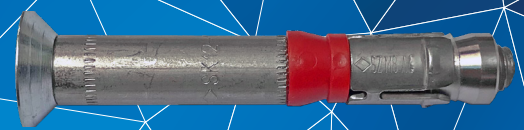
Performance Data (C20/25 non-cracked concrete) Standard Embedment

Size Of Thread	Embedment Depth	Minimum Concrete Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance	
	h_{nom} mm	h_{min} mm	Tensile (N_{Rk}) kN	Shear (V_{Rk}) kN	Tensile (N_{Rd}) kN	Shear (V_{Rd}) kN	Tensile (N_{Rec}) kN	Shear (V_{Rec}) kN
-	mm	mm	kN	kN	kN	kN	kN	kN
M8	70	120	16	24	10.6	17.6	7.6	12.6
M10	85	140	25	37	16.6	27.2	11.9	19.4
M12	95	160	35.2	62	23.4	45.5	16.7	32.5

Performance Data (C20/25 non-cracked concrete) Deep Embedment

Size Of Thread	Embedment Depth	Minimum Concrete Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance	
	h_{nom} mm	h_{min} mm	Tensile (N_{Rk}) kN	Shear (V_{Rk}) kN	Tensile (N_{Rd}) kN	Shear (V_{Rd}) kN	Tensile (N_{Rec}) kN	Shear (V_{Rec}) kN
-	mm	mm	kN	kN	kN	kN	kN	kN
M8	110	160	16	24	10.6	17.6	7.6	12.6
M10	120	175	25	37	16.6	27.2	11.9	19.4
M12	120	185	35	62	23.3	45.5	16.6	32.5





PERFORMANCE DATA FOR STRUCTURAL APPLICATIONS (CRACKED CONCRETE)

Performance Data* (C20/25 cracked concrete) Standard Embedment

Size Of Thread	Embedment Depth	Minimum Concrete Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance	
	h_{nom}	h_{min}	Tensile (N_{Rk})	Shear (V_{Rk})	Tensile (N_{Rd})	Shear (V_{Rd})	Tensile (N_{Rec})	Shear (V_{Rec})
-	mm	mm	kN	kN	kN	kN	kN	kN
M8	70	120	9	24	6	17.6	4.2	12.6
M10	85	140	16	37	10.6	27.2	7.6	19.4
M12	95	160	24.6	49.2	16.4	32.8	11.7	23.4

Performance Data* (C20/25 cracked concrete) Deep Embedment

Size Of Thread	Embedment Depth	Minimum Concrete Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance	
	h_{nom}	h_{min}	Tensile (N_{Rk})	Shear (V_{Rk})	Tensile (N_{Rd})	Shear (V_{Rd})	Tensile (N_{Rec})	Shear (V_{Rec})
-	mm	mm	kN	kN	kN	kN	kN	kN
M8	110	160	9	24	6	17.6	4.2	12.6
M10	120	175	16	37	10.6	27.2	7.6	19.4
M12	120	185	25	62	16.6	45.5	11.9	32.5

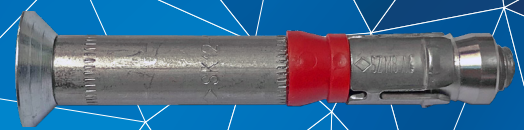
* Important notes:

- Fasteners subject to static and quasi-static loads. Please refer to ETA approval or the JCP Anchor Calculation Program for the seismic loads.
- Performance data stated for a single anchor, without the effect of spacing and edge distances. The influence of these parameters must be verified where applicable.
- Minimum concrete thickness, hole diameter, and embedment depth shall correspond to the dimensions stated in this document.
- Concrete strength class C20/25 is assumed.
- Drill holes produced using rotary hammer drilling, unless otherwise noted.
- Installation carried out strictly in accordance with the product's Installation Instructions and performed by a trained operator.
- Characteristic and design resistances derived from ETA approval.
- Design resistances are calculated from characteristic values using the appropriate partial safety factors corresponding to the decisive failure mode.
- The Recommended Resistance is calculated using an additional safety factor (γ_{Add}) equal to 1.4.
- Performance data is valid for shear loading without a lever arm; installations involving a lever arm require additional verifications.
- Performance data is not valid for combined tensile and shear loading; where combined loading occurs, further checks shall be performed.
- When concrete-related strength factors are applied, ensure that the resulting resistance value does not exceed the steel design resistance.
- For project-specific assessments or conditions not explicitly covered, download the JCP Anchor Calculation Program.



For variations in structure thickness, reduced spacing and edge calculations download the free **Anchor Calculation Program** from www.jcpfixings.co.uk





FIRE RESISTANCE DATA



Fire Resistance Data (C20/25 to C50/60 cracked or non-cracked concrete) Standard Embedment*

Size Of Thread	Embedment Depth h_{nom}	Minimum Concrete Thickness (h_{min})	Design Resistance								Recommended Resistance							
			30min (R30)		60min (R60)		90min (R90)		120min (R120)		30min (R30)		60min (R60)		90min (R90)		120min (R120)	
			Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$
			(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)
M8	70	120	2.2	9.6	2.2	9.6	2.2	7.9	1.8	6.3	1.6	6.8	1.6	6.8	1.6	5.6	1.2	4.5
M10	85	140	4	14.6	4	14.6	4	12.6	2.8	10	2.8	10.4	2.8	10.4	2.8	9	2	7.1
M12	95	160	6.2	19.7	6.2	19.7	6.2	18.3	4.1	14.6	4.4	14	4.4	14	4.4	13	2.9	10.4

Fire Resistance Data (C20/25 to C50/60 cracked or non-cracked concrete) Deep Embedment*

Size Of Thread	Embedment Depth h_{nom}	Minimum Concrete Thickness (h_{min})	Design Resistance								Recommended Resistance							
			30min (R30)		60min (R60)		90min (R90)		120min (R120)		30min (R30)		60min (R60)		90min (R90)		120min (R120)	
			Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$	Tensile $(N_{Rd,fi})$	Shear $(V_{Rd,fi})$
			(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)	(kN)
M8	110	160	2.2	14.3	2.2	11.1	2.2	7.9	1.8	6.3	1.6	10.2	1.6	7.9	1.6	5.6	1.2	4.5
M10	120	175	4	22	4	17.6	4	12.6	2.8	10	2.8	16.2	2.8	12.5	2.8	9	2	7.1
M12	120	185	6.2	32.8	6.25	25.5	6.25	18.3	4.1	14.6	4.4	23.4	4.4	18.2	4.4	13	2.9	10.4

* The determination covers anchors with a fire attack from one side only. If the fire attack is from more than one side, the design method may be taken only, if the edge distance of the anchor is $c \geq 300$ mm and $\geq 2 h_{ef}$.

**For combined loads, use Anchor Calculation Program.

SUPPLEMENTARY DATA

Influence Of Concrete Strength (Cracked/Non-cracked Concrete)					
Concrete strength		C20/25	C30/37	C40/50	C50/60
Cylinder	N/mm ²	20	30	40	50
Cube	N/mm ²	25	37	50	60
Factor	-	1.0	1.22	1.41	1.55

Important Note:

When using concrete factors ensure that loads do not exceed Steel Design Resistance.

Steel Failure

Size Of Thread	Tensile Resistance			Shear Resistance		
	Characteristic Resistance $(N_{Rk,s})$	Design Resistance $(N_{Rd,s})$	Recommended Resistance $(N_{Rrec,s})$	Characteristic Resistance $(V_{Rk,s})$	Design Resistance $(V_{Rd,s})$	Recommended Resistance $(V_{Rrec,s})$
-	kN	kN	kN	kN	kN	kN
M8	26.0	13.9	9.9	24.0	17.6	12.5
M10	41.0	21.9	15.6	37.0	27.2	19.4
M12	60.0	32.0	22.8	62.0	45.5	32.5

