

SKR - SKS



SKR - SKS: screw anchor for concrete

- Suitable for uncracked concrete
- Hexagonal head of increased size
- Thread suitable for dry fastening
- Trivalent chrome Cr³⁺ coating
- Electrogalvanized carbon steel
- Through fastener
- No fastener expansion

SKR
hexagonal head

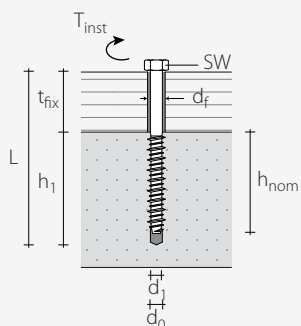


code	d ₁ [mm]	L [mm]	t _{fix} [mm]	h _{1,min} [mm]	h _{nom} [mm]	d _{0 cls} [mm]	d _{f timber} [mm]	d _{f steel} [mm]	SW [mm]	T _{inst} [Nm]	pcs/box
SKR7560	7,5	60	10	60	50	6	8	8-10	13	15	100
SKR7580		80	30	60	50	6	8	8-10	13	15	50
SKR75100		100	20	90	80	6	8	8-10	13	15	50
SKR1080	10	80	30	65	50	8	10	10-12	16	25	50
SKR10100		100	20	95	80	8	10	10-12	16	25	25
SKR10120		120	40	95	80	8	10	10-12	16	25	25
SKR10140		140	60	95	80	8	10	10-12	16	25	25
SKR10160		160	80	95	80	8	10	10-12	16	25	25
SKR12100	12	100	20	100	80	10	12	12-14	18	50	25
SKR12120		120	40	100	80	10	12	12-14	18	50	25
SKR12140		140	60	100	80	10	12	12-14	18	50	25
SKR12160		160	80	100	80	10	12	12-14	18	50	25
SKR12200		200	120	100	80	10	12	12-14	18	50	25
SKR12240		240	160	100	80	10	12	12-14	18	50	25
SKR12280		280	200	100	80	10	12	12-14	18	50	25
SKR12320		320	240	100	80	10	12	12-14	18	50	25
SKR12400		400	320	100	80	10	12	12-14	18	50	25

SKS
countersunk head



code	d ₁ [mm]	L [mm]	t _{fix} [mm]	h _{1,min} [mm]	h _{nom} [mm]	d _{0 cls} [mm]	d _{f timber} [mm]	d _{f steel} [mm]	TX [mm]	T _{inst} [Nm]	pcs/box
SKS7560	7,5	60	10	60	50	6	8	-	TX40	-	50
SKS7580		80	30	60	50	6	8	-	TX40	-	50
SKS75100		100	20	90	80	6	8	-	TX40	-	50
SKS75120		120	40	90	80	6	8	-	TX40	-	50
SKS75140		140	60	90	80	6	8	-	TX40	-	50
SKS75160		160	80	90	80	6	8	-	TX40	-	50

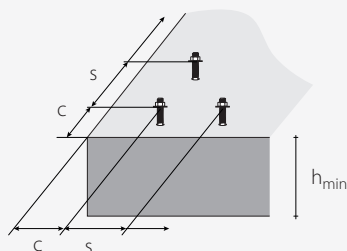


d₁ = anchor diameter
L = anchor length
t_{fix} = maximum fixing thickness
h₁ = minimum hole depth
h_{nom} = nominal anchoring depth

d₀ = hole diameter in the concrete support
d_f = maximum hole diameter in the element to be fastened
SW = wrench size
T_{inst} = tightening torque

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INSTALLATION



			SKR			SKS
Spacing and distances for tensile loads			7,5	10	12	7,5
Minimum spacing	$s_{min,N}$	[mm]	50	60	65	50
Minimum edge distance	$c_{min,N}$	[mm]	50	60	65	50
Minimum thickness support on concrete	h_{min}	[mm]	100	110	130	100
Critical spacing	$s_{cr,N}$	[mm]	100	150	180	100
Critical edge-distance	$c_{cr,N}$	[mm]	50	70	80	50

Spacing and distances for shear loads			7,5	10	12	7,5
Minimum spacing	$s_{min,V}$	[mm]	50	60	70	50
Minimum edge distance	$c_{min,V}$	[mm]	50	60	70	50
Minimum thickness of the concrete support	h_{min}	[mm]	100	110	130	100
Critical spacing	$s_{cr,V}$	[mm]	140	200	240	140
Critical edge-distance	$c_{cr,V}$	[mm]	70	110	130	70

For spacing and distances smaller than the critical ones, the strength values should be reduced depending on the installation parameters.

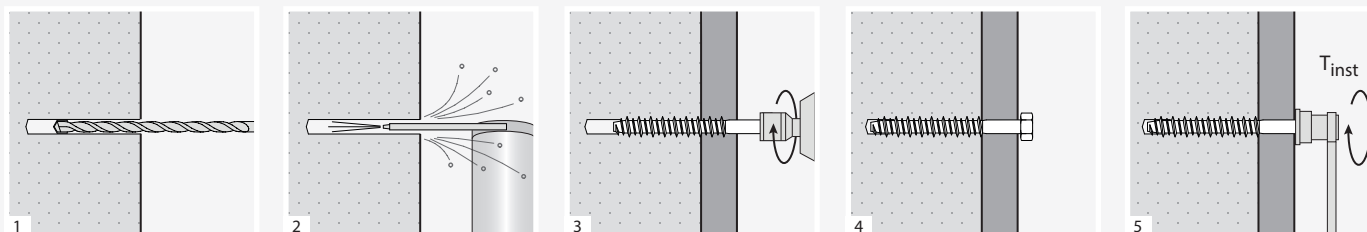
STATIC VALUES

Valid for a single anchor in C20/25 grade concrete when spacing and edge-distance are not limiting parameters.

ADMISSIBLE VALUES (recommended)

		UNCRACKED CONCRETE		
		TENSION	SHEAR ⁽¹⁾	HEAD PENETRATION
		$N_{1,rec}$ [kN]	V_{rec} [kN]	$N_{2,rec}$ [kN]
SKR	7,5	2,13	2,50	1,19 ⁽²⁾
	10	6,64	6,65	1,86 ⁽²⁾
	12	8,40	8,18	2,83 ⁽²⁾
SKS	7,5	2,13	2,50	0,72

ASSEMBLY



GENERAL PRINCIPLES

- Shear and tensile admissible values (recommended) are according to the Certificate Nr. 2006/5205/1 released from Politecnico di Milano and obtained by considering a safety factor of 4 for the failure load.

NOTES

- ⁽¹⁾ When evaluating the anchor global-strength, the shear strength on the element to be fastened (e.g. timber, concrete, ...) must be considered separately based on the material adopted.
- ⁽²⁾ All values refer to SKR installed with DIN 9021 (ISO 9073) washer.