



SKR | SKS

CONCRETE SCREW

RAPID DRY SYSTEM

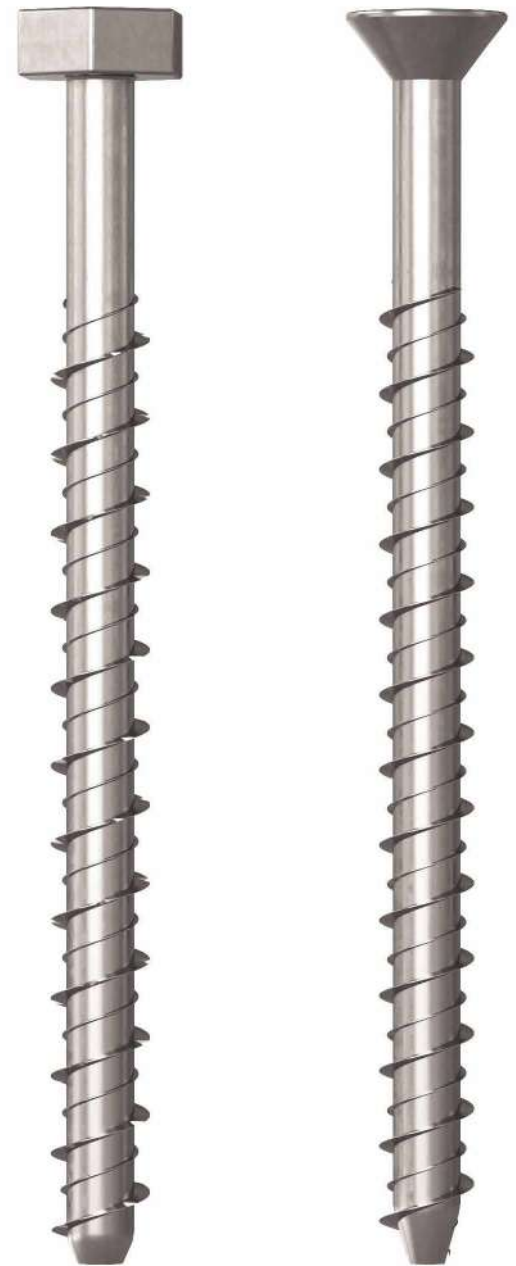
Fast and easy operation. The special threading requires a small pre-drill and guarantees fastening on concrete without creating expansion stresses in the concrete. Reduced minimum distances.

SKR - SKS EVO

For some sizes, a version is available with special surface treatment to improve corrosion resistance of the externally exposed head.

LARGER HEAD

Robust and easy to install, thanks to the increased geometry of the SKR hexagonal head.



CHARACTERISTICS

FOCUS	screw for concrete
HEAD	hexagonal and countersunk
DIAMETER	from 7,5 to 12,0 mm
LENGTH	from 60 to 400 mm



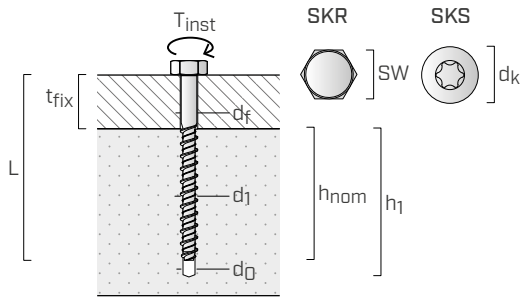
MATERIAL

Galvanized carbon steel. Versions in carbon steel with C4 EVO coating.

FIELDS OF USE

Fastening of timber or steel elements to concrete supports. Service classes 1 and 2. Versions with C4 EVO coating allow the application in service class 3

SKR - SKS GEOMETRY



d_1	external diameter of anchor
L	anchor length
t_{fix}	maximum fastening thickness
h_1	minimum hole depth
h_{nom}	nominal anchoring depth
d_0	hole diameter in the concrete support
d_f	maximum hole diameter in the element to be fastened
SW	wrench size SKR
d_k	SKS head diameter
T_{inst}	tightening torque

CODES AND DIMENSIONS SKR - SKS

SKR hexagonal head

CODE	d_1 [mm]	L [mm]	t_{fix} [mm]	$h_{1,min}$ [mm]	h_{nom} [mm]	d_0 [mm]	$d_{f\ timber}$ [mm]	$d_{f\ steel}$ [mm]	SW [mm]	T_{inst} [Nm]	pcs
SKR7560	7,5	60	10	60	50	6	8	8-10	13	15	50
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 [mm]	$d_{f\ timber}$ [mm]	d_k [mm]	TX	T_{inst} [Nm]	pcs
SKS7560	7,5	60	10	60	50	6	8	13	TX40	-	50
SKS7580		80	30	60	50	6	8	13	TX40	-	50
SKS75100		100	20	90	80	6	8	13	TX40	-	50
SKS75120		120	40	90	80	6	8	13	TX40	-	50
SKS75140		140	60	90	80	6	8	13	TX40	-	50
SKS75160		160	80	90	80	6	8	13	TX40	-	50

CODES AND DIMENSIONS SKR - SKS | EVO VERSION



SKR EVO hexagonal head

CODE	d_1 [mm]	L [mm]	t_{fix} [mm]	$h_{1,min}$ [mm]	h_{nom} [mm]	d_0 [mm]	$d_{f\ timber}$ [mm]	$d_{f\ steel}$ [mm]	SW [mm]	T_{inst} [Nm]	pcs
SKREVO7560	7,5	60	10	60	50	6	8	8-10	13	15	50
SKREVO1080	10	80	30	65	50	8	10	10-12	16	25	50
SKREVO12100	12	100	20	100	80	10	12	12-14	18	50	25

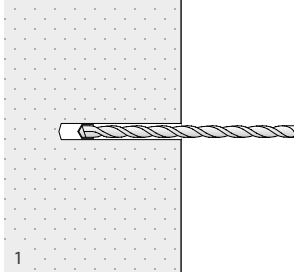
SKS EVO countersunk head

CODE	d_1 [mm]	L [mm]	t_{fix} [mm]	$h_{1,min}$ [mm]	h_{nom} [mm]	d_0 [mm]	$d_{f\ timber}$ [mm]	d_k [mm]	TX	T_{inst} [Nm]	pcs
SKSEVO7580	7,5	80	30	60	50	6	8	13	TX40	-	50
SKSEVO75100		100	20	90	80	6	8	13	TX40	-	50
SKSEVO75120		120	40	90	80	6	8	13	TX40	-	50

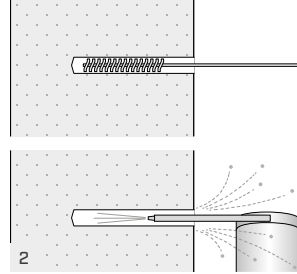
TECHNICAL FEATURES

- Suitable for uncracked concrete
- Hexagonal head of increased size
- Thread is suitable for dry fastening
- Double version: zinc plated and C4 EVO coating
- Electrogalvanized carbon steel
- Through fastening
- No fastener expansion

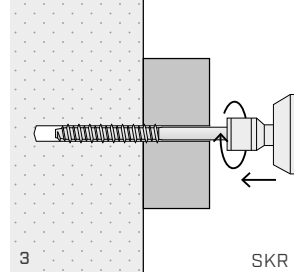
ASSEMBLY



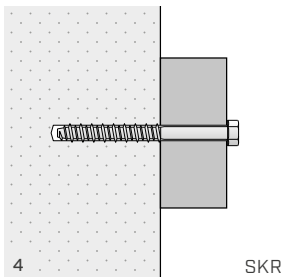
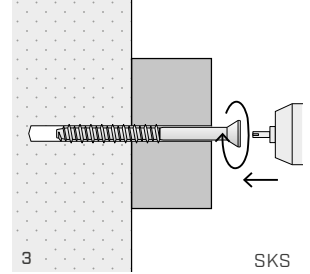
Drill a hole in rotary percussion mode



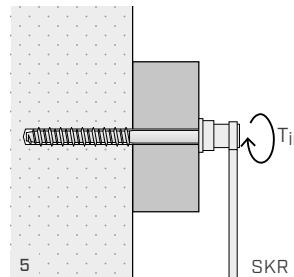
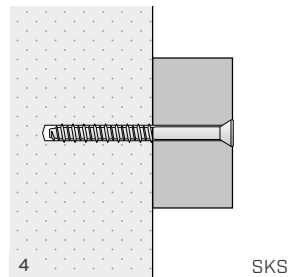
Clean the hole



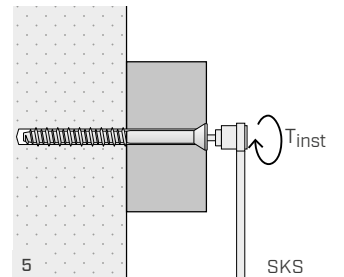
Position the object to be fixed and install the screw with a pulse screw gun



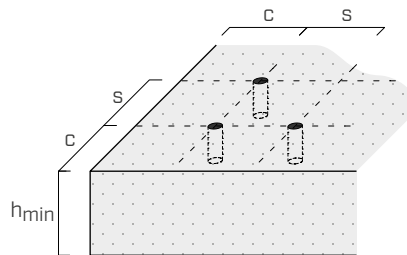
Ensure the anchor head is in complete contact with the object to be fixed



Check the tightening torque T_{inst}



INSTALLATION



		SKR			SKS
Spacing and distances for tensile loads		Ø7,5	Ø10	Ø12	Ø7,5
Minimum spacing	$s_{min,N}$ [mm]	50	60	65	50
Minimum edge distance	$c_{min,N}$ [mm]	50	60	65	50
Minimum thickness of concrete support	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		Ø7,5	Ø10	Ø12	Ø7,5
Minimum spacing	$s_{min,V}$ [mm]	50	60	70	50
Minimum edge distance	$c_{min,V}$ [mm]	50	60	70	50
Minimum thickness of 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, strength values have to be reduced depending on the installation parameters.

■ STATIC VALUES

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

ADMISSIBLE VALUES

UNCRACKED CONCRETE

		<i>tension</i>	<i>shear</i> ⁽¹⁾	<i>head pull-through</i>
		$N_{1,rec}$ [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

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.

GENERAL PRINCIPLES:

- Recommended admissible shear and tensile values are compliant with Certificate Nr. 2006/5205/1 released from Politecnico di Milano and obtained by considering a safety factor of 4 for the failure load.