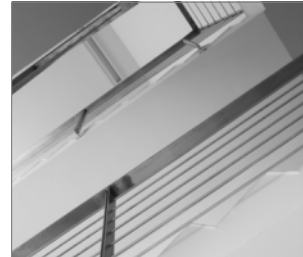


R-LX-CS-ZF Zinc Flake coated Countersunk Concrete Screw Anchor

Self-tapping concrete screwbolt



Product information

Features and benefits

- Time-efficient installation through streamlined procedure - simply drill and drive
- Completely removable
- Unique design with patented threadform ensures high performance for relatively small hole diameter and low torque level during installation even in high strength concrete
- Non-expansion functioning ensures low risk of damage to base material and makes R-LX ideal for installation near edges and adjacent anchors
- Highest performance in both cracked and non-cracked concrete
- Special zinc flake coating for increased corrosion resistance
- Different head types for any application
- Possibility of multiple use in high-strength concrete
- Allround product for any application
- Suitable for standard and reduced embedment depth

Applications

- Through-fixing
- Temporary anchorages
- Formwork support systems
- Balustrading & handrails
- Fencing & gates manufacturing and installation
- Racking systems
- Public seating
- Scaffolding

Base materials

Suitable for use in

- Concrete

Installation guide

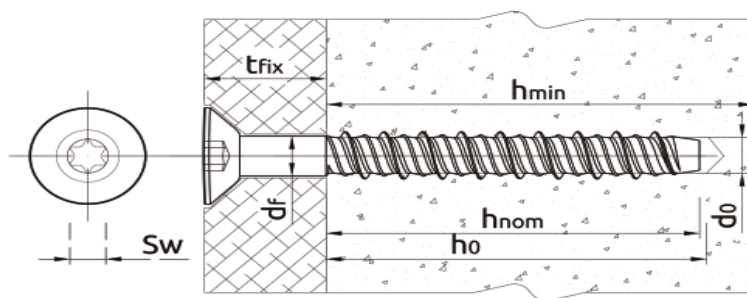
1. Drill a hole of required diameter and depth
2. Clean the hole of drilling dust and debris (using blowpump or equivalent method)
3. Insert anchor through fixture and screw into hole, until installation depth is reached and fixture is secure. Recommended installation torque may be used as a guideline (for use in concrete)

Product information



Size	Product Code	Anchor		Fixture		
		Diameter	Length	Max. thickness	Max. thickness t_{fix} for:	Hole diameter
		d	L	$t_{fix, r}$	$h_{nom, std}$	d_f
		[mm]	[mm]	[mm]	[mm]	[mm]
5	R-LX-05X050-CS-ZF	6.3	50	25	10	7
	R-LX-05X075-CS-ZF	6.3	75	50	25	7
6	R-LX-06X050-CS-ZF	7.5	50	10	-	9
	R-LX-06X075-CS-ZF	7.5	75	35	20	9
	R-LX-06X100-CS-ZF	7.5	100	60	45	9
	R-LX-06X130-CS-ZF	7.5	130	90	75	9
	R-LX-06X150-CS-ZF	7.5	150	110	95	9
	R-LX-06X160-CS-ZF	7.5	160	110	95	9
8	R-LX-08X060-CS-ZF	10	60	10	-	12
	R-LX-08X075-CS-ZF	10	75	25	5	12
	R-LX-08X090-CS-ZF	10	90	40	20	12
	R-LX-08X100-CS-ZF	10	100	50	30	12
	R-LX-08X130-CS-ZF	10	130	80	60	12
	R-LX-08X150-CS-ZF	10	150	100	80	12
10	R-LX-10X065-CS-ZF	12.5	65	10	-	14
	R-LX-10X075-CS-ZF	12.5	75	20	-	14
	R-LX-10X085-CS-ZF	12.5	85	30	-	14
	R-LX-10X100-CS-ZF	12.5	100	45	15	14
	R-LX-10X120-CS-ZF	12.5	120	65	35	14
	R-LX-10X140-CS-ZF	12.5	140	85	55	14
	R-LX-10X160-CS-ZF	12.5	160	105	75	14

Installation data



Size			5	6	8	10
Thread diameter	d	[mm]	6.3	7.5	10	12.5
Hole diameter in substrate	d_0	[mm]	5	6	8	10
Wrench size	Sw		25	30	45	50

Installation data

Mechanical properties

Size			5	6	8	10
Nominal ultimate tensile strength - tension	f_{uk}	[N/mm ²]	1300	1250	1200	1050
Nominal yield strength - tension	f_{yk}	[N/mm ²]	1150	1100	1050	950
Cross sectional area - tension	A_s	[mm ²]	19.6	28.3	50.3	78.5
Elastic section modulus	W_{el}	[mm ³]	12.2	21.2	50.3	98.1
Characteristic bending resistance	$M_{Rk,s}^b$	[Nm]	19	31.8	72.4	123.6
Design bending resistance	M	[Nm]	12.67	21.2	48.27	82.4

Basic performance data

Performance data for single anchor in tension without influence of edge distance and spacing

Size		5	6	8	10
MEAN ULTIMATE LOAD					
TENSION LOAD $N_{Ru,m}$					
NON-CRACKED CONCRETE C20/25					
Standard embedment depth	[kN]	8.70	14.80	26.04	35.37
Reduced embedment depth	[kN]	-	11.09	15.19	17.08
CRACKED CONCRETE C20/25					
Standard embedment depth	[kN]	7.10	11.10	18.33	24.89
Reduced embedment depth	[kN]	-	7.81	10.69	12.02
SHEAR LOAD $V_{Ru,m}$					
NON-CRACKED CONCRETE C20/25					
Standard embedment depth	[kN]	8.70	14.80	26.04	49.46
Reduced embedment depth	[kN]	-	11.09	15.19	17.08
CRACKED CONCRETE C20/25					
Standard embedment depth	[kN]	7.10	11.10	18.33	49.46
Reduced embedment depth	[kN]	-	7.81	10.69	12.02
CHARACTERISTIC LOAD					
TENSION LOAD N_{Rk}					
NON-CRACKED CONCRETE C20/25					
Standard embedment depth	[kN]	7.00	12.00	19.49	26.46
Reduced embedment depth	[kN]	-	8.00	11.00	12.78
CRACKED CONCRETE C20/25					
Standard embedment depth	[kN]	4.50	7.00	13.00	18.87
Reduced embedment depth	[kN]	-	5.50	7.50	8.00
SHEAR LOAD V_{Rk}					
NON-CRACKED CONCRETE C20/25					
Standard embedment depth	[kN]	7.00	12.00	24.00	41.20
Reduced embedment depth	[kN]	-	8.00	11.00	13.00
CRACKED CONCRETE C20/25					
Standard embedment depth	[kN]	4.50	7.00	13.00	38.00
Reduced embedment depth	[kN]	-	5.50	7.50	8.00

Basic performance data

Design performance data

Standard embedment depth

Size			5	6	8	10
Installation depth	h_{nom}	[mm]	43.00	55.00	70.00	85.00
Effective embedment depth	h_{ef}	[mm]	30.00	42.00	53.00	65.00
TENSION LOAD						
STEEL FAILURE						
Characteristic resistance	$N_{Rk,s}$	[kN]	25.50	35.40	60.40	82.40
Partial safety factor	γ_{Ms}	-	1.40	1.40	1.40	1.40
PULL-OUT FAILURE; NON-CRACKED CONCRETE C20/25						
Characteristic resistance	$N_{Rk,p}$	[kN]	7.00	12.00	-	-
CONCRETE CONE FAILURE; NON-CRACKED CONCRETE C20/25						
Characteristic resistance	$N_{Rk,c}$	[kN]	-	-	19.49	26.46
PULL-OUT FAILURE; CRACKED CONCRETE C20/25						
Characteristic resistance	$N_{Rk,p}$	[kN]	4.50	7.00	13.00	-
CONCRETE CONE FAILURE; CRACKED CONCRETE C20/25						
Characteristic resistance	$N_{Rk,c}$	[kN]	-	-	-	18.87
Partial safety factor	[English]: γ_2	-	1.20	1.00	1.00	1.00
Increasing factors for $N_{Rd,p}$ - C30/37	ψ_c	-	-	-	-	-
Increasing factors for $N_{Rd,p}$ - C40/50	ψ_c	-	-	-	-	-
Increasing factors for $N_{Rd,p}$ - C50/60	ψ_c	-	-	-	-	-
Spacing	$s_{cr,N}$	[mm]	90.00	126.00	160.00	196.00
Edge distance	$c_{cr,N}$	[mm]	45.00	63.00	80.00	98.00
SHEAR LOAD						
STEEL FAILURE						
Characteristic resistance without lever arm	$V_{Rk,s}$	[kN]	12.70	17.70	30.20	41.20
Characteristic resistance with lever arm	$M_{Rk,s}$	[Nm]	19.00	31.80	72.40	123.60
Partial safety factor	γ_{Ms}	-	1.50	1.50	1.50	1.50
CONCRETE PRY-OUT FAILURE; NON-CRACKED CONCRETE C20/25						
Characteristic resistance	$V_{Rk,cp}$	[kN]	7.00	12.00	24.00	60.00
CONCRETE PRY-OUT FAILURE; CRACKED CONCRETE C20/25						
Characteristic resistance	$V_{Rk,cp}$	[kN]	4.50	7.00	13.00	38.00
	k	-	1.00	1.00	1.00	2.00
Partial safety factor	[English]: γ_2	-	1.20	1.00	1.00	1.00

Design performance data

Reduced embedment depth

Size			5	6	8	10
Installation depth	h_{nom}	[mm]	-	43.00	50.00	55.00
Effective embedment depth	h_{ef}	[mm]	-	30.00	37.00	40.00
TENSION LOAD						
STEEL FAILURE						
Characteristic resistance	$N_{Rk,s}$	[kN]	-	35.40	60.40	82.40
Partial safety factor	γ_{Ms}	-	-	1.40	1.40	1.40
PULL-OUT FAILURE; NON-CRACKED CONCRETE C20/25						
Characteristic resistance	$N_{Rk,p}$	[kN]	-	8.00	11.00	-
CONCRETE CONE FAILURE; NON-CRACKED CONCRETE C20/25						
Characteristic resistance	$N_{Rk,c}$	-	-	-	-	12.78
PULL-OUT FAILURE; CRACKED CONCRETE C20/25						
Characteristic resistance	$N_{Rk,p}$	[kN]	-	5.50	7.50	8.00
CONCRETE CONE FAILURE; CRACKED CONCRETE C20/25						
Characteristic resistance	$N_{Rk,c}$	-	-	-	-	-
Partial safety factor	[English]: γ_2	-	-	1.00	1.00	1.00
Increasing factors for $N_{Rd,p}$ - C30/37	ψ_c	-	-	-	-	-
Increasing factors for $N_{Rd,p}$ - C40/50	ψ_c	-	-	-	-	-
Increasing factors for $N_{Rd,p}$ - C50/60	ψ_c	-	-	-	-	-
Spacing	$s_{cr,N}$	[mm]	-	90.00	112.00	120.00
Edge distance	$c_{cr,N}$	[mm]	-	45.00	56.00	60.00
SHEAR LOAD						
STEEL FAILURE						
Characteristic resistance without lever arm	$V_{Rk,s}$	[kN]	-	17.70	30.20	41.20
Characteristic resistance with lever arm	$M_{Rk,s}$	[Nm]	-	31.80	72.40	123.60
Partial safety factor	γ_{Ms}	-	-	1.50	1.50	1.50
CONCRETE PRY-OUT FAILURE; NON-CRACKED CONCRETE C20/25						
Characteristic resistance	$V_{Rk,cp}$	[kN]	-	8.00	11.00	13.00
CONCRETE PRY-OUT FAILURE; CRACKED CONCRETE C20/25						
Characteristic resistance	$V_{Rk,cp}$	[kN]	-	5.50	7.50	8.00
	k	-	-	1.00	1.00	1.00
Partial safety factor	[English]: γ_2	-	-	1.00	1.00	1.00

Product commercial data

Size	Product Code	Anchor	Quantity [pcs]			Weight [kg]			Bar Codes
		Length [mm]	Box	Outer	Pallet	Box	Outer	Pallet	
5	R-LX-05X050-CS-ZF	50	100	100	41600	0.10	0.10	71.6	5906675130217
	R-LX-05X075-CS-ZF	75	100	100	41600	0.10	0.10	71.6	5906675130224
6	R-LX-06X050-CS-ZF	50	100	100	41600	0.10	0.10	71.6	5906675130231
	R-LX-06X075-CS-ZF	75	100	100	41600	0.10	0.10	71.6	5906675130248
	R-LX-06X100-CS-ZF	100	100	100	25600	0.10	0.10	55.6	5906675130255
	R-LX-06X130-CS-ZF	130	100	100	25600	0.10	0.10	55.6	5906675130262
	R-LX-06X150-CS-ZF	150	100	100	25600	0.10	0.10	55.6	5906675130279
	R-LX-06X150-CS-ZF	150	100	100	25600	0.10	0.10	55.6	5906675130285
8	R-LX-08X060-CS-ZF	60	100	100	25600	0.10	0.10	55.6	5906675130385
	R-LX-08X075-CS-ZF	75	100	100	25600	0.10	0.10	55.6	5906675130392
	R-LX-08X090-CS-ZF	90	100	100	19200	0.10	0.10	49.2	5906675130408
	R-LX-08X100-CS-ZF	100	100	100	19200	0.10	0.10	49.2	5906675130415
	R-LX-08X130-CS-ZF	130	50	50	12800	0.05	0.05	42.8	5906675130422
	R-LX-08X150-CS-ZF	150	50	50	12800	0.05	0.05	42.8	5906675130439
10	R-LX-10X065-CS-ZF	65	50	50	15600	0.05	0.05	45.6	5906675130453
	R-LX-10X075-CS-ZF	75	50	50	12800	0.05	0.05	42.8	5906675130460

Product commercial data