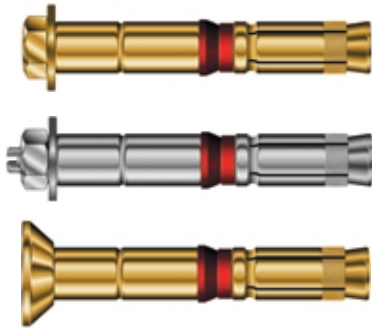


Highload Anchor SL

Steel, zinc plated / Stainless steel A4/316



Highload Anchor SL-S

Highload Anchor SL-B A4

Highload Anchor SL-SK



Description

The DIBt and Socotec (France) approved Highload Anchor SL is a torque controlled anchor system for through fastenings in non-cracked concrete, available in three versions.

Applications

Medium to heavy duty anchorings of base plates, supports, pallet racks, brackets, railings in non-cracked concrete.

Range of concrete quality: C20/25 - C50/60



Software available

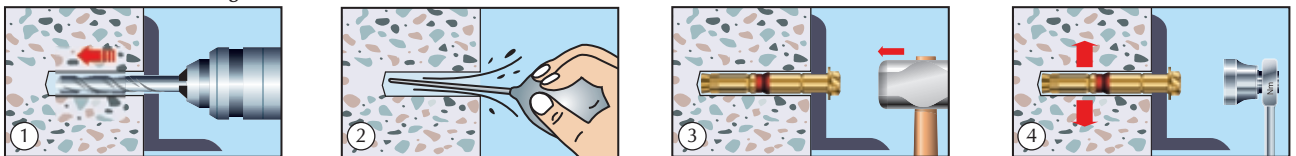
Loads and performance data

			SL 10	SL 12	SL 14	SL 18	SL 24	SL 28
			M6	M8	M10	M12	M16	M20
Non-cracked concrete C25/30								
Recommended loads, tension	rec. N	[kN]	4.70	6.90	10.20	15.50	25.00	33.00
Recommended loads, shear	rec. V	[kN]	5.00	8.40	12.30	22.10	36.80	51.10
Recommended loads, shear (A4-70 st. steel)	rec. V	[kN]	5.40	8.20	11.40	20.00	35.40	52.20
Recommended bending moments (8.8 Steel)	rec. M	[Nm]	7.00	17.10	34.20	60.00	152.00	297.00
Recommended bending moments (A4-70 st. steel)	rec. M	[Nm]	4.90	12.10	24.10	42.10	107.00	209.00

Installation parameters

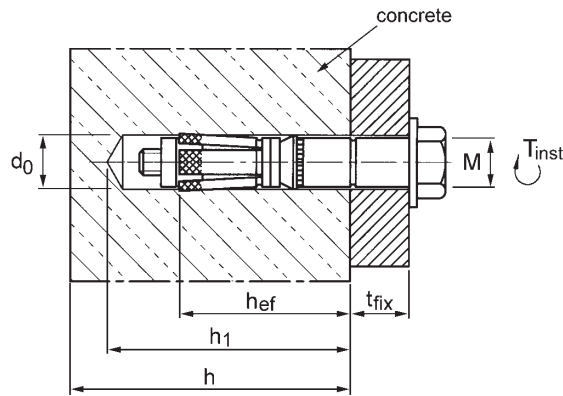
			SL 10	SL 12	SL 14	SL 18	SL 24	SL 28
Drill hole diameter	d _o	[mm]	10	12	14	18	24	28
Diameter of clearance hole in the fixture	d _f	[mm]	12	14	16	20	26	31
Depth of drill hole	h _i	[mm]	60	70	85	100	125	150
Effective anchorage depth	h _{ef}	[mm]	45	55	65	80	100	125
Minimum thickness of concrete slab	h	[mm]	120	140	165	200	235	300
Installation torque	T _{inst}	[Nm]	10	25	50	80	200	400
Width across nut	SW	[mm]	10	13	17	19	24	30

Installation of MKT SL Highload Anchor



1. Drill to specified diameter and depth.
2. Clean the hole with blow-out bulb.
3. Using a hammer, tap the anchor through the fixture into the hole until the bolt head is firmly seated against the fixture.
4. Tighten the anchor to the specified torque. Refer to approval and listing for design and building code compliance.





Recommended tension loads for single anchor without influence of spacing and edge distance, total safety factor 3.

Tension [kN]		Non-cracked concrete					
Concrete	SL	SL	SL	SZ	SZ	SZ	
strength	10/M6	12/M8	14/M10	18/M12	24/M16	28/M20	
C20/25	4.23	6.21	9.18	13.95	22.50	29.70	
C25/30	4.70	6.90	10.20	15.50	25.00	33.00	
C30/37	5.17	7.59	11.22	17.05	27.50	36.30	
C40/50	5.96	8.76	12.95	19.68	31.75	41.91	
C50/60	6.58	9.66	14.28	21.70	35.00	46.20	

Recommended shear loads for single anchor without influence of spacing and edge distance, total safety factor 3. C20/25 up to C50/60 in non-cracked concrete.

(Zinc Plated Steel)

Shear [kN]		Non-cracked concrete					
Concrete	SL	SL	SL	SZ	SZ	SZ	
strength	10/M6	12/M8	14/M10	18/M12	24/M16	28/M20	
≥ C20/25	5.00	8.40	12.30	22.10	36.80	51.10	

Recommended shear loads for single anchor without influence of spacing and edge distance, total safety factor 3. C20/25 up to C50/60 in non-cracked concrete.

(A4-70 Stainless Steel)

Shear [kN]		Non-cracked concrete					
Concrete	SL	SL	SL	SZ	SZ	SZ	
strength	10/M6	12/M8	14/M10	18/M12	24/M16	28/M20	
≥ C20/25	5.40	8.20	11.40	20.00	35.40	52.20	

Highload Anchor SL



→ Steel, zinc plated

→ DIBT approval for non-cracked concrete

Item No Type SL-S	Item No Type SL-B	Description	Drill hole Ø x depth mm	Setting depth mm	Anchor length l Type S Type B mm	Fixture thickness t _{fix} mm	Thread	Pkg. cont. pcs.	Weight per pkg. kg
2021110000	2021310000	SL 10/0	10 x 60	53	55 60	0	M6	100	3.20
2021110010	2021310010	SL 10/10	10 x 60	53	65 70	10	M6	50	1.85
2021110025	2021310025	SL 10/25	10 x 60	53	80 85	25	M6	50	2.25
2021110050	2021310050	SL 10/50	10 x 60	53	100 110	50	M6	50	3.10
-	2021310075	SL 10/75	10 x 60	53	- 140	75	M6	25	1.83
2021110100	2021310100	SL 10/100	10 x 60	53	150 160	100	M6	25	2.10
2021112000	2021312000	SL 12/0	12 x 70	63	65 75	0	M8	50	2.87
2021112010	2021312010	SL 12/10	12 x 70	63	75 85	10	M8	50	3.20
2021112025	2021312025	SL 12/25	12 x 70	63	90 100	25	M8	50	3.85
2021112050	2021312050	SL 12/50	12 x 70	63	115 125	50	M8	25	2.40
2021112075	2021312075	SL 12/75	12 x 70	63	140 150	75	M8	25	3.04
2021112100	2021312100	SL 12/100	12 x 70	63	160 170	100	M8	25	3.36
2021114000	2021314000	SL 14/0	14 x 85	73	75 90	0	M10	25	2.50
2021114010	2021314010	SL 14/10	14 x 85	73	85 100	10	M10	25	2.75
2021114025	2021314025	SL 14/25	14 x 85	73	100 115	25	M10	25	3.15
2021114050	2021314050	SL 14/50	14 x 85	73	125 140	50	M10	25	3.90
2021114075	2021314075	SL 14/75	14 x 85	73	150 165	75	M10	25	4.30
2021114100	2021314100	SL 14/100	14 x 85	73	170 185	100	M10	25	5.40
-	2021314125	SL 14/125	14 x 85	73	- 210	125	M10	25	5.42
-	2021314160	SL 14/160	14 x 85	73	- 245	160	M10	20	5.18
2021118000	2021318000	SL 18/0	18 x 100	93	95 110	0	M12	20	3.75
2021118015	2021318015	SL 18/15	18 x 100	93	105 120	15	M12	20	4.20
2021118025	2021318025	SL 18/25	18 x 100	93	115 130	25	M12	20	4.53
2021118040	2021318040	SL 18/40	18 x 100	93	130 145	40	M12	20	5.00
2021118070	2021318070	SL 18/70	18 x 100	93	160 175	70	M12	20	5.95
2021118100	2021318100	SL 18/100	18 x 100	93	190 205	100	M12	10	3.75
2021124000	2021324000	SL 24/0	24 x 125	107	110 135	0	M16	10	4.00
2021124025	2021324025	SL 24/25	24 x 125	107	140 160	25	M16	10	4.75
2021124050	2021324050	SL 24/50	24 x 125	107	160 180	50	M16	10	5.50
2021124100	2021324100	SL 24/100	24 x 125	107	210 230	100	M16	5	3.60
2021128000	2021328000	SL 28/0	28 x 150	135	140 165	0	M20	10	7.00
2021128030	2021328030	SL 28/30	28 x 150	135	170 190	30	M20	10	8.50
2021128060	2021328060	SL 28/60	28 x 150	135	200 220	60	M20	5	5.05
2021128100	2021328100	SL 28/100	28 x 150	135	240 260	100	M20	5	5.75

Highload Anchor SL A4



→ Stainless steel A4/316

→ DIBT approval for non-cracked concrete

Item No Type SL-S	Item No Type SL-B	Description	Drill hole Ø x depth mm	Setting depth mm	Anchor length l Type S Type B mm	Fixture thickness t _{fix} mm	Thread	Pkg. cont. pcs.	Weight per pkg. kg
2021010010	2021210010	SL 10/10	10 x 60	53	65 70	10	M6	50	1.85
2021010025	2021210025	SL 10/25	10 x 60	53	80 85	25	M6	50	2.25
2021010050	2021210050	SL 10/50	10 x 60	53	100 110	50	M6	50	3.10
2021012010	2021212010	SL 12/10	12 x 70	63	75 85	10	M8	50	3.20
2021012025	2021212025	SL 12/25	12 x 70	63	90 100	25	M8	50	3.85
2021012050	2021212050	SL 12/50	12 x 70	63	115 125	50	M8	25	2.40
2021014010	2021214010	SL 14/10	14 x 85	73	85 100	10	M10	25	2.75
2021014025	2021214025	SL 14/25	14 x 85	73	100 115	25	M10	25	3.15
2021014050	2021214050	SL 14/50	14 x 85	73	125 140	50	M10	25	3.90
2021018015	2021218015	SL 18/15	18 x 100	93	105 120	15	M12	20	4.20
2021018025	2021218025	SL 18/25	18 x 100	93	115 130	25	M12	20	4.53
2021018040	2021218040	SL 18/40	18 x 100	93	130 145	40	M12	20	5.00
2021024025	2021224025	SL 24/25	24 x 125	107	140 160	25	M16	10	4.75
2021024050	2021224050	SL 24/50	24 x 125	107	160 180	50	M16	10	5.50
2021028030	2021228030	SL 28/30	28 x 150	135	170 190	30	M20	5	4.30
2021028060	2021228060	SL 28/60	28 x 150	135	200 220	60	M20	5	5.05

Other lengths, special assemblies and SK version in stainless steel A4 on demand.

Highload Anchor SL-SK



→ Steel, zinc plated; with countersunk head

→ DIBT approval for non-cracked concrete

Item No Type SL-S	Description	Drill hole Ø x depth mm	Setting depth mm	Anchor length l mm	Fixture thickness mm	Thread	Pkg. cont. pcs.	Weight per pkg. kg
2021410015	SL-SK 10/10	10 x 60	53	65	15	M6	50	1.85
2021410030	SL-SK 10/25	10 x 60	53	80	30	M6	50	2.25
2021410055	SL-SK 10/50	10 x 60	53	100	55	M6	50	3.10
2021412075	SL-SK 12/10	12 x 70	63	75	20	M8	50	3.20
2021412090	SL-SK 12/25	12 x 70	63	90	35	M8	50	3.85
2021412115	SL-SK 12/50	12 x 70	63	115	60	M8	25	2.40
2021414020	SL-SK 14/10	14 x 85	73	85	20	M10	25	2.75
2021414035	SL-SK 14/25	14 x 85	73	100	35	M10	25	3.15
2021414060	SL-SK 14/50	14 x 85	73	125	60	M10	25	3.90
2021418025	SL-SK 18/15	18 x 100	93	105	25	M12	20	4.20
2021418050	SL-SK 18/40	18 x 100	93	130	50	M12	20	5.00

Dimensions countersunk head see page 5-18.

