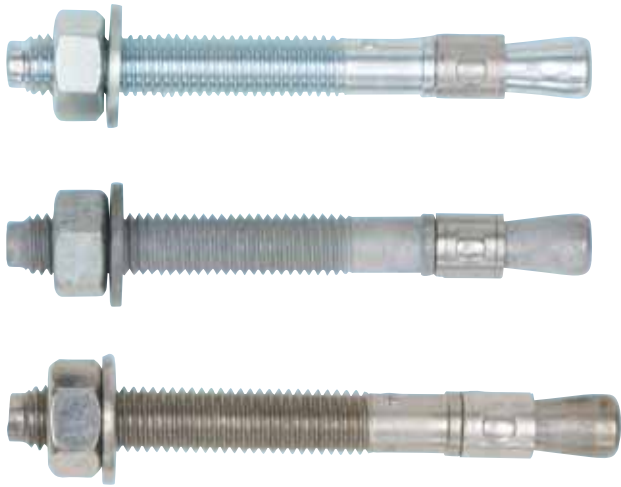


FIXANCHOR W-FA



Approvals and certificates



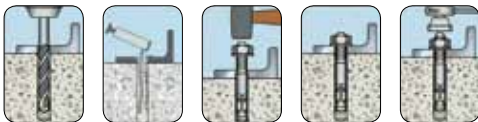
Type of installation

Pre-positioned	In-place	Stand-off
-	✓	✓

Application references



Installation



Loads

Thread size				M6		M8		M10		M12		M16		M20	
Effective anchorage depth		h_{ef}	[mm]	30	40	35	44	42	48	50	65	64	82	78	100
Non-cracked Concrete															
Tension	W-FA/S, F	N_{rec}	[kN]	2.9	4.1	4.9	5.7	6.4	7.6	8.3	12.3	12.0	17.4	16.1	23.4
	W-FA/A4; /HCR		[kN]	2.9	3.6	4.3	5.7	5.7	7.6	8.3	11.9	12.0	17.4	16.1	23.4
Shear	W-FA/S, F	V_{rec}	[kN]	2.9	2.9	4.9	6.3	6.4	7.8	8.3	14.3	23.6	23.6	32.3	37.1
	W-FA/A4; /HCR		[kN]	3.8	4.0	4.9	6.8	6.4	7.8	8.3	15.4	24.0	28.6	32.3	43.9

¹⁾ Loads are valid for single anchors. Normal spaced reinforcement in $\geq C20/25$. Material safety factor γ_w and safety factor for action $\gamma_L = 1.4$ are included. The material safety factor depends on the failure mode.

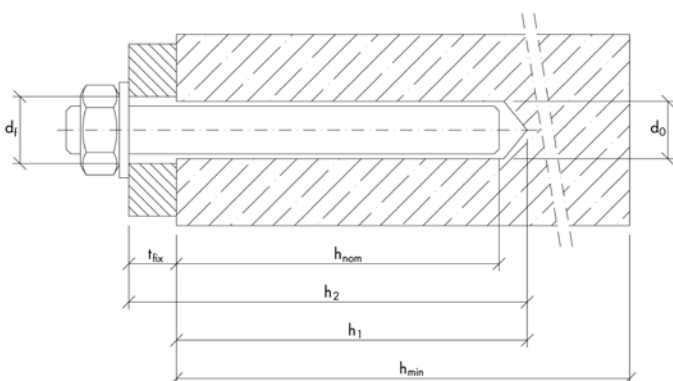
²⁾ Loads for anchorages close to edge and/or with small spacing have to be reduced and should be calculated based on performance data given in the ETA.

Clearance-hole in fixture		d_f	[mm]	7		9		12		14		18		22	
Drill depth		h_1	[mm]	45	55	55	65	65	70	75	90	95	110	110	130
Minimum thickness of concrete member	W-FA/S	h_{min}	[mm]	80	100	80	100	100	100	100	130	130	170	160	200
	W-FA/A4; /HCR												160		
Minimum edge distance	W-FA/S	c_{min}	[mm]	40	40	45	45	65	65	100	90	100	105	140	125
	W-FA/A4; /HCR				35	60			55		70		80		100

FIXANCHOR W-FA

Anchor length l	Fixture thickness for		Art. no.				Drill hole diameter	Drill hole depth for through installation	Installation torque			Wrench Size	Approval	Thread length	P. Qty.		
	$h_{ef, std}$	$h_{ef, red}$	Carbon steel	Carbon steel	Stainless steel	High corr. resist.			galv.	hot-dipped galv.	A4/HCR						
Type	[mm]	[mm]	[mm]	galvanized	hot-dipped galv.	A4	HCR	d_0 [mm]	h_2 [mm]	$T_{inst} \leq$ [Nm]			SW [mm]	ETA-02/0001	M x l [mm]	[qty.]	
W-FA																	
M6	40	5	-	5932 006 040	5932 906 040	0904 411 061	on demand	6	60	8	8	6	10	-	M6x16	100	
	67	10	20	5932 006 067	-	0904 411 065*	5932 206 020*		65						M6x30		
	82	25	35	5932 006 082	-	0904 411 066*	5932 206 035*		80						M6x35		M6x20 HCR only
	97	40	50	5932 006 097	-	0904 411 067*	on demand		95						M6x35		
M8	50	5	-	5932 008 050	-	-	-	8	70	15	15	15	13	-	M8x22	100	
	75	10	19	5932 008 075	-	0904 411 083	-		75						M8x40		
	80	15	24	5932 008 080	5932 908 080	0904 411 084	-		80						M8x45		
	90	25	34	5932 008 090	-	-	-		90						M8x55		
	95	30	39	5932 008 095	5932 908 095	0904 411 087	-		95						M8x60		
	110	45	54	5932 008 110	-	0904 411 089	-		110						M8x75		
M10	60	10	-	5932 010 060	-	-	-	10	80	30	30	25	17	-	M10x25	50	
	85	10	16	5932 010 085	-	0904 411 002	-		85						M10x40		
	90	15	21	5932 010 090	5932 910 090	0904 411 003	-		90						M10x45		
	95	20	26	5932 010 095	-	0904 411 004	-		95						M10x50		
	105	30	36	5932 010 105	5932 910 105	0904 411 005	-		100						M10x60		
	120	45	51	5932 010 120	5932 910 120	0904 411 006	-		115						M10x75		
	145	70	76	5932 010 145	-	-	-		140						M10x80		
	175	100	106	5932 010 175	-	-	-		170						M10x80		
M12	75	5	-	5932 012 075	-	-	-	12	95	50	50	40	19	-	M12x30	25	
	105	10	25	5932 012 105	-	-	-		100						M12x60		
	110	15	30	5932 012 110	5932 910 110	0904 411 204	-		105						M12x65		
	115	20	35	5932 012 115	-	-	-		110						M12x70		
	125	30	45	5932 012 125	5932 910 125	0904 411 206	-		120						M12x80		
	145	50	65	5932 012 145	5932 910 145	-	-		140						M12x100		
	180	85	100	5932 012 180	5932 910 180	0904 411 209	-		175						M12x100		M12x80 A4 only
M12	200	105	120	5932 012 200	-	0904 411 210	-	12	195	50	50	40	19	-	M12x100	25	
	220	125	140	5932 012 220	-	-	-		215						M12x80		M12x80 A4 only
	240	145	160	5932 012 240	-	-	-		235						M12x80		
	255	160	175	5932 012 255	-	-	-		250						M12x80		

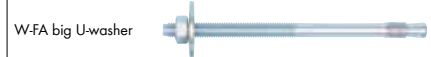
* additional ETA 06/0162 for multiple attachments



FIXANCHOR W-FA

	Anchor length l	Fixture thickness for		Art. no.				Drill hole diameter d ₀	Drill hole depth for through installation h ₂	Installation torque			Wrench Size SW	Approval ETA-02/0001	Thread length		P. Qty.
		h _{ef,std}	h _{ef,red}	Carbon steel	Carbon steel	Stainless steel	High corr. resist.			galv.	hot-dipped galv.	A4/HCR			M x l	[mm]	
Type	[mm]	[mm]	[mm]	galvanized	hot-dipped galv.	A4	HCR	d ₀ [mm]	h ₂ [mm]	T _{inst} ≤ [Nm]			SW [mm]	ETA-02/0001	M x l [mm]	[qty.]	
M16	115	13	-	5932 016 115	-	-	-	16	123	100	100	90	24	✓	M16x60	20	
	130	10	28	5932 016 130	-	-	-		120								
	150	30	48	5932 016 150	5932 916150	0904 411 604	-		140								
	180	60	78	5932 016 180	-	-	-		170								
	200	80	98	5932 016 200	-	-	-		190								
	220	100	118	5932 016 220	-	0904 411 607	-		210								
	250	130	148	5932 016 250	-	-	-		240								
	285	165	183	5932 016 285	-	-	-		275								
	320	200	218	5932 016 320	-	-	-		310								
	340	220	238	5932 016 340	-	-	-		330								
M20	150	5	27	5932 020 150	-	-	-	20	135	200	200	160	30	✓	M20x70	10	
	180	35	57	5932 020 180	-	0904 411 002	-		165								
	205	60	82	5932 020 205	-	-	-		195								
	240	95	117	5932 020 240	-	-	-		225								

	Anchor length l	Fixture thickness for		Art. no.				Drill hole diameter d ₀	Drill hole depth for through installation h ₂	Installation torque			Wrench Size SW	Approval ETA-02/0001	Thread length		P. Qty.
		h _{ef,std}	h _{ef,red}	Carbon steel	Carbon steel	Stainless steel	High corrosion resistant steel			galv.	hot-dipped galv.	A4/HCR			M x length	[mm]	
Type	[mm]	[mm]	[mm]	galvanized	hot-dipped galv.	A4	HCR	d ₀ [mm]	h ₂ [mm]	T _{inst} ≤ [Nm]			SW [mm]	ETA-02/0001	M x length [mm]	[qty.]	



M12	160	65	80	5932 112 160	-	-	-	12	155	50	-	-	19	✓	M12x100	10
	180	85	100	5932 112 180	-	-	-		175							
	200	105	120	5932 112 200	-	-	-		195							
	220	125	140	5932 112 220	-	-	-		215							
	240	145	160	5932 112 240	-	-	-		235							
	255	160	175	5932 112 255	-	-	-		250							
	285	190	205	5932 112 285	-	-	-		280							
	325	230	245	5932 112 325	-	-	-		320							
	355	260	275	5932 112 355	-	-	-		350							
M16	220	100	118	5932 116 220	-	-	-	16	210	100	-	-	24	✓	M16x80	10
	250	130	148	5932 116 250	-	-	-		240							
	285	165	183	5932 116 285	-	-	-		275							
	320	200	218	5932 116 320	-	-	-		310							

