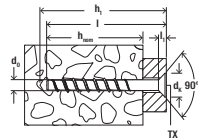
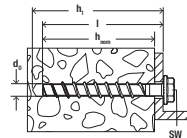


fischer UltraCut FBS II 6 GVZ

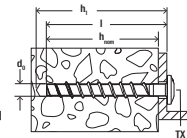
FBS II SK



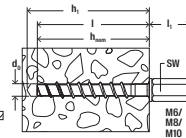
FBS II US



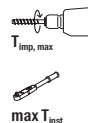
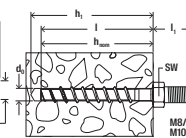
FBS II P/LP



FBS II I

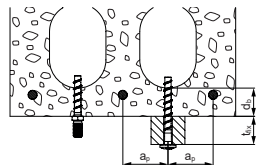


FBS II M



UltraCut FBS II GVZ	6			
	ETA-18/0242	ETA-15/0352		
d_0	[mm]	6	6	6
h_{nom1}	[mm]	20 - 55	40 - 55	40
h_{nom2}	[mm]	-	-	-
$h_1 \geq$	[mm]	$l+5(l+10)$	$l+10$	-
d_k	[mm]	-	-	$l+10$
$T_{imp,max}$	[Nm]	80 (450*)	450	80
$max T_{inst}$	[Nm]	5 (10*)	10	10
SW	[Nm]	10/13	10/13	10/13
TX	[-]	30 (SK/P/LP)		

* $h_{min} \geq 35$



UltraCut FBS II		US, SK, P, LP, I
$a_0 \geq$	[mm]	50
$d_0 \geq$	[mm]	25
$t_{fix} \geq$	[mm]	$l-d_0 - 30mm$
$T_{imp,max}$	[Nm]	80 (450*)
$max T_{inst}$	[Nm]	12 (25*)

Acc. ETA-18/0242: Additional installation characteristics for prestressed concrete hollow core slabs.
* $d_0 \geq 35$ mm and $h_{min} \geq 35$ mm



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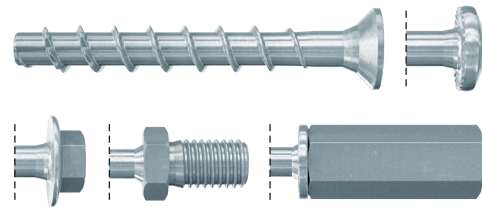
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UltraCut FBS II 6 GVZ



DE Montageanleitung	PL Instrukcje montażu	EL Οδηγίες Εγκατάστασης
EN Installation instructions	CS Návod k montáži	HE הבררה תוארה
FR Instructions de montage	SK Návod na montáž	BG Инструкции за инсталиране
NL Montagehandleiding	HU Szerelési útmutató	RU Инструкция по установке
IT Istruzioni per l'installazione	RO Instrucțiuni de montare	UK Інструкція з використання
ES Instrucciones de montaje	SL Navodila za montažo	ZH 使用说明书
PT Instruções de montagem	HR Upute za instalaciju	JA 取扱説明書
DA Monteringsvejledning	SR Navodila za sestavljanje	KO 사용 설명서
SV Installationsinstruktioner	BS Instalacijski vodici	TH คำแนะนำการติดตั้ง
NO Installasjonsveiledning	SQ Udhëzimet e montimit	VI hướng dẫn lắp ráp
FI Asennusohjeet	TR Montaj talimatları	AR تعليمات الاستخدام

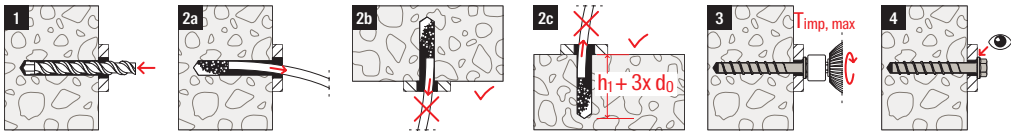
00199649 (00) - 01/2023 (gjm)/W/MS - Printed in Germany
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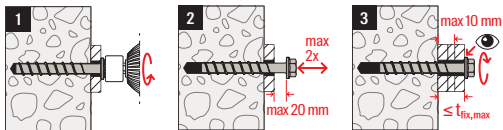
Post-installed fastening in cracked or uncracked concrete (Option 1, Seismic Performance Category C1) acc. ETA-15/0352; 15; EAD 330232-01-0601; DoP: 0227; www.fischer.de/sdb; 2873; fischerwerke GmbH & Co. KG, Klaus-Fischer-Str.1, 72178 Waldachtal

Only valid for $h_{\text{min}} \geq 40$

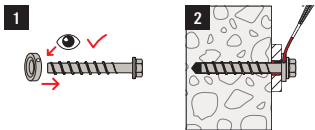
1.1



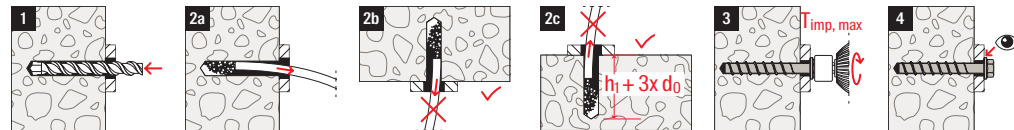
1.2



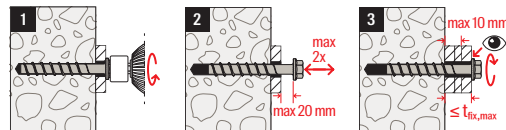
1.3



2.1

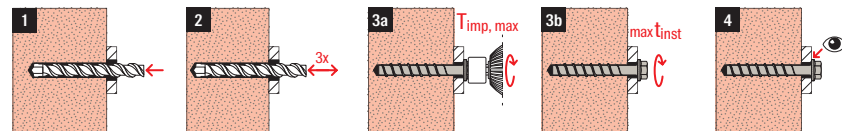


2.2

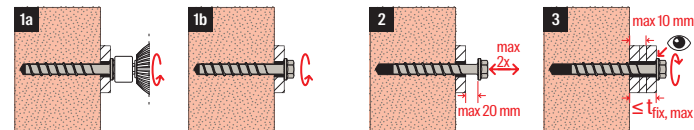


Post-installed fastening in cracked or uncracked concrete (Option 1, acc. ETA-18/0242; 15; EAD 330747-00-0601; DoP: 0185; www.fischer.de/sdb; 2873; fischerwerke GmbH & Co. KG, Klaus-Fischer-Str.1, 72178 Waldachtal

3.1



3.2



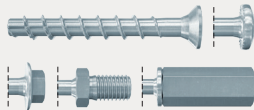
Screw anchors for use in masonry bricks made of clay, calcium silicat, solid brick masonry, and hollow brick masonry acc. ETA-20/0134; 22; EAD 330460-00-0604; DoP: 0311; www.fischer.de/sdb; 2873; fischerwerke GmbH & Co. KG, Klaus-Fischer-Str.1, 72178 Waldachtal

Only valid for $h_{\text{min}} \geq 40$

Performance parameter according to ETA-15/0352



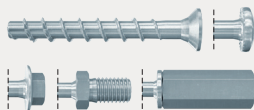
$N_{Rk,p,ucr} \geq N_{Rk,C1}^0$; $\psi_c = 1,12-1,58$; $\gamma_{inst} = 1,0$; $k_{c,N} = 7,7$; $k_{ucr,N} = 11$;
 $c_{cr,N} = 1,5 \times h_{ef}$; $N_{Rk,sp}^0 = \min(N_{Rk,C1}^0; N_{Rk,p})$; $c_{cr,sp} = 1,5 \times h_{ef}$; $k_f = 1$;
 $\alpha_{cr,sp} = 0,5-1,0$; $A_s \geq 8\%$
 Durability: (gvz) dry internal conditions
 Resistance to fire: Class A1

 Characteristic resistance to tension load (static and quasi-static loading)	Characteristic resistance to tension load (static and quasi-static loading)						Characteristic resistance to shear load (static and quasi-static loading)			Displacements				Characteristic resistance and displacements for seismic performance categories C1 or C2			Resistance to fire			
	$N_{Rk,s}$ [kN]	$N_{Rk,p,cr}$ [kN]	h_{ef} [mm]	c_{min} [mm]	s_{min} [mm]	h_{min} [mm]	$V_{Rk,s}^0$ [kN]	$M_{Rk,s}^0$ [Nm]	k_B [-]	δ_{N0} [mm]	$\delta_{N\infty}$ [mm]	δ_{V0} [mm]	$\delta_{V\infty}$ [mm]	$N_{Rk,s,C1}$ [kN]	$N_{Rk,p,C1}$ [kN]	$V_{Rk,s,C1}$ [kN]	$N_{Rk,s,fi}$ [kN]	$N_{Rk,p,fi}$ [kN]	$V_{Rk,s,fi}$ [kN]	$M_{Rk,s,fi}^0$ [Nm]
D6 - $h_{nom} = 40-55$ (US/US TX/SK/P/LP)	21	2,5-5,0	32-44	35	35	max. (80; h_1+30)	9,0-13,3	17,1	2	1,0-1,8	1,7-2,6	2,0-2,9	2,9-4,4	21	2,5-5,0	6,3-9,3	0,4-1,0	0,5-1,2	0,4-1,0	0,35-0,8
D6 - $h_{nom} = 55$ (M/I)	21	5,0	44	35	35	max. (80; h_1+30)	13,3	17,1	2	1,4-1,8	2,5-2,6	2,9	4,4	21	5,0	9,3	0,4-1,0	1,0-1,2	0,4-1,0	0,35-0,8

Performance parameter according to ETA-18/0242



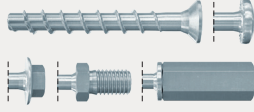
Durability: (gvz) dry internal conditions
 Resistance to fire: Class A1

 Characteristic resistance	Characteristic resistance																				Resistance to fire			
	h_{ef} [mm]	l_f [mm]	d_{nom} [mm]	$N_{Rk,s}$ [kN]	E_s [N/mm ²]	$N_{Rk,p}$ [kN]	ψ_c [-]	γ_{inst} [-]	$k_{c,N}$ [-]	$k_{ucr,N}$ [-]	$N_{Rk,sp}^0$ [kN]	$c_{cr,N}$ [mm]	$c_{cr,sp}$ [mm]	c_{min} [mm]	s_{min} [mm]	h_{min} [mm]	$V_{Rk,s}$ [kN]	$M_{Rk,s}^0$ [Nm]	k_f [-]	k_B [-]	$N_{Rk,s,fi}$ [kN]	$N_{Rk,p,fi}$ [kN]	$V_{Rk,s,fi}$ [kN]	$M_{Rk,s,fi}^0$ [Nm]
D6 - $h_{nom} = 25-55$ (US/US TX/SK/P/LP/M/I)	19-44	25-55	6	21	210.000	1,5-8,5	1,12-1,58	1	7,7	11,0	$\min(N_{Rk,C1}^0; N_{Rk,p}^0)$	$1,5 \times h_{ef}$	$1,5-2 \times h_{ef}$	35-100	35-100	max. (80; h_1+30)	4,8-13,3	17,1	1	1,3-2,0	0,4-1	0,3-2,1	0,4-1,0	0,35-0,8

Performance parameter according to ETA-20/0314



$V_{Rk,s,fl} = N_{Rk,s,fl}$; $C_{min,fl} = 2xh_{nom}$; $S_{min,fl} = 4xh_{nom}$
 Durability: (gz) dry internal conditions
 Resistance to fire: Class A1

	Characteristic resistance																					Displacements				Resistance to fire				
	$N_{Rk,s}$ [kN]	$V_{Rk,s}$ [kN]	$M_{Rk,s}^0$ [Nm]	$N_{Rk,p}$ [kN]	$N_{Rk,b}$ [kN]	$N_{Rk,p,c}$ [kN]	$N_{Rk,b,c}$ [kN]	N_{Rk}^0 [kN]	$\alpha_{q,N}$ [-]	$V_{Rk,b}$ [kN]	$V_{Rk,c,fl}$ [kN]	$V_{Rk,c,L}$ [kN]	$V_{Rk,b}^0$ [kN]	$V_{Rk,c,fl}^0$ [kN]	$V_{Rk,c,L}^0$ [kN]	$\alpha_{q,V}$ [-]	C_{cr} [mm]	C_{min} [mm]	S_{cr} [mm]	$S_{min,fl}$ [mm]	$S_{min,L}$ [mm]	h_{min} [mm]	X [-]	δ_{N0} [mm]	$\delta_{N\infty}$ [mm]	δ_{V0} [mm]	$\delta_{V\infty}$ [mm]	$N_{Rk,s,fl}$ [kN]	$N_{Rk,p,fl}$ [kN]	$M_{Rk,s,fl}^0$ [Nm]
D6 - $h_{nom} \geq 40$ (US/US TX/SK/P/LP/M/I)	21	9	17,1	0,3-2,3	0,3-2,3	0,3-2,3	0,3-2,3	$\alpha_{q,N} \times N_{Rk}$	1,75-2	0,8-4,4	1,1-4,4	0,8-2,5	$\alpha_{q,V} \times V_{Rk}$	$\alpha_{q,V} \times V_{Rk,fl}$	$\alpha_{q,V} \times V_{Rk,L}$	1,75	$1,5xh_{nom}$	50	$3xh_{nom}$	80	80	108-175	1,3	0,1-0,2	0,2-0,4	1,0-4,5	1,5-6,75	0,3-0,6	1-1,3	0,3-0,6