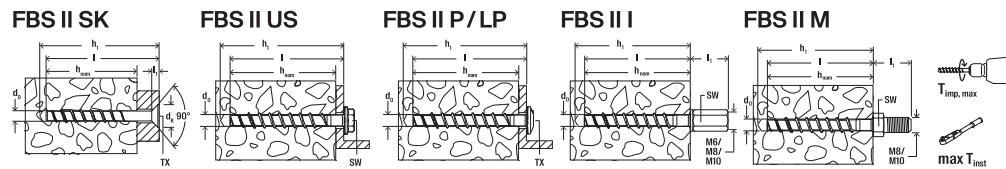




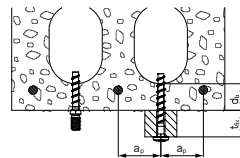


fischer UltraCut FBS II 6 GVZ



UltraCut FBS II GVZ		6			
					
		ETA-18/0242	ETA-15/0352		
d_0	[mm]	6	6	6	6
h_{nom1}	[mm]	20 - 55	40 - 55	40	40
h_{nom2}	[mm]	-	-	-	-
$h_1 \geq$	[mm]	l+5(l+10)	l+10	-	-
d_k	[mm]	-	-	l+10	l+10
$T_{imp,max}$	[Nm]	80 (450*)	450	80	65
$max T_{inst}$	[Nm]	5 (10*)	10	10	3
SW	[Nm]	10/13	10/13	10/13	10/13
TX	[-]	30 (SK/P/LP)			

* $h_{nom} \geq 35$



UltraCut FBS II	US, SK, P, LP, I
$a_p \geq$	[mm] 50
$d_p \geq$	[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.
* $d_p \geq 35$ mm and $h_{nom} \geq 35$ mm



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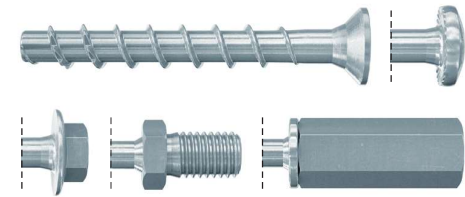
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fischer 

**UltraCut
FBS II 6 GVZ**



DE Montageanleitung	PL Instrukcje montażu	EL Οδηγίες Εγκατάστασης
EN Installation instructions	CS Návod k montáži	HE הנחיה לרצף
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 sastavljanje	KO 사용 설명서
SV Monteringsinstruktioner	BS Instalacijski vodice	TH ใช้อุปกรณ์ติดตั้ง
NO Installasjonsveiledning	SQ Udhëzimet e montimit	VI hướng dẫn lắp ráp
FI Aseennusohjeet	TR Montaj talimatları	AR تعليمات الاستخدام

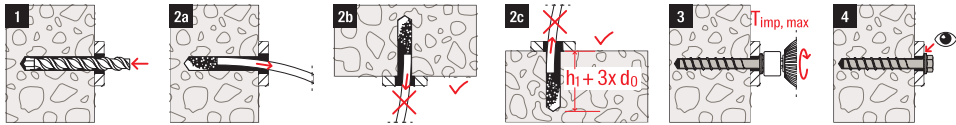
001996-09 (00) - 07/2023 [g]m/f/4-1/6 - Printed in Germany
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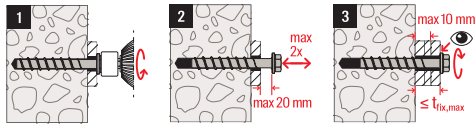
Post-installed fastening in cracked or uncracked concrete (Option 1, Seismic Performance Category C1) acc. ETA-15/0352; 15; EAD 330232-01-0601; DoP: 0227; www.fischer.de/sdb; 2873; Fischerwerke GmbH & Co. KG, Klaus-Fischer-Str.1, 72178 Waldachtal

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

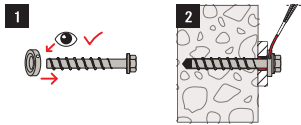
1.1



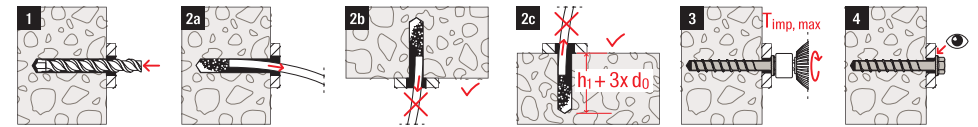
1.2



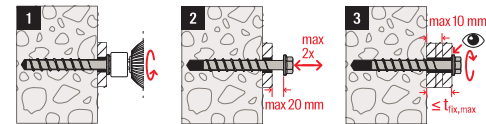
1.3



2.1

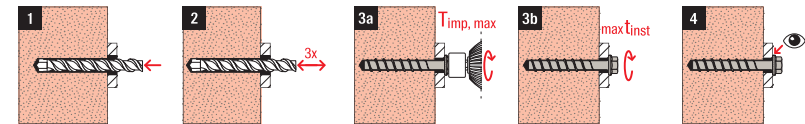


2.2

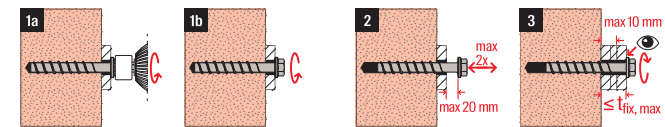


Post-installed fastening in cracked or uncracked concrete (Option 1, acc. ETA-18/0242; 15; EAD 330747-00-0601; DoP: 0185; www.fischer.de/sdb; 2873; Fischerwerke GmbH & Co. KG, Klaus-Fischer-Str.1, 72178 Waldachtal

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 $h_{min} \geq 40$

Performance parameter according to ETA-15/0352



$N_{Rk,D,0.05} \geq N_{Rk,D}^0$; $\psi_s=1,12-1,56$; $\gamma_{int}=1,0$; $k_{c,N}=7,7$; $k_{acc,N}=11$;
 $c_{ct,N}=1,5 \times h_{ef}$; $N_{Rk,D,sp}^0 = \min(N_{Rk,D}^0; N_{Rk,D})$; $c_{ct,sp}=1,5 \times h_{ef}$; $k_f=1$;
 $c_{ct,fl}=0,5-1,0$; $A_s \geq 8\%$
 Durability: (gvz) dry internal conditions
 Resistance to fire: Class A1

	Characteristic resistance to tension load (static and quasi-static loading)						Characteristic resistance to 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]	$N_{Rk,D,0.05}$ [kN]	h_{ef} [mm]	c_{min} [mm]	s_{min} [mm]	h_{min} [mm]	$V_{Rk,s}^0$ [kN]	$M_{Rk,s}^0$ [Nm]	k_s [-]	δ_{N0} [mm]	$\delta_{N\infty}$ [mm]	δ_{V0} [mm]	$\delta_{V\infty}$ [mm]	$N_{Rk,s,C1}$ [kN]	$N_{Rk,D,C1}$ [kN]	$V_{Rk,s,C1}$ [kN]	$N_{Rk,s,fl}$ [kN]	$N_{Rk,D,fl}$ [kN]	$V_{Rk,s,fl}$ [kN]	$M_{Rk,s,fl}^0$ [Nm]
D6 - $h_{boom}=40-55$ (US/US TX/SK/P/LP)	21	2,5-5,0	32-44	35	35	max. (80; h_t+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 - $h_{boom}=55$ (M/I)	21	5,0	44	35	35	max. (80; h_t+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																				Resistance to fire			
	h_{ef} [mm]	l_t [mm]	d_{boom} [mm]	$N_{Rk,s}$ [kN]	E_s [N/mm ²]	$N_{Rk,D}$ [kN]	ψ_s [-]	γ_{int} [-]	$k_{c,N}$ [-]	$k_{acc,N}$ [-]	$N_{Rk,D,sp}^0$ [kN]	$c_{ct,N}$ [mm]	$c_{ct,sp}$ [mm]	c_{min} [mm]	s_{min} [mm]	h_{min} [mm]	$V_{Rk,s}$ [kN]	$M_{Rk,s}^0$ [Nm]	k_f [-]	k_s [-]	$N_{Rk,s,fl}$ [kN]	$N_{Rk,D,fl}$ [kN]	$V_{Rk,s,fl}$ [kN]	$M_{Rk,s,fl}^0$ [Nm]
D6 - $h_{boom}=25-55$ (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. ($N_{Rk,D}^0$; $N_{Rk,D}$)	$1,5 \times h_{ef}$	$1,5-2 \times h_{ef}$	35-100	35-100	max. (80; h_t+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



$V_{Rk,s} = N_{Rk,s} \cdot C_{min,s} = 2 \cdot X_{h_{nom}}$; $S_{min,s} = 4 \cdot X_{h_{nom}}$
 Durability: (gvz) dry internal conditions
 Resistance to fire: Class A1

	Characteristic resistance																				Displacements				Resistance to fire					
	$N_{Rk,s}$ [kN]	$V_{Rk,s}$ [kN]	$M^0_{Rk,s}$ [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]	$V_{Rk,dll}$ [kN]	$V_{Rk,c,L}$ [kN]	$V^0_{Rk,b}$ [kN]	$V^0_{Rk,dll}$ [kN]	$V^0_{Rk,c,L}$ [kN]	$\alpha_{q,V}$ [-]	C_{cr} [mm]	C_{min} [mm]	S_{cr} [mm]	$S_{min,dll}$ [mm]	$S_{min,L}$ [mm]	h_{min} [mm]	X [-]	δ_{t0} [mm]	$\delta_{t\infty}$ [mm]	δ_{t0} [mm]	$\delta_{t\infty}$ [mm]	$N_{Rk,s,fl}$ [kN]	$N_{Rk,p,fl}$ [kN]	$M^0_{Rk,s,fl}$ [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	$\alpha_{q,N} \cdot N_{Rk}$	1,75-2	0,8-4,4	1,1-4,4	0,8-2,5	$\alpha_{q,V} \cdot V_{Rk}$	$\alpha_{q,V} \cdot V_{Rk,dll}$	$\alpha_{q,V} \cdot V_{Rk,c,L}$	1,75	$1,5 \cdot X_{h_{nom}}$	50	$3 \cdot X_{h_{nom}}$	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