

IZJAVA O LASTNOSTIH  
DoP Nr. MKT-132 - sl

1. Enotna identifikacijska oznaka tipa proizvoda: **MKT Einschlaganker E / ES**
2. Tip, serijska ali zaporedna številka ali kateri koli drug element, na podlagi katerega je mogoče prepoznati gradbene proizvode, v skladu s členom 11(4):

**ETA-05/0116, dodatek A4**  
**Serijska številka je odtisnjena na nalepki ali embalaži**

3. Predvidena uporaba ali predvidene vrste uporabe gradbenega proizvoda v skladu z veljavno harmonizirano tehnično specifikacijo, kot jih predvideva proizvajalec:

<b>generični tip</b>	Kontrolirana deformacija sidra
<b>za uporabo v</b>	<p>Beton z razpokami in brez razpok C20/25 - C50/60 (EN 206): velikosti: vse</p> <p>Beton z razpokami in brez razpok C12/15 - C50/60 (EN 206) v prednapetega betona votle plošče C30/37 za C50/60: velikosti: ES M6x25, ES M8x25, ES M10x25, ES M12x25</p> <p>za večtočkovno pritrjevanje nosilnih sistemov</p>
<b>opcija / kategorija</b>	ETAG 001-06
<b>obremenitev</b>	Statično in skoraj statično
<b>material</b>	<p><u>pocinkano jeklo:</u> samo pod pogoji suhe notranjosti velikosti: ES M6x25, E/ES M6x30, ES M8x25, E/ES M8x30, E/ES M8x40, ES M10x25, ES M10x30, E/ES M10x40, ES M12x25, E/ES M12x50, E/ES M16x65</p> <p><u>nerjaveče jeklo (oznaka A4):</u> notranja in zunanja uporaba brez posebnih agresivnih pogojev velikosti: E/ES M6x30, E/ES M8x30, E/ES M8x40, E/ES M10x40, E/ES M12x50, E/ES M16x65</p> <p><u>zelo korozijsko odporno jeklo (oznaka HCR)</u> notranja in zunanja uporaba pod agresivnimi pogoji velikosti: E/ES M6x30, E/ES M8x30, E/ES M8x40, E/ES M10x40, E/ES M12x50, E/ES M16x65</p>
<b>temperaturno območje</b>	--

4. Ime, registrirano trgovsko ime ali registrirana blagovna znamka in naslov proizvajalca v skladu s členom 11(5):

**MKT Metall-Kunststoff-Technik GmbH & Co. KG**  
**Auf dem Immel 2**  
**D - 67685 Weilerbach**

5. Po potrebi ime ali naslov pooblaščenega zastopnika, katerega pooblastilo zajema naloge, opredeljene v členu 12(2): --
6. Sistem ali sistemi ocenjevanja in preverjanja nespremenljivosti lastnosti gradbenega proizvoda, kot je določeno v Prilogi V: **sistem 2+**
7. Za izjavo o lastnostih glede gradbenega proizvoda, za katerega velja harmoniziran standard: --

8. Za izjavo o lastnostih glede gradbenega proizvoda, za katerega je bila izdana evropska tehnična ocena:

**Deutsches Institut für Bautechnik, Berlin**

izdal:

**ETA-05/0116**

na podlagi

**ETAG 001-6**

Prijavljeni proizvod certifikacijski organ 1343-CPR je treba uvesti v sistem 2+:

- i) začetnega pregleda proizvodnega obrata in tovarniške kontrole proizvodnje;
- ii) stalnega nadzora, ocenjevanja in vrednotenja tovarniške kontrole proizvodnje.

in izdal: Potrdilo o nespremenljivosti lastnosti 1343-CPR-M 550-7 / 08.14

9. Navedena lastnost:


Bistvene značilnosti	Metoda ocenjevanja	Lastnost	Harmonizirane tehnične specifikacije
charakteristična únosnost' v t'ahu	ETAG 001, dodatek C CEN/TS 1992-4	dodatek C1-C3	ETAG 001
charakteristična únosnost' v šmyku	ETAG 001, dodatek C CEN/TS 1992-4	dodatek C1-C3	
charakteristična únosnost' v účinki ognja	ETAG 001, dodatek C CEN/TS 1992-4	dodatek C4-C5	

Zahteve, ki jih izpolnjuje produkt, kadar se je v skladu s členoma 37 in 38 uporabila specifična tehnična dokumentacija: --

10. Lastnosti proizvoda, navedenega v točki 1 in 2, so v skladu z navedenimi lastnostmi iz točke 9.

Za izdajo te izjave o lastnostih je odgovoren izključno proizvajalec, naveden v točki 4:

Podpisal za in v imenu proizvajalca:

  
**Stefan Weustenhagen**  
(Direktor)  
Weilerbach, 04.01.2017

i.V.   
**Dipl.-Ing. Detlef Bigalke**  
(Vodja razvoja izdelkov)



**Table C1: Characteristic resistance for  $h_{ef} \geq 30$  mm in solid concrete slabs**

Anchor size			M6x30	M8x30	M8x40	M10x30	M10x40	M12x50	M16x65
Load in any direction									
Characteristic resistance in concrete <b>C20/25 to C50/60</b>	F <sup>0</sup> <sub>Rk</sub>	[kN]	3	5	6	6	6	6	16
Partial safety factor	γ <sub>M</sub>	[-]	1,8	2,16		2,1	2,16	1,8	1,8
Spacing	s <sub>cr</sub>	[mm]	130	180	210	230	170	170	400
Edge distance	c <sub>cr</sub>	[mm]	65	90	105	115	85	85	200
Shear load with lever arm, Steel zinc plated									
Characteristic resistance <b>(Steel 4.6)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>1)</sup>	[Nm]	6,1	15	15	30	30	52	133
Partial safety factor	γ <sub>Ms</sub>	[-]	1,67						
Characteristic resistance <b>(Steel 4.8)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>1)</sup>	[Nm]	6,1	15	15	30	30	52	133
Partial safety factor	γ <sub>Ms</sub>	[-]	1,25						
Characteristic resistance <b>(Steel 5.6)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>1)</sup>	[Nm]	7,6	19	19	37	37	65	166
Partial safety factor	γ <sub>Ms</sub>	[-]	1,67						
Characteristic resistance <b>(Steel 5.8)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>1)</sup>	[Nm]	7,6	19	19	37	37	65	166
Partial safety factor	γ <sub>Ms</sub>	[-]	1,25						
Characteristic resistance <b>(Steel 8.8)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>1)</sup>	[Nm]	12	30	30	59	60	105	266
Partial safety factor	γ <sub>Ms</sub>	[-]	1,25						
Shear load with lever arm, Stainless steel A4 / HCR									
Characteristic resistance <b>(Property class 70)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>1)</sup>	[Nm]	11	26	26	-	52	92	233
Partial safety factor	γ <sub>Ms</sub>	[-]	1,56						
Characteristic resistance <b>(Property class 80)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>1)</sup>	[Nm]	12	30	30	-	60	105	266
Partial safety factor	γ <sub>Ms</sub>	[-]	1,33						

1) Characteristic bending moment  $M_{RK,s}^0$  for equation (5.5) in ETAG 001, Annex C or for equation (14) in CEN/TS 1992-4-4

**Drop-in Anchor E / ES****Performance**

Characteristic resistance for  $h_{ef} \geq 30$  mm in solid concrete

**Annex C1**

**Table C2: Characteristic resistance for  $h_{ef} = 25$  mm in solid concrete slabs**

Anchor size			M6x25	M8x25	M10x25	M12x25
<b>Load in any direction</b>						
Characteristic resistance in concrete <b>C12/15 and C16/20</b>	$F_{Rk}^0$	[kN]	2,5	2,5	3,5	3,5
Characteristic resistance in concrete <b>C20/25 to C50/60</b>	$F_{Rk}^0$	[kN]	3,5	4,0	4,5	4,5
Partial safety factor	$\gamma_M$	[-]	1,5			
Spacing	$s_{cr}$	[mm]	75	75	75	75
Edge distance	$c_{cr}$	[mm]	38	38	38	38
<b>Shear load with lever arm</b>						
Characteristic resistance <b>(Steel 4.6)</b>	$M_{Rk,s}^0$ <sup>1)</sup>	[Nm]	6,1	15	30	52
Partial safety factor	$\gamma_{Ms}$	[-]	1,67			
Characteristic resistance <b>(Steel 4.8)</b>	$M_{Rk,s}^0$ <sup>1)</sup>	[Nm]	6,1	15	30	52
Partial safety factor	$\gamma_{Ms}$	[-]	1,25			
Characteristic resistance <b>(Steel 5.6)</b>	$M_{Rk,s}^0$ <sup>1)</sup>	[Nm]	7,6	19	37	65
Partial safety factor	$\gamma_{Ms}$	[-]	1,67			
Characteristic resistance <b>(Steel 5.8)</b>	$M_{Rk,s}^0$ <sup>1)</sup>	[Nm]	7,6	19	37	65
Partial safety factor	$\gamma_{Ms}$	[-]	1,25			
Characteristic resistance <b>(Steel 8.8)</b>	$M_{Rk,s}^0$ <sup>1)</sup>	[Nm]	12	30	60	105
Partial safety factor	$\gamma_{Ms}$	[-]	1,25			

<sup>1)</sup> Characteristic bending moment  $M_{Rk,s}^0$  for equation (5.5) in ETAG 001, Annex C or for equation (14) in CEN/TS 1992-4-4

## Drop-in Anchor E / ES

### Performance

Characteristic resistance for  $h_{ef} = 25$  mm in solid concrete

**Annex C2**

**Table C3: Characteristic resistance for  $h_{ef} = 25$  mm in precast pre-stressed hollow core slabs**

Anchor size			M6x25	M8x25	M10x25	M12x25
Load in any direction						
Flange thickness	d <sub>b</sub>	[mm]	≥ 35 (30) <sup>1)</sup>			
Characteristic resistance in precast pre-stressed hollow core slabs <b>C30/37 to C50/60</b>	F <sub>Rk</sub>	[kN]	3,5	4,0	4,5	4,5
Partial safety factor	γ <sub>M</sub>	[-]	1,5			
Spacing	s <sub>cr</sub>	[mm]	200			
Edge distance	c <sub>cr</sub>	[mm]	150			
Shear load with lever arm						
Characteristic resistance <b>(Steel 4.6)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>2)</sup>	[Nm]	6,1	15	30	52
Partial safety factor	γ <sub>Ms</sub>	[-]	1,67			
Characteristic resistance <b>(Steel 4.8)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>2)</sup>	[Nm]	6,1	15	30	52
Partial safety factor	γ <sub>Ms</sub>	[-]	1,25			
Characteristic resistance <b>(Steel 5.6)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>2)</sup>	[Nm]	7,6	19	37	65
Partial safety factor	γ <sub>Ms</sub>	[-]	1,67			
Characteristic resistance <b>(Steel 5.8)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>2)</sup>	[Nm]	7,6	19	37	65
Partial safety factor	γ <sub>Ms</sub>	[-]	1,25			
Characteristic resistance <b>(Steel 8.8)</b>	M <sup>0</sup> <sub>Rk,s</sub> <sup>2)</sup>	[Nm]	12	30	60	105
Partial safety factor	γ <sub>Ms</sub>	[-]	1,25			

<sup>1)</sup> The anchor may be set in a flange thickness of 30 mm with identical characteristic loads, if the borehole cuts no hollow core.

<sup>2)</sup> Characteristic bending moment  $M^0_{Rk,s}$  for equation (5.5) in ETAG 001, Annex C or for equation (14) in CEN/TS 1992-4-4

## Drop-in Anchor E / ES

### Performance

Characteristic resistance for  $h_{ef} = 25$  mm in precast pre-stressed hollow core slabs

**Annex C3**

**Table C4:** Characteristic values under **fire exposure** in **solid concrete slabs** C20/25 to C50/60 for  $h_{ef} \geq 30$  mm

Anchor size				M6x30	M8x30	M8x40	M10x30	M10x40	M12x50	M16x65	
Fire resistance class		Load in any direction									
Steel 4.6	R 30	Characteristic resistance	$F^{0}_{Rk,fi}$	[kN]	0,4	0,6	0,6	0,9	0,9	1,5	3,1
	R 60			[kN]	0,35	0,6	0,6	0,8	0,8	1,3	2,4
	R 90			[kN]	0,30	0,6	0,6	0,6	0,6	1,1	2,0
	R 120			[kN]	0,25	0,5	0,5	0,5	0,5	0,8	1,6
Steel 4.8	R 30	Characteristic resistance	$F^{0}_{Rk,fi}$	[kN]	0,4	0,9	1,1	0,9	1,5	1,5	4,0
	R 60			[kN]	0,35	0,9	0,9	0,9	1,5	1,5	4,0
	R 90			[kN]	0,3	0,6	0,6	0,9	1,1	1,5	3,0
	R 120			[kN]	0,3	0,5	0,5	0,7	0,9	1,2	2,4
Steel ≥ 5.6	R 30	Characteristic resistance	$F^{0}_{Rk,fi}$	[kN]	0,8	0,9	1,5	0,9	1,5	1,5	4,0
	R 60			[kN]	0,8	0,9	1,5	0,9	1,5	1,5	4,0
	R 90			[kN]	0,4	0,9	0,9	0,9	1,5	1,5	3,7
	R 120			[kN]	0,3	0,5	0,5	0,7	1,0	1,2	2,4
A4 / HCR	R 30	Characteristic resistance	$F^{0}_{Rk,fi}$	[kN]	0,8	0,9	1,5	-	1,5	1,5	4,0
	R 60			[kN]	0,8	0,9	1,5	-	1,5	1,5	4,0
	R 90			[kN]	0,4	0,9	0,9	-	1,5	1,5	3,7
	R 120			[kN]	0,3	0,5	0,5	-	1,0	1,2	2,4
		Partial safety factor $\gamma_{M,fi}$	[-]	1,0							
Steel zinc plated											
R 30 – R 120		Spacing	$s_{cr,fi}$	[mm]	130	180	210	170	170	200	400
		Edge distance	$c_{cr,fi}$	[mm]	65	90	105	85	85	100	200
		If the fire attack is from more than one side, the edge distance shall be ≥ 300 mm.									
Stainless steel A4, HCR											
R 30 – R 120		Spacing	$s_{cr,fi}$	[mm]	130	180	210	-	170	200	400
		Edge distance	$c_{cr,fi}$	[mm]	65	90	105	-	85	100	200
		If the fire attack is from more than one side, the edge distance shall be ≥ 300 mm.									

## Drop-in Anchor E / ES

### Performance

Characteristic values under **fire exposure** for  $h_{ef} \geq 30$  mm

**Annex C4**

**Table C5:** Characteristic values under **fire exposure** in **solid concrete slabs** C20/25 to C50/60 for  $h_{ef} = 25 \text{ mm}$

Anchor size				M6x25	M8x25	M10x25	M12x25
Fire resistance class		Load in any direction					
Steel $\geq 4.6$	R 30	Characteristic resistance $F^{0}_{Rk,fi}$	[kN]	0,4	0,6	0,6	0,6
	R 60		[kN]	0,35	0,6	0,6	0,6
	R 90		[kN]	0,30	0,6	0,6	0,6
	R 120		[kN]	0,25	0,5	0,5	0,5
		Partial safety factor $\gamma_{M,fi}$	[-]	1,0			
R 30 – R 120		Spacing $s_{cr,fi}$	[mm]	100	100	100	100
		Edge distance $c_{cr,fi}$	[mm]	50	50	50	50
		If the fire attack is from more than one side, the edge distance shall be $\geq 300 \text{ mm}$ .					

**Drop-in Anchor E / ES**

**Performance**  
Characteristic values under **fire exposure** for  $h_{ef} = 25 \text{ mm}$

**Annex C5**