

Det innvendige gjengeankeret med kant for enkel slagmontering



VERSJONER

- galvanisk forsinket stål
- rustfritt stål

BYGGEMATERIALER

Godkjent for:

- Betong C20/25 til C50/60, ikke-sprukket

Også egnet for:

- Betong C12/15
- Naturstein med tett struktur

GODKJENNINGER



ETA-07/0142

ETAG 001-6

Multiple use for non-structural applications in concrete



ETA-07/0135

ETAG 001-4

Option 7 for non-cracked concrete



Fire resistance classification

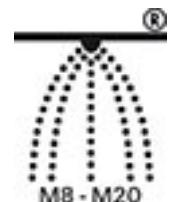
R 120

Anchor types see test report



APPROVED

from M10



FORDELER

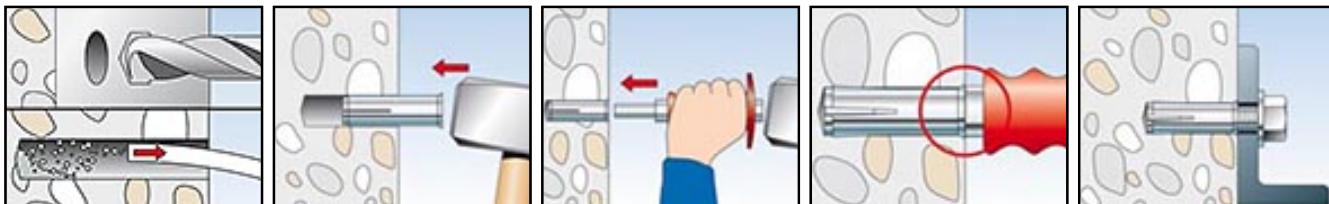
- Gjennom den pregede kanten forhindres en dypere rutsjing av ankerhylsen, og en problemfri slagmontering sikres.
- Den metriske innvendige gjengen gjør at du kan bruke vanlige skruer eller gjengestenger for ideell tilpasning til anvendelsen.
- Maskinsettapparatet EMS gjør det mulig, spesielt ved serieinnstallasjoner, med en kraftsparende montering.
- Ved spredning med pregingen påført av setteverktøyet EHS Plus forenkles kontrollen over forankringen og tilbyr høy brukssikkerhet.
- Festepunkt på hef 25 mm mot utsiktet utfall av pluggen før spredning.

APPLIKASJONER

- Rør- og luftledninger
- Sprinkleranlegg
- Kabelføringer og stiger
- Gitter
- Stålkonstruksjoner
- Maskiner
- Konsoller
- Skallstøtter

FUNKSJON/MONTERING

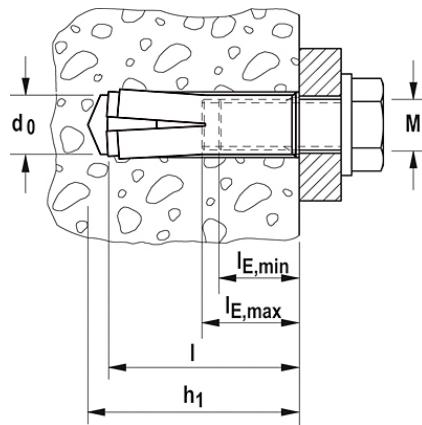
- EA II er egnet for forstikkmontering.
- Sett innslagsankeret i borehullet og driv det inn med hammeren i flukt med overflaten til forankringsgrunnen.
- Deretter blir hylsen gjennom inndriving av innvendig liggende stift spredd og spent mot borehullveggen med innslåingsverktøyet EHS Plus (alternativt maskinsetteapparatet EMS).
- Innslåingsverktøyene må sitte på kanten av ankeret for en riktig spredning.



TEKNISK DATA



Slaganker EA II



galvanized

Produktnavn	Art nr.	ETA-godkjennin	Nominell diameter boremaskin d_0	Plugglengde [mm]	Innvendig gjenge
EA II M 6 x 25	532230	■	8	25	M 6
EA II M 6 x 30	048264	■	8	30	M 6
EA II M 8 x 25	532231	■	10	25	M 8
EA II M 8 x 30	048284	■	10	30	M 8
EA II M 8 x 40	048323	■	10	40	M 8
EA II M 10 x 25	532232	■	12	25	M 10
EA II M 10 x 30	048332	■	12	30	M 10
EA II M 10 x 40	048339	■	12	40	M 10
EA II M 12 x 25	532233	■	15	25	M 12
EA II M 12 x 50	048406	■	15	50	M 12
EA II M 16 x 65	048408	■	20	65	M 16
EA II M 20 x 80	048409	■	25	80	M 20

stainless steel A4

Produktnavn	Art nr.	ETA-godkjennig	Nominell diameter boremaskin d_0	Plugglengde [mm]	Innvendig gjenge
			[mm]		
EA II M 6 x 30 A4	048410	■	8	30	M 6
EA II M 8 x 30 A4	048411	■	10	30	M 8
EA II M 8 x 40 A4	048412	■	10	40	M 8
EA II M 10 x 40 A4	048414	■	12	40	M 10
EA II M 12 x 50 A4	048415	■	15	50	M 12
EA II M 16 x 65 A4	048416	■	20	65	M 16
EA II M 20 x 80 A4	048417	■	25	80	M 20

LOADS

Hammerset anchor EA II (screw/threaded rod property class ≥ 4.6)

Highest permissible loads for a single anchor¹⁾ for multiple use for non-structural applications in concrete C20/25 up to C50/55. For the design the complete approval ETA-07/0142 has to be considered.

Type	Effective anchorage depth h_{ef} [mm]	Minimum member thickness $h_{min}^{4)}$ [mm]	Maximum torque moment $T_{inst,max}$ [Nm]	Cracked or non-cracked concrete		
				Permissible load $F_{perm}^{3)}$ [kN]	Min. spacing $s_{min}^{2)}$ [mm]	Min. edge distance $c_{min}^{2)}$ [mm]
EA II M 6 x 25	25	80	4,0	1,0	30	60
EA II M 6 x 30	30	80	4,0	1,2	65	115
EA II M 8 x 25	25	80	8,0	1,4	50	100
EA II M 8 x 30	30	80	8,0	2,0	70	115
EA II M 8 x 40	40	80	8,0	2,0	70	115
EA II M 10 x 25	25	80	15,0	1,9	60	100
EA II M 10 x 30	30	80	15,0	2,0	85	140
EA II M 10 x 40	40	80	15,0	3,0	95	150
EA II M 12 x 25	25	80	35,0	1,9	100	110
EA II M 12 x 50	50	100	35,0	4,3	145	200

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered.

²⁾ Minimum possible axial spacings resp. edge distances while increasing the member thickness. The combination of minimum axial spacing and minimum edge distance with the minimum member thickness is not possible. Exact data see approval.

³⁾ Valid for tensile load, shear load and oblique load under any angle. For combinations of tensile loads, shear loads as well as bending moments see approval.

⁴⁾ Minimum possible member thickness while increasing the axial spacings and edge distances. Combination of minimum axial spacing and minimum edge distance with the minimum member thickness is not possible. Exact data see approval.

⁵⁾ Further data for concrete C12/15 see approval.

LOADS

Hammerset anchor EA II (screw property class 4.6)

Highest permissible loads¹⁾ for a single anchor for multiple use for non-structural applications in pre-stressed hollow core slabs⁴⁾. For the design the complete approval ETA-07/0142 has to be considered.

Type	Bottom flange thickness [mm]	Effective anchorage depth h_{ef} [mm]	Maximum torque moment $T_{inst,max}$ [Nm]	Pre-stressed hollow core slabs		
				Permissible load $F_{perm}^{3)}$ [kN]	Min. spacing $s_{min}^{2)}$ [mm]	Min. edge distance $c_{min}^{2)}$ [mm]
EA II M 6 x 25	$\geq 35^{5)}$	25	4,0	1,0	200	150
EA II M 8 x 25			8,0	1,4		
EA II M 10 x 25			15,0	1,9		
EA II M 12 x 25			35,0	1,9		

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered.

²⁾ Minimum possible axial spacings resp. edge distances. Further data see approval.

³⁾ Valid for tensile load, shear load and oblique load under any angle. For combinations of tensile loads, shear loads as well as bending moments see approval.

⁴⁾ Concrete strength class C30/37 up to C50/60.

⁵⁾ The anchor may be used in a flange thickness $d_b = 30$ mm with the same characteristic resistance, but the drill hole must not cut a cavity.

LOADS

Hammerset anchor EA II A4 (screw property class A4-50)

Highest permissible loads for a single anchor¹⁾ for multiple use for non-structural applications in concrete C20/25 up to C50/60. For the design the complete approval ETA-07/0142 has to be considered.

Type	Effective anchorage depth h_{ef} [mm]	Min. member thickness $h_{min}^{4)}$ [mm]	Max. torque moment $T_{inst,max}$ [Nm]	Cracked or non-cracked concrete		
				Permissible load $F_{perm}^{3)}$ [kN]	Min. spacing $s_{min}^{2)}$ [mm]	Min. edge distance $c_{min}^{2)}$ [mm]
EA II M 6 x 30 A4	30	80	4,0	1,2	65	115
EA II M 8 x 30 A4	30	80	8,0	2,0	70	115
EA II M 8 x 40 A4	40	80	8,0	2,0	70	115
EA II M 10 x 30 A4	30	80	15,0	2,0	85	140
EA II M 10 x 40 A4	40	80	15,0	3,0	95	150
EA II M 12 x 50 A4	50	100	35,0	4,3	145	200

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered.

²⁾ Minimum possible axial spacings resp. edge distances while increasing the member thickness. The combination of minimum axial spacing and minimum edge distance with the minimum member thickness is not possible. Exact data see approval.

³⁾ Valid for tensile load, shear load and oblique load under any angle. For combinations of tensile loads, shear loads as well as bending moments see approval.

⁴⁾ Minimum possible member thickness while increasing the axial spacings and edge distances. combination of minimum axial spacing and minimum edge distance with the minimum member thickness is not possible. Exact data see approval.

⁵⁾ Further data for concrete strength class C12/15 see approval.

LOADS

Hammerset anchor EA II (screw property class 8.8)

Highest permissible loads for a single anchor¹⁾ in concrete C20/25⁴⁾

For the design the complete approval ETA - 07/0135 has to be considered.

Type	Effective anchorage depth h_{ef} [mm]	Min. member thickness h_{min} [mm]	Max. torque moment $T_{inst,max}$ [Nm]	Non-cracked concrete			
				Permissible tensile load $N_{perm}^{3)}$ [kN]	Permissible shear load $V_{perm}^{3)}$ [kN]	Min. spacing $s_{min}^{2)}$ [mm]	Min. edge distance $c_{min}^{2)}$ [mm]
EA II M 6 x 30 ⁵⁾	30	80	4,0	4,0	3,9	65	115
EA II M 8 x 30 ⁵⁾	30	80	8,0	4,0	4,9	70	115
EA II M 8 x 40	40	80	8,0	6,1	4,9	70	115
EA II M 10 x 30 ⁵⁾	30	80	15,0	4,0	6,2	85	140
EA II M 10 x 40	40	80	15,0	6,1	6,2	95	150
EA II M 12 x 50	50	100	35,0	8,5	11,3	145	200
EA II M 12D x 50	50	100	35,0	8,5	15,4	145	200
EA II M 16 x 65	65	160	60,0	12,6	18,3	180	240
EA II M 20 x 80	80	200	120,0	17,2	29,1	190	280

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered. As an single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1,5 \times h_{ef}$.

²⁾ Minimum possible axial spacings resp. edge distance while reducing the permissible load.

³⁾ For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

⁴⁾ For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

⁵⁾ Only for multiple use for non-structural applications.

LOADS

Hammerset anchor EA II A4 (screw property class A4-70)

Highest permissible loads for a single anchor¹⁾ in concrete C20/25⁴⁾

For the design the complete approval ETA - 07/0135 has to be considered.

Type	Effective anchorage depth h_{ef} [mm]	Min. member thickness h_{min} [mm]	Max. torque moment $T_{\text{inst,max}}$ [Nm]	Non-cracked concrete			
				Permissible tensile load $N_{\text{perm}}^{3)}$ [kN]	Permissible shear load $V_{\text{perm}}^{3)}$ [kN]	Min. spacing $s_{\text{min}}^{2)}$ [mm]	Min. edge dis. c_{min} [mm]
EA II M 6 x 30 A4 ⁵⁾	30	80	4,0	4,0	3,2	65	115
EA II M 8 x 30 A4 ⁵⁾	30	80	8,0	4,0	5,6	70	115
EA II M 8 x 40 A4	40	80	8,0	6,1	5,6	70	115
EA II M 10 x 30 A4 ⁵⁾	30	80	15,0	4,0	6,9	85	140
EA II M 10 x 40 A4	40	80	15,0	6,1	7,1	95	150
EA II M 12 x 50 A4	50	100	35,0	8,5	12,9	145	200
EA II M 12 D x 50 A4	50	100	35,0	8,5	13,5	145	200
EA II M 16 x 65 A4	65	160	60,0	12,6	21,1	180	240
EA II M 20 x 80 A4	80	200	120,0	17,2	33,7	190	280

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered. As an single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h_{\text{ef}}$ and an edge distance $c \geq 1,5 \times h_{\text{ef}}$.

²⁾ Minimum possible axial spacings resp. edge distance while reducing the permissible load.

³⁾ For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

⁴⁾ For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

⁵⁾ Only for multiple use for non-structural applications.