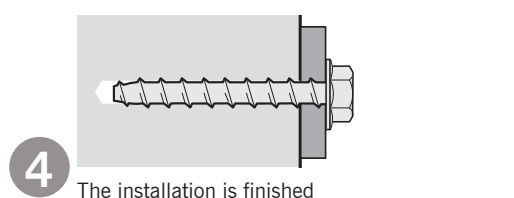
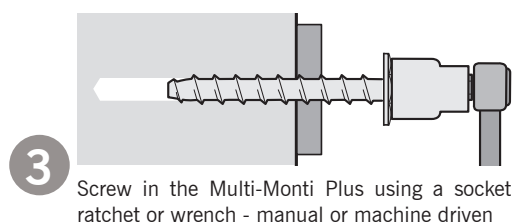
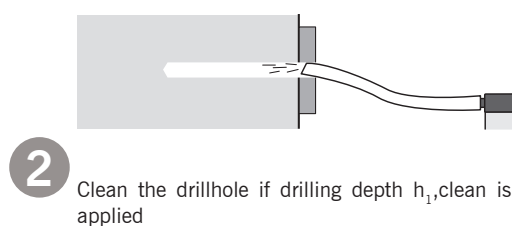
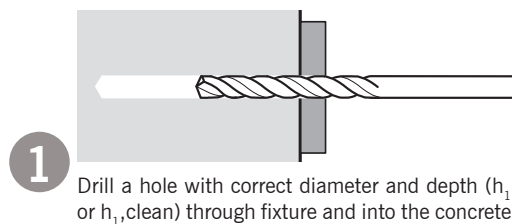


MULTI-MONTI PLUS A4

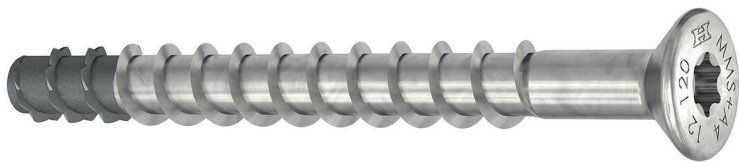
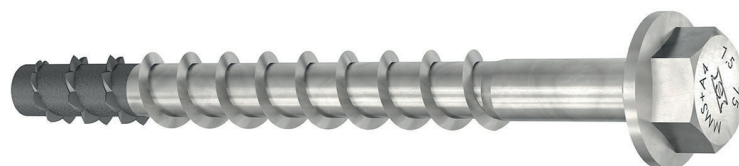
Installation:



Advantages:

- Expansion free.
- Through fixing.
- Installation is economic and easy - without use of special tools.
- Reduction of installation time up to 50%.
- Torque control is not required.
- Can be installed close to edges.
- ETA approved in Option 1, for use in cracked and non-cracked concrete.
- Anchorage can be designed in Expandet Calculation Software.

For fixing of brackets, balcony railings, wood- and steel structures etc. in cracked and non-cracked concrete and other solid base materials



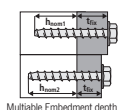
Materials:

Multi-Monti-plus A4 is produced in stainless steel 1.4401 or 1.4578 (CRC III according to EN 1993-4).

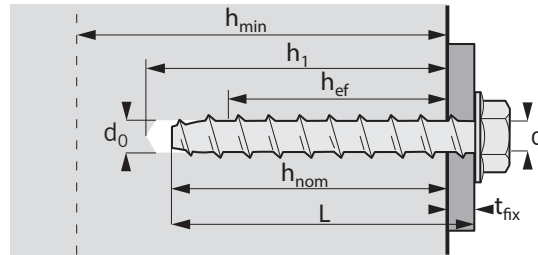
Approvals:

Stainless Steel A4:

- M7,5 to M12 are fire approved in accordance with ETA 15/0784.
- M7,5 to M12 are VdS-approved.
- M7,5 to M12 are CE-marked (ETA 15/0784) in Option 1.



MULTI-MONTI-PLUS A4 (h_{nom1} & h_{nom2})



Type	Headtype			Dimensions					Installation								Design Resistance			
				d	L	t _{fix}	SW ¹	Torx ²	d ₀	d _f	h ₁	h _{1, clean}	h _{nom}	h _{ef}	t _{max}	h _{min}	Non-cracked concrete N _{Rd}	Cracked concrete N _{Rd}	Non-cracked concrete V _{Rd}	Cracked concrete V _{Rd}
Stainless Steel A4 MMS PIUS h_{nom1} h_{nom}				Diameter (thread)	Length	Max. Thickness of fixture	Hex Size	Recess	Drill hole diameter	Clearance hole (d _f ≤)	Min. depth of drillhole without cleaning (mm)	Min. depth of drillhole with cleaning (mm)	Setting depth	Effective setting depth	Max applied installation torque (Nm)	Min. thickness of concrete	Design resistance tension ³	Design resistance shear ⁴	Design resistance tension ³	Design resistance shear ⁴
MMS + A4 7,5 x 85	*	*	*	7,5	85	10	10	T-30	6	9	87	85	75	49	200	100	7,22	10,00	2,22	7,34
MMS + A4 7,5 x 105	*	*	*	7,5	105	30	10	T-30	6	9	87	85	75	49	200	100	7,22	10,00	2,22	7,34
MMS + A4 7,5 x 115	*	*	*	7,5	115	40	10	T-30	6	9	87	85	75	49	200	100	7,22	10,00	2,22	7,34
MMS + A4 7,5 x 125	*	*	*	7,5	125	50	10	T-30	6	9	87	85	75	49	200	100	7,22	10,00	2,22	7,34
MMS + A4 10 x 95	*	*	*	10	95	10	13	T-40	8	12	101	95	85	56	450	125	13,33	15,37	6,00	10,76
MMS + A4 10 x 100	*	*	*	10	100	15	13	T-40	8	12	101	95	85	56	450	125	13,33	15,37	6,00	10,76
MMS + A4 10 x 105	*	*	*	10	105	20	13	T-40	8	12	101	95	85	56	450	125	13,33	15,37	6,00	10,76
MMS + A4 12 x 120	*	*	*	12	120	5	15	T-50	10	14	135	125	115	77	600	150	21,33	19,29	10,67	19,26
MMS + A4 12 x 130	*	*	*	12	130	15	15	T-50	10	14	135	125	115	77	600	150	21,33	19,29	10,67	19,26
MMS + A4 12 x 135	*	*	*	12	135	20	15	T-50	10	14	135	125	115	77	600	150	21,33	19,29	10,67	19,26

Type	Headtype			Dimensions					Installation								Design Resistance			
				d	L	t _{fix}	SW ¹	Torx ²	d ₀	d _f	h ₁	h _{1, clean}	h _{nom}	h _{ef}	t _{max}	h _{min}	Non-cracked concrete N _{Rd}	Cracked concrete N _{Rd}	Non-cracked concrete V _{Rd}	Cracked concrete V _{Rd}
Stainless Steel A4 MMS PIUS h_{nom2} h_{nom}				Diameter (thread)	Length	Max. Thickness of fixture	Hex Size	Recess	Drill hole diameter	Clearance hole (d _f ≤)	Min. depth of drillhole without cleaning (mm)	Min. depth of drillhole with cleaning (mm)	Setting depth	Effective setting depth	Max applied installation torque (Nm)	Min. thickness of concrete	Design resistance tension ³	Design resistance shear ⁴	Design resistance tension ³	Design resistance shear ⁴
MMS + A4 7,5 x 75	*	*	*	7,5	75	10	10	T-30	6	9	77	75	65	40	200	100	5,56	7,73	1,67	5,41
MMS + A4 7,5 x 85	*	*	*	7,5	85	20	10	T-30	6	9	77	75	65	40	200	100	5,56	7,73	1,67	5,41
MMS + A4 7,5 x 105	*	*	*	7,5	105	40	10	T-30	6	9	77	75	65	40	200	100	5,56	7,73	1,67	5,41
MMS + A4 7,5 x 115	*	*	*	7,5	115	50	10	T-30	6	9	77	75	65	40	200	100	5,56	7,73	1,67	5,41
MMS + A4 7,5 x 125	*	*	*	7,5	125	60	10	T-30	6	9	77	75	65	40	200	100	5,56	7,73	1,67	5,41
MMS + A4 10 x 85	*	*	*	10	85	10	13	T-40	8	12	91	85	75	48	450	125	11,33	12,19	4,67	8,54
MMS + A4 10 x 95	*	*	*	10	95	20	13	T-40	8	12	91	85	75	48	450	125	11,33	12,19	4,67	8,54
MMS + A4 10 x 100	*	*	*	10	100	25	13	T-40	8	12	91	85	75	48	450	125	11,33	12,19	4,67	8,54
MMS + A4 10 x 105	*	*	*	10	105	30	13	T-40	8	12	91	85	75	48	450	125	11,33	12,19	4,67	8,54
MMS + A4 12 x 120	*	*	*	12	120	15	15	T-50	10	14	125	115	105	69	600	150	17,33	19,29	8,67	19,26
MMS + A4 12 x 130	*	*	*	12	130	25	15	T-50	10	14	125	115	105	69	600	150	17,33	19,29	8,67	19,26
MMS + A4 12 x 135	*	*	*	12	135	30	15	T-50	10	14	125	115	105	69	600	150	17,33	19,29	8,67	19,26

- 1) SW Hex size for Hex-flangehead.
 2) Torx recess for countersunk and panhead products.
 3) Design resistance for tension, in accordance with EN 1992-4, is valid for a single anchor in concrete C20/25 not influenced by edge distance and/or spacing: $C \geq 1,5 h_{ef}$ and $S \geq 3 h_{ef}$. $\Psi_{Re,N} = 1$ (Normal reinforcement).
 4) Design resistance for shear, in accordance with EN 1992-4, is valid for a single anchor in concrete $\geq C20/25$ not influenced by edge distance and/or spacing: $C \geq 10 h_{ef}$ and $S \geq 3 h_{ef}$.

Partial safety factor for material (γ_m) is included in accordance with product ETA. Partial safety factor for action (γ_f) has to be applied in accordance with national building code. If no guidance for γ_f exists ETAG 001, Annex C recommends factor 1,35 for permanent actions and factor 1,5 for variable actions.

When calculating load capacities for anchors or anchorgroup use Expandet Calculation Software allowing for design with individual edge distance and spacing in accordance with ETAG 001, Annex C, Design Method A and/ or Eurocode. Download Expandet Calculation Software for free at www.expandet.com.

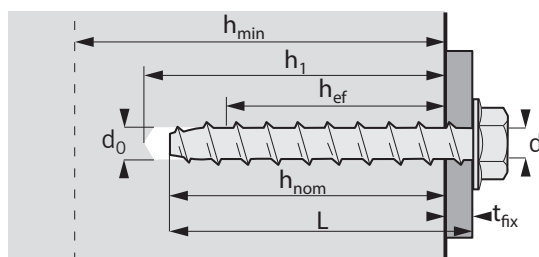
Combined resistance shall be verified if both tension and shear actions are applied:

$$\left(\frac{N_{Sd}}{N_{Rd,c}} \right)^{1,5} + \left(\frac{V_{Sd}}{V_{Rd,c}} \right)^{1,5} \leq 1,0$$

Partial safety factor for material γ_m is included in accordance with EN 1992-4 and γ_{inst} according to product ETA. Partial safety factor for action (γ_f) has to be applied in accordance with national building code.

Use Expandet Calculation Services, ECS, to calculate anchorages of single anchors or groups with limited spacing and edge distances, other concrete strenghts, fire etc. Available for free download at www.expandet.dk

MULTI-MONTI-PLUS A4 (h_{nom3} & h_{nom4})



Type	Headtype	Dimensions						Installation										Design Resistance			
		d	L	t _{fix}	SW ¹	Torx ²		d ₀	d _f	h ₁	h _{1, clean}	h _{nom}	h _{ef}	t _{max}	h _{min}	Non-cracked concrete N _{Rd}	Cracked concrete V _{Rd}	Design resistance tension ³	Design resistance shear ⁴	Design resistance tension ³	Design resistance shear ⁴
Stainless Steel A4 MMS PIUS h_{nom3} h_{nom}		Diameter (thread)	Length	Max. Thickness of fixture	Hex Size	Recess		Drill hole diameter	Clearance hole (d _f ≤)	Min. depth of drillhole without cleaning (mm)	Min. depth of drillhole with cleaning (mm)	Setting depth	Effective setting depth	Max applied installation torque (Nm)	Min. thickness of concrete						
MMS + A4 7,5 x 65	*	7,5	65	10	10	T-30		6	9	67	60	55	36	200	100	2,50	6,60	1,11	4,62		
MMS + A4 7,5 x 75	*	7,5	75	20	10	T-30		6	9	67	60	55	36	200	100	2,50	6,60	1,11	4,62		
MMS + A4 7,5 x 85	*	7,5	85	30	10	T-30		6	9	67	60	55	36	200	100	2,50	6,60	1,11	4,62		
MMS + A4 7,5 x 105	*	7,5	105	50	10	T-30		6	9	67	60	55	36	200	100	2,50	6,60	1,11	4,62		
MMS + A4 7,5 x 115	*	7,5	115	60	10	T-30		6	9	67	60	55	36	200	100	2,50	6,60	1,11	4,62		
MMS + A4 7,5 x 125	*	7,5	125	70	10	T-30		6	9	67	60	55	36	200	100	2,50	6,60	1,11	4,62		
MMS + A4 10 x 75	*	10	75	5	13	T-40		8	12	86	80	70	44	450	115	6,67	8,92	3,33	6,24		
MMS + A4 10 x 85	*	10	85	15	13	T-40		8	12	86	80	70	44	450	115	6,67	8,92	3,33	6,24		
MMS + A4 10 x 95	*	10	95	25	13	T-40		8	12	86	80	70	44	450	115	6,67	8,92	3,33	6,24		
MMS + A4 10 x 100	*	10	100	30	13	T-40		8	12	86	80	70	44	450	115	6,67	8,92	3,33	6,24		
MMS + A4 10 x 105	*	10	105	35	13	T-40		8	12	86	80	70	44	450	115	6,67	8,92	3,33	6,24		
MMS + A4 12 x 105	*	12	105	5	15	T-50		10	14	120	110	100	65	600	150	13,33	16,43	8,00	13,45		
MMS + A4 12 x 120	*	12	120	20	15	T-50		10	14	120	110	100	65	600	150	13,33	16,43	8,00	19,26		
MMS + A4 12 x 130	*	12	130	30	15	T-50		10	14	120	110	100	65	600	150	13,33	16,43	8,00	19,26		
MMS + A4 12 x 135	*	12	135	35	15	T-50		10	14	120	110	100	65	600	150	13,33	16,43	8,00	19,26		

Type	Headtype	Dimensions						Installation										Design Resistance			
		d	L	t _{fix}	SW ¹	Torx ²		d ₀	d _f	h ₁	h _{1, clean}	h _{nom}	h _{ef}	t _{max}	h _{min}	Non-cracked concrete N _{Rd}	Cracked concrete V _{Rd}	Design resistance tension ³	Design resistance shear ⁴	Design resistance tension ³	Design resistance shear ⁴
Stainless Steel A4 MMS PIUS h_{nom4} h_{nom}		Diameter (thread)	Length	Max. Thickness of fixture	Hex Size	Recess		Drill hole diameter	Clearance hole (d _f ≤)	Min. depth of drillhole without cleaning (mm)	Min. depth of drillhole with cleaning (mm)	Setting depth	Effective setting depth	Max applied installation torque (Nm)	Min. thickness of concrete						
MMS + A4 7,5 x 55	*	7,5	55	5	10	T-30		6	9	62	55	50	32	200	100	2,22	5,53	0,83	3,87		
MMS + A4 7,5 x 65	*	7,5	65	15	10	T-30		6	9	62	55	50	32	200	100	2,22	5,53	0,83	3,87		
MMS + A4 7,5 x 75	*	7,5	75	25	10	T-30		6	9	62	55	50	32	200	100	2,22	5,53	0,83	3,87		
MMS + A4 7,5 x 85	*	7,5	85	35	10	T-30		6	9	62	55	50	32	200	100	2,22	5,53	0,83	3,87		
MMS + A4 7,5 x 105	*	7,5	105	55	10	T-30		6	9	62	55	50	32	200	100	2,22	5,53	0,83	3,87		
MMS + A4 7,5 x 115	*	7,5	115	65	10	T-30		6	9	62	55	50	32	200	100	2,22	5,53	0,83	3,87		
MMS + A4 7,5 x 125	*	7,5	125	75	10	T-30		6	9	62	55	50	32	200	100	2,22	5,53	0,83	3,87		
MMS + A4 10 x 65	*	10	65	5	13	T-40		8	12	76	70	60	35	450	115	5,56	6,33	2,78	4,43		
MMS + A4 10 x 75	*	10	75	15	13	T-40		8	12	76	70	60	35	450	115	5,56	6,33	2,78	4,43		
MMS + A4 10 x 85	*	10	85	25	13	T-40		8	12	76	70	60	35	450	115	5,56	6,33	2,78	4,43		
MMS + A4 10 x 95	*	10	95	35	13	T-40		8	12	76	70	60	35	450	115	5,56	6,33	2,78	4,43		
MMS + A4 10 x 100	*	10	100	40	13	T-40		8	12	76	70	60	35	450	115	5,56	6,33	2,78	4,43		
MMS + A4 10 x 105	*	10	105	45	13	T-40		8	12	76	70	60	35	450	115	5,56	6,33	2,78	4,43		
MMS + A4 12 x 95	*	12	95	5	15	T-50		10	14	110	100	90	56	600	150	10,67	15,37	6,33	10,76		
MMS + A4 12 x 105	*	12	105	15	15	T-50		10	14	110	100	90	56	600	150	10,67	15,37	6,33	10,76		
MMS + A4 12 x 120	*	12	120	30	15	T-50		10	14	110	100	90	56	600	150	10,67	15,37	6,33	19,26		
MMS + A4 12 x 130	*	12	130	40	15	T-50		10	14	110	100	90	56	600	150	10,67	15,37	6,33	19,26		
MMS + A4 12 x 135	*	12	135	45	15	T-50		10	14	110	100	90	56	600	150	10,67	15,37	6,33	19,26		

1) SW Hex size for Hex-flangehead.

2) Torx recess for countersunk and panhead products.

3) Design resistance for tension, in accordance with EN 1992-4, is valid for a single anchor in concrete C20/25 not influenced by edge distance and/or spacing: $C \geq 1,5 h_{ef}$ and $S \geq 3 h_{ef}$. $\Psi_{Re,N} = 1$ (Normal reinforcement).

4) Design resistance for shear, in accordance with EN 1992-4, is valid for a single anchor in concrete $\geq C20/25$ not influenced by edge distance and/or spacing: $C \geq 10 h_{ef}$ and $S \geq 3 h_{ef}$.

Partial safety factor for material (γ_m) is included in accordance with product ETA. Partial safety factor for action (γ_f) has to be applied in accordance with national building code. If no guidance for γ_f exists ETAG 001, Annex C recommends factor 1,35 for permanent actions and factor 1,5 for variable actions.

When calculating load capacities for anchors or anchorgroup use Expandet Calculation Software allowing for design with individual edge distance and spacing in accordance with ETAG 001, Annex C, Design Method A and/ or Eurocode. Download Expandet Calculation Software for free at www.expandet.com.

Combined resistance shall be verified if both tension and shear actions are applied:

$$\left(\frac{N_{Sd}}{N_{Rd,c}} \right)^{1,5} + \left(\frac{V_{Sd}}{V_{Rd,c}} \right)^{1,5} \leq 1,0$$

Partial safety factor for material γ_m is included in accordance with EN 1992-4 and γ_{inst} according to product ETA. Partial safety factor for action (γ_f) has to be applied in accordance with national building code.

Use Expandet Calculation Services, ECS, to calculate anchorages of single anchors or groups with limited spacing and edge distances, other concrete strenghts, fire etc. Available for free download at www.expandet.dk

MULTI-MONTI-PLUS A4 reduced edge distances

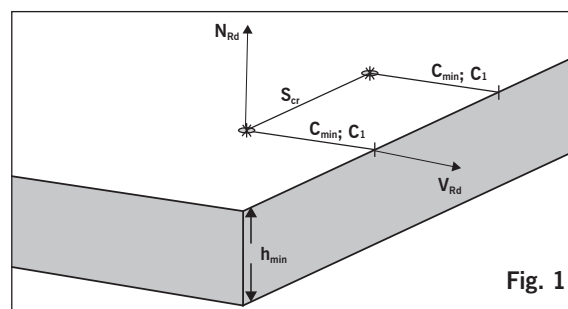


Fig. 1

Design resistance for a SINGLE anchor at minimum edge distance (C_{min}) and characteristic spacing S_{cr} as illustrated in (Fig 1) ¹⁾

MMS-plus A4			MMS+ 7,5				MMS+ 10				MMS+ 12			
h_{nom}	Setting depth	mm	50	55	65	75	60	70	75	85	90	100	105	115
C_{min}	Min. edge distance	mm	30				35				40			
N_{Rd}	Design Resistance, tension (Non-cracked concrete)	kN	2,22	2,50	4,41	5,43	4,24	5,24	6,85	8,03	8,55	9,97	10,63	11,99
	Design Resistance, tension (Cracked concrete)		0,83	1,11	1,67	2,22	2,78	3,33	4,67	5,62	5,98	6,98	7,44	8,39
V_{Rd}	Design Resistance, shear ¹⁾ (Non-cracked concrete)	kN	2,03	2,07	2,11	2,19	2,66	2,77	2,82	2,91	3,61	3,72	3,77	3,87
	Design Resistance, shear ¹⁾ (Cracked concrete)		1,44	1,47	1,50	1,55	1,88	1,96	2,00	2,06	2,55	2,64	2,67	2,74
S_{cr}	Characteristic Spacing	mm	96	108	120	147	105	132	144	168	168	195	207	231
h_{min}	Minimum concrete thickness	mm	100	100	100	100	115	115	125	125	150	150	150	150

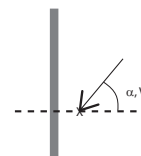
Design resistance for a SINGLE anchor at edge distance (C_1) and characteristic spacing S_{cr} as illustrated in (Fig 1) ¹⁾

MMS-plus A4			MMS+ 7,5				MMS+ 10				MMS+ 12			
h_{nom}	Setting depth	mm	50	55	65	75	60	70	75	85	90	100	105	115
C_1	Min. edge distance	mm	30				35				40			
N_{Rd}	Design Resistance, tension (Non-cracked concrete)	kN	2,22	2,50	5,56	7,12	5,45	6,50	8,39	9,63	9,63	11,10	11,78	13,17
	Design Resistance, tension (Cracked concrete)		0,83	1,11	1,67	2,22	2,78	3,33	4,67	6,00	6,33	7,77	8,24	9,22
V_{Rd}	Design Resistance, shear ¹⁾ (Non-cracked concrete)	kN	4,10	4,16	4,23	4,36	4,31	4,47	4,53	4,66	4,83	4,98	5,04	5,16
	Design Resistance, shear ¹⁾ (Cracked concrete)		2,90	2,95	2,99	3,09	3,05	3,17	3,21	3,30	3,42	3,53	3,57	3,65
S_{cr}	Characteristic Spacing	mm	96	108	120	147	105	132	144	168	168	195	207	231
h_{min}	Minimum concrete thickness	mm	100	100	100	100	115	115	125	125	150	150	150	150

¹⁾ In case of grout layer or leverarm Shear load with lever shall be calculated acc. to relevant standard. Use Expandet Calculation Program for this.
Use Expandet calculation program for calculation of anchor and anchorgroups according to applicable design standard. Can be downloaded at www.expandet.dk.

In case direction of shearload is not perpendicular to C_{min} ; C_1 the shear design resistance (V_{Rd}) can be increased by factor $\Psi_{\alpha,V}$

α, V	0°	10°	20°	30°	45°	50°	60°	70°	80°	$\geq 90^\circ$
$\Psi_{\alpha,V}$	1,00	1,01	1,05	1,11	1,26	1,34	1,51	1,72	1,92	2,00



Factor for increased concrete strength

Concrete Strenght (EN 206-1)	C 20/25	C 25/30	C 30/37	C 35/45	C 40/50	C 45/55	C 50/60
Concrete factor (Ψ_c)	1,00	1,12	1,22	1,32	1,41	1,50	1,58

In case of both tension and shear load the combined resistance shall be verified: $\left(\frac{N_{Sd}}{N_{Rd,e}}\right)^{1,5} + \left(\frac{V_{Sd}}{V_{Rd,e}}\right)^{1,5} \leq 1,0$

Note! Design resistance for steel shall be observed::

Tension load: Minimum af: (N_{Rd} ; $N_{Rd,s}$)

Shear load: Minimum af: ($V_{Rd} \times \Psi_c \times \Psi_{\alpha,V}$; $N_{Rd,s}$)

MULTI-MONTI-PLUS A4 reduced edge distances

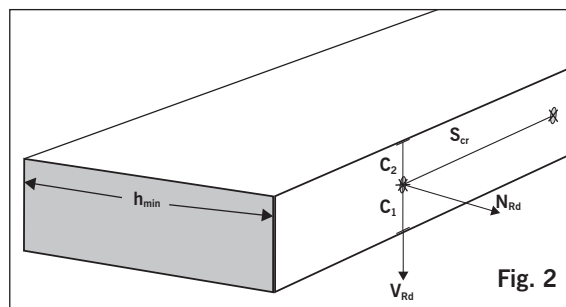


Fig. 2

Design resistance for a SINGLE anchor at towards edge distance (C_1) and characteristic spacing S_{cr} as illustrated in (Fig 2) ¹⁾

MMS-plus A4			MMS+ 7,5				MMS+ 10				MMS+ 12			
h_{nom}	Setting depth	mm	50	55	65	75	60	70	75	85	90	100	105	115
C_1	Min. edge distance	mm	30				35				40			
C_2	Second edge	mm	70				65				60			
N_{Rd}	Design Resistance, tension (Non-cracked concrete)	kN	2,22	2,50	4,41	5,43	4,24	5,24	6,85	8,03	8,55	9,97	10,63	11,99
	Design Resistance, tension (Cracked concrete)		0,83	1,11	1,67	2,22	2,78	3,33	4,67	5,62	5,98	6,98	7,44	8,39
V_{Rd}	Design Resistance, shear ¹⁾ (Non-cracked concrete)	kN	2,03	2,07	2,11	2,19	2,66	2,77	2,82	2,91	3,61	3,72	3,77	3,87
	Design Resistance, shear ¹⁾ (Cracked concrete)		1,44	1,47	1,50	1,55	1,88	1,96	2,00	2,06	2,55	2,64	2,67	2,74
S_{cr}	Characteristic Spacing	mm	96	108	120	147	105	132	144	168	168	195	207	231
h_{min}	Minimum concrete thickness	mm	100	100	100	100	115	115	125	125	150	150	150	150

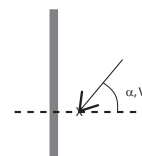
Design resistance for a SINGLE anchor at towards edge distance (C_1) and characteristic spacing S_{cr} as illustrated in (Fig 2) ¹⁾

MMS-plus A4			MMS+ 7,5				MMS+ 10				MMS+ 12			
h_{nom}	Setting depth	mm	50	55	65	75	60	70	75	85	90	100	105	115
C_1	Min. edge distance	mm	50				50				50			
C_2	Second edge	mm	50				50				50			
N_{Rd}	Design Resistance, tension (Non-cracked concrete)	kN	2,22	2,50	5,56	7,12	5,45	6,50	8,39	9,63	9,63	11,10	11,78	13,17
	Design Resistance, tension (Cracked concrete)		0,83	1,11	1,67	2,22	2,78	3,33	4,67	6,00	6,33	7,77	8,24	9,22
V_{Rd}	Design Resistance, shear ¹⁾ (Non-cracked concrete)	kN	4,10	4,16	4,23	4,36	4,31	4,47	4,53	4,66	4,83	4,98	5,04	5,16
	Design Resistance, shear ¹⁾ (Cracked concrete)		2,90	2,95	2,99	3,09	3,05	3,17	3,21	3,30	3,42	3,53	3,57	3,65
S_{cr}	Characteristic Spacing	mm	96	108	120	147	105	132	144	168	168	195	207	231
h_{min}	Minimum concrete thickness	mm	100	100	100	100	115	115	125	125	150	150	150	150

¹⁾ In case of grout layer or leverarm Shear load with lever shall be calculated acc. to relevant standard. Use Expandet Calculation Program for this.
Use Expandet calculation program for calculation of anchor and anchorgroups according to applicable design standard. Can be downloaded at www.expandet.dk.

In case direction of shearload is not perpendicular to C_{min} ; C_1 the shear design resistance (V_{Rd}) can be increased by factor $\Psi_{\alpha,V}$

α, V	0°	10°	20°	30°	45°	50°	60°	70°	80°	≥ 90°
$\Psi_{\alpha,V}$	1,00	1,01	1,05	1,11	1,26	1,34	1,51	1,72	1,92	2,00



Factor for increased concrete strength							
Concrete Strength (EN 206-1)	C 20/25	C 25/30	C 30/37	C 35/45	C 40/50	C 45/55	C 50/60
Concrete factor (Ψ_c)	1	1,1	1,22	1,34	1,41	1,48	1,55

In case of both tension and shear load the combined resistance shall be verified: $\left(\frac{N_{Sd}}{N_{Rd,e}}\right)^{1,5} + \left(\frac{V_{Sd}}{V_{Rd,e}}\right)^{1,5} \leq 1,0$

Note! Design resistance for steel shall be observed:

Tension load: Minimum af: (N_{Rd} ; $N_{Rd,s}$)

Shear load: Minimum af: ($V_{Rd} \times \Psi_c \times \Psi_{\alpha,V}$; $N_{Rd,s}$)

MULTI-MONTI-PLUS A4 reduced edge distances

Steel Resistance, MMS+ A4														
MMS-plus A4			MMS+ 7,5				MMS+ 10				MMS+ 12			
h_{nom}	Setting depth	mm	50	55	65	75	60	70	75	85	90	100	105	115
$N_{Rd,s}$	Steel Design resistance, tension	kN	11,4				20,71				32,14			
$V_{Rd,s}$	Steel Design resistance, shear ¹	kN	7,85		10,00		12,85		20,00		16,42		19,28	
K_7	Ductility factor	-	1											
$M_{Rk,s}^o$	Characteristic bending resistance	Nm	13,3				32,1				61,1			

¹⁾ In case of grout layer or leverarm Shear load with lever shall be calculated acc. to relevant standard. Use Expandet Calculation Program for this.