

SMART THROUGH BOLT



Through bolt S-TB option 7

Doorsteekanker S-TB optie 7

Goujon d'ancrage S-TB option 7

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THROUGH BOLT
DOORSTEEKANKER
GOUJON D'ANCORAGE



SM07TB



THROUGH BOLT WITH ETA OPTION 7

Torque controlled expansion anchor with technical assessment for use in non-cracked concrete.

TYPE S-TB7



ADVANTAGES

- Vast range for flexible use with long metric thread.
- Marking of the standard or reduced anchor depth. The reduced anchor depth reduces the drilling time and therefore speeds up the installation time.
- Completely mounted with washer and nut.

FUNCTIONING

- Pre-positioned and push-through installation.
- Prior to installation, place the nut in the optimal position (the drive-in pin projects by approx. 3 mm out of the hexagon nut).
- When applying the torque, the cone will expand the clip in the drill hole.

DOORSTEELKANKER MET ETA OPTIE 7

Moment-gecontroleerd doorsteekanker met Europese technische beoordeling voor ongescheurd beton.

VOORDELEN

- Lange metrische draad voor variabele nuttige lengtes en mogelijkheid tot afstandmontage van het anker.
- Aanduiding van de verankeringsdiepte (normale en gereduceerde). De gereduceerde verankeringsdiepte vermindert de boortijd en versnelt bijgevolg de installatietijd.
- Compleet gemonteerd met sluitring en moer.

TOEPASSING

- Voorsteekmontage / Doorsteekmontage.
- Het anker is zo ontworpen dat het direct door het te bevestigen materiaal geplaatst kan worden.
- Wanneer de moer wordt aangedraaid, wordt de conus in de huls getrokken en klemt het anker zich tegen de boorwand. Hou rekening met het juiste aandraaimoment.

GOUJON D'ANCRAGE AVEC ATE OPTION 7

Goujon d'ancrage à expansion contrôlée avec évaluation technique européenne pour béton non fissuré.

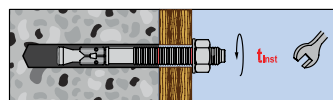
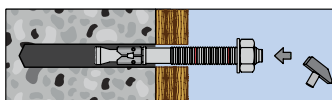
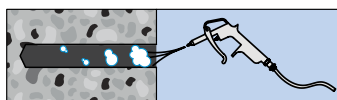
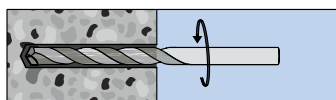
AVANTAGES

- Le long filet permet des longueurs utiles variables et le montage à distance.
- Marquage de la profondeur d'installation minimum et normale. La profondeur minimum réduit le temps d'installation.
- Prémonté avec rondelle et écrou.

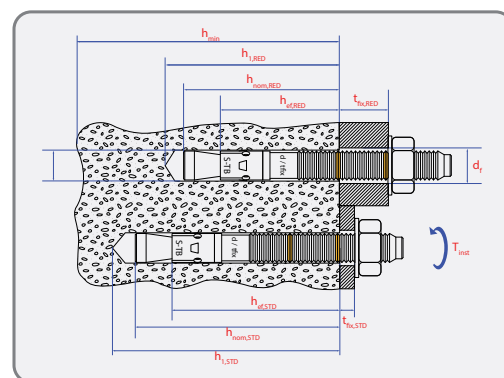
APPLICATION

- Pré-installation Installation traversante.
- La cheville est préassemblée et peut être installée directement à travers la pièce à fixer.
- Lorsque l'écrou est serré, le cône est ramené dans la bague d'expansion et s'écarte contre le trou. Appliquer le couple de serrage indiqué.

INSTALLATION SCHEME



INFO



d [mm]	l [mm]	d ₀ [mm]	Standard embedment depth			Reduced embedment depth			T _{inst} [Nm]	SW [mm]	d _f [mm]
			t _{fix, std} ≤ [mm]	h _{1, std} ≥ [mm]	h _{ef, std} ≥ [mm]	t _{fix, red} ≤ [mm]	h _{1, red} ≥ [mm]	h _{ef, red} ≥ [mm]			
M 6	50	6		54	40	2	44	30	6	10	7
M 6	63	6	5	54	40	15	44	30	6	10	7
M 6	83	6	25	54	40	35	44	30	6	10	7
M 6	103	6	45	54	40	55	44	30	6	10	7
M 8	52	8		60	45	1	45	30	15	13	9
M 8	61	8		60	45	10	45	30	15	13	9
M 8	66	8		60	45	15	45	30	15	13	9
M 8	76	8	10	60	45	25	45	30	15	13	9
M 8	91	8	25	60	45	40	45	30	15	13	9
M 8	116	8	50	60	45	65	45	30	15	13	9
M 8	131	8	65	60	45	80	45	30	15	13	9
M 10	70	10		67	50	5	57	40	30	17	12
M 10	90	10	15	67	50	25	57	40	30	17	12
M 10	100	10	25	67	50	35	57	40	30	17	12
M 10	120	10	45	67	50	55	57	40	30	17	12
M 10	150	10	75	67	50	85	57	40	30	17	12
M 10	170	10	95	67	50	105	57	40	30	17	12
M 10	210	10	135	67	50	145	57	40	30	17	12
M 10	230	10	155	67	50	165	57	40	30	17	12
M 12	82	12		88	65	1	73	50	50	19	14
M 12	91	12		88	65	10	73	50	50	19	14
M 12	101	12	5	88	65	20	73	50	50	19	14
M 12	111	12	15	88	65	30	73	50	50	19	14
M 12	126	12	30	88	65	45	73	50	50	19	14
M 12	146	12	50	88	65	65	73	50	50	19	14
M 12	161	12	65	88	65	80	73	50	50	19	14
M 12	181	12	85	88	65	100	73	50	50	19	14
M 12	221	12	125	88	65	140	73	50	50	19	14
M 14	122	14	15	98	75	35	78	55	80	22	16
M 14	147	14	40	98	75	60	78	55	80	22	16
M 14	172	14	65	98	75	85	78	55	80	22	16
M 16	107	16		111	85	10	86	60	100	24	18
M 16	127	16	5	111	85	30	86	60	100	24	18
M 16	147	16	25	111	85	50	86	60	100	24	18
M 16	172	16	50	111	85	75	86	60	100	24	18
M 16	222	16	100	111	85	125	86	60	100	24	18
M 16	252	16	130	111	85	155	86	60	100	24	18
M 20	278	20	130	134	105	155	109	80	200	30	22
M 20	128	20		134	105	5	109	80	200	30	22
M 20	168	20	20	134	105	45	109	80	200	30	22
M 20	218	20	70	134	105	95	109	80	200	30	22



Carton box packing - Kartonverpakking - Boîte carton

size	pgb code	EAN13	
M6x50	SM07TB0010600503	5902134250427	200
M6x60	SM07TB0010600603	5902134250441	200
M6x80	SM07TB0010600803	5902134250489	200
M6x100	SM07TB0010601003	5902134250465	200
M8x50	SM07TB0010800503	5902134250502	200
M8x60	SM07TB0010800603	5902134250519	200
M8x65	SM07TB0010800653	5902134250533	200
M8x75	SM07TB0010800753	5902134250557	100
M8x90	SM07TB0010800903	5902134250571	100
M8x115	SM07TB0010801153	5902134250595	100
M8x130	SM07TB0010801303	5902134250618	100
M10x70	SM07TB0011000703	5902134250632	100
M10x90	SM07TB0011000903	5902134250656	50
M10x100	SM07TB0011001003	5902134250670	50
M10x120	SM07TB0011001203	5902134250694	50
M10x150	SM07TB0011001503	5902134250717	50
M10x170	SM07TB0011001703	5902134250731	50
M10x210	SM07TB0011002103	5902134250755	50
M10x230	SM07TB0011002303	5902134250779	50
M12x80	SM07TB0011200803	5902134250793	50
M12x90	SM07TB0011200903	5902134250809	50
M12x100	SM07TB0011201003	5902134250823	50

size	pgb code	EAN13	
M12x110	SM07TB0011201103	5902134250847	50
M12x125	SM07TB0011201253	5902134250861	50
M12x145	SM07TB0011201453	5902134250878	50
M12x160	SM07TB0011201603	5902134250885	50
M12x180	SM07TB0011201803	5902134250908	50
M12x220	SM07TB0011202203	5902134250922	50
M12x250	SM07TB0011202503	5902134250946	25
M14x120	SM07TB0011401203	5902134250960	25
M14x145	SM07TB0011401453	5902134250984	25
M14x170	SM07TB0011401703	5902134251004	25
M16x105	SM07TB0011601053	5902134251028	25
M16x125	SM07TB0011601253	5902134251035	25
M16x145	SM07TB0011601453	5902134251059	25
M16x170	SM07TB0011601703	5902134251073	25
M16x220	SM07TB0011602203	5902134251097	25
M16x250	SM07TB0011602503	5902134251110	25
M16x280*	SM07TB0011602803	5902134251134	25
M20x125	SM07TB0012001253	5902134251158	20
M20x165	SM07TB0012001653	5902134251165	20
M20x215	SM07TB0012002153	5902134251172	20
M20x275*	SM07TB0012002753	5902134251189	20

*= No eta approval



Carton box packing - Kartonverpakking - Boîte carton

size	pgb code	EAN13	
M 8x75	SM07TB001080075E	5902134010823	25
M 8x90	SM07TB001080090E	5902134010830	25
M 8x115	SM07TB001080115E	5902134010847	20
M 8x130	SM07TB001080130E	5902134010854	20
M 10x90	SM07TB001100090E	5902134010861	20
M 10x100	SM07TB001100100E	5902134010878	15
M 10x120	SM07TB001100120E	5902134010885	15
M10x150	SM07TB001100150E	5902134010892	15
M10x170	SM07TB001100170E	5902134010908	15

size	pgb code	EAN13	
M12x100	SM07TB001120100E	5902134010915	10
M12x110	SM07TB001120110E	5902134010922	10
M12x125	SM07TB001120125E	5902134010939	10
M12x145	SM07TB001120145E	5902134010946	10
M12x160	SM07TB001120160E	5902134010953	10
M12x180	SM07TB001120180E	5902134010960	5
M16x105	SM07TB001160105E	5902134010977	5
M16x125	SM07TB001160125E	5902134010984	5
M16x170	SM07TB001160170E	5902134010991	5

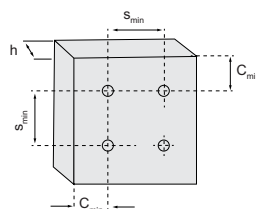
LOADS - BELASTINGEN - CHARGES

Recommended loads for a single anchor with STANDARD embedment depth. ¹⁾

Maximaal aanbevolen belasting voor één anker met NORMALE verankeringsdiepte. ¹⁾

Charges maximales conseillées pour un ancrage simple et profondeur d'ancrage STANDARD. ¹⁾

Type S-TB7			M 6	M 8	M10	M12	M14	M16	M20
Embedment depth / Verankeringsdiepte / Profondeur d'ancrage	h_{ef}	[mm]	40	45	50	65	75	85	105
Overall embedment depth / Nominale verankeringsdiepte / Profondeur d'ancrage nominale	h_{nom}	[mm]	49	55	62	80	90	103	126
Min. spacing / Min h.o.h.-afstand / Distance entre-axes min.	s_{min}	[mm]	56	63	70	91	105	119	147
Min. thickness of concrete member / Min. betondikte / Epaisseur min. du béton	h_{min}	[mm]	100	100	100	130	150	170	210
Min. edge distance / Min. randafstand / Distance au bord min.	C_{min}	[mm]	56	63	70	91	105	119	147
Tension load / Trekbelasting / Traction									
Concrete / Beton / Béton	C20/25	[kN]	3,2	6,2	8,9	13,1	16,1	19,5	26,8
Shear load / Afschuifbelasting / Cisaillement									
Concrete / Beton / Béton	C20/25	[kN]	2,9	5,4	8,6	12,5	17	23,3	36,2



LOADS - BELASTINGEN - CHARGES

Recommended loads for a single anchor with REDUCED embedment depth. ¹⁾

Maximaal aanbevolen belasting voor één anker met GEREDUCEERDE verankeringsdiepte. ¹⁾

Charges maximales conseillées pour un ancrage simple et profondeur d'ancrage REDUIT. ¹⁾

Type S-TB7			M 6	M 8	M10	M12	M14	M16	M20
Embedment depth / Verankeringsdiepte / Profondeur d'ancrage	h_{ef}	[mm]	30	30	40	50	55	60	80
Overall embedment depth / Nominale verankeringsdiepte / Profondeur d'ancrage nominale	h_{nom}	[mm]	39	40	52	65	70	78	101
Min. spacing / Min h.o.h.-afstand / Distance entre-axes min.	s_{min}	[mm]	42	42	56	70	77	84	112
Min. thickness of concrete member / Min. betondikte / Epaisseur min. du béton	h_{min}	[mm]	100	100	100	100	110	120	160
Min. edge distance / Min. randafstand / Distance au bord min.	C_{min}	[mm]	42	42	56	70	77	84	112
Tension load / Trekbelasting / Traction									
Concrete / Beton / Béton	C20/25	[kN]	3,2	4,9	6,3	8,8	10,2	11,6	17,8
Shear load / Afschuifbelasting / Cisaillement									
Concrete / Beton / Béton	C20/25	[kN]	2,9	4,1	6,3	12,5	17	23,1	25,8

¹⁾ According to / volgens / selon ETA-20/0822

Including partial safety factors γ_{Mc} and γ_f / Inclusief veiligheidsfactoren / Coefficient partiel de sécurité inclus.

ANCHOR DESIGN SOFTWARE



FOR CONSTRUCTION



DETAILED REPORT



INTUITIVE

SMART ANCHOR DESIGN SOFTWARE

FOR BUILDING PROFESSIONALS

pgb-Europe offers their own free of charge software solution for the calculation of anchorages in concrete. The user-friendly program works for mechanical and chemical anchors.

pgb-Europe biedt een gratis softwarepakket aan voor het opmaken van rekennota's voor verankeringen in beton. Het programma is gebruiksvriendelijk en berekent de lasten voor mechanische en chemische ankers.

pgb-Europe vous présente son logiciel de calcul gratuit des ancrages dans le béton. Le logiciel est convivial et vous permet de calculer les charges pour des ancrages mécaniques et chimiques.

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