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European Technical Assessment

ETA-05/0044 of 18/08/2025

English translation prepared by CSTB - Original version in French language

General Part

Technical Assessment Body issuing the European Technical Assessment:
Centre Scientifique et Technique du Bâtiment (CSTB)

Trade name:	**SPIT TRIGA Z XTREM**
Product family:	Torque-controlled expansion anchor for use in concrete: sizes M6, M8, M10, M12 M16 and M20.
Manufacturer:	Société Spit Route de Lyon F-26501 BOURG-LES-VALENCE France
Manufacturing plants:	Société Spit Route de Lyon F-26501 BOURG-LES-VALENCE
This European Technical Assessment contains:	17 pages including 14 pages of annexes which form an integral part of this assessment
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:	"Mechanical fasteners for use in concrete"
This Assessment replaces:	ETA-05/0044 of 20/08/2015

Specific Part

1 Technical description of the product

The SPIT TRIGA Z XTREM anchor is an anchor made of galvanized steel which is placed into a drilled hole and anchored by torque-controlled expansion.

The illustration and the description of the product are given in Annexes A.

2 Specification of the intended use

The performances given in Section 3 are only valid if the anchor is used in compliance with the specifications and conditions given in Annexes B.

The provisions made in this European technical assessment are based on an assumed working life of the anchor of 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product

3.1 Mechanical resistance and stability (BWR 1)

Essential characteristic	Performance
Characteristic resistance in case of static and quasi-static loading	See Annex C1 and C2
Characteristic resistance in case of seismic performance category C1	See Annex C5
Characteristic resistance in case of seismic performance category C2	See Annex C6
Durability	See Annex C6
Displacements	See Annex B1

3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Anchorages satisfy requirements for Class A1
Resistance to fire	See Annex C3 and C4

3.3 Hygiene, health and the environment (BWR 3)

Regarding dangerous substances contained in this European technical approval, there may be requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Directive, these requirements need also to be complied with, when and where they apply.

3.4 Safety in use (BWR 4)

For Basic requirement Safety in use the same criteria are valid as for Basic Requirement Mechanical resistance and stability.

3.5 Protection against noise (BWR 5)

Not relevant.

3.6 Energy economy and heat retention (BWR 6)

Not relevant.

3.7 Sustainable use of natural resources (BWR 7)

For the sustainable use of natural resources no performance was determined for this product.

3.8 General aspects relating to fitness for use

Durability and Serviceability are only ensured if the specifications of intended use according to Annex B1 are kept.

4 Assessment and verification of constancy of performance (AVCP)

According to the Decision 96/582/EC of the European Commission[1], as amended, the system of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) given in the following table apply.

Product	Intended use	Level or class	System
Metal anchors for use in concrete	For fixing and/or supporting to concrete, structural elements (which contributes to the stability of the works) or heavy units	—	1

5 Technical details necessary for the implementation of the AVCP system

Technical details necessary for the implementation of the Assessment and verification of constancy of performance (AVCP) system are laid down in the control plan deposited at Centre Scientifique et Technique du Bâtiment.

The manufacturer shall, on the basis of a contract, involve a notified body approved in the field of anchors for issuing the certificate of conformity CE based on the control plan.

The original French version is signed by:

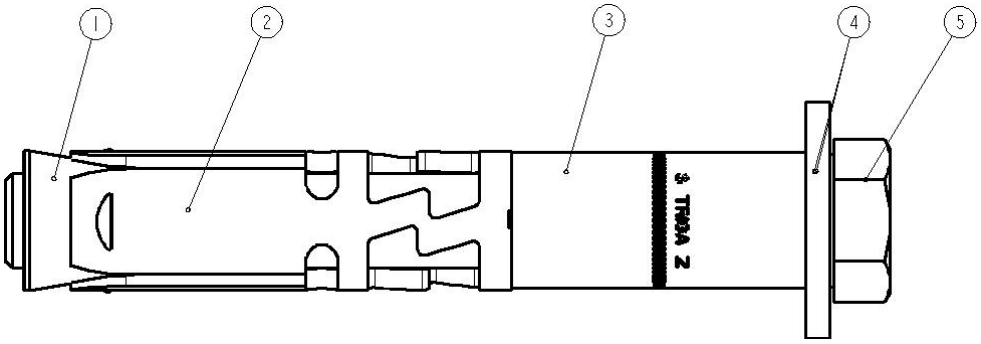
Loïc PAYET

Head of the Structure, Masonry, Partition Division

1 Official Journal of the European Communities L 254 of 08.10.1996

Installed condition

Figure A1: Assembled anchor:



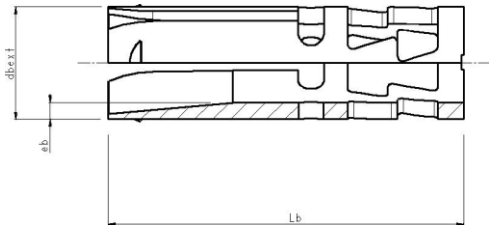
1. cone
2. expansion sleeve
3. distance sleeve
4. washer
5. screw (or threaded rod with hexagonal nut or countersunk head)

Marking on the sleeve: S TRIGA Z
S : Manufacturer SPIT
TRIGA Z : Trade name

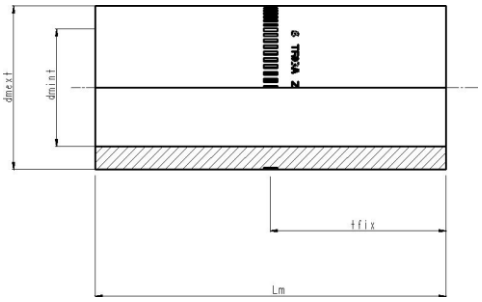
Table A1: Materials

Part	Designation	Material	Coating
1	Cone	1.0765 steel EN 10 087	Galvanised 5 μm
2	Expansion sleeve	1.5530 steel EN 10 149-2	Galvanised 5 μm
3	Distance sleeve	TS 37 a BK or S300Pb NF A 49 341	Galvanised 5 μm
4	Threaded rod	1. Steel Grade 8.8 EN 20 898-1	Galvanised 5 μm
5	Screw	Steel Grade 8.8 EN 20 898-1	Galvanised 5 μm
6	Washer	HLE S550MC	Galvanised 5 μm
7	Hexagonal nut	Grade 8 EN 20 898-2	Galvanised 5 μm

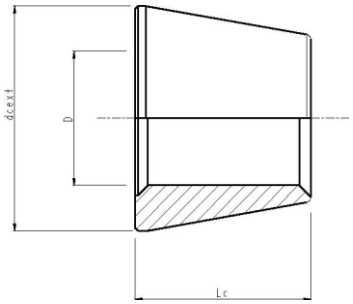
Figure A2: Versions, parts and dimensions of the anchor



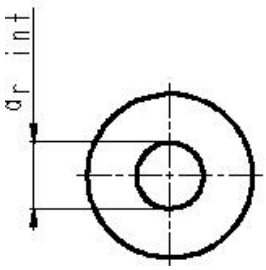
Expansion sleeve

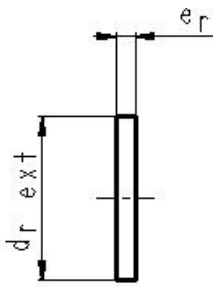


Distance sleeve

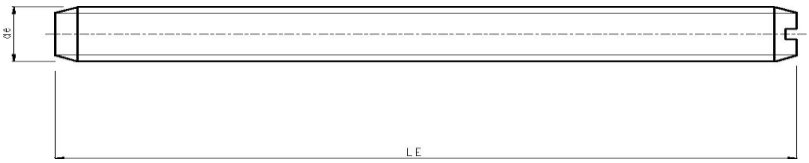


Cone

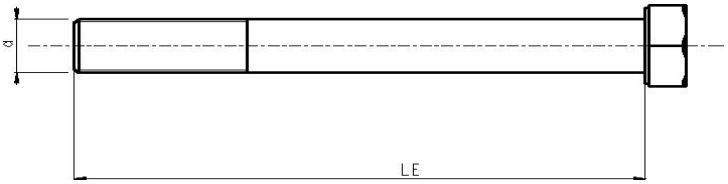




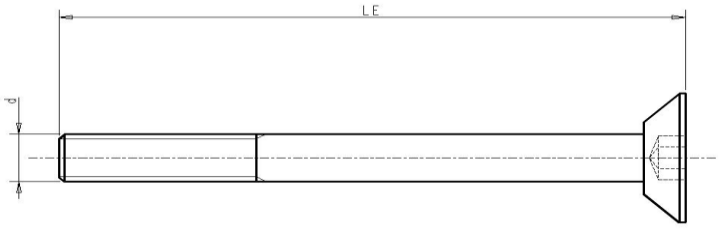
washer



Threaded rod (type E)



Screw (type V)



Countersunk head screw (type TF)

SPIT TRIGA Z XTREM expansion anchor	
Product description Parts, dimensions	**Annex A2**

Table A2: Dimensions

	Dimensions of anchor bolt SPIT TRIGA Z															
	References	**Rod**		**Washer**			**Distance sleeve**				**Expansion sleeve**			**Cone**		
	TRIGA Z	LE	d	Er	dr_{ext}	dr_{int}	Lm	dm_{ext}	dm_{int}	t_{fix}	Lb	db_{ext}	eb	Lc	dc	D
M6	**V6-10/5**	65	6	2	18	6,7	25	9,5	6,2	5	30	9,5	1,5	8	9,8	6
	V6-10/20	80					40			20						
	E6-10/50	117					70			20						
M8	**V8-12/10**	80	8	2	20	8,7	30	11,5	8,2	10	40	11,5	1,5	9,5	11,8	8
	V8-12/20	90					40			20						
	V8-12/50	80					70			50						
	E8-12/20	99					40			20						
	E8-12/35	114					55			35						
	E8-12/55	134					75			55						
	E8-12/95	174					115			95						
	TF8-12/16	85					30			16						
	TF8-12/26	95					40			26						
M10	**V10-15/10**	95	10	3	26	10,5	30	14,5	10,2	10	50	14,5	2	10,5	14,8	10
	V10-15/20	105					40			20						
	V10-15/55	95					75			55						
	E10-15/20	114					40			20						
	E10-15/35	129					55			35						
	E10/15/55	149					75			55						
	E10-15/100	194					120			100						
	TF10-15/27	105					40			27						
M12	**V12-18/10**	105	12	3	30	12,5	33	17,5	12,4	10	57	17,5	2,5	13	17,8	12
	V12-18/25	120					48			25						
	V12-18/55	105					78			55						
	E12-18/25	132					48			25						
	E12-18/45	152					68			45						
	E12-18/65	172					88			65						
	E12-18/100	207					123			100						
M16	**V16-24/10**	130	16	4	40	16,7	35	23	16,5	10	75	23,5	3,5	18,7	23,8	16
	V16-24/25	145					50			25						
	V16-24/50	145					75			50						
	E16-24/25	159					50			25						
	E16-24/55	189					80			55						
	E16-24/100	234					125			100						
M20	**V20-28/25**	170	20	4	45	20,7	56	27	20,5	25	94	27,5	3,5	19,6	27,8	20
	E20-28/25	192					56			25						
	E20-28/60	227					91			60						
	E20-28/100	267					131			100						

Specifications of intended use

Anchorages subject to:

- Static and quasi-static loading: all sizes
- Seismic performance category C1 and C2: sizes M10 to M16,
- Fire exposure: all sizes

Base materials:

- Reinforced or unreinforced normal weight concrete according to EN 206:2013+ A1:2016.
- Strength classes C20/25 to C50/60 according to EN 206:2013+A1:2016.
- Cracked and uncracked concrete.

Use conditions (Environmental conditions):

- Structures subject to dry internal conditions.

Design:

- Anchorages under static or quasi-static loading are designed in accordance with EN 1992-4:2018
- Anchorages under seismic actions (cracked concrete) are designed in accordance with EN 1992-4:2018
- Anchorages shall be positioned outside of critical regions (e.g. plastic hinges) of the concrete structure. Fastenings in stand-off installation or with a grout layer under seismic action are not covered in this European technical assessment (ETA).
- In case of requirements to resistance to fire local spalling of the concrete cover must be avoided.

Installation:

- Anchor installation carried out by appropriately qualified personnel and under the supervision of the person responsible for technical matters of the site.
- Use of the anchor only as supplied by the manufacturer without exchanging the components of an anchor.
- Anchor installation in accordance with the manufacturer's specifications and drawings and using the appropriate tools.
- Effective anchorage depth, edge distances and spacing not less than the specified values without minus tolerances.
- Hole drilling by hammer drill.
- Cleaning of the hole of drilling dust.
- Application of specified torque moment using a calibrated torque wrench.
- In case of aborted hole, drilling of new hole at a minimum distance of twice the depth of the aborted hole, or smaller distance provided the aborted drill hole is filled with high strength mortar and no shear or oblique tension loads in the direction of aborted hole.
- Drilling technique: hammer drilling
- Use category:
  - dry concrete

SPIT TRIGA Z XTREM expansion anchor	**Annex B1**
Intended Use Specifications	

Table B1: Installation parameters

		Embedment depth h_{ef}	Drill hole diameter	Depth of drill hole h_1	Thickness of fixture t_{fix}	Setting torque T_{inst}	Thickness of concrete member	Diameter of clearance hole d_f
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
M6	V6-10/5	50	10	70	5	15	100	12
	V6-10/20				20			
	E6-10/50				50			
M8	V8-12/10	60	12	80	1	25	120	14
	V8-12/20				10			
	V8-12/50				50			
	E8-12/20				20			
	E8-12/35				35			
	E8-12/55				55			
	E8-12/95				95			
	TF8-12/16				16			
	TF8-12/26				26			
M10	V10-15/10	70	15	90	10	50	140	17
	V10-15/20				20			
	V10-15/55				55			
	E10-15/20				20			
	E10-15/35				35			
	E10/15/55				55			
	E10-15/100				100			
	TF10-15/27				27			
M12	V12-18/10	80	18	105	10	80	160	20
	V12-18/25				25			
	V12-18/55				55			
	E12-18/25				25			
	E12-18/45				45			
	E12-18/65				65			
	E12-18/100				100			
M16	V16-24/10	100	24	131	10	120	200	26
	V16-24/25				25			
	V16-24/50				50			
	E16-24/25				25			
	E16-24/55				55			
	E16-24/100				100			
M20	V20-28/25	125	28	157	25	200	250	31
	E20-28/25				25			
	E20-28/60				60			
	E20-28/100				100			

SPIT TRIGA Z XTREM expansion anchor

Intended Use
Installation parameters

Annex B2

Figure B1: Installed anchor

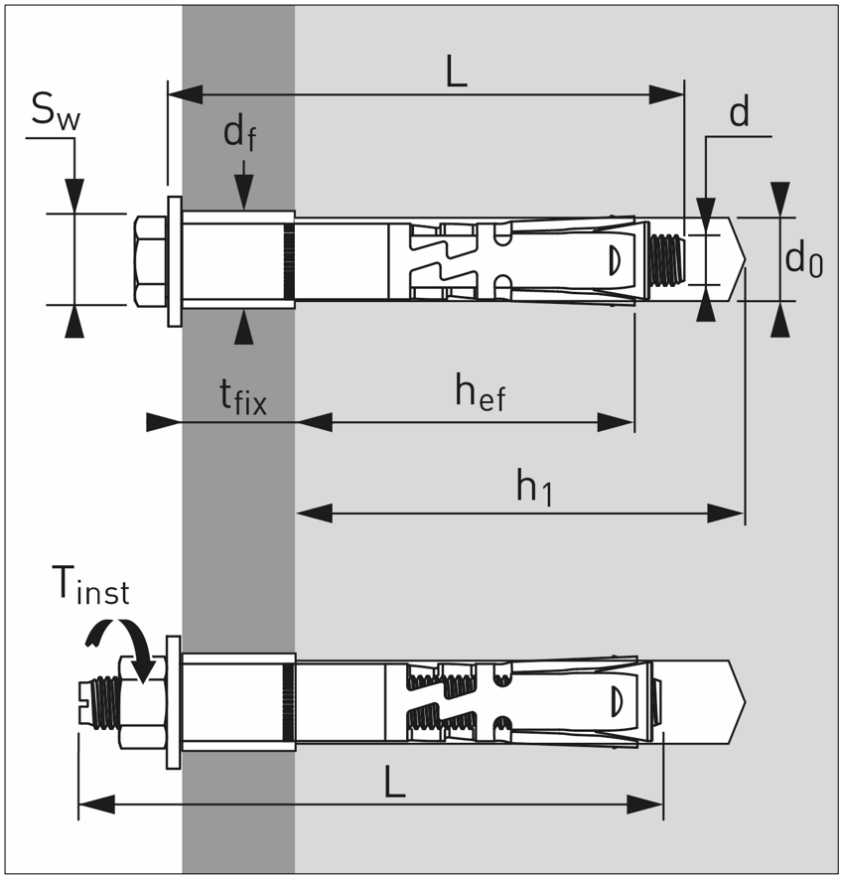
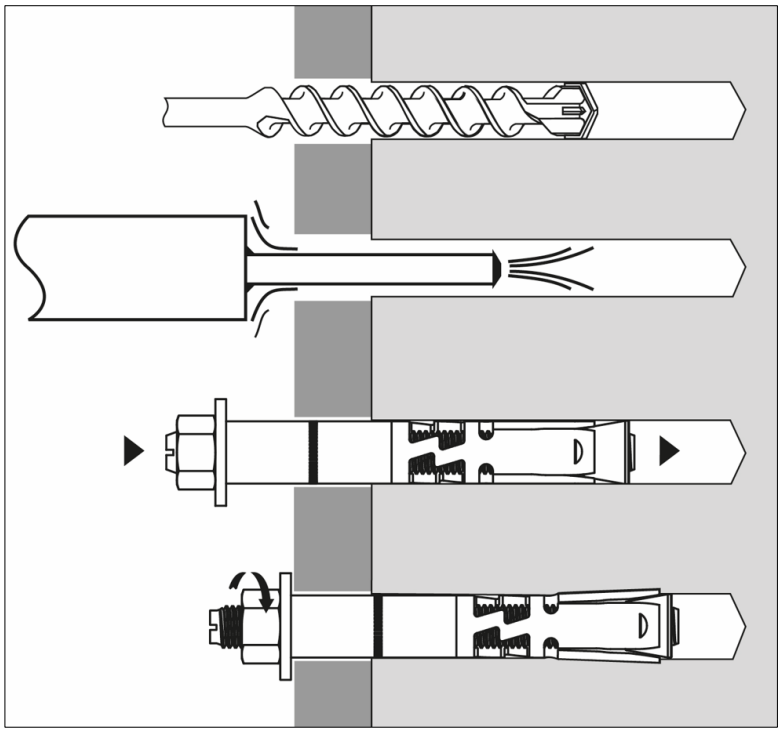


Table B2: Minimum spacing and edge distance, minimum thickness member

			M6	M8	M10	M12	M16	M20
Min. member thickness	h_{min}	(mm)	100	120	140	160	200	250
Minimum spacing	s_{min}	(mm)	50	60	70	80	100	125
For c_{min} =		(mm)	80	100	100	160	180	300
Minimum edge distance	c_{min}	(mm)	50	60	70	80	100	150
For s_{min} =		(mm)	100	100	160	200	220	300

Figure B3: Installation steps



SPIT TRIGA Z XTREM expansion anchor	**Annex B3**
Intended Use Installation instructions	

Table C1: Characteristic values of resistance under tension load in case of static and quasi static loading in cracked and uncracked concrete

				M6	M8	M10	M12	M16	M20
Steel failure									
Characteristic resistance		$N_{Rk,s}$	[kN]	16,1	29,3	46,4	67,4	125,6	196,0
Partial safety factor		$\gamma_{Ms,N}$	[-]	1,50					
Pull-out failure (cracked and uncracked concrete)									
Characteristic resistance in concrete C20/25	uncracked	$N_{Rk,p,uncr}$	[kN]	17,8	19,8	29,5	36,1	50,4	70,4
	cracked	$N_{Rk,p,cr}$	[kN]	5,0	12,0	16,0	25,8	36,0	50,3
Installation safety factor		γ_{inst}	[-]	1,00					
Increasing factor for $N_{Rk,p}$ for cracked and uncracked concrete $\psi_c = (f_{ck}/20)^{0,5}$	C30/37	ψ_c	[-]	1,22					
	C40/50	ψ_c	[-]	1,41					
	C50/60	ψ_c	[-]	1,58					
Concrete cone failure and splitting (cracked and uncracked concrete)									
Effective embedment depth		h_{ef}	[mm]	50	60	70	80	100	125
Installation safety factor		γ_{inst}	[-]	1,00					
Factor		$k_{ucr,N}$	[-]	11,0					
		$k_{cr,N}$	[-]	7,7					
Char. spacing	concrete cone failure	$s_{cr,N}$	[mm]	150	180	210	240	300	375
	splitting failure	$s_{cr,sp}$	[mm]	300	300	300	300	380	480
Char. edge distance	concrete cone failure	$c_{cr,N}$	[mm]	75	90	105	120	150	185
	splitting failure	$c_{cr,sp}$	[mm]	150	150	150	150	190	240

Table C2: Characteristic values of resistance under shear load in case of static and quasi-static loading

			M6	M8	M10	M12	M16	M20
Steel failure without lever arm								
Screw and countersunk versions – type V and TF								
Char. resistance	$V^0_{Rk,s}$	[kN]	23,4	32,6	49,1	72,7	117,2	173,5
Partial safety factor	$\gamma_{Ms,V}$ 1)	[-]	1,25					
Ductility factor	k_7	[-]	1,00					
Threaded rod version – type E								
Char. resistance	$V^0_{Rk,s}$	[kN]	14,3	19,0	31,0	47,4	93,1	109,9
Partial safety factor	$\gamma_{Ms,V}$ 1)	[-]	1,25					
Ductility factor	k_7	[-]	1,00					
Threaded rod only (without distance sleeve)								
Char. resistance	$V^0_{Rk,s}$	[kN]	8,0	14,6	23,2	33,7	62,8	98,0
Partial safety factor	$\gamma_{Ms,V}$ 1)	[-]	1,25					
Ductility factor	k_7	[-]	1,00					
Steel failure with lever arm								
Char. bending moment	$M^0_{Rk,s}$	[Nm]	12	30	60	105	266	519
Ductility factor	k_7	[-]	1,00					
Installation safety factor	γ_{inst}	[-]	1,25					
Concrete pry-out failure								
Pry-out factor	k_8	[-]	1,0	2,0				
Installation safety factor	γ_{inst}	[-]	1, 0					
Concrete edge failure								
Effective length of anchor under shear loading	l_f	[mm]	50	60	70	80	100	125
Outside diameter of anchor	d_{nom}	[mm]	9,5	11,5	14,5	17,5	23,5	27,4
Installation safety factor	γ_{inst}	[-]	1,0					

SPIT TRIGA Z XTREM expansion anchor

Performances
Characteristic resistance under shear load

Annex C2

Table C3: Characteristic tension resistance under fire exposure in cracked concrete

			M6	M8	M10	M12	M16	M20
Steel failure								
Characteristic resistance	R30 $N_{Rk,s,fi}$	[kN]	0,9	2,8	4,5	17,6	32,8	51,1
	R60 $N_{Rk,s,fi}$	[kN]	0,6	2,1	3,3	11,4	21,3	33,2
	R90 $N_{Rk,s,fi}$	[kN]	0,4	1,3	2,1	5,3	9,8	15,3
	R120 $N_{Rk,s,fi}$	[kN]	0,3	0,9	1,5	2,2	4,1	6,4
Pullout failure								
Characteristic resistance in concrete ≥ C20/25	R30 $N_{Rk,p,fi}$	[kN]	1,2	3,0	4,0	-	-	-
	R60 $N_{Rk,p,fi}$	[kN]	1,2	3,0	4,0	-	-	-
	R90 $N_{Rk,p,fi}$	[kN]	1,2	3,0	4,0	-	-	-
	R120 $N_{Rk,p,fi}$	[kN]	1,0	2,4	3,2	-	-	-
Concrete cone and splitting failure								
Characteristic resistance in concrete ≥ C20/25	R30 $N^0_{Rk,c,fi}$	[kN]	3,2	5,0	7,4	10,3	18,0	31,4
	R60 $N^0_{Rk,c,fi}$	[kN]	3,2	5,0	7,4	10,3	18,0	31,4
	R90 $N^0_{Rk,c,fi}$	[kN]	3,2	5,0	7,4	10,3	18,0	31,4
	R120 $N^0_{Rk,c,fi}$	[kN]	2,5	4,0	5,9	8,2	14,4	25,2
Characteristic spacing	$s_{cr,N,fi}$	[mm]	$4 \times h_{ef}$					
Characteristic edge distance	$c_{cr,N,fi}$	[mm]	$2 \times h_{ef}$					

In absence of other national regulations, the partial safety factor for resistance under fire exposure $\gamma_{M,fi} = 1,0$ is recommended

Table C4: Characteristic shear resistance under fire exposure in cracked concrete

			M6	M8	M10	M12	M16	M20
Steel failure without lever arm								
Characteristic resistance	R30 $V_{Rk,s,fi}$	[kN]	0,9	2,8	4,5	17,6	32,8	51,1
	R60 $V_{Rk,s,fi}$	[kN]	0,6	2,1	3,3	11,4	21,3	33,2
	R90 $V_{Rk,s,fi}$	[kN]	0,4	1,3	2,1	5,3	9,8	15,3
	R120 $V_{Rk,s,fi}$	[kN]	0,3	0,9	1,5	2,2	4,1	6,4
Steel failure with lever arm								
Characteristic resistance in concrete ≥ C20/25	R30 $M^0_{Rk,s,fi}$	[kN]	0,9	2,9	5,8	27,3	69,5	135,5
	R60 $M^0_{Rk,s,fi}$	[kN]	0,6	2,1	4,2	17,8	45,2	88,1
	R90 $M^0_{Rk,s,fi}$	[kN]	0,4	1,3	2,7	8,2	20,9	40,7
	R120 $M^0_{Rk,s,fi}$	[kN]	0,3	0,9	1,9	3,4	8,7	17,0
Concrete pry-out failure								
Pry-out factor	k_8	[-]	1,0	2,0	2,0	2,0	2,0	2,0
Characteristic resistance	R30 $V_{Rk,cp,fi}$	[kN]	3,2	5,0	7,4	10,3	18,0	31,4
	R60 $V_{Rk,cp,fi}$	[kN]	3,2	5,0	7,4	10,3	18,0	31,4
	R90 $V_{Rk,cp,fi}$	[kN]	3,2	5,0	7,4	10,3	18,0	31,4
	R120 $V_{Rk,cp,fi}$	[kN]	2,5	4,0	5,9	8,2	14,4	25,2
Concrete edge failure								
Eff. length of anchor under shear loading	l_f	[mm]	50	60	70	80	100	125
Outside diameter of anchor	d_{nom}	[mm]	6	8	10	12	16	20

In absence of other national regulations, the partial safety factor for resistance under fire exposure $\gamma_{M,fi} = 1,0$ is recommended.

SPIT TRIGA Z XTREM expansion anchor

Performances
Characteristic shear resistance under fire exposure

Annex C4

Table C5: Characteristic values of resistance under tension load and shear load in case of seismic category C1

Anchor sizes			**M6**	**M8**	**M10**	**M12**	**M16**	**M20**
Tension load								
Steel failure								
Characteristic resistance	$N_{Rk,s,C1}$	[kN]	-	-	46	67	126	-
Partial safety factor	$\gamma_{Ms,C1}$ [1)]	[-]	-	-	1,0			
Pull-out failure								
Characteristic resistance	$N_{Rk,p,C1}$	[kN]	-	-	9,2	25,8	36,0	-
Installation safety factor	γ_{inst}	[-]	-	-	1,0			-
Concrete cone failure [2)]								
Installation safety factor	γ_{inst}	[-]	-	-	1,0			-
Factor	$k_{cr,N}$	[-]	-	-	7,7			-
Splitting failure [2)]								
Installation safety factor	γ_{inst}	[-]	-	-	1,0			-
Shear loads: Screw and countersunk versions – type V and TF, Threaded rod version – type E								
Steel failure without lever arm								
Characteristic resistance	$V_{Rk,s,C1}$	[kN]	-	-	17,1	28,4	60,5	-
Partial safety factor	$\gamma_{Ms,C1}$ [1)]	[-]	-	-	1,25			-
Concrete pry-out failure								
Installation safety factor	γ_{inst}	[-]	-	-	1,00			-

[1)] In absence of other national regulations

[2)] For concrete cone failure and splitting failure see EN 1992-4:2018

Table C6: Characteristic values of resistance under tension load and shear load in case of seismic category C2

Anchor sizes			**M6**	**M8**	**M10**	**M12**	**M16**	**M20**
Tension load								
Steel failure								
Characteristic resistance	$N_{Rk,s,C2}$	[kN]	-	-	46	67	126	-
Partial safety factor	$\gamma_{Ms,C2}$	[-]	-	-	1,0			-
Pull-out failure								
Characteristic resistance	$N_{Rk,p,\ C2}$	[kN]	-	-	5,3	9,4	16,5	-
Installation safety factor	γ_{inst}	[-]	-	-	1,0			-
Displacement at DLS	$\delta_{N,C2\ (DSL)}$	[mm]	-	-	3,76	2,64	6,56	-
Displacement at ULS	$\delta_{N,C2\ (ULS)}$	[mm]	-	-	15,87	12,09	17,75	-
Shear loads: Screw and countersunk versions – type V and TF, Threaded rod version – type E								
Steel failure without lever arm								
Characteristic resistance	$V_{Rk,s,C2}$	[kN]	-	-	14,5	28,4	58,1	-
Partial safety factor	$\gamma_{Ms,C2}$	[-]	-	-	1,25			-
Displacement at DLS	$\delta_{V,C2\ (DSL)}$	[mm]	-	-	2,41	5,83	6,62	-
Displacement at ULS	$\delta_{V,C2\ (ULS)}$	[mm]	-	-	7,48	8,92	11,14	-

Table C7: Displacements under tension loading

Screw, threaded rod and countersunk head versions			M6	M8	M10	M12	M16	M20
Tension load in uncracked concrete C20/25		[kN]	7,7	9,5	14,1	17,2	24,0	33,5
Displacement	δ_{N0}	[mm]	0,1	0,1	0,1	0,1	0,1	0,1
	$\delta_{N\infty}$	[mm]	0,1	0,1	0,1	0,1	0,1	0,1
Tension load in uncracked concrete C50/60		[kN]	7,7	13,9	21,8	26,6	37,2	51,9
Displacement	δ_{N0}	[mm]	0,1	0,2	0,4	0,5	0,8	1,2
	$\delta_{N\infty}$	[mm]	0,1	0,2	0,4	0,5	0,8	1,2
Tension load in cracked concrete C20/25		[kN]	2,4	5,7	7,6	12,3	17,1	23,9
Displacement	δ_{N0}	[mm]	0,6	0,6	0,6	0,7	0,7	0,8
	$\delta_{N\infty}$	[mm]	0,6	0,6	0,7	0,7	1,0	1,0
Tension load in cracked concrete C50/60		[kN]	3,7	8,9	11,8	19,0	26,6	37,1
Displacement	δ_{N0}	[mm]	0,7	0,9	1,1	1,3	1,7	2,2
	$\delta_{N\infty}$	[mm]	0,7	0,9	1,1	1,3	1,7	2,2

Table C8: Displacements under shear loads

Screw and countersunk head versions			M6	M8	M10	M12	M16	M20
Shear load in cracked and uncracked concrete C20/25 to C50/60		[kN]	13,4	18,6	28,1	41,5	67,0	99,1
Displacement	δ_{V0}	[mm]	6,0	6,4	6,9	7,4	8,3	9,4
	$\delta_{V\infty}$	[mm]	9,0	9,7	10,4	11,0	12,4	14,1

Threaded rod versions			M6	M8	M10	M12	M16	M20
Shear load in cracked and uncracked concrete C20/25 to C50/60		[kN]	8,2	10,9	17,7	27,1	53,2	62,8
Displacement	δ_{V0}	[mm]	4,5	4,8	5,0	5,3	5,8	6,5
	$\delta_{V\infty}$	[mm]	6,7	7,1	7,5	7,9	8,8	9,8

Additional displacement due to anular gap between anchor and fixture has to be taken into account.

SPIT TRIGA Z XTREM expansion anchor

Displacements

Annex C7