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SPIT TRIGA Z
Heavy Duty Anchor

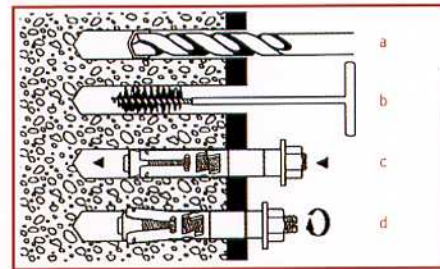
Safety expansion anchor for heavy loads



FEATURES

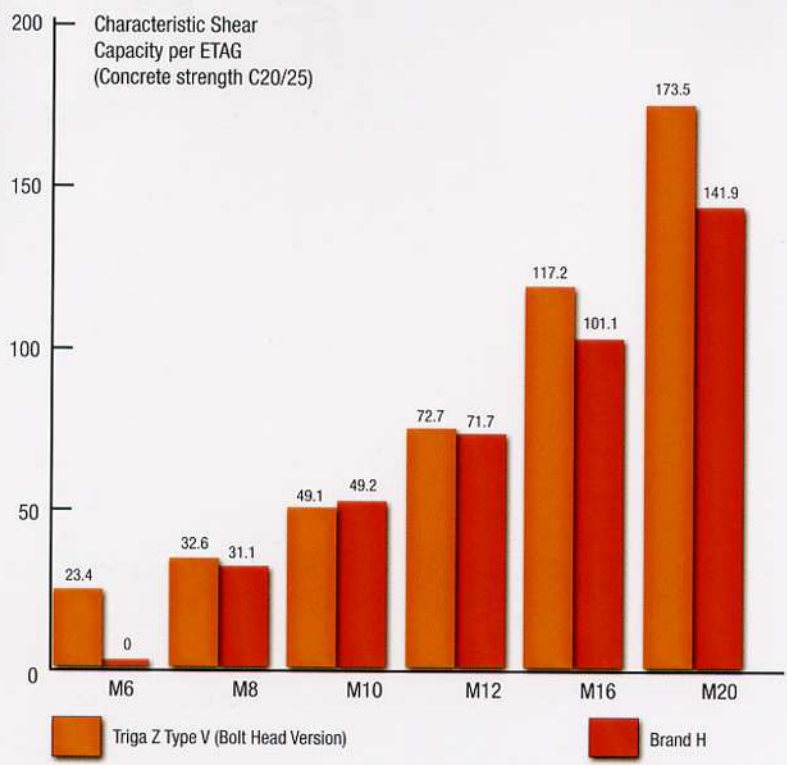
- Quick and easy through fixing.
- Simple bolt action expansion.
- Resistant to high loads (especially suitable for dynamic loads).
- Performance can be improved by deeper embedment.
- Clamps down part to be fixed.
- SPIT TRIGA Z for cracked concrete, you can also use in no cracked concrete.
- Full steel anchor.
- Z shape collapse system: Z shape shear during tightening. Ensures a good pressure between the part to be fixed and the concrete.
- Bolt and threaded rod: 8.8 quality steel for high performances.
- M6 Bolt version available.
- 5 versions: screw, bolt, countersunk, ring, hook versions available.
- Can be used with cracked or non-cracked concrete (ETA).
- ETA approval.
- 2 patents, on Z shape anti-rotation and Z shearing shape.

INSTALLATION



- Drill the hole to the required depth.
- Remove the drilling debris from the hole whenever there is a risk that it will prevent TRIGA Z from penetrating to its minimum anchorage depth.
- Insert the anchor and drive it home with a hammer if necessary. Tighten to the necessary torque using a torque wrench.
- With the "E" version, after expanding you may loosen the nut and then tighten the threaded stud with a screwdriver to ensure fastening with minimum overrun; then retighten the nut to the required torque.

ANCHOR SIZE (mm)	INSTALLATION DETAILS							
	Anchor length, L (mm)	For fixtures up to, t_{fix} (mm)	Thread size, d	Hole diameter, d_o (mm)	Min. anchor depth, h_{ef} (mm)	Hole depth, h_L (mm)	Fixture hole diameter, d_f (mm)	Tight torque, T_{inst} (Nm)
V6-10/5	65	5	M6	10	50	70	12	15
V6-10/20	80	20						
E6-10/50	117	50						
V8-12/10	80	10	M8	12	60	80	14	25
V8-12/20	90	20						
V8-12/50	120	50						
E8-12/20	99	20						
E8-12/35	114	35						
E8-12/55	134	55						
V10-15/10	95	10	M10	15	70	90	17	50
V10-15/20	105	20						
V10-15/55	140	55						
E10-15/20	114	20						
E10-15/35	129	35						
E10-15/55	149	55	M12	18	80	105	20	80
E10-15/100	194	100						
V12-18/10	105	10						
V12-18/25	120	25						
V12-18/55	150	55						
E12-18/25	132	25						
E12-18/45	152	45	M16	24	100	131	26	120
E12-18/65	172	65						
E12-18/100	207	100						
V16-24/10	130	10						
V16-24/25	145	25	M20	28	125	157	31	200
V16-24/50	170	50						
E16-24/25	159	25						
E16-24/55	189	55						
E16-24/100	234	100	M20	28	125	157	31	200
V20-28/25	170	25						
E20-28/25	192	25						
E20-28/60	227	60						
E20-28/100	267	100						



2 Patents on TRIGA Z anchor

PATENTED N°EP1211430 BREVETÉ
Patent on the Z shearing shapes - clamp down fixture

PATENTED N°EP1367266 BREVETÉ
Patent on the Z anti-rotation shapes (cross section)

MINIMUM DIMENSIONS			RECOMMENDED LOAD (kN)			PART NO.	
Edge Distance C_{min} (mm)	Anchor spacing, S_{min} (mm)	Substrate thickness, h_{min} (mm)	Shear V_{rec} >C20/25	Tension, N_{rec}			Zinc Plated
				Concrete compressive strength, f_b			
				25MPa	30MPa	37MPa	
50	50	100	13.4	8.5	9.4	10.4	Triga Z V6-10/15
			13.4				Triga Z V6-10/20
			8.1				Triga Z E6-10/50
60	60	120	18.6	11.1	12.2	13.5	Triga Z V8-12/10
			18.6				Triga Z V8-12/20
			18.6				Triga Z V8-12/50
			10.9				Triga Z E8-12/20
			10.9				Triga Z E8-12/35
			10.9				Triga Z E8-12/55
			10.9				Triga Z E8-12/95
70	70	140	28.1	14.0	15.4	17.1	Triga Z V10-15/10
			28.1				Triga Z V10-15/20
			28.1				Triga Z V10-15/55
			17.7				Triga Z E10-15/20
			17.7				Triga Z E10-15/35
			17.7				Triga Z E10-15/55
			17.7				Triga Z E10-15/100
80	80	160	41.6	17.2	18.9	20.9	Triga Z V12-18/10
			41.6				Triga Z V12-18/25
			41.6				Triga Z V12-18/55
			27.1				Triga Z E12-18/25
			27.1				Triga Z E12-18/45
			27.1				Triga Z E12-18/65
			27.1				Triga Z E12-18/100
100	100	200	67.0	24.0	26.4	29.3	Triga Z V16-24/10
			67.0				Triga Z V16-24/25
			67.0				Triga Z V16-24/50
			53.2				Triga Z E16-24/25
			53.2				Triga Z E16-24/55
53.2	Triga Z E16-24/100						
150	125	250	99.1	33.5	36.8	40.8	Triga Z V20-28/25
			62.8				Triga Z E20-28/25
			62.8				Triga Z E20-28/60
			62.8				Triga Z E20-28/100



The Triga Z Safety Anchor is a heavy duty, torque setting, thick-sleeve expansion anchor

PRINCIPAL APPLICATIONS

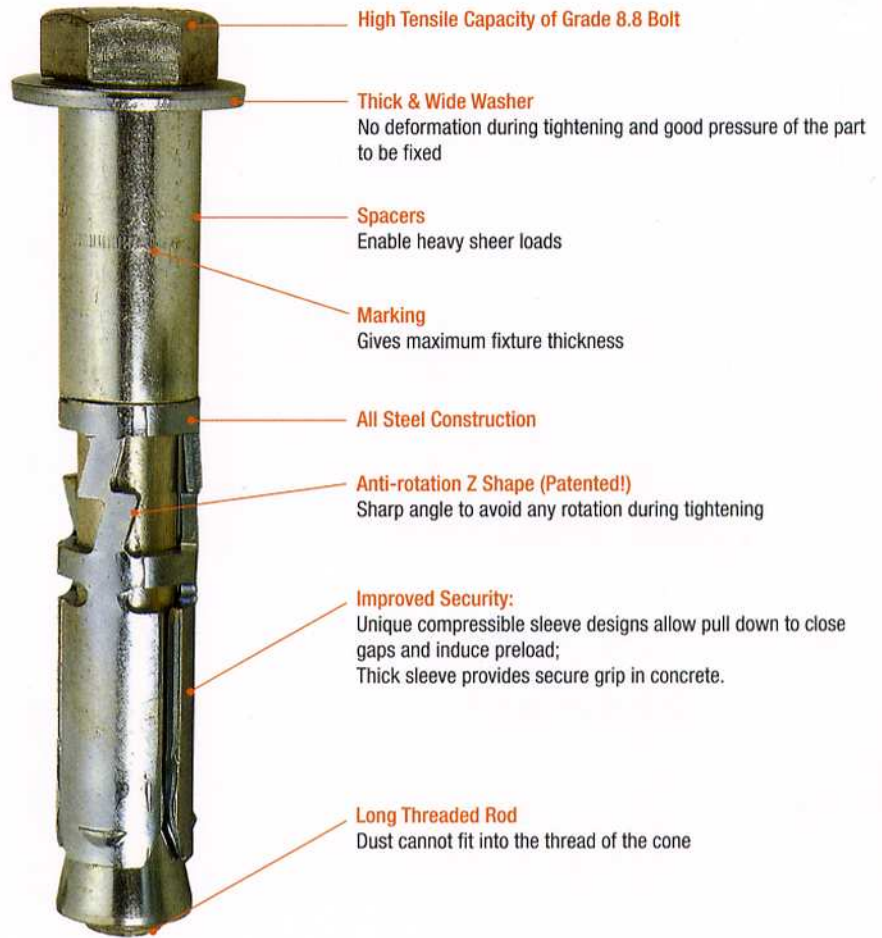
- structural beams and columns
- machinery and heavy plant hold down
- lift guide rails, overhead crane rails
- safety barrier
- heavy duty & suitable for cyclic loading and seismic conditions



Example of an application



Main upgrading project using Split Triga Z for bracket of SAI



High Tensile Capacity of Grade 8.8 Bolt

Thick & Wide Washer

No deformation during tightening and good pressure of the part to be fixed

Spacers

Enable heavy sheer loads

Marking

Gives maximum fixture thickness

All Steel Construction

Anti-rotation Z Shape (Patented!)

Sharp angle to avoid any rotation during tightening

Improved Security:

Unique compressible sleeve designs allow pull down to close gaps and induce preload;
Thick sleeve provides secure grip in concrete.

Long Threaded Rod

Dust cannot fit into the thread of the cone

TRIGA Z
Pigtail Version



TRIGA Z
Ring Version



TRIGA Z
Countersunk Version



TRIGA Z
Bolt Version



TRIGA Z
Loose Nut Version



Various TRIGA Z Heads Available!

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AIK LEE INDUSTRIES SUPPLY PTE LTD

8 Tuas Avenue 10 Singapore 639132

Construction - Tel: (65) 6744 1555 Fax: (65) 6744 9577 / (65) 6744 6922
Industrial - Tel: (65) 6560 0866 Fax: (65) 6560 9557 / (65) 6562 4737
www.aiklee.com.sg ✉ : sales@aiklee.com.sg