

NCC COMPLIANT AS5216 CONFORMING

THROUGH BOLT NUT & WASHER

Range M10 - M20

Zinc Plated Dry, internal applications

FEATURES & BENEFITS

- Ideal for safety critical & fire rated applications.
- Intended working life of 50 years.
- Comprehensive range from M10 to M20.
- ETA rating Seismic C2* for all anchor sizes.
- Fire rating to 120 minutes for all anchor sizes.

APPLICATIONS/TRADES

- Structural steel connections to concrete.
- Safety barriers.
- Formwork restraint.
- Bottom plate fixing.
- Racking.





Chamfered impact face prevents thread damage during installation



Thread size = hole size, optimising capacity per hole



Long thread accommodates a wide range of fixture thicknesses



COMPLIANCE











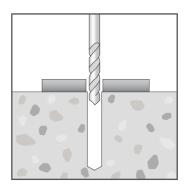


THROUGH BOLT **NUT & WASHER** NCC COMPLIANT | AS5216 CONFORMING

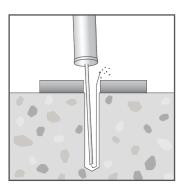
RANGE												
Product Code	Pack Qty	Thread size	Anchor length (mm)	Drill hole Ø (mm)	Drill hole depth (mm) @ tfix, max	Minimum concrete thickness (mm)	Maximum fixture thickness (mm)	Fixture clearance hole Ø (mm)				
			I _t	d _o	h ₁	h _{min}	t _{fix, max}	d _f				
ATBMZ10095ETA	25	M10	95	10	85	110	10	12				
ATBMZ10105ETA	25		105	10			20					
ATBMZ10145ETA	25		145	10			60					
ATBMZ12115ETA	25	M12	115	12	105	140	10	14				
ATBMZ12125ETA	25		125	12			20					
ATBMZ12145ETA	15		145	12			40					
ATBMZ12165ETA	15		165	12			60					
ATBMZ12205ETA	10		205	12			100					
ATBMZ16145ETA	10	M16	145	16	120	170	20	18				
ATBMZ16165ETA	5		165	16			40					
ATBMZ16225ETA	5		225	16			100					
ATBMZ20200ETA	5	M20	200	20	135	200	60	22				

For a fixture thickness ($t_{\rm fix}$) that is less than the ($t_{\rm fix,max}$) value tabled above: - increase both the drill hole depth ($h_{\rm 1}$) & concrete thickness ($h_{\rm min}$) by ($t_{\rm fix,max}$ - $t_{\rm fix}$ actual) Note:

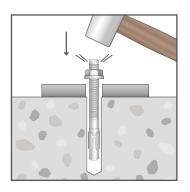
INSTALLATION



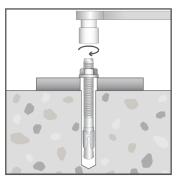
Drill hole through fixture into substrate to the specified diameter and depth.



Clear hole of drilling debris.



Insert anchor into hole and drive until anchor is flush with the surface of the fixture.



Using a wrench, expand anchor by tightening to the specified installation torque.



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PRODUCT INSTALL & PERFORMANCE INFORMATION											
								Design Capacities			
Product Code	Anchor length (mm)	Maximum fixture thickness (mm)	Drill hole depth @ tfix, max (mm)	Minimum concrete thickness (mm)	Socket size AF (mm)	Installation torque (Nm)	Uncracked concrete - tension (kN)	Uncracked concrete - shear (kN)			
	I _t	t _{fix, max}	h ₁	h _{min}	SW	T _{inst}	$N_{ m Rd}$	\mathbf{V}_{Rd}			
ATBMZ10095ETA	95	10	85	110	17	45	10.8	13.3			
ATBMZ10105ETA	105	20									
ATBMZ10145ETA	145	60									
ATBMZ12115ETA	115	10	105	140	19	60	16.3	23.3			
ATBMZ12125ETA	125	20									
ATBMZ12145ETA	145	40									
ATBMZ12165ETA	165	60									
ATBMZ12205ETA	205	100									
ATBMZ16145ETA	145	20	120	170	24	110	24.7	40.0			
ATBMZ16165ETA	165	40									
ATBMZ16225ETA	225	100									
ATBMZ20200ETA	200	60	135	200	30	200	32.5	63.3			

Note:

Concrete cylinder compressive strength = 32MPa.

Single anchor capacity - no nearby edge, minimum recommended concrete thickness.

For combined load cases (tension & shear) - must also comply with $(N^*/N_{Pd}) + (V^*/V_{Pd}) \le 1.2$.

Important Disclaimer: Product performance information contained herein is based on ETA certificate data and AS5216:2021 inputs as appropriate. Capacity information is limited to very simple load case configurations and is provided to enable a relative comparison within and across product ranges. The design of an anchoring solution for a particular application should be conducted by an appropriately qualified design professional.

BREMICK

^{*} Seismic C1 & C2 performance requires the use of the Seismic Protector Sleeve (SPS) - contact Bremick for details.