

NON SAFETY CRITICAL

THROUGH BOLT

M6 - M20 sizes

Stainless Steel Studs
Marine & external applications

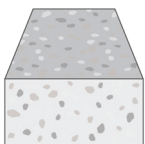
FEATURES & BENEFITS

- Medium to heavy duty torque controlled expansion anchor.
- Convenient through fixture fastening.
- Load immediately after installing.
- Extensive range covers a multitude of applications.
- Optimised for high shear loads.

APPLICATIONS/TRADES

- Warehouse racking.
- Conveyor lines / production plant.
- Plant room equipment hold down.
- Safety barriers.
- Timber bottom plate hold down.

SUBSTRATE SUITABILITY



UNCRACKED
CONCRETE



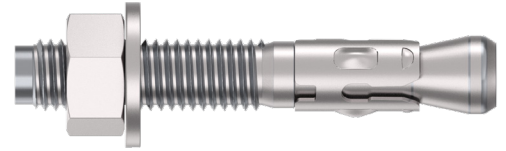
- Long thread section accommodates a wide range of fixture thicknesses.
- Robust form factor makes it ideal for tough conditions.
- Cold forged construction ensures superior strength and reliability.



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RANGE



HEXAGONAL FLANGE NUT HEAD

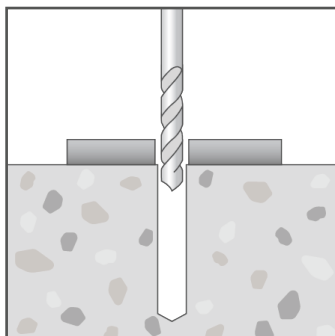
Product Code	Pack Qty	Anchor/ Drill hole Ø (mm)	Thread size	Anchor length (mm)	Maximum fixture thickness (mm)	Drill hole depth (mm) @ $t_{fix, max}$	Minimum embedment depth (mm) @ $t_{fix, max}$	Fixture clearance hole Ø (mm)
				l_t	$t_{fix, max}$	h_1	h_{nom}	
ATBM6060652	50	6	M6	65	35	40	30	8
ATBM6080502	20	8	M8	50	10	50	40	10
ATBM6080602	50	8	M8	60	20	50	40	10
ATBM6080802	25	8	M8	80	40	50	40	10
ATBM6080902	20	8	M8	90	50	50	40	10
ATBM6100652	25	10	M10	65	15	60	50	12
ATBM6100752	25	10	M10	75	25	60	50	12
ATBM6100902	20	10	M10	90	40	60	50	12
ATBM6101202	20	10	M10	120	70	60	50	12
ATBM6120802	20	12	M12	80	20	75	60	14
ATBM6121002	20	12	M12	100	40	75	60	14
ATBM6121202	20	12	M12	120	60	75	60	14
ATBM6121402	20	12	M12	140	80	75	60	14
ATBM6161052	20	16	M16	105	25	95	80	18
ATBM6161252	20	16	M16	125	45	95	80	18
ATBM6161402	20	16	M16	140	60	95	80	18
ATBM6161802	10	16	M16	180	100	100	80	18
ATBM6201252	10	20	M20	125	25	120	100	24
ATBM6201602	10	20	M20	160	60	120	100	24

Note: For a fixture thickness (t_{fix}) that is less than the $t_{fix, max}$ value tabled above:
 - increase both the drill hole depth (h_1) & concrete thickness (h_{min}) by ($t_{fix, max} - t_{fix}$ actual)

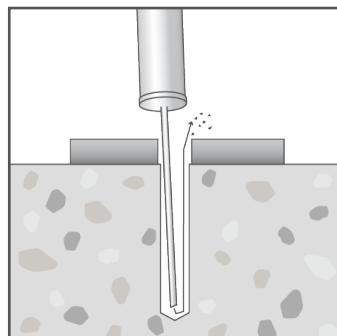
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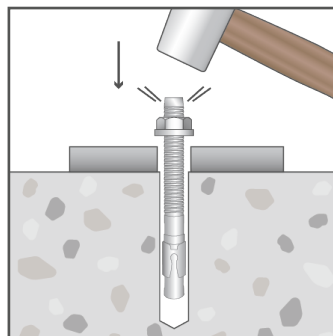
INSTALLATION



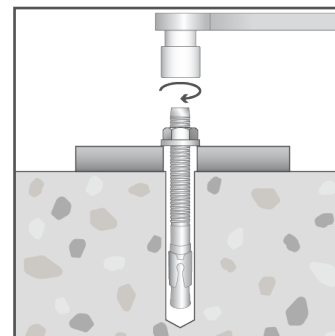
Drill hole through fixture into substrate to the specified diameter and depth.



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.

PRODUCT INSTALL & PERFORMANCE INFORMATION

Anchor / Drill hole Ø (mm)	Minimum embedment depth	Minimum substrate thickness	Socket size AF (mm)	Installation torque (Nm)	Critical anchor spacing (mm)	Critical anchor edge distance (mm)	Recommended Capacities	
							Tensile (kN)	Shear (kN)
d_{nom} / d_o	h_{nom}	h_{min}	SW	T_{inst}	s_{cr}	c_{cr}	N_{rec}	V_{rec}
6	30	60	10	5	75	40	1.9	2.5
8	40	80	13	15	100	50	3.0	3.9
10	50	100	16	30	120	60	4.1	5.3
12	60	120	18	45	150	75	5.5	7.6
16	80	160	24	110	200	100	8.4	12.2
20	100	200	30	180	240	120	11.7	16.7

Note: Recommended capacities are based on:

- Single anchor.
- Critical anchor spacing and edge distance values.
- 20MPa concrete compressive strength.
- (Characteristic ultimate concrete capacities / 3) & (characteristic ultimate steel capacities / 2.5).
- Shear load directed away from concrete edge.
- For combined load cases (tension & shear) - must also comply with $(N_{app} / N_{rec}) + (V_{app} / V_{rec}) \leq 1.2$.

Important Disclaimer: Capacity information is limited to the simple scope above and is provided to enable a relative comparison within and across product ranges. Please contact Bremick to enable an anchoring solution to be optimised for your particular anchoring application.

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