PRODUCT DATA

XBolt® Screw Anchor Mechanical Galvanised

XBolt® is a single unit screw type anchor that can be used in solid concrete applications. Fixing is achieved by screwing the anchor into a drilled hole in concrete. As it is screwed in, the anchor taps the hole, thus enabling it to produce a mechanical interlock with the concrete.

Applications
• Hand rail fastening • Form-work support fastening • Mechanical, electrical and pipe bracket fastening • Bottom plate fixing into concrete slabs • Pallet racking

Material	CS Carbon Steel
Finish	MGAL Mechanical Galvanised

Part	QFind	Dia	Length
		Ø (mm)	(mm)
MXHMSGM060030	**MXH100**	M6	30
MXHMSGM060050	**MXH101**		50
MXHMSGM060075	**MXH102**		75
MXHMSGM060100	**MXH103**		100
MXHMSGM080050	**MXH104**	M8	50
MXHMSGM080060	**MXH105**		60
MXHMSGM080075	**MXH106**		75
MXHMSGM080100	**MXH107**		100
MXHMSGM100060	**MXH108**	M10	60
MXHMSGM100075	**MXH109**		75
MXHMSGM100100	**MXH110**		100
MXHMSGM100120	**MXH111**		120
MXHMSGM100150	**MXH112**		150
MXHMSGM120075	**MXH113**	M12	75
MXHMSGM120100	**MXH114**		100
MXHMSGM120150	**MXH115**		150
MXHMSGM160100	**MXH116**	M16	100
MXHMSGM160150	**MXH117**		150
MXHMSGM200150	**MXH140**	M20	150
MXHMSGM200175	**MXH141**		175
MXHMSGM200200	**MXH142**		200

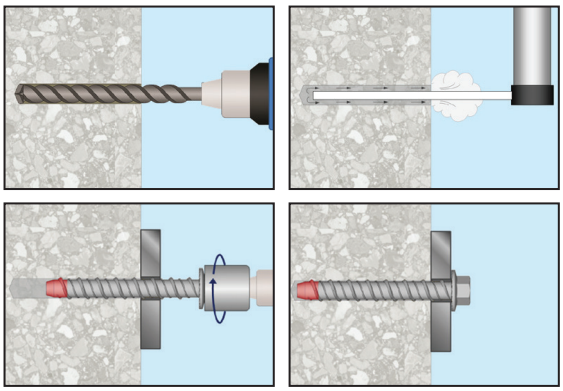
Tapered End

Features

- Suitable for medium to heavy loads
- Suitable for small anchor spacing and edge distance applications
- Quick and easy to install
- Fully removable

XBolt®

Installation



CONXTRUCT®

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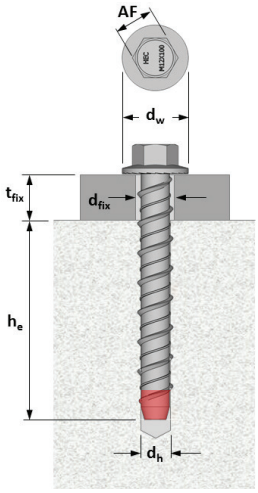
Installation Specification

Size	Nominal hole diameter	Minimum embedment depth	Min. hole diameter on fixture	Wrench size	Flange Head Diameter	Minimum spacing	Minimum edge distance
Ø	d_h (mm)	$h_{e,min}$ (mm)	d_{fix} (mm)	AF (mm)	d_w (mm)	S_{min} (mm)	c_{min} (mm)
M6	6	25	8	10	13.7	40	40
M8	8	40	11	13	17.9	40	40
M10	10	50	13	15	22.5	50	50
M12	12	55	15	16	26.1	60	60
M16	16	65	20	21	31.9	70	70
M20	20	90	24	27	40.0	100	100



Basic Load Performance in 32 MPa non-cracked concrete

[1] *Design Resistance* is the governing minimum load resistance obtained by comparing relevant concrete and steel resistances. Capacity reduction factors of $\phi = 0.60$ for concrete and $\phi = 0.80$ for steel are already included.
[2] *Working Load* is the governing minimum allowable load obtained by comparing relevant concrete and steel working loads. Factor of safety of FOS = 2.5 for steel and FOS = 3.0 for concrete are already included.

Size	Embedment Depth	Design Tensile Resistance[1]	Working Load in Tension[2]
Ø	h_e (mm)	ØN_d (kN)	N_{WLL} (kN)
M6	25	2.4	1.3
	30	2.7	1.5
	45	6.1	3.3
	60	10.8	6.0
M8	40	5.7	3.1
	60	12.2	6.8
	80	20.1	11.1
M10	50	8.8	4.8
	75	18.2	10.1
	90	24.6	13.6
M12	55	7.8	4.3
	60	11.3	6.2
	90	24.6	13.6
	110	34.2	19.0
M16	65	13.3	7.3
	75	17.1	9.5
	100	28.0	15.5
	125	40.6	22.5
M20	90	31.9	17.7
	105	40.2	22.3
	115	46.0	25.6
	130	55.3	30.7

Size	Embedment Depth	Edge Distance	Design Shear Resistance$_1$	Working Load in Shear$_2$
Ø	h_e (mm)	c_1(mm)	ØV_d (kN)	V_{WLL} (kN)
M6	40	40	3.1	1.7
		60	5.4	3.0
		80	8.1	4.5
		100	9.5	4.7
M8	50	40	3.3	1.8
		60	5.8	3.2
		80	8.6	4.8
		100	11.8	6.5
M10	60	50	4.9	2.7
		80	9.1	5.1
		100	12.4	6.9
		120	15.9	8.8
M12	70	60	6.6	3.6
		80	9.7	5.3
		120	16.7	9.3
		150	22.6	12.6
M16	80	70	8.7	4.8
		100	13.9	7.7
		150	23.9	13.3
		200	35.4	19.6
M20	115	100	15.8	8.8
		150	26.7	14.8
		200	39.0	21.7
		250	52.5	29.2

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Maximum Installation Torque (Nm)

Base Material: 32 MPa Concrete							
Anchor Diameter Ø (mm)	5	6	8	10	12	16	20
Installation Torque (Nm)	10	15	45	55	80	100	140

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