



# 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	
<ul style="list-style-type: none"> <li>• Hand rail fastening</li> <li>• Form-work support fastening</li> <li>• Mechanical, electrical and pipe bracket fastening</li> <li>• Bottom plate fixing into concrete slabs</li> <li>• Pallet racking</li> </ul>	

<b>Material</b>	 Carbon Steel
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<b>Finish</b>	 Mechanical Galvanised
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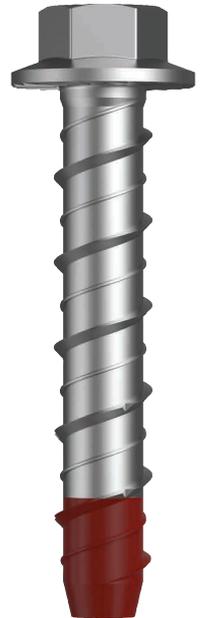
Part	QFind	Dia	Length	Pack Qty
		Ø (mm)	(mm)	
MXHMSGM060030	<b>MXH100</b>	M6	30	100
MXHMSGM060050	<b>MXH101</b>		50	100
MXHMSGM060075	<b>MXH102</b>		75	50
MXHMSGM060100	<b>MXH103</b>		100	50
MXHMSGM080050	<b>MXH104</b>	M8	50	50
MXHMSGM080060	<b>MXH105</b>		60	50
MXHMSGM080075	<b>MXH106</b>		75	50
MXHMSGM080100	<b>MXH107</b>		100	50
MXHMSGM100060	<b>MXH108</b>	M10	60	50
MXHMSGM100075	<b>MXH109</b>		75	50
MXHMSGM100100	<b>MXH110</b>		100	50
MXHMSGM100120	<b>MXH111</b>		120	50
MXHMSGM100150	<b>MXH112</b>	M12	150	50
MXHMSGM120075	<b>MXH113</b>		75	50
MXHMSGM120100	<b>MXH114</b>		100	50
MXHMSGM120150	<b>MXH115</b>		150	50
MXHMSGM160100	<b>MXH116</b>	M16	100	15
MXHMSGM160150	<b>MXH117</b>		150	15



Tapered End

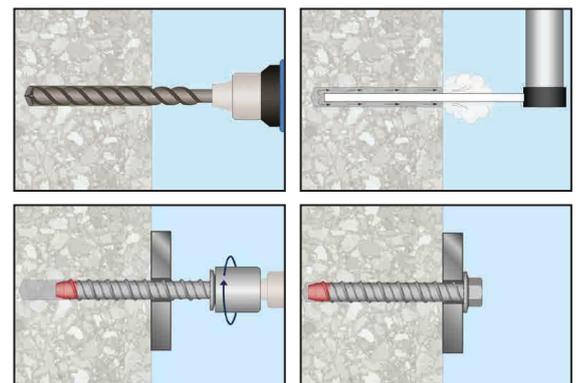
### Features

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



# XBolt®

### Installation



# CONSTRUCT®

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Bolt Tension | Anti-Vibration | Product Reliability | Traceability

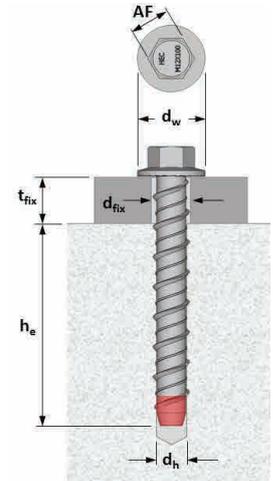


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## XBolt® Screw Anchor Mechanical Galvanised

### 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 <sub>h</sub> (mm)	h <sub>o,min</sub> (mm)	d <sub>fix</sub> (mm)	AF (mm)	d <sub>w</sub> (mm)	S <sub>min</sub> (mm)	c <sub>min</sub> (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



### Basic Load Performance in 32 MPa non-cracked concrete

<sup>1</sup> 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.

<sup>2</sup> 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 <sup>1</sup>	Working Load in Tension <sup>2</sup>
Ø	h <sub>o</sub> (mm)	ØN <sub>d</sub> (kN)	N <sub>WLL</sub> (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

Size	Embedment Depth	Edge Distance	Design Shear Resistance <sub>1</sub>	Working Load in Shear <sub>2</sub>
Ø	h <sub>o</sub> (mm)	c <sub>1</sub> (mm)	ØV <sub>d</sub> (kN)	V <sub>WLL</sub> (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
M10	60	100	11.8	6.5
		50	4.9	2.7
		80	9.1	5.1
M12	70	100	12.4	6.9
		120	15.9	8.8
		60	6.6	3.6
M16	80	80	9.7	5.3
		120	16.7	9.3
		150	22.6	12.6
		70	8.7	4.8
M16	80	100	13.9	7.7
		150	23.9	13.3
		200	35.4	19.6

### Maximum Installation Torque (Nm)

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

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