



# PRODUCT DATA

## **XBolt® Screw Anchor Zinc Yellow Passivate**

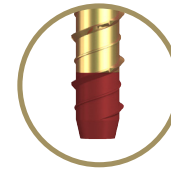
**XBolt®** is a single unit screw type anchor that can be used in solid concrete applications. Fixing is achieved by screwing the anchor into a drilled hole in concrete. As it is screwed in, the anchor taps the hole, thus enabling it to produce a mechanical interlock with the concrete.

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>	

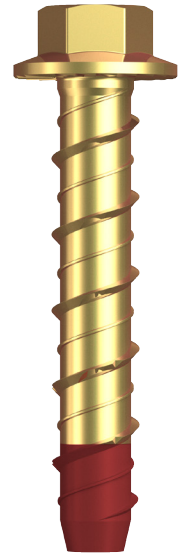
<b>Material</b>	 <b>CS</b> Carbon Steel
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<b>Finish</b>	 <b>ZYP</b> Zinc Yellow Passivate
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Part	QFind	Diameter		Length
		Ø (mm)	(mm)	
MXHMSYM050030	<b>MXH118</b>	M5		30
MXHMSYM050050	<b>MXH119</b>			50
MXHMSYM060030	<b>MXH120</b>	M6		30
MXHMSYM060050	<b>MXH121</b>			50
MXHMSYM060075	<b>MXH122</b>			75
MXHMSYM060100	<b>MXH123</b>			100
MXHMSYM080050	<b>MXH124</b>	M8		50
MXHMSYM080060	<b>MXH125</b>			60
MXHMSYM080075	<b>MXH126</b>			75
MXHMSYM080100	<b>MXH127</b>			100
MXHMSYM100060	<b>MXH128</b>	M10		60
MXHMSYM100075	<b>MXH129</b>			75
MXHMSYM100100	<b>MXH130</b>			100
MXHMSYM100120	<b>MXH131</b>			120
MXHMSYM100150	<b>MXH132</b>	M12		150
MXHMSYM120075	<b>MXH133</b>			75
MXHMSYM120100	<b>MXH134</b>			100
MXHMSYM120150	<b>MXH135</b>			150
MXHMSYM160100	<b>MXH136</b>	M16		100
MXHMSYM160150	<b>MXH137</b>			150
MXHMSYM200150	<b>MXH138</b>	M20		150
MXHMSYM200200	<b>MXH143</b>			200



**Tapered End**

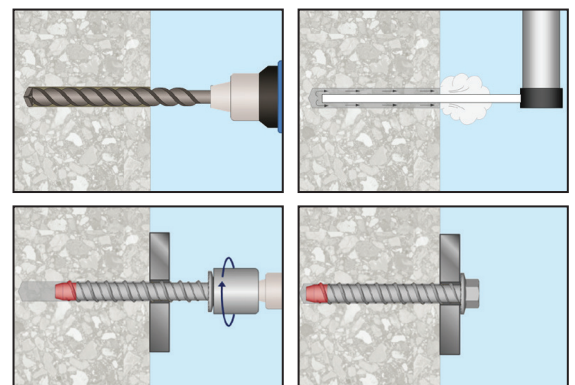


### Features

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

# **XBolt®**

### Installation



# **CONSTRUCT®**

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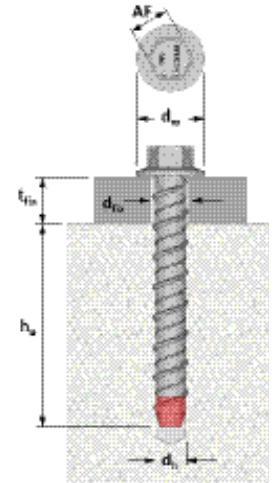


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### Installation Specification

Size	Nominal hole diameter	Minimum embedment depth	Min. hole diameter on fixture	Wrench size	Flange Head Diameter	Minimum spacing	Minimum edge distance
Ø	d <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
M20	20	90	24	27	40.0	100	100



### 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>	Size	Embedment Depth	Edge Distance	Design Shear Resistance <sub>1</sub>	Working Load in Shear <sub>2</sub>
Ø	h <sub>o</sub> (mm)	ØN <sub>d</sub> (kN)	N <sub>WLL</sub> (kN)	Ø	h <sub>o</sub> (mm)	c <sub>1</sub> (mm)	ØV <sub>d</sub> (kN)	V <sub>WLL</sub> (kN)
M6	25	2.4	1.3	M6	40	40	3.1	1.7
	30	2.7	1.5			60	5.4	3.0
	45	6.1	3.3			80	8.1	4.5
	60	10.8	6.0			100	9.5	4.7
M8	40	5.7	3.1	M8	50	40	3.3	1.8
	60	12.2	6.8			60	5.8	3.2
	80	20.1	11.1			80	8.6	4.8
M10	50	8.8	4.8	M10	60	100	11.8	6.5
	75	18.2	10.1			50	4.9	2.7
	90	24.6	13.6			80	9.1	5.1
M12	55	7.8	4.3	M12	70	100	12.4	6.9
	60	11.3	6.2			120	15.9	8.8
	90	24.6	13.6			60	6.6	3.6
	110	34.2	19.0			80	9.7	5.3
M16	65	13.3	7.3	M16	80	120	16.7	9.3
	75	17.1	9.5			150	22.6	12.6
	100	28.0	15.5			70	8.7	4.8
	125	40.6	22.5			100	13.9	7.7
M20	90	31.9	17.7	M20	90	150	23.9	13.3
	105	40.2	22.3			200	35.4	19.6
	115	46.0	25.6			100	15.0	8.3
	130	55.3	30.7			150	25.5	14.2
M20	115			M20	115	200	37.4	20.8
						250	50.6	28.1
						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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