# **PRODUCT DATA**





## **XBolt® Countersunk Head Mechanical Galvanised**

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**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
- · General flooring and decking
- · Swimming pool fences

Material



Carbon Steel

**Finish** 



Mechanical Galvanised

Part	QFind	Dia Internal Hex		Length
		Ø (mm)	(mm)	(mm)
MXKMSGM060050	MXK100	MC	5	50
MXKMSGM060075	MXK101	M6	5	75
MXKMSGM080050	MXK102		6	50
MXKMSGM080075	MXK103	M8	6	75
MXKMSGM080100	MXK104		6	100
MXKMSGM100060	MXK105		8	60
MXKMSGM100075	MXK106	M10	8	75
MXKMSGM100100	MXK107		8	100
MXKMSGM120075	MXK108		10	75
MXKMSGM120100	MXK109		10	100
MXKMSGM120150	MXK110	M12	10	150
MXKMSGM120200	MXK122		10	200

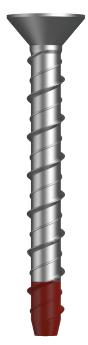


**Tapered End** 



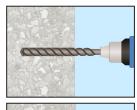
#### **Features**

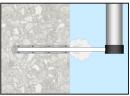
- · Rapid simple installation
- Close edge distance install
- Immediate loading of fixture
- Shallow embedment depth
- Fully removable
- Countersunk head for flush finish



# XBolt

#### Installation











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Bolt Tension | Anti-Vibration | Product Reliability | Traceability







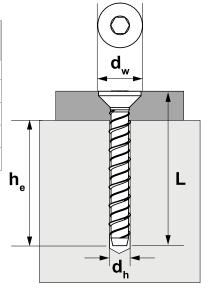


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#### **Installation Specification**

Size	Nominal hole diameter	Minimum embedment depth	Drive Bit	Head Diameter	Minimum spacing	Minimum edge distance
Ø	d <sub>h</sub> (mm)	h <sub>e,min</sub> (mm)	HEX	d <sub>w</sub> (mm)	S <sub>min</sub> (mm)	c <sub>min</sub> (mm)
M6	6	25	5	16	40	40
M8	8	40	6	20	40	40
M10	10	50	8	24	50	50
M12	12	55	10	27	60	60



#### 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 <sup>1</sup>	Working Load in Tension <sup>2</sup>
Ø	h <sub>e</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	35	4.1	2.3
	40	5.7	3.1
	60	12.2	6.8
	80	20.1	11.1
M10	45	6.6	3.6
	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

Size	Embedment Depth	Edge Distance	Design Shear Resistance <sub>1</sub>	Working Load in Shear <sub>2</sub>
Ø	h <sub>e</sub> (mm)	c <sub>1</sub> (mm)	ØV <sub>d</sub> (kN)	V <sub>WLL</sub> (kN)
	M6 40	40	3.1	1.7
Me		60	5.4	3.0
IVIO		80	8.1	4.5
		100	9.5	4.7
	M8 50	40	3.3	1.8
NAO		60	5.8	3.2
IVIO		80	8.6	4.8
		100	11.8	6.5
	M10 60	50	4.9	2.7
M10		80	9.1	5.1
IVITO		100	12.4	6.9
		120	15.9	8.8
	M40 70	60	6.6	3.6
M12		80	9.7	5.3
IVI I Z	70	120	16.7	9.3
		150	22.6	12.6

### **Maximum Installation Torque (Nm)**

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

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