AUSTRALIAN FASTENERS.COM
51 Lakewood Boulevard
Carrum Downs VIC 3201
Tel: 0458 116 452
ABN: 65 651 565 758

HBS BOLTS for Blind and Hollow Steel Connections

One-sided installation for fixing steel to hollow sections or where there is limited access. High shear capacity and large grip range make the HBS Bolt suitable for many steel connections.

Applications

- For fixing steel to hollow steel sections
- For use with square, rectangle, and circular hollow sections
- High shear and tensile capacities
- Large grip range
- One sided installation
- Steel framework including: gantries, bridges, stadiums, and transmission towers.

Material	8.8 Class 8.8
Coating	HDG Hot Dipped Galvanised

3-part assembly

- » **M8**
- » **M10**
- » **M12**

5-part assembly

- » **M16**
- » **M20**

Hexagon collar for use with open end or ring spanner.

Part Prefix.	Nominal Size	Mechanical Properties			
		Characteristic Load[a]		Working Load	
		Tensile	Shear	Tensile	Shear
		kN	kN	kN	kN
KBB88GHM08	M8	24.3	26.1	6	7
KBB88GHM10	M10	44.8	45.6	10	12
KBB88GHM12	M12	51.6	58.3	13	15
KBB88GHM16	M16	89.1	105.3	23	28
KBB88GHM20	M20	128.9	161.4	34	43

[a] Characteristic loads are used to calculate design resistance and should not be used as working loads. The characteristic loads apply to the HBS Bolts assembly, the design resistance of the connection may be lower due to material properties of other parts of the connection.

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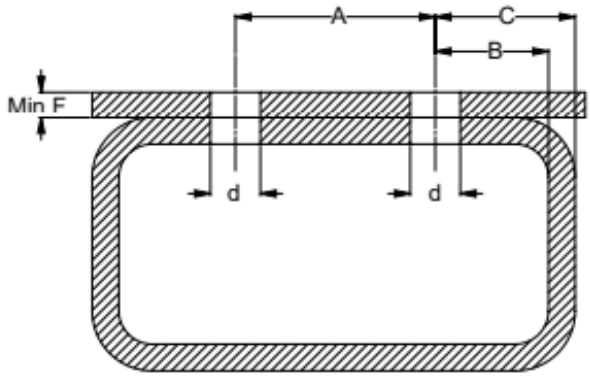
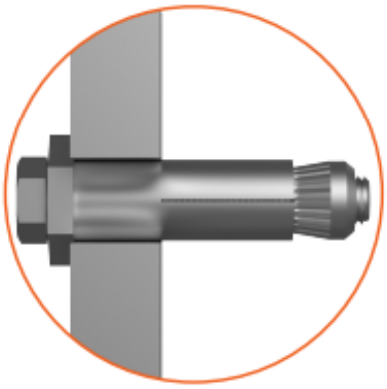
Hole Size and Spacing



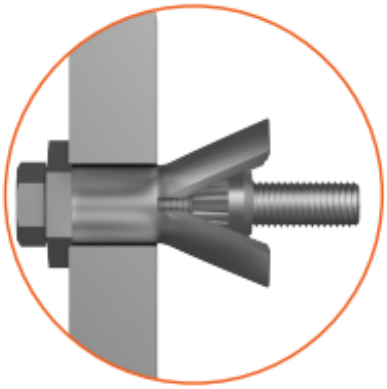
Nominal Size	Hole in Steel Work	Hole Spacing		Edge Distance	Min. Fixture Thickness	Nominal Tightening Torque
	d (mm)	A (mm)	B (mm)	C (mm)	F (mm)	Nm
M8	14.00 – 15.00*	35	13	C > 17.5	1	25
M10	18.00 – 19.00*	40	15	C > 22.5	1	45
M12	20.00 – 21.00*	50	18	C > 25.0	1	80
M16	26.00 – 28.00	55	20	C > 32.5	8	190
M20	33.00 – 35.00	70	25	C > 33.0	8	300

*For maximum performance of the grip length up to the minimum +2.0mm, the recommended hole diameter is the minimum.

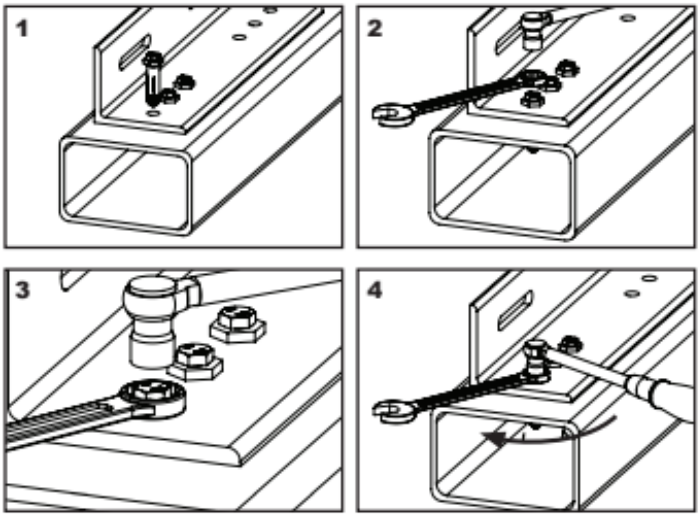
Before



After



Installation



Installation Guide

1. Bring steel work together, align pre-drilled holes and insert HBS Bolt.
2. Prepare suitably sized open ended or ring spanner and torque wrench.
3. Place spanner over the larger hex collar and torque wrench over bolt head.
4. Holding the spanner in place tighten the bolt head to the specified tightening torque.

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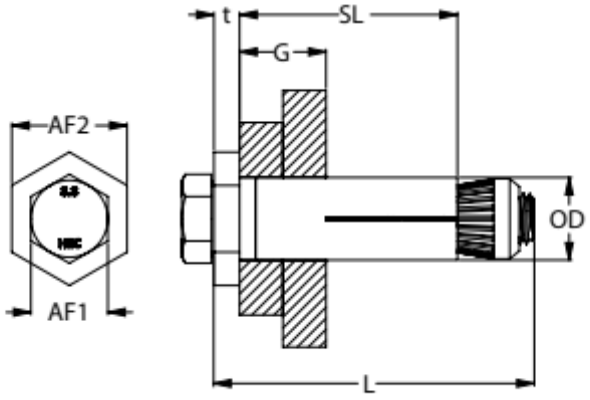
Dimensions



3-Part Assembly

Part	QFind	Nominal Size	Bolt Length	Grip Range	Hex Size	Sleeve		Collar		Pack QTY
						Length	Outer Ø	Across Flats	Thickness	
			L (mm)	G (mm)	AF1 (mm)	SL (mm)	OD (mm)	AF2 (mm)	t (mm)	
KBB88GHM080050	**HBG850**	M8	50	3 - 22	13	30	13.75	20	5	50
KBB88GHM080070	**HBG870**		70	22 - 41		49				
KBB88GHM080090	**HBG890**		90	41 - 60		68				
KBB88GHM100055	**HBG1055**	M10	55	3 - 22	16	30	17.75	24	6	50
KBB88GHM100070	**HBG1070**		70	22 - 41		48				
KBB88GHM100090	**HBG1090**		90	41 - 60		67				
KBB88GHM120060	**HBG1260**	M12	60	3 - 25	18	35	19.75	30	7	25
KBB88GHM120080	**HBG1280**		80	25 - 47		57				
KBB88GHM120110	**HBG12110**		110	47 - 69		79				

5-Part Assembly

Part	QFind	Nominal Size	Bolt Length	Grip Range	Hex Size	Sleeve		Collar		Pack QTY
						Length	Outer Ø	Across Flats	Thickness	
			L (mm)	G (mm)	AF1 (mm)	SL (mm)	OD (mm)	AF2 (mm)	t (mm)	
KBB88GHM160080	**HBG1680**	M16	80	12 - 29	24	42	25.75	36	8	10
KBB88GHM160100	**HBG16100**		100	29 - 50		63				
KBB88GHM160120	**HBG16120**		120	50 - 71		84				
KBB88GHM200090	**HBG2090**	M20	90	12 - 34	30	50	32.75	46	10	5
KBB88GHM200120	**HBG20120**		120	34 - 60		76				
KBB88GHM200140	**HBG20140**		140	60 - 86		102				