

SM1-B23 M4



SM1-B23 M5



SM1-B23 M6



SM1-B23 M8



Description

bigHead fastener with an externally threaded stud fixing welded to a Ø 23 mm circular perforated Head. Suitable for embedding and surface bonding applications requiring the following:

- Embedment into materials with overall or localised section thickness of around 3 mm or greater
- Surface bonding onto or through components, with minimal standoff/ clearance height

Key features



As-rolled thread end-form



Shoulder diameter to suit ISO 273 clearance holes



Perforated head design



Minimised thickness/ stand-off height



Stainless steel construction, self colour finish

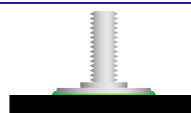
Intended usage



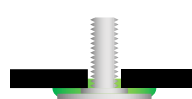
Embedding, flush stud



Embedding, inset stud



Surface bonding, blind stud



Surface bonding, through stud

Alternative configurations may be possible using this product.

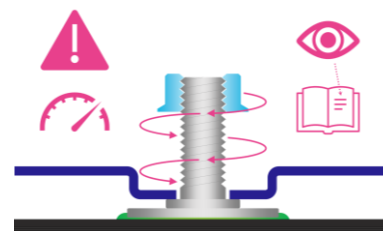
Please contact bigHead for further advice.

Fastening functionality

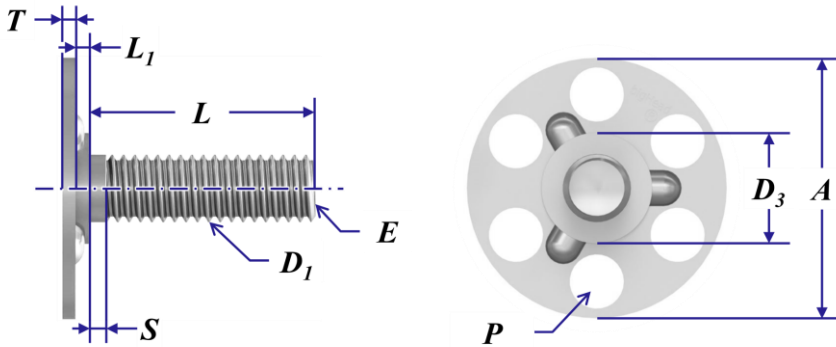
Provides an externally threaded connection point for assembling threaded nuts and similar secondary fasteners onto.



Torque tightening & preload during assembly: these products require specific consideration, please see torque & preload guidance section.



Nominal dimensions (mm)



Product code	D1	D3 (Ø)	A (Ø)	L	L1	T	S	Typical min. weight (g)
SM1 B23 M4	M4 x 0.70	8.3	23	Nominal thread length value	1.2	1.2	1.0	5
SM1 B23 M5	M5 x 0.80	9.8	23		1.2	1.2	1.2	6
SM1 B23 M6	M6 x 1.00	9.8	23		1.2	1.2	1.5	7
SM1 B23 M8	M8 x 1.25	11.8	23		1.5	1.2	1.9	9

Common to all:

Thread class: 6g post finish
 E - ISO 4753 "RL" as rolled end-form
 P - 6 perforation holes, equally spaced circular array

Design & application guidance

Thread size	Tightening torque			Loadability (Fixing) Max. tensile load (kN)	Loadability (Weld) Max. tensile load (kN)	Clearance holes Max. recommended hole size (mm)
	Max. tightening torque (Nm)					
	Friction coefficient:					
	0.1	0.2	0.3			
M4	0.9	1.3	1.7	4.3	4.2	4.5
M5	1.7	2.7	3.3	6.9	4.8	5.5
M6	2.9	4.6	5.7	9.6	4.5	6.6
M8	7.0	11.1	13.8	15.9	4.0	9.0

Based on VDI 2230, 90% utilisation of yield strength. Valid only for fixing load condition.

Applicability depends on the assembly system friction coefficient, which may vary according to the secondary fastener(s) specification.

For guidance only, determination of correct assembly parameters may require specialist expertise.

Always conduct suitable torque/preload calculation and appropriate validation for the intended assembly design.

Fixing load limit (FLL):

To avoid failure of the bigHead fastener, do not exceed stated loadability limits during in-service mechanical loading or assembly preloading.

Weld load limit (WLL):

bigHead is not liable for failures arising from excessive tensile loading or assembly preloading of their products.

ISO 273 "medium" clearance hole basis.

Please contact bigHead for further guidance if you are unsure about these topics.

Disclaimer

The information within this document is for guidance purposes only and does not constitute a guarantee or warranty of any kind.

bigHead cannot accept liability for performance arising from use of these products.

Always perform appropriate testing and evaluation to determine application suitability.

Illustrations and diagrams are for illustrative purposes only and may differ from actual products.

Further information & contact details

For further information about these products, or for technical support inquiries, please contact us:

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