

SOCKET HEAD SHOULDER
SCREW
CLASS 12.9 METRIC



PLAIN

APPLICATION

Bremick® Shoulder Screws are used where a pivoting action is required. The smooth shaft acts as a bearing surface for moving parts.

PRODUCT ATTRIBUTES

Material Class:	Alloy Steel Class 12.9
Thread Form:	Metric 6g
Finish:	Plain/Black/Natural
Standard:	Complies to ISO 7379: 1983
Mechanical Properties:	Complies to ISO 898.1 2013
Chemical Composition:	Complies to ISO 898.1 2013

HEAD MARKING

Manufacturer Mark

Property Class

In some cases, the Bremick head mark will be replaced by the mark of the original manufacturer

MECHANICAL PROPERTIES

PROPERTIES	TENSILE STRENGTH (MPa)	STRESS UNDER PROOF LOAD (MPa)	HARDNESS					
	MIN	NOM.	VICKERS (HV)		BRINELL (HBW)		ROCKWELL (HRC)	
CLASS 12.9	1220	970	385	435	380	429	39	44

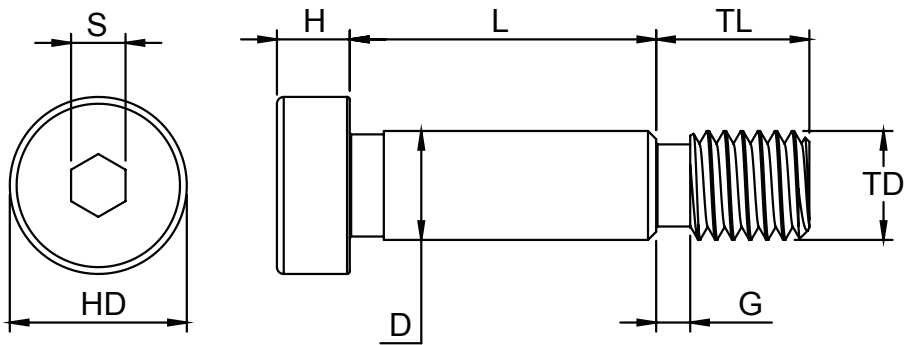
CHEMICAL COMPOSITION (%)

MATERIAL	C		P	S	B	TEMPERING TEMPERATURE °C
	MIN	MAX	MAX	MAX	MAX	MIN
ALLOY STEEL	0.30	0.50	0.025	0.025	0.003	425

FINISH INFORMATION

PLAIN / BLACK / NATURAL		
DESCRIPTION	OVERVIEW	CORROSION RESISTANCE
Plain, Black & Natural are all terms referring to the fastener not having a coating applied. The product has a light oil added.	Plain or uncoated fasteners offer no corrosion protection they are supplied lightly oiled to inhibit the rust process prior to installation and help during installation.	—

DIMENSIONAL DATA (mm)



DIAMETER	PITCH	SHAFT DIAMETER (D)		HEAD DIAMETER (HD)		HEAD HEIGHT (H)		HEX SOCKET ACROSS FLAT (S)		THREAD DIAMETER (TD)	THREAD LENGTH (TL)		(G)
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	NOM	MIN	MAX	MAX
6.5mm	1.25	6.451	6.487	9.78	10.22	4.32	4.5	3.02	3.08	M5	9.25	9.75	2.5
8mm	1.25	7.951	7.987	12.73	13.27	5.32	5.5	4.02	4.095	M6	10.75	11.25	2.5
10mm	1.5	9.951	9.987	15.73	16.27	6.78	7	5.02	5.095	M8	12.75	13.25	2.5
12mm	1.75	12.941	12.984	17.73	18.27	8.78	9	6.02	6.095	M10	15.60	16.40	2.5
16mm	2	15.941	15.984	23.67	24.33	10.73	11	8.025	8.115	M12	17.60	18.40	2.5
20mm	2.5	19.928	19.980	29.67	30.33	13.73	14	10.025	10.115	M16	21.60	22.40	2.5

LENGTH (L)	NOM	10	12	16	20	25	30	40	50	60	70	80	90	100	120
	MIN	10	12	16	20	25	30	40	50	60	70	80	90	100	120
	MAX	10.25	12.25	16.25	20.25	25.25	30.25	40.25	50.25	60.25	70.25	80.25	90.25	100.25	120.25

SOCKET OR SPANNER SIZE (mm)

SCREW DIAMETER	M6	M8	M10	M12	M16	M20
SOCKET SIZE	3	4	5	6	8	10

Whilst every care was taken in the preparation of this publication, Bremick® accepts no responsibility for the accuracy of the information supplied. Bremick® reserves the right to make alterations to specifications as part of ongoing development and improvement. This publication serves as a guide and it's the responsibility of the end user to ensure suitability for their application.
The contents of this publication are the exclusive copyright of Bremick® and may not be reproduced without permission.

Bremick Pty Ltd
Head Office | 88 Dalmeny Avenue, Rosebery 2018
National Distribution Centre | M5/M7 Logistics Park,
Warehouse 4B, 290 Kurrajong Road, Prestons NSW 2170
www.bremick.com.au