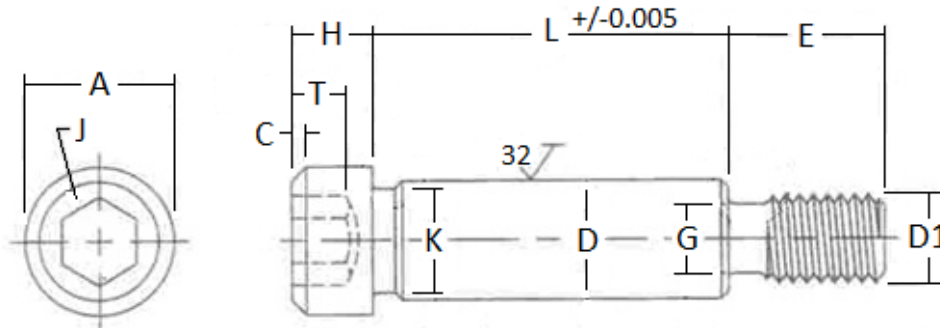




Socket Head Shoulder Screw, Black Oxide, Manufactured in the USA

This product standard contains the required dimensional, mechanical, performance, and chemical characteristics of the products shown in this purchase order (as applicable to the product). Unless specified below, current revisions of national or international standards shall be applicable as of the date of Fastenal's purchase order and must be adhered to in their entirety. If the order received does not meet these requirements, corrective action may be issued which could jeopardize your status as an approved supplier to Fastenal.



Nominal Size of Basic Shoulder Diameter	D		A		H		C	J		T	
	Shoulder Diameter		Head Diameter		Head Height		Chamfer or Radius	Hexagon or Socket Size		Key Engagement	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Nom.	Min.		
1/4	.250	.2480	.2460	.375	.357	.188	.177	.020	1/8	.125	.094
5/16	.312	.3105	.3085	.438	.419	.219	.209	.026	5/32	.156	.117
3/8	.375	.3730	.3710	.562	.543	.250	.240	.031	3/16	.188	.141
1/2	.500	.4980	.4960	.750	.729	.312	.302	.040	1/4	.250	.188
5/8	.625	.6230	.6210	.875	.853	.375	.365	.050	5/16	.312	.234
3/4	.750	.7480	.7450	1.000	.977	.500	.490	.069	3/8	.375	.281

Nominal Size or Basic Shoulder Diameter	K	Shoulder Neck Width	D1		G		I	Thread Neck Fillet		E	
	Shoulder Neck Diameter		Nominal Thread Size or Basic Thread Diameter	Thread Neck Diameter		Thread Neck Width	Thread Neck Fillet	Thread Length			
				Max.	Min.			Max.	Min.	Basic	
1/4	.250	.227	.093	10	.1900	.142	.133	.083	.023	.017	.375
5/16	.312	.289	.093	1/4	.2500	.193	.182	.100	.028	.022	.438
3/8	.375	.352	.093	5/16	.3125	.249	.237	.111	.031	.025	.500
1/2	.500	.477	.093	3/8	.3750	.304	.291	.125	.035	.029	.625
5/8	.625	.602	.093	1/2	.5000	.414	.397	.154	.042	.036	.750
3/4	.750	.727	.093	5/8	.6250	.521	.502	.182	.051	.045	.875

RECORD OF REVISION CHANGES TO THIS DOCUMENT ARE LOCATED ON THE LAST PAGE



Specification Requirements:

- **Dimensions:** ASME B18.3
- **Material:** Alloy Steel per ASME B18.3
- **Mechanical Properties:** HRC 32 to 43
- **Thread Requirements:** ASME B1.1, Class 3A, UNC
- **Product Marking:** Manufacturer's ID
- **Finish:** Black Oxide (Thermal or Chemical) on the head.
- **Material Test Reports:** The MTR must have documented lot traceability, dimensional results, full chemical test results and full mechanical test results to the specification(s) above. In addition, the MTR shall be in full compliance with Fastenal's MTR Requirements.

- **Quality Assurance Provisions:** Category 3 of ASME B18.18

Revision Level Changes to this Document

Document Name	Revision Level	Revision Date	Rationale for Revision
HK.STRIP.BO	06	1/14/2019	Revised finish requirement.

The rationale above may not include all of the changes within each revision. A complete review of the Fastenal Product Standard is required.