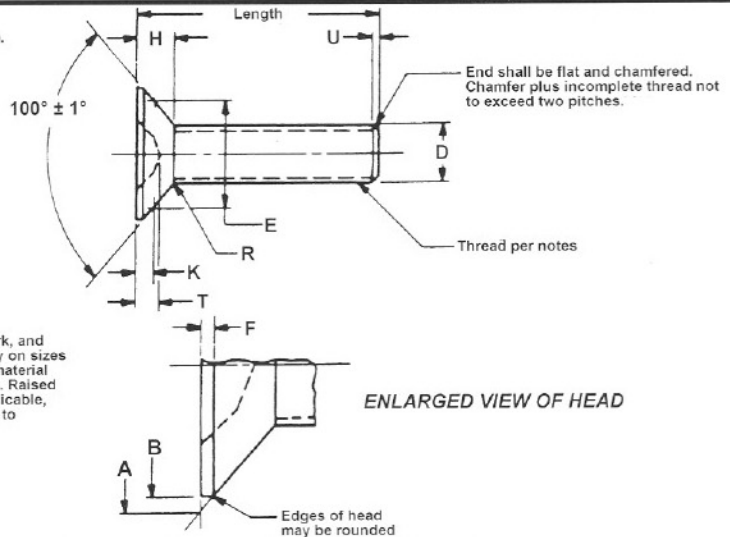
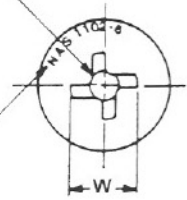


Torq-Set recess per MS33781 or MS14191 (see code).



Head marking: basic part no., manufacturer's trademark, and first dash no. on sizes 3 and larger. First dash no. only on sizes 04, 06, and 08. No marking required on size 02. Mark material per code to indicate cres or titanium where applicable. Raised or depressed .010 max. Location optional. Where applicable, add "R" after first dash no. on sizes 06, 08, 3, 4, and 5 to indicate MS14191 recess.

Part Number	Thread	A Dia	B Abso Min Dia	F	H Ref	R	U Ref	D Diam Max	T Max	W Max	Recess Gage Penetration		K	E Diam
											Max	Min		
NAS1102-02	0.0860-56 UNJC 3A	.172 .162	0.126	.015 .005	0.036	.015 .005	0.01	0.086	0.043	0.115	0.0315	0.0225		
NAS1102-04	0.1120-40 UNJC 3A	.225 .213	0.177		0.045		0.013	0.112	0.055	0.0148	0.0405	0.0305		
NAS1102-06	0.1380-32 UNJC 3A	.279 .267	0.231		0.057			0.138	0.066	0.182	0.05	0.0395		
NAS1102-08	0.1640-32 UNJC 3A	.332 .319	0.27	.020 .010	0.068	.020 .010	0.016	0.164	0.078	0.215	0.0595	0.048	.0268 .0240	.2671 .2667
NAS1102-3	0.1900-32 UNJF 3A	.385 .371	0.322		0.08		0.19	0.09	0.248	0.0685	0.056	.0290 .0263	.3147 .3143	
NAS1102-4	0.2500-28 UNJF 3A	.507 .491	0.442		0.106		0.18	0.25	0.118	0.325	0.089	0.075	.0342 .0316	.4245 .4241
NAS1102-5	0.3125-24 UNJF 3A	.635 .617	0.568	.021	0.133	.021		0.312	0.122	0.357	0.086	0.07	.0395 .037	.5389 .5385
NAS1102-6	0.3750-24 UNJF 3A	.762 .742	0.694		0.16			0.375	0.145	0.427	0.103	0.085	.0450 .0426	.6532 .6528

**LENGTH CHART**

**MIN TENSILE STRENGTH, LBS**

Dash No.	Length	Dash No.	Length	Dash No.	Length	Part Number	Alloy Steel Cres (160 ksi) Ti (6AL-4V)
	Tolerance +.000, -.031	12	0.75	26	1.625	NAS1102-02	591
3	0.188	14	0.875	28	1.75	NAS1102-04	966
4	0.25	16	1	30	1.875	NAS1102-06	1450
5	0.312	Tolerance +.000, -.062		32	2.000	NAS1102-08	2240
6	0.375	18	1.125	Tolerance +.000, -.094		NAS1102-3	3180
7	0.438	20	1.25	34 to 96	2.125 to 6.000	NAS1102-4	5820
8	.5	22	1.375			NAS1102-5	9200
10	.625	24	1.5			NAS1102-6	14000

**MATERIAL:** Alloy steel, 4140 per MIL-S-5626, 4340 per MIL-S-5000, or 8740 per MIL-S-6049.  
 Cres per AMS5737 (A286), except for heat treatment, designated by "E" code.  
 Titanium alloy (6AL-4V) per AMS4967, designated by "V" code.  
**HEAT TREAT:** Alloy steel - 160,000-180,000 psi UTS per MIL-H-6875.  
 Cres - 160,000 psi UTS min. at room temp.  
 Titanium alloy - 160,000 psi UTS min.

PROCUREMENT SPECIFICATION <b>MIL-B-87114</b>	TITLE <b>SCREW, MACHINE FLAT 100 DEG HEAD, FULL THREAD, TORQ-SET</b>	CLASSIFICATION <b>STANDARD PART NAS 1102</b>
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