

FED. SUPPLY CLASS

53GP

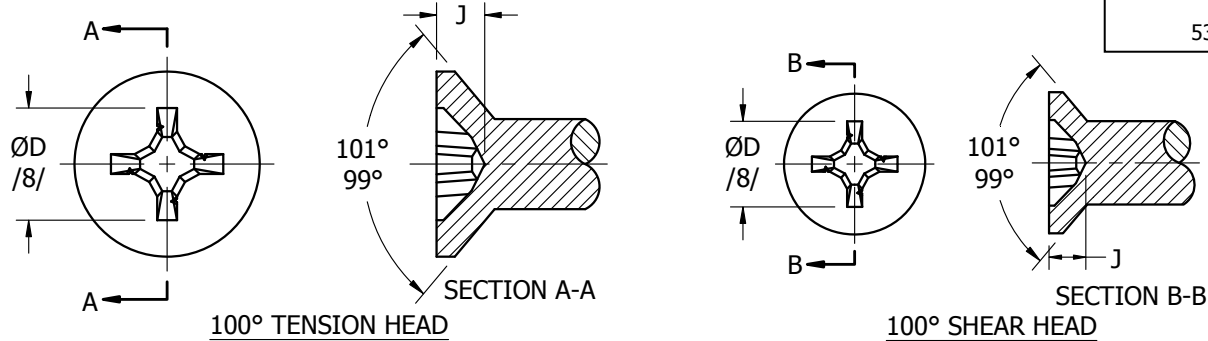


FIGURE 1 – RIBBED CRUCIFORM RECESS, FLUSH HEADS /7/ /9/

TABLE I – RECESS DIMENSIONS, FLUSH HEADS

RECESS SIZE	THREAD SIZE		ØD		J		RECESS PEN /2/	
	100° TENSION HEAD	100° SHEAR HEAD	MAX	MIN	MAX	MIN	MAX	MIN
0	.0600-80	—	.061	.047	.035	.019	.028	.012
1	.0860-56	—	.095	.082	.056	.040	.049	.033
1	.1120-40	—	.117	.104	.078	.062	.071	.055
2	.1380-32	.1640-32	.154	.141	.086	.063	.075	.052
2	.1640-32	.1900-32	.169	.156	.101	.078	.090	.067
2	.1900-32	.2500-28	.184	.171	.116	.093	.105	.082
3	.2500-28	.3125-24	.247	.234	.135	.112	.118	.095
4S	.3125-24	.3750-24	.317	.304	.168	.146	.148	.126
4S	.3750-24	.4375-20	.342	.328	.193	.171	.173	.151
4L	.4375-20	.5000-20	.366	.351	.218	.194	.196	.174
4L	.5000-20	.5625-18	.393	.380	.245	.223	.225	.203
4L	.5625-18	.6250-18	.424	.411	.276	.254	.256	.234
5	.6250-18	.7500-16	.516	.493	.281	.255	.248	.222
5	.7500-16	.8750-14	.577	.553	.342	.316	.309	.283
6	.8750-14	1.0000-12	.750	.727	.469	.444	.433	.409
6	1.0000-12	—	.814	.790	.533	.507	.497	.473

NOTES:

- (1) Dimensions in inches.
- /2/ See Figure 5 and Table V for gage used to measure recess penetration.
- (3) See NAS7101 for dimensions of driver & gage.
- (4) Users of this National Aerospace Standard are advised that patent rights may apply to the product specified in this standard. Patent rights are held by the Phillips Screw Company. Phillips maintains that this product is produced and marketed only by its licensees. The Aerospace Industries Association expresses no opinion as to the validity of patent rights. Users are advised to contact the patent holder or its licensees for further information.
- ~~(5) Revision 5 of NAS7100 extends the effective date established by both revisions 1 and 5 of NAS7100 until no later than February 28, 2000.~~
- /6/ Rib element on the removal wall defined by dimensions "T", "ØW", "X" and "Y" is optional for recess sizes 0, 5 & 6.
- /7/ Drawings for bolts or screws using this recess shall have a leader pointing to the plan view of the recess and a callout such as: "Recess per NAS7100."
- /8/ Concentricity: ØD of recess to shank within .016 FIM thru .2500-28 size; .024 FIM above .2500-28 size.
- /9/ See Figure 3 and Table III for additional recess detail.
- (10) Tolerances unless otherwise specified: Decimals ± .016.

⑨ COMPLETELY REVISED

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 9
PROCUREMENT SPECIFICATION NONE	TITLE RECESS, RIBBED CRUCIFORM, DIMENSIONS OF RECESS AND GAGES	CLASSIFICATION DESIGN STANDARD
		NAS7100 SHEET 1 OF 6

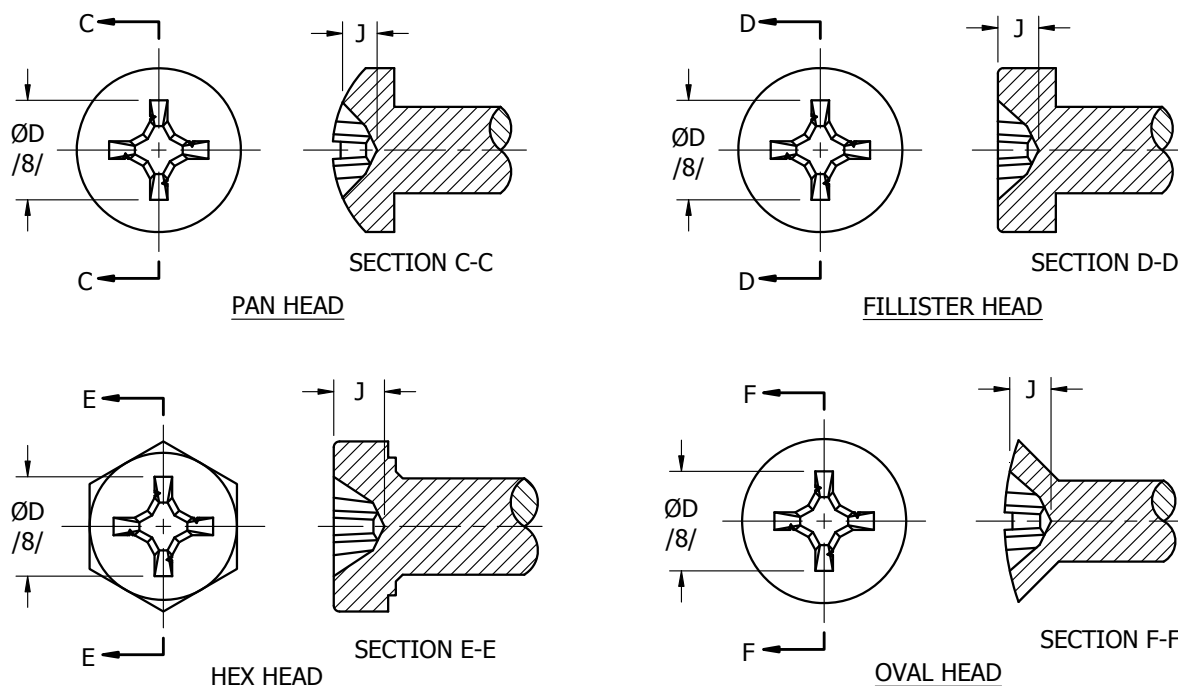


FIGURE 2 – RIBBED CRUCIFORM RECESS, PROTRUDING HEADS /7/ /9/

TABLE II – RECESS DIMENSIONS, PROTRUDING HEADS

RECESS SIZE	THREAD SIZE	PAN HEAD						FILLISTER HEAD					
		ØD		J		RECESS PENETRATION /2/		ØD		J		RECESS PENETRATION /2/	
		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
0	.0600-80	.067	.054	.039	.021	.032	.014	.068	.055	.043	.027	.036	.020
1	.0860-56	.104	.091	.059	.041	.052	.034	.102	.089	.063	.047	.056	.040
1	.1120-40	.122	.109	.078	.060	.071	.053	.117	.104	.078	.062	.071	.055
2	.1380-32	.166	.153	.091	.066	.080	.054	.164	.151	.096	.073	.085	.062
2	.1640-32	.182	.169	.108	.082	.097	.071	.174	.161	.106	.083	.095	.072
2	.1900-32	.199	.186	.124	.100	.114	.089	.189	.176	.121	.098	.110	.087
3	.2500-28	.281	.268	.161	.135	.144	.118	.268	.255	.156	.133	.139	.116
4S	.3125-24	.350	.337	.193	.169	.173	.149	.334	.321	.186	.164	.166	.144
4L	.3750-24	.389	.376	.233	.210	.213	.189	.364	.351	.216	.194	.196	.174
4L	.4375-20	.413	.400	.259	.234	.239	.214	.393	.380	.245	.223	.225	.203
4L	.5000-20	.435	.421	.280	.255	.260	.235	.409	.396	.261	.239	.241	.219
		HEX HEAD						OVAL HEAD					
1	.1120-40	.124	.111	.085	.069	.078	.062	.125	.112	.083	.065	.076	.058
2	.1380-32	.149	.136	.081	.058	.070	.047	.178	.165	.105	.081	.094	.069
2	.1640-32	.189	.176	.121	.098	.110	.087	.192	.179	.119	.095	.108	.084
2	.1900-32	.204	.191	.136	.113	.125	.102	.209	.196	.137	.113	.126	.102
3	.2500-28	.283	.270	.171	.148	.154	.131	.290	.277	.172	.148	.155	.131
4L	.3125-24	.365	.351	.216	.194	.196	.174	.390	.377	.234	.210	.214	.190
4L	.3750-24	.393	.380	.245	.223	.225	.203	.410	.397	.255	.232	.235	.212