

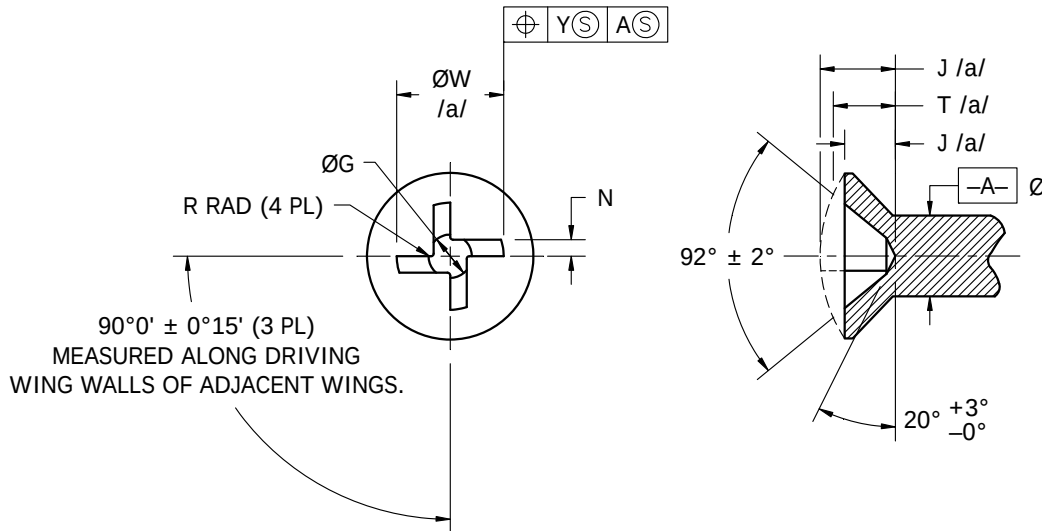


FIGURE 1 – OFFSET CRUCIFORM RECESS

TABLE I – OFFSET CRUCIFORM RECESS DIMENSIONS /b/

Recess Size	N		ØG		R		Y	
	Max	Min	Max	Min	Max	Min	Tol.	
0	.018	.016	.037	.033	.010	.000	.012	
1			.044	.040				
2			.052	.048				
3	.021	.018	.059	.055	.018	.008		
4	.023	.020	.067	.063				
5	.026	.023	.075	.071				
6	.029	.026	.082	.078	.030	.016	.016	
8	.034	.031	.096	.092				
10	.039	.036	.111	.107				
1/4	.051	.048	.147	.143	.040	.023		
5/16	.064	.061	.184	.180				
3/8	.076	.073	.220	.216	.052	.031		
7/16	.089	.086	.256	.252				
1/2	.102	.098	.292	.288	.089	.062		
9/16	.115	.111	.328	.324				
5/8	.127	.123	.365	.361	.108	.078	.024	

- /a/ The specific part standard or drawing which specifies this recess drive referencing this document shall specify values for dimensions "J", "ØW", "T", and depth Gage Penetration, if the values specified herein are not compatible with the part configuration or performance requirements.
- /b/ For dimensions of ribbed recesses, sizes 6 through 5/16 inch, see NASM14191.
- /c/ Portions of the technical data contained in this standard are extracted from copyrighted materials by permission of the Phillips Screw Company.

③ COMPLETELY REVISED

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS33781B.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 3
PROCUREMENT SPECIFICATION NONE	TITLE RECESS, OFFSET CRUCIFORM, DIMENSIONS OF RECESS, GAGE AND DRIVER FOR	CLASSIFICATION DESIGN STANDARD
	③	NASM33781 SHEET 1 OF 7

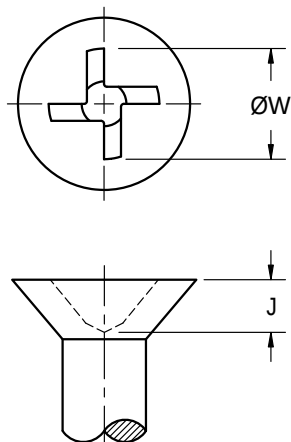


FIGURE 2 – 100° FLUSH HEAD

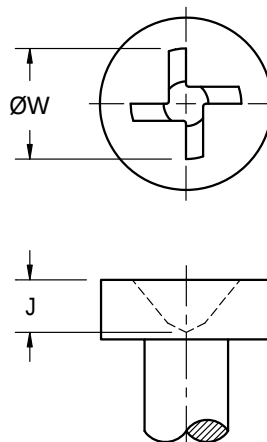


FIGURE 3 – RECESSED HEAD

TABLE II – 100° FLUSH HEAD /d/

Screw Size	Recess and Driver Size	ØW Wing	J Recess Depth	Gage Penet.
0	0	.082 .072	.031 .021	.0225 .0145
1	1	.098 .088	.037 .027	.0270 .0185
2	2	.115 .105	.043 .033	.0315 .0225
3	3	.132 .122	.049 .039	.0365 .0270
4	4	.148 .138	.055 .045	.0405 .0305
5	5	.165 .155	.061 .051	.0450 .0350
6	6	.182 .172	.066 .056	.0500 .0395
8	8	.215 .205	.078 .068	.0595 .0480
10	10	.248 .238	.090 .080	.0685 .0560
1/4	1/4	.325 .315	.118 .108	.0890 .0750
5/16	5/16	.357 .347	.122 .112	.0860 .0700
3/8	3/8	.427 .417	.145 .135	.1030 .0850
7/16	7/16	.498 .488	.169 .159	.1205 .1005
1/2	1/2	.568 .558	.193 .183	.1375 .1155
9/16	9/16	.638 .628	.217 .207	.1545 .1305
5/8	5/8	.708 .698	.241 .231	.1710 .1450

TABLE III – RECESSED HEXAGON HEAD, FLAT PAN HEAD, FLAT FILLISTER HEAD /d/

Screw Size	Recess and Driver Size	ØW Wing	J Recess Depth	Gage Penet.
0	0	.087 .077	.033 .023	.0250 .0170
1	1	.104 .094	.039 .029	.0300 .0215
2	2	.122 .112	.046 .036	.0350 .0260
3	3	.140 .130	.053 .043	.0405 .0310
4	4	.157 .147	.059 .049	.0450 .0350
5	5	.175 .165	.066 .056	.0500 .0400
6	6	.193 .183	.072 .062	.0555 .0450
8	8	.228 .218	.085 .075	.0660 .0545
10	10	.263 .253	.098 .088	.0760 .0635
1/4	1/4	.345 .335	.128 .118	.0990 .0850
5/16	5/16	.382 .372	.134 .124	.0985 .0825
3/8	3/8	.457 .447	.161 .151	.1180 .1000
7/16	7/16	.498 .488	.169 .159	.1205 .1005
1/2	1/2	.568 .558	.193 .183	.1375 .1155
9/16	9/16	.638 .628	.217 .207	.1545 .1305
5/8	5/8	.708 .698	.241 .231	.1710 .1450

/d/ Gage penetration is defined as the distance to which the gage, shown on Sheet 5, will enter the recess.

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REVISION
3

NAS 33781
SHEET 2
Document Sharing Hub

