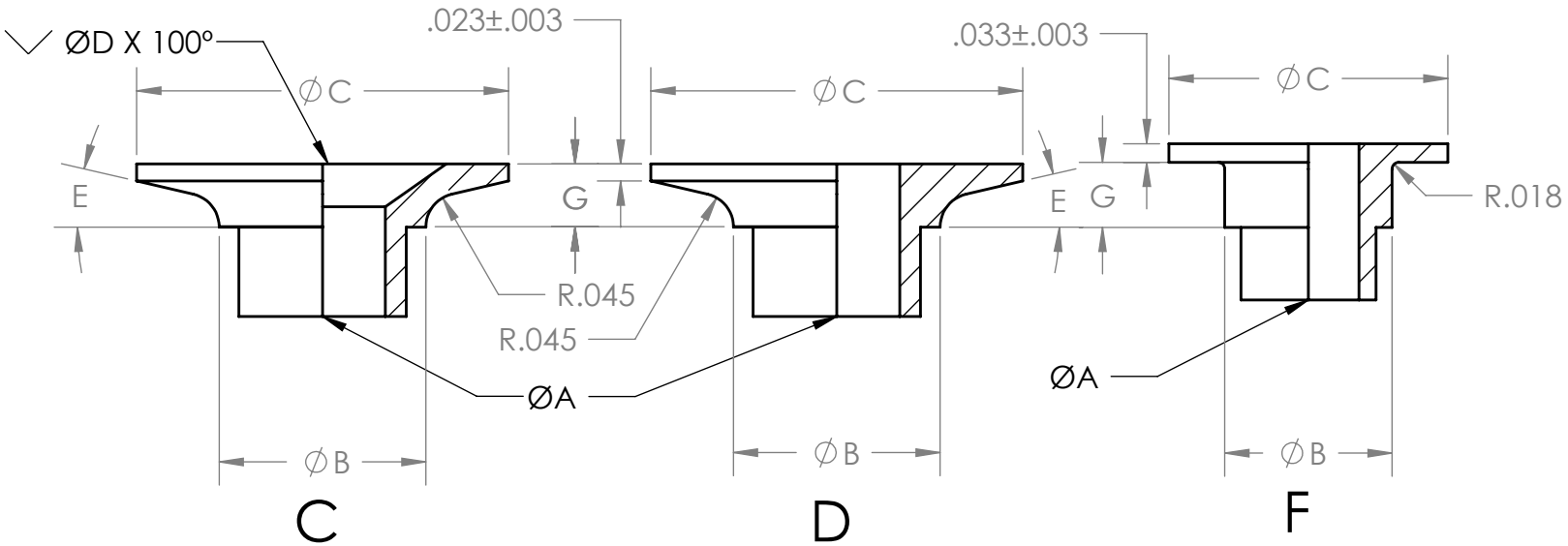
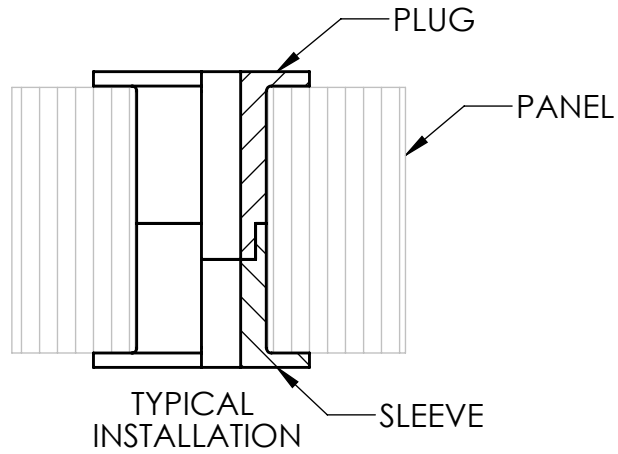
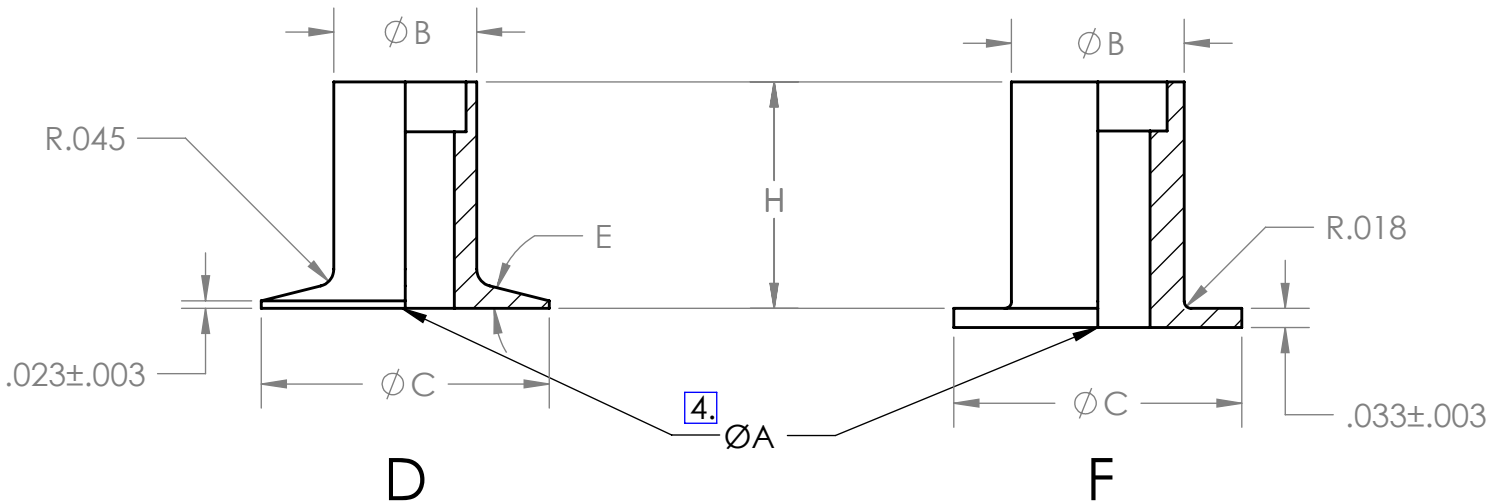


W101

INSERT: GROMMET TYPE, THROUGH-RIVET



PLUG HEAD STYLES



SLEEVE HEAD STYLES

WITTEN COMPANY
918-272-9567

APPROVAL DATE: 11/10/2020

GAGE CODE: 0JHK5

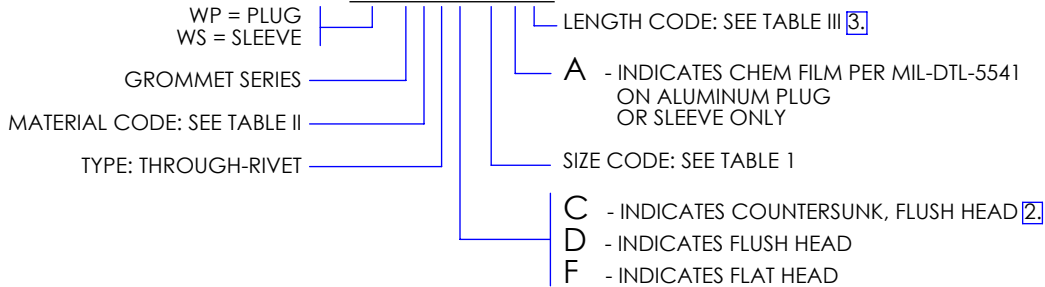
W101

INSERT: GROMMET TYPE, THROUGH-RIVET

PART NUMBER CODING:

WP161D18-0

WS161D18-08


TABLE I

SIZE CODE	$\varnothing A$ +.002 -.003	$\varnothing B$ $\pm .002$	$\varnothing C$ $\pm .005$	$\varnothing D$ +.003 -.004	E $\pm 1^\circ$
12	.133	.278	.500	.233	13°
15	.168	.278	.500	.295	13°
18	.194	.309	.625	.362	13°
25	.256	.372	.750	.486	14°
28	.289	.403	.812	.501	14°
31	.318	.466	.875	.574	14°
37	.381	.622	1.000	.704	14°

TABLE II

MATL CODE	MATERIAL	FINISH
0	AL ALLOY, GRADE 2024, TEMPER T4 OR T351 PER SAE-AMS-QQ-A-225/6	ANODIZE PER MIL-A-8625 TYPE I, CLASS 1
6	CORROSION RESISTANT STEEL, TYPE 303 CRES PER ASTM A 582	PASSIVATE PER ASTM-A967
9	CARBON STEEL PER ASTM A 108	CAD PLATE PER SAE-AMS-QQ-P-416, TYPE II, CLASS 2

NOTES:

1. ANY COMBINATION OF SLEEVE AND PLUG WITHIN RIVET SIZE MAY BE USED.
- [2] 'C' HEAD STYLE IS AVAILABLE IN PLUG CONFIGURATION ONLY.
- [3] REFER TO TABLE III TO SELECT A PLUG/SLEEVE COMBINATION FOR GIVEN PANEL THICKNESS.
- [4] A SINGLE THROUGH HOLE DIAMETER IS USED FOR -.03 AND -.04 SLEEVE LENGTHS IN 25 AND 28 SIZES.
5. THE W101 GROMMETS ARE SELF-RETAINED THROUGH A TELESCOPE FIT.
6. CONSULT THE WITTEN COMPANY ENGINEERING DEPARTMENT FOR OTHER FINISHES, MATERIALS, OR SIZES.

 WITTEN COMPANY
 918-272-9567

APPROVAL DATE: 11/10/2020

GAGE CODE: 0JHK5

W101

INSERT: GROMMET TYPE, THROUGH-RIVET

TABLE III

PANEL THICKNESS MINIMUM	LENGTH CODE	PLUG			LENGTH CODE	SLEEVE		
		G				H		
		SIZE CODE				SIZE CODE		
		12,15,18	25,28	31,37		12,15,18	25,28	31,37
.187	X	.085	.120	NA	03	.103	.067	NA
.250	0	.085	.120	NA	04	.165	.130	NA
.265	01	.100	.135					
.281	1	.116	.151					
.296	11	.131	.167					
.312	2	.147	.183					
.327	21	.163	.198					
.344	3	.179	.214					
.359	31	.194	.230					
.375	0	.085	.120	.190	06	.290	.255	0.185 31 ONLY
.390	01	.100	.135	.206				
.406	1	.116	.151	.221				
.421	11	.131	.167	.237				
.437	2	.147	.183	.252				
.452	21	.163	.198	.268				
.469	3	.179	.214	.283				
.484	31	.194	.230	.298				
.500	0	.085	.120	.190	08	.415	.380	.310
.515	01	.100	.135	.206				
.531	1	.116	.151	.221				
.546	11	.131	.167	.237				
.562	2	.147	.183	.252				
.577	21	.163	.198	.268				
.594	3	.179	.214	.283				
.609	31	.194	.230	.298				
.625	0	.085	.120	.190	10	.540	.505	.435
.640	01	.100	.135	.206				
.656	1	.116	.151	.221				
.672	11	.131	.167	.237				
.687	2	.147	.183	.252				
.702	21	.163	.198	.268				
.719	3	.179	.214	.283				
.734	31	.194	.230	.298				
.750	0	.085	.120	.190	12	.665	.630	.560
.765	01	.100	.135	.206				
.781	1	.116	.151	.221				
.796	11	.131	.167	.237				
.812	2	.147	.183	.252				
.827	21	.163	.198	.268				
.844	3	.179	.214	.283				
.859	31	.194	.230	.298				
.875	0	.085	.120	.190	14	.790	.755	.685
.890	01	.100	.135	.206				
.906	1	.116	.151	.221				
.921	11	.131	.167	.237				
.937	2	.147	.183	.252				
.952	21	.163	.198	.268				
.969	3	.179	.214	.283				
.984	31	.194	.230	.298				

W101

INSERT: GROMMET TYPE, THROUGH-RIVET

TABLE III (CONT.)

PANEL THICKNESS MINIMUM	LENGTH CODE	PLUG			LENGTH CODE	SLEEVE		
		G				H		
		SIZE CODE				SIZE CODE		
		12,15,18	25,28	31,37		12,15,18	25,28	31,37
1.000	0	.085	.120	.190	16	.915	.880	.810
1.015	01	.100	.135	.206				
1.031	1	.116	.151	.221				
1.046	11	.131	.167	.237				
1.062	2	.147	.183	.252				
1.077	21	.162	.198	.268				
1.094	3	.179	.214	.283				
1.109	31	.194	.230	.298				
1.125	0	.085	.120	.190	18	1.040	1.005	.935
1.140	01	.100	.135	.206				
1.156	1	.116	.151	.221				
1.171	11	.131	.167	.237				
1.187	2	.147	.183	.252				
1.202	21	.162	.198	.268				
1.219	3	.179	.214	.283				
1.234	31	.194	.230	.298				
1.250	0	.085	.120	.190	20	1.165	1.130	1.060
1.265	01	.100	.135	.206				
1.281	1	.116	.151	.221				
1.296	11	.131	.167	.237				
1.312	2	.147	.183	.252				
1.327	21	.162	.198	.268				
1.343	3	.179	.214	.283				
1.359	31	.194	.230	.298				