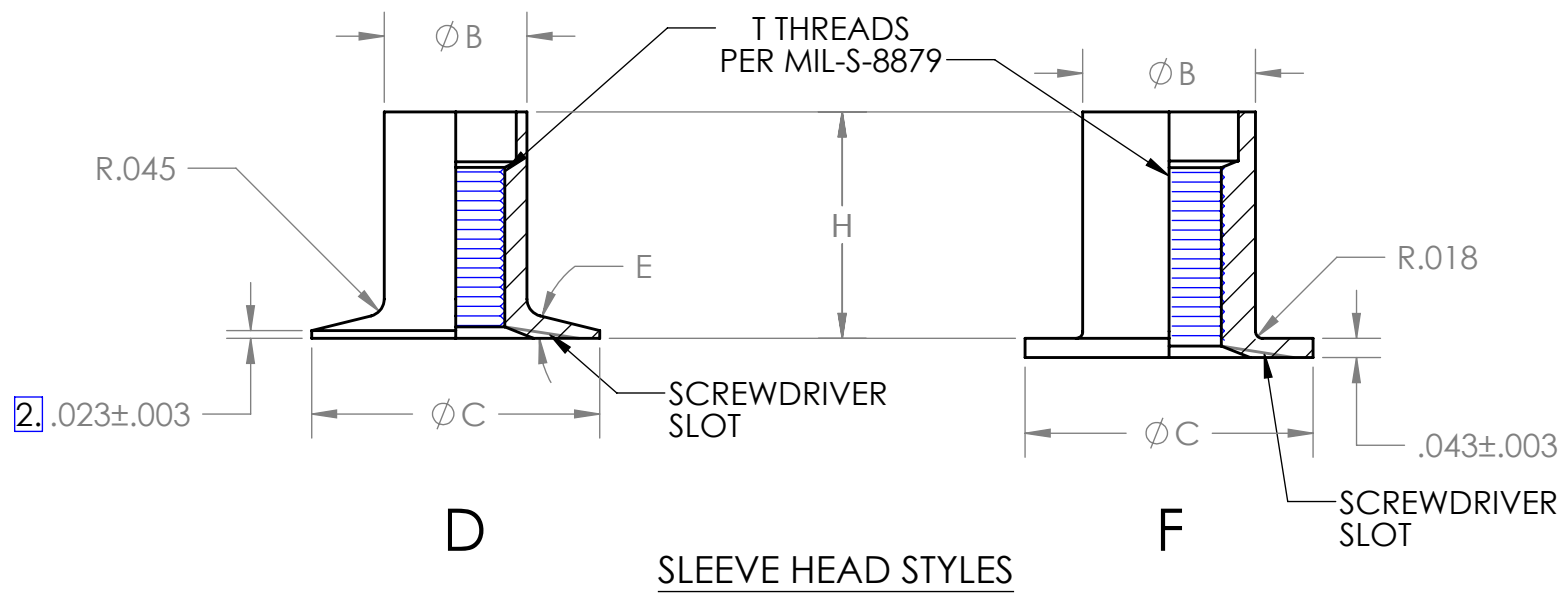
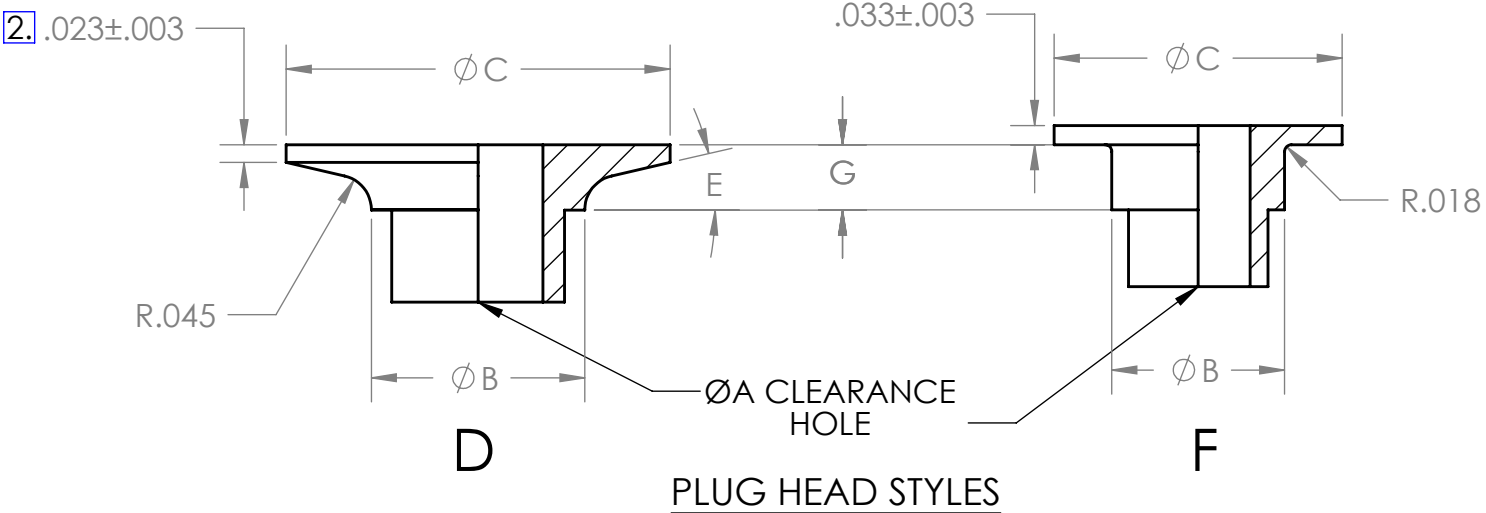
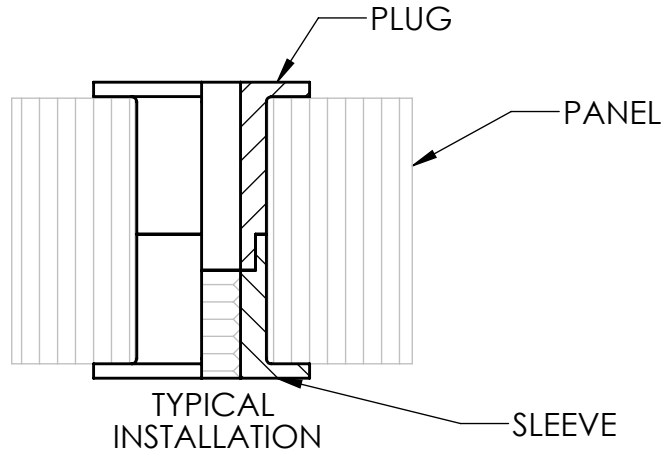


W103
INSERT: GROMMET TYPE, THREADED



WITTEN COMPANY
 918-272-9567

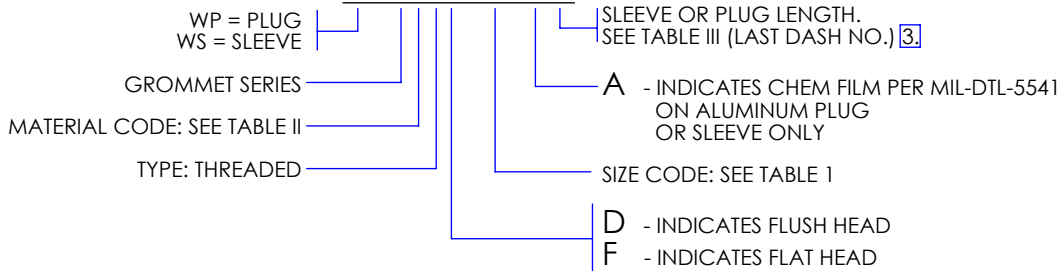
APPROVAL DATE: 11/10/2020

GAGE CODE: 0JHK5

W103

INSERT: GROMMET TYPE, THREADED

PART NUMBER CODING:

 WP193F10-0
 WS193F1032-08

TABLE I

BOLT SIZE	T THREAD CLASS 3B	ØA ±.003	ØB ±.003	ØC	E
440	.112-40UNJC	.116	.216	.375	13°
632	.1380-32UNJC	.142	.278	.500	13°
832	.1640-32UNJC	.168	.278	.500	13°
1032	.1900-32UNJF	.194	.309	.625	13°
428	.2500-28UNJF	.256	.372	.750	14°
524	.3125-24UNJF	.318	.466	.875	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
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 BOLT SIZE MAY BE USED.
- 2**. .033±.003 ON 524 SIZE.
- 3**. REFER TO TABLE III TO SELECT PLUG/SLEEVE COMBINATION FOR A GIVEN PANEL THICKNESS.
4. THE W103 SERIES GROMMETS ARE SELF-RETAINED THROUGH A TELESCOPIC PRESS FIT.
5. 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

W103

INSERT: GROMMET TYPE, THREADED

TABLE III

PANEL THICKNESS MINIMUM	LENGTH CODE	PLUG			LENGTH CODE	SLEEVE						
		G				H						
		SIZE CODE				SIZE CODE						
		4, 6, 8, 10	25	31		440, 632, 832, 1032	428	524				
.500	0	.085	.120	.120	08	.415	.380	NA				
.515	01	.100	.135									
.531	1	.116	.151									
.546	11	.131	.167	NA								
.562	2	.147	.183									
.577	21	.162	.198									
.594	3	.179	.214									
.609	31	.194	.230									
.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	.162	.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	.162	.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	.162	.198	.268								
.969	3	.179	.214	.283								
.984	31	.194	.230	.298								
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								

 WITTEN COMPANY
 918-272-9567

 APPROVAL DATE:
 11/10/2020

GAGE CODE: OJHK5