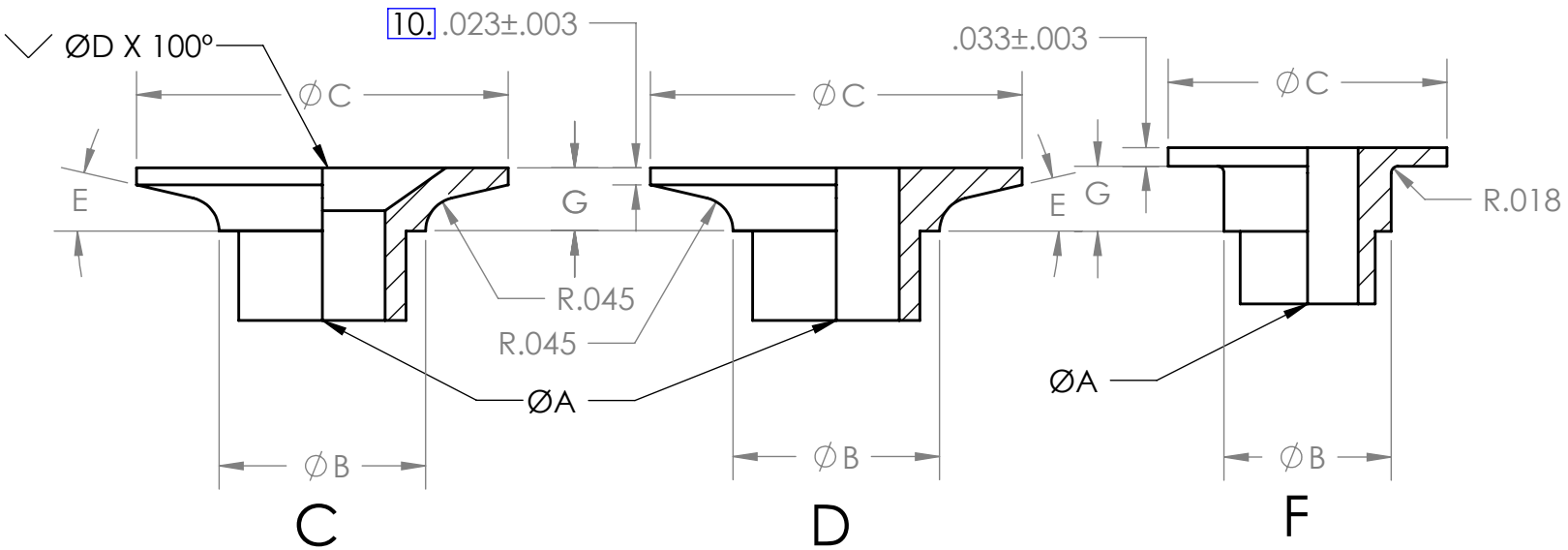
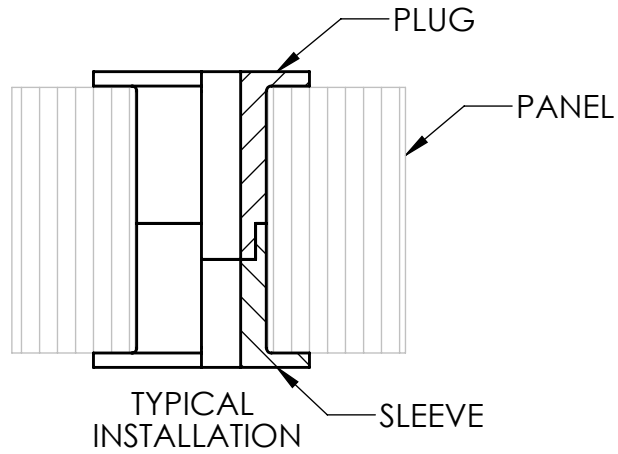
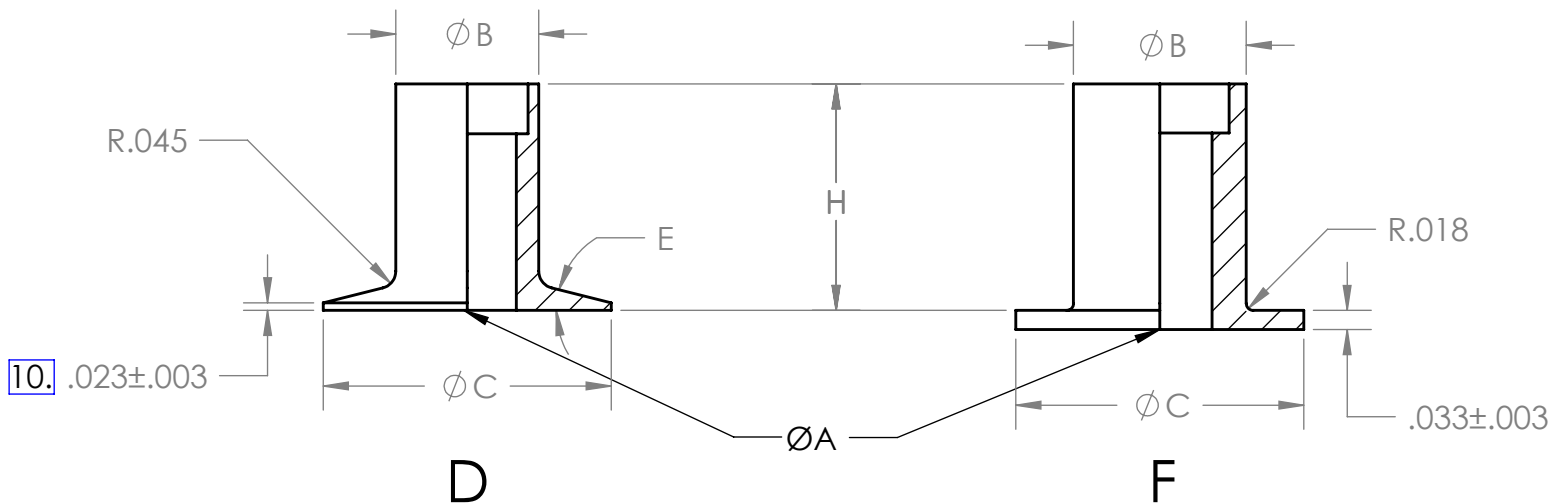


W102

INSERT: GROMMET TYPE, THROUGH-BOLT



PLUG HEAD STYLES



SLEEVE HEAD STYLES

WITTEN COMPANY
918-272-9567

APPROVAL DATE: REV:A 10/27/2020

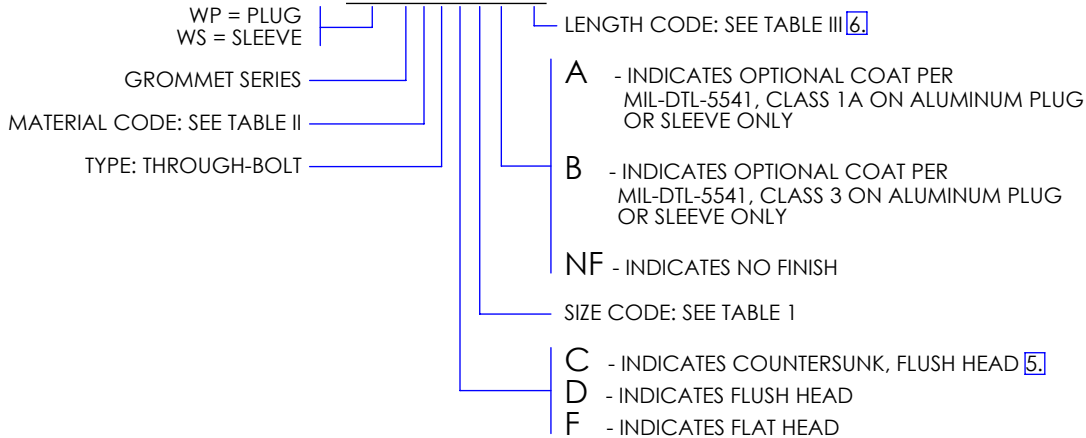
GAGE CODE: 0JHK5

W102

INSERT: GROMMET TYPE, THROUGH-BOLT

PART NUMBER CODING:

WP102F8 - 11
WS102D8A08


TABLE I

SIZE CODE	ØA ±.003	ØB ±.003	ØC	ØD	E	INSTALLATION HOLE Ø
4	.116	.216	.375	.220	13°	.228
6	.144	.278	.500	.274	13°	.290
8	.169	.278	.500	.332	13°	.290
10	.194	.309	.625	.382	13°	.323
25	.257	.372	.750	.505	14°	.390
31	.318	.466	.875	.632	14°	.484
37	.381	.622	1.000	.761	14°	.640

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. DIMENSIONING AND TOLERANCING PRACTICES PER ASME Y14.5M-2018.
2. DIMENSIONAL LIMITS APPLY AFTER PLATING.
3. DEBURR AND BREAK ALL SHARP EDGES .005 - .015.
4. SURFACE TEXTURE: 125 MICROINCHES PER ASME B46.1-2019.
- ⁵ 'C' HEAD STYLE IS AVAILABLE IN PLUG CONFIGURATION ONLY.
- ⁶ REFER TO TABLE III TO SELECT PLUG/SLEEVE COMBINATION FOR A GIVEN PANEL THICKNESS.
7. THE W102 GROMMETS ARE SELF-RETAINED THROUGH A TELESCOPE FIT.
- ⁸ A SINGLE THROUGH HOLE DIAMETER IS USED FOR 03 SLEEVE LENGTH CODE.
- ⁹ A SINGLE THROUGH HOLE DIAMETER IS USED FOR 04 SLEEVE LENGTH CODE IN 26 AND 28 SIZE CODES.
- ¹⁰ PARTS SPECIFIED WITH A 31 OR 37 SIZE CODE HAVE A FLANGE THICKNESS OF .033±.003.
11. CONSULT THE WITTEN COMPANY ENGINEERING DEPARTMENT FOR OTHER FINISHES, MATERIALS, OR SIZES.

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W102

INSERT: GROMMET TYPE, THROUGH-BOLT

TABLE III

PANEL THICKNESS MINIMUM	LENGTH CODE	PLUG			LENGTH CODE	SLEEVE		
		G+.000/- .010				H+.000/- .010		
		SIZE CODE				SIZE CODE		
		4,6,8,10	25	31,37		4,6,8,10	25	31,37
.188	X	.085	.120	NA	03 8.	.103	.067	NA
.250	0	.085	.120	NA	04 9.	.165	.130	NA
.266	01	.101	.136					
.281	1	.116	.151					
.297	11	.132	.167					
.312	2	.147	.182					
.328	21	.163	.198					
.344	3	.179	.214					
.359	31	.194	.229					
.375	0	.085	.120	.190	06	.290	.255	.185
.391	01	.101	.136	.206				
.406	1	.116	.151	.221				
.422	11	.132	.167	.237				
.438	2	.147	.182	.252				
.453	21	.163	.198	.268				
.469	3	.179	.214	.284				
.484	31	.194	.229	.299				
.500	0	.085	.120	.190	08	.415	.380	.310
.516	01	.101	.136	.206				
.531	1	.116	.151	.221				
.547	11	.132	.167	.237				
.562	2	.147	.182	.252				
.578	21	.163	.198	.268				
.594	3	.179	.214	.284				
.609	31	.194	.229	.299				
.625	0	.085	.120	.190	10	.540	.505	.435
.641	01	.101	.136	.206				
.656	1	.116	.151	.221				
.672	11	.132	.167	.237				
.688	2	.147	.182	.252				
.703	21	.163	.198	.268				
.719	3	.179	.214	.284				
.734	31	.194	.229	.299				
.750	0	.085	.120	.190	12	.685	.630	.560
.766	01	.101	.136	.206				
.781	1	.116	.151	.221				
.797	11	.132	.167	.237				
.812	2	.147	.182	.252				
.828	21	.163	.198	.268				
.844	3	.179	.214	.284				
.859	31	.194	.229	.299				
.875	0	.085	.120	.190	14	.790	.755	.685
.891	01	.101	.136	.206				
.906	1	.116	.151	.221				
.922	11	.132	.167	.237				
.938	2	.147	.182	.252				
.953	21	.163	.198	.268				
.969	3	.179	.214	.284				
.984	31	.194	.229	.299				

W102

INSERT: GROMMET TYPE, THROUGH-BOLT

TABLE III (CONT.)

PANEL THICKNESS MINIMUM	LENGTH CODE	PLUG			LENGTH CODE	SLEEVE		
		G+.000/- .010				H+.000/- .010		
		SIZE CODE				SIZE CODE		
		4,6,8,10	25	31,37		4,6,8,10	25	31,37
1.000	0	.085	.120	.190	16	.915	.880	.810
1.016	01	.101	.136	.206				
1.031	1	.116	.151	.221				
1.047	11	.132	.167	.237				
1.062	2	.147	.182	.252				
1.078	21	.163	.198	.268				
1.094	3	.179	.214	.284				
1.109	31	.194	.229	.299				
1.125	0	.085	.120	.190	18	1.040	1.005	.935
1.141	01	.101	.136	.206				
1.156	1	.116	.151	.221				
1.172	11	.132	.167	.237				
1.188	2	.147	.182	.252				
1.203	21	.163	.198	.268				
1.219	3	.179	.214	.284				
1.234	31	.194	.229	.299				
1.250	0	.085	.120	.190	20	1.165	1.130	1.060
1.266	01	.101	.136	.206				
1.281	1	.116	.151	.221				
1.297	11	.132	.167	.237				
1.312	2	.147	.182	.252				
1.328	21	.163	.198	.268				
1.344	3	.179	.214	.284				
1.359	31	.194	.229	.299				
1.375	0	.085	.120	.190	22	1.290	1.255	1.185
1.391	01	.101	.136	.206				
1.406	1	.116	.151	.221				
1.422	11	.132	.167	.237				
1.438	2	.147	.182	.252				
1.453	21	.163	.198	.268				
1.469	3	.179	.214	.284				
1.484	31	.194	.229	.299				
1.500	0	.085	.120	.190	24	1.415	1.380	1.310
1.516	01	.101	.136	.206				
1.531	1	.116	.151	.221				
1.547	11	.132	.167	.237				
1.562	2	.147	.182	.252				
1.578	21	.163	.198	.268				
1.594	3	.179	.214	.284				
1.609	31	.194	.229	.299				
1.625	0	.085	.120	.190	26	1.540	1.505	1.435
1.641	01	.101	.136	.206				
1.656	1	.116	.151	.221				
1.672	11	.132	.167	.237				
1.688	2	.147	.182	.252				
1.703	21	.163	.198	.268				
1.719	3	.179	.214	.284				
1.734	31	.194	.229	.299				