

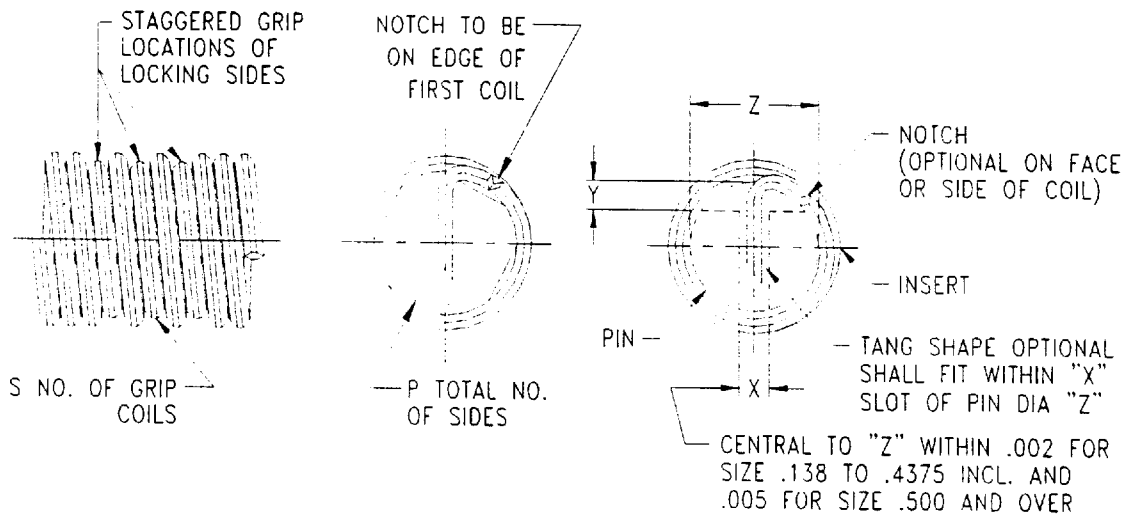
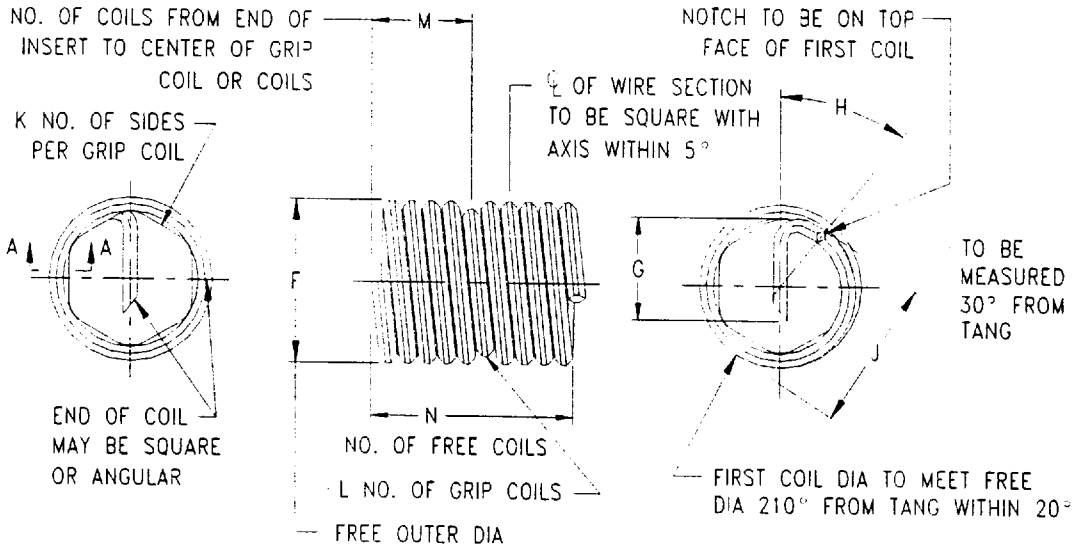


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LIST OF CURRENT SHEETS

NO.	1	2	3	4	5	6	7	8
REV.	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS21209, REVISION E. PART NUMBERS REMAIN MS21209.

CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE



PROCUREMENT SPECIFICATION

MIL-I-8846

TITLE
INSERT, SCREW THREAD, COARSE AND FINE,
SCREW LOCKING, HELICAL COIL, CRES

CLASSIFICATION
PART STANDARD

NASM21209
SHEET 1 OF 8

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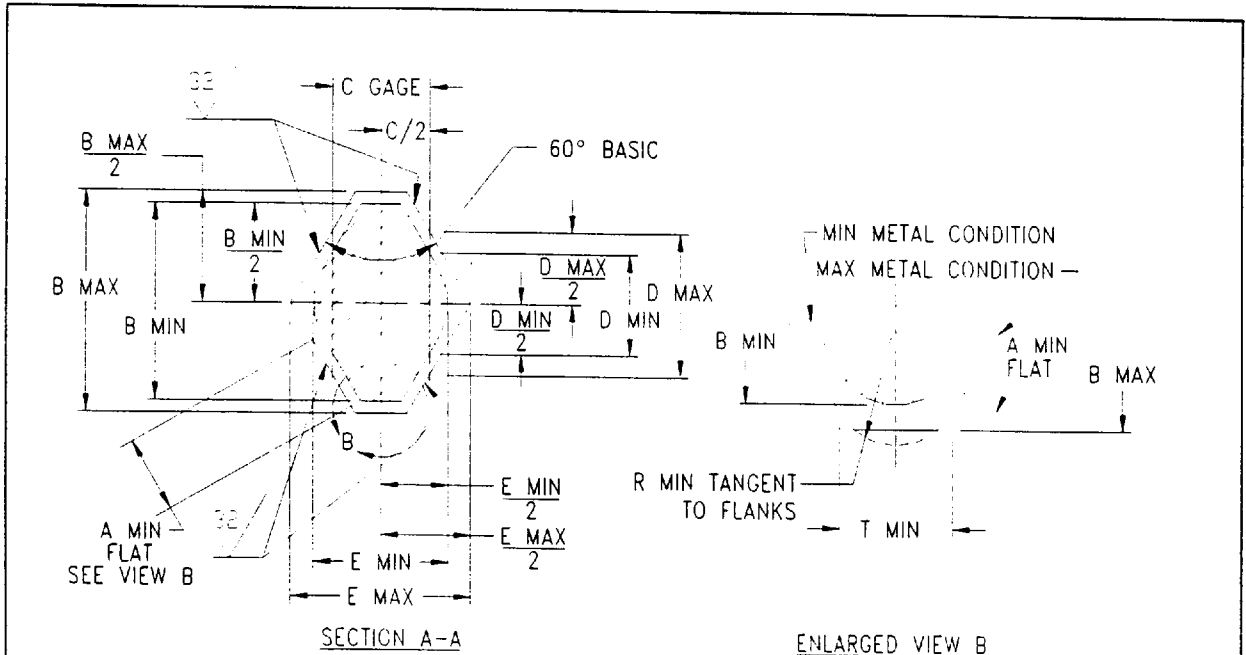


TABLE I. Dash numbers and dimensions for coarse thread series.

Ø1 DIAMETER NOMINAL LENGTH						Ø1.5 DIAMETER NOMINAL LENGTH				
NOMINAL THREAD SIZE	DASH NO.	LENGTH (REF)	WEIGHT LBS/100	M ±1 COIL	N ±1/4 COIL	DASH NO.	LENGTH (REF)	WEIGHT LBS/100	M ±1 COIL	N ±1/4 COIL
.086-56	C0210	.086	.0051	1.500	3.00	C0215	.129	.0084	2.625	5.250
.099-48	C0310	.099	.0077	1.4375	2.875	C0315	.148	.0125	2.500	5.000
.112-40	C0410	.112	.0121	1.375	2.750	C0415	.168	.0196	2.375	4.750
.125-40	C0510	.125	.0154	1.625	3.250	C0515	.188	.0250	2.750	5.500
.138-32	C0610	.138	.0243	1.375	2.750	C0615	.207	.0384	2.375	4.750
.164-32	C0810	.164	.0355	1.750	3.500	C0815	.246	.0556	3.000	6.000
.190-24	C1-10	.190	.0573	1.4375	2.875	C1-15	.285	.0899	2.500	5.000
.216-24	C2-10	.216	.077	1.750	3.500	C2-15	.324	.119	3.000	6.000
.250-20	C4-10	.250	.145	1.6875	3.375	C4-15	.375	.196	2.875	5.750
.3125-18	C5-10	.3125	.232	2.000	4.000	C5-15	.469	.369	3.3125	6.625
.375-16	C6-10	.375	.391	2.1875	4.375	C6-15	.562	.625	3.625	7.250
.4375-14	C7-10	.4375	.667	2.250	4.500	C7-15	.656	.943	3.6875	7.375
.500-13	C8-10	.500	.794	2.4375	4.875	C8-15	.750	1.316	3.9375	7.875
.5625-12	C9-10	.5625	1.235	2.5625	5.125	C9-15	.844	1.961	4.125	8.250
.625-11	C1010	.625	1.515	2.6250	5.250	C1015	.938	2.439	4.250	8.500
.750-10	C1210	.750	2.778	2.9375	5.875	C1215	1.125	4.000	4.6875	9.375
.875-9	C1410	.875	4.545	3.125	6.250	C1415	1.312	6.250	5.000	10.000
1.000-8	C1610	1.000	5.882	3.1875	6.375	C1615	1.500	9.091	5.0625	10.125
1.125-7	C1810	1.125	8.392	3.0625	6.125	C1815	1.688	12.928	4.9375	9.875
1.250-7	C2010	1.250	10.487	3.500	7.000	C2015	1.875	16.070	5.625	11.250
1.375-6	C2210	1.375	14.505	3.250	6.500	C2215	2.062	22.264	5.250	10.500
1.500-6	C2410	1.500	17.563	3.625	7.250	C2415	2.250	26.915	5.750	11.500

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TABLE I. Dash numbers and dimensions for coarse thread series – (Continued)

Ø2 DIAMETER NOMINAL LENGTH						Ø2.5 DIAMETER NOMINAL LENGTH				
NOMINAL THREAD SIZE	DASH NO.	LENGTH (REF)	WEIGHT LBS/100	M ±1 COIL	N ±1/4 COIL	DASH NO.	LENGTH (REF)	WEIGHT LBS/100	M ±1 COIL	N ±1/4 COIL
.086-56	C0220	.172	.0117	3.6875	7.375	C0225	.215	.015	5.9375	9.625
.099-48	C0320	.198	.0174	3.625	7.250	C0325	.248	.0224	5.750	9.375
.112-40	C0420	.224	.0272	3.375	6.750	C0425	.280	.0348	5.500	8.875
.125-40	C0520	.250	.0345	3.875	7.750	C0525	.312	.044	6.125	10.000
.138-32	C0620	.276	.0525	3.4375	6.875	C0625	.345	.0666	5.4375	8.875
.164-32	C0820	.328	.0776	4.1875	8.375	C0825	.410	.1008	6.5625	10.750
.190-24	C1-20	.380	.1330	3.5625	7.125	C1-25	.475	.172	5.6875	9.250
.216-24	C2-20	.432	.172	4.1875	8.375	C2-25	.540	.208	6.4375	10.625
.250-20	C4-20	.500	.308	4.000	8.000	C4-25	.625	.385	6.375	10.375
.3125-18	C5-20	.625	.510	4.625	9.250	C5-25	.781	.658	7.250	11.875
.375-16	C6-20	.750	.862	5.000	10.000	C6-25	.938	1.064	7.875	12.875
.4375-14	C7-20	.875	1.250	5.125	10.250	C7-25	1.094	1.667	8.000	13.125
.500-13	C8-20	1.000	1.852	5.500	11.000	C8-25	1.250	2.273	8.625	14.125
.5625-12	C9-20	1.125	2.632	5.750	11.500	C9-25	1.406	3.226	9.000	14.750
.625-11	C1020	1.250	3.448	5.875	11.750	C1025	1.562	4.348	9.125	15.000
.750-10	C1220	1.500	5.263	6.500	13.000	C1225	1.875	6.667	10.000	16.500
.875-9	C1420	1.750	8.333	6.875	13.750	C1425	2.188	10.000	10.625	17.500
1.000-8	C1620	2.000	12.500	7.000	14.000	C1625	2.500	14.286	10.750	17.750
1.125-7	C1820	2.250	17.464	6.8125	13.625	C1825	2.812	22.000	10.6875	17.500
1.250-7	C2020	2.500	21.653	7.6875	15.375	C2025	3.125	27.236	11.8125	19.500
1.375-6	C2220	2.750	30.122	7.1875	14.375	C2225	3.438	37.981	11.1875	18.375
1.500-6	C2420	3.000	36.268	7.9375	15.875	C2425	3.750	45.620	12.1875	20.125

TABLE I. Dash numbers and dimensions for coarse thread series – (Continued)

Ø3 DIAMETER NOMINAL LENGTH					
NOMINAL THREAD SIZE	DASH NO.	LENGTH (REF)	WEIGHT LBS/100	M ±1 COIL	N ±1/4 COIL
.086-56	C0230	.258	.0183	8.1875	11.875
.099-48	C0330	.297	.0271	7.875	11.500
.112-40	C0430	.336	.0423	7.500	10.875
.125-40	C0530	.375	.0536	8.375	12.250
.138-32	C0630	.414	.0807	7.4375	10.750
.164-32	C0830	.492	.125	9.0625	13.250
.190-24	C1-30	.570	.219	7.8125	11.375
.216-24	C2-30	.648	.279	8.9375	13.125
.250-20	C4-30	.750	.490	8.750	12.750
.3125-18	C5-30	.938	.806	10.000	14.625
.375-16	C6-30	1.125	1.316	10.875	15.750
.4375-14	C7-30	1.312	2.000	11.000	16.125
.500-13	C8-30	1.500	2.857	11.625	17.125
.5625-12	C9-30	1.688	4.000	12.125	17.875
.625-11	C1030	1.875	5.263	12.500	18.375
.750-10	C1230	2.250	8.333	13.625	20.125
.875-9	C1430	2.625	12.500	14.375	21.250
1.000-8	C1630	3.000	16.670	14.625	21.625
1.125-7	C1830	3.375	26.536	14.4375	21.250
1.250-7	C2030	3.750	32.819	16.0625	23.750
1.375-6	C2230	4.125	45.839	15.0625	22.250
1.500-6	C2430	4.500	54.972	16.5625	24.500

NASM21209
SHEET 3

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TABLE I. Dash numbers and dimensions for fine thread series.

Ø1 DIAMETER NOMINAL LENGTH						Ø1.5 DIAMETER NOMINAL LENGTH				
NOMINAL THREAD SIZE	DASH NO.	LENGTH (REF)	WEIGHT LBS/100	M ±1 COIL	N ±1/4 COIL	DASH NO.	LENGTH (REF)	WEIGHT LBS/100	M ±1 COIL	N ±1/4 COIL
.099-56	F0310	.099	.0051	1.6875	3.375	F0315	.148	.0084	2.8125	5.625
.112-48	F0410	.112	.0099	1.6875	3.375	F0415	.168	.0160	2.8125	5.625
.138-40	F0610	.138	.020	1.750	3.500	F0615	.207	.0304	3.000	6.000
.164-36	F0810	.164	.0325	1.9375	3.875	F0815	.246	.0502	3.250	6.500
.190-32	F1-10	.190	.0474	2.0625	4.125	F1-15	.285	.0784	3.4375	6.875
.250-28	F4-10	.250	.109	2.500	5.000	F4-15	.375	.155	4.125	8.250
.3125-24	F5-10	.312	.180	2.750	5.500	F5-15	.469	.284	4.4375	8.875
.375-24	F6-10	.375	.259	3.4375	6.875	F6-15	.562	.420	5.500	11.000
.4375-20	F7-10	.438	.459	3.3125	6.625	F7-15	.656	.699	5.3125	10.625
.500-20	F8-10	.500	.595	3.9375	7.875	F8-15	.750	.909	6.1875	12.375
.5625-18	F9-10	.562	.826	4.000	8.000	F9-15	.844	1.266	6.250	12.500
.625-18	F1010	.625	1.010	4.500	9.000	F1015	.938	1.562	7.0625	14.125
.750-16	F1210	.750	1.695	4.875	9.750	F1215	1.125	2.564	7.5625	15.125
.875-14	F1410	.875	2.564	4.9375	9.875	F1415	1.312	4.000	7.750	15.500
1.000-12	F1610	1.000	3.875	4.8125	9.625	F1615	1.500	6.063	7.500	15.000
1.125-12	F1810	1.125	4.917	5.5625	11.125	F1815	1.688	7.572	8.625	17.250
1.250-12	F2010	1.250	6.254	6.250	12.500	F2015	1.875	9.502	9.6875	19.375
1.375-12	F2210	1.375	7.359	6.875	13.750	F2215	2.062	11.276	10.6875	21.375
1.500-12	F2410	1.500	8.799	7.625	15.250	F2415	2.250	13.650	11.750	23.500

TABLE II. Dash numbers and dimensions for fine thread series. -- Continued.

Ø2 DIAMETER NOMINAL LENGTH						Ø2.5 DIAMETER NOMINAL LENGTH				
NOMINAL THREAD SIZE	DASH NO.	LENGTH (REF)	WEIGHT LBS/100	M ±1 COIL	N ±1/4 COIL	DASH NO.	LENGTH (REF)	WEIGHT LBS/100	M ±1 COIL	N ±1/4 COIL
.099-56	F0320	.198	.0117	4.000	8.000	F0325	.248	.0192	6.375	10.375
.112-48	F0420	.224	.0222	3.9375	7.875	F0425	.280	.0285	6.3125	10.250
.138-40	F0620	.276	.0408	4.1875	8.375	F0625	.345	.0512	6.5625	10.750
.164-36	F0820	.328	.0680	4.5625	9.125	F0825	.410	.0857	7.0625	11.625
.190-32	F1-20	.380	.112	4.750	9.500	F1-25	.475	.140	7.500	12.000
.250-28	F4-20	.500	.212	5.6875	11.375	F4-25	.625	.276	8.8125	14.500
.3125-24	F5-20	.625	.397	6.125	12.250	F5-25	.781	.490	9.500	15.625
.375-24	F6-20	.750	.553	7.500	15.000	F6-25	.938	.709	11.625	19.125
.4375-20	F7-20	.875	.917	7.3125	14.625	F7-25	1.094	1.250	11.1875	18.500
.500-20	F8-20	1.000	1.234	8.4375	16.875	F8-25	1.250	1.563	12.9375	21.375
.5625-18	F9-20	1.125	1.695	8.5625	17.125	F9-25	1.406	2.128	13.1875	21.750
.625-18	F1020	1.250	2.083	9.625	19.250	F1025	1.562	2.632	14.625	24.250
.750-16	F1220	1.500	3.448	10.3125	20.625	F1225	1.875	4.348	15.6875	26.000
.875-14	F1420	1.750	5.263	10.5625	21.125	F1425	2.188	6.667	16.0625	26.625
1.000-12	F1620	2.000	8.188	10.250	20.500	F1625	2.500	10.406	15.750	26.000
1.125-12	F1820	2.250	10.227	11.6875	23.375	F1825	2.812	12.882	17.8125	29.500
1.250-12	F2020	2.500	12.750	13.125	26.250	F2025	3.125	15.998	19.875	33.000
1.375-12	F2220	2.750	15.194	14.4375	28.875	F2225	3.438	19.111	22.0625	36.500
1.500-12	F2420	3.000	18.501	15.8125	31.625	F2425	3.750	23.352	24.0625	39.875

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TABLE II. Dash numbers and dimensions for fine thread series - (Continued)

Ø3 DIAMETER NOMINAL LENGTH					
NOMINAL THREAD SIZE	DASH NO.	LENGTH (REF)	WEIGHT LBS/100	M ±1 COIL	N ±1/4 COIL
.099-56	F0330	.297	.0234	8.625	12.625
.112-48	F0430	.336	.0346	8.5625	12.500
.138-40	F0630	.414	.0616	9.0625	13.250
.164-36	F0830	.492	.1034	9.6875	14.250
.190-32	F1-30	.570	.170	10.125	14.875
.250-28	F4-30	.750	.338	11.9375	17.625
.3125-24	F5-30	.938	.602	12.875	19.000
.375-24	F6-30	1.125	.862	15.625	23.125
.4375-20	F7-30	1.312	1.493	15.1875	22.500
.500-20	F8-30	1.500	1.887	17.4375	25.875
.5625-18	F9-30	1.688	2.564	17.6875	26.250
.625-18	F1030	1.875	3.030	19.750	29.375
.750-16	F1230	2.250	5.263	21.1875	31.500
.875-14	F1430	2.625	7.692	21.6875	32.250
1.000-12	F1630	3.000	12.815	21.250	31.500
1.125-12	F1830	3.375	15.536	24.0625	35.750
1.250-12	F2030	3.750	19.246	26.750	39.875
1.375-12	F2230	4.125	23.028	29.5625	44.000
1.500-12	F2430	4.500	28.203	32.3125	48.125

TABLE III. Insert dimensions coarse thread.

NOMINAL THREAD SIZE	A MIN	B		C GAGE	D		E		F	
		MIN	MAX		MIN	MAX	MIN	MAX	MIN	MAX
.086-56	.0027	.0163	.0193	.00893	.0112	.0116	.0126	.0156	.110	.119
.099-48	.0043	.0196	.0226	.01042	.01313	.01353	.0152	.0182	.128	.137
.112-40	.0068	.0241	.0271	.0125	.01584	.01624	.0189	.0219	.144	.159
.125-40	.0068	.0241	.0271	.0125	.01584	.01624	.0189	.0219	.158	.173
.138-32	.0076	.0295	.0338	.01563	.01985	.02030	.0233	.0273	.178	.193
.164-32	.0076	.0295	.0338	.01563	.01985	.02030	.0233	.0273	.205	.220
.190-24	.0120	.0410	.0449	.02083	.02656	.02706	.0305	.0365	.244	.259
.216-24	.0120	.0410	.0449	.02083	.02656	.02706	.0305	.0365	.270	.285
.250-20	.0164	.050	.0540	.02500	.03198	.03248	.0378	.0438	.310	.330
.3125-18	.0176	.056	.060	.02778	.03558	.03608	.0416	.0486	.380	.400
.375-16	.0215	.0636	.0677	.03125	.04009	.04059	.0477	.0547	.452	.472
.4375-14	.0267	.0730	.0770	.03571	.04589	.04639	.0545	.0625	.526	.551
.500-13	.0273	.0758	.0829	.03846	.04946	.04996	.0593	.0673	.597	.622
.5625-12	.0334	.0861	.0900	.04167	.05363	.05413	.0649	.0729	.669	.694
.625-11	.0351	.0909	.0980	.04545	.05855	.05905	.0715	.0795	.742	.767
.750-10	.0402	.1007	.1079	.05000	.06445	.06495	.0795	.0875	.881	.906
.875-9	.0466	.1124	.1199	.05556	.07167	.07217	.0892	.0972	1.022	1.052
1.000-8	.0544	.1264	.1350	.06250	.08069	.08119	1.004	1.094	1.166	1.196
1.125-7	.0645	.1451	.1546	.07143	.09229	.09279	1.160	1.250	1.315	1.355
1.250-7	.0645	.1451	.1546	.07143	.09229	.09279	1.160	1.250	1.443	1.483
1.375-6	.0775	.1695	.1799	.08333	.10775	.10825	1.368	1.458	1.598	1.643
1.500-6	.0775	.1695	.1799	.08333	.10775	.10825	1.368	1.458	1.727	1.772

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TABLE III. Insert dimensions coarse thread - (Continued)

NOMINAL THREAD SIZE	G		H		J		K	L	P	S ±.250 COIL	R MIN	T MIN
	MIN	MAX	MIN	MAX	MIN	MAX						
.086-56	.067	.085	75°	150°	.103	.111	4	1	3	1.50	.0032	.0056
.099-48	.070	.090	75°	150°	.128	.137	4	1	3	1.50	.0038	.0065
.112-40	.070	.105	25°	100°	.144	.159	4	1	3	1.75	.0045	.0078
.125-40	.078	.108	25°	100°	.158	.173	4	1	3	1.62	.0045	.0078
.138-32	.091	.135	25°	100°	.178	.193	4	1	3	1.75	.0056	.0098
.164-32	.117	.152	20°	100°	.205	.220	4	1	3	1.75	.0056	.0098
.190-24	.138	.183	20°	90°	.244	.259	4	1	3	1.75	.0075	.0130
.216-24	.154	.189	20°	90°	.270	.285	4	1	3	1.75	.0075	.0130
.250-20	.187	.238	20°	80°	.310	.330	5	1	4	2.50	.0090	.0156
.3125-18	.227	.291	20°	80°	.380	.400	5	1	3	2.75	.0100	.0174
.375-16	.271	.354	20°	80°	.452	.472	6	1	3	2.75	.0113	.0195
.4375-14	.318	.416	20°	80°	.526	.551	6	1	4	1.75	.0129	.0223
.500-13	.349	.463	20°	80°	.597	.622	6	1	4	1.75	.0139	.0240
.5625-12	.401	.521	20°	80°	.656	.676	6	1	4	1.75	.0150	.0260
.625-11	.428	.572	20°	80°	.727	.747	6	1	5	2.25	.0164	.0284
.750-10	.453	.635	60°	120°	.840	.885	6	1	5	2.25	.0180	.0312
.875-9	.500	.734	60°	120°	.991	1.026	6	1	6	3.33	.0200	.0347
1.000-8	.526	.781	60°	120°	1.135	1.170	6	1	6	3.33	.0226	.0391
1.125-7	.557	.843	60°	120°	1.260	1.315	6	1	6	3.33	.0258	.0446
1.250-7	.679	.937	60°	120°	1.366	1.416	6	1	6	3.33	.0258	.0446
1.375-6	.689	1.093	60°	120°	1.545	1.598	7	1	6	3.33	.0301	.0521
1.500-6	.811	1.187	60°	120°	1.676	1.727	7	1	6	3.33	.0301	.0521

TABLE IV. Insert dimensions coarse thread - (Continued)

NOMINAL THREAD SIZE	X +.001 -.000	Y +.001 -.000	Z +.000 -.001
.086-56	-	-	-
.099-48	-	-	-
.112-40	-	-	-
.125-40	-	-	-
.138-32	.045	.020	.101
.164-32	.045	.020	.127
.190-24	.061	.020	.142
.216-24	.064	.025	.168
.250-20	.073	.028	.193
.3125-18	.082	.034	.250
.375-16	.093	.039	.302
.4375-14	.112	.056	.355
.500-13	.125	.076	.411
.5625-12	.142	.086	.468
.625-11	.156	.114	.521
.750-10	.186	.117	.625
.875-9	.186	.156	.750
1.000-8	.250	.156	.844
1.125-7	-	-	-
1.250-7	-	-	-
1.375-6	-	-	-
1.500-6	-	-	-

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TABLE IV. Insert dimensions fine thread.

NOMINAL THREAD SIZE	A MIN	B		GAGE	D		E		F	
		MIN	MAX		MIN	MAX	MIN	MAX	MIN	MAX
.099-56	.0027	.0163	.0193	.00893	.0112	.0116	.0126	.0156	.131	.146
.112-48	.0043	.0196	.0226	.01042	.01313	.01353	.0152	.0182	.147	.162
.138-40	.0068	.0241	.0271	.01250	.01584	.01624	.0189	.0219	.173	.193
.164-36	.0059	.0261	.0301	.01389	.01764	.01804	.0203	.0243	.204	.224
.190-32	.0076	.0295	.0338	.01563	.01985	.02030	.0233	.0273	.236	.256
.250-28	.0085	.0347	.0387	.01786	.02270	.02320	.0253	.0313	.306	.326
.3125-24	.0120	.0410	.0449	.02083	.02656	.02706	.0305	.0365	.380	.400
.375-24	.0120	.0410	.0449	.02083	.02656	.02706	.0305	.0365	.448	.468
.4375-20	.0164	.500	.0540	.02500	.03198	.03248	.0378	.0438	.524	.549
.500-20	.0164	.500	.0540	.02500	.03198	.03248	.0378	.0438	.592	.617
.5625-18	.0176	.0560	.0600	.02778	.03558	.03608	.0416	.0486	.666	.691
.625-18	.0176	.0560	.0600	.02778	.03558	.03608	.0416	.0486	.733	.758
.750-16	.0215	.0636	.0677	.03125	.04009	.04059	.0477	.0547	.876	.901
.875-14	.0267	.0730	.0770	.03571	.04589	.04639	.0545	.0625	1.021	1.051
1.000-12	.0334	.0861	.0900	.04167	.05363	.05413	.0649	.0729	1.169	1.199
1.125-12	.0334	.0861	.0900	.04167	.05363	.05413	.0649	.0729	1.304	1.334
1.250-12	.0334	.0861	.0900	.04167	.05363	.05413	.0649	.0729	1.439	1.469
1.375-12	.0334	.0861	.0900	.04167	.05363	.05413	.0649	.0729	1.575	1.610
1.500-12	.0334	.0861	.0900	.04167	.05363	.05413	.0649	.0729	1.710	1.745

TABLE IV. Insert dimensions fine thread - (Continued)

NOMINAL THREAD SIZE	G		H		J		K	L	P	S ±1/4 COIL	R MIN	T MIN
	MIN	MAX	MIN	MAX	MIN	MAX						
.099-56	.072	.090	75°	150°	.131	.146	4	1	-	-	.0032	.0056
.112-48	.060	.095	75°	150°	.147	.162	4	1	4	2.33	.0038	.0065
.138-40	.100	.130	25°	100°	.173	.193	4	1	4	2.33	.0045	.0078
.164-36	.117	.147	20°	100°	.204	.224	4	1	4	2.33	.0050	.0087
.190-32	.131	.182	15°	90°	.236	.256	5	1	4	1.75	.0056	.0098
.250-28	.178	.244	15°	75°	.306	.326	5	1	6	4.0	.0064	.0112
.3125-24	.209	.291	15°	75°	.380	.400	6	2	9	5.25	.0075	.0130
.375-24	.240	.353	15°	75°	.448	.468	6	2	10	5.25	.0075	.0130
.4375-20	.287	.416	15°	75°	.524	.549	6	2	8	4.0	.0090	.0156
.500-20	.318	.479	15°	75°	.592	.617	6	2	10	5.25	.0090	.0156
.5625-18	.354	.541	15°	75°	.666	.691	6	2	10	5.25	.0100	.0174
.625-18	.386	.588	15°	75°	.733	.758	6	2	10	5.25	.0100	.0174
.750-16	.464	.557	15°	75°	.876	.901	7	2	12	6.25	.0113	.0195
.875-14	.495	.604	15°	75°	1.021	1.051	8	2	12	6.25	.0129	.0223
1.000-12	.526	.728	15°	75°	1.169	1.199	8	2	14	7.5	.0150	.0260
1.125-12	.557	.819	10°	70°	1.304	1.334	8	2	14	7.5	.0150	.0260
1.250-12	.679	.941	10°	70°	1.344	1.374	8	2	14	7.5	.0150	.0260
1.375-12	.689	1.001	10°	70°	1.469	1.504	10	2	14	7.5	.0150	.0260
1.500-12	.811	1.123	10°	70°	1.594	1.629	11	2	14	7.5	.0150	.0260

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TABLE IV. Insert dimensions fine thread.-
(Continued)

NOMINAL THREAD SIZE	X +.001 -.000	Y +.001 -.000	Z +.000 -.001
.099-56	-	-	-
.112-48	-	-	-
.138-40	-	-	-
.164-36	-	-	-
.190-32	.052	.020	.153
.250-28	.060	.020	.208
.3125-24	.070	.024	.265
.375-24	.070	.024	.328
.4375-20	.088	.046	.380
.500-20	.090	.046	.422
.5625-18	.100	.066	.500
.625-18	.100	.089	.563
.750-16	.109	.087	.679
.875-14	.125	.135	.794
1.000-12	-	-	-
1.125-12	-	-	-
1.250-12	-	-	-
1.375-12	-	-	-
1.500-12	-	-	-

NOMINAL LENGTH: NOMINAL LENGTH EQUALS MINIMUM THROUGH HOLE LENGTH WITHOUT COUNTERSINK AND WITH INSERT LOCATED ¼ TO ½ THREAD PITCH BELOW TOP SURFACE.

FREE COILS: THE NUMBER OF FREE COILS OF THE INSERT ARE COUNTED 90° FROM TANG FOR ALL SIZES.

MATERIAL: STEEL, CORROSION RESISTANT. SEE PROCUREMENT SPECIFICATION.

THREAD: INSERT, WHEN ASSEMBLED IN BASIC TAPPED HOLE AS SPECIFIED ON STANDARD MS33537, SHALL PRODUCE A FINISHED THREAD MEETING THE REQUIREMENTS OF HANDBOOK H28 AND SHALL ACCEPT EXTERNAL THREADED PARTS WHICH ARE THREADED TO MIL-S-7742 OR MIL-S-8879.

SURFACE ROUGHNESS: ANSI B46.1 - 1962.

DIMENSIONS IN INCHES. APPLY BEFORE PLATING. UNLESS OTHERWISE SPECIFIED, TOLERANCES:

LINEAR DIMENSIONS ±.010, ANGULAR DIMENSIONS ±5°.

COLOR IDENTIFICATION: (a) BARE INSERTS - DYED RED
(b) DRY FILM LUBRICATED - DARK GREY
(c) CADMIUM PLATED - OLIVE DRAB

LUBRICANT: DRY FILM LUBRICANT SHALL BE IN ACCORDANCE WITH MIL-L-8937.

PLATING: CADMIUM PLATING SHALL BE IN ACCORDANCE WITH QQ-P-416, TYPE II, EXCEPT THE THICKNESS SHALL BE A MINIMUM OF 0.0001.

ADD THE LETTER "L" AFTER THE PART NUMBER TO DESIGNATE A DRY FILM LUBRICANT COATED INSERT.

ADD THE LETTER "P" AFTER THE PART NUMBER TO DESIGNATE A CADMIUM PLATED INSERT.

THE MS PART NUMBER CONSISTS OF THE BASIC MS NUMBER PLUS THE DASH NUMBER.

EXAMPLE OF PART NUMBER: MS21209C0415 = A SCREW LOCKING HELICAL COIL INSERT (MS21209), COARSE THREAD (C), NUMBER 4 THREAD DIAMETER (04), 1.5 DIA NOMINAL LENGTH (15).
MS21209F4-20L = A SCREW LOCKING HELICAL COIL INSERT (MS21209), FINE THREAD (F), .250-28 THREAD DIAMETER (4), WITH A DRY FILM LUBRICANT (L).
MS21209F1225P = A SCREW LOCKING HELICAL COIL INSERT (MS21209), FINE THREAD (F), .750-16 THREAD DIAMETER (12), 2.5 DIAMETER NOMINAL LENGTH (25), WITH CADMIUM PLATING (P).

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