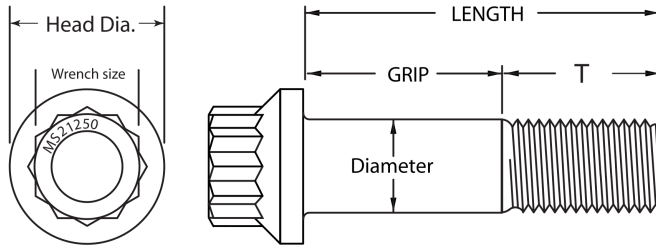


MS21250, 12 Point Bolts

Diameter / Head Size / Thread Lengths



HELP WITH THE SELECTION OF PART NUMBERS

The first five numbers after MS designates the Design of the bolt.
 12 point, Alloy Steel, Heat Treated to 180 to 200 ksi Tensile Strength, Cadmium II, type 2 plate per QQP416.
 The next two numbers after the (-) or the (H) designates the Diameter.
 The next three numbers directly after the Diameter number designates the Grip length.
There is no dash or other characters in between the Diameter number and the Grip length number.

Examples of part numbers:

MS21250 (" - " for no holes in head, "H" for safety holes in head) (Diameter #) (Grip Length Number)

MS21250 - 04012 =1/4 DIAMETER, 28 THREADS PER INCH, .750 GRIP, 1.260 OVERALL LENGTH NO SAFETY HOLES IN HEAD.

MS21250H10020 =5/8 DIAMETER, 16 THREADS PER INCH, 1.250 GRIP, 2.169 OVERALL LENGTH SAFETY HOLES IN HEAD.

Diameter #	THREAD DIA/PITCH	DIA. MAX	DIA. MIN	WRENCH SIZE	" T " DIMENSION	HEAD DIA. + OR - .005
02	8-32	.1635	.1625	7/32	.375	.295
03	10-32	.1895	.1885	1/4	.420	.345
04	1/4-28	.2495	.2485	5/16	.492	.433
05	5/16-24	.3120	.3110	3/8	.579	.526
06	3/8-24	.3745	.3735	7/16	.625	.645
07	7/16-20	.4370	.4360	1/2	.721	.730
08	1/2-20	.4995	.4985	9/16	.768	.825
09	9/16-18	.5615	.5605	5/8	.852	.933
10	5/8-18	.6240	.6230	11/16	.899	1.045
12	3/4-16	.7490	.7480	13/16	1.036	1.225
14	7/8-14	.8740	.8730	15/16	1.244	1.433
16	1"-12	.9990	.9980	1 1/16	1.479	1.620
18	1 1/8"-12	1.1240	1.235	1 1/4	1.650	1.870
20	1 1/4"-12	1.2490	1.2475	1 5/16	1.760	2.120
22	1 3/8"-12	1.3740	1.3725	1 7/16	1.885	2.308

MS21250, 12 Point Bolts

Grip Lengths / Overall Lengths

Grip Dash Number	Grip + or-.010	For Overall Lengths see below																						
		Diameter Dash Numbers																						
		02	03	04	05	06	07	08	09	10	12	14	16	18	20	22	24							
004	0.250	0.655	0.690	0.762	0.849	0.895	0.991	1.038	Not Available															
005	0.313	0.718	0.753	0.825	0.912	0.958	1.054	1.101																
006	0.375	0.780	0.815	0.887	0.974	1.020	1.116	1.163														1.247	1.294	1.431
007	0.438	0.843	0.878	0.950	1.037	1.083	1.179	1.226														1.310	1.357	1.494
008	0.500	0.905	0.940	1.012	1.099	1.145	1.241	1.288	1.372	1.419	1.556													
009	0.563	0.968	1.003	1.075	1.162	1.208	1.304	1.351	1.435	1.482	1.619							1.764	1.999	2.170				
010	0.625	1.030	1.065	1.137	1.224	1.270	1.366	1.413	1.497	1.544	1.681	1.889	2.124	2.295	2.405	2.530	2.655							
011	0.688	1.093	1.128	1.200	1.287	1.333	1.429	1.476	1.560	1.607	1.744	1.952	2.187	2.358	2.468	2.593	2.718							
012	0.750	1.155	1.190	1.262	1.349	1.395	1.491	1.538	1.622	1.669	1.806	2.014	2.249	2.420	2.530	2.655	2.780							
013	0.813	1.218	1.253	1.325	1.412	1.458	1.554	1.601	1.685	1.732	1.869	2.077	2.312	2.483	2.593	2.718	2.843							
014	0.875	1.280	1.315	1.387	1.474	1.520	1.616	1.663	1.747	1.794	1.931	2.139	2.374	2.545	2.655	2.780	2.905							
015	0.938	1.343	1.378	1.450	1.537	1.583	1.679	1.726	1.810	1.857	1.994	2.202	2.437	2.608	2.718	2.843	2.968							
016	1.000	1.405	1.440	1.512	1.599	1.645	1.741	1.788	1.872	1.919	2.056	2.264	2.499	2.670	2.780	2.905	3.030							
017	1.063	1.468	1.503	1.575	1.662	1.708	1.804	1.851	1.935	1.982	2.119	2.327	2.562	2.733	2.843	2.968	3.093							
018	1.125	1.530	1.565	1.637	1.724	1.770	1.866	1.913	1.997	2.044	2.181	2.389	2.624	2.795	2.905	3.030	3.155							
019	1.188	1.593	1.628	1.700	1.787	1.833	1.929	1.976	2.060	2.107	2.244	2.452	2.687	2.858	2.968	3.093	3.218							
020	1.250	1.655	1.690	1.762	1.849	1.895	1.991	2.038	2.122	2.169	2.306	2.514	2.749	2.920	3.030	3.155	3.280							
021	1.313	1.718	1.753	1.825	1.912	1.958	2.054	2.101	2.185	2.232	2.369	2.577	2.812	2.983	3.093	3.218	3.343							
022	1.375	1.780	1.815	1.887	1.974	2.020	2.116	2.163	2.247	2.294	2.431	2.639	2.874	3.045	3.155	3.280	3.405							
023	1.438	1.843	1.878	1.950	2.037	2.083	2.179	2.226	2.310	2.357	2.494	2.702	2.937	3.108	3.218	3.343	3.468							
024	1.500	1.905	1.940	2.012	2.099	2.145	2.241	2.288	2.372	2.419	2.556	2.764	2.999	3.170	3.280	3.405	3.530							
025	1.563	1.968	2.003	2.075	2.162	2.208	2.304	2.351	2.435	2.482	2.619	2.827	3.062	3.233	3.343	3.468	3.593							
026	1.625	2.030	2.065	2.137	2.224	2.270	2.366	2.413	2.497	2.544	2.681	2.889	3.124	3.295	3.405	3.530	3.655							
027	1.688	2.093	2.128	2.200	2.287	2.333	2.429	2.476	2.560	2.607	2.744	2.952	3.187	3.358	3.468	3.593	3.718							
028	1.750	2.155	2.190	2.262	2.349	2.395	2.491	2.538	2.622	2.669	2.806	3.014	3.249	3.420	3.530	3.655	3.780							
029	1.813	2.218	2.253	2.325	2.412	2.458	2.554	2.601	2.685	2.732	2.869	3.077	3.312	3.483	3.593	3.718	3.843							
030	1.875	2.280	2.315	2.387	2.474	2.520	2.616	2.663	2.747	2.794	2.931	3.139	3.374	3.545	3.655	3.780	3.905							
031	1.938	2.343	2.378	2.450	2.537	2.583	2.679	2.726	2.810	2.857	2.994	3.202	3.437	3.608	3.718	3.843	3.968							
032	2.000	2.405	2.440	2.512	2.599	2.645	2.741	2.788	2.872	2.919	3.056	3.264	3.499	3.670	3.780	3.905	4.030							
034	2.125	2.530	2.565	2.637	2.724	2.770	2.866	2.913	2.997	3.044	3.181	3.389	3.624	3.795	3.905	4.030	4.155							
036	2.250	2.655	2.690	2.762	2.849	2.895	2.991	3.038	3.122	3.169	3.306	3.514	3.749	3.920	4.030	4.155	4.280							
038	2.375	2.780	2.815	2.887	2.974	3.020	3.116	3.163	3.247	3.294	3.431	3.639	3.874	4.045	4.155	4.280	4.405							
040	2.500	2.905	2.940	3.012	3.099	3.145	3.241	3.288	3.372	3.419	3.556	3.764	3.999	4.170	4.280	4.405	4.530							
042	2.625	3.030	3.065	3.137	3.224	3.270	3.366	3.413	3.497	3.544	3.681	3.889	4.124	4.295	4.405	4.530	4.655							
044	2.750	3.155	3.190	3.262	3.349	3.395	3.491	3.538	3.622	3.669	3.806	4.014	4.249	4.420	4.530	4.655	4.780							
046	2.875	3.280	3.315	3.387	3.474	3.520	3.616	3.663	3.747	3.794	3.931	4.139	4.374	4.545	4.655	4.780	4.905							
048	3.000	3.405	3.440	3.512	3.599	3.645	3.741	3.788	3.872	3.919	4.056	4.264	4.499	4.670	4.780	4.905	5.030							
050	3.125	3.530	3.565	3.637	3.724	3.770	3.866	3.913	3.997	4.044	4.181	4.389	4.624	4.795	4.905	5.030	5.155							
052	3.250	3.655	3.690	3.762	3.849	3.895	3.991	4.038	4.122	4.169	4.306	4.514	4.749	4.920	5.030	5.155	5.280							
054	3.375	3.780	3.815	3.887	3.974	4.020	4.116	4.163	4.247	4.294	4.431	4.639	4.874	5.045	5.155	5.280	5.405							
056	3.500	3.905	3.940	4.012	4.099	4.145	4.241	4.288	4.372	4.419	4.556	4.764	4.999	5.170	5.280	5.405	5.530							
058	3.625	4.030	4.065	4.137	4.224	4.270	4.366	4.413	4.497	4.544	4.681	4.889	5.124	5.295	5.405	5.530	5.655							
060	3.750	4.155	4.190	4.262	4.349	4.395	4.491	4.538	4.622	4.669	4.806	5.014	5.249	5.420	5.530	5.655	5.780							
062	3.875	4.280	4.315	4.387	4.474	4.520	4.616	4.663	4.747	4.794	4.931	5.139	5.374	5.545	5.655	5.780	5.905							
064	4.000	4.405	4.440	4.512	4.599	4.645	4.741	4.788	4.872	4.919	5.056	5.264	5.499	5.670	5.780	5.905	6.030							
066	4.125	4.530	4.565	4.637	4.724	4.770	4.866	4.913	4.997	5.044	5.181	5.389	5.624	5.795	5.905	6.030	6.155							
068	4.250	4.655	4.690	4.762	4.849	4.895	4.991	5.038	5.122	5.169	5.306	5.514	5.749	5.920	6.030	6.155	6.280							
070	4.375	4.780	4.815	4.887	4.974	5.020	5.116	5.163	5.247	5.294	5.431	5.639	5.874	6.045	6.155	6.280	6.405							
072	4.500	4.905	4.940	5.012	5.099	5.145	5.241	5.288	5.372	5.419	5.556	5.764	5.999	6.170	6.280	6.405	6.530							