

Bolt Size Chart

Hexagon Size S(mm)	Thread Size D(mm)	Hexagon Size J(mm)
17	M10	8
19	M12	10
22	M14	12
24	M16	14
27	M18	14
30	M20	17
34	M22	17
36	M24	19
41	M27	19
46	M30	22
50	M33	24
55	M36	27
60	M39	27(30)
65	M42	32
70	M45	-
75	M48	36
80	M52	36
85	M56	41
90	M60	46
95	M64	50
100	M68	55
105	M72	60
110	M76	65
115	M80	70
120	M85	70(75)
130	M90	-
135	M95	85
145	M100	-
150	M105	-
155	M110	-
165	M115	-
170	M120	-
180	M125	-
185	M130	-
200	M140	-
210	M150	-

Hexagon Size S(inch)	Thread Size D(inch)	Hexagon Size J(inch)
1-1/16	5/8	1/2
1-1/4	3/4	5/8
1-7/16	7/8	3/4
1-5/8	1	3/4
1-13/16	1-1/8	7/8
2	1-1/4	7/8
2-3/16	1-3/8	1
2-3/8	1-1/2	1
2-9/16	1-5/8	-
2-3/4	1-3/4	1-1/4
2-15/16	1-7/8	1-3/8
3	2	1-1/2
3-1/8	2	1-5/8
3-3/8	2-1/4	1-3/4
3-1/2	2-1/4	1-3/4
3-3/4	2-1/2	1-3/4
3-7/8	2-1/2	1-7/8
4-1/8	2-3/4	2
4-1/4	2-3/4	2
4-5/8	3	2-1/4
5	3-1/4	2-1/4



According to the bolt and nut to determine the max torque of wrench



Note: the chart above is for you reference



HEAVY LOAD SOCKET MUST COMPLY WITH:
ISO2725,1301174,DIN3129
DIN3121,ASME-B107,2/1995



Pay attention to the loosen torque

The Choosing Of Hydraulic Torque Wrench

The Bolt And Nut Pretightening Force Recommended Chart

Strength Grade		4.8		6.8		8.8		10.9		12.9	
Minum Breaking Strength		392MPa		588MPa		784MPa		941MPa		1176MPa	
Material		Q235 (ss41)		35 (S35C)		35CrMo (SCM3)		42CrMo (SCM4)		40GrNiMoA (SNCM)	
Bolt	Diameter	Torque		Torque		Torque		Torque		Torque	
		KGM	NM	KGM	NM	KGM	NM	KGM	NM	KGM	NM
M14	22mm	7	69	10	98	14	137	17	165	23	225
M16	24mm	10	98	14	137	21	206	25	247	36	363
M18	27mm	14	137	21	206	29	284	35	341	49	480
M20	30mm	18	176	28	296	41	402	58	569	69	480
M22	34mm	23	225	34	333	55	539	78	765	93	911
M24	36mm	32	314	48	470	70	686	100	981	120	1176
M27	41mm	45	441	65	637	105	1029	150	1472	180	1764
M30	46mm	60	588	90	882	125	1225	200	1962	240	2352
M33	50mm	75	735	115	1127	150	1470	210	2060	250	2450
M36	55mm	100	980	150	1470	180	1764	250	2453	300	2940
M39	60mm	120	1176	180	1764	220	2156	300	2943	370	3626
M42	65mm	155	1519	240	2352	280	2744	390	3826	470	4606
M45	70mm	180	1764	280	2744	320	3136	450	4415	550	5390
M48	75mm	230	2254	350	3430	400	3920	570	5592	680	6664
M52	80mm	280	2744	420	4116	480	4704	670	6573	850	8330
M56	85mm	360	3528	530	5149	610	5978	860	8437	1050	10290
M60	90mm	410	4018	610	5978	790	7742	1100	10791	1350	13230
M64	95mm	510	4998	760	7448	900	8820	1224	11998	1530	14994
M68	100mm	580	5684	870	8526	1100	10780	1392	13645	1740	17053
M72	105mm	660	6468	1000	9800	1290	12642	1584	15527	1980	19405
M76	110mm	750	7350	1100	10780	1500	14700	1800	17644	2250	22050
M80	115mm	830	8143	1250	12250	1850	18130	1992	19547	2489	24429
M85	120mm	900	8820	1400	13720	2250	22050	2160	21172	2699	26459
M90	130mm	1080	10584	1650	16170	2500	24500	2593	25407	3241	31752
M100	145mm	1400	13720	2050	20090	2800	27440	3361	32935	4200	41160
M110	155mm	1670	16366	2550	24990	3340	32732	4009	39287	5010	49098
M120	170mm	2030	19894	3050	29890	4060	39788	4873	47756	6090	59682

- This is Germany standard(DIN) above,the figure in the form is the max torque of the bolt, the recommended torque is 80% of chart figure
- This recommended tightening torque equals the figure in the form(80-90%).For instance,M52,strength grade is 8.8,the torque is 4704*90%=4233.6N.m
- It is recommended that loosening torque equals about 150% of lighting torque.For instance,the tightening torque is 4233.6*(1.5-2)=6350.4-8467.2N.m