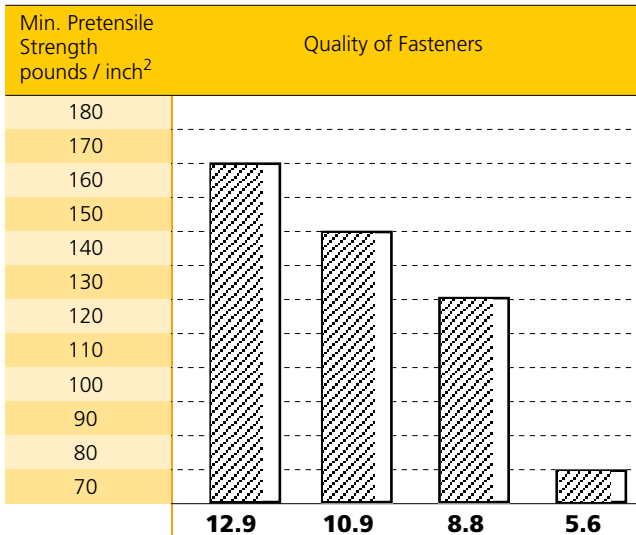


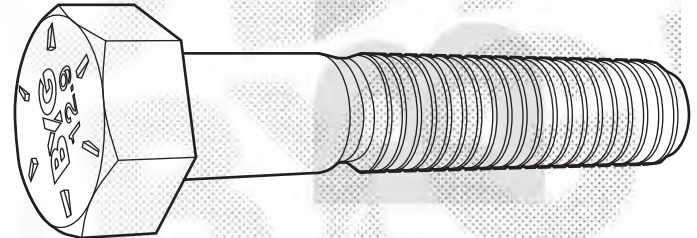
Hexagonal Fasteners

Hexagonal Fasteners

- Coarse Thread Bolts (U.S.S. COARSE UNC-2A)
- Fine Thread Bolts (S.A.E. FINE UNF-2A)
- Coarse Metric Thread Bolts Norms DIN 931 / 933
- Fine Metric Thread Bolts According to DIN 960 / 961
- Hexagonal Nuts
- Self-Locking Nuts
- Heavy Duty Flat Washers
- Heavy Duty Spring Washers



QUALITY 5.6		QUALITY 8.8		QUALITY 10.9		QUALITY 12.9	
Ø mm.	Kg	Ø mm.	Kg	Ø mm.	Kg.	Ø mm.	Kg
		4	0,560	4	0,790		
		5	0,910	5	1,280	5	1,530
6	0,600	6	1,290	6	1,810	6	2,170
8	1,090	8	2,340	8	3,300	8	3,950
10	1,740	10	3,710	10	5,200	10	6,250
12	2,530	12	5,400	12	7,500	12	9,100
14	3,450	14	7,350	14	10,350	14	12,400
16	4,710	16	10,000	16	14,130	16	16,900
18	5,760	18	12,300				
20	7,350						
24	10,590						



12.9 Quality

Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)
 Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)
 Rockwell Hardness
C35-38

Characteristics of BYG Hexagonal Bolts

Higher Head

Heads 20% higher than American Standard B 18.2.1. Providing increased fatigue life and maximum holding force for the nut.

SAE Grade Brands

The radial marks indicate the grade of SAE strength for better identification. Six marks on the head guarantee the quality grade 12.9 / 35-38 Rockwell (113/124 Kg./mm²)

Forged Head

Provides a correct flow of the steel fibre reducing the fatigue points ensuring major resistance to bumps and an even distribution of the weight. The edges do not round off and the bolts can be reused. The washer sits perfectly below the head.

Laminated Thread

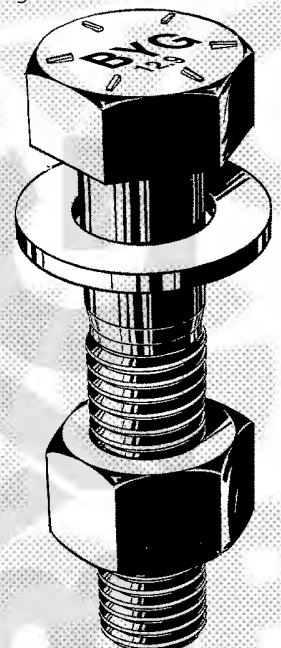
Laminated with the maximum precision they provide a better hold eliminating the risk of breaking.

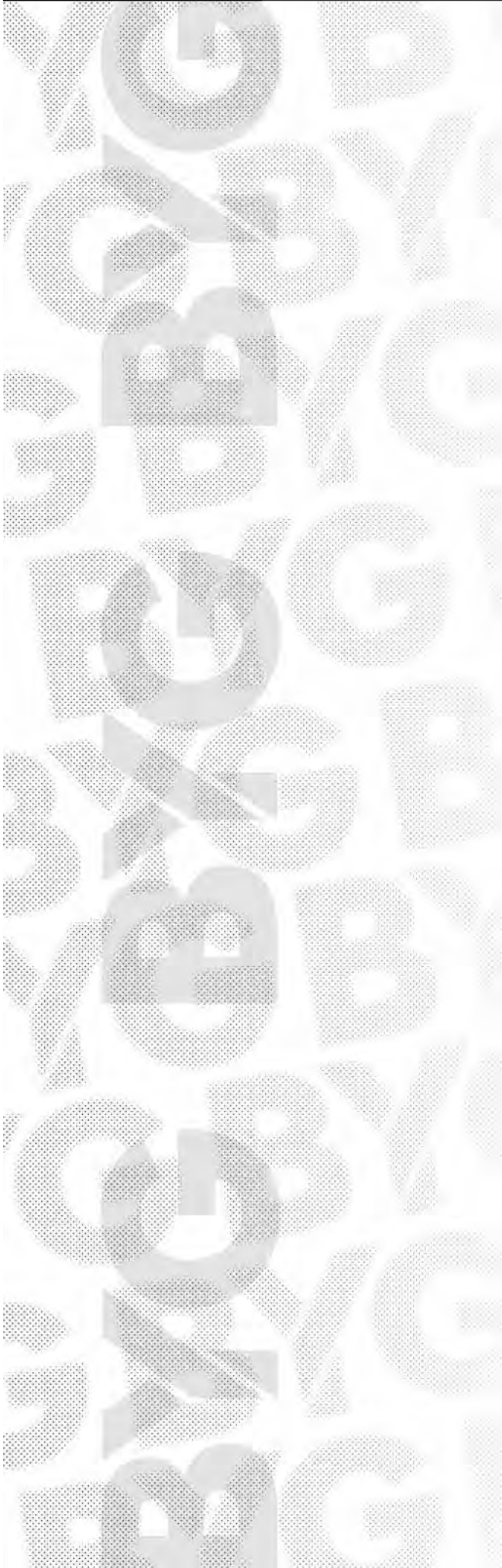
Fine Grade Steel

Provides a more even microstructure improving its resistance with a lower percentage of breakage.

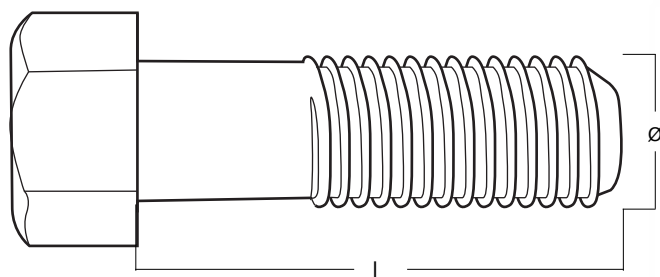
Complete Fastening System

For better assurance and to get the maximum resistance and duration use BYG HD nuts and washers in combination with BYG fasteners.





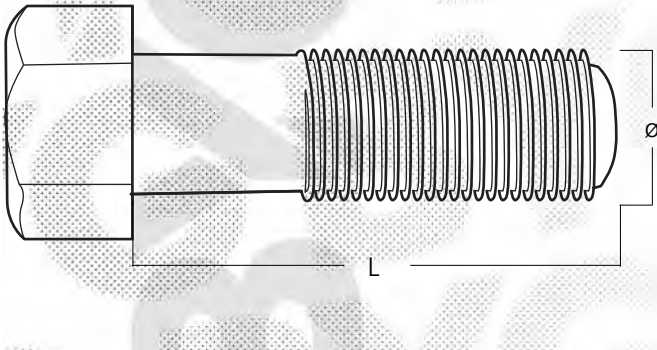
Hexagonal Bolts: Coarse UNC Thread



L	Ø 1/4"	Ø 5/16"	Ø 3/8"	Ø 7/16"	Ø 1/2"	Ø 9/16"	Ø 5/8"	Ø 3/4"	Ø 7/8"	Ø 1"	Ø 1-1/8"	Ø 1-1/4"	Ø 1-1/2"	L
	20 Thread"	18 Thread"	16 Thread"	14 Thread"	13 Thread"	12 Thread"	11 Thread"	10 Thread"	9 Thread"	8 Thread"		7 Thread"	6 Thread"	mm
3/8"	S-1613													10
1/2"	S-1614	S-0569	S-4879		S-6705									13
5/8"	S-0762	S-3755	S-0102											16
3/4"	S-1615	S-1617	S-0509	S-0060	S-1620		S-9456							19
7/8"	S-7957	S-2695	S-1351	S-0526	S-3855									22
1"	S-1616	S-1618B	S-1594	S-0318	S-1621	S-3379	S-1624	S-2069						25
1-1/8"	S-6580	S-3388	S-2029	S-8965	S-1717		S-9372							29
1-1/4"	S-2742	S-7182	S-1588	S-0320	S-1595B	S-4732	S-1592	S-1583		S-4767				32
1-3/8"	S-5546	S-2790	S-1915	S-5368	S-3235	S-8519	S-4043							35
1-1/2"	S-7022	S-9579	S-1591	S-0772	S-1585	S-4733	S-1566	S-1626	S-0690	S-0450				38
1-5/8"	S-8167	S-5514	S-4639											41
1-3/4"	S-2713	S-9575	S-1571	S-0768	S-1587		S-1589	S-0458	S-3757	S-7370				44
1-7/8"			S-2251											48
2"	S-2377	S-2694	S-1590B	S-0319	S-1460	S-4734	S-1135	S-1178	S-1973	S-5257	S-8281			51
2-1/4"	S-4533	S-4538	S-2070	S-4707	S-0947		S-9092	S-1538	S-9522	S-9093				57
2-1/2"	S-2714	S-4539	S-1143	S-4703	S-1366	S-4735	S-1625	S-8063	S-4625	S-4635	S-7222	S-6353		64
2-3/4"	S-4781	S-4540	S-0573	S-4556	S-5822		S-8537	S-4608	S-4626	S-1363	S-2037			70
3"	S-9365	S-4541	S-1619	S-5192	S-1329	S-4736B	S-4367	S-4609	S-4627	S-4709	S-2814B	S-2299		76
3-1/4"	S-8178	S-5842	S-1352	S-8428	S-0375		S-4585	S-4610	S-4628	S-4637		S-5484	S-1805	83
3-1/2"	S-8695	S-4111	S-0065	S-8698	S-4566	S-4737	S-4586	S-2968	S-4629	S-4638	S-2175	S-1955		89
3-3/4"	S-6302	S-0831	S-1608	S-2491	S-2886		S-1169	S-5227	S-3856	S-5772				95
4"	S-4710	S-3903	S-9191	S-7226	S-1573	S-4738	S-1569	S-4612	S-4630	S-4639B	S-1614B	S-3758		102
4-1/4"		S-8769	S-0055	S-5907	S-4569		S-4588	S-1756	S-4631	S-4640	S-1572	S-6560		108
4-1/2"	S-4711	S-5932	S-5964	S-7220	S-9089	S-4739	S-8651	S-1627	S-5576		S-0544	S-2300		114
4-3/4"	S-3776	S-3243	S-5183	S-3472	S-2006		S-4590	S-6753	S-8622	S-1420		S-1156		121
5"	S-2716	S-6296	S-9603	S-5059	S-6488	S-4740	S-5405	S-4614	S-1351B	S-4642		S-1618	S-9414	127
5-1/4"			S-2638		S-5282		S-3224	S-8199			S-1551			133
5-1/2"	S-2717	S-1761	S-4899	S-4197	S-4572	S-4741	S-4593	S-4615	S-4634	S-4643		S-2721		140
5-3/4"		S-1865	S-3425		S-8804			S-1330						146
6"	S-2718	S-0059	S-4706	S-6419	S-4574	S-4742	S-4595	S-4616	S-1322	S-6936	S-5727	S-1537		152
6-1/4"			S-8544		S-8260		S-9514	S-4617						158
6-1/2"	S-1761B	S-3508	S-0411	S-0742	S-1531		S-4597	S-1015	S-1536	S-5473	S-4486	S-1628		165
7"			S-8999	S-7209	S-7669		S-4599	S-4620	S-5976	S-9338		S-6061		178
7-1/2"			S-1557	S-7442	S-0168		S-4600	S-4621	S-9422	S-7218				191
8"			S-6350	S-7925	S-1374	S-9129	S-7709	S-4622	S-6259	S-4644		S-9025		203
8-1/2"			S-2773		S-3573		S-4601	S-4623	S-7127	S-4645		S-6775		216
9"			S-6044	S-7926	S-9613		S-3756	S-4624	S-8739	S-4646		S-9418		229
9-1/2"			S-3283				S-4602	S-1702	S-6260	S-4647		S-9420		241
10"					S-5281			S-4225	S-2391	S-8348				254
10-1/2"					S-0139B					S-6453		S-0388		267
11"			S-1415	S-4317	S-3887				S-3112	S-5130		S-9415		279
11-1/2"					S-5421		S-4624B	S-7945		S-4363				292
12"			S-1202							S-4010				305
12-1/2"									S-8317					318
13"					S-6212			S-9099		S-4081		S-4378		330
14"					S-7900				S-0581B	S-2001		S-1734		356
15"									S-3183	S-4011		S-0213		381
16"									S-6552	S-1029				406

Most common reference numbers appear in Bold

Hexagonal Bolts: Fine UNF Thread



L	Ø 1/4 "	Ø 5/16 "	Ø 3/8 "	Ø 7/16 "	Ø 1/2 "	Ø 9/16 "	Ø 5/8 "	Ø 3/4 "	Ø 7/8 "	Ø 1 "	Ø 1-1/8 "	Ø 1-1/4 "	Ø 1-1/2 "	L
	28 Thread "	24 Thread "		20 Thread "		18 Thread "		16 Thread "	14 Thread "			12 Thread "		mm.
1/2 "	S-7027	S-2093	S-1138											13
5/8 "	S-1570	S-3737	S-0642											16
3/4 "	S-0284	S-2343	S-0472		S-7032									19
7/8 "	S-1340	S-9883	S-0703		S-0598									22
1 "	S-1597	S-3738	S-7030	S-0840	S-1629		S-7316							25
1-1/8 "	S-1590	S-0187	S-2208B											29
1-1/4 "	S-2152	S-1293	S-2209	S-0244	S-1593	S-4743	S-4273	S-3740						32
1-3/8 "		S-1371	S-4996		S-7502	S-4761	S-4033							35
1-1/2 "	S-4475	S-0581	S-0924B	S-4723	S-1603	S-4744	S-1701	S-3725	S-4754	S-4755				38
1-3/4 "	S-7563	S-3708	S-0478	S-4350	S-1584	S-4762	S-0841	S-0075	S-7496	S-4756				44
2 "	S-8701	S-5403	S-1748	S-0489	S-1579	S-4745	S-1576	S-1362	S-3854	S-3743				51
2-1/4 "	S-8593	S-3739	S-0639	S-4724	S-0484	S-4763	S-1577	S-1897	S-7035	S-3744	S-2208	S-2289		57
2-1/2 "	S-9919	S-4717	S-1648	S-0572	S-1604	S-4746	S-1600	S-0856	S-5873	S-9385	S-3751			64
2-3/4 "		S-1028	S-0139	S-4725	S-1599	S-4764	S-1601	S-3152	S-1596	S-3745				70
3 "	S-4712	S-4718	S-7031	S-4726	S-1732	S-0753	S-5144	S-1575	S-7036	S-9194		S-6112		76
3-1/4 "		S-0938	S-1605	S-4085	S-1558		S-2318	S-5310	S-3741	S-7037	S-0477			83
3-1/2 "	S-4713	S-4719		S-6298	S-2315	S-4747	S-1602	S-1364	S-0224	S-1368		S-0439		89
3-3/4 "			S-3680	S-4727	S-1952	S-1216	S-2353	S-3103	S-2090	S-1367			S-2921	95
4 "	S-4714	S-4720	S-0513	S-4728	S-1559	S-4748	S-0459	S-1328	S-0603	S-7464	S-3895	S-2663	S-5535	102
4-1/4 "			S-5082		S-7033		S-0523	S-3419	S-3848					108
4-1/2 "	S-4715	S-4721	S-8425	S-4729	S-3046	S-4749	S-0857		S-8340	S-0269	S-4040		S-6762	114
4-3/4 "					S-0557		S-3203	S-5163		S-7181		S-8791		121
5 "	S-4716	S-4722	S-2116	S-4730	S-1422	S-4750	S-7024	S-1607	S-6089	S-3746	S-9215		S-9402	127
5-1/2 "			S-6579		S-1097	S-4751	S-2814	S-6123	S-1606	S-6124	S-5219	S-2555		140
5-3/4 "		S-5229			S-9979		S-7538							146
6 "			S-4736	S-4731	S-1595	S-4752	S-6030	S-4436	S-6100	S-6645	S-3424	S-1649	S-9891	152
6-1/2 "					S-3747			S-7901	S-4991	S-4283	S-5752	S-6511		165
7 "					S-1930		S-3623	S-3749	S-6426	S-6932	S-8930		S-1692	178
7-1/2 "					S-3748		S-5569	S-3750	S-1747	S-0637	S-3742	S-9464		191
8 "			S-5883		S-3967		S-4753	S-0925	S-0479	S-4757	S-3647	S-0924	S-7687	203
8-1/2 "							S-1873	S-4766		S-5981		S-9339		216
9 "				S-4523				S-1926	S-1091	S-8122	S-3530		S-3492	229
9-1/2 "								S-7943		S-7136		S-7079		241
10 "								S-2813		S-8586		S-8009	S-9384	254
11 "							S-7144	S-8288	S-4978					279
11-1/2 "								S-9845	S-7572			S-4438	S-2812	292
12 "							S-0953					S-3579		305
13 "												S-2400	S-0436	330

Hexagonal Bolts: Cross Reference Caterpillar / BYG

CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG
0L-0139	S-0139	0S-1600	S-1600	0T-0857	S-0857	1B-3573	S-3573	1D-4628	S-4628	2A-1420	S-1420
0L-0472	S-0472	0S-1601	S-1601	0T-0924	S-0924B	1B-3623	S-3623	1D-4629	S-4629	2A-1531	S-1531
0L-0478	S-0478	0S-1602	S-1602	0V-0269	S-0269	1B-3680	S-3680	1D-4630	S-4630	2A-1538	S-1538
0L-0557	S-0557	0S-1603	S-1603	0V-0375	S-0375	1B-4367	S-4367	1D-4631	S-4631	2A-2814	S-2814
0L-0639	S-0639	0S-1604	S-1604	0V-0450	S-0450	1B-5082	S-5082	1D-4634	S-4634	2A-4639	S-4639
0L-1138	S-1138	0S-1605	S-1605	0V-0459	S-0459	1B-7182	S-7182	1D-4635	S-4635	2A-4781	S-4781
0L-1143	S-1143	0S-1606	S-1606	0V-0523	S-0523	1B-7709	S-7709	1D-4637	S-4637	2A-4996	S-4996
0L-1169	S-1169	0S-1607	S-1607	1A-0075	S-0075	1B-9575	S-9575	1D-4638	S-4638	2A-5546	S-5546
0L-1178	S-1178	0S-1608	S-1608	1A-0168	S-0168	1C-0569	S-0569	1D-4639	S-4639B	2B-0947	S-0947
0L-1328	S-1328	0S-1614	S-1614	1A-0224	S-0224	1D-3419	S-3419	1D-4640	S-4640	2B-1015	S-1015
0L-1329	S-1329	0S-1615	S-1615	1A-0458	S-0458	1D-3848	S-3848	1D-4642	S-4642	2B-1955	S-1955
0L-1340	S-1340	0S-1616	S-1616	1A-1135	S-1135	1D-4533	S-4533	1D-4643	S-4643	2B-2006	S-2006
0L-1351	S-1351	0S-1617	S-1617	1A-1460	S-1460	1D-4538	S-4538	1D-4644	S-4644	2B-2391	S-2391
0L-1352	S-1352	0S-1618	S-1618B	1A-1952	S-1952	1D-4539	S-4539	1D-4645	S-4645	2B-2694	S-2694
0L-1558	S-1558	0S-1619	S-1619	1A-2029	S-2029	1D-4540	S-4540	1D-4646	S-4646	2B-2695	S-2695
0L-1590	S-1590	0S-1620	S-1620	1A-2116	S-2116	1D-4541	S-4541	1D-4647	S-4647	2B-6030	S-6030
0L-1648	S-1648	0S-1621	S-1621	1A-2208	S-2208	1D-4556	S-4556	1D-4703	S-4703	2B-7218	S-7218
0L-1732	S-1732	0S-1624	S-1624	1A-2209	S-2209	1D-4566	S-4566	1D-4706	S-4706	2B-8593	S-8593
0L-2070	S-2070	0S-1625	S-1625	1A-2343	S-2343	1D-4569	S-4569	1D-4707	S-4707	2D-3424	S-3424
0L-2090	S-2090	0S-1626	S-1626	1A-3046	S-3046	1D-4572	S-4572	1D-4709	S-4709	2D-7563	S-7563
0L-2315	S-2315	0S-1627	S-1627	1A-3103	S-3103	1D-4574	S-4574	1D-5873	S-5873	2D-8930	S-8930
0S-0484	S-0484	0S-1629	S-1629	1A-3203	S-3203	1D-4585	S-4585	1D-5976	S-5976	2F-2093	S-2093
0S-0509	S-0509	0S-1748	S-1748	1A-3967	S-3967	1D-4586	S-4586	1D-6089	S-6089	2H-0637	S-0637
0S-1559	S-1559	0S-1756	S-1756	1A-4273	S-4273	1D-4588	S-4588	1D-6259	S-6259	2H-1537	S-1537
0S-1566	S-1566	0S-1897	S-1897	1A-4350	S-4350	1D-4590	S-4590	1D-6260	S-6260	2H-1618	S-1618
0S-1569	S-1569	0S-1973	S-1973	1A-5183	S-5183	1D-4593	S-4593	1F-4111	S-4111	2H-3708	S-3708
0S-1570	S-1570	0S-2318	S-2318	1A-5405	S-5405	1D-4595	S-4595	1F-5842	S-5842	2H-3725	S-3725
0S-1571	S-1571	0S-2353	S-2353	1A-5576	S-5576	1D-4597	S-4597	1F-6296	S-6296	2H-3737	S-3737
0S-1573	S-1573	0T-0055	S-0055	1A-5822	S-5822	1D-4599	S-4599	1F-7464	S-7464	2H-3738	S-3738
0S-1575	S-1575	0T-0065	S-0065	1A-5964	S-5964	1D-4600	S-4600	1H-5403	S-5403	2H-3739	S-3739
0S-1576	S-1576	0T-0102	S-0102	1A-7669	S-7669	1D-4601	S-4601	1H-5514	S-5514	2H-3740	S-3740
0S-1577	S-1577	0T-0244	S-0244	1A-8063	S-8063	1D-4602	S-4602	1J-2175	S-2175	2H-3741	S-3741
0S-1579	S-1579	0T-0284	S-0284	1A-8537	S-8537	1D-4608	S-4608	1J-2814	S-2814B	2H-3743	S-3743
0S-1583	S-1583	0T-0318	S-0318	1A-8651	S-8651	1D-4609	S-4609	1J-5257	S-5257	2H-3744	S-3744
0S-1584	S-1584	0T-0319	S-0319	1A-9579	S-9579	1D-4610	S-4610	1J-5484	S-5484	2H-3745	S-3745
0S-1585	S-1585	0T-0320	S-0320	1A-9919	S-9919	1D-4612	S-4612	1J-6298	S-6298	2H-3746	S-3746
0S-1587	S-1587	0T-0489	S-0489	1B-0572	S-0572	1D-4614	S-4614	1J-6775	S-6775	2H-3747	S-3747
0S-1588	S-1588	0T-0513	S-0513	1B-0581	S-0581	1D-4615	S-4615	1J-7370	S-7370	2H-3748	S-3748
0S-1589	S-1589	0T-0573	S-0573	1B-1293	S-1293	1D-4616	S-4616	1K-4378	S-4378	2H-3749	S-3749
0S-1590	S-1590B	0T-0598	S-0598	1B-1422	S-1422	1D-4617	S-4617	1K-9415	S-9415	2H-3750	S-3750
0S-1591	S-1591	0T-0603	S-0603	1B-2713	S-2713	1D-4620	S-4620	1K-9418	S-9418	2H-3751	S-3751
0S-1592	S-1592	0T-0642	S-0642	1B-2714	S-2714	1D-4621	S-4621	1K-9420	S-9420	2H-3755	S-3755
0S-1593	S-1593	0T-0690	S-0690	1B-2716	S-2716	1D-4622	S-4622	1K-9422	S-9422	2H-3756	S-3756
0S-1594	S-1594	0T-0703	S-0703	1B-2717	S-2717	1D-4623	S-4623	1L-8586	S-8586	2H-3757	S-3757
0S-1595	S-1595B	0T-0768	S-0768	1B-2718	S-2718	1D-4624	S-4624	1S-3647	S-3647	2H-3758	S-3758
0S-1596	S-1596	0T-0772	S-0772	1B-2721	S-2721	1D-4625	S-4625	1S-6560	S-6560	2H-3854	S-3854
0S-1597	S-1597	0T-0840	S-0840	1B-2790	S-2790	1D-4626	S-4626	2A-0762	S-0762	2H-3855	S-3855
0S-1599	S-1599	0T-0856	S-0856	1B-2886	S-2886	1D-4627	S-4627	2A-1371	S-1371	2H-3856	S-3856

Most common reference numbers appear in Bold

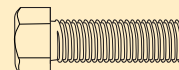
Hexagonal Bolts: Cross Reference Caterpillar / BYG

CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG
2H-4010	S-4010	4B-0831	S-0831	5F-6044	S-6044	6K-1330	S-1330	8F-6124	S-6124	8S-4743	S-4743
2H-4011	S-4011	4B-1028	S-1028	5F-6932	S-6932	6K-8739	S-8739	8F-6302	S-6302	8S-4744	S-4744
2H-6488	S-6488	4B-2152	S-2152	5F-7136	S-7136	6M-1029	S-1029	8F-6350	S-6350	8S-4745	S-4745
2J-2555	S-2555	4B-3388	S-3388	5F-9338	S-9338	6M-2001	S-2001	8F-6419	S-6419	8S-4746	S-4746
2J-5907	S-5907	4B-3903	S-3903	5F-9339	S-9339	6M-9613	S-9613	8F-6453	S-6453	8S-4747	S-4747
2J-8348	S-8348	4B-4043	S-4043	5H-1649	S-1649	6S-0753	S-0753	8F-7496	S-7496	8S-4748	S-4748
2K-0439	S-0439	4B-5219	S-5219	5J-1572	S-1572	6V-1734	S-1734	8F-8178	S-8178	8S-4749	S-4749
2K-1747	S-1747	4B-7220	S-7220	5J-1702	S-1702	6V-1873	S-1873	8F-8804	S-8804	8S-4750	S-4750
2K-2037	S-2037	4B-7572	S-7572	5K-7144	S-7144	6V-8199	S-8199	8H-4040	S-4040	8S-4751	S-4751
2K-2813	S-2813	4B-8519	S-8519	5L-1761	S-1761	7B-2289	S-2289	8H-5727	S-5727	8S-4752	S-4752
2L-1091	S-1091	4B-8701	S-8701	5M-0544	S-0544	7B-2742	S-2742	8H-5772	S-5772	8S-4753	S-4753
2L-1701	S-1701	4B-9365	S-9365	5M-7900	S-7900	7B-3235	S-3235	8H-8769	S-8769	8S-4754	S-4754
2L-4523	S-4523	4B-9883	S-9883	5P-0059	S-0059	7B-4436	S-4436	8K-5130	S-5130	8S-4755	S-4755
2L-7442	S-7442	4D-8317	S-8317	5P-0060	S-0060	7B-5163	S-5163	8M-0139	S-0139B	8S-4756	S-4756
2M-3530	S-3530	4F-0411	S-0411	5P-1415	S-1415	7B-7181	S-7181	8M-1865	S-1865	8S-4757	S-4757
2P-9845	S-9845	4F-0925	S-0925	5P-2663	S-2663	7B-8167	S-8167	8S-3887	S-3887	8S-4761	S-4761
2S-1216	S-1216	4F-3508	S-3508	5P-4624	S-4624B	7B-8791	S-8791	8S-4710	S-4710	8S-4762	S-4762
310213	S-0213	4F-4879	S-4879	5P-5421	S-5421	7B-9215	S-9215	8S-4711	S-4711	8S-4763	S-4763
319099	S-9099	4F-5192	S-5192	5P-8288	S-8288	7F-0479	S-0479	8S-4712	S-4712	8S-4764	S-4764
3B-1915	S-1915	4F-6426	S-6426	5P-9384	S-9384	7F-0938	S-0938	8S-4713	S-4713	8S-4766	S-4766
3B-2968	S-2968	4F-7226	S-7226	5P-9402	S-9402	7F-1926	S-1926	8S-4714	S-4714	8S-4767	S-4767
3B-4978	S-4978	4F-7957	S-7957	6B-0388	S-0388	7F-3425	S-3425	8S-4715	S-4715	8S-6212	S-6212
3B-5752	S-5752	4F-8965	S-8965	6B-1557	S-1557	7F-4283	S-4283	8S-4716	S-4716	8S-9089	S-9089
3B-6753	S-6753	4H-2400	S-2400	6B-5310	S-5310	7F-5227	S-5227	8S-4717	S-4717	8S-9092	S-9092
3B-8428	S-8428	4H-3283	S-3283	6B-9194	S-9194	7F-6100	S-6100	8S-4718	S-4718	8S-9093	S-9093
3B-8695	S-8695	4H-4033	S-4033	6F-4438	S-4438	7F-6112	S-6112	8S-4719	S-4719	8S-9191	S-9191
3F-6353	S-6353	4H-5883	S-5883	6F-4736	S-4736	7F-8698	S-8698	8S-4720	S-4720	9F-1595	S-1595
3F-6645	S-6645	4H-6511	S-6511	6F-4991	S-4991	7F-9464	S-9464	8S-4721	S-4721	9F-2491	S-2491
3F-9025	S-9025	4H-8009	S-8009	6F-5281	S-5281	7H-2069	S-2069	8S-4722	S-4722	9F-2773	S-2773
3H-1097	S-1097	4H-8340	S-8340	6F-5282	S-5282	7H-3472	S-3472	8S-4723	S-4723	9F-6580	S-6580
3H-1930	S-1930	4J-0924	S-0924	6F-7024	S-7024	7H-3579	S-3579	8S-4724	S-4724	9F-6936	S-6936
3H-3243	S-3243	4J-7945	S-7945	6F-7027	S-7027	7H-5569	S-5569	8S-4725	S-4725	9F-7022	S-7022
3H-5368	S-5368	4J-8622	S-8622	6F-7030	S-7030	7H-7209	S-7209	8S-4726	S-4726	9F-8122	S-8122
3H-5932	S-5932	4K-7502	S-7502	6F-7031	S-7031	7J-7222	S-7222	8S-4727	S-4727	9F-8999	S-8999
3J-5981	S-5981	4L-3776	S-3776	6F-7032	S-7032	7K-4363	S-4363	8S-4728	S-4728	9F-9522	S-9522
3J-8281	S-8281	4L-7925	S-7925	6F-7033	S-7033	7M-1202	S-1202	8S-4729	S-4729	9M-3742	S-3742
3K-0581	S-0581B	4L-7926	S-7926	6F-7035	S-7035	7S-3224	S-3224	8S-4730	S-4730	9S-1322	S-1322
3K-3112	S-3112	4N-1761	S-1761B	6F-7036	S-7036	7S-9372	S-9372	8S-4731	S-4731	9S-1351	S-1351B
3K-3183	S-3183	5B-0841	S-0841	6F-7037	S-7037	8B-0477	S-0477	8S-4732	S-4732	9S-1362	S-1362
3K-3379	S-3379	5B-2208	S-2208B	6F-7316	S-7316	8B-2377	S-2377	8S-4733	S-4733	9S-1363	S-1363
3K-6552	S-6552	5B-2638	S-2638	6F-7901	S-7901	8B-5144	S-5144	8S-4734	S-4734	9S-1364	S-1364
3K-7127	S-7127	5B-5059	S-5059	6F-8425	S-8425	8B-7943	S-7943	8S-4735	S-4735	9S-1366	S-1366
3L-0526	S-0526	5B-5473	S-5473	6H-0187	S-0187	8F-1156	S-1156	8S-4736	S-4736B	9S-1367	S-1367
3L-0742	S-0742	5B-6579	S-6579	6H-1628	S-1628	8F-3152	S-3152	8S-4737	S-4737	9S-1368	S-1368
3L-4317	S-4317	5B-9385	S-9385	6H-1717	S-1717	8F-3895	S-3895	8S-4738	S-4738	9S-1374	S-1374
3N-1614	S-1614B	5B-9603	S-9603	6J-1536	S-1536	8F-4197	S-4197	8S-4739	S-4739		
3R-2299	S-2299	5D-4085	S-4085	6J-1551	S-1551	8F-4225	S-4225	8S-4740	S-4740		
3R-2300	S-2300	5F-4475	S-4475	6J-4081	S-4081	8F-4486	S-4486	8S-4741	S-4741		
3S-7079	S-7079	5F-4899	S-4899	6K-0953	S-0953	8F-6123	S-6123	8S-4742	S-4742		

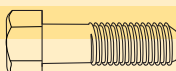
Hexagonal Bolts: Coarse Metric Thread

L mm.	Ø M-5 Thread 0.80	Ø M-6 Thread 1.00	Ø M-8 Thread 1.25	Ø M-10 Thread 1.50	Ø M-12 Thread 1.75	Ø M-14 Thread 2.00	Ø M-16 Thread 2.50	Ø M-18 Thread 2.50	Ø M-20 Thread 2.50	Ø M-22 Thread 3.00	Ø M-24 Thread 3.00	Ø M-27 Thread 3.50	Ø M-30 Thread 3.50	Ø M-33 Thread 4.00	Ø M-36 Thread 4.00
10	M-06010 M-08010														
12	M-05012														
15	M-06015 M-08015 M-10015														
16	M-05016														
20	M-05020 M-06020 M-08020 M-10020 M-12020														
25	M-05025 M-06025 M-08025 M-10025 M-12025 M-14025														
30	M-05030 M-06030 M-08030 M-10030 M-12030 M-14030 M-16030														
35	M-05035 M-06035 M-08035 M-10035 M-12035 M-14035 M-16035 M-18035														
40	M-05040 M-06040 M-08040 M-10040 M-12040 M-14040 M-16040 M-18040 M-20040														
45	M-06045 M-08045 M-10045 M-12045 M-14045 M-16045 M-18045 M-20045														
50	M-06050 M-08050 M-10050 M-12050 M-14050 M-16050 M-18050 M-20050 M-22050														
55	M-08055 M-10055 M-12055 M-14055 M-16055 M-18055 M-20055														
60	M-06060 M-08060 M-10060 M-12060 M-14060 M-16060 M-18060 M-20060 M-22060 M-24060														
70	M-08070 M-10070 M-12070 M-14070 M-16070 M-18070 M-20070 M-22070 M-24070														
80	M-10080 M-12080 M-14080 M-16080 M-18080 M-20080 M-22080 M-24080 M-27080 M-30080														
90	M-10090 M-12090 M-14090 M-16090 M-18090 M-20090 M-22090 M-24090 M-27090 M-30090														
100	M-10100 M-12100 M-14100 M-16100 M-18100 M-20100 M-22100 M-24100 M-27100 M-30100 M-33100 M-36100														
110	M-14110 M-16110 M-18110 M-20110 M-22110 M-24110 M-27110														
120	M-12120 M-14120 M-16120 M-18120 M-20120 M-22120 M-24120 M-27120 M-30120 M-33120 M-36120														
150	M-14150 M-16150 M-18150 M-20150 M-22150 M-24150 M-27150 M-30150 M-33150 M-36150														
180	M-16180 M-18180 M-20180 M-22180 M-24180 M-27180 M-30180 M-33180 M-36180														
200	M-16200 M-18200 M-20200 M-22200 M-24200 M-27200 M-30200 M-33200 M-36200														
250	M-18250 M-20250 M-22250 M-24250 M-27250 M-30250 M-33250 M-36250														
300	M-27300 M-30300 M-33300 M-36300														

DIN 933



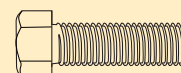
DIN 931



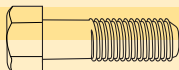
Hexagonal Bolts: Fine Metric Thread

L mm.	Ø M-6 Thread 0.80	Ø M-8 Thread 1.00	Ø M-10 Thread 1.25	Ø M-12 Thread 1.50	Ø M-14 Thread 1.50	Ø M-16 Thread 1.50	Ø M-18 Thread 2.00	Ø M-20 Thread 2.00	Ø M-22 Thread 2.00	Ø M-24 Thread 2.00	Ø M-27 Thread 2.00	Ø M-30 Thread 2.00
10	F-06010											
15	F-06015 F-08015											
20	F-06020 F-08020 E-10020 F-10020 E-12020 F-12020											
25	F-06025 F-08025 E-10025 F-10025 E-12025 F-12025											
30	F-06030 F-08030 E-10030 F-10030 E-12030 F-12030 F-14030 F-16030											
35	F-06035 F-08035 E-10035 F-10035 E-12035 F-12035 F-14035 F-16035 F-18035											
40	F-06040 F-08040 E-10040 F-10040 E-12040 F-12040 F-14040 F-16040 F-18040											
45	F-06045 F-08045 F-10045 E-12045 F-12045 F-14045 F-16045 F-18045 F-20045											
50	F-06050 F-08050 E-10050 F-10050 E-12050 F-12050 F-14050 F-16050 F-18050 F-20050 F-22050											
55	F-08055 F-10055 E-12055 F-12055 F-14055 F-16055 F-18055 F-20055											
60	F-08060 E-10060 F-10060 E-12060 F-12060 F-14060 F-16060 F-18060 F-20060 F-22060 F-24060											
70	F-10070 E-12070 F-12070 F-14070 F-16070 F-18070 F-20070 F-22070 F-24070											
80	F-10080 E-12080 F-12080 F-14080 F-16080 F-18080 F-20080 F-22080 F-24080 F-27080 F-30080											
90	F-12090 F-14090 F-16090 F-18090 F-20090 F-22090 F-24090											
100	F-12100 F-14100 F-16100 F-18100 F-20100 F-22100 F-24100 F-27100 F-30100											
110	F-14110 F-16110 F-18110 F-20110 F-22110 F-24110 F-27110											
120	F-14120 F-16120 F-18120 F-20120 F-22120 F-24120 F-27120 F-30120											
150	F-16150 F-18150 F-20150 F-22150 F-24150 F-27150 F-30150											
180	F-27180 F-30180											
200	F-27200 F-30200											

DIN 961



DIN 960

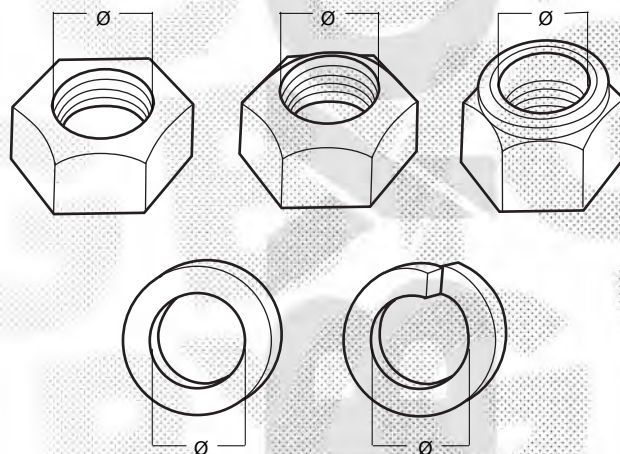


Cross Reference Metric Thread Bolts Caterpillar / BYG

CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG
2W-9499	M-06040	6V-4249	M-10050	6V-7728	M-06045	6V-9667	M-20100	8T-0299	M-16030	8T-0658	M-20180
5P-8347	M-08070	6V-4429	M-16040	6V-7729	M-20040	8C-0537	M-14090	8T-0357	M-16070	8T-0664	M-24070
6A-5591	M-12025	6V-5215	M-08015	6V-7981	M-10070	8C-3222	M-30080	8T-0358	M-16090	8T-0666	M-24090
6V-1819	M-10100	6V-5217	M-08020	6V-8004	M-12120	8C-3411	M-30090	8T-0360	M-20090	8T-0667	M-24100
6V-1820	M-10030	6V-5218	M-08035	6V-8132	M-24120	8T-0070	M-20120	8T-0362	M-20110	8T-0668	M-24110
6V-2315	M-06035	6V-5219	M-08040	6V-8133	M-24080	8T-0100	M-08060	8T-0368	M-30100	8T-0671	M-24150
6V-2317	M-08030	6V-5230	M-10060	6V-8154	M-16150	8T-0106	M-12100	8T-0369	M-30120	8T-0674	M-24180
6V-3303	M-16060	6V-5684	M-12045	6V-8197	M-12040	8T-0207	M-16100	8T-0372	M-12090	8T-3653	M-14080
6V-3531	M-20050	6V-5685	M-14050	6V-8198	M-24200	8T-0226	M-14045	8T-0373	M-14020	8T-3666	M-14060
6V-3532	M-20060	6V-5686	M-16050	6V-8212	M-10015	8T-0275	M-06050	8T-0375	M-16045	8T-5002	M-16180
6V-3668	M-12030	6V-5696	M-12080	6V-8214	M-06020	8T-0276	M-08045	8T-0390	M-24060	8T-5066	M-06060
6V-3669	M-20080	6V-5842	M-10040	6V-8336	M-12070	8T-0281	M-16080	8T-0640	M-06030	8T-6624	M-30180
6V-3822	M-10035	6V-5843	M-10045	6V-8490	M-06025	8T-0282	M-16120	8T-0643	M-10080		
6V-3823	M-12060	6V-5844	M-16035	6V-8550	M-14035	8T-0293	M-12020	8T-0644	M-10090		
6V-3918	M-08050	6V-5845	M-20070	6V-8569	M-20200	8T-0296	M-14025	8T-0649	M-16110		
6V-3940	M-08025	6V-6317	M-10020	6V-8675	M-12035	8T-0297	M-14030	8T-0652	M-20045		
6V-4248	M-10025	6V-7673	M-12050	6V-8837	M-06015	8T-0298	M-14100	8T-0656	M-20150		

Nuts and Washers for Hexagonal Bolts

UNC - UNF Thread



Coarse UNC Thread

Ø											Thread"
	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM	
1/4"	NP-014	9S-8750			TAC-140	7H-8909	0-206	5P-0537	0-14	3B-4504	20
5/16"	NP-516	5S-0003			TAC-516	2R-0504	0-207	9M-1974	0-31	3B-4505	18
3/8"	NP-038	9S-8752			TAC-380	4J-8265	0-208	5M-2894	0-37	3B-4506	16
7/16"	NP-716	3S-1546			TAC-716	9M-5048	0-210	5P-8244	0-43	3B-4507	14
1/2"	NP-117	1F-7958			TAC-120	2H-3788	0-212	5P-8245	0-52	3B-4508	13
9/16"	NP-149	5P-0539			TAC-916		0-214	5P-8246	0-56	3B-4509	12
5/8"	NP-158	4K-0367			TAC-580	2H-3789	0-216	5P-8247	0-62	3B-4510	11
3/4"	NP-190	2J-3506			TAC-340	2H-3790	0-219	5P-8248	0-75	3B-4512	10
7/8"	NP-222	2J-3505			TAC-780		0-222	5P-8249	0-87	3B-4514	9
1"	NP-100	2J-3507	NP-100 B	8J-2933	TAC-100		0-254	5P-8250	0-25	3B-4516	8
1-1/8"	NP-118	4J-5977			TAC-118		0-300	3S-1349	0-12	3B-4518	7
1-1/4"	NP-114	3K-9770	NP-114 B	5P-8362	TAC-114		0-320	4K-0684	0-11	3B-4520	
1-3/8"	NP-138						0-350				6
1-1/2"	NP-112	9S-8216			TAC-112		0-325		0-15	3B-4524	

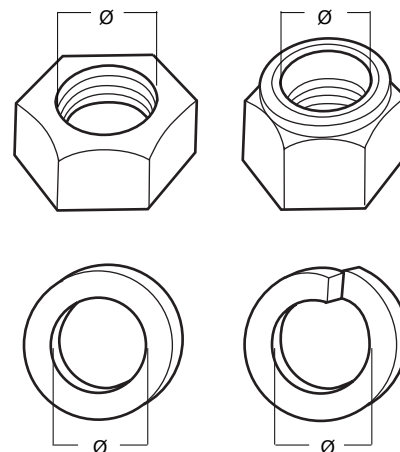
Fine UNF Thread

Ø											Thread"
	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM	
1/4"	NC-4201	9S-8748			TAF-140	3F-7674	0-206	5P-0537	0-14	3B-4504	28
5/16"	NC-4202	9S-8751			TAF-516	3F-2617	0-207	9M-1974	0-31	3B-4505	24
3/8"	NC-4203	3S-2713			TAF-380	2F-8616	0-208	5M-2894	0-37	3B-4506	20
7/16"	NC-4204	9S-8905			TAF-716	6I-6698	0-210	5P-8244	0-43	3B-4507	
1/2"	NC-4205	6B-6684			TAF-120	2M-2570	0-212	5P-8245	0-52	3B-4508	18
9/16"	NC-1940	5P-0540			TAF-916		0-214	5P-8246	0-56	3B-4509	
5/8"	NC-4206	6B-6683			TAF-580	7B-1756	0-216	5P-8247	0-62	3B-4510	16
3/4"	NC-4207	6B-6682			TAF-340	3F-7673	0-219	5P-8248	0-75	3B-4512	
7/8"	NC-4208	1A-5666			TAF-780		0-222	5P-8249	0-87	3B-4514	14
1"	NC-4209	1A-1935			TAF-100		0-254	5P-8250	0-25	3B-4516	
1-1/8"	NC-5753	3S-1356			TAF-118		0-300	3S-1349	0-12	3B-4518	12
1-1/4"	NC-4210	7H-7539			TAF-114		0-320	4K-0684	0-11	3B-4520	
1-3/8"							0-350				12
1-1/2"	NC-7413	8H-3390			TAF-112		0-325		0-15	3B-4524	

Most common reference numbers appear in Bold

Nuts and Washers for Hexagonal Bolts

Metric Thread



Coarse Metric Thread

Ø									Thread
	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM	
M-5	TM-005								0.8
M-6	TM-006	6V-8225	TA-006	01598.00608	0-206	5P-0537	0-14	3B-4504	1.00
M-8	TM-008	5P-7970	TA-008	01598.00809	0-207	9M-1974	0-31	3B-4505	1.25
M-10	TM-010	2Y-5829	TA-010	01598.01011	0-208	5M-2894	0-10	3B-4506	1.50
M-12	TM-012	6V-8149	TA-012	01598.01214	0-212	5P-8245	0-52	3B-4507	1.75
M-14	TM-014		TA-014	01598.01415	0-214	5P-8246	0-56	3B-4508	2.00
M-16	TM-016	8T-1757	TA-016	01598.01617	0-216	5P-8247	0-62	3B-4509	
M-18	TM-018		TA-018	01598.01812	0-218		0-75	3B-4510	2.50
M-20	TM-020	6V-7742	TA-020	01598.02021	0-219	5P-8248	0-20	3B-4512	
M-22	TM-022		TA-022	01598.02223	0-222	5P-8249	0-87	3B-4514	
M-24	TM-024	7X-0851	TA-024	01598.02425	0-254	5P-8250	0-25	3B-4516	3.00
M-27	TM-027		TA-027		0-227		0-12	3B-4518	
M-30	TM-030	8T-1583	TA-030		0-300	3S-1349	0-11	3B-4520	3.50
M-33	TM-033		TA-033		0-320	4K-0684	0-33		
M-36	TM-036		TA-036		0-350		0-15	3B-4524	4.00
M-42	TM-042				0-325				4.50

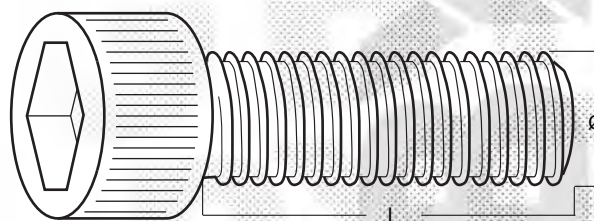
Fine Metric Thread

Ø									Thread
	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM	
M-8	TM-008 F		TA-008 F		0-207	9M-1974	0-31	3B-4505	1.00
M-10	TM-010 E		TA-010 E		0-208	5M-2894	0-10	3B-4506	
	TM-010 F	12164727	TA-010 F	01599.01011					
M-12	TM-012 E	16101527	TA-012 E		0-212	5P-8245	0-52	3B-4507	1.25
	TM-012 F		TA-012 F	01599.01214					
M-14	TM-014 F		TA-014 F	01599.01415	0-214	5P-8246	0-56	3B-4508	1.50
M-16	TM-016 F	12164111	TA-016 F		0-216	5P-8247	0-62	3B-4509	
M-18	TM-018 F		TA-018 F	01599.01820	0-218		0-75	3B-4510	
M-20	TM-020 F	12164327	TA-020 F	01599.02021	0-219	5P-8248	0-20	3B-4512	
M-22	TM-022 F		TA-022 F	01599.02223	0-222	5P-8249	0-87	3B-4514	
M-24	TM-024 F	8287743	TA-024 F	01599.02425	0-254	5P-8250	0-25	3B-4516	
M-27	TM-027 F	76004796	TA-027 F		0-227		0-12	3B-4518	2.00
M-30	TM-030 F		TA-030 F		0-300	3S-1349	0-11	3B-4520	

Socket Head Cap Screws DIN 912

12.9 Quality

Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)
Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)
Rockwell Hardness
C35-38



Coarse UNC Thread

L	Ø 1/4 "		Ø 5/16 "		Ø 3/8 "		Ø 1/2 "		Ø 5/8 "		Ø 3/4 "		L mm.
	20 Thread "		18 Thread "		16 Thread "		13 Thread "		11 Thread "		10 Thread "		
	BYG	CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG	CAT	BYG	CAT	
1/2 "	A-20050	8H-0708											13
5/8 "	A-25063	8H-3128	A-31063										16
3/4 "	A-25075	8H-3127	A-31075	9F-5975	A-38075	1L-0509							19
1 "	A-25100	8H-0707	A-31100	1T-0284	A-38100	2D-4534	A-50100	5H-4893					25
1-1/4 "	A-25125	4L-7124	A-31125	9F-6641	A-38125	2J-5245	A-50125	5F-8807					32
1-1/2 "			A-31150	5J-5314	A-38150	4D-3120	A-50150	3F-7147	A-63150				38
2 "					A-38200	1L-8793	A-50200	8B-7997	A-63200	5S-2457	A-75200		51
2-1/2 "							A-50250	8B-7979	A-63250		A-75250	2N-6170	64
3 "									A-63300	4D-0242	A-75300		76
4 "									A-63400	8L-4743	A-75400		102
5 "											A-75500		127

Coarse Metric Thread

L mm.	Ø M-5 Thread 0.80	Ø M-6 Thread 1.00	Ø M-8 Thread 1.25	Ø M-10 Thread 1.50	Ø M-12 Thread 1.75	Ø M-14 Thread 2.00	Ø M-16 Thread 2.00	Ø M-20 Thread 2.50
12	A-05012	A-06012						
16	A-05016	A-06016	A-08016					
20	A-05020	A-06020	A-08020	A-10020				
25	A-05025	A-06025	A-08025	A-10025	A-12025			
30	A-05030	A-06030	A-08030	A-10030	A-12030	A-14030		
35	A-05035	A-06035	A-08035	A-10035	A-12035	A-14035		
40	A-05040	A-06040	A-08040	A-10040	A-12040	A-14040	A-16040	
45	A-05045	A-06045	A-08045	A-10045	A-12045	A-14045	A-16045	
50	A-05050	A-06050	A-08050	A-10050	A-12050	A-14050	A-16050	A-20050
60	A-05060	A-06060	A-08060	A-10060	A-12060	A-14060	A-16060	A-20060
70	A-05070	A-06070	A-08070	A-10070	A-12070	A-14070	A-16070	A-20070
80	A-05080	A-06080	A-08080	A-10080	A-12080	A-14080	A-16080	A-20080
90		A-06090	A-08090	A-10090	A-12090	A-14090	A-16090	A-20090
100		A-06100	A-08100	A-10100	A-12100	A-14100	A-16100	A-20100
120						A-14120	A-16120	A-20120
150							A-16150	A-20150

Most common reference numbers appear in Bold

Flat Head Socket Cap Screws DIN 7991

10.9 Quality

Pretensile Strength

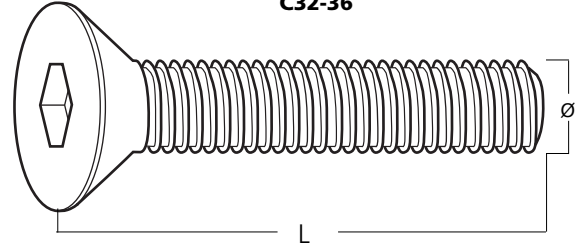
150.000 P.S.I. (105 Kg/mm²)

Elastic Load Limit

120.000 P.S.I. (84 Kg/mm²)

Rockwell Hardness

C32-36



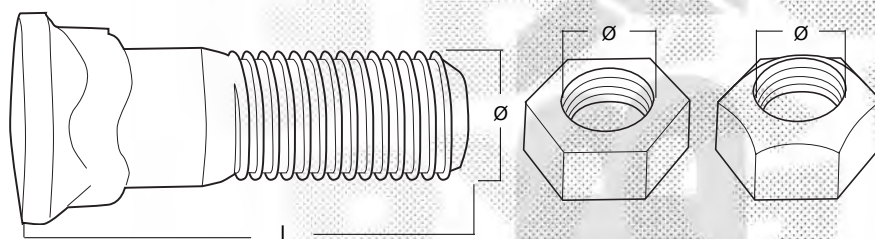
Coarse Metric Thread

L mm.	Ø M-5 Thread 0.80	Ø M-6 Thread 1.00	Ø M-8 Thread 1.25	Ø M-10 Thread 1.50	Ø M-12 Thread 1.75	Ø M-14 Thread 2.00	Ø M-16 Thread 2.00	Ø M-18 Thread 2.50	Ø M-20 Thread 2.50
12	V-05012								
16	V-05016	V-06016							
20	V-05020	V-06020	V-08020						
25	V-05025	V-06025	V-08025	V-10025	V-12025				
30	V-05030	V-06030	V-08030	V-10030	V-12030	V-14030	V-16030	V-18030	<i>V-20030</i>
35	V-05035	V-06035	V-08035	V-10035	V-12035	V-14035	V-16035	<i>V-18035</i>	<i>V-20035</i>
40	V-05040	V-06040	V-08040	V-10040	V-12040	V-14040	V-16040	<i>V-18040</i>	<i>V-20040</i>
50		V-06050	V-08050	V-10050	V-12050	V-14050	V-16050	<i>V-18050</i>	<i>V-20050</i>
60			V-08060	V-10060	V-12060	V-14060	V-16060	<i>V-18060</i>	<i>V-20060</i>

Plow Bolts and Nuts

12.9 Quality

Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)
 Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)
 Rockwell Hardness
C36-42

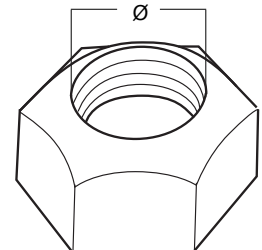
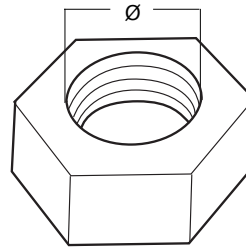
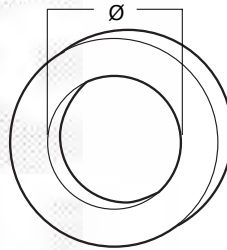
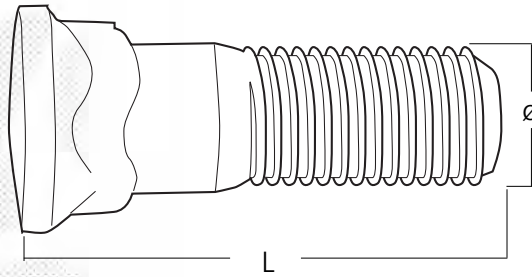


Caterpillar: Plow Bolts and Nuts

L	Ø 1/2"		Ø 5/8"		Ø 3/4"		Ø 7/8"		Ø 1"		Ø 1-1/4"	
	13 Thread"		11 Thread"		10 Thread"		9 Thread"		8 Thread"		7 Thread"	
	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM
1-1/2"	PB-201	4F-3646										
1-3/4"	PB-202	4F-3648	PB-502	4F-3653								
2"	PB-203	4F-3649	PB-505	4F-3654	PB-320	4F-3672						
2-1/4"	PB-204	4F-3650	PB-510	3F-5108	PB-322	4F-7827	PB-730					
2-1/2"	PB-205	4F-3651	PB-512	4F-3656	PB-324	5J-4773	PB-732	5J-4772				
2-3/4"	PB-206	4F-3652	PB-514	4F-3657		5J-4771	PB-734	6F-0196	PB-940	1J-5607		
3"			PB-516	4F-3658	PB-328	4F-0138	PB-736	5J-2409	PB-942	4F-4042		
3-1/4"					PB-330		PB-738	8J-2935	PB-943	4J-9058		
3-1/2"			PB-518	4F-3665	PB-332		PB-740	2J-2548	PB-944	4J-9208		
3-3/4"					PB-334	5F-8933	PB-742		PB-945	1J-4948		
4"			PB-520	4F-3671	PB-336		PB-744		PB-946	8J-2928	PB-801	5P-8823
4-1/2"					PB-338	4F-0253			PB-948	1J-3527	PB-803	6V-8360
5"					PB-340		PB-746		PB-950	1J-2034	PB-805	5P-8361
5-1/2"									PB-952			
5-3/4"											PB-807	
6-1/2"									PB-954			
	NP-117	1F-7958	NP-158	4K-0367	NP-190	2J-3506	NP-222	2J-3505	NP-100	2J-3507	NP-114	3K-9770
									NP-100 B	8J-2933	NP-114 B	5P-8362

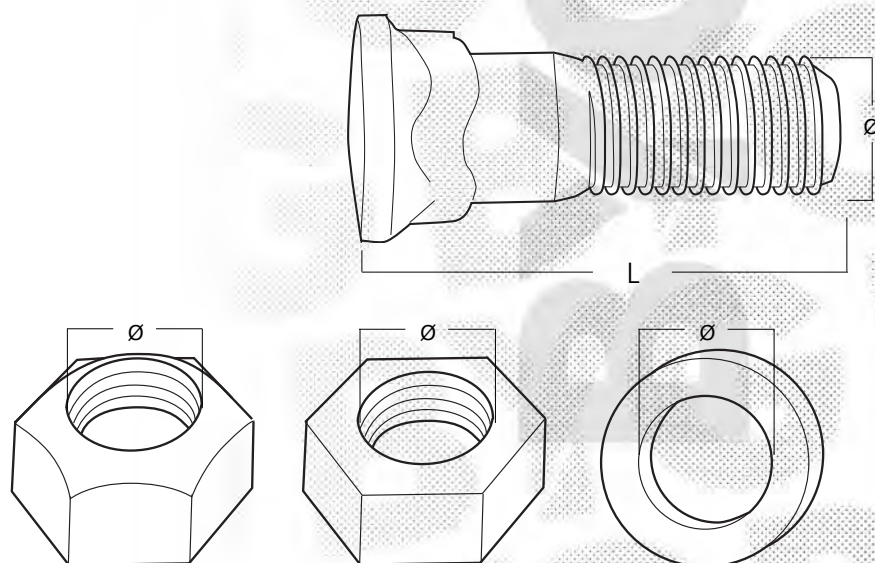
Fiat: Plow Bolts and Nuts

L mm.	M-20 Thread 1.50	
	BYG	OEM
52	PB-050 F	8280591
62	PB-060 F	8273211
72	PB-070 F	8273530
82	PB-078 F	8289500
	TM-020 F	12164327



Komatsu: Plow Bolts and Nuts

L	Ø 1/2" 13 Thread"		Ø 5/8" 11 Thread"		Ø 3/4" 10 Thread"		Ø 7/8" 9 Thread"		L mm.
	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM	
1-1/2"	PB-201	02090-10840							38
1-3/4"	PB-202		PB-502						44
2"	PB-203		PB-505	02090-11050	PB-320				51 >
2-1/4"	PB-204		PB-510	02090-11060	PB-322		PB-730		57
2-1/2"	PB-205		PB-512		PB-324	02090-11265	PB-732		64
2-3/4"	PB-206		PB-514		PB-326	02090-11270	PB-734		70
3"			PB-516	02090-11080	PB-328	02090-11275	PB-736	175-71-11454	76 >
3-1/4"					PB-330		PB-738	175-71-11450	83
3-1/2"			PB-518		PB-332	02090-1129	PB-740	124-70-21640	89
3-3/4"					PB-334		PB-742		95
4"			PB-520		PB-336	02091-11200	PB-744		102 >
4-1/4"									
4-1/2"					PB-338	02091-11215			114
4-9/16"									
5"					PB-340	02091-11220	PB-746	175-71-11471	127 >
5-1/2"									140
5-3/4"									146
6-1/4"									
6-1/2"									165 >
	NP-117	02290-10813	NP-158	02290-11016	NP-190	02290-11219	NP-222	02290-11422	>
									>
									>



Komatsu: Plow Bolts and Nuts

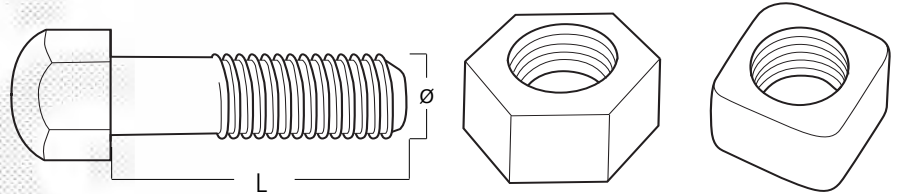
L	Ø 1" 8 Thread"		Ø 1-1/8" 7 Thread"		Ø 1-1/4" 7 Thread"		Ø 1-3/8" 6 Thread"		L mm.
	BYG	OEM	BYG	OEM	BYG	OEM	BYG	OEM	
1-1/2"									38
1-3/4"									44
2"									51
2-1/4"									57
2-1/2"									64
2-3/4"	PB-940								70
3"	PB-942								76
3-1/4"	PB-943								83
3-1/2"	PB-944								89
3-3/4"	PB-945	195-71-11452	PB-620	195-71-52320					95
4"	PB-946	195-71-11461			PB-801	02091-12010			102
4-1/4"			PB-622	195-71-52330					105
4-1/2"	PB-948				PB-803	02091-12020			114
4-9/16"							PB-650	1987-12-1850	116
5"	PB-950				PB-805				127
5-1/2"	PB-952						PB-652	198-71-21860	140
5-3/4"					PB-807				146
6-1/4"							PB-654	198-71-21870	159
6-1/2"	PB-954	195-71-11473							165
	NP-100	02290-11625	NP-118	195-71-52340	NP-114	02290-12031	NP-138	198-71-21910	
	NP-100 B				NP-114 B				
			O-300	195-71-52350			O-350	198-71-21890	

Track Chain Bolts and Nuts

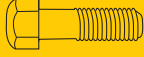
UNF Thread

12.9 Quality

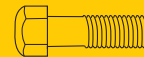
Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)
 Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)
 Rockwell Hardness
C36-42



Caterpillar: Track Chain Bolts

	Ø	Thread	L	L mm.				
BYG					OEM			
D2, 933C	7/16"	UNF-20	1-9/16"	39,7	S-1916	2B-5484	N-716	N-716 E
D3, D4, 931, 933	1/2"	UNF-20	1-1/2"	38,1	S-1250	8H-7504	N-125	N-125 E
D3, D4, 931, 933	1/2"	UNF-20	1-7/8"	47,6	S-0178	2A-3223	N-125	N-125 E
D3, D4, 215, 931, 933, 941	9/16"	UNF-18	1-5/8"	41,2	S-1516 C	4K-7038	N-916	N-916 E
D3, D4, 931, 933, 941, 215	9/16"	UNF-18	1-15/16"	49,2	S-1516	7H-3596	N-916	N-916 E
D4-5-6-7, 941-51-53-55-77, 561	5/8"	UNF-18	2-1/8"	53,9	S-0051	7H-3597	N-058	N-058 E
D6C, D7	5/8"	UNF-18	2-33/64"	63,9	S-0064		N-058	N-058 E
D6-7-8, 955-63-73-77, 235, 571	3/4"	UNF-16	2-5/32"	54,7	S-0189	1S-1859	N-034	N-034 E
D6-7-8, 955-63-73-77, 235, 571	3/4"	UNF-16	2-3/8"	60,3	S-0238	7H-3598	N-034	N-034 E
D6-7-8, 955-63-73-77, 235, 571	3/4"	UNF-16	2-3/4"	69,8	S-0234	7F-8619	N-034	N-034 E
D8, D8H, 583, 983	7/8"	UNF-14	2-21/32"	67,4	S-2132	9M-7444	N-078	N-078 E
D8L	7/8"	UNF-14	3-1/2"	88,9	S-0312	6V-1723	N-078 S	N-078 E
D9, D9E, D9D, D9G, D9H, 594	1"	UNF-14	2-15/16"	74,6	S-1278	9M-7445	N-254	N-254 E
245	1"	UNF-14	3-5/16"	84,1	S-3516	3T-6308	N-254	
D9N	1"	UNF-14	3-9/16"	90,5	S-3916	6T-2638	N-254 S	
D9L	1"	UNF-14	4"	101,6	S-0400	6V-1726	N-254 S	N-254 E
D10	1-1/8"	UNF-12	4-1/4"	107,9	S-0414	5P-3868	N-041 S	
D10N	1-1/8"	UNF-12	3-25/32"	96,0	S-2532	7T-1000	N-041 S	

Fiat: Track Chain Bolts

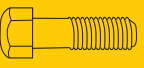
	Ø	Thread	L	L mm.				
BYG					OEM			
AD5, FL6, 805C, 45, 50, 655	9/16"	UNF-18	1-15/16"	49,2	S-1516	79012420	N-916	N-916 E
FL8, FL9, FL10, AD7, AD8, AD9, AD10	5/8"	UNF-18	2-1/8"	53,9	S-0051	79004489	N-058	N-058 E

RECOMMENDED TORQUE VALUES FOR UNF BOLTS

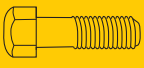
Ø	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"
UNF Lb.ft	88	138	195	275	480	770	1.170	1.660	2.200
UNF Kg. m	13	19	27	39	67	107	162	229	300

Most common reference numbers appear in Bold

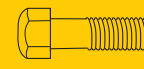
International: Track Chain Bolts

	Ø	Thread	L	L mm.				
BYG					OEM			
TD6, T6	7/16"	UNF-20	1-9/16"	39,6	S-1916	616182C1	N-716	N-716 E
TD7, TD8C, TD9B, 125B, 125C, 150	1/2"	UNF-20	1-1/2"	38,1	S-1250	330059R1	N-125	N-125 E
TD7, TD8C, TD9B, 125, 150	1/2"	UNF-20	1-7/8"	47,6	S-0178	316843R1	N-125	N-125 E
TD14A, TD15B, 175B	9/16"	UNF-18	2-3/16"	55,6	S-0316	616199C1	N-916	N-916 E
TD12 C, TD20 B, TD24, TD25 B, TD25 E	3/4"	UNF-16	2-3/4"	69,8	S-0234	311348R1	N-034	N-034 E

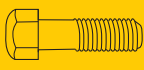
Case: Track Chain Bolts

	Ø	Thread	L	L mm.				
BYG					OEM			
880 B, 880 C, 750, 1000	9/16"	UNF-18	1-15/16"	49,2	S-1516	R15309	N-916	N-916 E

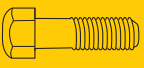
John Deere: Track Chain Bolts

	Ø	Thread	L	L mm.				
BYG					OEM			
350	1/2"	UNF-20	1-7/8"	47,6	S-0178		N-125	N-125 E

Poclain: Track Chain Bolts

	Ø	Thread	L	L mm.				
BYG					OEM			
FC30	1/2"	UNF-20	1-7/8"	47,6	S-0178	H00300-81	N-125	N-125 E
60, 60CL, 60CS, 75C, 75CL, 90C, 90CL	9/16"	UNF-18	2-3/16"	55,6	S-0316	P00330-41	N-916	N-916 E
SC150K, 160CK, 220C, RC200, 200CL	3/4"	UNF-16	2-5/32"	54,8	S-0189	S02330-06	N-034	N-034 E
220CK, 300CL	3/4"	UNF-16	2-3/4"	69,8	S-0234	K10330-77	N-034	N-034 E
HC300, 300CK, 350CK, 400CL	7/8"	UNF-14	3-1/8"	79,4	S-0082	LIO2330-77	N-078	N-078 E

Komatsu: Track Chain Bolts

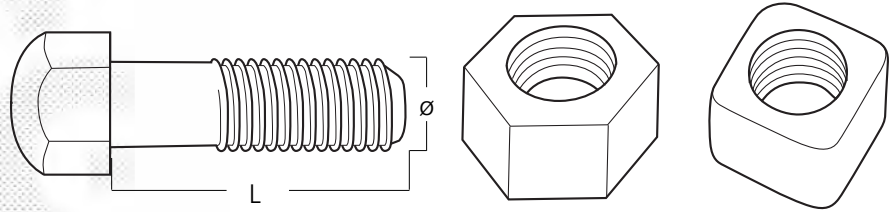
	Ø	Thread	L	L mm.				
BYG					OEM			
D60A, D65A, D80A	3/4"	UNF-16	2-3/8"	60,3	S-0238	150-32-21320 150-32-21321	N-034	N-034 E

Track Chain Bolts and Nuts

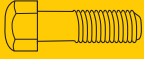
Metric Thread

12.9 Quality

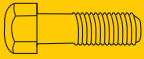
Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)
 Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)
 Rockwell Hardness
C36-42



Fiat: Track Chain Bolts

	Ø	Thread	L mm.				
				BYG	OEM		
25, 311, 312, 351, 352, 355	M-10	1.00	33	S-0010	557155	N-010	
AD4, FL4, 411C	M-12	1.00	40	S-1240	571894	N-012	
FL12, FL14, D60K	M-18	1.50	61	S-0018	598391	N-018	N-018 E
AD18, AD20	M-20	1.50	70	S-0020	588961	N-020	N-020 E

Komatsu: Track Chain Bolts

	Ø	Thread	L mm.				
				BYG	OEM		
D30, MF450	M-14	1.50	50	S-0014	1421301M1	N-014	
D55, D65	M-18	1.50	65	S-0018 K	135-32-11210	N-018	N-018 E
D60, D65	M-19	1.50	62	S-0019 KC	150-32-21321		N-019 E
D60A	M-19	1.50	66	S-0019 KL	144-82-07210		N-019 E
D75, D80, D85	M-20	1.50	65	S-0020 KC	154-32-21321	N-020	N-020 E
D75S, D80, D85	M-20	1.50	85	S-0020 KL	175-71-11452	N-020	N-020 E
D120, 125, 150, 155	M-22	1.50	76	S-0023 K	170-32-11212		N-022 E
"Komatsu" Adapter	M-22	1.50	105	S-0022 K	145-70-19232		N-022 E
D355	M-24	1.50	78	S-0024 KC	176-32-11210	N-024	
D355	M-24	1.50	100	S-0024 KL	175-32-81190	N-024	
D355K	M-27	1.50	82	S-0027 K	195-32-11210	N-027	N-027 K
D455	M-30	2.00	97	S-0030 K	198-32-11211	N-030	

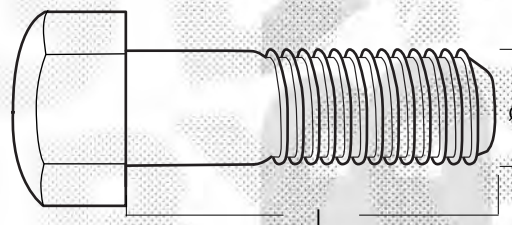
RECOMMENDED
TORQUE VALUES FOR
METRIC BOLTS

Ø	12x1	14x1.5	16x1.5	18x1.5	20x1.5	22x1.5	24x1.5	27x1.5
Lb.ft	116	190	285	435	580	790	1.010	1.455
Kg. m	16	26	39	60	80	105	139	201

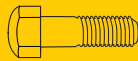
Split Master Link Bolts

12.9 Quality

Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)
 Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)
 Rockwell Hardness
C35-38



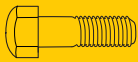
Caterpillar: Split Master Link Bolts

	Ø	Thread	L mm.		
				BYG	OEM
D4, D5, D6, 951, 953	5/8"	UNF-18	3-1/2"	S-2274	3P-2274
D6C	3/4"	UNF-16	4-5/32"	S-1838	9S-1838
D7G	3/4"	UNF-14	4-27/64"	S-9670	2P-9670
D8H	7/8"	UNF-14	4-25/32"	S-0395	8S-0395
D8L	7/8"	UNF-14	3-3/4"	S-1724	6V-1724
D8L	7/8"	UNF-14	5"	S-1725	6V-1725
D9G, D9H	1"	UNF-14	5-9/16"	S-1723	8S-1723
D9L	1"	UNF-14	4-21/64"	S-1727	6V-1727
D9L	1"	UNF-14	5-53/64"	S-1728	6V-1728
D10N	1-1/8"	UNF-12	5-9/32"	S-0999	7T-0999
D10N	1-1/8"	UNF-12	6-29/64"	S-0998	7T-0998
D11	1-3/8"	UNF-12	6"	S-8521	6T-8521
D11	1-3/8"	UNF-12	7-1/4"	S-8520	6T-8520

Fiat: Split Master Link Bolts

	Ø	Thread	L mm.		
				BYG	OEM
FL10C	M-18	1.50	95	S-18095	79039444
FL14/625, FD14/625	M-20	1.50	102	S-20102	79035815
FL20, FD20	M-22	1.50	115	S-22115	76007852

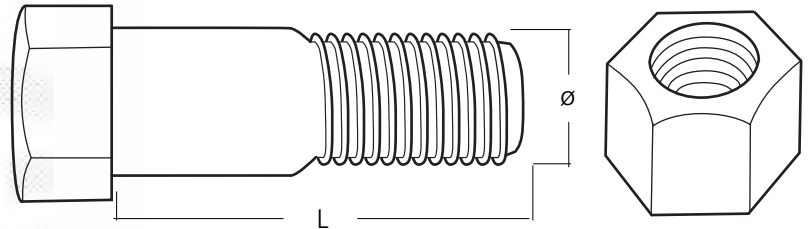
Komatsu: Split Master Link Bolts

	Ø	Thread	L mm.		
				BYG	OEM
D60, D65A, D65E, D65S	M-18	1.50	95	S-18095	144-32-21342
D80, D85A, D85E	M-20	1.50	118	S-20118	154-32-21260
D150, D155A, D155S	M-24	2.00	127	S-24127	175-32-41260
D355A	M-27	2.00	147	S-27147	195-32-23140

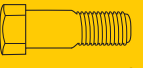
Segment Groups Bolts and Nuts

12.9 Quality

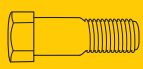
Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)
 Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)
 Rockwell Hardness
C35-38



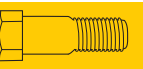
Caterpillar: Segment Groups Bolts

	Ø	Thread	L mm.			
				BYG	OEM	
D5, D6C, 561, 955, 977	5/8"	UNF-18	47.6	S-8182 C	3S-8182	N-058 E
D7, D7E, 571, 572E, 973, 977H-K	3/4"	UNF-16	60.3	S-0336 C	3S-0336	N-034 E
D8L	3/4"	UNF-16	66.7	S-4130 C	5P-4130	N-034 E
D8H, D8K, 983, 583H, 583K	7/8"	UNF-14	65.0	S-2727 C	9S-2727	N-078 E
D9L	7/8"	UNF-14	76.2	S-6471 C	5P-6471	N-078 E
D9G, 594	1"	UNF-14	72.2	S-2728 C	9S-2728	N-254 E
D9H	1"	UNF-14	72.2	S-0233 C	5P-0233	N-254 E
D10N	1"	UNF-14	92,2	S-5422 C	5P-5422	N-254 E

Fiat: Segment Groups Bolts

	Ø	Thread	L mm.			
				BYG	OEM	
FL10-B-C, AD10, BD10, 110C	M-20	1.50	65.0	S-0010 F	59884/37	N-010 F
FL12, AD12, BD12, FL14, AD14	M-22	1.50	65.0	S-0014 F	59927/31	N-014 F
AD18, BD18, AD20, BD20, 180C	M-24	2.00	70.0	S-0020 F	59973/31	N-020 F
FL20, FD20	M-24	2.00	75.0	S-0021 F	79018427	N-020 F

Komatsu: Segment Groups Bolts

	Ø	Thread	L mm.			
				BYG	OEM	
D60, D65A, D65S, D75S.3	M-22	1.50	70.0	S-0065 K	154-27-12320	N-022 K
D75S.2, D80, D85A, D85P, D95S	M-22	1.50	71.0	S-0075 K	155-27-12181	N-022 K
D150, D155A, D155S	M-24	1.50	79.0	S-0155 K	178-27-11150	N-024 K
D355A.3	M-24	1.50	90.0	S-0355 K	195-27-12632	N-024 K

Final Drive Gear Bolts

12.9 Quality

Pretensile Strength

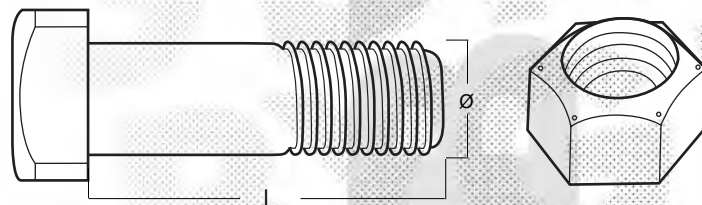
170.000 P.S.I. (120 Kg/mm²)

Elastic Load Limit

140.000 P.S.I. (100 Kg/mm²)

Rockwell Hardness

C36-42



Final Drive Gear Bolts

	Ø	Thread	L mm.			
				BYG	OEM	
D4, 955, 12A	5/8 "	UNF-18	40	BG-5840	9F-5227	NAF-580
941B, 951B, 955H-K	5/8 "	UNF-18	45	BG-5845	3K-3815	NAF-580
D6, D6C, 977H-K	5/8 "	UNF-18	51	BG-5851	3B-4990	NAF-580
D7E-F, 977H, 983, 20A	3/4 "	UNF-16	53	BG-3453	6B-4598	NAF-340
D8	3/4 "	UNF-16	58	BG-3458	3B-4580	NAF-340

Tamping Foot Bolts and Nuts

12.9 Quality

Pretensile Strength

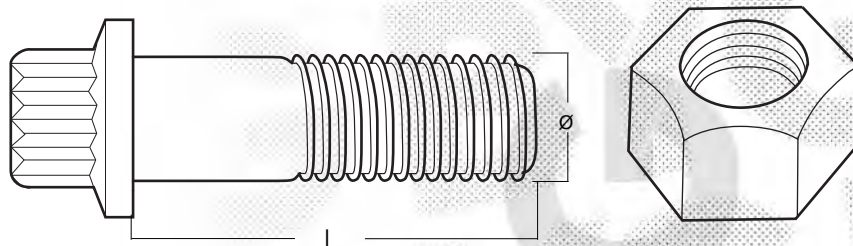
170.000 P.S.I. (120 Kg/mm²)

Elastic Load Limit

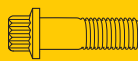
140.000 P.S.I. (100 Kg/mm²)

Rockwell Hardness

C35-38



Tamping Foot Bolts and Nuts

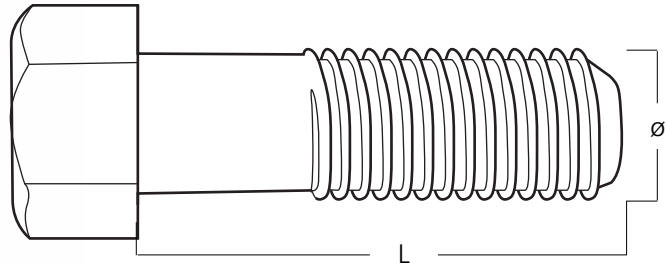
		Ø	Thread	L mm.				
					BYG	OEM		
8K-9189	815	5/8"	UNF-18	51	S12-5851	8K-9163	N-058 E	O-1258
8K-9171	825	7/8"	UNF-14	63	S12-7863	8K-9164	N-078 E	O-1278

Most common reference numbers appear in Bold

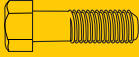
Track Roller Bolts

12.9 Quality

Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)
 Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)
 Rockwell Hardness
C35-38



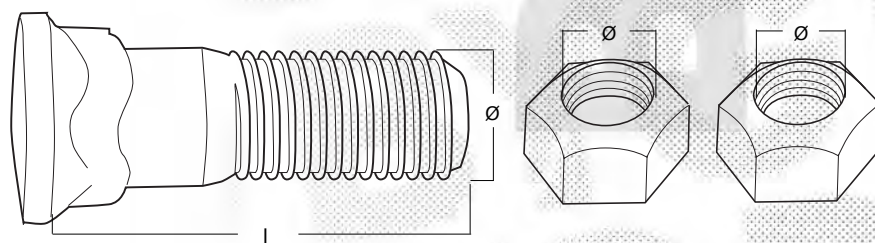
Track Roller Bolts

	Series	Ø	Thread	L	L mm.		
						BYG	OEM
933	42A						
955H	45A, 608412						
931	89A	5/8"	UNF-18	2-3/4"	69,85	S-1601	0S-1601
D5	All series						
D6	8U, 9U, 37A, 44A						
D4	24A, 39A, 78A, 86A, 88A, 58J, 83J, 84J	5/8"	UNC-11	2"	50,80	S-1135	1A-1135
941	80H, 70H						
955H	60A-8413 Up	5/8"	UNC-11	2-3/4"	69,85	S-8537	1A-8537
D6C	99J, 10K, 47J						
D6C	76A						
955K	61H, 58J, 64J						
951	79H	5/8"	UNC-11	2-1/2"	63,50	S-1625	0S-1625
951B	86J, 69J						
955L	84J						
D7	17A	5/8"	UNF-18	3-1/4"	82,55	S-2318	0S-2318
977H	53A						
977KL	46H, 11K, 48J	3/4"	UNC-10	3"	76,20	S-4609	1D-4609
D7E	47A, 48A						
D7F	94N	7/8"	UNC-9	3-1/2"	88,90	S-4629	1D-4629
983	38K						
D8	13A, 14A, 15A	7/8"	UNF-14	3-3/4"	95,25	S-2090	0L-2090
D8H	52A, 35A, 46A	7/8"	UNC-9	2-3/4"	69,85	S-4626	1D-4626
D9E	18A, 19A, 34A						
D8H	68A	1"	UNC-8	4-1/4"	107,95	S-4640	1D-4640
D9G	66A	7/8"	UNC-9	4"	101,60	S-4630	1D-4630

Plow Bolts and Nuts for Adapters and Corner Adapters

12.9 Quality

Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)
 Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)
 Rockwell Hardness
C36-42

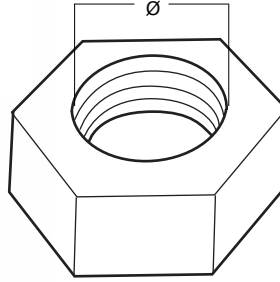


Plow Bolts and Nuts for Adapters and Corner Adapters

						Ø	Thread	L	L mm.		
1U-0257				PB-946	8J-2928	1"	UNC-8	4"	101,60	NP-100 B	
1U-0307											
1U-1357				PB-805	5P-8361	1-1/4"	UNC-7	5"	127,00	NP-114 B	
		1U-2209	1U-2208	PB-324	5J-4773	3/4"	UNC-10	2-1/2"	63,50		NP-190
	3G-1357			PB-946	8J-2928	1"	UNC-8	4"	101,60	NP-100 B	
	3G-2357			PB-948	1J-3527	1"	UNC-8	4-1/2"	114,30	NP-100 B	
3G-3357				PB-805	5P-8361	1-1/4"	UNC-7	5"	127,00	NP-114 B	
		3G-4259	3G-4258	PB-942	4F-4042	1"	UNC-8	3"	76,20	NP-100 B	
		3G-4309	3G-4308	PB-801	5P-8823	1-1/4"	UNC-7	4"	101,60	NP-114 B	
		3G-5307		PB-946	8J-2928	1"	UNC-8	4"	101,60	NP-100 B	
		3G-5359	3G-5358	PB-803	6V-8360	1-1/4"	UNC-7	4-1/2"	114,30	NP-114 B	
3G-7357				PB-805	5P-8361	1-1/4"	UNC-7	5"	127,00	NP-114 B	
		3G-8309	3G-8308	PB-801	5P-8823	1-1/4"	UNC-7	4"	101,60	NP-114 B	
3G-9307				PB-805	5P-8361	1-1/4"	UNC-7	5"	127,00	NP-114 B	
4T-4307				PB-946	8J-2928	1"	UNC-8	4"	101,60	NP-100 B	
				PB-948	1J-3527	1"	UNC-8	4-1/2"	114,30	NP-100 B	
4T-8457				PB-805	5P-8361	1-1/4"	UNC-7	5"	127,00	NP-100 B	
9J-4207				PB-326	5J-4771	3/4"	UNC-10	2-3/4"	69,85		NP-190
9W-6207				PB-512	4F-3656	5/8"	UNC-11	2-1/2"	63,50		NP-158

"Finished" Hexagonal Nuts

UNC - UNF Thread



10.9 Quality

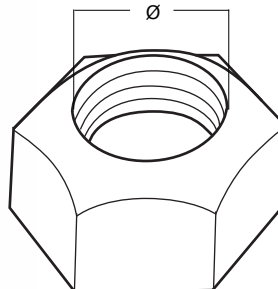
Pretensile Strength
150.000 P.S.I. (105 Kg/mm²)
Elastic Load Limit
120.000 P.S.I. (84 Kg/mm²)
Rockwell Hardness
C32-36

"Finished" Hexagonal Nuts

Ø	Thread	UNC Thread			Thread	UNF Thread		
		BYG	Caterpillar	Komatsu		BYG	Caterpillar	Fiat
1/4"	UNC-20	NP-014	9S-8750		UNF-28	NC-4201	9S-8748	
5/16"	UNC-18	NP-516	5S-0003		UNF-24	NC-4202	9S-8751	
3/8"	UNC-16	NP-038	9S-8752		UNF-24	NC-4203	3S-2713	
7/16"	UNC-14	NP-716	3S-1546		UNF-20	NC-4204	9S-8905	
1/2"	UNC-13	NP-117	1F-7958	02290-10813	UNF-20	NC-4205	6B-6684	
9/16"	UNC-12	NP-149	5P-0539		UNF-18	NC-1940	5P-0540	573905
5/8"	UNC-11	NP-158	4K-0367	02290-11016	UNF-18	NC-4206	6B-6683	
3/4"	UNC-10	NP-190	2J-3506	02290-11219	UNF-16	NC-4207	6B-6682	
7/8"	UNC-9	NP-222	2J-3505	02290-11422	UNF-14	NC-4208	1A-5666	
1"	UNC-8	NP-100	2J-3507	135-70-34130	UNF-14	NC-4209	1A-1935	
1-1/8"	UNC-7	NP-118	4J-5977		UNF-12	NC-5753	3S-1356	
1-1/4"	UNC-7	NP-114	3K-9770	02290-12031	UNF-12	NC-4210	7H-7539	
1-3/8"	UNC-6	NP-138		19871-21910				
1-1/2"	UNC-6	NP-112	9S-8216		UNF-12	NC-7413	8H-3390	

Conical Taper Nuts: Coarse UNC Thread

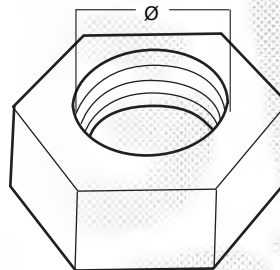
Ø	Thread		
		BYG	OEM
1"	UNC-8	NP-100 B	8J-2933
1-1/4"	UNC-7	NP-114 B	5P-8362



Hexagonal Nuts

DIN 934

Metric Thread



10.9 Quality

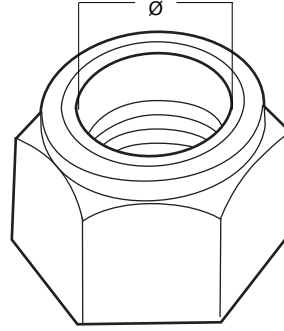
Pretensile Strength
150.000 P.S.I. (105 Kg/mm²)
 Elastic Load Limit
120.000 P.S.I. (84 Kg/mm²)
 Rockwell Hardness
C32-36

Hexagonal Nuts DIN 934: Metric Thread

Ø	Thread	COARSE Thread		Thread	FINE Thread	
		BYG	Caterpillar		BYG	Fiat
M-5	0.80	TM-005				
M-6	1.00	TM-006	6V-8225			
M-8	1.25	TM-008	5P-7970	1.00	TM-008 F	
M-10	1.50	TM-010	2Y-5829	1.25	TM-010 F	12164727
M-10				1.00	TM-010 E	
M-12	1.75	TM-012	6V-8149	1.25	TM-012 E	16101527
M-12				1.50	TM-012 F	
M-14	2.00	TM-014		1.50	TM-014 F	
M-16	2.00	TM-016	8T-1757	1.50	TM-016 F	12164111
M-18	2.50	TM-018		1.50	TM-018 F	
M-20	2.50	TM-020	6V-7742	1.50	TM-020 F	12164327
M-22	2.50	TM-022		1.50	TM-022 F	
M-24	3.00	TM-024	7X-0851	2.00	TM-024 F	8287743
M-27	3.00	TM-027		2.00	TM-027 F	76004796
M-30	3.50	TM-030	8T-1583	2.00	TM-030 F	
M-33	3.50	TM-033				
M-36	4.00	TM-036				

Nylon Insert Lock Nuts Din 982

UNC - UNF Thread



10.9 Quality

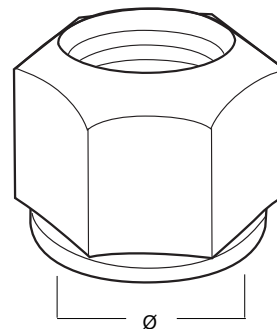
Pretensile Strength
150.000 P.S.I. (105 Kg/mm²)
Elastic Load Limit
120.000 P.S.I. (84 Kg/mm²)
Rockwell Hardness
C32-36

UNC - UNF Thread

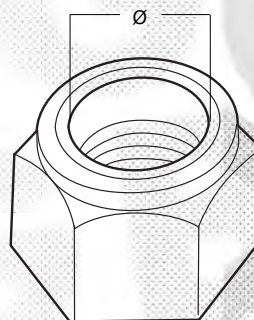
Ø	Thread	UNC Thread		Thread	UNF Thread	
		BYG	OEM		BYG	OEM
1/4"	UNC-20	TAC-140	7H-8909	UNF-28	TAF-140	3F-7674
5/16"	UNC-18	TAC-516	2R-0504	UNF-24	TAF-516	3F-2617
3/8"	UNC-16	TAC-380	4J-8265	UNF-24	TAF-380	2F-8616
7/16"	UNC-14	TAC-716	9M-5048	UNF-20	TAF-716	616698
1/2"	UNC-13	TAC-120	2H-3788	UNF-20	TAF-120	2M-2570
9/16"	UNC-12	TAC-916		UNF-18	TAF-916	
5/8"	UNC-11	TAC-580	2H-3789	UNF-18	TAF-580	7B-1756
3/4"	UNC-10	TAC-340	2H-3790	UNF-16	TAF-340	3F-7673
7/8"	UNC-9	TAC-780		UNF-14	TAF-780	
1"	UNC-8	TAC-100		UNF-14	TAF-100	
1-1/8"	UNC-7	TAC-118		UNF-12	TAF-118	
1-1/4"	UNC-7	TAC-114		UNF-12	TAF-114	
1-1/2"	UNC-6	TAC-112		UNF-12	TAF-112	

Conical Taper Nylon Insert Lock Nuts: UNC Thread

Ø	Thread	
1-1/4"	UNC-7	TAC-114 B



Nylon Insert Lock Nuts Din 982 Metric Thread



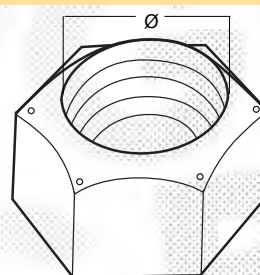
10.9 Quality

Pretensile Strength
150.000 P.S.I. (105 Kg/mm²)
Elastic Load Limit
120.000 P.S.I. (84 Kg/mm²)
Rockwell Hardness
C32-36

Metric Thread Nuts

Ø	Thread	COARSE Thread		Thread	FINE Thread	
		BYG	OEM		BYG	OEM
M-6	1.00	TA-006	01598-00608			
M-8	1.25	TA-008	01598-00809	1.00	TA-008 F	
M-10	1.50	TA-010	01598-01011	1.00	TA-010 E	
M-10				1.25	TA-010 F	01599-01011
M-12	1.75	TA-012	01598-01214	1.25	TA-012 E	
M-12				1.50	TA-012 F	01599-01214
M-14	2.00	TA-014	01598-01415	1.50	TA-014 F	01599-01415
M-16	2.25	TA-016	01598-01617	1.50	TA-016 F	01599-01820
M-18	2.50	TA-036	01598-01820	1.50	TA-018 F	01599-02021
M-20	2.50	TA-020	01598-02021	1.50	TA-020 F	01599-02223
M-22	2.50	TA-022	01598-02223	1.50	TA-022 F	01599-02425
M-24	3.00	TA-024	01598-02425	2.00	TA-024 F	
M-27	3.00	TA-027		2.00	TA-027 F	
M-30	3.50	TA-030		2.00	TA-030 F	
M-33	3.50	TA-033				
M-36	4.00	TA-036				

Self-Locking Nuts



10.9 Quality

Pretensile Strength
150.000 P.S.I. (105 Kg/mm²)
Elastic Load Limit
120.000 P.S.I. (84 Kg/mm²)
Rockwell Hardness
C32-36

Self-Locking Nuts: UNC - UNF Thread

Ø	Thread	UNC Thread		Thread	UNF Thread	
		BYG	OEM		BYG	OEM
1/4"	UNC-20	<i>NAC-140</i>	2D-6235	UNF-28	<i>NAF-140</i>	2L-9038
5/16"	UNC-18	<i>NAC-516</i>	314155	UNF-24	<i>NAF-516</i>	3D-8752
3/8"	UNC-16	<i>NAC-380</i>	2K-4973	UNF-24	<i>NAF-380</i>	2L-6267
7/16"	UNC-14	<i>NAC-716</i>	6V-5729	UNF-20	<i>NAF-716</i>	4D-6432
1/2"	UNC-13	<i>NAC-120</i>	1K-6872	UNF-20	<i>NAF-120</i>	2K-0564
9/16"	UNC-12	<i>NAC-916</i>	349954	UNF-18	<i>NAF-916</i>	545448
5/8"	UNC-11	<i>NAC-580</i>	3K-2889	UNF-18	NAF-580	2K-4821
3/4"	UNC-10	<i>NAC-340</i>	1K-6870	UNF-16	NAF-340	2K-0337
7/8"	UNC-9	<i>NAC-780</i>	6K-0545	UNF-14	<i>NAF-780</i>	5D-1986
1"	UNC-8	<i>NAC-100</i>	6K-3632	UNF-14	<i>NAF-100</i>	2K-7471

Most common reference numbers appear in **Bold**

Track Chain Nuts

12.9 Quality

Pretensile Strength

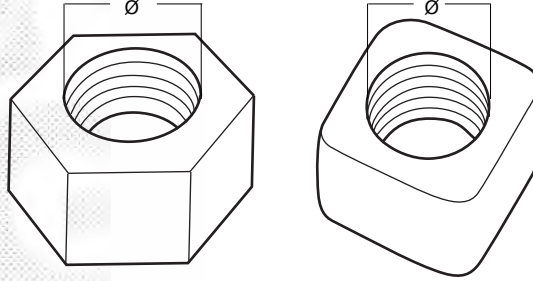
170.000 P.S.I. (120 Kg/mm²)

Elastic Load Limit

140.000 P.S.I. (100 Kg/mm²)

Rockwell Hardness

C35-38



Square and Hexagonal Nuts: Fine UNF Thread

Ø	Thread	BYG 	OEM	BYG 	OEM
7/16"	UNF-20	N-716	7K-1706	N-716 E	2B-5483
1/2"	UNF-20	N-125	6S-3419	N-125 E	8H-5724
9/16"	UNF-18	N-916	7K-2017	N-916 E	7H-3606
5/8"	UNF-18	N-058	1M-1408	N-058 E	7H-3607
3/4"	UNF-16	N-034	1S-1860	N-034 E	7H-3608
7/8"	UNF-14	N-078	2S-2140	N-078 E	7H-3609
7/8"	UNF-14	N-078 S	7G-6442		
1"	UNF-14	N-254	1S-6421	N-254 E	2M-5656
1"	UNF-14	N-254 S	7G-0343		
1-1/8"	UNF-12	N-041	70671868		
1-1/8"	UNF-12	N-041 S	5P-8221		

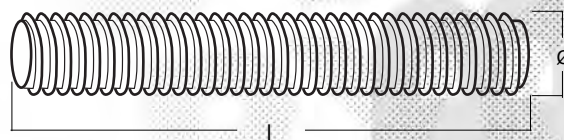
Square and Hexagonal Nuts: Metric Thread

Ø	Thread	BYG 	OEM	BYG 	OEM
M-10	1.00	N-010	577156		
M-12	1.00	N-012	79031163		
M-14	1.50	N-014	372938396		
M-18	1.50	N-018	4982325	N-018 E	135-32-11221
M-19	1.50			N-019 E	150-32-21331
M-20	1.50	N-020	4981731	N-020 E	01803-02026
M-22	1.50			N-022 E	170-32-11222
M-24	1.50	N-024	178-32-11220		
M-27	1.50	N-027	195-32-11221	N-027 K	195-32-11220
M-30	2.00	N-030			

Threaded Rods for Caterpillar Machines

10.9 Quality

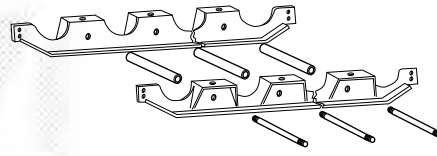
Pretensile Strength
150.000 P.S.I. (105 Kg/mm²)
 Elastic Load Limit
120.000 P.S.I. (84 Kg/mm²)
 Rockwell Hardness
C32-36



Threaded Rods for Caterpillar Machines

L	Ø 3/8"	Ø 1/2"	Ø 5/8"	Ø 3/4"	L mm.
	Thread UNC - 16	Thread UNC - 13	Thread UNC - 11	Thread UNC - 10	
1-9/16"	2M-1538	8M-8778			39,7
1-3/4"	2M-4779	2D-8153			44,4
2"	1J-8668	3D-0490			50,8
2-3/16"	4M-2743	5M-1932	3D-4639		55,6
2-3/8"	8M-1871	2D-8154	2D-8822		60,3
2-5/8"	3M-0496	4J-6925	2D-5238	4D-6579	66,7
2-13/16"	7S-6719	3D-0472	4D-4823	2D-8369	71,4
2-15/16"	9M-3296	3D-6627	6L-7655	4D-6578	74,6
3-1/8"	2M-8411	2D-8426	3J-8154	4D-7246	79,4
3-9/16"	2M-2488	2D-8155	3D-5963	5J-6796	90,5
4"	6L-4428	3D-0471	5P-3887	2P-1303	101,6

Track Guard Rods, Bolts and Pipes



12.9 Quality

Pretensile Strength

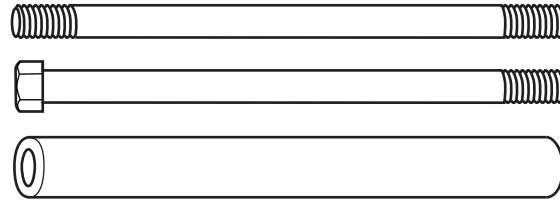
170.000 P.S.I. (120 Kg/mm²)

Elastic Load Limit

140.000 P.S.I. (100 Kg/mm²)

Rockwell Hardness

C32-36

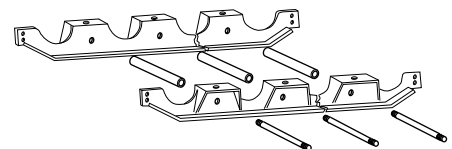


Caterpillar: Track Guard Rods, Bolts and Pipes

			
D4C, D4D	8H-1360		2F-0027
D4E, 941		5K-7144	5K-7247
D5	8H-1381		4S-6559
D5H	5P-7971		4S-6559
D5B		6K-0953	3A-2327
D6B	8H-1381		4S-6559
D6C, 955L	7M-2531		7M-2530
D6H	3W-4144		7G-4355
D7E, D7F, D7G, D7H, 977K	8H-1383		2F-0025
D8H	7S-8020		7S-8019
D8K, 983B	1P-1013		1P-1014
D9G	5M-4516		5M-4514
D9G, D9H	8H-2252		5M-4514
943	5P-4625		7P-7201
951B, 951C		6K-0953	6K-0952
953	5P-4624		7P-7368
955K	8H-4288		8H-1205
963	7P-4699		7P-4695
973	8G-2049		7P-5952
977H, 977K	8H-1383	8H-1383	2M-8387
983	8H-9478	8H-9478	7S-4710

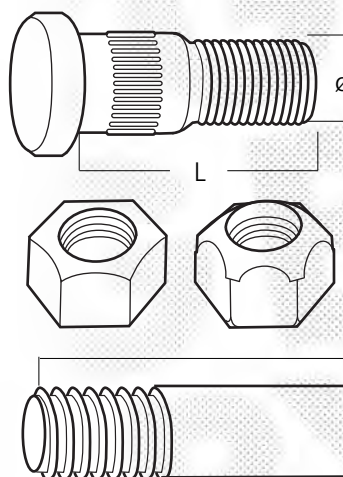
Komatsu: Track Guard Bolts and Pipes

		
	0920518310	1413032181
	1753032162	1753032151
	1953012181	1953012171



Most common reference numbers appear in Bold

Rim Wheel Loader Bolts, Nuts and Studs



10.9 Quality

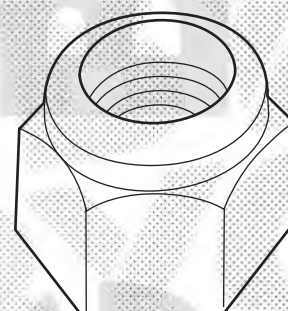
Pretensile Strength
150.000 P.S.I. (105 Kg/mm²)
 Elastic Load Limit
120.000 P.S.I. (84 Kg/mm²)
 Rockwell Hardness
C32-36

Caterpillar: Rim Wheel Studs, Bolts and Nuts

	Ø	Thread	L				
920	3/4"	UNF-16	2-1/8"		6K-9133	6K-9316	
930 950	3/4"	UNF-16	2-1/2"		1V-3323	6K-9316	
966C	3/4"	UNF-16	3-1/8"		4K-6754		3K-0453
980B	3/4"	UNC-UNF	5-1/2"	7K-3422			3K-0453
988A	1"	UNC-8	4-13/32"	9M-3948		<i>2J-3507</i>	
988B	1"	UNC-8	4-59/64"	6D-0419		<i>2J-3507</i>	
769-773	1-5/16"	UNF-12	4"	4D-8695		5D-0765	

Komatsu: Rim Wheel Studs and Nuts

	Ø	Thread	L mm.		
HD460-465	M-18	2.50	72	<i>01124-61850</i>	01580-11815
PALAS WA	M-20	2.50	100	01144-62070	423-22-12790
HD460-465	M-22	1.50 / 2.50	153	01121-62225	569-22-12920
HD 785	M-27	3.00	175	562-22-12731	562-22-12741



Other Studs

		Ø	Thread	L mm.	
TAMROCK		7/8"		4"	TMK-78108
TAMROCK		7/8"		5-1/2"	TMK-78140
	WABCO	M-22		150	WBO-22150
	PERLINI	M-30	2.50 / 3.00	130	PD-650 C
	PERLINI	M-30	2.50 / 3.00	160	PD-650 L

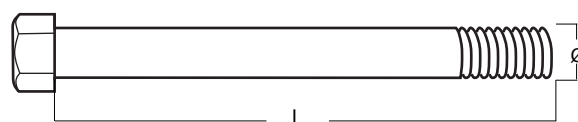
Other Hexagonal Bolts

12.9 Quality

Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)

Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)

Rockwell Hardness
C35-38



Bolts for Caterpillar Loader 988

Ø	Thread	L	L mm.	
1-1/4"	UNC-7	15"	381	 S-0213

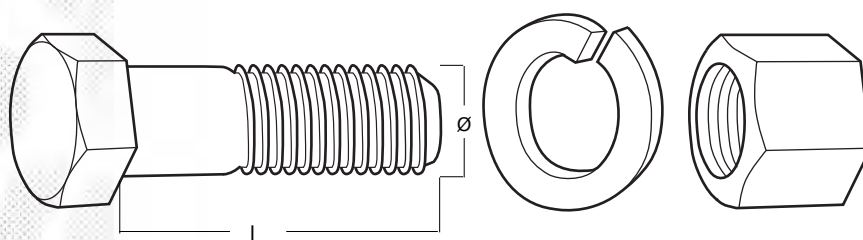
Agricultural Bolts

12.9 Quality

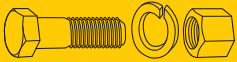
Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)

Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)

Rockwell Hardness
C35-38

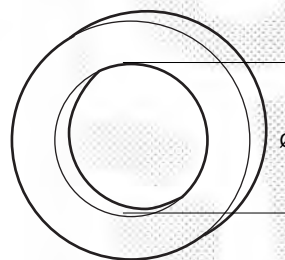


Rotavator Kit for Agricultural Machinery

Ø	Thread	L. mm.	
7/16"	UNF-20	35	 R-716
1/2"	UNF-20	38	R-120
5/8"	UNF-18	45	R-580
M-16	1.50	47	R-016

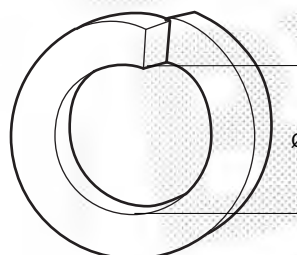
HD Flat Washers

HD Spring Washers



10.9 Quality

Pretensile Strength
150.000 P.S.I. (105 Kg/mm²)
 Elastic Load Limit
120.000 P.S.I. (84 Kg/mm²)
 Rockwell Hardness
C32-36



12.9 Quality

Pretensile Strength
170.000 P.S.I. (120 Kg/mm²)
 Elastic Load Limit
140.000 P.S.I. (100 Kg/mm²)
 Rockwell Hardness
C35-38

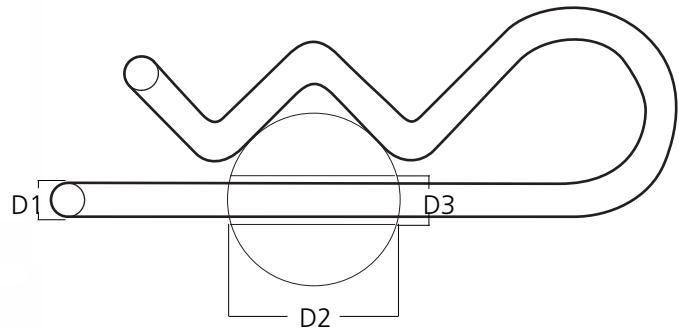
Heavy Duty Washers

Ø	Ø mm.	BYG	OEM	BYG	OEM
1/4"	7,14	0-206	5P-0537	0-14	3B-4504
5/16"	8,73	0-207	9M-1974	0-31	3B-4505
3/8"	9,92	0-208	5M-2894	0-37	3B-4506
M-10	10,40			0-10	
7/16"	11,90	0-210	5P-8244	0-43	3B-4507
1/2"	13,49	0-212	5P-8245	0-52	3B-4508
9/16"	15,08	0-214	5P-8246	0-56	3B-4509
5/8"	16,66	0-216	5P-8247	0-62	3B-4510
M-18	19,00	0-218			
3/4"	19,84	0-219	5P-8248	0-75	3B-4512
M-20	20,80			0-20	
7/8"	23,81	0-222	5P-8249	0-87	3B-4514
1"	26,98	0-254	5P-8250	0-25	3B-4516
M-27	29,00	0-227			
1-1/8"	30,16	0-300	3S-1349	0-12	3B-4518
1-1/4"	33,33	0-320	4K-0684	0-11	3B-4520
M-33	34,10			0-33	
1 3/8"	35,93	0-350			
1-1/2"	39,68	0-325		0-15	3B-4524
1-5/8"	43,28	0-413			
1-3/4"	47,45	0-440			
2"	52,80	0-508			
2-1/8"	54,98	0-540			
2-1/4"	58,15	0-572			

Steel Locking Pins

Steel Locking Pins

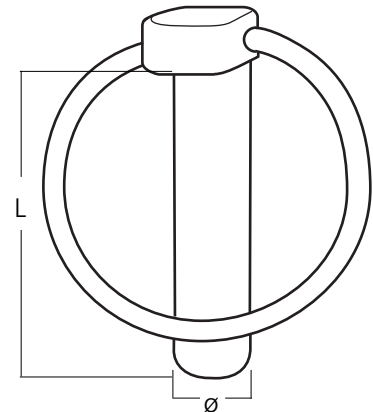
D1	mm.			
	D2	D3		
2	14	2,5		CLA-201
3	18	3,5		CLA-202
3,5	20	4		CLA-203
4	26	4,5		CLA-204
4,5	27	5,2		CLA-205
5	30	6		CLA-206
6	32	7		CLA-207



Snap Ring Pins

Snap Ring Pins

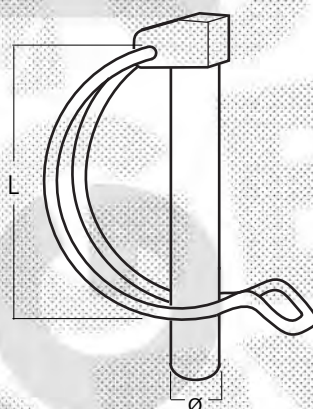
mm			
Ø	L		
4,5	31		PA-100
5,7	37		PA-101
7	37		PA-102
7,8	46		PA-103
8,8	46		PA-104
9,8	46		PA-105
10,8	46		PA-106



Clip Retainers

Clip Retainers

mm		
Ø	L	
8	40	PCE-301
8	50	PCE-302
8	60	PCE-303
9	40	PCE-304
9	50	PCE-305
9	60	PCE-306
10	40	PCE-307
10	50	PCE-308
10	60	PCE-309
12	40	PCE-310
12	50	PCE-311
12	60	PCE-312



Conversion Inches / Millimeters

Inch Fractions		0"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"
(0)	0	0,00	25,40	50,80	76,20	101,60	127,00	152,40	177,80	203,20	228,60	254,00	279,40	304,80
1/64	0,015625	0,40	25,80	51,20	76,60	102,00	127,40	152,80	178,20	203,60	229,00	254,40	279,80	305,20
1/32	0,03125	0,79	26,19	51,59	76,99	102,39	127,79	153,19	178,59	203,99	229,39	254,79	280,19	305,59
3/64	0,046875	1,19	26,59	51,99	77,39	102,79	128,19	153,59	178,99	204,39	229,79	255,19	280,59	305,99
1/16	0,0625	1,59	26,99	52,39	77,79	103,19	128,59	153,99	179,39	204,79	230,19	255,59	280,99	306,39
5/64	0,078125	1,98	27,38	52,78	78,18	103,58	128,98	154,38	179,78	205,18	230,58	255,98	281,38	306,78
3/32	0,09375	2,38	27,78	53,18	78,58	103,98	129,38	154,78	180,18	205,58	230,98	256,38	281,78	307,18
7/64	0,109375	2,78	28,18	53,58	78,98	104,38	129,78	155,18	180,58	205,98	231,38	256,78	282,18	307,58
1/8	0,125	3,18	28,58	53,98	79,38	104,78	130,18	155,58	180,98	206,38	231,78	257,18	282,58	307,98
9/64	0,140625	3,57	28,97	54,37	79,77	105,17	130,57	155,97	181,37	206,77	232,17	257,57	282,97	308,37
5/32	0,15625	3,97	29,37	54,77	80,17	105,57	130,97	156,37	181,77	207,17	232,57	257,97	283,37	308,77
11/64	0,171875	4,37	29,77	55,17	80,57	105,97	131,37	156,77	182,17	207,57	232,97	258,37	283,77	309,17
3/16	0,1875	4,76	30,16	55,56	80,96	106,36	131,76	157,16	182,56	207,96	233,36	258,76	284,16	309,56
13/64	0,203125	5,16	30,56	55,96	81,36	106,76	132,16	157,56	182,96	208,36	233,76	259,16	284,56	309,96
7/32	0,21875	5,56	30,96	56,36	81,76	107,16	132,56	157,96	183,36	208,76	234,16	259,56	284,96	310,36
15/64	0,234375	5,95	31,35	56,75	82,15	107,55	132,95	158,35	183,75	209,15	234,55	259,95	285,35	310,75
1/4	0,25	6,35	31,75	57,15	82,55	107,95	133,35	158,75	184,15	209,55	234,95	260,35	285,75	311,15
17/64	0,265625	6,75	32,15	57,55	82,95	108,35	133,75	159,15	184,55	209,95	235,35	260,75	286,15	311,55
9/32	0,28125	7,14	32,54	57,94	83,34	108,74	134,14	159,54	184,94	210,34	235,74	261,14	286,54	311,94
19/64	0,296875	7,54	32,94	58,34	83,74	109,14	134,54	159,94	185,34	210,74	236,14	261,54	286,94	312,34
5/16	0,3125	7,94	33,34	58,74	84,14	109,54	134,94	160,34	185,74	211,14	236,54	261,94	287,34	312,74
21/64	0,328125	8,33	33,73	59,13	84,53	109,93	135,33	160,73	186,13	211,53	236,93	262,33	287,73	313,13
11/32	0,34375	8,73	34,13	59,53	84,93	110,33	135,73	161,13	186,53	211,93	237,33	262,73	288,13	313,53
23/64	0,359375	9,13	34,53	59,93	85,33	110,73	136,13	161,53	186,93	212,33	237,73	263,13	288,53	313,93
3/8	0,375	9,53	34,93	60,33	85,73	111,13	136,53	161,93	187,33	212,73	238,13	263,53	288,93	314,33
25/64	0,390625	9,92	35,32	60,72	86,12	111,52	136,92	162,32	187,72	213,12	238,52	263,92	289,32	314,72
13/32	0,40625	10,32	35,72	61,12	86,52	111,92	137,32	162,72	188,12	213,52	238,92	264,32	289,72	315,12
27/64	0,421875	10,72	36,12	61,52	86,92	112,32	137,72	163,12	188,52	213,92	239,32	264,72	290,12	315,52
7/16	0,4375	11,11	36,51	61,91	87,31	112,71	138,11	163,51	188,91	214,31	239,71	265,11	290,51	315,91
29/64	0,453125	11,51	36,91	62,31	87,71	113,11	138,51	163,91	189,31	214,71	240,11	265,51	290,91	316,31
15/32	0,46875	11,91	37,31	62,71	88,11	113,51	138,91	164,31	189,71	215,11	240,51	265,91	291,31	316,71
31/64	0,484375	12,30	37,70	63,10	88,50	113,90	139,30	164,70	190,10	215,50	240,90	266,30	291,70	317,10
1/2	0,5	12,70	38,10	63,50	88,90	114,30	139,70	165,10	190,50	215,90	241,30	266,70	292,10	317,50
33/64	0,515625	13,10	38,50	63,90	89,30	114,70	140,10	165,50	190,90	216,30	241,70	267,10	292,50	317,90
17/32	0,53125	13,49	38,89	64,29	89,69	115,09	140,49	165,89	191,29	216,69	242,09	267,49	292,89	318,29
35/64	0,546875	13,89	39,29	64,69	90,09	115,49	140,89	166,29	191,69	217,09	242,49	267,89	293,29	318,69
9/16	0,5625	14,29	39,69	65,09	90,49	115,89	141,29	166,69	192,09	217,49	242,89	268,29	293,69	319,09
37/64	0,578125	14,68	40,08	65,48	90,88	116,28	141,68	167,08	192,48	217,88	243,28	268,68	294,08	319,48
19/32	0,59375	15,08	40,48	65,88	91,28	116,68	142,08	167,48	192,88	218,28	243,68	269,08	294,48	319,88
39/64	0,609375	15,48	40,88	66,28	91,68	117,08	142,48	167,88	193,28	218,68	244,08	269,48	294,88	320,28
5/8	0,625	15,88	41,28	66,68	92,08	117,48	142,88	168,28	193,68	219,08	244,48	269,88	295,28	320,68
41/64	0,640625	16,27	41,67	67,07	92,47	117,87	143,27	168,67	194,07	219,47	244,87	270,27	295,67	321,07
21/32	0,65625	16,67	42,07	67,47	92,87	118,27	143,67	169,07	194,47	219,87	245,27	270,67	296,07	321,47
43/64	0,671875	17,07	42,47	67,87	93,27	118,67	144,07	169,47	194,87	220,27	245,67	271,07	296,47	321,87
11/16	0,6875	17,46	42,86	68,26	93,66	119,06	144,46	169,86	195,26	220,66	246,06	271,46	296,86	322,26
45/64	0,703125	17,86	43,26	68,66	94,06	119,46	144,86	170,26	195,66	221,06	246,46	271,86	297,26	322,66
23/32	0,71875	18,26	43,66	69,06	94,46	119,86	145,26	170,66	196,06	221,46	246,86	272,26	297,66	323,06
47/64	0,734375	18,65	44,05	69,45	94,85	120,25	145,65	171,05	196,45	221,85	247,25	272,65	298,05	323,45
3/4	0,75	19,05	44,45	69,85	95,25	120,65	146,05	171,45	196,85	222,25	247,65	273,05	298,45	323,85
49/64	0,765625	19,45	44,85	70,25	95,65	121,05	146,45	171,85	197,25	222,65	248,05	273,45	298,85	324,25
25/32	0,78125	19,84	45,24	70,64	96,04	121,44	146,84	172,24	197,64	223,04	248,44	273,84	299,24	324,64
51/64	0,796875	20,24	45,64	71,04	96,44	121,84	147,24	172,64	198,04	223,44	248,84	274,24	299,64	325,04
13/16	0,8125	20,64	46,04	71,44	96,84	122,24	147,64	173,04	198,44	223,84	249,24	274,64	300,04	325,44
53/64	0,828125	21,03	46,43	71,83	97,23	122,63	148,03	173,43	198,83	224,23	249,63	275,03	300,43	325,83
27/32	0,84375	21,43	46,83	72,23	97,63	123,03	148,43	173,83	199,23	224,63	250,03	275,43	300,83	326,23
55/64	0,859375	21,83	47,23	72,63	98,03	123,43	148,83	174,23	199,63	225,03	250,43	275,83	301,23	326,63
7/8	0,875	22,23	47,63	73,03	98,43	123,83	149,23	174,63	200,03	225,43	250,83	276,23	301,63	327,03
57/64	0,890625	22,62	48,02	73,42	98,82	124,22	149,62	175,02	200,42	225,82	251,22	276,62	302,02	327,42
29/32	0,90625	23,02	48,42	73,82	99,22	124,62	150,02	175,42	200,82	226,22	251,62	277,02	302,42	327,82
59/64	0,921875	23,42	48,82	74,22	99,62	125,02	150,42	175,82	201,22	226,62	252,02	277,42	302,82	328,22
15/16	0,9375	23,81	49,21	74,61	100,01	125,41	150,81	176,21	201,61	227,01	252,41	277,81	303,21	328,61
61/64	0,953125	24,21	49,61	75,01	100,41	125,81	151,21	176,61	202,01	227,41	252,81	278,21	303,61	329,01
31/32	0,96875	24,61	50,01	75,41	100,81	126,21	151,61	177,01	202,41	227,81	253,21	278,61	304,01	329,41
63/64	0,984375	25,00	50,40	75,80	101,20	126,60	152,00	177,40	202,80	228,20	253,60	279,00	304,40	329,80