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Produktprogram Offshore



Checklist for purchase of stud bolts

Thread standard for studs:

- Stud bolts up to 1" (including 1") will be UNC thread as standard
- Stud bolts from 1 1/8" (including 1 1/8") will be 8UN thread as standard

If other thread norms are required, it must be specified clearly! If not, above standards will be delivered *.

All studs are produced according to normal thread dimension. This means:

Plain studs can be assembled with existing thread / material.

Zinc plated studs will normally be possible to assemble with existing threads / material also but you have to consider the thickness of the zinc plating. To ensure a correct fit, please indicate when purchasing that the studs are to be used with existing threads.

Galvanized studs do not fit existing thread / material, because the galvanizing is too thick. To make it fit, the stud bolt thread must be undercut before galvanizing. This must be clearly specified on the order, or else standard bolts will be delivered *.

B8M, A4, Titan Hastelloy and similar. For studs in these materials apply the same rule as for plain studs.

All studs are delivered with two nuts, unless otherwise agreed.

We supply studs in any available material and we stock a huge program of studs in our warehouse in Norway.

3.1b certificate can be requested for all types of studs and the price is NOK 100,- for each dimension, unless otherwise agreed.

All prices are in NOK. brutto pr. 100 pcs.

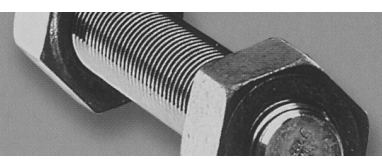
For inquiries, please call 815 58 548 or send a mail to: salg@bufab.no

**Ref. Guide ANSI B1.1, Class 2A fit, sizes 1 in. (25 mm) and smaller in diameter with the coarse-thread series, and 1 1/8 in. (28 mm) and larger in diameter with the 8-pitch-thread series.*

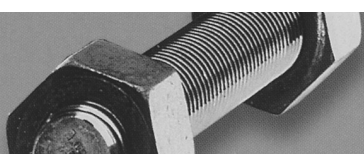


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Studbolt

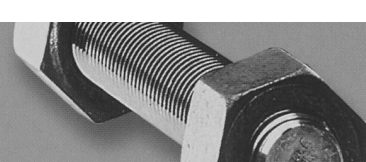
ASTM A193 B7
Hot Dip Galvanized

D	1/2"	5/8"	3/4"	7/8"	1"	1.1/8"	1.1/4"	1.3/8"
L	Price = NOK/100 pcs.							
60	4020							
65	4160							
70	4290							
75	4420	5790	8440					
80	4560	5970	8710					
85	4690	6160	8970					
90	4820	6350	9240					
95	4950	6530	9500					
100	5090	6720	9770					
105	5220	6900	10040					
110	5350	7090	10300	14490				
115	5490	7280	10570	14830				
120	5620	7460	10830	15180	21340			
125	5750	7650	11100	15520	21810			
130	5880	7830	11360	15870	22290	29250		
135	6020	8020	11630	16210	22770	29840		
140	6150	8210	11900	16560	23250	30440		
145	6280	8390	12160	16900	23730	31030		
150	6420	8580	12430	17250	24210	31630	39960	
155	6550	8760	12690	17590	24680	32220	40700	
160	6680	8950	12960	17940	25160	32820	41430	
165	6810	9140	13220	18290	25640	33410	42170	
170	6950	9320	13490	18630	26120	34010	42910	
175	7080	9510	13760	18980	26600	34600	43650	
180	7210	9690	14020	19320	27080	35200	44390	
185		9880	14290	19670	27550	35800	45130	
190		10070	14550	20010	28030	36390	45870	
195		10250	14820	20360	28510	36990	46610	
200		10440	15080	20700	28990	37580	47340	
205		10620	15350	21050	29470	38180	48080	
210		10810	15620	21390	29950	38770	48820	
215		11000	15880	21740	30420	39370	49560	
220		11180	16150	22090	30900	39960	50300	
225		11370	16410	22430	31380	40560	51040	
230		11550	16680	22780	31860	41150	51780	66710
235		11740	16950	23120	32340	41750	52520	67610
240		11930	17210	23470	32820	42340	53250	68510
245		12110	17480	23810	33290	42940	53990	69420
250		12300		24400	33770	43530	54730	70320
255				24850	34250	44130	55470	71220
260				25610	34730	44720	56210	72120
Order ex.: 3/4" x 260 Studbolt B7/2H H.D.G.								
Partno.: 1930342603								

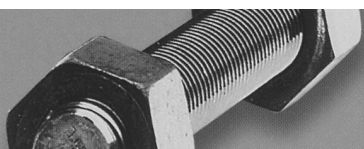
Studbolt

ASTM A193 B7

Hot Dip Galvanized



D	7/8"	1"	1.1/8"	1.1/4"	1.3/8"	1.1/2"	1.5/8"	1.3/4"	1.7/8"
L	Price = NOK/100 pcs.								
270	25640	35690	45910	57690	73920	92960			
275	25890	36160	46510	58430	74820	94070			
280	26230	36640	47110	59160	75720	95190			
285	26580	37120	47700	59900	76620	96300			
290	26920	37600	48300	60640	77520	97420			
295	27270	38080	48890	61380	78420	98540			
300	27610	38560	49490	62120	79330	99650			155176
305	27960	39030	50080	62860	80230	100770			156038
310	28300	39510	50680	63600	81130	101880			156900
315	28650	39990	51270	64340	82030	103000			157762
320	29000	40470	51870	65070	82930	104120			158624
325		40950	52460	65810	83830	105230			159486
330		41430	53060	66550	84730	106350	132060		160348
335		41900	53650	67290	85630	107460	133420		161210
340		42380	54250	68030	86530	108580	134780		162072
345		42860	54840	68770	87430	109700	136140		162934
350		43340	55440	69510	88330	110810	137500	165060	163711
355		43820	56030	70250	89230	111930	138860	166550	163800
360		44300	56630	70990	90140	113050	140220	168030	165438
365		44770	57230	71720	91040	114160	141580	169520	174216
370		45250	57820	72460	91940	115280	142940	171010	175608
375			58420	73200	92840	116390	144300	172500	177000
380			59010	73940	93740	117510	145660	173990	178250
385			59610	74680	94640	118630	147020	175480	179500
390			60200	75420	95540	119740	148380	176960	182000
395			60800	76160	96440	120860	149740	178450	183500
400			61390	76900	97340	121970	151110	179940	185000
405			61990	77630	98240	123090	152470	181430	185875
410			62580	78370	99140	124210	153830	182920	186750
415				79110	100050	125320	155190	184400	187625
420				79850	100950	126440	156550	185890	233000
425				80590	101850	127560	157910	187380	234400
430				81330	102750	128670	159270	188870	235800
435				82070	103650	129790	160630	190360	237200
440				82810	104550	130900	161990	191850	238600
445					105450	132020	163350	193330	240000
450					106350	133140	164710	194820	241400
455					107250	134250	166070	196310	242800
460					108150	135370	167430	197800	244200
465					109050	136480	168790	199290	245600
470					109960	137600	170150	200770	247000
Order ex.: 7/8" x 320 Studbolt B7/2H H.D.G.									
Partno.: 1930783203									



Studbolt

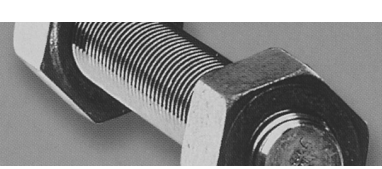
ASTM A193 B7
Hot Dip Galvanized

D	1.7/8"	2"	2.1/4"	2.1/2"	3"	3.1/2"
L	Price = NOK/100 pcs.					
420	233000	251690	326930	421800		
430	235800	255720	331770	427700		
440	238600	259750	336610	433600		
450	241400	263780	341440	439500		
460	244200	267810	346280	445400		
470	247000	271840	351120	451300		
480	249800	275860	355950	457200		
490	252600	279890	360790	463100		
500	255400	283920	365630	469000		
510	258200	287950	370460	474890		
520	261000	291980	375300	480790		
530	263800	296010	380140	486690		
540	266600	300040	384970	492590	520080	
550	269800	304070	389810	498490	555100	
560	273000	308090	394650	504390	590130	
570		312120	399480	510290	625170	
580		316150	404320	516190	660190	
590		320180	409160	522090	695220	
600		324210	413990	527990	730250	
610		328240	418830	533890	765280	
620					800310	
630					835040	
640					843550	
650					852050	
660					860550	
670					869060	
680					877560	
690					886070	
700					894570	1373020
710					903070	1384770
720					911580	1396520
730					920080	1408260
740					928590	1420010
750					937090	1431750
760					945590	1443500
770					954100	1455250
780					962600	1466990
790					971110	1478740
800					979610	1490490
810					988110	1502230
820					996620	1513980
Other dimensions available on request.						
Order ex.: 2.1/2" x 400 Studbolt B7/2H H.D.G.						
Partno.: 1932124003						

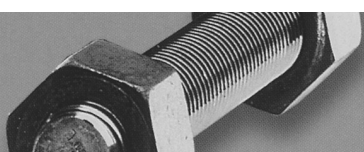
Studbolt

ASTM A193 B7

Hot Dip Galvanized



D	M14	M16	M20	M24	M27	M30	M33	M36
L	Price = NOK/100 pcs.							
60	3848	4914						
65	3949	5085						
70	4050	5256						
75	4320	5427						
80	4185	5598						
85	4455	5769						
90	4624	5940						
95	4725	6111						
100	4826	6345	10530					
105		6516	10808					
110		6687	11086					
115		6858	11364					
120		7029	11642					
125		7200	11920					
130		7371	12198					
135		7542	12476					
140		7713	12754					
145		7884	13032					
150		8055	13310	24030		43000		
155		8235	13588	24375		43215		
160		8561	13866	24720	42390	44100		
165		8888	14144	25065	42800	44900		
170		9214	14422	25410	43209	45450		
175		9540	14700	25755	43619	46553	55620	65000
180		9866	14978	26100	44028	47655	56970	66305
185		10193	15256	26445	44438	50389	58320	67610
190		10519	15534	26790	44847	46879	59670	68915
195		10845	15812	27135	45257	51300	61020	70220
200		11171	16090	27480	45666	47790	62370	71525
205			16368	27825	46076	52211	63720	72830
210			16646	28170	46485	53123	65070	74135
220			16924	28515	46895	54034	66420	75440
230			17202	28860	47304	54945	67770	76745
240			17480	29205	47714	55857	66555	78050
250			17758	29550	48123	56769	67905	79355
260			18036	29895	48533	57681	69255	80660
270			18314	30240	48942	58593	70605	81965
280				30585	49352	59505	71955	83270
290				30930	49761	60417	73305	84575
300				31275	50171	61329	74655	85880
310				31620	50580	62241	76005	87185
Order ex.: M16 x 300 Studbolt B7/2H H.D.G. Partno.: 976B163003								
Other dimensions available on request.								



Studbolt

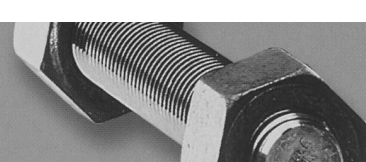
ASTM A320 L7
Hot Dip Galvanized

D	1/2"	5/8"	3/4"	7/8"	1"	1.1/8"	1.1/4"	1.3/8"
L	Price = NOK/100 pcs.							
60	5536							
65	5669							
70	5802	8099	11996					
75	5935	8285	12262					
80	6068	8471	12527					
85	6201	8657	12793					
90	6334	8843	13059	19179				
95	6467	9029	13325	19524				
100	6599	9215	13590	19869				
105	6732	9401	13856	20215				
110	6865	9587	14122	20560	28614			
115	6998	9773	14388	20906	29092			
120	7131	9959	14653	21251	29570	37736		
125	7264	10145	14919	21597	30049	38331		
130	7397	10331	15185	21942	30527	38927		
135	7530	10517	15451	22288	31005	39522		
140	7662	10703	15716	22633	31484	40117		
145	7795	10889	15982	22979	31962	40712	52313	
150	7928	11075	16248	23324	32440	41308	53051	
155	8061	11261	16514	23670	32919	41903	53790	
160	8194	11447	16779	24015	33397	42498	54529	
165	8327	11633	17045	24361	33875	43094	55268	
170	8460	11819	17311	24706	34354	43689	56007	
175	8593	12005	17577	25052	34832	44284	56745	
180	8725	12191	17842	25397	35310	44879	57484	
185		12377	18108	25742	35789	45475	58223	
190		12563	18374	26088	36267	46070	58962	
195		12749	18640	26433	36746	46665	59700	
200		12935	18905	26779	37224	47261	60439	
205		13121	19171	27124	37702	47856	61178	
210		13307	19437	27470	38181	48451	61917	
215		13494	19703	27815	38659	49046	62656	68000
220		13680	19968	28161	39137	49642	63394	69022
225		13866	20234	28506	39616	50237	64133	70044
230		14052	20500	28852	40094	50832	64872	71066
235		14238	20766	29197	40572	51427	65611	72088
240		14424	21031	29543	41051	52023	66349	73110
245		14610	21297	29888	41529	52618	67088	74132
250		14796	21563	30234	42007	53213	67827	75154
255				31000	42486	53809	68566	76176
260				31595	42964	54404	69305	77198
Order ex.: 3/4" x 260 Studbolt L7/Gr.7 H.D.G. Partno.: 3200342603								

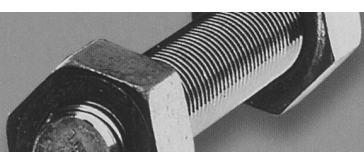
Studbolt

ASTM A320 L7

Hot Dip Galvanized



D	7/8"	1"	1.1/8"	1.1/4"	1.3/8"	1.1/2"	1.5/8"	1.3/4"	1.7/8"
L	Price = NOK/100 pcs.								
270	31616	43921	55594	70782	90093	113732			
275	31961	44399	56190	71521	90994	114848			
280	32306	44877	56785	72260	91895	115964			
285	32652	45356	57380	72998	92795	117080			
290	32997	45834	57975	73737	93696	118196			
295	33343	46312	58571	74476	94597	119312			
300	33688	46791	59166	75215	95498	120429			
305	34034	47269	59761	75954	96399	121545			
310	34379	47747	60357	76692	97300	122661			
315	34725	48226	60952	77431	98201	123777			
320	35070	48704	61547	78170	99102	124893			
325		49183	62142	78909	100003	126009			
330		49661	62738	79647	100903	127125	190512		
335		50139	63333	80386	101804	128241	191872		
340		50618	63928	81125	102705	129358	193233		
345		51096	64524	81864	103606	130474	194593		
350		51574	65119	82603	104507	131590	195954	220408	231000
355		52053	65714	83341	105408	132706	197315	221896	233500
360		52531	66309	84080	106309	133822	198675	223385	236000
365		53009	66905	84819	107210	134938	200036	224873	238500
370		53488	67500	85558	108111	136054	201397	226361	241000
375			68095	86296	109011	137171	202757	227849	243500
380			68690	87035	109912	138287	204118	229337	246000
385			69286	87774	110813	139403	205479	230826	248500
390			69881	88513	111714	140519	206839	232314	251000
395			70476	89252	112615	141635	208200	233802	253500
400			71072	89990	113516	142751	209560	235290	256000
410			72262	91468	115318	144984	212282	238266	258500
420			72857	92207	116219	146100	213642	239755	261000
430				93684	118020	148332	216364	242731	267349
440				95901	120723	151680	220445	247196	273698
450				97378	122525	153913	223167	250172	280047
460				98856	124326	156145	225888	253148	286396
470				100333	126128	158377	228609	256125	292745
480				101811	127930	160610	231330	259101	299094
490					129732	162842	234052	262078	305443
500					131534	165074	236773	265054	311792
510					133335	167306	239494	268030	318141
520					135137	169539	242216	271007	324490
530					136939	171771	244937	273983	330839
540					138741	174003	247658	276959	337188
Order ex.: 3/4" x 440 Studbolt L7/Gr.7 H.D.G.									
Partno.: 3200344403									



Studbolt

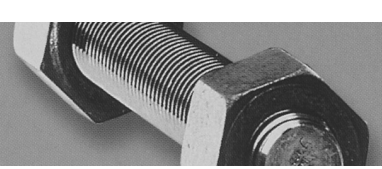
ASTM A320 L7
Hot Dip Galvanized

D	1.7/8"	2"	2.1/4"	2.1/2"	3"	3.1/2"
L	Price = NOK/100 pcs.					
420	261000	338092	447218	580423		
430	267349	342121	452054	586323		
440	273698	346150	456891	592223		
450	280047	350178	461728	598122		
460	286396	354207	466564	604022		
470	292745	358236	471401	609921		
480	299094	362265	476237	615821		
490	305443	366293	481074	621721		
500	311792	370322	485911	627620		
510	318141	374351	490747	633520		
520	324490	378379	495584	639420		
530	330839	382408	500421	645319		
540	337188	386437	505257	651219	840000	
550	343537	390466	510094	657118	866301	
560	349886	394494	514930	663018	892602	
570	356235	398523	519767	668918	918903	
580	362584	402552	524604	674817	945204	
590	368933	406581	529440	680717	971505	
600	375282	410609	534277	686616	997806	
610	381631	414638	539113	692516	1024107	
620					1050408	
630					1076709	
640					1103017	
650					1111521	
660					1120025	
670					1128529	
680					1137033	
690					1145537	
700					1154041	1631684
710					1162545	1643430
720					1171048	1655177
730					1179552	1666923
740					1188056	1678669
750					1196560	1690415
760					1205064	1702161
770					1213568	1713907
780					1222072	1725653
790					1230576	1737399
800					1239080	1749145
810					1247584	1760891
820					1256088	1772637
Other dimensions available at request.						
Order ex.: 2.1/2" x 400 Studbolt L7/Gr.7 H.D.G.						
Partno.: 3202124003						

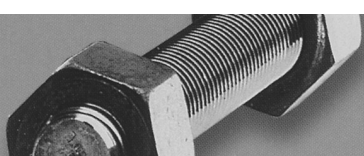
Studbolt

ASTM A320 L7

Hot Dip Galvanized



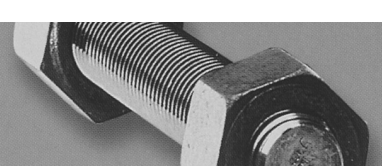
D	M14	M16	M20	M24	M27	M30	M33	M36
L	Price = NOK/100 pcs.							
60	5799	4858						
65	5900	5029						
70	6086	5200						
75	6271	5535						
80	6457	5870						
85	6643	6205						
90	6829	6540						
95	7014	6875						
100	7200	7210	8550					
105		7539	8773					
110		7869	8995					
115		8198	9218					
120		8528	9440					
125		8699	9694					
130		8870	15660					
135		9041	9949					
140		9212	10203					
145		9383	10457					
150		9554	10711	27928				
155		8235	10966	28273				
160		7898	11220	28618	33000	48500		
165		8610	11524	28963	33500	49600		
170		9322	17415	29308	34000	53144	61290	69400
175		10034	11828	29653	34571	54056	62640	70733
180		10746	12132	29998	35143	54968	63990	72066
185		11458	12436	30343	35714	55880	65340	73399
190		12173	12740	30688	36286	56792	66690	74732
195		12885	13044	31033	36857	57704	68040	76065
200		13597	13348	31378	37429	58616	69390	77398
205		14309	18775	31723	38000	59528	70740	78731
210		15021	20136	32068	38571	60440	72090	80064
220			21496	32413	39143	61352	73440	81397
230			22857	32758	39714	62264	74790	82730
240			24217	33103	40286	63176	76140	84063
250			25577	33448	40857	64088	77490	85396
260			26938	33793	41429	65000	78840	86729
270			35100	34138	42000	65912	80190	88062
280				34483	42571	66824	81540	89395
290				34828	43143	67736	82890	90728
300				35173	43714	68648	84240	92061
310				35518	44286	69560	85590	93394
Order ex.: M16 x 180 Studbolt L7/Gr.7 H.D.G. Other dimensions available on request.								
Partno.: 976L161803								



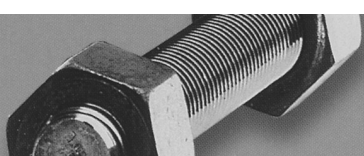
Studbolt

ASTM A320/A193 B8M

D	1/2"	5/8"	3/4"	7/8"	1"	1.1/8"	1.1/4"	1.1/2"
L	Price = NOK/100 pcs.							
60	12000							
65	12500							
70	12500							
75	13500							
80	14500	20000						
85	14750	20500						
90	15000	21000	26000					
95	15250	21250	26500					
100	15500	21500	27000					
105		22575	32667					
110		23650	38334					
115		28000	36000					
120		28666	37000					
125		29332	38000					
130		23000	39000					
135		29998	40000	61000	45501			
140		24000	45000	51000	47534			
145		30664	40720	52500	49567			
150		32000	41440	54000	51600			
155		33000	42160	55500	53833			
160		25000	35000	57000	56066	76600	81680	
165		34000	42880	58500	58299	78000	82510	
170		35000	43600	60000	60532	79400	83340	
175		36000	44320	61575	62765	80800	84170	
180		37000	36000	63150	65000	82200	85000	
185		38000	45040	64725	67350	83600	85833	
190		40000	45760	66300	69700	85000	86666	
195			46480	67875	72050	86400	87499	97430
200			47200	69450	74400	87800	88332	100430
205			47920	71130	76750	89200	86229	103430
210			50000	72810	79100	90600	90000	106430
215			52500	74490	81450	92000	91875	109430
220			55000	76170	83800	93400	93750	112430
225			57500	77850	86150	94800	95625	115430
230			60000	79530	88500	96200	97500	118430
235			62857	80738	90925	97600	99375	121430
240			65714	81946	93350	99000	101250	124430
245			68571	83154	95775	100400	103125	127430
250			71428	84362	98200	101800	105000	130430
255			74285	85570	100625	103200	117359	133430
260			77142	86778	103050	104600	120188	136430
265			79999	87986	105475	106000	123015	139430
Order ex.: 1/2" x 180 Studbolt B8M/8M								
Partno.: 3200121804								



D	3/4"	7/8"	1"	1.1/8"	1.1/4"	1.1/2"
L	Price = NOK/100 pcs.					
270	82857	89194	107900	115452	134138	140000
275	85714	90402	110325	118046	141404	147389
280	88571	91610	112750	120640	148670	154778
285	91428	92818	115175	123234	155936	162167
290	94285	94026	117600	125828	163202	169556
295	97142	95234	120025	128422	170468	176945
300	100000	96442	122450	131016	177734	184334
305		97650	124875	133610	185000	191723
310		98858	127300	136204	192266	199112
315		100066	129725	138798	199532	206501
320		101274	132150	141392	206798	213890
325		102482	134575	143986	214064	221279
330		103690	137000	146580	221330	228668
335		104898	139425	149174	228596	236057
340		106106	141850	151768	235862	243446
345		107314	144275	154362	243128	250835
350		108522	146700	156956	250394	258224
355		109730	149125	159550	257660	265613
360		110938	151550	162144	264926	273002
365		112146	153975	164738	272192	280391
370		113354	156400	167332	279458	287780
375		114562	158825	169926	286724	295169
380		115770	161250	172520	293990	302558
385		116978	163675	175114	301256	309947
390		118186	166100	177708	301260	317336
395		119394	168525	180302	308560	324725
400		120600	170950	182896	315860	332114
405					323160	339503
410					330460	346892
415					337760	354281
420					345060	361670
425					352360	369059
430					359660	376448
435					366960	383837
440					374260	391226
445					381560	398615
450					388860	406004
Order ex.: 3/4" x 300 Studbolt B8M/8M						
Partno.: 3200343004						



Studbolt

UNS S31803 (NORSOK MDS-D47)

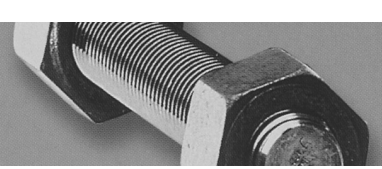
Duplex - F51

D	1/2"	5/8"	3/4"	7/8"	1"	1.1/8"	1.1/4"	1.3/8"
L	Price = NOK/100 pcs.							
70	29060							
75	29865							
80	30660	45900						
85	31465	48600						
90	32270	50057	49600					
95	33075	51514	49900					
100	33880	52971	52000					
105	34685	54428	54230					
110	35490	55885	56460					
115	36295	57342	58690	65400				
120	37100	58799	60920	66000				
125	37905	60256	63150	66900				
130	38710	61713	65380	67500				
135	39515	63170	67610	68300	84500			
140	40320	64627	69840	70070	86870			
145	41125	66084	72070	71840	89240			
150	41930	67541	74300	73610	91610	104000		
155	59750	68998	76530	75380	93980	107305		
160	42735	70455	78760	77150	96350	110610		
165		71912	80990	78920	98720	113915		
170		73369	83220	80690	101090	117220		
175		74826	85450	82460	103460	120525		
180		76283	87680	84230	105830	123830	131000	
185		77740	89910	86000	108200	127135	135093	
190		79197	92140	87770	110570	130440	139186	
195		80654	94370	89540	112940	133745	143279	
200		82111	96600	91310	115310	137050	147372	158400
205				93080	117680	140355	151465	163663
210				94850	120050	143660	155558	168926
215				96620	122420	146965	159651	174189
220				98390	124790	150270	163744	179452
225				100160	127160	153575	167837	184715
230				101930	129530	156880	171930	189978
235				103700	131900	160185	176023	195241
240				105470	134270	163490	180116	200504
245				107240	136640	166795	184209	205767
250				109010	139010	170100	188302	211030
260				110780	141380	173405	192395	216293
Order ex.: 1/2" x 180 Studbolt F51 Duplex								
Partno.: 31803012180								

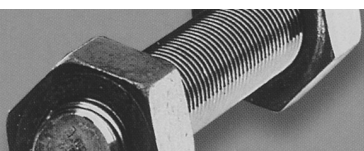
Studbolt

UNS S32760 (NORSOK MDS-D57)

Super Duplex



D	1/2"	5/8"	3/4"	7/8"	1"	1.1/8"	1.1/4"	1.1/2"
L	Price = NOK/100 pcs.							
70	32500							
75	33430							
80	34359	44210						
85	35289	46705						
90	36218	49200	52100	69400				
95	37148	51695	54656	71716				
100	38077	54190	57212	74032				
105	39000	56685	59768	76348				
110	39930	59180	62324	78664				
115	40859	61675	64880	80980				
120	41789	64170	67436	83296	87500			
125	42718	66665	69992	85612	89993			
130	43648	69160	72548	87928	92486			
135	44577	71655	75104	90244	94979	126000		
140	45507	74150	77660	92560	97472	128660		
145	46436	76645	80216	94876	99965	131320		
150	47366	79140	82772	97192	102458	133980	148500	
155	48295	81635	85328	99508	104951	136640	151904	
160	49225	84130	87884	101824	107444	139300	155308	
165		86625	90440	104140	109937	141960	158712	
170		89120	92996	106456	112430	144620	162116	
175		91615	95552	108772	114923	147280	165520	
180		94110	98108	111088	117416	149940	168924	
185			100664	113404	119909	152600	172328	
190			103220	115720	122402	155260	175732	
195			105776	118036	124895	157920	179136	
200			108332	120352	127388	160580	182540	169500
205			110888	122668	129881	163240	185944	176067
210			113444	124984	132374	165900	189348	182634
215			116000	127300	134867	168560	192752	189201
220					137360	171220	196156	195768
225					139853	173880	199560	202335
230					142346	176540	202964	208902
235					144839	179200	206368	215469
240					147332	181860	209772	222036
245					149825	184520	213176	228603
250					152318	187180	216580	235170
255					154811	189840	219984	241737
260					157304	192500	223388	248304
Order ex.: 1/2" x 160 Studbolt UNS S32760								
Partno.: 32760012160								

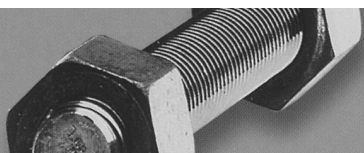


Hex nuts - inches

ASTM A194 2H/G7/G4

Hot Dip Galvanized

D	2H	D	G7	D	G4
Price = NOK/100 pcs.					
1/2"	720	1/2"	1000	1/2"	1000
5/8"	1200	5/8"	1200	5/8"	1200
3/4"	2000	3/4"	2200	3/4"	2200
7/8"	2300	7/8"	2400	7/8"	2400
1"	3700	1"	3800	1"	3800
1. 1/8"	5500	1. 1/8"	5600	1. 1/8"	5600
1. 1/4"	7500	1. 1/4"	7900	1. 1/4"	7900
1. 3/8"	14500	1. 3/8"	15000	1. 3/8"	15000
1. 1/2"	15500	1. 1/2"	16500	1. 1/2"	16500
1. 5/8"	20000	1. 5/8"	18500	1. 5/8"	18500
1. 3/4"	23000	1. 3/4"	24000	1. 3/4"	24000
1. 7/8"	26000	1. 7/8"	27000	1. 7/8"	27000
2"	35500	2"	52687	2"	52687
2. 1/4"	40860	2. 1/4"	60877	2. 1/4"	60877
2. 1/2"	46400	2. 1/2"	69067	2. 1/2"	69067
2. 3/4"	51900	2. 3/4"	77257	2. 3/4"	77257
3"	57500	3"	85456	3"	85456
Order ex.: 1/2" Hex Nut A194 Gr.7 H.D.G. Partno.: 1947012003					



Hex nuts - inches

ASTM A194 8M

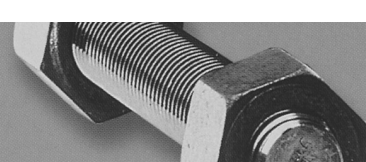
D	8M	D	8M
Price = NOK/100 pcs.			
1/2"	3800	1. 1/2"	42000
5/8"	4700	1. 5/8"	47150
3/4"	8700	1. 3/4"	52300
7/8"	10500	1. 7/8"	57450
1"	13900	2"	62600
1. 1/8"	27000	2. 1/4"	67750
1. 1/4"	32000	2. 1/2"	72900
1. 3/8"	37000	2. 3/4"	78050
Order ex.: 1/2" Hex Nut A194 GR.8M Partno.: 1948012004			

For technical details - see page 24.

Hex nuts - metric

ASTM A194 2H/G7/G4

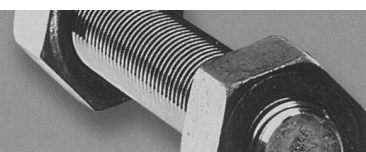
Hot Dip Galvanized



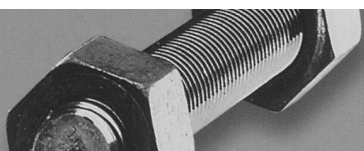
D	2H	D	G7	D	G4
Price = NOK/100 pcs.					
M10	1420	M10	2000	M10	2817
M12	1775	M12	2500	M12	3000
M14	2130	M14	3000	M14	3600
M16	2130	M16	3000	M16	3600
M18	2485	M18	3500	M18	4200
M20	2835	M20	4000	M20	4800
M22	4615	M22	6500	M22	7800
M24	4970	M24	7000	M24	8400
M27	6745	M27	9500	M27	11400
M30	11360	M30	16000	M30	19200
M33	13490	M33	19000	M33	22800
M36	17040	M36	24000	M36	28800
M39	20945	M39	29500	M39	35400
M42	24850	M42	35000	M42	42000
M45	28755	M45	40500	M45	48600
M48	32660	M48	46000	M48	55200
M52	37630	M52	53000	M52	62200
Order ex.: M30 Hex Nut A194 Gr.7 H.D.G. Partno.: 1947003003					

Hex nuts - metric

ASTM A194 8M



D	8M	D	8M
Price = NOK/100 pcs.			
M10	3000	M33	24500
M12	4500	M36	30000
M14	7000	M39	34000
M16	9500	M42	40000
M20	12500	M45	45500
M22	13000	M48	51000
M24	13000	M52	59500
M27	15000		
M30	16000		
Order ex.: M30 Hex Nut A194 Gr.8M Partno.: 1948300004			



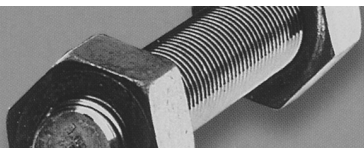
UNS S32760
Super Duplex

UNS S31803
Super Duplex

Hex nuts - inches

ASTM A453
Grade 660

D	Super Duplex	D	Duplex	D	Gr. 660
Price = NOK/100 pcs.					
1/2"	20000	1/2"	10000	5/8"	14300
5/8"	32000	5/8"	16000	3/4"	18370
3/4"	40000	3/4"	20000	7/8"	24200
7/8"	46700	7/8"	25000	1"	26045
1"	53400	1"	35800		
1. 1/8"	60100	1. 1/8"	48200	1. 1/8"	28127
1. 1/4"	66800	1. 1/4"	50000	1. 1/4"	32325
1. 3/8"	73500	1. 3/8"	60000	1. 3/8"	42760
1. 1/2"	80000	1. 1/2"	65600	1. 1/2"	54650
1.5/8"	86700	1.5/8"	71094	1.5/8"	62650
1.3/4"	95400	1.3/4"	78228	1.3/4"	69650
1. 7/8"	106100	1. 7/8"	87002	1. 7/8"	78000
2"	118800	2"	97416	2"	96000
Order ex.: 5/8 " Hex Nut UNS S32760 SUPER DUPLEX Partno.: 3276005800					



Threaded rods

ASTM A453 Gr. 660 Cl.A

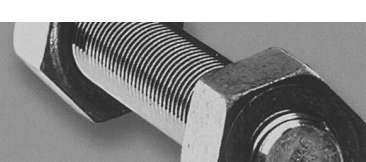
D	1/2"	5/8"	3/4"	7/8"	1"	1.1/8"	1.1/4"	1.3/8"	1.1/2"
L	Price = NOK/100 pcs.								
1000	176000	198000	211000,00	232200	279648	367056	398000	411000	422000

D	1.5/8"	1.3/4"	1.7/8"	2"
L	Price = NOK/100 pcs.			
1000	436000	449000,00	496000,00	516000
Order ex.: 3/4x1000 UNC 453 660A Partno.: 4530341000				

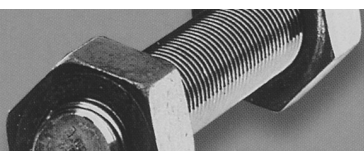
Hexbolt

ASTM A320 L7 and A193 B7

Hot Dip Galvanized



D	1/2"	5/8"	3/4"	7/8"	1"	1.1/8"	1.1/4"
L	Price = NOK/100 pcs.						
40	19500	21000	25000				
45	19500	21000	25000				
50	19500	21000	25000				
55	19500	21000	25000				
60	19500	21000	25000	44000			
65	22650	24000	28188	46250			
70	25800	27000	31375	48500	58500		
75	28950	30000	34563	50750	60300	91800	
80	32100	33000	37750	53000	62100	93990	112000
85	35250	36000	40938	55250	63900	96180	115700
90	38400	39000	44125	57500	65700	98370	119400
95	41550	42000	47313	59750	67500	100560	123100
100	44700	45000	50500	62000	69300	102750	126800
105	47850	48000	53688	64250	71100	104940	130500
110	51000	51000	56875	66500	72900	107130	134200
115		54000	60063	68750	74700	109320	137900
120		57000	63250	71000	76500	111510	141600
125		60000	66438	73250	78300	113700	145300
130		63000	69625	75500	80100	115890	149000
135			72813	77750	81900	118080	152700
140			76000	80000	83700	120270	156400
145				82250	85500	122460	160100
150				84500	87300	124650	163800
155				86750	89100	126840	167500
160				89000	90900	129030	171200
165					92700	131220	174900
170					94500	133410	178600
175					96300	135600	182300
180					98100	137790	186000
185					99900	139980	189700
190	Other dimensions available on request				101700	142170	193400
195					103500	144360	197100
200					105300	146550	200800
205					107100	148740	204500
210					108900	150930	208200
220					110700	153120	211900
230					112500	155310	215600
240					114300	157500	219300
250					116100	159690	223000
Order ex.: 1/2" x 80 Hexbolt B7 HDG Partno.: 193H0120803 = B7 - 320H0120803 = L7							

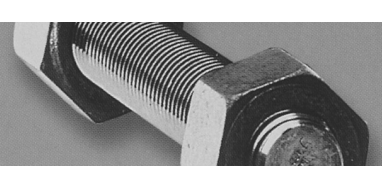


Protection caps

Inches

D	Price
Price = NOK/100 pcs.	
1/2"	5335
5/8"	6500
3/4"	7665
7/8"	8830
1"	10000
1. 1/8"	13500
1. 1/4"	16000
1. 3/8"	18000
1. 1/2"	20000
1. 5/8"	24000
1. 7/8"	26000
2"	30000
2. 1/4"	35000
2. 1/2"	41000
2. 3/4"	48000
3"	56000
3. 1/2"	65000
Order ex.: 5/8" Protection caps Partno.: 0580000009	

Suggested materials for use in varios temperatures.

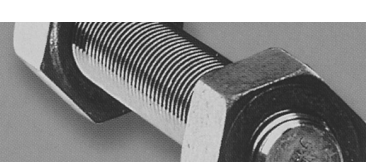


ASTM Designation	Grade	Service Temperature Range	Strength and Ductility				Alloy Type	AISI	Suitable Nuts (ASTM/Grade)
			Tensile Min. PSI	Yield	Reduction of Area R/A	Elongation EL			
ASTM A-193	B7	High Temp. from 0-480°C	125000	100000	50	16	Cr-Mo	(4140)	A194 Gr. 2H
ASTM A-193	B16	High Temp. 0-550°C	125000	105000	50	18	Cr-Mo-V	(4140M)	A194 Gr. 4
ASTM A-193	B7M	High Temp. 0-450°C	100000	80000	50	18	Cr-Mo	(4140)	A194 Gr. 2HM
ASTM A-320	L7	Low Temp. -100°C	125000	105000	50	16	Cr-Mo	(4140)	A194 Gr. 4 or A194 Gr. 7
ASTM A-193	B5	Up to 815°C	100000	80000	50	16	5% Cr	(501)	A194 Gr. 3
ASTM A-193	B6	Up to 450°C	110000	85000	50	16	13% Cr	(410)	A194 Gr. 6
ASTM A-193	B8	Low Temp. -200 C - 650°C	75000	30000	50	30	18% Cr - 8% Ni	(304)	A194 B8
ASTM A-193	B8M	Low Temp. -200 C - 750°C	75000	30000	50	30	16% Cr - 10% Ni	(316)	A194 B8M
ASTM A-320	B8	Low Temp. -200 C - 650°C	75000	30000	50	30	18% Cr - 8% Ni	(304)	A194 B8
ASTM A-320	B8M	Low Temp. -200 C - 750°C	75000	30000	50	30	16% Cr - 10% Ni	(316)	A194 B8M
ASTM A-320	B8T	Low Temp. -200 C - 650°C	75000	30000	50	30	17% Cr - 9% Ni	(321)	A194 B8T
ASTM A-320	B8C	Low Temp. -200 C - 650°C	75000	30000	50	30	17% Cr - 9% Ni	(347)	A194 B8C
ASTM A-193	B8 Class 2	Low Temp. -200 C - 650°C	125000	100000	35	12	18% Cr - 8% Ni	(304)	A194 B8
ASTM A-453	660	High Temp. to 750°C	130000	85000	18	15	High Iron Superalloy Precipitation Hardening STST	660 (A286)	A453 660
ASTM A-564 (cond. 900)	630	Med. Temp. up to 316°C	190000	170000	40	10		630 (17-4)	A564 630
ASTM A-564 (cond. 1100)			140000	115000	45	14			
ASTM B-408	800-800H	High Temp. 540 C - 815°C	80000	35000		25	Incoloy		ASTM B408
ASTM B-164	405	High Temp. to 815°C	85000	50000		15	Monel	Temperature Conversions	
ASTM B-164	K500	High Temp. 650 C - 423°C	100000	70000		35	Monel	°C	°F
		Low Temp. 650 C - 253°C						-423	-729
		High Temp. Range from 815 C - 1090°C	100000	80000		30	Nickel Superalloy (Inconel)	-200	-328
600, 625, 718, x750		High Temp. to 850°C	170000	115000		30	Nickel Superalloy (Hastalloy)	-100	-148
B, C, X								316	601
								450	842
								480	896
								540	1004
								550	1027
								650	1202
								750	1382
								815	1499
								850	1562

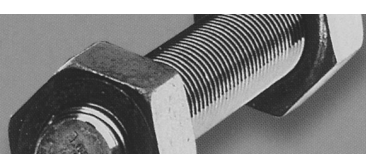
Dimensions of studbolts for ASA flanges raised face weld neck (R.F.W.N)

Nominal diameter of flange	150 LBS			300 LBS			600 LBS			900 LBS			1500 LBS		
	No.	diam of Stud	Length	No.	diam of Stud	Length	No.	diam of Stud	Length	No.	diam of Stud	Length	No.	diam of Stud	Length
½"	4	½" 12	2½" 60	4	½" 12	2¾" 70	4	½" 12	3¼" 85	4	¾" 20	4½" 110	4	¾" 20	4½" 115
¾"	4	½" 12	2¾" 70	4	⅝" 16	3¼" 80	4	⅝" 16	3¼" 100	4	¾" 20	4¾" 120	4	¾" 20	4¾" 120
1"	4	½" 12	2¾" 70	4	⅝" 16	3¼" 80	4	⅝" 16	3¼" 100	4	⅞" 22	5¼" 135	4	⅞" 22	5¼" 135
1¼"	4	½" 12	3" 80	4	⅝" 16	3½" 90	4	⅝" 16	4" 105	4	⅞" 22	5¼" 135	4	⅞" 22	5¼" 135
1½"	4	½" 12	3" 80	4	¾" 20	3¾" 100	4	¾" 20	4½" 115	4	1" 27	6" 155	4	1" 27	6" 155
2"	4	⅝" 16	3½" 90	8	⅝" 16	3¾" 110	8	⅝" 16	4½" 115	8	⅞" 22	6" 155	8	⅞" 22	6" 155
2½"	4	⅝" 16	3¾" 100	8	¾" 20	4¼" 110	8	¾" 20	5" 130	8	1" 27	6¾" 175	8	1" 27	6¾" 175
3"	4	⅝" 16	3¾" 100	8	¾" 20	4½" 110	8	¾" 20	5¼" 135	8	⅞" 22	6" 155	8	1⅛" 30	7½" 190
3½"	8	⅝" 16	3¾" 100	8	¾" 20	4½" 120	8	⅞" 22	5¼" 150						
4"	8	⅝" 16	3¾" 100	8	¾" 20	4¾" 125	8	⅞" 22	6" 155	8	1⅛" 30	7¼" 185	8	1¼" 33	8¼" 210
5"	8	¾" 20	4" 105	8	¾" 20	5" 130	8	1" 27	7" 185	8	1¼" 33	8" 210	8	1½" 39	10¼" 260
6"	8	¾" 20	4¼" 110	12	¾" 20	5" 130	12	1" 27	7¼" 190	12	1⅛" 30	8" 210	12	1⅜" 36	10¾" 275
8"	8	¾" 20	4½" 115	12	⅞" 22	5¾" 150	12	1⅛" 30	8" 205	12	1⅞" 36	9¼" 235	12	1⅝" 42	12" 305
10"	12	⅞" 22	5" 130	16	1" 27	6¾" 175	16	1¼" 33	9" 230	16	1⅞" 36	¾" 250	12	1⅞" 48	14" 360
12"	12	⅞" 22	5" 130	16	1⅛" 30	7¼" 190	20	1¼" 33	9¼" 235	20	1⅞" 36	10½" 270	16	2" 52	15½" 390
14"	12	1" 27	5¾" 150	20	1⅛" 30	7½" 195	20	1⅞" 36	9¼" 250	20	1½" 39	11¼" 285	16	2¼" 56	16¾" 430
16"	16	1" 27	5¾" 150	20	1¼" 33	8" 205	20	1½" 39	10½" 270	20	1⅞" 42	11¾" 300	16	2½" 64	18½" 470
18"	16	1⅛" 30	6¼" 160	24	1¼" 33	8¼" 210	20	1⅞" 42	11¼" 290	20	1⅞" 48	13½" 340	16	2¾" 68	20¼" 520
20"	20	1⅛" 30	6¾" 175	24	1¼" 33	8¾" 225	24	1⅞" 42	12" 305	20	2" 52	14½" 370	16	3" 76	22¼" 570
22"	20	1¼" 33	7¼" 185	24	1¼" 33	9½" 245	24	1¾" 45	12¾" 330						
24"	20	1¼" 33	7½" 190	24	1½" 39	9¾" 250	24	1⅞" 48	13½" 340	20	2½" 64	18" 460	16	3½" 90	25¼" 650
26"	24	1¼" 33	7¾" 200	28	1⅞" 42	10¾" 275	28	1⅞" 48	14" 360						
30"	28	1¼" 33	8" 205	28	1¾" 45	12" 310	28	2" 50	15" 385						
34"	32	1½" 39	8¾" 225	28	1⅞" 48	13" 330	28	2¼" 56	16" 410						
36"	32	1½" 39	9" 230	32	2" 52	13¾" 350	28	2½" 64	16¾" 425						
42"	36	1½" 39	9½" 245	36	2" 52	14¾" 380	28	2¾" 68	18½" 470						

Dimensions of studbolts for ASA flanges ring type joint (R.T.J.)



Nominal diameter of flange	150 LBS			300 LBS			600 LBS			900 LBS			1500 LBS		
	No.	diam of Stud	Length	No.	diam of Stud	Length	No.	diam of Stud	Length	No.	diam of Stud	Length	No.	diam of Stud	Length
½"				4	½"	3 ¼"	4	½"	3 ¼"	4	¾"	4 ½"	4	¾"	4 ½"
					12	85		12	85		20	115		20	115
¾"				4	⅝"	3 ¾"	4	⅝"	3 ¾"	4	¾"	4 ¾"	4	¾"	4 ¾"
					16	95		16	95		20	120		20	120
1"	4	½"	3 ½"	4	⅝"	4"	4	⅝"	4"	4	⅞"	5 ½"	4	⅞"	5 ½"
		12	90		16	105		16	105		22	140		22	140
1 ¼"	4	½"	3 ½"	4	⅝"	4"	4	⅝"	4 ¼"	4	⅞"	5 ½"	4	⅞"	5 ½"
		12	90		16	105		16	110		22	140		22	140
1 ½"	4	½"	3 ¾"	4	¾"	4 ½"	4	¾"	4 ½"	4	1"	6"	4	1"	6"
		12	95		20	115		20	115		27	155		27	155
2"	4	⅝"	4"	8	⅝"	4 ½"	8	⅝"	4 ¾"	8	⅞"	6 ¼"	8	⅞"	6 ¼"
		16	100		16	115		16	125		22	160		22	160
2 ½"	4	⅝"	4 ¼"	8	¾"	5"	8	¾"	5 ¼"	8	1"	7"	8	1"	7"
		16	110		20	130		20	135		27	180		27	180
3"	4	⅝"	4 ½"	8	¾"	5 ½"	8	¾"	5 ½"	8	⅞"	6 ¼"	8	1 ⅛"	7 ¾"
		16	115		20	135		20	140		22	160		30	200
3 ½"	8	⅝"	4 ½"	8	¾"	5 ½"	8	⅞"	6"	8	1 ⅛"	7 ½"			
		16	115		20	140		22	155		30	190			
4"	8	⅝"	4 ½"	8	¾"	5 ½"	8	⅞"	6 ¼"	8	1 ⅛"	7 ½"	8	1 ¼"	8 ½"
		16	115		20	140		22	160		30	190		33	215
5"	8	¾"	4 ¾"	8	¾"	5 ¾"	8	1"	7 ¼"	8	1 ¼"	8 ¼"	8	1 ½"	10 ½"
		20	120		20	150		27	185		33	210		39	270
6"	8	¾"	4 ¾"	12	¾"	6"	12	1"	7 ½"	12	1 ⅛"	8 ¼"	12	1 ⅜"	11 ¼"
		20	120		20	155		27	190		30	210		36	285
8"	8	¾"	5"	12	⅞"	6 ½"	12	1 ⅛"	8 ¼"	12	1 ⅜"	9 ½"	12	1 ⅝"	12 ½"
		20	130		22	165		30	210		36	245		42	320
10"	12	⅞"	5 ½"	16	1"	7 ½"	16	1 ¼"	9 ½"	16	1 ⅜"	10"	12	1 ⅞"	14 ½"
		22	140		27	190		33	235		36	255		48	370
12"	12	⅞"	5 ¾"	16	1 ⅛"	8"	20	1 ¼"	9 ½"	20	1 ⅜"	10 ¾"	16	2"	16 ¼"
		22	150		30	205		33	245		36	275		52	415
14"	12	1"	6 ¼"	20	1 ⅛"	8 ¼"	20	1 ⅜"	10"	20	1 ½"	11 ¾"	16	2 ¼"	17 ¾"
		27	160		30	210		36	255		39	300		56	450
16"	16	1"	6 ½"	20	1 ¼"	8 ¾"	20	1 ½"	10 ¾"	20	1 ⅝"	12 ¼"	16	2 ½"	19 ½"
		27	165		33	225		39	275		42	315		64	495
18"	16	1 ⅛"	7"	24	1 ¼"	9"	20	1 ⅝"	11 ½"	20	1 ⅞"	14"	16	2 ¾"	21 ¼"
		30	180		33	230		42	295		48	355		68	540
20"	20	1 ⅛"	7 ¼"	24	1 ¼"	9 ½"	24	1 ⅝"	12 ¼"	20	2"	15"	16	3"	23 ½"
		30	185		33	245		42	315		52	380		76	600
22"	20	1 ¼"	8"	24	1 ½"	10 ½"	24	1 ¾"	13 ½"						
		33	205		39	270		45	345						
24"	20	1 ¼"	8"	24	1 ½"	10 ¾"	24	1 ⅞"	14"	20	2 ½"	19"	16	3 ½"	26 ¾"
		33	205		39	275		48	355		64	485		90	680
26"	24	1 ¼"	8 ½"	28	1 ⅝"	11 ¾"	28	1 ⅞"	14 ¾"						
		33	215		42	300		48	375						
30"	28	1 ¼"	8 ¾"	28	1 ¾"	13 ¼"	28	2"	15 ½"						
		33	225		45	340		52	395						
34"	32	1 ½"	9 ¾"	28	1 ⅞"	14 ¼"	28	2 ¼"	16 ¾"						
		39	250		48	365		56	430						
36"	32	1 ½"	10"	32	2"	15"	28	2 ½"	17 ½"						
		39	255		52	380		64	445						
42"	36	1 ½"	10 ½"	36	2"	16"	28	2 ¾"	19 ½"						
		39	270		52	410		68	500						

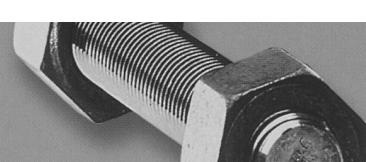


Chemical analysis and physical properties of various grades of studbolts to ASTM standards with equivalent specifications

High temperature

Low temperature
A 320

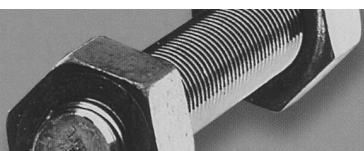
A 193 —		B5	B6	B7	B16	B8	B8T	B8M	L7	
CHEMICAL ANALYSIS	Carbon	> 0.10	< 0.15	0.37-0.49	0.36-0.44	< 0.08	< 0.08	< 0.08	0.38-0.48	
	Manganese	< 1.0	< 1.0	0.65-1.10	0.45-0.70	< 2.0	< 2.0	< 2.0	0.75-1.00	
	Phosphorus Max	0.04	0.04	0.04	0.04	0.045	0.045	0.045	0.04	
	Sulfur	0.03	0.03	0.04	0.04	0.03	0.03	0.03	0.04	
	Silicon	< 1.0	< 1.0	0.15-0.35	0.15-0.35	< 1.0	< 1.0	< 1.0	0.15-0.35	
	Nickel					8.0-10.5	9.0-12.0	10.0-14.0		
	Chromium	4.0-6.0	11.5-13.5	0.75-1.20	0.08-1.15	18.0-20.0	17.0-19.0	16.0-18.0	0.80-1.10	
	Molybdenum	0.40-0.65		0.15-0.25	0.50-0.65			2.0-3.0	0.15-0.25	
	Vanadium				0.25-0.35					
	Titanium Min						5 x C		15 ft/lb 4.14kgm/cm ²	Test Temperature Min Resilience
TENSILE REQUIREMENTS	Min Tensile Strength	PSI	100,000	110,000	125,000	125,000	75,000	75,000	75,000	125,000
		kg/mm ²	70.5	77.5	88	88	53	53	53	88
	Mini Yield Strength	PSI	80,000	85,000	105,000	105,000	30,000	30,000	30,000	105,000
		kg/mm ²	56.5	60	74	74	21	21	21	74
	Elongation in 2 in. Min Per Cent		16	15	16	18	30	30	30	16
	Reduction of area Min Per Cent		50	50	50	50	50	50	50	50
EQUIVALENTS	AISI		501	410	4140	—	304	321	316	4140
	AFNOR		Z 12-CD5	Z 12-C13	42 CD 4	40CDV4-06	Z6CN18-09	Z6CNT18-11	Z6CND17-11	42 CD 4
	DIN		—	X 10-CR13	42 Cr Mo 4	—	X5CrNi18-09	X10CrNiTi18-09	X5CrNiMo18-10	42 Cr Mo 4
	B.S.		4882-B5 1506-625	4882-B6 1506-713	4882-B7 1505-621 Gr A	4882-B16 1506-661	4882-B8 1506-801 Gr B	4882-B8T 1506-821 Gr Ti	4882-B8M 1506-845	4882-L7 1506-621A



Carbon and alloy
steels for nuts

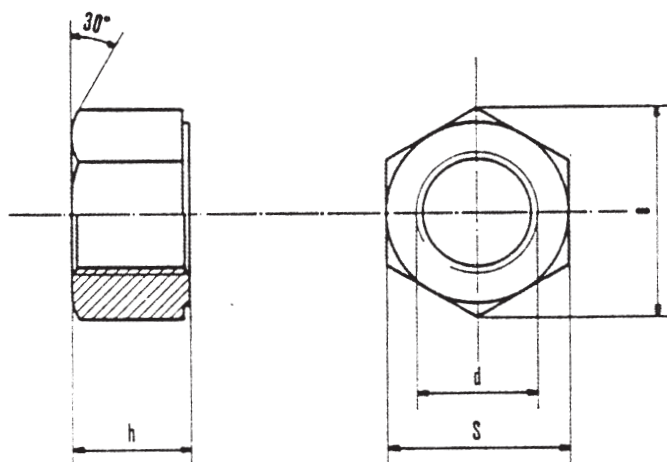
ASTM designation A194

		2H	3	4	6	7	8	8T	8M	8F
CHEMICAL ANALYSIS	Carbon	> 0.40	> 0.10	0.40-0.50	< 0.15	0.37-0.49	< 0.08	< 0.08	< 0.08	< 0.15
	Manganese		< 1.0	0.70-0.90	< 1.25	0.65-1.10	< 2.0	< 2.0	< 2.0	< 2.0
	Phosphorus Max	0.04	0.04	0.035	0.06	0.04	0.045	0.045	0.045	< 0.20
	Sulfur	< 0.05	< 0.03	< 0.04	> 0.15	< 0.04	< 0.03	< 0.03	< 0.03	0.15-0.35
	Silicon		< 1.0	0.15-0.35	< 1.0	0.15-0.35	< 1.0	< 1.0	< 1.0	< 1.0
	Nickel						8.0-10.5	9.0-12.0	10.0-14.0	8.0-10.0
	Chromium		4.0-6.0		12.0-14.0	0.75-1.20	18.0-20.0	17.0-19.0	16.0-18.0	17.0-19.0
	Molybdenum		0.40-0.65	0.20-0.30		0.15-0.25			2.0-3.0	
	Titanium Min							5 x C		
REQUIREMENTS	Brinell Hardness	248-352	248-352	248-352	248-352	248-352	126-300	126-300	126-300	126-300
EQUIVALENTS	AISI	—	501	—	416	4142	304	321	316	303
	AFNOR	C 45 d	Z 12 CD 5	—	Z 12 CF 13	42 CD 4	Z 6 CN 18-09	Z 6 CNT 18-11	Z 6 CND 17-11	Z 10 CNF 18-09
	DIN	C 45	—	—	—	42 Cr Mo 4	X5CrNi 18-09	X18CrNiTi 18-09	X5CrNiMo 18-10	X12CrNiS 18-08
	B.S.	4882-2H 1506-162	4882 GR3 1506-625	4882 GR4 1506-240	4882 GR6 1506-713	4882 GR7 1506-621 GrA	4882 GR8 1506-801 GrB	4882 GR8T 1506-821 GrTi	4882 GR8M 1506-845	4882 GR8F 1506-801 Gr AM



Heavy Hex nuts

ANSI B 18-2



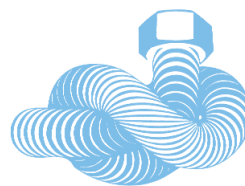
Nominal size	Number of threads/inch	Width across flats s		Thickness h		Width across corners e		Weight of 100 nuts in kg
		Inch	mm	inch	mm	Inch	mm	
3/8"	16	11/16	17.5	3/8	9.1	3/4	19.7	1.4
7/16"	14	3/4	19.0	7/16	10.7	7/8	22	1.9
1/2"	13	7/8	22.2	1/2	12.3	1"	25.4	3.0
9/16"	12	15/16	23.8	9/16	13.9	1 1/16	27	3.7
5/8"	11	1 1/16	27.0	5/8	15.5	1 1/4	31.2	5.4
3/4"	10	1 1/4	31.7	3/4	18.7	1 3/8	35.7	8.8
7/8"	9	1 7/16	36.5	7/8	21.8	1 5/8	41.6	13.5
1"	8	1 5/8	41.3	1"	25.0	1 7/8	47.2	19.3
1 1/8	8	1 13/16	46.0	1 1/8	28.2	2 1/16	52	26.9
1 1/4	8	2"	50.8	1 1/4	31.0	2 1/4	57.8	35.7
1 3/8	8	2 3/16	55.6	1 3/8	34.1	2 1/2	63.5	46.3
1 1/2	8	2 3/8	60.3	1 1/2	37.3	2 3/4	69.3	59.5
1 5/8	8	2 9/16	65.1	1 5/8	40.5	2 15/16	75	73.6
1 3/4	8	2 3/4	69.8	1 3/4	43.6	3 1/16	78.6	92.7
1 7/8	8	2 15/16	74.6	1 7/8	46.8	3 3/8	85.5	109.5
2"	8	3 1/8	79.4	2"	50.0	3 9/16	90	135.8
2 1/4	8	3 1/2	88.9	2 1/4	56.0	3 15/16	100	190.3
2 1/2	8	3 7/8	98.4	2 1/2	62.3	4 3/8	111.6	256.0
2 3/4	8	4 1/4	108	2 3/4	70.0	4 7/8	124.3	335.0
3"	8	4 5/8	117.5	3"	76.2	5 3/8	135.3	432.0
3 1/4	8	5"	127	3 1/4	80.9	5 3/4	146.5	543.0
3 1/2	8	5 3/8	136.5	3 1/2	87.3	6 3/16	157.2	694.0
3 3/4	8	5 3/4	146	3 3/4	93.7	6 5/8	168.6	824.0
4"	8	6 1/8	155.6	4"	100.0	7 1/16	179.5	991.0

NOTA. — Widths across flats and corners, as well as thickness are to American standard B18.2 «Heavy semi finished Hexagon Nuts». Threading according to ASA B 1.1 UNC 1960 up to 1"; 8 threads UN from diameter 1 1/8.

YOUR GLOBAL PARTNER IN FASTENERS



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