

Hex Head Fasteners 10.9/Gr.8

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Hex Head Bolts / Screws

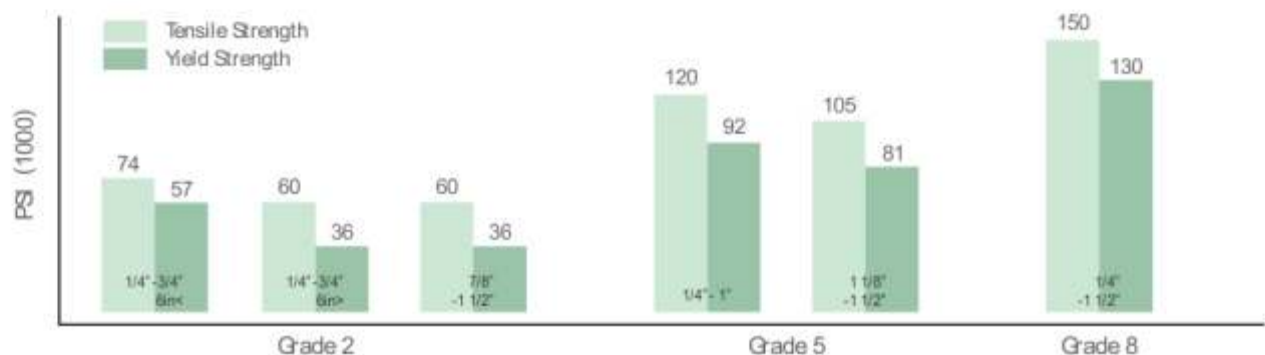
In-house Destructive And Non-destructive Testing:

- Chemical product check analysis
- Heat treatment tests
- Room temprature tension tests (or at 0° C)
- Low temperature impact tests (upto -196° c)
- X-Ray Fluorescence Analysis
- Hardness tests
- UTS test
- Proof load test
- Macrotech tests
- Microtech tests
- Grains size
- Decarburization tests
- Ultra soud testing
- M.P.I tests
- Stress rupture tests

- RELIABILITY** : Once tightened, Grade 8 bolts will remain tight and maintain the permanent strength of the joint. Absence of heavy stress concentration due to absence of bearing between bolts and plates.
- ECONOMY** : Fewer high strength bolts are required than M. S. bolts and rivets. Drilling of close holes is not required. Overall weight the structure will be very light.
- SIMPLICITY** : A minimum of skill is required in tightening and the operators need only to follow a few simple rules.
- CONVENIENCE** : Whether in the workshop or at site, H.S.S. Bolts enable joints to be made easily. Welding of site splices can be eliminated, avoiding difficulties of welding in adverse weather conditions. Absence of pneumatic hammers used in riveted joints reduce noise level considerably.



Comparison of Different Grades





Hex Head Bolts/Screws

Metric

DIA	M4			M5			M6			M8		
Length	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty
10	170001	253	500	170013	268	500	170029	347	500			
12	170002	262	500	170014	272	500	170030	366	500	170049	529	500
16	170003	430	500	170015	429	500	170031	379	500	170050	536	200
18	170004	430	500	170016	440	500	170032	384	500	170051	483	200
20	170005	372	500	170017	354	500	170033	379	500	170052	483	200
22	170006	378	500	170018	377	500	170034	390	500	170053	547	200
25	170007	378	500	170019	372	500	170035	392	500	170054	530	200
30	170008	377	500	170020	401	500	170036	410	500	170055	593	200
35	170009	387	500	170021	406	500	170037	439	200	170056	695	200
40	170010	411	500	170022	430	500	170038	461	200	170057	737	200
45	170011	463	500	170023	470	500	170039	490	200	170058	797	200
50	170012	514	500	170024	565	500	170040	524	200	170059	867	200
55	240001	565	500	170025	595	500	170041	576	200	170060	950	100
60	240002	617	500	170026	649	200	170042	630	200	170061	1,072	100
65				170027	737	200	170043	683	100	170062	1,107	100
70				170028	795	200	170044	736	100	170063	1,194	100
75				240003	852	200	170045	742	100	170064	1,232	100
80							170046	782	100	170065	1,277	100
90							170047	881	100	170066	1,650	100
100							170048	979	100	170067	1,988	50
110							551178	1,507	100	240010	2,802	50
120							550866	1,638	100	240011	3,091	50
130							550867	1,765	100	240012	3,383	50
140							550868	1,894	100	550872	3,744	50
150							550869	2,023	100	550873	3,983	50
160										787951	4,212	50
170										787952	4,430	50
180										787953	4,680	50
190										787954	4,898	50
200										787955	5,127	50

Grey highlighted items are full threaded

- Specifications** : Generally conforming to IS : 1364, ISO : 4014/4017, DIN 931/933.
- Threads** : ISO Metric 6g as per IS:4218.
- Material and Mechanical Properties** : Property Class 10.9 as per IS : 1367.
- Note** : Shaded size are fully threaded. Prices for fully threaded screws beyond shaded sizes will cost 10% extra.
- Orders for Property class 8.8 can be accepted subject to our confirmation on the basis of item wise quantities.
Price list for 8.8 available separately.
- Upto 80MM Dia can be manufactured against request.
- Plating** : No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Hex Head Bolts/Screws

Metric

DIA	M10			M12			M14			M16		
Length	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty
16	170068	905	200									
18	170069	899	200									
20	170070	849	200	170093	1,393	100				170142	3,150	50
22	170071	934	200							170143	3,150	50
25	170072	917	200	170094	1,513	100	170121	2,406	50	170144	3,173	25
30	170073	990	100	170095	1,502	100	170122	2,593	50	170145	3,477	25
35	170074	1,041	100	170096	1,585	100	170123	2,697	25	170146	3,477	25
40	170075	1,264	100	170097	1,805	100	170124	2,885	25	170147	3,441	25
45	170076	1,466	100	170098	2,002	50	170125	3,115	25	170148	3,649	25
50	170077	1,502	100	170099	2,141	50	170126	3,453	25	170149	3,920	25
55	170078	1,564	100	170100	2,296	50	170127	3,530	25	170150	4,357	25
60	170079	1,717	100	170101	2,394	50	170128	3,688	25	170151	4,596	25
65	170080	1,810	50	170102	2,503	50	170129	3,891	25	170152	4,713	25
70	170081	1,903	50	170103	2,830	50	170130	4,127	25	170153	5,029	25
75	170082	2,034	50	170104	2,932	50	170131	4,328	25	170154	5,393	25
80	170083	2,341	50	170105	3,110	50	170132	4,582	25	170155	6,190	25
90	170084	2,595	50	170106	3,350	25	170133	5,020	25	170156	6,613	25
100	170085	2,983	50	170107	3,914	25	170134	5,777	25	170157	6,864	15
110	170086	3,444	50	170108	4,275	25	170135	6,280	25	170158	7,614	15
120	170087	3,749	25	170109	4,530	25	170136	6,973	25	170159	8,698	15
130	170088	4,211	50	170110	4,789	25	170137	7,548	25	170160	10,228	15
140	170089	4,672	50	170111	5,682	25	170138	9,774	25	170161	10,368	15
150	170090	5,006	30	170112	7,592	25	170139	10,788	25	170162	11,800	15
160	170091	5,337	25	170113	7,959	20	170140	12,047	25	170163	12,816	15
180	170092	6,005	25	170114	8,652	20	170141	12,924	25	170164	14,414	15
200	550876	6,673	25	170115	11,434	25	550887	14,360	25	170165	15,603	10
220				170116	16,442	25				170166	20,168	10
240				170117	16,848	20				170167	21,705	10
260				170118	17,210	20				170168	22,144	10
280				170119	18,794	18				170169	24,447	10
300				170120	20,136	18				170170	31,425	10

Grey highlighted items are full threaded

- Specifications :** Generally conforming to IS : 1364, ISO : 4014/4017, DIN 931/933.
- Threads :** ISO Metric 6g as per IS:4218.
- Material and Mechanical Properties :** Property Class 10.9 as per IS : 1367.
- Note :** Shaded size are fully threaded. Prices for fully threaded screws beyond shaded sizes will cost 10% extra.
- Orders for Property class 8.8 can be accepted subject to our confirmation on the basis of item wise quantities.
Price list for 8.8 available separately.
- Upto 80MM Dia can be manufactured against request.
- Plating :** No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Hex Head Bolts/Screws

Metric

DIA	M18			M20			M22		
Length	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty
35				170190	6,915	25			
40	170171	6,178	25	170191	6,915	25			
45	170172	6,439	25	170192	7,244	25			
50	170173	6,638	25	170193	7,192	25	170215	10,254	10
55	170174	7,092	25	170194	8,168	25	170216	11,043	10
60	170175	7,314	25	170195	8,283	25	170217	11,405	10
65	170176	7,561	25	170196	8,548	10	170218	12,213	10
70	170177	8,259	25	170197	8,484	10	170219	12,637	10
75	170178	8,741	10	170198	9,413	10	170220	13,072	10
80	170179	8,758	10	170199	9,691	10	170221	13,603	10
90	170180	9,304	10	170200	10,298	10	170222	14,489	10
100	170181	10,308	10	170201	10,967	10	170223	15,454	10
110	170182	10,867	10	170202	12,344	10	170224	16,823	10
120	170183	11,992	10	170203	13,140	10	170225	17,982	10
130	170184	12,539	10	170204	14,298	10	170226	18,948	10
140	170185	13,087	10	170205	15,258	10	170227	19,896	10
150	170186	14,014	10	170206	14,996	10	170228	20,831	10
160	170187	15,092	10	170207	17,854	10	170229	23,762	5
180	170188	16,743	10	170208	20,904	10	170230	25,806	5
200	170189	18,090	10	170209	22,528	10	170231	27,881	5
220	240020	19,898	10	170210	31,255	5	170232	42,826	5
240	240021	21,709	10	170211	32,822	5	170233	46,391	5
260	240022	23,519	10	170212	34,391	6	170234	48,174	5
280	240023	25,328	8	170213	37,518	6	170235	53,544	5
300	240024	27,137	8	170214	40,629	6	170236	57,370	5

Grey highlighted items are full threaded

- Specifications** : Generally conforming to IS : 1364, ISO : 4014/4017, DIN 931/933.
- Threads** : ISO Metric 6g as per IS:4218.
- Material and Mechanical Properties** : Property Class 10.9 as per IS : 1367.
- Note** : Shaded size are fully threaded. Prices for fully threaded screws beyond shaded sizes will cost 10% extra.
- Orders for Property class 8.8 can be accepted subject to our confirmation on the basis of item wise quantities.
Price list for 8.8 available separately.
- Upto 80MM Dia can be manufactured against request.
- Plating** : No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Hex Head Bolts/Screws

Metric

DIA	M24			M27			M30		
Length	Part No.	` Price/ 100 Pcs.	Box Qty	Part No.	` Price/ 100 Pcs.	Box Qty	Part No.	` Price/ 100 Pcs.	Box Qty
50	170237	12,927	10	170259	25,914	5	170281	34,350	5
55	170238	12,370	10	170260	25,914	5	170282	34,350	5
60	170239	13,458	10	170261	25,914	5	170283	34,350	5
65	170240	13,926	10	170262	25,914	5	170284	34,350	5
70	170241	14,762	10	170263	25,914	5	170285	34,350	5
75	170242	15,293	10	170264	27,868	5	170286	34,350	5
80	170243	16,722	10	170265	29,162	5	170287	35,747	5
90	170244	17,857	10	170266	31,749	5	170288	38,803	5
100	170245	19,314	10	170267	34,350	5	170289	41,758	5
110	170246	20,187	5	170268	37,041	5	170290	45,933	5
120	170247	21,186	10	170269	37,980	5	170291	46,948	5
130	170248	22,344	5	170270	39,230	5	170292	49,062	5
140	170249	23,407	5	170271	41,714	5	170293	52,105	5
150	170250	24,550	5	170272	44,198	5	170294	55,031	3
160	170251	29,316	5	170273	48,813	5	170295	62,262	3
170	240025	30,594	5	550941	51,407	5	550947	65,405	3
180	170252	31,874	5	170274	54,002	5	170296	68,568	3
190	240026	33,130	5						
200	170253	34,386	5	170275	58,822	5	170297	74,800	5
220	170254	49,296	5	170276	81,062	4	170298	90,248	3
240	170255	51,063	5	170277	87,410	4	170299	96,598	3
260	170256	52,830	4	170278	93,143	3	170300	102,961	3
280	170257	58,101	4	170279	98,861	3	170301	109,311	2
300	170258	71,028	4	170280	103,499	3	170302	115,647	2

Grey highlighted items are full threaded

- 1. Specifications :** Generally conforming to IS : 1364, ISO : 4014/4017, DIN 931/933.
- 2. Threads :** ISO Metric 6g as per IS:4218.
- 3. Material and Mechanical Properties :** Property Class 10.9 as per IS : 1367.
- 4. Note :** Shaded size are fully threaded. Prices for fully threaded screws beyond shaded sizes will cost 10% extra.
- 5. Orders for Property class 8.8 can be accepted subject to our confirmation on the basis of item wise quantities.**
Price list for 8.8 available separately.
- 6. Upto 80MM Dia can be manufactured against request.**
- 7. Plating :** No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Hex Head Bolts/Screws

Metric

DIA	M33			M36			M42			M48		
Length	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty
75	170303	47,152	5									
80	170304	49,857	5	170320	59,646	5						
90	170305	52,884	5	170321	64,188	3	170336	94,128	3			
100	170306	56,633	5	170322	66,774	3	170337	99,537	2	787845	138,424	2
110	170307	60,895	4	170323	71,316	4	170338	104,977	2	787846	146,032	2
120	170308	62,350	4	170324	72,698	3	170339	105,785	2	787847	146,890	2
130	170309	65,702	4	170325	76,506	3	170340	110,252	10	787848	153,010	2
140	170310	69,774	4	170326	80,870	3	170341	116,388	10	550980	170,926	2
150	170311	73,771	4	170327	85,206	3	170342	122,510	9	787849	178,661	2
160	170312	77,210	4	170328	93,628	3	170343	128,640	9	787850	186,450	2
180	170313	84,545	3	170329	108,576	2	170344	140,325	8	550981	201,973	2
200	170314	91,967	3	170330	117,690	2	170345	146,674	7	550982	209,312	2
220	170315	111,224	3	170331	141,105	2	170346	188,138	7	550983	266,059	2
240	170316	119,424	2	170332	151,268	9	170347	202,102	6	550984	283,788	2
260	170317	128,376	2	170333	161,418	8	170348	216,109	6	787851	301,517	2
280	170318	137,282	2	170334	171,589	8	170349	230,089	6	551123	319,245	2
300	170319	146,176	2	170335	205,981	7	170350	244,059	6	787852	336,974	2

Grey highlighted items are full threaded

- Specifications** : Generally conforming to IS : 1364, ISO : 4014/4017, DIN 931/933.
- Threads** : ISO Metric 6g as per IS:4218.
- Material and Mechanical Properties** : Property Class 10.9 as per IS : 1367.
- Note** : Shaded size are fully threaded. Prices for fully threaded screws beyond shaded sizes will cost 10% extra.
- Orders for Property class 8.8 can be accepted subject to our confirmation on the basis of item wise quantities.
Price list for 8.8 available separately.
- Upto 80MM Dia can be manufactured against request.
- Plating** : No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

Important * long delivery items-subject to extended deliveries (3 to 4 months). Users are advised to plan their requirements in advance.



Hex Head Bolts/Screws

Inch(UNC)

DIA	1/4			5/16			3/8			1/2		
Length	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty
1/2	170351	415	500	170364	553	500	170381	891	200			
5/8	170352	515	500	170365	530	500	170382	891	200			
3/4	170353	468	500	170366	510	200	170383	777	200	170400	1,673	100
7/8	170354	422	500	170367	558	200	170384	938	200	170401	1,660	100
1	170355	461	200	170368	555	200	170385	766	200	170402	1,763	100
1-1/4	170356	472	200	170369	611	200	170386	856	200	170403	1,966	100
1-1/2	170357	522	200	170370	744	200	170387	967	100	170404	2,098	50
1-3/4	170358	572	200	170371	834	200	170388	1,129	100	170405	2,256	25
2	170359	628	200	170372	888	200	170389	1,239	100	170406	2,455	25
2-1/4	170360	690	200	170373	977	100	170390	1,358	100	170407	2,711	25
2-1/2	170361	768	200	170374	1,072	100	170391	1,490	100	170408	2,887	25
2-3/4	170362	844	200	170375	1,159	100	170392	1,660	100	170409	3,125	25
3	170363	922	200	170376	1,220	100	170393	1,759	100	170410	3,506	25
3-1/4	240027	1,063	200	170377	1,301	100	170394	1,945	50	170411	3,760	25
3-1/2	240028	1,075	200	170378	1,402	100	170395	1,999	50	170412	3,889	25
3-3/4	240029	1,147	100	170379	1,731	100	170396	2,450	25	170413	4,092	25
4	240030	1,230	100	170380	1,912	100	170397	2,634	25	170414	4,263	25
4 1/4							170398	2,929	25	170415	4,527	25
4 1/2				551065	2,151	100	170399	3,100	25	170416	4,932	25
5				551066	2,390	100	240034	3,444	50	170417	5,387	25
5 1/2							240035	3,789	50	170418	6,577	25
6							240036	4,133	50	170419	7,985	25
6-1/2										240037	9,809	25
7										170420	11,997	20
7 1/2										170421	12,858	25
8										170422	13,714	25

Grey highlighted items are full threaded

- Specifications :** Generally conforming to ANSI B 18.2.1
- Threads :** Unified Coarse, 2A as per ANSI B1.1.
- Material & Mechanical Properties :** Grade 8 as per SAE J 429
- Note :** Non-shaded sizes if required in full thread will cost 10% extra.
: Upto 4 Inch Dia can be manufactured against request.
- Plating :** No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Hex Head Bolts/Screws

Inch(UNC)

DIA	5/8			3/4			7/8			1		
Length	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty	Part No.	Price/ 100 Pcs.	Box Qty
1	170423	3,080	25									
1.1/4	170424	3,438	25									
1.1/2	170425	3,607	25	170445	6,330	25				170487	13,830	10
1.3/4	170426	3,848	25	170446	6,570	25				170488	13,830	10
2	170427	4,042	25	170447	7,000	25	170467	16,551	10	170489	14,537	10
2.1/4	170428	4,401	25	170448	7,688	25	170468	16,551	10	170490	15,101	10
2.1/2	170429	4,816	25	170449	8,065	25	170469	13,345	10	170491	15,793	10
2.3/4	170430	5,205	25	170450	8,798	10	170470	13,345	10	170492	16,839	10
3	170431	5,610	25	170451	9,144	10	170471	13,981	10	170493	18,443	10
3.1/4	170432	5,974	25	170452	9,545	10	170472	15,419	10	170494	19,157	10
3.1/2	170433	6,328	25	170453	10,318	10	170473	15,419	10	170495	19,963	10
3 3/4	170434	6,999	25	170454	11,075	10	170474	16,542	10	170496	21,974	10
4	170435	7,184	25	170455	11,588	10	170475	17,331	10	170497	21,974	10
4 1/4	170436	7,435	25	170456	11,873	10	170476	18,373	10	170498	24,228	10
4 1/2	170437	7,712	25	170457	12,422	10	170477	19,248	10	170499	24,228	5
5	170438	8,681	25	170458	13,214	10	170478	20,711	10	170500	27,034	5
5 1/2	170439	9,987	20	170459	14,839	10	170479	21,819	10	170501	29,219	5
6	170440	10,469	10	170460	15,234	10	170480	23,159	10	170502	30,571	5
6.1/2	170441	12,214	10	170461	16,462	10	170481	24,440	5	170503	33,153	5
7	170442	13,154	10	170462	16,462	10	170482	26,978	5	170504	35,733	5
7.1/2	170443	14,093	10	170463	17,688	10	170483	28,373	5	170505	38,234	5
8	170444	14,350	10	170464	19,382	10	170484	29,624	5	170506	40,004	5
9				170465	20,263	10	170485	33,661	5	170507	44,989	5
10				170466	22,797	8	170486	35,220	5	170508	49,333	4
11				240038	24,230	8				170509	51,801	4
12										170510	56,509	4

Grey highlighted items are full threaded

1. Specifications : Generally conforming to ANSI B 18.2.1

2. Threads : Unified Coarse, 2A as per ANSI B1.1.

3. Material & Mechanical Properties : Grade 8 as per SAE J 429

4. Note : Non-shaded sizes if required in full thread will cost 10% extra.

: Upto 4 Inch Dia can be manufactured against request.

5. Plating : No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Hex Head Bolts/Screws

Inch(UNC)

DIA	1-1/8			1-1/4			1-3/8		
Length	Part No.	` Price/ 100 Pcs.	Box Qty	Part No.	` Price/ 100 Pcs.	Box Qty	Part No.	` Price/ 100 Pcs.	Box Qty
1	170511	15,534	5						
1.1/4	170512	16,847	5						
1.1/2	170513	18,384	10						
1.3/4	170514	19,007	10						
2	170515	20,467	10						
2.1/4	170516	21,936	5						
2.1/2	170517	23,189	5	170534	30,710	5	170551	37,186	5
2.3/4	170518	24,440	5	170535	32,169	5	170552	38,854	5
3	170519	25,900	5	170536	33,629	5	170553	40,736	5
3.1/4	170520	27,368	5	170537	35,512	5	170554	43,033	5
3.1/2	170521	28,619	5	170538	37,186	5	170555	45,124	5
3.3/4	170522	30,079	5	170539	39,062	5	170556	47,421	5
4	170523	31,539	5	170540	40,736	4	170557	49,510	5
4.1/4	170524	33,006	5	170541	42,404	5	170558	51,808	4
4.1/2	170525	34,467	5	170542	44,286	4	170559	53,898	4
5	170526	37,186	5	170543	47,836	5	170560	58,286	4
5.1/2	170527	40,107	5	170544	51,178	3	170561	62,672	3
6	170528	42,826	5	170545	54,735	4	170562	67,060	3
7	170529	48,466	3	170546	61,627	3	170563	75,627	3
7.1/2	170530	51,178	5	170547	64,970	3	170564	80,014	3
8	170531	54,105	3	170548	68,519	3	170565	84,401	3
9	170532	75,627	4	170549	75,627	3	170566	93,174	2
10	170533	65,385	3	170550	82,517	3	170567	101,949	2

Grey highlighted items are full threaded

- Specifications :** Generally conforming to ANSI B 18.2.1
- Threads :** Unified Coarse, 2A as per ANSI B1.1.
- Material & Mechanical Properties :** Grade 8 as per SAE J 429
- Note :** Non-shaded sizes if required in full thread will cost 10% extra.
: Upto 4 Inch Dia can be manufactured against request.
- Plating :** No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Hex Head Bolts/Screws

Inch(UNC)

DIA	1-1/2			1-3/4			2		
Length	Part No.	` Price/ 100 Pcs.	Box Qty	Part No.	` Price/ 100 Pcs.	Box Qty	Part No.	` Price/ 100 Pcs.	Box Qty
2.1/2	170568	46,791	5	170585	75,568	3	170602	105,794	2
2.3/4	170569	49,089	5	170586	78,768	3	170603	110,140	2
3	170570	51,393	5	170587	81,978	3	170604	114,266	2
3.1/4	170571	53,476	4	170588	85,413	2	170605	118,612	2
3.1/2	170572	56,195	4	170589	88,613	2	170606	122,966	2
3.3/4	170573	58,701	4	170590	92,049	2	170607	127,320	2
4	170574	61,419	3	170591	95,948	2	170608	131,666	2
4.1/4	170575	63,925	3	170592	99,839	2	170609	136,021	2
4.1/2	170576	66,643	3	170593	103,730	2	170610	141,056	2
5	170577	71,861	3	170594	111,520	2	170611	151,365	2
5.1/2	170578	77,086	3	170595	119,303	2	170612	161,437	2
6	170579	82,311	2	170596	127,093	2	170613	171,745	2
7	170580	92,337	2	170597	142,201	2	170614	191,207	2
7.1/2	170581	97,561	3	170598	149,756	2	170615	201,516	2
8	170582	102,785	2	170599	157,772	2	170616	211,815	2
9	170583	113,228	2	170600	173,345	2	170617	231,968	2
10	170584	123,677	2	170601	188,917	2	170618	252,576	2

Grey highlighted items are full threaded

- Specifications :** Generally conforming to ANSI B 18.2.1
- Threads :** Unified Coarse, 2A as per ANSI B1.1.
- Material & Mechanical Properties :** Grade 8 as per SAE J 429
- Note :** Non-shaded sizes if required in full thread will cost 10% extra.
: Upto 4 Inch Dia can be manufactured against request.
- Plating :** No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Hex Nuts

Size (mm)	Grade	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
M6 X 1	8	550303	135	500	9000
M6 X 1	10	170619	161	500	9000
M8 X 1.25	8	550304	184	200	2400
M8 X 1.25	10	170620	210	200	2400
M10 X 1.5	8	550305	356	200	2400
M10 X 1.5	10	170621	407	200	2400
M12 X 1.75	8	550306	580	200	1600
M12 X 1.75	10	170623	917	200	2400
(M12) X 1.5	10	170622	917	200	2400
(M14) X 1.5	10	170625	1,064	100	800
M14 X 2	10	170626	1,064	100	800
M16 X 2	8	550307	1,155	100	800
M16 X 2	10	170627	1,393	100	800
(M18) X1.5	10	170629	2,092	100	600
M18 X 2.5	10	170630	2,092	100	600
(M20)X 1.5	10	170631	2,678	50	300
M20 X 2.5	10	170632	2,678	50	300
M22 X 2.5	10	170633	3,077	50	200
M24 X 3	10	170634	4,603	50	200
M27 X 3	10	170635	7,433	25	150
M30 X 3.5	10	170636	10,703	25	150
M33 X 3.5	10	170637	14,724	10	80
M36 X 4	10	170638	19,007	10	80
M39 X 4	10	170639	25,925	10	40
M42 X 4.5	10	170640	31,844	10	40
M45 X 4.5	10	170641	38,043	10	40
M48 X 5	10	170642	45,833	10	40
M52 X 5	10	170643	54,265	4	16
M56 X 5.5	10	170644	70,141	4	16
M60 X 5.5	10	550301	131,512	3	12
M64 X 6	10	170645	140,280	3	12
M72 X 6	10	550302	251,160	2	8

1. **Specifications** : For Nuts with Metric Threads IS : 1364, ISO 4032

2. **Threads** : ISO Metric 6H as per is : 4218, ISO 261, ISO 965.

3. **Material Mechanical Properties** : Property Class as tabulated as per IS : 1367, ISO 898, Part-II.

4. **Note** : Size in brackets are non-preferred standards.

5. **Plating** : No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Hex Nuts

Size (mm)	Grade	Part No	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
1/4	8	170646	148	500	9000
5/16	8	170647	204	500	9000
3/8	8	170648	293	200	2400
7/16	8	170658	670	200	1600
1/2	8	170649	670	200	1600
5/8	8	170650	1,393	200	1600
3/4	8	170651	2,455	50	400
7/8	8	170652	3,309	50	200
1	8	170653	5,200	50	200
1-1/8	8	170654	7,344	25	150
1-1/4	8	170655	10,417	25	100
1-3/8	8	170656	13,305	25	100
1-1/2	8	170657	18,094	10	40

- 1. Specifications :** For Nuts with UNC Threads : (ANSI B 18.2.2).
- 2. Threads :** Unified Coarse, 2B As Per ANSI B1.1.
- 3. Material Mechanical Properties :** Grade as tabulated as per SAE J 995.
- 4. Plating :** No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

Nylock Nut (Din 982, (ISO 7040 Grade-8) Blue Ring

(Duly Mechanical White Zinc Plated)

Size (mm)	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
M6	630448	169	500	9000
M8	630449	303	200	2400
M10	630450	669	200	2400
M12	630451	958	200	2400
M12X1.5	630452	1,016	200	2400
M14	630453	1,558	100	800
M16	630454	2,015	100	800
M16x1.5	630455	2,063	100	800
M20M	630456	4,090	50	300
20x1.5	630457	4,376	50	300





Nylock Nut (Din 982, (ISO 7040 Grade-10) Blue Ring

(Duly Mechanical White Zinc Plated)

Size (mm)	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
M10	630458	773	200	2400
M12	630459	1,116	200	2400
M16	630460	2,308	100	800
M16X1.5	630461	2,401	100	800
M20	630462	4,339	50	300
M24	630463	9,656	50	200



Nylock Nut (Din 985, (ISO 10511 Grade-8) Blue Ring

(Duly Mechanical White Zinc Plated)

Size (mm)	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
M6	290001	117	500	9000
M8	290002	232	200	2400
M10	290003	505	200	2400
M12	290004	739	200	2400
M12X1.5	290005	793	200	2400
M14	290006	1,214	100	800
M16	560957	1,634	100	800
M16x1.5	630379	1,673	100	800
M20M	630380	3,526	50	300
20x1.5	630381	3,773	50	300



Nylock Nut (Din 985, (ISO 10511 Grade-10) Blue Ring

(Duly Mechanical White Zinc Plated)

Size (mm)	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
M10	630305	597	200	2400
M12	630306	882	200	2400
M16	290007	1,881	100	800
M16X1.5	290008	1,944	100	800
M20	290009	3,745	50	300
M24	290010	7,614	50	200



1. Plating : No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Spring Washer - Square Section

Size (mm)	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton	Size (mm)	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
3MM	171758	12	2000	160000	18MM	171767	194	100	2400
4MM	171759	15	2000	90000	20MM	171768	359	100	1500
5MM	171760	18	2000	48000	22MM	171769	402	50	1000
6MM	171761	20	1000	30000	24MM	171770	535	50	1200
8MM	171762	34	1000	24000	27MM	171771	613	50	700
10MM	171763	59	500	12000	30MM	171772	948	50	500
12MM	171764	70	500	7000	33MM	171773	1,116	25	400
14MM	171765	117	200	4800	36MM	171774	1,623	25	350
16MM	171766	176	100	3000	39MM	171775	1,756	25	250

1. **Specification:** Generally conforming to IS : 6735/1972 & DIN 7980



Spring Washer - Flat Section

Size (mm)	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton	Size (mm)	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
3MM	171776	12	2000	140000	18MM	171785	312	100	1800
4MM	171777	14	2000	120000	20MM	171786	446	100	1400
5MM	171778	19	2000	60000	22MM	171787	506	50	800
6MM	171779	33	1000	32000	24MM	171788	755	50	700
8MM	171780	53	1000	14000	27MM	171789	841	50	700
10MM	171781	77	500	7000	30MM	171790	1,359	50	500
12MM	171782	115	500	5000	33MM	171791	2,173	25	200
14MM	171783	178	200	3200	36MM	171792	2,276	25	350
16MM	171784	269	100	3000	39MM	171793	2,389	25	250

1. **Specification:** Generally conforming to DIN 127, IS 3063 & BS 4464



Unbrako Hardened Washer for 10.9 Bolts

Size (mm)	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
M12	551111	431	500	4000
M16	551112	754	200	1600
M20	551113	1,143	100	800
M22	631368	1,269	100	800
M24	551114	1,612	100	600
M27	630476	2,704	100	400
M30	630477	3,380	100	400



1. **Specifications :** Generally conforming to 300HV - 370HV. For Unbrako Hardened Washer 10.9 Bolts

2. **Plating :** No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Hexagon Weld Nut

Size (mm)	Part No.	Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
M6	136004	123	500	9000
M8	136001	214	200	2400
M10	136002	392	200	2400
M12	136003	558	200	1600

- 1. Specifications :** Generally conforming to DIN 929
- 2. Plating :** No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

Construction Fasteners CE Approved

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Arc Welding Stud

Construction Fasteners

Arc Welding Stud



The UNBRAKO ARC Welding Stud is used in the construction of tall buildings, bridges and steel structures. It prevents the slip between two objects & improves the strength of the structure.

* Prices available on request

Product Range :
Metric: M13, M16, M19, M22, M25 – Any Length

Inch: 1/2", 5/8", 3/4", 7/8", 1" – Any Length

Auto Torque Indicator



UNBRAKO Auto Torque Indicators, or ATIs, are single-use mechanical load cells designed to indicate the magnitude of preload in the assembly. It shows if the bolt is properly tensioned, very useful while tensioning High Strength Structural Bolts.

Product Range :
Metric: M16 – M36 as per BS EN 14399-9

Unbrako Feeler Gauge is available to check if the required torque is achieved.

High Strength Structural Bolt Assembly



Compared to the conventional methods of riveting or welding, UNBRAKO Pre-load bolts maintain the permanent strength of the joint due to reduced stress concentration.

Hence, it does not permit loosening, making it most ideal where vibration is involved.

Product Range :
Metric: M12 to M36
Any Length

As per BS EN 15048-1/2 & 14399-3/4 or as per IS 3757

Auto Torque Check Bolt Assembly



UNBRAKO Auto Torque Indicators, or ATIs, are single-use mechanical load cells designed to indicate the magnitude of preload in the assembly. It shows if the bolt is properly tensioned, very useful while tensioning High Strength Structural Bolts.

* Prices available on request

Product Range :
Metric: M12 – M30 (any length) – As Per BS EN 14399 - 10

Unbrako Electric Shear Wrench is also Available.

Rebar Coupler

The COUPLER system is a threaded connection of two bars through a threaded sleeve that guarantees an ultimate tensile strength of the splice (Joint) greater than that of the parent bar. COUPLER splicing system is suitable for joining reinforcement bars end to end.

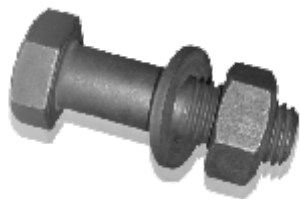


Total Solution Bolt Assembly Tamper Proof



The Innovative design acts to convert radial force into axial force, increasing onto the contact surface of the application.

* Prices available on request



High Strength Structural Bolts

Metric

DIA	M16			M20			M22		
Length	International Part No.	Price/ 100 pcs	Box Quantity	International Part No.	Price/ 100 pcs	Box Quantity	International Part No.	Price/ 100 pcs	Box Quantity
40	300001	4,068	25	300021	7,519	25			
45	300002	4,431	25	300022	8,091	25			
50	300003	4,662	25	300023	8,461	25	300041	11,475	10
55	300004	4,814	25	300024	8,836	25	300042	11,801	10
60	300005	5,134	25	300025	9,443	20	300043	12,284	10
65	300006	5,415	25	300026	9,858	20	300044	13,408	10
70	300007	5,722	25	300027	10,211	10	300045	14,046	10
75	300008	6,125	25	300028	10,600	10	300046	14,484	10
80	300009	6,726	25	300029	10,900	10	300047	14,994	10
90	300010	7,053	25	300030	11,585	10	300048	16,485	10
100	300011	7,651	25	300031	12,253	10	300049	16,859	10
110	300012	8,263	25	300032	12,728	10	300050	18,199	10
120	300013	9,112	15	300033	13,806	10	300051	19,403	10
130	300014	10,462	10	300034	14,847	10	300052	20,486	10
140	300015	10,629	10	300035	15,306	10	300053	21,423	10
150	300016	12,603	10	300036	16,131	10	300054	22,464	10
160	300017	13,640	10	300037	19,214	10	300055	25,490	5
170	300018	14,484	10	300038	20,027	10	300056	26,560	5
180	300019	15,329	10	300039	20,844	10	300057	27,626	5
200	300020	17,290	10	300040	23,376	10	300058	29,697	5

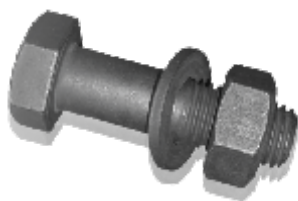
1. **Specifications** : Bolts IS : 3757, Nuts : IS 6623, Washers : IS 6649.

2. **Threads** : Bolts ISO Metric 6g as per IS:4218.

3. **Material and Mechanical Properties** :

Bolts: Property Class 10.9S as per IS : 1367. Nuts: Property Class 10S as per IS : 1367.

4. **Plating** : No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



High Strength Structural Bolts

Metric

DIA	M24			M27			M30			M36		
Length	International Part No.	Price/ 100 pcs	Box Quantity	International Part No.	Price/ 100 pcs	Box Quantity	International Part No.	Price/ 100 pcs	Box Quantity	International Part No.	Price/ 100 pcs	Box Quantity
55	300059	14,944	10									
60	300060	15,472	10	300076	31,505	5						
65	300061	16,758	10	300077	32,978	5						
70	300062	17,016	10	300078	32,755	5						
75	300063	18,509	10	300079	35,005	5	300092	42,280	5			
80	300064	18,867	10	300080	36,578	5	300093	43,778	5			
90	300065	20,847	5	300081	38,862	5	300094	44,987	5			
100	300066	22,392	5	300082	41,723	5	300095	48,242	5			
110	300067	22,940	5	300083	43,439	5	300096	52,515	5			
120	300068	23,839	5	300084	44,648	5	300097	53,534	5	581151	94,640	5
130	300069	24,874	5	300085	45,926	5	300098	56,106	5	581153	100,048	4
140	300070	25,942	5	300086	48,688	5	300099	59,431	5	581155	105,300	4
150	300071	27,114	5	300087	51,420	5	300100	62,637	5	581157	110,760	4
160	300072	30,810	5	300088	56,635	5	300101	70,731	4	581159	115,960	4
170	300073	33,394	5	300089	62,500	5	300102	77,755	4	581161	121,160	4
180	300074	34,902	5	300090	62,362	5	300103	77,630	4	581163	126,568	4
200	300075	37,498	5	300091	67,677	5	300104	84,453	4	581167	136,760	3
220							581122	91,278	3	581171	147,160	3
240							581126	98,102	3	581175	157,560	3
260							581130	104,927	3	581179	168,480	3
280										581183	178,880	3
300										581186	189,280	3

High Strength Structural Nuts

Metric

Diameter	M16	M20	M22	M24	M27	M30	M36
International Part No.	131001	131002	131003	131004	131005	131006	581348
Price/100 Pcs	1,988	4,026	4,700	6,745	10,912	13,811	23,816
Box Quantity	100	50	50	25	10	10	10

Hardened & Tempered Washer (Type A)

Metric

Diameter	M16	M20	M22	M24	M27	M30	M36
International Part No.	132001	132002	132003	132004	132005	132006	581349
Price/100 Pcs	1,259	1,576	2,243	2,372	3,813	4,744	7,228
Box Quantity	200	100	100	100	100	100	10

- Specifications :** Bolts IS : 3757, Nuts : IS 6623, Washers : IS 6649.
- Threads :** Bolts ISO Metric 6g as per IS:4218.
- Material and Mechanical Properties :** Bolts: Property Class 10.9S as per IS : 1367.
Nuts: Property Class 10S as per IS : 1367. Washer: Hardness: HRC 38-45 as per IS: 6649
- Plating :** No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



High Tensile Track Shoe Bolts & Square Nuts

Suitable for BEML (KOMATSU) EARTHMOVERS

Equivalent O.E. Part No. (For Ref. Only)	Size	Description	Model	International Part No.	Price/ 100 pcs
130.32.11212	M16 x 1.5 x 57	T.S. Bolt	D50, D50A 15	330001	6,911
130.32.11220	M16 x 1.5	T.S. Sq. Nut	D50, D50A 15	330002	3,499
130.32.11212/130.32.11220	M16 x 1.5 x 57	T.S. Bolt & Sq. Nut	D50, D50A 15	550287	10,410
205.32.51210	M18 x 1.5 x 58	T.S. Bolt	PC220	330003	8,506
01803.01824	M18 x 1.5	T.S. Sq. Nut	Pc220	330004	3,999
205.32.51210/01803.01824	M18 x 1.5 x 58	T.S. Bolt & Sq. Nut	PC220	550288	12,505
150.32.11210	M19 x 1.5 x 65	T.S. Bolt	D80, D80A 12	330005	10,633
150.32.11210/150.32.21311	M19 x 1.5 x 65	T.S. Bolt & Sq. Nut	D80, D80A 12	550289	14,799
113CT51096	M19 x 1.5 x 62	T.S. Bolt	D80, D80A 12	330006	10,633
113CT51096/150.32.21311	M19 x 1.5 x 62	T.S. Bolt & Sq. Nut	D80, D80A 12	550290	14,799
150.32.21311	M19 x 1.5	T.S. Sq. Nut	D80, D80A 12	330007	4,166
207.32.11350	M20 x 1.5 x 63	T.S. Bolt	PC300	330008	11,873
-----	M20 x 1.5	T.S. Sq. Nut	PC300	550308	4,499
207.32.11350	M20 x 1.5 x 63	T.S. Bolt & Sq. Nut	PC300	550291	16,372
176.32.11210	M24 x 1.5 x 78.5	T.S. Bolt	D155	330009	18,962
178.32.11220	M24 x 1.5	T.S. Sq. Nut	D155	330010	7,165
176.32.11210/178.32.11220	M24 x 1.5 x 78.5	T.S. Bolt & Sq. Nut	D155	550292	26,127
195.32.11210	M27 x 1.5 x 82.5	T.S. Bolt	D355	330011	24,810
195.32.11221	M27 x 1.5	T.S. Sq. Nut	D355	330012	10,331
195.32.11210/195.32.11221	M27 x 1.5 x 82.5	T.S. Bolt & Sq. Nut	D355	550294	35,141

SUITABLE FOR L & T POCLAIN EARTHMOVERS

Equivalent O.E. Part No. (For Ref. Only)	Size	Description	Model	International Part No.	Price/ 100 pcs
W 00 330.71	5/8" UNFx2.1/4"	T.S. Bolt	90 CK	330017	6,911
K 01345.36	5/8" UNF	T.S. Sq. Nut	90 CK	330018	3,499
W 00 330.71/K 01345.36	5/8" UNFx2.1/4"	T.S. Bolt & Sq. Nut	90 CK	550296	10,410
U 02330-77	7/8" UNFx2.66"	T.S. Bolt	300 CK	330014	14,532
Z 02345-07	7/8" UNF	T.S. Sq. Nut	300 CK	330015	6,165
U 02330-77/Z 02345-07	7/8" UNFx2.66"	T.S. Bolt & Sq. Nut	300 CK	550300	20,697

- 1. Specifications :** Forged from High Grade Alloy Steel.
- 2. Mechanical Properties :** Track Shoe Bolt Grade 12.9, Square Nut HRC 32-38
- 3. Plating :** No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



High Tensile Track Shoe Bolts & Square Nuts

Suitable for CATERPILLAR EARTHMOVERS

Equivalent O.E. Part No. (For Ref. Only)	Size	Description	Model	International Part No.	Price/ 100 pcs
7H 3597	5/8" UNFx2.3/32"	T.S. Bolt	D4, D5	330016	6,557
5M 8756	5/8" UNFx2.1/4"	T.S. Bolt	D4, D5	330017	6,911
1M 1408	5/8" UNF	T.S. Sq. Nut	D4, D5	330018	3,499
7H 3597/1M 1408	5/8" UNFx2.3/32"	T.S. Bolt & Sq. Nut	D4, D5	550295	10,056
5M 8756/1M 1408	5/8" UNFx2.1/4"	T.S. Bolt & Sq. Nut	D4, D5	550296	10,410
7 H3598	3/4" UNF x 2.3/8"	T.S. Bolt	D6, D7	330019	10,456
1S1860	3/4" UNF	T.S. Sq. Nut	D6, D7	330020	4,333
7 H3598/1S1860	3/4" UNF x 2.3/8"	T.S. Bolt & Sq. Nut	D6, D7	550297	14,789
7H 3599	7/8" UNF x 2.66" (2 21/32)	T.S. Bolt	D8	330014	14,532
2S2140	7/8" UNF	T.S. Sq. Nut	D8	330015	6,165
7H 3599/2S2140	7/8" UNF x 2.66" (2 21/32)	T.S. Bolt & Sq. Nut	D8	550298	20,697
9M 7445	1" UNS x 2.94" (2 15/16)	T.S. Bolt	D8	330021	20,734
1S6421	1" UNS	T.S. Sq. Nut	DS9	330022	8,498
9M 7445/1S6421	1" UNS x 2.94" (2 15/16)	T.S. Bolt & Sq. Nut	DS9	550299	29,232

SUITABLE FOR HM-TEREX & HM DEMAG EARTHMOVERS

Equivalent O.E. Part No. (For Ref. Only)	Size	Description	Model	International Part No.	Price/ 100 pcs
01801340	3/4"xUNFx2.3/4"	T.S. Bolt	H31, H36, H41	630419	11,650
06400140	3/4" UNF	T.S. Sq. Nut	H36	330020	4,333
01801340/06400140	3/4"xUNFx2.3/4"	T.S. Bolt & Sq. Nut	H31, H36, H41	550297	15,983
06327940	7/8" UNFx3.11/32" (84.9 mm)	T.S. Bolt	H51, H55	330023	17,190
06400240	7/8" UNF	T.S. Sq. Nut	H51	330015	6,165
06327940/06400240	7/8" UNFx3.11/32" (84.9 mm)	T.S. Bolt & Sq. Nut	H51, H55	550300	23,355

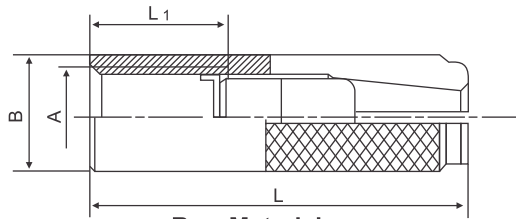
1. **Specifications** : Forged from High Grade Alloy Steel.

2. **Mechanical Properties** : Track Shoe Bolt Grade 12.9, Square Nut HRC 32-38

3. **Plating** : No guarantee can given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



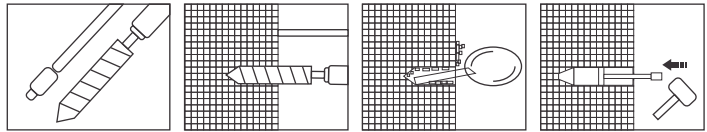
Drop In Anchors



Raw Material:

Special steel developed by UNBRAKO USA

DROP IN ANCHORS HAMMER SET ANCHORS



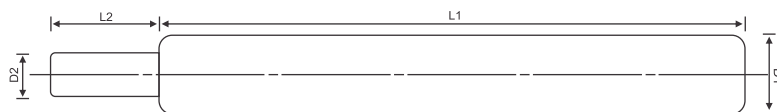
Value Are In KN

Main Technical Index	M6 x 25	M8 x 30	M10 x 40	M12 x 50	M16 x 60
Design tensile breaking strength	3.3	5.3	7.0	11.9	16.1
Design breaking shearing force	4.1	6.7	7.8	14.3	18.1
Safety Tensile breaking strength	2.4	3.8	5.0	8.5	11.5
Safety breaking shearing force	2.9	3.9	5.6	10.2	12.9

Drop In Anchors

Code	International Part No.	Size (A)	External Diameter (B)	Thread Length (L1)	Body Length (L)	Box Quantity	Cartoon Quantity	Price/ 100 Nos
DANCH0625ZP	551654	M6	8.0	10	25	100	3600	555
DANCH0830ZP	551655	M8	10.0	13	30	100	1800	725
DANCH1040ZP	551656	M10	12.0	15	40	50	1000	1,129
DANCH1250ZP	630269	M12	16.0	20	50	50	600	2,673
DANCH1660ZP	551657	M16	20.0	25	60	25	300	4,505

★ ★ ★ ONE ANCHOR SETTING TOOL FREE WITH PACK OF 100 ANCHOR SETS ★ ★ ★



Drop In Anchors Setting Tools

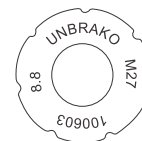
Code	SIZE	D1	D2	L1	L2
ANCHT06	6	9.900	4.700	97.790	17.000
ANCHT08	10	12.700	7.950	114.300	25.400
ANCHT10	12	15.875	9.525	127.000	31.750
ANCHT12	16	19.050	12.700	139.700	38.100



Auto Torque Indicator Washer (ATI) For 8.8 S Bolt Assembly

(Duly Mechanical Zinc Plated)

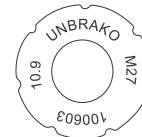
Size	International Part No.	Price/ 100 pcs	Pcs/Box	Pcs/Carton
M16	630330	2,501	100	1200
M20	370002	4,470	100	800
M22	370003	5,411	50	400
M24	370004	7,247	50	400
M27	370005	9,176	50	300



Auto Torque Indicator Washer (ATI) For 10.9 S Bolt Assembly

(Duly Mechanical Zinc Plated)

Size	International Part No.	Price/ 100 pcs	Pcs/Box	Pcs/Carton
M24	370006	7,247	50	400
M27	370007	9,176	50	300
M30	370008	13,385	25	200
M36	370009	19,226	25	150



1. Specification : Generally conforming to BS-EN-14399-09

Note : Separate catalogue can be provided on request.

Separate Construction Catalogue available on request

Stainless Steel Fasteners

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Stainless Steel Fasteners

Unbrako stainless socket screws are made from austenitic stainless steel. Unbrako stainless screws offer excellent resistance to rust and corrosion from acids, organic substances, salt solutions and atmospheres. Superior properties attained with stainless steel include retention of a high percentage of tensile strength and good creep resistance up to +800°F. Without scaling or oxidation, and good shock and impact resistance to temperatures as low as -300°F.



Advantages

- Corrosion resistance
- Wide temperature range (-300°F to + 800°F)
- Freedom from scaling or oxidation
- Non-magnetic : A valuable property in certain electrical and electronic applications. (Maximum permeability is 1.2 and can be reduced to 1.025 by bright annealing.)
- Standard processing of Unbrako fasteners includes a passivation treatment which neutralizes surface contamination.

Unique production and service

- Advanced quality management system - ISO/TS 16949 certified
- Computerized heat treatment process control for critical parts production
- Wide range of special plating and coating technologies available upon request
- Special technical training and support for distributors and customers
- International distribution network
- Complete product range



Socket Head Cap Screws

Metric S.S. 304
Fully Threaded

DIA	M3			M4			M5			M6			M8		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
6	5000730	297	500	5000738	366	500									
8	5000731	339	500	5000739	360	500									
10	5000732	286	500	5000740	305	500	5000749	387	500	5000762	374	200			
12	5000733	318	500	5000741	339	500	5000750	429	500	5000763	403	200	5000780	924	200
16	5000734	382	500	5000742	390	500	5000751	482	500	5000764	457	200	5000781	1,026	200
20	5000735	430	500	5000743	401	500	5000752	492	200	5000765	512	200	5000782	981	200
25	5000736	492	200	5000744	475	500	5000753	590	200	5000766	596	200	5000783	1,097	200
30	5000737	584	200	5000745	549	500	5000754	689	200	5000767	651	200	5000784	1,236	200
35				5000746	623	200	5000755	775	200	5000768	777	200	5000785	1,382	200
40				5000747	773	200	5000756	873	200	5000769	863	200	5000786	1,529	200
45							5000757	971	200	5000770	949	200	5000787	1,675	200
50				5000748	966	200	5000758	1,058	200	5000771	1,036	200	5000788	1,821	200
55							5000759	1,304	200	5000772	1,121	200	5000789	1,967	100
60							5000760	1,423	200	5000773	1,208	200	5000790	2,114	100
65							5000761	1,540	200	5000774	1,415	200	5000791	2,267	100
70										5000775	1,523	200	5000792	2,414	100
75										5000776	1,837	200	5000793	2,586	100
80										5000777	1,959	200	5000794	2,706	100
90										5000778	2,204	200	5000795	3,044	100
100										5000779	2,449	200	5000796	3,382	100
110													5000797	5,717	100
120													5000798	6,236	50
125													5000799	6,864	50
130													5000800	7,138	50
140													5001471	7,687	50
150													5001472	8,290	50

1. **Specification** : Din 912, ISO 4762.
2. **Property Class** : A2 - 70.
3. **Material** : AISI 304.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. **Marking** : UNBRAKO A2 - 70.



Socket Head Cap Screws

Metric S.S. 304
Fully Threaded

DIA	M10			M12			M16			M20		
Length	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty
16	5000801	1,747	200									
20	5000802	1,675	200	5000821	2,348	100						
25	5000803	1,858	100	5000822	2,611	100						
30	5000804	2,041	100	5000823	2,875	100	5000842	5,690	50			
35	5000805	2,224	100	5000824	3,138	100	5000843	6,173	50			
40	5000806	2,406	100	5000825	3,402	100	5000844	6,656	50	5000859	12,561	10
45	5000807	2,640	100	5000826	3,672	50	5000845	7,138	50	5000860	13,482	10
50	5000808	2,875	100	5000827	3,987	50	5000846	7,753	25	5000861	14,403	10
55	5000809	3,109	100	5000828	4,308	50	5000847	8,338	25	5000862	15,324	10
60	5000810	3,342	100	5000829	4,638	50	5000848	8,923	25	5000863	16,246	10
65	5000811	3,576	100	5000830	4,959	50	5000849	9,508	20	5000864	17,167	10
70	5000812	3,811	50	5000831	5,215	50	5000850	10,093	20	5000865	18,088	10
75	5000813	4,083	50	5000832	5,587	50	5000851	10,814	20	5000866	19,380	10
80	5000814	4,279	50	5000833	5,866	50	5000852	11,264	20	5000867	20,181	10
90	5000815	4,747	50	5000834	6,517	50	5000853	12,434	10	5000868	22,275	10
100	5000816	5,208	50	5000835	7,168	50	5000854	13,604	10	5000869	24,368	10
110	5000817	6,558	50	5000836	8,960	25	5000855	16,915	20	5000870	26,462	10
120	5000818	7,155	50	5000837	9,714	25	5000856	18,255	20	5001486	28,555	10
125	5000819	7,453	50	5000838	10,119	25	5000857	19,016	20	5001487	29,603	10
130	5000820	7,751	50	5000839	10,524	25	5001480	19,595	20	5001488	30,649	10
140	5001473	8,348	50	5000840	11,332	25	5001481	20,935	20	5001489	32,742	10
150	5001474	8,960	50	5000841	12,142	25	5000858	22,275	20	5001490	34,836	10
160	5001475	10,755	50	5001476	14,623	25	5001482	26,903	10	5001491	42,071	10
170	5001718	11,415	25	5001477	15,566	20	5001483	28,582	10	5001492	44,456	10
180	5001719	12,076	25	5001478	16,415	20	5001484	30,242	10	5001493	46,841	10
200	5001720	13,396	25	5001479	18,302	20	5001485	33,581	10	5001730	51,611	10
220	5001721	16,642	20	5001724	22,472	20	5001727	41,128	10	5001731	63,070	10
230	5001722	17,384	20	5001725	23,532	20	5001728	42,930	10	5001732	65,932	5
250	5001723	18,868	20	5001726	25,652	20	5001729	46,640	10	5001733	71,656	5

1. Specification : Din 912, ISO 4762.
2. Property Class : A2 - 70.
3. Material : AISI 304.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. Marking : UNBRAKO A2 - 70.



Socket Head Cap Screws

Metric S.S. 304
Fully Threaded

DIA	M22			M24			M27			M30		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
50	5000871	20,935	10	5000891	25,122	10	5000910	33,581	5			
55	5000872	22,024	10	5000892	26,462	10	5000911	35,680	5			
60	5000873	23,112	10	5000893	27,634	10	5000912	37,778	5	5000929	55,427	5
65	5000874	24,368	10	5000894	28,890	10	5000913	39,877	5	5000930	58,003	5
70	5000875	25,624	10	5000895	30,398	10	5000914	41,976	5	5000931	60,579	5
75	5000876	27,450	10	5000896	32,566	10	5000915	44,972	5	5000932	64,901	5
80	5000877	28,137	10	5000897	33,412	10	5000916	46,174	5	5000933	65,826	5
90	5000879	30,649	10	5000898	36,427	10	5000917	50,467	5	5000934	71,073	5
100	5000880	33,161	10	5000899	39,442	10	5000918	54,760	5	5000935	76,320	5
110	5000881	35,673	10	5000900	42,456	10	5000919	59,053	5	5000936	81,567	5
120	5000882	38,185	5	5000901	45,471	10	5000920	63,346	5	5000937	86,814	5
125	5000883	39,777	5	5000902	47,363	5	5000921	65,979	5	5000938	90,429	5
130	5000884	40,698	5	5000903	48,485	5	5000922	67,639	5	5000939	92,061	5
140	5000885	43,210	5	5000904	51,500	5	5000923	71,932	5	5000940	97,308	5
150	5000886	45,722	5	5000905	54,515	5	5000924	76,225	5	5000941	103,032	5
160	5000887	54,950	5	5000906	65,540	5	5000925	93,937	5	5000942	125,769	4
170	5000888	58,385	5	5000907	69,632	5	5000926	99,803	5	5000943	133,572	4
180	5000889	60,674	5	5000908	72,409	5	5000927	103,954	5	5000944	138,012	4
200	5000890	66,398	5	5000909	79,277	5	5000928	113,526	5	5000945	150,255	5
220	5001734	80,136	5	5001737	95,718	5	5001743	123,543	4	5001749	162,498	3
230	5001735	83,740	5	5001738	100,064	5	5001744	129,108	4	5001750	169,844	3
250	5001736	91,054	5	5001739	107,590	5	5001745	142,575	4	5001751	181,976	3
270				5001740	116,176	5	5001746	154,818	3	5001752	194,107	2
280				5001741	120,522	5	5001747	160,606	3	5001753	199,227	2
300				5001742	129,214	5	5001748	172,070	3	5001754	211,470	2

1. Specification : Din 912, ISO 4762.
2. Property Class : A2 - 70.
3. Material : AISI 304.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. Marking : UNBRAKO A2 - 70.



Socket Head Cap Screws

Metric S.S. 316
Fully Threaded

DIA	M3			M4			M5			M6			M8		
Length	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty
6	5000946	412	500	5000953	507	500									
8	5000947	470	500	5000954	500	500									
10	5000948	397	500	5000955	423	500	5000963	537	500	5000974	519	200			
12	5000949	441	500	5000956	470	500	5000964	595	500	5000975	559	200	5000992	1,282	200
16	5000950	529	500	5000957	541	500	5000965	669	500	5000976	634	200	5000993	1,423	200
20	5000951	597	500	5000958	556	500	5000966	682	200	5000977	710	200	5000994	1,360	200
25	5000952	682	200	5000959	659	500	5000967	819	200	5000978	826	200	5000995	1,521	200
30	5001494	810	200	5000960	761	500	5000968	956	200	5000979	903	200	5000996	1,714	200
35				5000961	864	200	5000969	1,075	200	5000980	1,078	200	5000997	1,917	200
40				5000962	1,072	200	5000970	1,211	200	5000981	1,197	200	5000998	2,120	200
45							5000971	1,347	200	5000982	1,316	200	5000999	2,323	200
50				5001495	1,339	200	5000972	1,467	200	5000983	1,436	200	5001000	2,525	200
55							5000973	1,808	200	5000984	1,555	200	5001001	2,728	100
60							5001496	1,973	200	5000985	1,676	200	5001002	2,931	100
65							5001497	2,136	200	5000986	1,962	200	5001003	3,144	100
70										5000987	2,112	200	5001004	3,347	100
75										5000988	2,548	200	5001005	3,587	100
80										5000989	2,717	200	5001006	3,753	100
90										5000990	3,056	200	5001007	4,222	100
100										5000991	3,396	200	5001008	4,691	100
110													5001498	7,928	100
120													5001499	8,648	50
125													5001500	9,518	50
130													5001501	9,899	50
140													5001502	10,660	50
150													5001503	11,497	50

1. Specification : Din 912, ISO 4762.
2. Property Class : A4 - 80.
3. Material : AISI 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. Marking : UNBRAKO A4 - 70.



Socket Head Cap Screws

Metric S.S. 316
Fully Threaded

DIA	M10			M12			M16			M20		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
16	5001504	2,423	200									
20	5001009	2,323	200	5001512	3,256	100						
25	5001010	2,577	100	5001024	3,621	100						
30	5001011	2,830	100	5001025	3,987	100	5001523	7,891	50			
35	5001012	3,084	100	5001026	4,351	100	5001038	8,561	50			
40	5001013	3,337	100	5001027	4,717	100	5001039	9,230	50	5001050	17,420	10
45	5001014	3,662	100	5001028	5,092	50	5001040	9,899	50	5001051	18,697	10
50	5001015	3,987	100	5001029	5,529	50	5001041	10,752	25	5001052	19,974	10
55	5001016	4,312	100	5001030	5,974	50	5001042	11,563	25	5001053	21,252	10
60	5001017	4,635	100	5001031	6,431	50	5001043	12,374	25	5001054	22,529	10
65	5001018	4,960	100	5001032	6,877	50	5001044	13,186	20	5001055	23,807	10
70	5001019	5,285	50	5001033	7,232	50	5001045	13,997	20	5001056	25,084	10
75	5001020	5,662	50	5001034	7,748	50	5001046	14,997	20	5001057	26,876	10
80	5001021	5,934	50	5001035	8,135	50	5001047	15,620	20	5001058	27,987	10
90	5001022	6,583	50	5001036	9,038	50	5001048	17,243	10	5001059	30,891	10
100	5001023	7,222	50	5001037	9,940	50	5001049	18,866	10	5001060	33,794	10
110	5001505	9,095	50	5001513	12,426	25	5001524	23,458	20	5001534	36,697	10
120	5001506	9,923	50	5001514	13,471	25	5001525	25,316	20	5001535	39,600	10
125	5001507	10,336	50	5001515	14,033	25	5001526	26,372	20	5001536	41,053	10
130	5001508	10,749	50	5001516	14,594	25	5001527	27,174	20	5001537	42,504	10
140	5001509	11,576	50	5001517	15,716	25	5001528	29,033	20	5001538	45,407	10
150	5001510	12,426	50	5001518	16,839	25	5001529	30,891	20	5001539	48,310	10
160	5001511	14,915	50	5001519	20,279	25	5001530	37,309	10	5001540	58,344	10
170	5001755	15,830	25	5001520	21,587	20	5001531	39,637	10	5001541	61,652	10
180	5001756	16,746	25	5001521	22,764	20	5001532	41,939	10	5001542	64,959	10
200	5001757	18,578	25	5001522	25,381	20	5001533	46,570	10	5001767	71,574	10
220	5001758	23,079	20	5001761	31,164	20	5001764	57,036	10	5001768	87,465	10
230	5001759	24,108	20	5001762	32,634	20	5001765	59,535	10	5001769	91,434	5
250	5001760	26,166	20	5001763	35,574	20	5001766	64,680	10	5001770	99,372	5

1. Specification : Din 912, ISO 4762.
2. Property Class : A4 - 80.
3. Material : AISI 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. Marking : UNBRAKO A4 - 70.



Socket Head Cap Screws

Metric S.S. 316
Fully Threaded

DIA	M22			M24			M27			M30		
Length	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty
50	5001061	29,033	10	5001080	34,839	10	5001099	46,570	5			
55	5001062	30,542	10	5001081	36,697	10	5001100	49,480	5			
60	5001063	32,052	10	5001082	38,323	10	5001101	52,391	5	5001118	76,866	5
65	5001064	33,794	10	5001083	40,065	10	5001102	55,301	5	5001119	80,438	5
70	5001065	35,536	10	5001084	42,155	10	5001103	58,212	5	5001120	84,011	5
75	5001066	38,067	10	5001085	45,163	10	5001104	62,366	5	5001121	90,004	5
80	5001067	39,020	10	5001086	46,336	10	5001105	64,033	5	5001122	91,287	5
90	5001068	42,504	10	5001087	50,517	10	5001106	69,987	5	5001123	98,564	5
100	5001069	45,987	10	5001088	54,697	10	5001107	75,940	5	5001124	105,840	5
110	5001070	49,471	10	5001089	58,878	10	5001108	81,894	5	5001125	113,117	5
120	5001071	52,955	5	5001090	63,059	10	5001109	87,847	5	5001126	120,393	5
125	5001072	55,162	5	5001091	65,683	5	5001110	91,499	5	5001127	125,406	5
130	5001073	56,439	5	5001092	67,239	5	5001111	93,801	5	5001128	127,670	5
140	5001074	59,923	5	5001093	71,420	5	5001112	99,754	5	5001129	134,946	5
150	5001075	63,407	5	5001094	75,601	5	5001113	105,708	5	5001130	142,884	5
160	5001076	76,205	5	5001095	90,890	5	5001114	130,271	5	5001131	174,416	4
170	5001077	80,968	5	5001096	96,566	5	5001115	138,406	5	5001132	185,236	4
180	5001078	84,143	5	5001097	100,416	5	5001116	144,163	5	5001133	191,394	4
200	5001079	92,081	5	5001098	109,941	5	5001117	157,437	5	5001134	208,373	5
220	5001771	111,132	5	5001774	132,741	5	5001780	171,329	5	5001786	225,351	3
230	5001772	116,130	5	5001775	138,768	5	5001781	179,046	4	5001787	235,538	3
250	5001773	126,273	5	5001776	149,205	5	5001782	197,722	4	5001788	252,362	3
270				5001777	161,112	5	5001783	214,701	3	5001789	269,186	2
280				5001778	167,139	5	5001784	222,727	3	5001790	276,287	2
300				5001779	179,193	5	5001785	238,625	3	5001791	293,265	2

1. Specification : Din 912, ISO 4762.
2. Property Class : A4 - 80.
3. Material : AISI 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. Marking : UNBRAKO A4 - 70.



Socket Set Screws (Grub Screw)

Plain Cup Point

Metric S.S. 304

Fully Threaded

DIA	M3			M4			M5			M6		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
3	5001183	311	200									
4	5001184	312	200	5001189	286	200	5001199	310	200			
5	5001185	313	200	5001190	306	200	5001200	290	200			
6	5001186	333	200	5001191	306	200	5001201	290	200	5001209	294	200
8	5001187	379	200	5001192	313	200	5001202	290	200	5001210	302	200
10	5001188	414	200	5001193	313	200	5001203	306	200	5001211	395	200
12				5001194	356	200	5001204	375	200	5001212	480	200
16				5001195	433	200	5001205	449	200	5001213	503	200
20				5001196	464	200	5001206	580	200	5001214	619	200
25				5001197	638	200	5001207	638	200	5001215	735	200
30				5001198	789	200	5001208	789	200	5001216	812	200
35										5001217	1,045	200
40										5001218	1,277	200
50										5001219	1,470	200

DIA	M8			M10			M12		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
8	5001220	592	200						
10	5001221	619	200	5001230	1,045	100			
12	5001222	638	200	5001231	1,122	100	5001239	1,702	100
16	5001223	716	200	5001232	1,199	100	5001240	1,857	100
20	5001224	867	200	5001233	1,238	100	5001241	2,167	100
25	5001225	1,122	200	5001234	1,315	100	5001242	2,283	100
30	5001226	1,238	200	5001235	1,432	100	5001243	2,321	100
35	5001227	1,432	200	5001236	1,691	100	5001244	2,399	100
40	5001228	1,625	200	5001237	2,066	100	5001245	2,554	100
50	5001229	1,702	200	5001238	2,105	100	5001246	2,786	100

1. Specification : Din 916, ISO 4029.
2. Property Class : A2 - 70.
3. Material : AISI 304.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded.



Socket Countersunk Head Screws

Metric S.S. 304
Fully Threaded

DIA	M3			M4			M5			M6		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
6	5001247	104	200									
8	5001248	112	200	5001253	150	200	5001262	203	200			
10	5001249	128	200	5001254	159	200	5001263	225	200	5001272	330	200
12	5001250	150	200	5001255	173	200	5001264	243	200	5001273	361	200
16	5001251	209	200	5001256	208	200	5001265	269	200	5001274	410	200
20	5001252	276	200	5001257	225	200	5001266	312	200	5001275	470	200
25				5001258	272	200	5001267	366	200	5001276	543	200
30				5001259	305	200	5001268	426	200	5001277	624	200
35				5001260	334	200	5001269	476	200	5001278	698	200
40				5001261	381	200	5001270	556	200	5001279	840	200
50							5001271	706	200	5001280	908	200
60										5001281	1,213	200
70										5001282	1,555	200
80										5001283	2,027	200
90										5001284	2,337	200
100										5001285	2,831	200

DIA	M8			M10			M12		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
16	5001286	986	200						
20	5001287	1,029	200	5001298	1,832	100			
25	5001288	1,151	200	5001299	2,070	100	5001309	4,247	50
30	5001289	1,291	200	5001300	2,280	100	5001310	4,538	50
35	5001290	1,421	200	5001301	2,425	100	5001311	5,001	50
40	5001291	1,556	200	5001302	2,735	100	5001312	5,157	50
50	5001292	1,943	200	5001303	3,224	100	5001313	5,956	50
60	5001293	2,378	200	5001304	3,624	100	5001314	6,648	50
70	5001294	2,662	200	5001305	4,150	100	5001315	7,424	50
80	5001295	2,907	200	5001306	4,538	100	5001316	8,012	50
90	5001296	3,205	200	5001307	5,102	100	5001317	8,910	50
100	5001297	3,624	200	5001308	5,721	100	5001318	9,875	50

1. **Specification** : Din 7991, IS 6761.
2. **Property Class** : A2 - 70.
3. **Material** : AISI 304.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. **Marking** : UNBRAKO A2 - 70.



Socket Button Head Screws

Metric S.S. 304
Fully Threaded

DIA	M3			M4			M5		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
8	5001135	173	200	5001141	159	200	5001150	223	200
10	5001136	176	200	5001142	167	200	5001151	263	200
12	5001137	194	200	5001143	183	200	5001152	271	200
16	5001138	221	200	5001144	214	200	5001153	326	200
20	5001139	275	200	5001145	268	200	5001154	386	200
25	5001140	294	200	5001146	306	200	5001155	433	200
30				5001147	375	200	5001156	502	200
35				5001148	429	200	5001157	577	200
40				5001149	507	200	5001158	635	200

DIA	M6			M8			M10		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
10	5001159	355	200						
12	5001160	371	200						
15	5001161	426	200	5001168	953	200			
20	5001162	501	200	5001169	1,029	200	5001176	1,988	100
25	5001163	591	200	5001170	1,164	200	5001177	2,198	100
30	5001164	698	200	5001171	1,418	200	5001178	2,581	100
35	5001165	819	200	5001172	1,580	200	5001179	2,845	100
40	5001166	897	200	5001173	1,756	100	5001180	2,971	50
50	5001167	1,172	200	5001174	2,006	100	5001181	3,374	50
60				5001175	2,307	100	5001182	4,031	20

1. Specification : ISO 7380
2. Property Class : A2 - 70.
3. Material : AISI 304.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.



Hex Head Screws

Metric S.S. 304
Fully Threaded

DIA	M3			M4			M5			M6		
Length	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty
10	5000001	120	500	5000011	169	500	5000021	218	500	5000037	340	500
12	5000002	130	500	5000012	174	500	5000022	232	500	5000038	346	500
16	5000003	140	500	5000013	190	500	5000023	279	500	5000039	386	500
20	5000004	157	500	5000014	211	500	5000024	330	500	5000040	432	500
25	5000005	181	200	5000015	237	500	5000025	373	500	5000041	507	500
30	5000006	310	200	5000016	294	500	5000026	431	500	5000042	568	500
35	5000007	374	200	5000017	343	500	5000027	488	500	5000043	625	200
40	5000008	464	200	5000018	474	500	5000028	520	500	5000044	679	200
45	5000009	501	200	5000019	509	500	5000029	571	500	5000045	745	200
50	5000010	539	200	5000020	529	500	5000030	609	500	5000046	805	200
55							5000031	778	500	5000047	895	200
60							5000032	802	200	5000048	937	200
65							5000033	861	200	5000049	1,022	100
70							5000034	917	200	5000050	1,071	100
75							5000035	989	200	5000051	1,187	100
80							5000036	1,045	200	5000052	1,232	100
85										5000053	1,366	100
90										5000054	1,396	100
100										5000055	1,540	100

1. **Specification** : Din 933, IS 1364, ISO 4017.
2. **Property Class** : A2 - 70.
3. **Material** : AISI 304.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. **Marking** : UNBRAKO A2 - 70.



Hex Head Screws

Metric S.S. 304
Fully Threaded

DIA	M8			M10				M12			
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No. ISO	Part No. DIN	` Price/ 100 Pcs	Box Qty	Part No. ISO	Part No. DIN	` Price/ 100 Pcs	Box Qty
16	5000056	818	200	5000073	5000280	1,431	200				
20	5000057	819	200	5000074	5000281	1,413	200	5000090	5000297	2,153	100
25	5000058	926	200	5000075	5000282	1,582	200	5000091	5000298	2,370	100
30	5000059	1,032	200	5000076	5000283	1,746	100	5000092	5000299	2,540	100
35	5000060	1,140	200	5000077	5000284	1,912	100	5000093	5000300	2,788	100
40	5000061	1,246	200	5000078	5000285	2,079	100	5000094	5000301	3,003	100
45	5000062	1,353	200	5000079	5000286	2,245	100	5000095	5000302	3,232	50
50	5000063	1,452	200	5000080	5000287	2,412	100	5000096	5000303	3,465	50
55	5000064	1,559	100	5000081	5000288	2,579	100	5000097	5000304	3,705	50
60	5000065	1,665	100	5000082	5000289	2,752	100	5000098	5000305	3,877	50
65	5000066	1,772	100	5000083	5000290	3,251	50	5000099	5000306	4,184	50
70	5000067	1,879	100	5000084	5000291	3,085	50	5000100	5000307	4,424	50
75	5000068	1,985	100	5000085	5000292	3,251	50	5000101	5000308	4,664	50
80	5000069	2,092	100	5000086	5000293	3,419	50	5000102	5000309	4,904	50
85	5000070	2,198	100	5000087	5000294	3,585	50	5000103	5000310	5,144	25
90	5000071	2,306	100	5000088	5000295	3,751	50	5000104	5000311	5,384	25
100	5000072	2,512	50	5000089	5000296	4,084	50	5000105	5000312	5,863	25
110	5000198	2,870	50	5000204	5000338	4,597	50	5000211	5000345	6,366	25
120	5000199	3,082	50	5000205	5000339	4,853	25	5000212	5000346	6,992	25
125	5000200	3,271	50	5000206	5000340	4,976	50	5000213	5000347	7,242	25
130	5000201	3,404	50	5000207	5000341	5,157	50	5000214	5000348	7,603	25
140	5000202	3,638	50	5000208	5000342	5,533	50	5000215	5000349	8,078	25
150	5000203	4,086	50	5000209	5000343	5,858	30	5000216	5000350	8,557	25
160				5000210	5000344	7,302	25	5000217	5000351	9,587	20
170				5001543	5001606	7,761	25	5000218	5000352	14,135	20
180				5001544	5001607	8,185	25	5000219	5000353	14,517	20
200				5001545	5001608	8,985	25	5000220	5000354	17,484	25
220				5001546	5001609	9,777	20	5001549	5001612	19,106	25
230				5001547	5001610	10,184	20	5001550	5001613	19,836	20
250				5001548	5001611	10,995	20	5001551	5001614	21,346	20

1. Specification : Din 933, IS 1364, ISO 4017.
2. Property Class : A2 - 70.
3. Material : AISI 304.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. Marking : UNBRAKO A2 - 70.



Hex Head Screws

Metric S.S. 304
Fully Threaded

DIA	M14				M16			M18		
Length	Part No. ISO	Part No. DIN	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
25	5000106	5000313	3,887	50	5000121	5,001	25			
30	5000107	5000314	4,183	50	5000122	5,370	25			
35	5000108	5000315	4,495	25	5000123	5,714	25			
40	5000109	5000316	4,744	25	5000124	6,059	25	5000136	10,025	25
45	5000110	5000317	5,086	25	5000125	6,487	25	5000137	10,790	25
50	5000111	5000318	5,374	25	5000126	6,862	25	5000138	11,211	25
55	5000112	5000319	5,762	25	5000127	7,329	25	5000139	12,139	25
60	5000113	5000320	5,952	25	5000128	7,795	25	5000140	12,612	25
65	5000114	5000321	6,398	25	5000129	8,195	25	5000141	13,395	25
70	5000115	5000322	6,636	25	5000130	8,661	25	5000142	13,873	25
75	5000116	5000323	6,954	25	5000131	9,128	25	5000143	14,659	10
80	5000117	5000324	7,289	25	5000132	9,594	25	5000144	15,233	10
85	5000118	5000325	7,932	25	5000133	9,995	25	5000145	15,855	10
90	5000119	5000326	8,332	25	5000134	10,461	25	5000146	16,356	10
100	5000120	5000327	8,578	25	5000135	11,327	15	5000147	17,265	10
110	5001552	5001615	9,874	25	5000221	13,065	15	5001568	20,048	10
120	5001553	5001616	10,595	25	5000222	13,871	15	5001569	21,413	10
125	5001554	5001617	10,956	25	5000223	14,298	15	5001570	22,181	10
130	5001555	5001618	11,316	25	5000224	14,763	15	5001571	22,863	10
140	5001556	5001619	12,037	25	5000225	15,450	15	5001572	24,228	10
150	5001557	5001620	12,758	25	5000226	16,596	15	5001573	25,593	10
160	5001558	5001621	13,478	25	5000227	17,789	15	5001574	26,958	10
170	5001559	5001622	14,199	25	5000228	19,443	15	5001575	28,323	10
180	5001560	5001623	14,920	25	5000229	20,716	15	5001576	29,688	10
200	5001561	5001624	16,361	25	5000230	23,182	10	5001577	32,418	10
220	5001562	5001625	17,803	20	5001565	25,772	10	5001578	35,745	10
230	5001563	5001626	18,524	20	5001566	27,053	10	5001579	37,195	10
250	5001564	5001627	19,965	20	5001567	29,304	10	5001580	40,011	10

1. **Specification** : Din 933, IS 1364, ISO 4017.
2. **Property Class** : A2 - 70.
3. **Material** : AISI 304.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. **Marking** : UNBRAKO A2 - 70.



Hex Head Screws

Metric S.S. 304
Fully Threaded

DIA	M20			M22				M24		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No. ISO	Part No. DIN	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
40	5000148	11,061	25							
45	5000149	11,890	25							
50	5000150	12,493	25	5000160	5000328	16,881	10	5000170	19,893	10
55	5000151	12,980	25	5000161	5000329	18,027	10	5000171	21,191	10
60	5000152	13,673	25	5000162	5000330	19,364	10	5000172	22,720	10
65	5000153	14,475	10	5000163	5000331	19,889	10	5000173	24,975	10
70	5000154	15,307	10	5000164	5000332	20,983	10	5000174	25,992	10
75	5000155	15,891	10	5000165	5000333	22,179	10	5000175	27,596	10
80	5000156	16,646	10	5000166	5000334	22,961	10	5000176	28,200	10
85	5000157	17,295	10	5000167	5000335	24,395	10	5000177	29,321	10
90	5000158	17,996	10	5000168	5000336	24,935	10	5000178	29,895	10
100	5000159	19,300	10	5000169	5000337	25,744	10	5000179	32,597	10
110	5000231	21,490	10	5000240	5000355	28,111	10	5000250	35,995	5
120	5000232	22,838	10	5000241	5000356	30,601	10	5000251	37,924	10
125	5000233	23,536	10	5000242	5000357	31,004	10	5000252	39,413	5
130	5000234	24,366	10	5000243	5000358	31,954	10	5000253	39,626	5
140	5000235	25,820	10	5000244	5000359	33,886	10	5000254	42,459	5
150	5000236	27,351	10	5000245	5000360	36,474	10	5000255	47,932	5
160	5000237	28,594	10	5000246	5000361	39,178	5	5000256	48,982	5
170	5000238	30,086	10	5000247	5000362	41,956	5	5000257	51,105	5
180	5000239	31,453	10	5000248	5000363	43,577	5	5000258	53,940	5
200	5001581	36,143	10	5000249	5000364	48,045	5	5000259	58,671	5
220	5001582	40,107	5	5001585	5001628	50,460	5	5001588	63,688	5
230	5001583	41,918	5	5001586	5001629	52,367	5	5001589	66,178	5
250	5001584	44,907	5	5001587	5001630	56,325	5	5001590	72,029	5
270								5001591	76,535	4
280								5001592	84,717	4
300								5001593	88,500	4

1. **Specification** : Din 933, IS 1364, ISO 4017.
2. **Property Class** : A2 - 70.
3. **Material** : AISI 304.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. **Marking** : UNBRAKO A2 - 70.



Hex Head Screws

Metric S.S. 304
Fully Threaded

DIA	M27		
Length	Part No.	Price / 100 Pcs	Box Qty
50	5000180	30,769	5
55	5000181	32,369	5
60	5000182	33,679	5
65	5000183	35,721	5
70	5000184	37,328	5
75	5000185	38,935	5
80	5000186	40,710	5
85	5000187	42,507	5
90	5000188	43,942	5
100	5000189	47,086	5
110	5000260	50,811	5
120	5000261	54,070	5
125	5000262	55,480	5
130	5000263	57,223	5
140	5000264	59,579	5
150	5000265	62,155	5
160	5000266	65,324	5
170	5000267	68,493	5
180	5000268	71,662	5
200	5000269	77,999	5
220	5001594	83,956	4
230	5001595	87,572	4
250	5001596	93,869	4
270	5001597	100,083	3
280	5001598	103,272	3
300	5001599	109,486	3

M30		
Part No.	Price / 100 Pcs	Box Qty
5000190	44,579	5
5000191	47,052	5
5000192	48,864	5
5000193	50,677	5
5000194	52,490	5
5000195	54,303	5
5000196	56,443	5
5000197	60,832	5
5000270	65,101	5
5000271	69,113	5
5000272	71,286	5
5000273	73,124	5
5000274	77,135	5
5000275	81,147	3
5000276	85,158	3
5000277	89,170	3
5000278	93,181	3
5000279	101,204	5
5001600	109,615	3
5001601	113,798	3
5001602	122,166	3
5001603	130,533	3
5001604	134,717	2
5001605	143,085	2

Hexagon Head Screws

Metric S.S. 316
Fully Threaded

DIA	M3		
Length	Part No.	Price/100 Pcs	Box Qty
10	5000365	171	500
12	5000366	185	500
16	5000367	199	500
20	5000368	222	500
25	5000369	256	200
30	5000370	440	200
35	5000371	530	200
40	5000372	657	200
45	5000373	710	200
50	5000374	764	200
55			
60			
65			
70			
75			
80			

M4		
Part No.	Price/100 Pcs	Box Qty
5000375	238	500
5000376	245	500
5000377	268	500
5000378	297	500
5000379	335	500
5000380	414	500
5000381	483	500
5000382	667	500
5000383	717	500
5000384	746	500

M5		
Part No.	Price/100 Pcs	Box Qty
5000385	309	500
5000386	329	500
5000387	390	500
5000388	460	500
5000389	520	500
5000390	601	500
5000391	717	500
5000392	737	500
5000393	809	500
5000394	863	500
5000395	1,103	500
5000396	1,137	200
5000397	1,220	200
5000398	1,299	200
5000399	1,401	200
5000400	1,481	200



Hex Head Screws

Metric S.S. 316
Fully Threaded

DIA	M6			M8			M10			
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No. ISO	Part No. DIN	` Price/ 100 Pcs	Box Qty
10	5000401	469	500							
12	5000402	478	500							
16	5000403	537	500	5000420	1,156	200	5000443	5000645	2,001	200
20	5000404	604	500	5000421	1,151	200	5000444	5000646	2,082	200
25	5000405	709	500	5000422	1,293	200	5000445	5000647	2,275	200
30	5000406	786	500	5000423	1,442	200	5000446	5000648	2,480	100
35	5000407	867	200	5000424	1,591	200	5000447	5000649	2,686	100
40	5000408	944	200	5000425	1,739	200	5000448	5000650	2,901	100
45	5000409	1,070	200	5000426	1,888	200	5000449	5000651	3,134	100
50	5000410	1,159	200	5000427	2,028	200	5000450	5000652	3,366	100
55	5000411	1,212	200	5000428	2,177	100	5000451	5000653	3,599	100
60	5000412	1,274	200	5000429	2,325	100	5000452	5000654	3,841	100
65	5000413	1,420	100	5000430	2,474	100	5000453	5000655	4,073	50
70	5000414	1,492	100	5000431	2,623	100	5000454	5000656	4,410	50
75	5000415	1,617	100	5000432	2,771	100	5000455	5000657	4,538	50
80	5000416	1,682	100	5000433	2,920	100	5000456	5000658	4,778	50
85	5000417	1,912	100	5000434	3,069	100	5000457	5000659	5,003	50
90	5000418	1,954	100	5000435	3,218	100	5000458	5000660	5,236	50
100	5000419	2,144	100	5000436	3,506	50	5000459	5000661	5,700	50
110				5000437	4,084	50	5000460	5000662	6,632	50
120				5000438	4,379	50	5000461	5000663	7,004	25
125				5000439	4,598	50	5000462	5000664	7,180	50
130				5000440	4,778	50	5000463	5000665	7,441	50
140				5000441	5,099	50	5000464	5000666	7,964	50
150				5000442	5,415	50	5000465	5000667	8,427	30
160							5000466	5000668	10,416	25
170							5001631	5001693	10,938	25
180							5001632	5001694	11,507	25
200							5001633	5001695	12,647	25
220							5001634	5001696	13,786	20
230							5001635	5001697	14,356	20
250							5001636	5001698	15,495	20

1. Specification : Din 933, IS 1364, ISO 4017.
2. Property Class : A4 - 80.
3. Material : AISI 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. Marking : UNBRAKO A4 - 70.



Hex Head Screws

Metric S.S. 316
Fully Threaded

DIA	M12				M14				M16		
Length	Part No. ISO	Part No. DIN	` Price/ 100 Pcs	Box Qty	Part No. ISO	Part No. DIN	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty
20	5000467	5000669	3,085	100							
25	5000468	5000670	3,388	100	5000493	5000695	5,662	50	5000508	6,835	25
30	5000469	5000671	3,686	100	5000494	5000696	6,091	50	5000509	7,359	25
35	5000470	5000672	3,999	100	5000495	5000697	6,544	25	5000510	7,857	25
40	5000471	5000673	4,297	100	5000496	5000698	6,905	25	5000511	8,388	25
45	5000472	5000674	4,511	50	5000497	5000699	7,399	25	5000512	9,030	25
50	5000473	5000675	4,907	50	5000498	5000700	7,825	25	5000513	9,579	25
55	5000474	5000676	5,171	50	5000499	5000701	8,388	25	5000514	10,230	25
60	5000475	5000677	5,517	50	5000500	5000702	8,683	25	5000515	10,881	25
65	5000476	5000678	5,840	50	5000501	5000703	9,312	25	5000516	11,439	25
70	5000477	5000679	6,175	50	5000502	5000704	9,670	25	5000517	12,090	25
75	5000478	5000680	6,510	50	5000503	5000705	10,152	25	5000518	12,741	25
80	5000479	5000681	6,845	50	5000504	5000706	10,635	25	5000519	13,392	25
85	5000480	5000682	7,180	25	5000505	5000707	11,571	25	5000520	13,950	25
90	5000481	5000683	7,515	25	5000506	5000708	12,162	25	5000521	14,601	25
100	5000482	5000684	8,184	25	5000507	5000709	12,513	25	5000522	15,810	15
110	5000483	5000685	9,314	25	5001640	5001702	14,795	25	5000523	19,104	15
120	5000484	5000686	10,159	25	5001641	5001703	15,875	25	5000524	20,280	15
125	5000485	5000687	10,521	25	5001642	5001704	16,415	25	5000525	20,909	15
130	5000486	5000688	10,983	25	5001643	5001705	16,955	25	5000526	21,590	15
140	5000487	5000689	11,665	25	5001644	5001706	18,035	25	5000527	22,587	15
150	5000488	5000690	12,356	25	5001645	5001707	19,115	25	5000528	24,254	15
160	5000489	5000691	13,819	20	5001646	5001708	20,195	25	5000529	25,837	15
170	5000490	5000692	19,163	20	5001647	5001709	21,275	25	5000530	27,920	15
180	5000491	5000693	21,314	20	5001648	5001710	22,355	25	5000531	29,676	15
200	5000492	5000694	24,290	25	5001649	5001711	24,515	25	5000532	32,823	10
220	5001637	5001699	26,506	25	5001650	5001712	26,675	20	5001653	35,854	10
230	5001638	5001700	27,549	20	5001651	5001713	27,755	20	5001654	37,258	10
250	5001639	5001701	29,634	20	5001652	5001714	29,915	20	5001655	40,174	10

1. **Specification** : Din 933, IS 1364, ISO 4017.
2. **Property Class** : A4 - 80.
3. **Material** : AISI 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. **Marking** : UNBRAKO A4 - 70.



Hex Head Screws

Metric S.S. 316
Fully Threaded

DIA	M18			M20			M22			
Length	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No. ISO	Part No. DIN	Price/ 100 Pcs	Box Qty
40	5000533	13,402	25	5000546	15,529	25				
45	5000534	14,425	25	5000547	16,693	25				
50	5000535	14,987	25	5000548	17,539	25	5000567	5000710	23,322	10
55	5000536	16,229	25	5000549	18,222	25	5000568	5000711	24,904	10
60	5000537	16,861	25	5000550	19,196	25	5000569	5000712	26,510	10
65	5000538	17,907	25	5000551	20,234	25	5000570	5000713	27,612	10
70	5000539	18,547	25	5000552	21,392	25	5000571	5000714	29,001	10
75	5000540	19,597	10	5000553	22,311	25	5000572	5000715	30,360	10
80	5000541	20,365	10	5000554	23,371	10	5000573	5000716	31,730	10
85	5000542	21,196	10	5000555	24,281	10	5000574	5000717	33,392	10
90	5000543	21,865	10	5000556	25,266	10	5000575	5000718	34,133	10
100	5000544	23,080	10	5000557	27,096	10	5000576	5000719	36,835	10
110	5000545	26,557	10	5000558	31,678	10	5000577	5000720	38,220	10
120	5001656	28,598	10	5000559	33,664	10	5000578	5000721	41,606	10
125	5001657	29,623	10	5000560	34,695	10	5000579	5000722	42,153	10
130	5001658	30,534	10	5000561	35,916	10	5000580	5000723	43,445	10
140	5001659	32,357	10	5000562	38,061	10	5000581	5000724	46,071	10
150	5001660	34,180	10	5000563	40,317	10	5000582	5000725	49,590	10
160	5001661	36,003	10	5000564	42,150	10	5000583	5000726	53,267	5
170	5001662	37,826	10	5000565	44,349	10	5000584	5000727	57,043	5
180	5001663	39,649	10	5000566	46,365	10	5000585	5000728	59,247	5
200	5001664	43,295	10	5001668	51,108	10	5000586	5000729	65,322	5
220	5001665	47,738	10	5001669	55,860	5	5001672	5001715	72,590	5
230	5001666	49,675	10	5001670	58,077	5	5001673	5001716	75,365	5
250	5001667	53,435	10	5001671	62,723	5	5001674	5001717	81,026	5

1. Specification : Din 933, IS 1364, ISO 4017.
2. Property Class : A4 - 80.
3. Material : AISI 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. Marking : UNBRAKO A4 - 70.



Hex Head Screws

Metric S.S. 316
Fully Threaded

DIA	M24			M27			M30		
Length	Part No.	` Price/ 100 Pcs	Box Qty	Part No.	` Price/ 100 Pcs	Box Qty	Part No. ISO	Part No. DIN	` Price/ 100 Pcs
50	5000587	29,546	10	5000607	42,897	5			
55	5000588	31,635	10	5000608	45,126	5			
60	5000589	32,568	10	5000609	46,953	5	5000627	62,149	5
65	5000590	34,075	10	5000610	49,800	5	5000628	65,595	5
70	5000591	35,868	10	5000611	52,040	5	5000629	68,123	5
75	5000592	39,415	10	5000612	54,280	5	5000630	70,650	5
80	5000593	40,104	10	5000613	56,755	5	5000631	73,178	5
85	5000594	42,000	10	5000614	59,260	5	5000632	75,705	5
90	5000595	44,601	10	5000615	61,261	5	5000633	78,690	5
100	5000596	48,528	10	5000616	65,644	5	5000634	84,808	5
110	5000597	49,397	5	5000617	71,769	5	5000635	87,774	5
120	5000598	52,044	10	5000618	76,373	5	5000636	93,183	5
125	5000599	54,088	5	5000619	79,844	5	5000637	96,112	5
130	5000600	54,381	5	5000620	80,976	5	5000638	98,591	5
140	5000601	58,268	5	5000621	84,153	5	5000639	103,999	5
150	5000602	61,909	5	5000622	86,001	5	5000640	109,408	3
160	5000603	67,220	5	5000623	90,386	5	5000641	114,816	3
170	5000604	70,133	5	5000624	94,770	5	5000642	120,225	3
180	5000605	74,024	5	5000625	99,154	5	5000643	125,633	3
200	5000606	80,517	5	5000626	107,923	5	5000644	136,450	5
220	5001675	89,144	5	5001681	117,756	4	5001687	149,333	3
230	5001676	92,563	5	5001682	122,088	4	5001688	155,032	3
250	5001677	99,403	5	5001683	130,865	4	5001689	166,432	3
270	5001678	106,243	4	5001684	139,529	3	5001690	177,831	3
280	5001679	109,663	4	5001685	143,975	3	5001691	183,531	2
300	5001680	116,502	4	5001686	152,638	3	5001692	194,930	2

1. Specification : Din 933, IS 1364, ISO 4017.
2. Property Class : A4 - 80.
3. Material : AISI 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged & fully threaded up to head.
7. Marking : UNBRAKO A4 - 70.



Hex Nuts

Metric S.S. 304/316

S.S. 304 A2 Hex Nut					
Size	Part No. ISO	Part No. DIN	Price/100 Pcs	Pcs. Per Box	Box Qty
M3	5001319		56	500	9000
M4	5001320		79	500	9000
M5	5001321		101	500	9000
M6	5001322		171	500	9000
M8	5001323		342	200	2400
M10	5001324	5001334	712	200	2400
M12	5001325	5001335	1,101	200	1600
M14	5001326	5001336	2,160	200	800
M16	5001327		2,293	100	800
M18	5001328		5,140	100	600
M20	5001329		5,078	50	300
M22	5001330	5001337	8,667	50	200
M24	5001331		9,336	50	200
M27	5001332		14,979	25	150
M30	5001333		24,058	25	150

S.S. 316 A4 Hex Nut					
Size	Part No. ISO	Part No. DIN	Price/100 Pcs	Pcs. Per Box	Box Qty
M3	5001338		112	500	9000
M4	5001339		143	500	9000
M5	5001340		177	500	9000
M6	5001341		251	500	9000
M8	5001342		507	200	2400
M10	5001343	5001352	1,042	200	2400
M12	5001344	5001353	1,653	200	1600
M14	5001345	5001354	3,265	200	800
M16	5001346		3,335	100	800
M18	5001347		7,230	100	600
M20	5001348		7,125	50	300
M24	5001349		13,207	50	200
M27	5001350		17,886	25	150
M30	5001351		28,516	25	150

1. Specification : Din 934, IS 1364, ISO 4032.
2. Property Class : A2 / A4.
3. Material : AISI 304 / 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged.
7. Marking : UNBRAKO A2 / UNBRAKO A4.



Plain Washer

Metric S.S. 304/316

S.S. 304 A2 Plain Washer				
Size	Part No.	Price/100 Pcs	Pcs./Box	Pcs./Carton
M6	5001355	104	1000	32000
M8	5001356	163	1000	14000
M10	5001357	310	500	7000
M12	5001358	475	500	5000
M14	5001359	783	200	3200
M16	5001360	960	100	3000
M18	5001361	1,290	100	1800
M20	5001362	1,459	100	1400
M22	5001363	1,717	50	800
M24	5001364	2,980	50	700
M27	5001365	3,888	50	700
M30	5001366	4,870	50	500
M33	5001367	6,841	25	200
M36	5001368	8,368	25	350

S.S. 316 A4 Plain Washer				
Size	Part No.	Price/100 Pcs	Pcs./Box	Pcs./Carton
M6	5001372	138	1000	32000
M8	5001373	245	1000	14000
M10	5001374	465	500	7000
M12	5001375	715	500	5000
M14	5001376	1,034	200	3200
M16	5001377	1,292	100	3000
M18	5001378	1,704	100	1800
M20	5001379	1,960	100	1400
M22	5001380	2,268	50	800
M24	5001381	3,739	50	700
M27	5001382	5,136	50	700
M30	5001383	6,431	50	500
M33	5001384	9,035	25	200
M36	5001385	11,051	25	350

1. **Specification** : Din 125, IS 2016, ISO 7089.
2. **Property Class** : A2 / A4.
3. **Material** : AISI 304 / 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged.
7. **Marking** : UNBRAKO A2 / UNBRAKO A4.



Spring Washer

Metric S.S. 304/316

FLAT SECTION A2 S.S. 304				
Size	Part No.	Price/ 100 Pcs	Pcs./Box	Pcs./Carton
M3	5001386	99	2000	140000
M4	5001387	111	2000	120000
M5	5001388	125	2000	60000
M6	5001389	94	1000	32000
M8	5001390	170	1000	14000
M10	5001391	268	500	7000
M12	5001392	405	500	5000
M14	5001393	637	200	3200
M16	5001394	810	100	3000
M18	5001395	1,031	100	1800
M20	5001396	1,472	100	1400
M22	5001397	1,760	50	800
M24	5001398	2,381	50	700
M27	5001399	2,608	50	700
M30	5001400	4,025	50	500
M33	5001401	5,724	25	200
M36	5001402	6,160	25	350

SQUARE SECTION A2 S.S. 304				
Size	Part No.	Price/ 100 Pcs	Pcs./Box	Pcs./Carton
M3	5001403	48	2000	160000
M4	5001404	56	2000	90000
M5	5001405	62	2000	48000
M6	5001406	45	1000	30000
M8	5001407	116	1000	24000
M10	5001408	210	500	12000
M12	5001409	242	500	7000
M14	5001410	399	200	4800
M16	5001411	534	100	3000
M18	5001412	693	100	2400
M20	5001413	1,107	100	1500
M22	5001414	1,428	50	1000
M24	5001415	1,629	50	1200
M27	5001416	1,854	50	700
M30	5001417	2,880	50	500
M33	5001418	3,150	25	400
M36	5001419	4,725	25	350

FLAT SECTION A4 S.S. 316				
Size	Part No.	Price/ 100 Pcs	Pcs./Box	Pcs./Carton
M3	5001420	161	2000	140000
M4	5001421	173	2000	120000
M5	5001422	229	2000	60000
M6	5001423	120	1000	32000
M8	5001424	216	1000	14000
M10	5001425	342	500	7000
M12	5001426	516	500	5000
M14	5001427	811	200	3200
M16	5001428	1,069	100	3000
M18	5001429	1,313	100	1800
M20	5001430	1,944	100	1400
M22	5001431	2,241	50	800
M24	5001432	3,144	50	700
M27	5001433	3,444	50	700
M30	5001434	5,316	50	500
M33	5001435	7,560	25	200
M36	5001436	8,135	25	350

SQUARE SECTION A4 S.S. 316				
Size	Part No.	Price/ 100 Pcs	Pcs./Box	Pcs./Carton
M3	5001437	104	2000	160000
M4	5001438	117	2000	90000
M5	5001439	155	2000	48000
M6	5001440	57	1000	30000
M8	5001441	148	1000	24000
M10	5001442	270	500	12000
M12	5001443	310	500	7000
M14	5001444	513	200	4800
M16	5001445	713	100	3000
M18	5001446	891	100	2400
M20	5001447	1,476	100	1500
M22	5001448	1,836	50	1000
M24	5001449	2,172	50	1200
M27	5001450	2,472	50	700
M30	5001451	3,840	50	500
M33	5001452	4,200	25	400
M36	5001453	6,299	25	350

1. Specification : Din 127 / 7980, IS 3063 / 6735.
2. Property Class : A2/A4.
3. Material : AISI 304 / 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged.



Threaded Rod

Metric S.S. 304/316

Threaded Rod A2 S.S. 304		
Size	Part No.	Price/Meter
6X1METER	5001454	147
8X1METER	5001455	228
10X1METER	5001456	348
12X1METER	5001457	538
16X1METER	5001458	936
20X1METER	5001459	1,404
24X1METER	5001460	1,958
27X1METER	5001461	2,554
30X1METER	5001462	2,724

Threaded Rod A4 S.S. 316		
Size	Part No.	Price/Meter
6X1METER	5001463	245
8X1METER	5001464	379
10X1METER	5001465	571
12X1METER	5001466	809
16X1METER	5001467	1,223
20X1METER	5001468	2,081
24X1METER	5001469	2,951
27X1METER	5001470	3,921

1. **Specification** : Din 975.
2. **Property Class** : A2 / A4.
3. **Material** : AISI 304 / 316.
4. The all above prices are Ex-Factory.
5. Excise duty and central sale tax extra as applicable.
6. All Cold Forged Fully Threaded.
7. Price per meter.
8. **Marking** : UNBRAKO A2 / UNBRAKO A4.

Petrochemical Fasteners

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Petrochemical Fasteners

Wide Range of Unbrako Studbolts and Nuts for Gas, Petroleum & Chemical Industries.

ISO 9001:2008 and ISO/TS 16949:2002 Quality Assured.

Product Capability Coatings

- Plain (Self Colour)
- Hot Dipped Galvanized
- Mechanically Plated
- Zinc Plated
- PTFE
- Xylan™
- Molybond™
- Cadmium
- Phosphate and Oil



Size Range

Length Range
Inch : upto 10 feet
Metric : upto 3 meters

Diameter Range
Inch : 3/8" to 4"
Metric : M10 to M100



STUDBOLTS (ASTM Spec)	Screw Fastening Material (generic)	Material	COMPATIBLE NUTS (ASTM Spec)
A193 Grade B7	Cr - Mo	4140 / 4142 / 4145	A194 Grade 2H
A193 Grade B7M	Cr - Mo	4140 / 4142 / 4145	A194 Grade 2HM
A193 Grade B8	18 Cr - 8 Ni	304	A194 Grade 8
A320 Grade B8M	18 Cr - 10 Ni - 2 Mo	316	A194 Grade 8M
A193 Grade B16	Cr MoV	EN 40CrMoV4	A194 Grade 4 or 7
A320 Grade L7	Cr - Mo	4140 / 4142 / 4145	A194 Grade 4 or 7
A320 Grade L7M	Cr - Mo	4140 / 4142 / 4145	A194 Grade 4M or 7M
A193 Grade B5	5 Cr	501	A194 Grade 3
A193 Grade B6	12 Cr	410	A194 Grade 6
A193 Grade B8T	18 Cr - 10 Ni - Ti	321	A194 Grade 8T

* Grey Highlighted items can be made-to-order. Not all material is stocked, however is available on request



Stud Bolt With 2 Heavy Hex Nuts

Metric

DIA	M12		M16		M18		M20		M22	
Length	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs
60	350001	3,116	350013	5,997						
70	350002	3,418	350014	6,496	350033	9,111				
80	350003	3,689	350015	6,994	350034	9,770	350055	12,507		
90	350004	3,954	350016	7,502	350035	10,427	350056	13,270	350078	17,513
100	350005	4,227	350017	8,075	350036	11,077	350057	14,117	350079	18,163
110	350006	4,492	350018	8,536	350037	11,690	350058	14,880	350080	18,586
120	350007	4,764	350019	9,074	350038	12,348	350059	15,660	350081	19,584
130	350008	5,074	350020	9,572	350039	12,969	350060	16,461	350082	20,545
140	350009	5,459	350021	10,081	350040	13,619	350061	17,270	350083	21,505
150	350010	5,732	350022	10,578	350041	14,194	350062	18,048	350084	22,504
160	350011	5,997	350023	11,190	350042	14,843	350063	18,851	350085	23,471
170	350012	6,307	350024	11,690	350043	15,470	350064	19,660	350086	24,432
180			350025	12,226	350044	16,121	350065	20,129	350087	25,436
190			350026	12,734	350045	16,734	350066	20,930	350088	26,321
200			350027	13,270	350046	17,384	350067	21,739	350089	27,312
210			350028	13,770	350047	18,004	350068	22,511	350090	28,280
220			350029	14,269	350048	18,623	350069	23,319	350091	29,279
230			350030	14,805	350049	19,273	350070	24,083	350092	30,245
240			350031	15,312	350050	19,887	350071	24,893	350093	31,245
250			350032	15,811	350051	20,545	350072	25,700	350094	32,205
260					350052	21,164	350073	26,472	350095	33,210
270					350053	21,777	350074	27,273	350096	34,170
280					350054	22,427	350075	28,091	350097	35,177
290							350076	28,855	350098	36,136
300							350077	29,663	350099	37,128
320									350100	39,094

- 1. Studbolt Specification :** Generally conforming to ASTM A193 / Grade : B7
- 2. Nut Specification :** Generally conforming to ASTM A194 / Grade : 2H
- 3. Note :** Prices for ASTM Grade B7M.L7, L7M, B16, B8, Yellow Zinc Cr6+, Xylan® (PTFE) available on request.
: Small quantities less than one standard carton will be subject to surcharge by your unbrako distributor.
: Check availability in stock at the time of order.
- 4. Plating :** No guarantee can given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Stud Bolt with 2 Heavy Hex Nuts

Metric

DIA	M24		M27		M30		M33		M36	
Lenght	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs
90	350101	19,402								
100	350102	20,855								
110	350103	22,389	350126	30,783						
120	350104	23,161	350127	32,590	350151	41,172				
130	350105	24,318	350128	34,094	350152	42,707	350180	54,140		
140	350106	25,474	350129	35,554	350153	44,635	350181	56,408	350208	71,078
150	350107	26,623	350130	37,051	350154	46,564	350182	58,828	350209	73,799
160	350108	27,782	350131	38,508	350155	48,484	350183	61,096	350210	76,522
170	350109	28,937	350132	40,016	350156	50,019	350184	63,365	350211	79,243
180	350110	30,049	350133	41,557	350157	51,947	350185	65,785	350212	81,966
190	350111	31,206	350134	43,101	350158	53,875	350186	67,599	350213	84,235
200	350112	32,318	350135	44,635	350159	55,417	350187	70,018	350214	86,956
210	350113	34,011	350136	46,177	350160	57,338	350188	72,287	350215	89,678
220	350114	35,177	350137	47,713	350161	59,258	350189	74,706	350216	92,415
230	350115	36,324	350138	48,870	350162	61,187	350190	77,277	350217	95,198
240	350116	37,474	350139	50,374	350163	63,114	350191	80,151	350218	97,391
250	350117	38,631	350140	51,871	350164	66,193	350192	82,268	350219	100,112
260	350118	39,788	350141	53,338	350165	68,113	350193	84,688	350220	102,835
270	350119	40,945	350142	54,836	350166	70,035	350194	86,200	350221	105,406
280	350120	42,094	350143	56,302	350167	71,933	350195	88,469	350222	108,129
290	350121	43,252	350144	57,754	350168	73,891	350196	90,737	350223	112,060
300	350122	44,288	350145	59,258	350169	75,426	350197	92,702	350224	114,631
320	350123	46,677	350146	62,223	350170	79,274	350198	97,239	350225	120,074
340	350124	48,983	350147	65,187	350171	82,737	350199	101,927	350226	125,520
360	350125	51,296	350148	68,160	350172	86,200	350200	106,162	350227	130,964
380			350149	71,115	350173	90,048	350201	110,849	350228	136,106
400			350150	74,079	350174	93,520	350202	115,084	350229	141,247
420					350175	96,975	350203	119,773	350230	146,691
440					350176	100,824	350204	124,008	350231	151,682
460					350177	104,287	350205	128,544	350232	157,277
480					350178	108,136	350206	132,779	350233	162,571
500					350179	111,607	350207	137,618	350234	167,863

- 1. Studbolt Specification :** Generally conforming to ASTM A193 / Grade : B7
- 2. Nut Specification :** Generally conforming to ASTM A194 / Grade : 2H
- 3. Note :** Prices for ASTM Grade B7M.L7, L7M, B16, B8, Yellow Zinc Cr6+, Xylan® (PTFE) available on request.
: Small quantities less than one standard carton will be subject to surcharge by your unbrako distributor.
: Check availability in stock at the time of order.
- 4. Plating :** No guarantee can given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Stud Bolt with 2 Heavy Hex Nuts

Metric

DIA	M39		M42		M45		M48		M52		M56	
Length	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs
150	350235	91,190										
160	350236	94,215	350261	116,295								
170	350237	97,543	350262	120,074	350286	145,618						
180	350238	100,415	350263	124,008	350287	149,724	350310	179,811				
190	350239	103,439	350264	127,788	350288	154,086	350311	184,801	350333	218,222		
200	350240	106,918	350265	131,720	350289	158,336	350312	189,792	350334	223,817		
210	350241	109,944	350266	135,501	350290	162,873	350313	194,933	350335	229,414	350355	266,464
220	350242	113,119	350267	139,447	350291	166,880	350314	199,773	350336	235,916	350356	272,968
230	350243	116,295	350268	143,153	350292	171,840	350315	204,914	350337	241,361	350357	279,772
240	350244	119,319	350269	147,008	350293	176,029	350316	209,905	350338	247,561	350358	286,124
250	350245	122,797	350270	150,480	350294	180,264	350317	214,895	350339	253,459	350359	292,779
260	350246	125,821	350271	154,253	350295	184,801	350318	220,038	350340	259,508	350360	299,432
270	350247	128,997	350272	158,185	350296	189,337	350319	225,028	350341	265,254	350361	305,632
280	350248	132,022	350273	162,131	350297	194,329	350320	230,018	350342	271,456	350362	312,287
290	350249	138,677	350274	165,905	350298	198,866	350321	235,086	350343	277,352	350363	319,092
300	350250	141,701	350275	169,693	350299	204,158	350322	240,000	350344	283,401	350364	325,443
320	350251	146,238	350276	177,406	350300	213,080	350323	249,829	350345	295,499	350365	338,147
340	350252	152,287	350277	184,801	350301	219,432	350324	260,415	350346	306,237	350366	351,453
360	350253	158,185	350278	190,548	350302	228,052	350325	270,396	350347	318,488	350367	364,460
380	350254	164,839	350279	196,295	350303	236,824	350326	280,377	350348	330,282	350368	377,617
400	350255	170,888	350280	203,554	350304	242,721	350327	290,359	350349	342,229	350369	390,774
420	350256	176,937	350281	210,964	350305	250,434	350328	300,490	350350	346,766	350370	403,477
440	350257	183,289	350282	217,920	350306	258,147	350329	310,471	350351	358,411	350371	416,483
460	350258	189,337	350283	225,331	350307	265,859	350330	320,604	350352	369,905	350372	429,790
480	350259	195,538	350284	232,619	350308	273,723	350331	330,586	350353	381,397	350373	442,797
500	350260	202,646	350285	240,099	350309	281,285	350332	340,566	350354	393,194	350374	455,802

- 1. Studbolt Specification :** Generally conforming to ASTM A193 / Grade : B7
- 2. Nut Specification :** Generally conforming to ASTM A194 / Grade : 2H
- 3. Note :** Prices for ASTM Grade B7M.L7, L7M, B16, B8, Yellow Zinc Cr6+, Xylan® (PTFE) available on request.
: Small quantities less than one standard carton will be subject to surcharge by your unbrako distributor.
: Check availability in stock at the time of order.
- 4. Plating :** No guarantee can given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Stud Bolt with 2 Heavy Hex Nuts

Inch

DIA	1/2		5/8		3/4		7/8		1	
Length	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs
2.1/4	550309	4,160								
2.3/4	550310	4,462	550322	7,621						
3	550311	4,773	550323	8,091	550338	12,484				
3.1/2	550312	5,074	550324	8,552	550339	13,209	550353	19,250		
4	550313	5,384	550325	9,014	550340	13,951	550354	20,264	550368	27,660
4.1/2	550314	5,695	550326	9,474	550341	14,684	550355	21,263	550369	28,961
4.3/4	550315	6,004	550327	9,936	550342	15,395	550356	22,268	550370	30,275
5	550316	6,314	550328	10,397	550343	16,137	550357	23,281	550371	31,607
5.1/2	550317	6,616	550329	10,866	550344	16,863	550358	24,273	550372	32,922
6	550318	6,926	550330	11,320	550345	17,602	550359	25,255	550373	34,208
6 1/2	550319	7,546	550331	12,446	550346	19,070	550360	27,221	550374	36,824
7	550320	7,857	550332	12,907	550347	19,569	550361	28,280	550375	38,140
7 1/2	550321	8,159	550333	13,408	550348	20,295	550362	29,036	550376	39,652
8			550334	14,368	550349	21,685	550363	31,002	550377	41,618
8 1/2			550335	14,873	550350	22,382	550364	32,015	550378	43,145
9			550336	15,334	550351	23,116	550365	32,968	550379	44,689
9-1/2			550337	15,842	550352	23,804	550366	33,952	550380	45,445
10							550367	35,917	550381	48,167
10-1/2									550382	49,330
11									550383	50,873
11-1/2									550384	52,022

- 1. Studbolt Specification :** Generally conforming to ASTM A193 / Grade : B7
- 2. Nut Specification :** Generally conforming to ASTM A194 / Grade : 2H
- 3. Note :** Prices for ASTM Grade B7M.L7, L7M, B16, B8, Yellow Zinc Cr6+, Xylan® (PTFE) available on request.
 - : Small quantities less than one standard carton will be subject to surcharge by your unbrako distributor.
 - : Check availability in stock at the time of order.
- 4. Plating :** No guarantee can given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Stud Bolt with 2 Heavy Hex Nuts

Inch

DIA	1-1/8		1-1/4		1-1/2		1-5/8	
Length	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs
4-1/2	550385	39,305						
4-3/4	550386	40,831	550406	52,779				
5	550387	42,768	550407	54,730				
5-1/2	550388	44,340	550408	56,651	550429	90,062		
6	550389	45,821	550409	58,979	550430	93,006	550458	111,153
6-1/2	550390	49,301	550410	63,213	550431	99,190	550459	118,336
7	550391	50,873	550411	65,135	550432	102,275	550460	121,890
7-1/2	550392	52,385	550412	67,070	550433	105,860	550461	125,520
8	550393	55,879	550413	71,304	550434	111,909	550462	132,627
8-1/2	550394	57,422	550414	73,634	550435	114,934	550463	136,106
9	550395	58,979	550415	75,161	550436	117,958	550464	140,038
9-1/2	550396	60,900	550416	77,474	550437	121,361	550465	143,667
10	550397	64,000	550417	81,723	550438	127,561	550466	150,472
10-1/2	550398	65,890	550418	83,645	550439	130,586	550467	154,253
11	550399	67,433	550419	85,912	550440	132,764	550468	157,580
11-1/2	550400	68,960	550420	87,878	550441	134,593	550469	161,209
12	550401	72,454	550421	91,947	550442	140,642	550470	168,922
12-1/2	550402	73,973	550422	94,064	550443	143,667	550471	172,552
13	550403	75,759	550423	96,166	550444	146,691	550472	176,635
13-1/2	550404	79,228	550424	100,415	550445	152,891	550473	183,439
14	550405	80,922	550425	102,533	550446	156,144	550474	187,523
14-1/2			550426	104,650	550447	159,168	550475	191,152
15			550427	106,767	550448	162,192	550476	194,933
15-1/2			550428	111,001	550449	168,242	550477	201,738
16					550450	171,190	550478	205,520
16-1/2					550451	174,215	550479	208,997
17					550452	177,088	550480	212,627
17-1/2					550453	183,289	550481	220,038
18					550454	186,616	550482	223,817
18-1/2					550455	189,792	550483	227,144
19					550456	195,841	550484	234,706
19-1/2					550457	198,866	550485	238,336
20							550486	241,965
20-1/2							550487	245,594
21							550488	252,552
22							550489	260,112

- 1. Studbolt Specification :** Generally conforming to ASTM A193 / Grade : B7
- 2. Nut Specification :** Generally conforming to ASTM A194 / Grade : 2H
- 3. Note :** Prices for ASTM Grade B7M.L7, L7M, B16, B8, Yellow Zinc Cr6+, Xylan® (PTFE) available on request.
: Small quantities less than one standard carton will be subject to surcharge by your unbrako distributor.
: Check availability in stock at the time of order.
- 4. Plating :** No guarantee can given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Stud Bolt with 2 Heavy Hex Nuts

Inch

DIA	1-3/4		1-7/8		2		2-1/4	
Length	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs	Part No.	` Price/ 100 Pcs
6-1/2	550490	143,667	550521	168,317				
7	550491	148,204	550522	172,930				
7-1/2	550492	152,287	550523	178,132				
8	550493	160,755	550524	187,976				
8-1/2	550494	164,839	550525	192,741	550554	228,355		
9	550495	169,375	550526	197,732	550555	233,648	550585	312,438
9-1/2	550496	173,610	550527	202,646	550556	239,393	550586	319,696
10	550497	182,382	550528	212,249	550557	250,737	550587	334,214
10-1/2	550498	186,616	550529	217,164	550558	256,484	550588	341,776
11	550499	190,926	550530	221,701	550559	261,776	550589	349,035
11-1/2	550500	195,093	550531	226,843	550560	267,674	550590	356,295
12	550501	203,848	550532	236,521	550561	278,942	550591	370,963
12-1/2	550502	207,940	550533	241,361	550562	284,688	550592	378,222
13	550503	212,324	550534	248,847	550563	290,359	550593	385,632
13-1/2	550504	220,491	550535	256,332	550564	301,246	550594	400,301
14	550505	224,658	550536	261,428	550565	306,993	550595	407,939
14-1/2	550506	228,838	550537	266,162	550566	312,438	550596	414,969
15	550507	233,119	550538	270,698	550567	318,184	550597	422,229
15-1/2	550508	241,549	550539	281,586	550568	329,678	550598	434,025
16	550509	245,776	550540	286,275	550569	335,122	550599	441,133
16-1/2	550510	250,025	550541	291,115	550570	340,566	550600	448,544
17	550511	254,517	550542	295,954	550571	346,313	550601	455,499
17-1/2	550512	262,419	550543	305,783	550572	357,277	550602	470,320
18	550513	265,904	550544	310,775	550573	362,948	550603	477,428
18-1/2	550514	270,926	550545	315,765	550574	368,544	550604	484,535
19	550515	280,332	550546	325,443	550575	379,582	550605	499,053
19-1/2	550516	284,460	550547	330,434	550576	385,329	550606	506,101
20	550517	288,816	550548	335,727	550577	390,320	550607	513,117
20-1/2	550518	292,855	550549	340,566	550578	396,218	550608	520,376
21	550519	301,397	550550	350,094	550579	407,560	550609	535,046
22	550520	309,896	550551	360,226	550580	419,204	550610	549,260
23			550552	375,046	550581	435,688	550611	565,140
24			550553	384,724	550582	447,182	550612	585,480
25					550583	464,271	550613	606,576
26					550584	474,857	550614	621,094
27							550615	642,720

- 1. Studbolt Specification :** Generally conforming to ASTM A193 / Grade : B7
- 2. Nut Specification :** Generally conforming to ASTM A194 / Grade : 2H
- 3. Note :** Prices for ASTM Grade B7M.L7, L7M, B16, B8, Yellow Zinc Cr6+, Xylan® (PTFE) available on request.
: Small quantities less than one standard carton will be subject to surcharge by your unbrako distributor.
: Check availability in stock at the time of order.
- 4. Plating :** No guarantee can given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Heavy Hex Nuts (ASTM A194 GR2H)

Metric

Size	Part No.	Price/100 Pcs	Box Quantity
M12	551700	1,382	200
M16	270001	1,673	150
M18	270002	2,495	100
M20	270003	3,236	75
M22	270004	3,962	50
M24	270005	5,549	50
M27	270006	8,313	25
M30	270007	11,712	25
M33	270008	15,074	20
M36	270009	20,642	10
M39	270010	26,333	10
M42	270011	34,233	8
M45	270012	41,999	5
M48	270013	51,242	5
M52	270014	63,844	4
M56	270015	74,329	4

Inch

Size	Part No.	Price/100 Pcs	Box Quantity
1/2"	270016	1,200	200
9/16"	270017	1,484	175
5/8"	270018	2,171	125
3/4"	270019	3,537	75
7/8"	270020	5,431	50
1"	270021	7,767	30
1-1/8"	270022	10,823	25
1-1/4"	270023	14,991	15
1-3/8"	270024	19,448	15
1-1/2"	270025	24,990	10
1-5/8"	270026	30,913	8
1-3/4"	270027	38,928	6
1-7/8"	270028	45,994	6
2"	270029	94,090	5

- Nut Specification** : Generally conforming to ASTM A194 / Grade : 2H
- Note** : Prices for ASTM Grade B7M, L7, L7M, B16, B8, Yellow Zinc Cr6+, Xylan® (PTFE) available on request.
: Small quantities less than one standard carton will be subject to surcharge by your unbrako distributor.
: Check availability in stock at the time of order.
- Plating** : No guarantee can given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

Prestigious Petrochemical Clientele



Separate Petrochemical Catalogue available on request





Hex Head Bolts/Screws

Metric

Dia	M4			M5			M6			M8		
Length	International Part No.	` Price/ 100 Pcs	Box Quantity	International Part No.	` Price/ 100 Pcs	Box Quantity	International Part No.	` Price/ 100 Pcs	Box Quantity	International Part No.	` Price/ 100 Pcs	Box Quantity
10	616724	167	500	616745	174	500	616767	140	500			
12	616725	167	500	616746	174	500	616768	151	500	616815	289	500
16	616727	195	500	616748	205	500	616770	175	500	616817	327	200
18	616728	195	500	616749	205	500	616771	187	500	616818	343	200
20	616729	213	500	616750	223	500	616772	198	500	616819	361	200
22	624809	231	500	624810	242	500	616773	210	500	616820	379	200
25	613042	231	500	613047	242	500	616774	227	500	616821	408	200
30	613044	260	500	613049	272	500	613054	275 •	500	616823	456	200
35	613045	277	500	613050	309	500	613055	312 •	200	613070	534 •	200
40	613046	311	500	613051	361	500	613056	350 •	200	613071	596 •	200
45				613052	401	500	613057	386 •	200	613072	652 •	200
50				613053	438	500	613058	420 •	200	613073	711 •	200
55							613059	458	200	613074	758	100
60							613060	491	200	613075	818	100
65							624811	533	100	613076	876	100
70							624812	574	100	613077	935	100
75							624813	615	100	613078	990	100
80							624814	656	100	613079	1,049	100
90										624815	1,179	100
100										624816	1,346	50

1. **Specifications** : Generally conforming to IS:1364, ISO:4014, 4017, DIN 931/933.

2. **Threads** : ISO Metric 6g as per IS per IS:4218.

3. **Material Mechanical Properties** : Property Class 8.8 as per IS:1367.

4. **Note** : Grey shaded sizes are fully threaded :

Prices for fully threaded screws beyond shaded sizes will cost 10% extra.

• These sizes are available in full thread with 10% extra cost

5. **Marking** : DFL 8.8

6. **Plating** : No guarantee can given for DFL products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

8% will be Charged Extra For Zinc Cr3+Plating





Hex Head Bolts/Screws

Metric

Dia	M10			M12			(M14)			M16		
Length	International Part No.	' Price/ 100 Pcs	Box Quantity	International Part No.	' Price/ 100 Pcs	Box Quantity	International Part No.	' Price/ 100 Pcs	Box Quantity	International Part No.	' Price/ 100 Pcs	Box Quantity
16	616844	587	200									
18	616845	618	200									
20	616846	624	200	616876	949	100						
22	616847	652	200	-		-						
25	616848	696	200	616878	1,044	100	616907	1,557	50	616935	2,332	25
30	616850	771	100	616880	1,109	100	616909	1,701	50	616937	2,261	25
35	616851	843	100	616881	1,214	100	616910	1,848	25	616938	2,455	25
40	613080	1,029•	100	616882	1,320	100	616911	1,996	25	616939	2,651	25
45	613081	1,117	100	613093	1,576•	50	616912	2,143	25	616940	2,855	25
50	613082	1,209•	100	613094	1,708•	50	613107	2,410	25	616941	3,027	25
55	613083	1,287•	100	613095	1,840	50	613108	2,589	25	613122	3,380•	25
60	613084	1,379•	100	613096	1,970•	50	613109	2,766	25	613123	3,615•	25
65	613085	1,470	50	613097	2,066	50	613110	2,904	25	613124	3,850•	25
70	613086	1,561	50	613098	2,196	50	613111	3,086	25	613125	4,086•	25
75	613087	1,652	50	613099	2,325	50	613112	3,262	25	613126	4,321•	25
80	613088	1,743	50	613100	2,457	50	613113	3,439	25	613127	4,556•	25
90	613090	1,925	50	613102	2,715	25	613115	3,733	25	613129	5,026•	25
100	613092	2,107	50	613104	2,969	25	613117	4,086	25	613131	5,466•	15
110				613105	3,204	25	613118	4,622	25	613132	5,937	15
120				613106	3,669	25	613119	5,020	25	613133	6,408	15
130				624823	3,948	25	613120	5,326	25	613134	7,040	15
140				624824	4,262	25	613121	5,662	25	613135	7,530	15
150				624825	4,543	25	624835	5,999	25	613136	8,019	15
160				624826	4,847	20	624836	6,399	25	613137	8,576	15
180				624828	5,452	20	624838	7,542	25	624841	9,563	15
200				624830	6,340	25				624843	11,009	10
220				624831	6,974	25				624844	12,040	10
240				624832	7,608	20				624845	13,070	10
260				624833	8,547	20				624846	14,100	10
280				624834	9,204	18				624847	15,131	10
300										624848	16,161	10

- Specifications :** Generally conforming to IS:1364, ISO:4014, 4017, DIN 931/933.
- Threads :** ISO Metric 6g as per IS per IS:4218.
- Material Mechanical Properties :** Property Class 8.8 as per IS:1367.
- Note :** Sizes in brackets are non-preferred standard. Grey shaded sizes are fully threaded :
Prices for fully threaded screws beyond shaded sizes will cost 10% extra.
• These sizes are available in full thread with 10% extra cost
- Marking :** DFL 8.8
- Plating :** No guarantee can given for DFL products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
8% will be Charged Extra For Zinc Cr3+Plating





Hex Head Bolts/Screws

Metric

(M18)				M20			(M22)		
Dia	International Part No.	` Price/ 100 Pcs	Box Quantity	International Part No.	` Price/ 100 Pcs	Box Quantity	International Part No.	` Price/ 100 Pcs	Box Quantity
40	616965	3,527	25	616996	4,556	25			
45	616966	3,762	25	616997	4,850	25			
50	616967	3,997	25	616998	5,173	25	617029	6,437	10
55	616968	4,262	25	616999	5,466	25	617030	6,819	10
60	624849	4,790	25	617000	5,761	25	617031	7,172	10
65	613138	5,026	25	613154	6,437 •	10	617032	7,555	10
70	613139	5,320	25	613155	6,789 •	10	613172	8,259	10
75	613140	5,613	10	613156	7,142 •	10	613173	8,700	10
80	613141	5,879	10	613157	7,495 •	10	613174	9,141	10
90	613143	6,466	10	613159	8,202 •	10	613176	10,022	10
100	613145	7,055	10	613161	8,906 •	10	613178	10,875	10
110	613146	7,642	10	613162	9,612 •	10	613179	11,952	10
120	613147	8,230	10	613163	10,316 •	10	613180	12,848	10
130	613148	9,060	10	613164	11,471	10	613181	13,445	10
140	613149	9,673	10	613165	12,182	10	613182	14,342	10
150	613150	10,284	10	613166	12,814	10	613183	15,425	10
160	613151	10,810	10	613167	13,488	10	613184	16,332	5
180	613153	12,748	10	613169	15,902	10	613186	18,146	5
200	624851	14,100	10	613171	17,513	10	613188	20,362	5
220				624854	19,122	5	613189	23,821	5
240				624855	20,731	5	624860	25,988	5
260				624857	22,342	6	624861	28,154	5
280				624858	23,951	6	624862	30,319	5
300				624859	25,560	6			

1. **Specifications** : Generally conforming to IS:1364, ISO:4014, 4017, DIN 931/933.

2. **Threads** : ISO Metric 6g as per IS per IS:4218.

3. **Material Mechanical Properties** : Property Class 8.8 as per IS:1367.

4. **Note** : Sizes in brackets are non-preferred standard. Grey shaded sizes are fully threaded :

Prices for fully threaded screws beyond shaded sizes will cost 10% extra.

• These sizes are available in full thread with 10% extra cost

5. **Marking** : DFL 8.8

6. **Plating** : No guarantee can given for DFL products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

8% will be Charged Extra For Zinc Cr3+Plating





Hex Head Bolts/Screws

Metric

Dia	M24			(M27)*			M30*		
Length	International Part No.	` Price/ 100 Pcs	Box Quantity	International Part No.	` Price/ 100 Pcs	Box Quantity	International Part No.	` Price/ 100 Pcs	Box Quantity
50	617060	8,594	10	617088	12,965	5	617112	17,056	5
55	617061	9,066	10	617089	13,667	5	617113	17,848	5
60	617062	9,536	10	617090	14,305	5	617114	18,673	5
65	617063	10,007	10	617091	14,958	5	617115	19,464	5
70	617064	10,477	10	617092	15,612	5	617116	20,289	5
75	617065	10,735	10	617093	16,266	5	617117	21,114	5
80	613190	12,093 •	10	617094	16,919	5	617118	21,905	5
90	613192	13,204 •	10	617096	18,261	5	617120	23,556	5
100	613194	14,315 •	10	613209	20,736	5	613225	26,376	5
110	613195	15,426	5	613210	22,353	5	613226	28,302	5
120	613196	16,506	10	613211	23,900	5	613227	30,262	5
130	613197	17,276	5	613212	24,760	5	613228	31,637	5
140	613198	18,356	5	613213	26,307	5	613229	33,529	5
150	613199	19,436	5	613214	27,854	5	613230	35,420	3
160	613200	20,516	5	613215	29,747	5	613231	37,312	3
180	613202	22,675	5	613217	32,498	5	613233	41,267	3
200	613204	25,914	5	613219	35,420	5	613235	45,049	5
220	613205	28,785	5	613220	38,859	4	613236	48,832	3
240	613206	30,935	5	613221	41,954	4	613237	52,614	3
260	624869	33,086	4	613222	45,049	3	613238	56,398	3
280	624870	35,236	4	624873	48,488	3	613239	60,181	2
300	624871	37,387	4	624874	51,927	3	613240	63,963	2

1. **Specifications** : Generally conforming to IS:1364, ISO:4014, 4017, DIN 931/933.

2. **Threads** : ISO Metric 6g as per IS per IS:4218.

3. **Material Mechanical Properties** : Property Class 8.8 as per IS:1367.

4. **Note** : Sizes in brackets are non-preferred standard. Grey shaded sizes are fully threaded :

Prices for fully threaded screws beyond shaded sizes will cost 10% extra.

• These sizes are available in full thread with 10% extra cost

* **Long Delivery Items** - Subject to extended deliveries (3 to 4 months)

Users are advised to plan their requirements in advance.

5. **Marking** : DFL 8.8

6. **Plating** : No guarantee can given for DFL products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

8% will be Charged Extra For Zinc Cr3+Plating





Hex Head Bolts/Screws

Metric

(M33)*				M36*			M42*		
Dia	International Part No.	` Price/ 100 Pcs	Box Quantity	International Part No.	` Price/ 100 Pcs	Box Quantity	International Part No.	` Price/ 100 Pcs	Box Quantity
75	617141	26,651	5						
80	617142	27,717	5	617166	34,044	5			
90	617144	29,781	5	617168	36,452	3	617215	53,302	3
100	617146	31,637	5	617170	39,203	3	617217	56,741	2
110	613242	35,076	4	613257	42,642	4	617218	59,835	2
120	613243	37,484	4	613258	45,393	3	617219	63,275	2
130	613244	39,547	4	613259	47,800	3	613286	68,089	10
140	613245	41,954	4	613260	50,550	3	613287	71,873	10
150	613246	44,361	4	613261	53,302	3	613288	75,655	9
160	613247	46,425	4	613262	56,053	3	613289	79,438	9
180	613249	50,896	3	613264	61,555	2	613291	86,660	8
200	613251	55,367	3	613266	67,058	2	613293	94,225	7
220	613252	60,181	3	613267	72,560	2	613294	101,790	7
240	613253	64,650	2	613268	78,061	9	613295	109,355	6
260	613254	69,465	2	613269	83,564	8	613296	116,922	6
280	613255	73,935	2	613270	89,066	8	613297	121,047	6
300	613256	78,749	2	613271	94,568	7	613298	125,174	6

1. **Specifications** : Generally conforming to IS:1364, ISO:4014, 4017, DIN 931/933.

2. **Threads** : ISO Metric 6g as per IS per IS:4218.

3. **Material Mechanical Properties** : Property Class 8.8 as per IS:1367.

4. **Note** : Sizes in brackets are non-preferred standard. Grey shaded sizes are fully threaded :

Prices for fully threaded screws beyond shaded sizes will cost 10% extra.

• These sizes are available in full thread with 10% extra cost

* **Long Delivery Items** - Subject to extended deliveries (3 to 4 months)

Users are advised to plan their requirements in advance.

5. **Marking** : DFL 8.8

6. **Plating** : No guarantee can given for DFL products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

8% will be Charged Extra For Zinc Cr3+Plating





Hex Nuts

Metric

Diameter	International Part No.	Price/ 100 Pcs	Box Quantity	Carton Quantity
M4 x 0.70	623196	30	1000	8000
M5 x 0.80	623197	42	2000	16000
M6 x 1	623198	78	500	9000
M8 x 1.25	623200	152	200	2400
M10 x 1.25	787925	341	200	2400
M10 x 1.5	623201	324	200	2400
M12 x 1.75	623202	478	200	1600
(M12) x 1.5	787926	501	200	2400
(M14) x 1.5	624890	784	100	800
M14 x 2	623203	747	100	800
M16 x 1.5	787927	1,020	100	800
M16 x 2	623204	971	100	800
(M18) x 1.5	624891	1,708	100	600
M18 x 2.5	623205	1,626	100	600
(M20) x 1.5	624892	2,227	50	300
M20 x 2.5	623206	2,121	50	300
(M22) x 2.5	623207	2,601	50	200
M24 x 3	623208	3,624	50	200
(M27) x 3	623209	6,207	25	150
M30 x 3.5	623210	8,646	25	150
(M33) x 3.5	623211	11,721	10	80
M36 x 4	623212	16,014	10	80
M42 x 4.5	623214	26,505	10	40

1. **Specifications** : For Nuts with Metric Threads IS:1364, ISO:4032.

2. **Threads** : ISO Metric 6H as per IS:4218, ISO:261, ISO:965.

3. **Material and Mechanical Properties of nuts** : Property Class 8 as tabulated as per IS:1367, ISO:898 Part-II.

4. **Note** : Sizes in brackets are non-preferred non-standard sizes.

5. **Marking** : M4 Marking D8 & all other Sizes Marking DFL 8.

6. **Plating** : No guarantee can given for DFL products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

8% will be Charged Extra For Zinc Cr3+Plating





Plain Washers

Metric

Diameter	International Part No.	Price/ 100 Pcs	Box Quantity
M4	787853	21	500
M5	787854	27	500
M6	787855	45	500
M8	787856	71	200
M10	628850	131	200
M12	561034	235	100
M14	787857	324	100
M16	561035	410	100
M18	561051	535	100
M20	561030	627	100
M22	561033	666	100
M24	561036	1,174	100
M27	561031	1,539	50
M30	561032	1,949	50
M33	561037	2,740	50
M36	561038	3,346	50
M42	561040	6,656	25

- Specifications :** For washer with metric IS : 2016
- Plating :** No guarantee can given for DFL products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
8% will be Charged Extra For Zinc Cr3+Plating

Terms & Conditions

Delivery:

All offers for delivery from stocks are subject to goods remaining unsold at the time of receipt of order. For forward delivery, dates are given without any guarantee and no responsibility can be accepted by the company for delay in delivery or failure to deliver due to circumstances beyond the company's control.

Infringement of patent and trade mark:

When products are forged to customer's drawings and / or specifications, the responsibility to ensure that these do not result in infringement of any patent or trademark will lie entirely with customer concerned and the customer will be solely responsible for the consequence in case of any such infringement.

Order confirmation:

The company accepts no responsibility for orders booked by the company's salesman or representatives, till it is confirmed in writing by the company.

Acceptance and return:

Wrong dispatches should be notified to the company within 15days from the date of receipt of goods and the Company's consent should be obtained in writing before return of such goods.

Force Majeure:

The company shall not be responsible for failure or delay in delivering the goods or any part thereof (or any consequential damages) due to acts of God, enemies of the Government of India, wars, revolution, embargo, riots, civil or political disturbances, strikes, lock-outs, stoppages of labour.

Disclaimer

All information contained in this catalogue has been prepared to assist users in their requirements for fasteners. The information is based on International Fastener Standards. All such source material and information beyond the control of Deepak Fasteners Ltd (DFL) is subject to change.

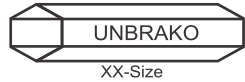
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Comparison of Different Strength Grades

SAE	B.S.	IS 1.S.D. DIN	ULTIMATE TENSILE STRENGTH			HARDNESS		
			Tonnes/In ² (Kgf/mm ²)	Newtons/mm ² Min. (Kgf/mm ²)	Pounds/In ² Min. (Kgf/mm ²)	BHN	HRb	HRc
		4.6		400 (40.8)		114 209	67 95	
GRADE 1					60,000 (42.3)	(121) (241)	70 100	
		4.8		420 (42.8)		124 209	71 95	
		5.6		500 (51.0)		147 209	79 95	
GRADE 2					74,000 (52.1)	(154) (241)	80 100	
		5.8		520 (53.0)		152 209	82 95	
	P		35/45 (55.2/71.0)			152 207		
		6.8		600 (61.2)		181 238	89 99	
	R		45/55 (71.0/86.8)			201 285		
	S		50/60 (78.9/94.7)			223 310		(20/33)
		8.8		800≤ M16 830> M16 (81.6) (84.6)		219/285 242/319		20/30 23/34
GRADE 5					1,20,000 (84.6)	(266) (318)		25/34
	T		55/65 (86.8/102.6)			248 335		(24/36)
	U		60/70 (94.7/110.5)			269 331		(28/36)
	V		65/75 (102.6/118.4)			293 370		(31/40)
GRADE 8					1,50,00 (105.7)	(311) (362)		33/39
		10.9		1,040 (106.0)		295 362		31/39
	W		70/80 (110.5/126.3)			311 375		(33/41)
	X		75/85 (118.4/134.2)			341 410		(37/44)
		12.9		1,220 (124.4)		353 412		38/44
	Y		80/90 (126.3/142.0)			363 429		(39/46)
	Z		100 Min (157.8)			444		(47)

Note : 1. : 1Kgf=9.81 Newtons 1Kgf/mm²=1421.7 Psi 2. : Values in brackets are approximate conversions

How Identify Unbrako Products

PRODUCTS	METRIC SERIES	PRODUCTS	INCH SERIES
Socket Head Cap Screw M4 to M5		Socket Head Cap Screw 1/8" to 3/16"	
Socket Head Cap Screw M6 to M24		Socket Head Cap Screw 3/16" to 3/8"	
Socket Head Cap Screw M27 to M42		Socket Head Cap Screw 1/2" to 1"	
Socket Counter Sunk Cap Screw M5 to M24			
Socket Set Screw 1.5 A/F		Socket Set Screw 1.8" to 3/4" (1/8 to 3/4")	
Hexagon Wrenches 1.5 A/F to 3 A/F		Hexagon Wrenches 1/16" A/F to 1/8"	
Hexagon Wrenches 4 A/F to 32 A/F		Hexagon Wrenches 5/32" A/F to 3/4" A/F	
Hexagon Head Bolts M4 to M42	 	Hexagon Head Bolts All Sizes	  
Hexagon Nut M12 to M42	 	Hexagon Head Bolts All Sizes	  
High Strength Structural Bolts M16 To M30	 	Hexagon Nuts All Sizes	  
High Strength Structural Bolts M16 To M30	 		
Washers For High Strength Structural Bolts			
Special / Auto OEM Replacement Market Bolts & Nuts		Special / Auto OEM Replacement Market	
Hex Head Bolt/Screws M16 to M36 SS-304/316	   		
Stud With Two NUTs M12 to M56	 	Stud with Two Nuts 1/2 to 2-1/4	 

According to stamping area on the Product Unbrako/U-130 Stamp will be used

NOTE:- "E" Marking on SHCS, is the internal coding it can be changed with any alphabetic



Specialized Coating

A Product's lifespan and performance is not only measured by it's quality, grade and and specification, but also by it's surface finish. Choosing the correct coating for the application will prevent corrosion, enhance aesthetic value and add strength to the fastener, extending it's life and performance.

Unbrako excels in a variety of coatings done in-house, designed specifically to provide the required protection in such harsh environment. Technical information of a few of these coatings is set out below:

MAIN COATINGS		ELECTROLYTIC COATINGS ZINC CADMIUM	HOT-DIP GALVANISATION	SHERARDIZATION	METALLIC COATING "GEOMET" ®	PTFE
Type of material		All metals	Steels	Steels	All metals	All metals
Process temperature		Bath t° < 90°C Baking temp. < 250°C	460°C - 550°C	350°C - 400 °C	20°C Process 300°C Baking	300°C Baking
Maximum service temperature without damage of coating		Zinc : 250°C Max Cadmium : 235°C Max chromating Zinc & Cadmium : 70°C max	300°C max	500°C max	280°C max	280°C max
Usual thickness		Cadmium : 3 µm to 20 µm	50 µm - 70 µm	20 µm - 60 µm	5 µm - 15 µm	10 µm - 20 µm
Average Friction Coefficient	without lubrication	0.16 - 0.22	Seizure risks when bolt stress is >40% YS	≈ 0.29	0.15 - 0.25	0.15 - 0.25
	with lubrication	0.08 - 0.12	0.13 - 0.16	0.08 - 0.12	0.08 - 0.12	0.08 - 0.12
Salt spray test (red corrosion)		Zinc 5 to 7 µm : 48 h min Zinc chromating 5 to 7 µm : 96 h min Reinforced chromating : 200 h min	70µm : 400 h min	Test not praticable without chromating With chromating 20µm : 400 h min With chromating 35µm : 700 h min	chromating 5-7 µm : 400h min 8-10 µm: 1000h min	1000h min
Hydrogen embrittlement		Descaling with inhibitor imperative baking for 100 Mpa steels	Descaling with inhibitor No risk process	No risk process	No risk process	No risk process
Aspect		Bright	Matt or glossy	Matt gray	Matt aluminum	Matt Blue

NOTE:- Specialist assistance is recommended when selecting these coatings.

INTRODUCING THE FIRST EVER Fastener Smartphone App

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Products are manufactured to meet these standards.

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