

 **PRICE
LIST**

DFL-20, w.e.f. 1st April, 2026

Page	Product
13	Socket Screws
33	Durlok
37	Hex Bolt, Nut & Washer
53	Construction
67	Petrochemical

Largest Industrial Fasteners Manufacturer in India

NOTE

Plating: All the products, unless otherwise ordered, are supplied in black thermal finish with a coat of rust preventive oil. No guarantee can be give for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

Packing: All products are supplied in standard packing as described in respective price tables. For sizes M6 (1/4") and above - 5% extra packing charges will be applicable if the order quantity is less than one carton.

Pricing: The prices mentioned in this pricelist are in INR - Indian Rupee (₹) The price, specification and other particulars contained in this pricelist are subject to change with notice.

GST extra as applicable.

Contents	Thread	Page
About Unbrako		4
Limited Warranty and Exclusive Remedy		6
Product, Thread & Mechanical Terminology		7
Quick Product Selection Guide		8
Thread Size Comparison		9
Torque Chart		10
SOCKET RANGE		
Socket Head Cap Screws	Metric	13
Socket Head Cap Screws	Inch (BSW)	18
Countersunk Socket Cap Screws (CSK)	Metric	21
Socket Low Head Cap Screws (LHCS)	Metric	22
Socket Head Shoulder Screws	Metric	23
Socket Set Screws (Knurled Cup Point)	Metric / Inch	24
Button Head Socket Screws	Metric	27
Flange Button Head Socket Screws	Metric	28
Hexagon Wrench Sets	Metric / Inch	29
Ballpoint Hexagon Wrench Sets	Metric / Inch	30
Dowel Pins	Metric	31
DURLOK®		
Durluk® Screws		35
Durluk® Nuts		36
Durluk® Washers		36
HEX FASTENERS		
10.9 Hex Head Bolts/Screws	Metric	39
Gr.8 Hex Head Bolts/Screws	Inch (UNC)	45
Hex Nut - ISO 4032-Class 8/10	Metric	49
Hex Nut Inch UNC Grade 8	Inch	50
Lock Nuts	Metric	50
Nylock Nut (Nylon Ring) DIN 985 - Grade 8 /10	Metric	51
Nylock Nut (Nylon Ring) ISO 7040 - Grade 8 /10	Metric	51
All Metal Prevailing Torque Nut DIN 980M & DIN 980V	Metric	51
Square Section Spring Washer - DIN 7980	Metric	52
Flat Section Spring Washer - DIN 127 B	Metric	52
Hardened Washer	Metric	52
CONSTRUCTION FASTENERS CE Approved		
IS 3757 High Strength Structural Bolts	Metric	55
IS 6623 High Strength Structural Nuts	Metric	56
IS 6649 Structural Washer	Metric	56
High Tensile Track Shoe Bolts & Squire Nuts	Metric	57
Flange Track Shoe Bolt	Metric	58
Segment Bolt	Metric	58
High Tensile Track Shoe Bolts & Squire Nuts	Inch	59
High Tensile Plow Bolts & Hex Nuts	Inch	60
Drop In Anchors	Metric	61
Drop In Anchors Setting Tools	Metric	61
Hexagon Weld Nut	Metric	61
Direct Tension Indicator - BS EN 14399-9	Metric	62
Rebar Coupler	Metric	62
Twist-off Type Tension Control Bolt BS EN 14399-10	Metric	64
Nut - BS EN 14399-10 (HRD) k-class K1	Metric	66
Washer - BS EN 14399-6	Metric	66
PETROCHEMICAL FASTENERS		
Studbolt	Metric	69
Studbolt	Inch	72
Heavy Hex Nut	Metric/Inch	75
Terms & Conditions		76
Comparison of Different Strength Grades		77
How to identify UNBRAKO products		78
Specialized Coatings		79

About Unbrako



West Coast Distribution Center

Founded in 1911, Unbrako is the world leader in advancing the technology of bolted joints and meeting the needs of industry for stronger and better performing fasteners. Products such as the famous Unbrako® socket head cap screw and Durlok® fasteners are the solutions of choice for engineering applications across the world & is used by industries such as the automotive, power generation, petrochemical, heavy machinery, construction and military sectors.

With an extensive international network in 35 countries, Unbrako provides a complete range of industrial fastening hardware including bolts, screws, SEM's, nuts, studbolts, self-locking fasteners, thread forming fasteners, among others.

Unbrako products are primarily used in performance critical applications and incorporate unique design and work-manship features that meet or exceed recognized international standards, resulting in higher tensile strength, improved fatigue resistance, ease of installation, reduced total cost of maintenance and extended life cycle. .

With advanced manufacturing, engineering and logistics facilities, ISO/TS and CE certification, Unbrako is equipped to provide technical support and full-service package. Unbrako's focus is on building long - term relationships with its customers. Full-service includes engineering and design support, procurement and purchasing services, localized warehousing and transport, a variety of packaging options and choice of delivery frequencies – to provide the right answer to any customer need.



Certified Laboratory

Our Laboratory is NABL ISO/IEC 17025:2005 certified, which facilitates in maintaining consistently high quality. The fasteners go through strict quality checks at every stage of the process. Our inspection facilities are equipped with state-of-the-art equipment for testing of both physical and metallurgical aspects of fasteners for the most demanding applications:

- Tensile & Hardness testing
- Salt spray testing
- Digital profile analysis
- X-ray analysis of coating thickness
- Chemical composition analysis (Spectrometer)
- Impact Testing
- Dynamic fatigue testing
- Torque tension and friction testing
- Eddy current Testing
- Metallurgical Microscope with Image Analyzer

ISO 9001 **IATF 16949** **ISO 14001** **ISO 45001**



15048
14399



15048
14399



ISO/IEC
17025



International Certifications

Our production facilities are ISO 9001, IATF 16949, ISO 14001 and ISO 45001:2018 Certified. Our fasteners meet or exceed International Standards like DIN, ISO, ASTM, IS, BS, BIS etc. We have expertise not only in standard products, but also in made-to-order customized products.



Specialized Coatings

We excel in a variety of coatings, which are done in-house. These are designed to provide required protection in different environments, e.g. Hot Dip Galvanizing, Mechanical Galvanizing, Electroplating (Zinc & Copper Cadmium), PTFE Coating, Zinc-Al Flake Coating (Geomet, Delta Protekt) and Unbrako Wiscoat Coating.



Unbrako Wiscoat
Corrosion Protection System



GEOMET®



Limited Warranty and Exclusive Remedy



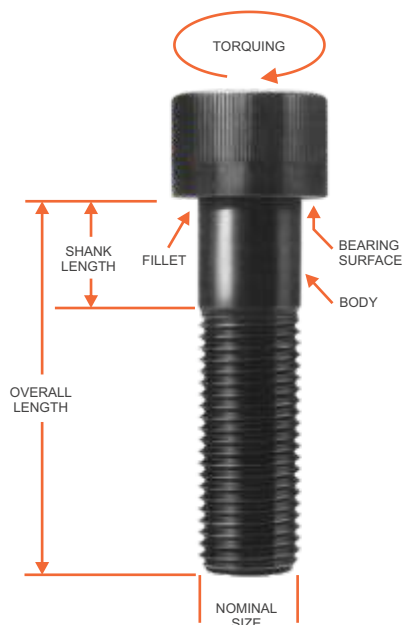
Deepak Fasteners Ltd., through its Unbrako Division and associated companies, warrants that these products conform to industry standards specified herein and will be free from defects in materials and workmanship. This warranty is expressly given in lieu of any and all other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, and in lieu of any other obligation on the part of Deepak Fasteners.

Deepak Fasteners will at its option, repair or replace free of charge (excluding all shipping and handling costs) any products which have not been subject to misuse, abuse, or modification and which in its sole determination were not manufactured in compliance with the warranty given above.

Deepak Fasteners makes no representations or warranties, express or implied, that anything imported, made, used, sold, or otherwise provided under any sale agreement is or will be free from infringement of patents / other proprietary rights of any third persons. Nothing in this application, or any agreement, shall be construed as giving rise to any obligation on Deepak Fasteners part to indemnify or hold harmless any Buyer from any liability relating to Buyer's purchase, use, or re-sale of Deepak Fasteners product, or the incorporation of Deepak Fasteners product into another manufactured product.

The remedy provided herein shall be the exclusive remedy for any breach of warranty or any claim arising in any way out of the manufacture, sale or use of these products. In no event shall Deepak Fasteners be liable for consequential, incidental or any other damages of any nature whatsoever except those specifically provided herein for any breach of warranty or any claim arising in any way of the manufacture, sale or use of these products. No other person is authorized by Deepak Fasteners to give any other warranty, written or oral, pertaining to the products.

Product Terminology



BODY

The unthreaded portion of the shank of a threaded fastener.

FILLET

Concave junction between the head and shank.

HEAD

A headed fastener has one end enlarged into a preformed shape.

OVERALL LENGTH

The Overall length of a headed fastener is the distance from intersection between the bearing surface & the extreme end of the fastener, measured parallel to the axis of the fastener. The length of a headless fastener is the distance from one extreme end to the other end, also measured parallel to the fastener.

NOMINAL SIZE

It is the basic major diameter of the thread.

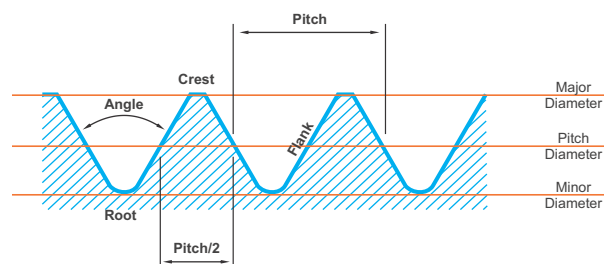
SHANK

The Shank Length is minimum length of the unthreaded cylindrical portion of the shank.

TORQUING

It is the act of tightening a fastener by turning either the bolt or nut.

Thread Terminology



CREST

The outermost tip of a male thread as seen in a thread profile.

FLANK

The thread surface connecting the crest with the root.

BEARING SURFACE

The supporting or locating surface of a fastener with respect to the part it fastens or mates.

MAJOR DIAMETER

The largest diameter of a thread.

MINOR DIAMETER

The smallest diameter of a thread.

PITCH

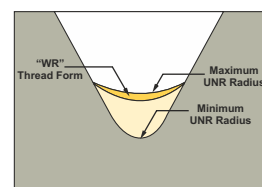
The distance from a point on a screw thread to the corresponding point on the next screw thread.

PITCH DIAMETER

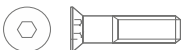
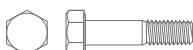
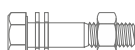
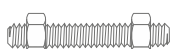
Is the diameter of a theoretical cylinder that passes through the threads at a position that the width of thread ridge and thread groove are equal.

ROOT

The Root of the thread is the bottom of the groove between two flank.



Quick Product Selection Guide

PRODUCT		Tensile Strength		Size Range				Equivalent Standards					
		Property Class		Diameter		Length							
		Psi. Min.	N/mm ²	Metric	Inch*	Metric	Inch*	IS	ISO	DIN	BS	ANSI	JIS
Socket Head Cap Screws		190000	1,300 (12.9)	M2 to M42	1/8 to 1"	6 mm to 300 mm	3/16" to 10"	2269	4762	912	4168 2470	B18.3.1M	B1176
Socket Countersunk Head Screws		160000	1,050 (012.9)	M3 to M24	3/16" to 5/16	6 mm to 60 mm	3/8" to 1 1/4"	6761	10642	7991	4168 2470	B18.3.5M	–
Socket Low Head Cap Screws		–	010.9	M4 to M20	–	10 mm to 100 mm	–	As Per Unbrako Specification					
Socket Set Screws Knurled Cup		Hardness HRc 45 Minimum		M3 to M20	1/8" to 3/4"	3 mm to 85 mm	3/16" to 3"	6094	4026 4027 4028 4029	913 914 915 916	4168 2470	B18.3.6 M	B1177
Socket Button Head Cap Screws		–	1,050 (012.9)	M3 to M12	–	6 mm to 50 mm	–	–	7380	9427	4168	B18.3.4M	–
Hex Wrenches		Hardness HRc 47 Minimum		1.5 mm to 32 mm	1/16" to 3/4"	–	–	3082	2936	911	4168 2470	B18.3.2M	B4648
Durlok Bolt			1220 N/mm ² min. (12.9)	M6 to M20	–	12 mm to 100 mm	–	As Per Unbrako Specification					
Hex Head Bolts		Grade R,S V	1,040 (10.9)	M4 to M48	1/4" to 2"	10 mm to 300 mm	1/2" to 12"	1364	4014 4017	931 933	1083 1768	B18.2.1	B1180
Hex Nuts		Nut (mm) Grade 8/10	Nut (in) Grade 5/8	M6 to M72	1/4" to 1-1/2"	–	–	1364	4032	934	1083 1768	B18.2.4.1M B18.2.2	B1181
Lock Nuts (Thin Nut)		Nut (mm) Grade 04 / 05		M10 to M24				1364 P4	4035				
Nylock Nut		Nut Grade 8/10	–	M6 to M24				7002	7040	982 985			
Spring Washer Flat & Square Type				M3 to M39				3063 6735		127B 7980	4464 --		
High Strength Structural Bolts, Nuts & Washers		Bolts 8.8S/10.9S Nuts 8S/10S	–	M16 to M30	–	40 mm to 300 mm	–	3757 6623 6649	7412 4775 7415	6914 6915 6916	4395	B18.2.3.7M B18.2.4.6M	B1186
Tension Control Structural Bolt		Grade 10.9 HRc		M12 to M36							BS EN 14399-10		
Stud with 2 Heavy Hex Nuts		Stud B7 Nut 2H	–	M12 to M56	1/2" to 2-1/4"	60 mm to 500 mm	2 1/4" to 27"					ASTM A193 A194	

*Thread type in any of the following inch series: BSW, BA, UNC & UNF.

**Thread type in NPTF

Note: Unbrako standard meet, or in many instances, exceed the requirements of the standards listed.

Special Products available on request (MOQ basis)

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

Thread Size Comparison

METRIC PRODUCTS				UNIFIED INCH PRODUCTS				B.S. INCH PRODUCTS					
SIZE	THREAD PITCH		Major Dia	SIZE	T.P.I.		Major Dia	SIZE	T.P.I.		Major Dia	T.P.I.	Major Dia
	COARSE	FINE			BSW	BSF			BA	inch			
	PITCH (mm)	PITCH (mm)	mm		UNC	UNF	inch		inch	BA	inch		
M3	0.50	-	3.00	#5	40	44	0.125	1/8	40	-	0.125		
				#6	32	40	0.138	5 BA 4 BA				43.1 38.5	0.126 0.142
M4	0.70	-	4.00	#8	32	36	0.164	3 BA	24	32	0.187	34.8	0.161
M5	0.80	-	5.00	#10	24	32	0.190	3/16					
								2 BA 1 BA				31.3 28.2	0.185 0.209
M6	1.0	-	6.00	1/4	20	28	0.250	1/4 0 BA	20	26	0.250	25.4	0.236
M8	1.25	1.00	8.00	5/16	18	24	0.313	5/16	18	22	0.313		
M10	1.50	1.25	10.00	3/8	16	24	0.375	3/8	16	20	0.375		
								7/16	14	18	0.438		
M12	1.75	1.25	12.00	1/2	13	20	0.500	1/2	12	16	0.500		
(M14)	2.00	1.50	14.00										
M16	2.00	1.50	16.00	5/8	11	18	0.625	5/8	11	14	0.625		
(M18)	2.50	1.50	18.00										
M20	2.50	1.50	20.00	3/4	10	16	0.750	3/4	10	12	0.750		
(M22)	2.50	1.50	22.00	7/8	9	14	0.875	7/8	9	11	0.875		
M24	3.00	2.00	24.00	1	8	12	1.000	1	8	10	1.000		
				1-1/8	7	12	1.125	1-1/8	7	9	1.125		
(M27)	3.00	2.00	27.00										
M30	3.50	2.00	30.00	1-1/4	7	12	1.250	1-1/4	7	9	1.250		
(M33)	3.50	2.00	33.00	1-1/2	6	12	1.500	1-1/2	6	8	1.500		
M36	4.00	3.00	36.00										
(M39)	4.00	3.00	39.00										
M42	4.50	3.00	42.00										
M45	4.50	3.00	45.00										
M48	5.00	3.00	48.00										
M52	5.00	3.00	52.00										
M56	5.50	3.00	56.00										

Note : Sizes in brackets are non-preferred standards

Plating : No guarantee can be given for UNBRAKO products which have been plated by the users and / outside plates, who may not have considered hydrogen embrittlement problem.

Torque Values (Coarse Pitch - Metric)

RECOMMENDED TORQUE VALUES FOR 10.9 & 12.9 GRADE METRIC ALLOY STEEL FASTENERS FOR BLACK OXIDE/NON COATED

Grade	10.9		12.9	
Nominal Diameter (mm)	Induced Load KN	Seating Torque NM	Induced Load KN	Seating Torque NM
M3 x 0.5	3.1	1.9	3.7	2
M3.5 x 0.6	4.2	3	4.9	3
M4 x 0.7	5.5	4	6.4	5
M5 x 0.8	8.8	9	10.3	10
M6 x 1	12.5	15	14.6	18
M8 x 1.25	22.8	36	26.6	43
M10 x 1.5	36.1	72	42.2	84
M12 x 1.75	52.5	126	61.3	147
M14 x 2	71.6	200	83.7	234
M16 x 2	97.7	313	114.2	365
M18	119.5	430	139.7	503
M20 x 2.5	152.5	610	178.2	713
M22	188.6	830	220.4	970
M24 x 3	219.7	1055	256.8	1233
M27	285.7	1543	333.9	1803
M30 x 3.5	349.2	2095	408.1	2449
M33	432.0	2851	504.9	3332
M36 x 4	508.6	3662	594.4	4279
M39	607.6	4739	710.0	5538
M42	697.9	5862	815.6	6851
M45	813.1	7318	950.2	8552
M48	917.1	8805	1071.8	10290
M52	1094.4	11382	1279.0	13301

NOTE:

The recommended seating torque listed in the above table serve as guidelines only.

Even when using the recommended seating torques, the induced loads obtained may vary upto $\pm 25\%$ due to lubrication, surface finish and thread condition.

The values of Torque have been derived from the empirical formula.

Torque (T) = $K \times D \times P$ for reference only should be calculated with actual conditions of assembly Where,

K=Nut factor or friction factor for calculation taken as 0.20 for Blk/Non coated fasteners.

P=Induced Load or Clamp Load or Pre-Tension which is 75% of Proof Load.

D=Nominal Diameter of the Bolt.

Socket Screws

Page Contents

13	Socket Head Cap Screws - Metric
18	Socket Head Cap Screws - Inch
21	Countersunk Socket Head Cap Screws (CSK)
22	Socket Low Head Cap Screws (LHCS)
23	Socket Head Shoulder Screws
24	Socket Set Screws (Knurled Cup Point)
27	Button Head Socket Screws
28	Flange Button Head Socket Screws
29	Hexagon Wrench Sets
30	Dowel Pins



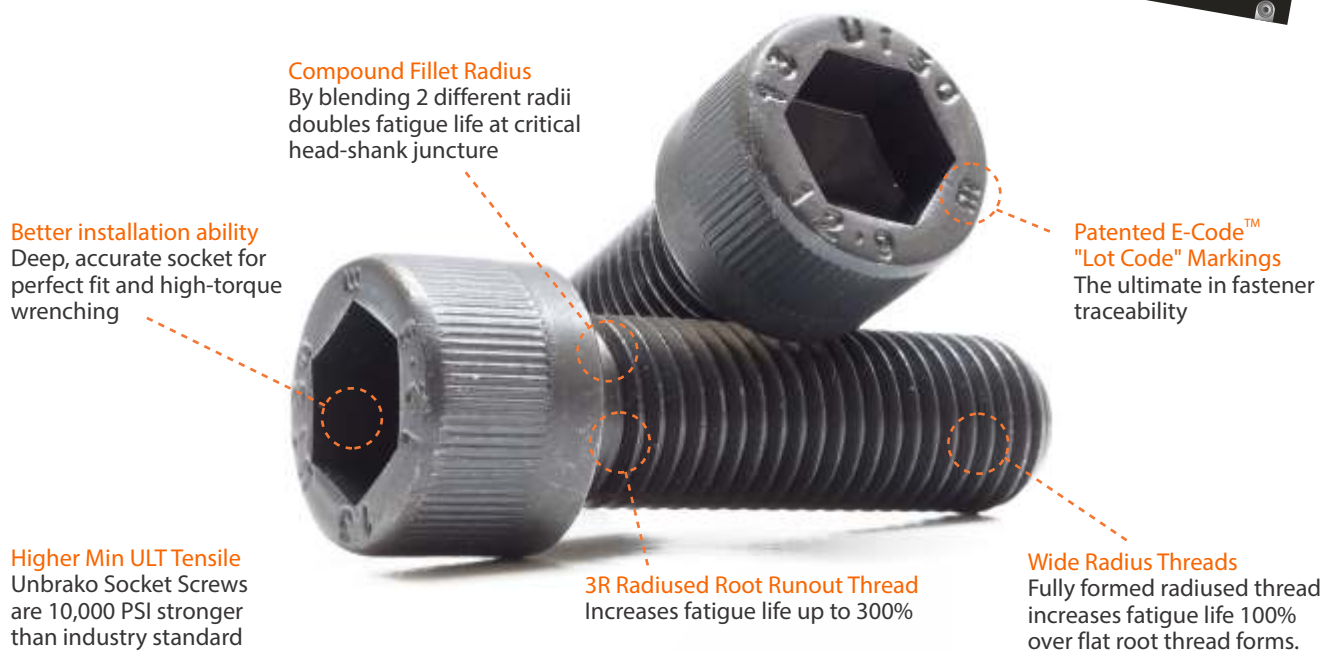
Unbrako Socket Range

Unbrako is the world's leading socket screw brand with more than 100 years experience of supplying to high-end industries, such as the automotive, aerospace, petrochemical, heavy machinery and military sectors.

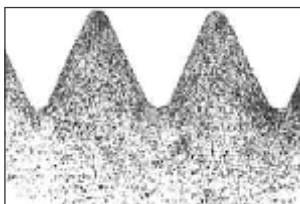
Unbrako socket screws meet/exceed industry standards. Unbrako is top-grade solution for those industrial end-users who demand maximum precision, product lifespan, reliability and premium technical services.

Superior performance ultimately translates into cost savings: reduced number of parts, reduced weight and size of equipment, less equipment failure and downtime, longer product life and lower total cost.

Advantages



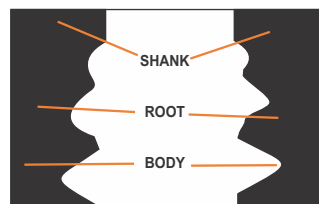
Contour flow & root radius



Contour-following flow lines provide extra shear strength in threads, resist stripping and provide high fatigue resistance.

Extra large root radius doubles fatigue life compared to flat root thread forms.

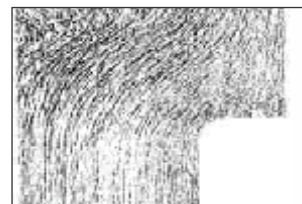
Controlled runout root radius



Unbrako's controlled runout root radius provides a smooth form that distributes stress and increases fatigue life of thread runout up to 300% for certain sizes.

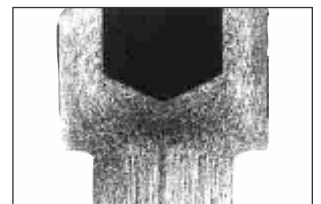
The sharp angle at the root of conventional threads results in high stress concentration and crack initiation points.

Forged heads



Controlled head forging, uniform grain flow and unbroken flow lines, make heads stronger, minimizes failure in vital fillet area, and improves fatigue strength.

Accurate socket depth



Accurate socket depth allows more wrench engagement than other screw, permitting tightening without cracking or reaming the socket while providing ample metal in the crucial fillet area for maximum head strength.



Socket Head Cap Screw - Metric

M2 Wrench Key Size 1.5mm				M2.5 Wrench Key Size 2mm			M3 Wrench Key Size 2.5mm			
Diameter	Length	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
	3	104151	1,827	500						
	4	104152	819	500						
	5	104154	833	500	104161	790	500	106218	1,290	500
	6	104155	850	500	104162	819	500	103002	1,110	500
	8	104157	862	500	104163	842	500	122097	812	500
	10	104159	879	500	104164	862	500	113583	678	500
	12	106216	906	500	104166	951	500	120870	678	500
	16							103003	676	500
	20							113623	676	500
	25							103010	742	500
	30							103013	868	500
	35							106219	1,086	500
	40							406027	1,242	500
	45							700034	1,375	500

M4 Wrench Key Size 3mm				M5 Wrench Key Size 4mm			M6 Wrench Key Size 5mm			
Diameter	Length	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
	6	106223	1,049	500	106224	898	500			
	8	113810	741	500	122122	765	500	103042	1,049	200
	10	113839	590	500	122243	423	500	122111	694	200
	12	121077	531	500	121094	423	500	120872	659	200
	16	103014	554	500	103024	462	500	103044	625	200
	20	125753	594	500	113970	496	200	119790	696	200
	25	125381	652	500	121096	531	200	119937	780	200
	30	103018	773	500	103029	645	200	122121	881	200
	35	103019	847	200	115292	709	200	121090	966	200
	40	103021	934	200	103030	773	200	121075	1,049	200
	45	103022	1,067	200	103031	837	200	122087	1,136	200
	50	103023	1,224	200	103035	847	200	112624	1,238	200
	55	400835	1,967	200	103038	1,449	200	113128	1,348	200
	60	180011	2,511	200	103040	1,857	200	122088	2,493	200
	65	551167	3,252	200	106225	2,013	200	103047	2,585	200
	70				106228	2,166	200	103048	2,697	200
	75				700072	2,638	200	103049	2,949	200
	80				404774	2,786	200	103051	3,196	200
	90				181525	3,076	200	103052	3,432	200
	100				551170	4,147	200	103053	3,875	200
	110							103054	5,132	100
	120							103055	5,721	100
	130							183896	6,172	100
	140							700097	6,625	100
	150							551172	7,044	100

*Note: "X" marking on SHCS is the internal coding for product traceability, it can be changed with any alphanumeric.
All Products of sizes smaller than M5 or 1/4" have no head marking due to space constraint

Grey highlighted items are full threaded



Socket Head Cap Screw - Metric

Diameter	M8 Wrench Key Size 6mm			M10 Wrench Key Size 8mm			M12 Wrench Key Size 10mm			M14 Wrench Key Size 12mm		
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	103056	1,350	200									
12	114972	1,026	200	106237	1,553	200						
16	103058	854	200	103080	1,436	200	106247	4,224	100			
20	122086	920	200	113163	1,313	200	112607	3,767	100			
25	119351	943	200	115060	1,454	100	122250	3,278	100	400528	8,515	50
30	119383	1,097	200	122114	1,559	100	122251	3,145	100	400529	8,515	50
35	122113	1,130	200	113257	1,683	100	125530	3,296	100	400530	7,162	50
40	113143	1,294	200	100845	1,895	100	114996	3,232	100	400531	7,329	50
45	121076	1,450	200	121088	2,080	100	115075	3,440	50	400532	7,457	50
50	121068	1,505	200	125660	2,263	100	112360	3,360	50	120863	7,635	50
55	103063	1,654	100	103087	2,446	100	122255	3,712	50	400533	7,724	50
60	121070	1,776	100	122217	2,636	100	122260	3,923	50	112000	8,197	50
65	103064	1,896	100	103088	2,816	100	122261	4,130	50	400534	8,308	50
70	103066	2,029	100	125786	2,999	50	103098	4,352	50	400535	8,965	50
75	103069	2,139	100	103090	3,193	50	103099	4,546	50	400536	9,466	50
80	103070	3,219	100	103091	4,635	50	103100	5,443	50	400537	9,928	20
90	103073	3,716	100	103094	5,276	50	103103	6,149	50	400538	10,151	20
100	103075	4,415	100	103095	6,205	50	122142	7,118	50	400539	12,577	25
110	103076	5,507	100	103096	7,318	50	125791	8,537	25	400540	13,673	25
120	103077	6,428	50	103097	7,407	50	103104	9,828	25	400508	14,775	25
130	106230	7,899	50	106240	10,190	50	103107	11,937	25	180223	17,113	25
140	106231	8,484	50	106241	11,392	50	103108	13,295	25	180103	18,315	25
150	106232	9,168	50	106242	12,655	50	103110	14,669	25	180225	19,522	25
160	106233	10,419	100	106243	17,347	50	107456	24,169	25	180226	21,161	10
170	700125	11,248	100	210001	19,127	50	181063	26,584	20	210002	23,110	10
180	106234	11,857	100	106244	19,514	25	107458	26,584	20	180227	24,471	10
200	106235	13,102	100	106245	20,859	25	107459	28,765	20	551663	27,619	10
220				400517	26,798	25	400570	33,182	20	791320	30,382	10
230							183555	41,557	20	791321	31,608	10
240							400571	49,817	20	791322	32,990	10
260				809653	27,528	20	400572	56,928	20	791323	35,445	10
280				811605	29,775	20	400573	59,643	20	791324	38,208	10

Grey highlighted items are full threaded

1. Specifications : Generally conforming to IS 2269, DIN 912, ISO 4762.
2. Threads : ISO Metric (Coarse Series) 5g6g as per IS 4218, ISO 261, ISO 965.
3. Material : Unbrako high grade alloy steel.
4. Mechanical Properties : Property Class 12.9 as per IS 1367, ISO 898 Part I.
5. Note : Upto 80mm Diameter can be manufactured against request.
6. For sizes beyond those listed, prices available on request.
7. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
8. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

*Note: "X" marking on SHCS is the internal coding for product traceability, it can be changed with any alphanumeric.

All Products of sizes smaller than M5 or 1/4" have no head marking due to space constraint

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Socket Head Cap Screw - Metric

DIA	M16 Wrench Key Size 14mm			M18 Wrench Key Size 14mm			M20 Wrench Key Size 17mm			M22 Wrench Key Size 17mm		
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
20	210003	8,298	50									
25	106248	8,237	50				210006	20,246	25			
30	103112	8,237	50	183894	22,272	20	107465	20,180	10			
35	103113	6,760	50	400541	22,561	20	107466	20,445	10			
40	125751	6,933	50	400542	19,745	20	103130	17,391	10	180408	26,303	10
45	103115	7,222	50	400606	19,883	25	103131	18,002	10	180409	27,829	10
50	112474	7,197	25	100844	20,051	10	103132	17,258	10	180181	23,301	10
55	103117	7,541	25	400543	20,179	10	103136	17,763	10	180182	26,189	10
60	112594	7,741	25	400544	20,329	10	103137	17,492	10	180183	26,929	10
65	103118	8,092	20	400545	20,507	25	103138	18,060	10	180184	29,990	10
70	103119	8,731	20	400546	21,904	10	103141	19,849	10	180185	29,099	10
75	103120	9,238	20	400547	23,323	10	103142	20,544	10	210007	34,047	10
80	125658	9,661	20	400549	23,779	10	103143	20,476	10	180186	34,047	10
90	103122	9,878	10	400550	24,253	10	103144	21,361	10	180187	35,700	10
100	103123	12,260	10	400551	25,433	10	103145	23,025	10	180188	37,653	10
110	103124	13,317	20	400548	28,148	25	103146	25,486	10	180189	40,926	10
120	103126	14,392	20	400552	30,830	15	103148	27,946	10	180190	44,236	5
130	103127	16,662	20	180311	33,541	10	103150	30,374	10	180191	58,160	5
140	103128	17,836	20	180229	36,222	10	103151	32,813	10	180192	67,954	5
150	103129	19,005	20	180407	38,905	10	103152	35,376	10	180193	90,588	5
160	103364	37,820	10	180230	44,106	10	107462	45,344	10	180194	1,14,173	5
170	180418	42,111	10	210005	52,230	10	180495	51,777	10	791330	1,18,533	5
180	107460	42,111	10	100231	54,253	10	107463	51,777	10	180196	1,25,578	5
200	107448	46,540	10	551668	56,563	10	107464	53,992	10	180198	1,34,408	5
220	400574	48,677	10	791325	72,312	10	400553	58,809	10	210008	1,43,670	5
230	182815	50,831	10	791326	76,041	10	181001	74,616	5	791331	1,49,855	5
240	400575	50,831	10	791327	79,022	10	400554	92,168	5	210009	1,59,412	5
260	400576	52,974	10	791328	84,986	10	400555	1,13,063	5	210010	1,71,132	5
280	400577	55,116	10	551667	90,950	10	400556	1,33,938	5	210011	1,77,885	5
300	400578	57,275	10	791329	96,914	10	400557	1,43,505	5	210012	1,90,594	5
340							796973	1,58,428	5			

Grey highlighted items are full threaded

1. Specifications : Generally conforming to IS 2269, DIN 912, ISO 4762.
2. Threads : ISO Metric (coarse series) 5g6g as per IS 4218, ISO 261, ISO 965.
3. Material : Unbrako high grade alloy steel.
4. Mechanical Properties : Property Class 12.9 as per IS 1367, ISO 898 Part I.
5. Note : Upto 80mm diameter can be manufactured against request.
6. For sizes beyond those listed, prices on application.
7. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
8. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

*Note : "X" marking on SHCS is the internal coding for product traceability, it can be changed with any alphanumeric.

All Products of sizes smaller than M5 or 1/4" have no head marking due to space constraint

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Socket Head Cap Screw - Metric

Diameter	M24			M27			M30		
	Wrench Key Size 19mm			Wrench Key Size 19mm			Wrench Key Size 22mm		
Length	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
45	103153	22,210	10						
50	103155	21,275	10				551648	51,836	5
55	103157	23,930	10						
60	103158	24,597	10	180233	45,623	5	180207	46,753	5
65	103159	27,290	10	581201	48,457	5	210014	46,431	5
70	103160	27,897	10	180326	49,488	5	116464	50,775	5
75	103161	29,561	10	210013	52,003	5	182283	50,775	5
80	103162	31,075	10	406161	52,784	5	140610	52,784	5
90	103163	32,594	10	406162	57,948	5	140611	56,756	5
100	103165	34,375	10	406163	61,950	5	140612	61,950	5
110	103166	37,380	10	406164	65,689	5	140613	65,689	5
120	103167	40,402	10	400607	69,696	5	140614	69,696	5
130	103168	43,419	5	406165	70,376	5	140615	74,576	5
140	103170	46,424	5	406166	77,437	5	140616	77,437	5
150	103171	49,456	5	400608	82,317	5	140617	82,317	5
160	104143	80,281	5	400609	1,29,632	5	140618	1,29,632	4
170				406167	1,37,006	5			
180	104146	85,896	5	406168	1,43,388	5	140620	1,43,388	4
200	104147	91,945	5	400579	1,56,003	5	140621	1,56,003	5
220	400560	98,395	5	180003	1,94,424	4	400622	1,93,562	3
240	400561	1,06,208	5	406171	2,15,349	4	400623	2,08,187	3
260	400562	1,10,842	5	406172	2,34,571	3	140624	2,22,806	2
280	400563	1,15,475	5	406173	2,50,319	3	140625	2,37,430	2
300	400564	1,23,727	5	406174	2,66,091	3	400626	2,52,045	2
310	818254	1,18,170	5						
320	400565	1,21,637	5				180848	2,65,731	2
340	400566	1,28,573	5						
370							818243	3,02,486	2
380							182648	3,09,215	2
400	786983	1,75,090	3				183066	3,22,698	2

1. Specifications : Generally conforming to IS 2269, DIN 912, ISO 4762.

2. Threads : ISO Metric (coarse series) 5g6g as per IS 4218, ISO 261, ISO 965.

3. Material : Unbrako high grade alloy steel.

4. Mechanical Properties : Property Class 12.9 as per IS 1367, ISO 898 Part I.

5. Note : Upto 80mm diameter can be manufactured against request.

6. For sizes beyond those listed, prices on application.

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

8. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Grey highlighted items are full threaded

*Note : "X" marking on SHCS is the internal coding for product traceability, it can be changed with any alphanumeric.

All Products of sizes smaller than M5 or 1/4" have no head marking due to space constraint

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Socket Head Cap Screw - Metric

Diameter	M33 Wrench Key Size 24mm			M36 Wrench Key Size 27mm			M42 Wrench Key Size 32mm		
Length	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
75	210015	76,302	5						
80	180254	79,451	5	140629	94,939	5			
90	400649	86,047	5	140630	1,03,526	5	182336	1,54,763	5
100	400628	90,064	5	140631	1,06,482	5	400645	1,69,543	12
110	180255	94,939	5	400632	1,12,265	4	700380	1,74,151	12
120	180256	1,03,526	5	140633	1,17,115	4	183113	1,89,385	10
130	405492	1,08,406	5	400634	1,21,017	4	182331	1,93,457	10
140	180257	1,15,290	4	140635	1,33,580	3	700383	2,09,325	9
150	180258	1,21,017	4	140636	1,38,396	3	180960	2,13,716	9
160	180259	1,60,873	4	140637	1,86,247	3	181289	2,98,895	9
180	180261	1,78,080	3	140639	2,08,096	3	182059	3,17,225	8
200	180263	1,93,562	3	140640	2,25,520	2	181290	3,43,673	7
220	210016	2,40,007	3	180294	2,78,837	2	400647	4,31,151	7
240	210017	2,58,644	3	140641	2,86,506	2	182510	4,49,418	6
260	210018	2,70,398	2	140642	3,06,839	9	700390	4,79,360	6
280	210019	2,85,306	2	180411	3,27,237	8	181291	5,09,327	6
300	210020	3,07,667	2	140643	3,47,807	8	180863	5,39,288	6
320				180490	3,83,950	8			
340				181287	4,04,496	8	700394	5,65,010	5
360				183067	4,25,042	8	700395	5,93,261	5
380				183068	4,45,587	5	700396	6,21,512	3
400				400644	4,66,133	5	700397	6,49,762	3
420				796957	5,47,514	5			
460				796960	5,93,743	5			
480				796961	6,16,856	3			
500				551866	6,39,971	3			
520				796963	6,63,085	3			
560				796965	7,09,313	3			
580				796966	7,32,426	2			
650				796968	8,13,325	2			

- Specifications : Generally conforming to IS 2269, DIN 912, ISO 4762.
- Threads : ISO Metric (coarse series) 5g6g as per IS 4218, ISO 261, ISO 965.
- Material : Unbrako high grade alloy steel.
- Mechanical Properties : Property Class 12.9 as per IS 1367, ISO 898 Part I.
- Note : Upto 80mm diameter can be manufactured against request.
- For sizes beyond those listed, prices on application.
- Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
- Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

*Note : "X" marking on SHCS is the internal coding for product traceability, it can be changed with any alphanumeric.
All Products of sizes smaller than M5 or 1/4" have no head marking due to space constraint

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Marking*

Socket Head Cap Screw - Metric (FULL THREAD)

Diameter	M6		M8		M10		M12		M16	
	Wrench Key Size 5mm		Wrench Key Size 6mm		Wrench Key Size 8mm		Wrench Key Size 10mm		Wrench Key Size 14mm	
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
40	400590	1,049	400593	1,294						
45	834560	1,136	551840	1,450						
50	400591	1,238	400594	1,505	400597	2,263				
60	400592	2,493	400595	1,776	400598	2,636	551829	3,923		
65									834594	8,092
70	834588	2,697	406180	2,029	400599	2,999	629982	4,352	809216	8,731
75									834595	9,238
80			406181	3,219	400600	4,635	834591	5,443	551837	9,661
90					834589	5,276	834592	6,149	616459	9,878
100					834590	6,205	834593	7,118	834596	12,260
110									834597	13,317
120									834598	14,392



Marking*

Socket Head Cap Screw - Inch (BSW)

Diameter	3/16			1/4			5/16			3/8		
	Wrench Key Size 5/32"			Wrench Key Size 3/16"			Wrench Key Size 7/32"			Wrench Key Size 5/16"		
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
3/8	400056	615	200	400068	743	200						
1/2	400057	615	200	400069	722	200	400085	1,035	200	400101	1,582	200
5/8	400058	543	200	400070	706	200	400086	882	200	400102	1,536	200
3/4	400059	615	200	400071	743	200	400087	946	200	400103	1,318	200
7/8	551219	653	200	400072	768	200	400088	960	200	400104	1,504	200
1	400061	688	200	400073	832	200	400089	1,026	200	400105	1,462	200
1 1/4	400062	761	200	400074	914	200	400090	1,176	200	400106	1,603	100
1 1/2	400063	868	200	400075	1,049	200	400091	1,317	200	400107	1,784	100
1 3/4	400064	989	200	400076	1,284	200	400092	1,556	200	400108	2,133	50
2	400065	989	200	400077	1,250	200	400093	1,556	200	400109	2,214	100
2 1/4	210021	1,169	200	400078	2,532	200	400094	1,869	200	400110	2,558	100
2 1/2	400066	1,302	200	400079	2,606	200	400095	1,869	100	400111	2,748	100
2 3/4				400080	3,047	200	404433	2,280	100	400112	3,074	100
3				400081	3,047	200	400096	2,216	100	400113	3,074	100
3 1/4				400082	3,655	200	701026	3,807	100	400114	4,501	50
3 1/2				400083	3,553	200	400098	3,807	100	400115	4,610	50
4				400084	4,025	100	400099	4,518	100	400116	5,411	50
4 1/2							400100	7,286	100	400117	8,202	50
5							701030	8,211	100	400118	9,732	50
5 1/2										400181	11,696	50
6										400119	12,381	50

Grey highlighted items are full threaded

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Socket Head Cap Screw - Inch (BSW)

Diameter	7/16 Wrench Key Size 5/16"			1/2 Wrench Key Size 3/8"			5/8 Wrench Key Size 1/2"		
Length	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
3/4	551220	3,663	100	400130	4,032	100			
7/8	791967	3,663	100	402942	4,032	100	210033	7,833	50
1	400121	3,544	100	400131	3,426	100	400150	7,621	50
1 1/4	400122	3,544	100	400132	3,591	100	400151	6,623	50
1 1/2	400123	3,612	100	400133	3,654	50	400152	6,855	50
1 3/4	400124	3,863	100	400134	3,903	50	400153	7,292	50
2	400125	3,863	100	400135	3,990	50	400154	7,637	20
2 1/4	210025	4,439	50	400136	4,603	50	400155	8,298	20
2 1/2	701059	4,650	50	400137	4,603	50	400156	8,531	20
2 3/4	210026	5,007	50	400138	5,181	50	400157	9,110	20
3	400127	5,105	20	400139	5,262	50	400158	9,365	20
3 1/4	210027	6,789	50	400140	6,926	50	701096	10,465	10
3 1/2	400128	6,604	50	400141	6,926	20	400159	10,585	10
4	400129	7,648	20	400142	8,142	25	400160	12,973	10
4 1/2	210028	10,991	50	400143	9,842	25	400161	13,390	15
5	210029	10,984	25	400144	12,116	25	400162	14,768	15
5 1/2	210030	12,867	50	400145	13,339	20	400163	18,852	20
6	210031	12,881	25	400146	13,808	20	400164	20,543	20
6 1/2				400147	27,396	20	400165	42,450	10
7				400148	27,945	15	400166	43,633	10
7 1/2				210032	29,040	15	210035	45,307	10
8				400149	31,106	25	400167	46,816	10
8 1/2							210036	62,971	10
9							210037	61,388	10
10							210038	80,326	10

Grey highlighted items are full threaded

1. Specifications : Generally conforming to BS 2470.
2. Threads : BS Whitworth Fine, Medium as per BS 84.
3. Material : Unbrako High Grade Alloy Steel.
4. Mechanical Properties : As per BS 2470
5. Note : Upto 4 Inch Dia can be manufactured against request.
6. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

*Note : "X" marking on SHCS is the internal coding for product traceability, it can be changed with any alphanumeric.

All Products of sizes smaller than M5 or 1/4" have no head marking due to space constraint



Socket Head Cap Screw - Inch (BSW)

Diameter	3/4 Wrench Key Size 9/16"			7/8 Wrench Key Size 9/16"			1 Wrench Key Size 5/8"		
	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
1	210039	19,549	50						
1 1/4	400168	19,019	10						
1 1/2	400169	16,773	10	400187	27,012	10	210054	25,321	15
1 3/4	400170	17,155	10	210043	28,864	10	210055	26,315	15
2	400171	17,636	10	400188	28,079	10	400194	26,819	10
2 1/4	400172	18,016	10	404637	31,092	10	404571	29,719	10
2 1/2	400173	18,016	10	400189	30,248	10	400195	29,719	10
2 3/4	400174	19,945	10	210044	34,965	10	210056	33,472	10
3	400175	20,504	10	400190	34,083	10	400196	32,562	10
3 1/4	400176	21,303	10	701133	38,639	10	210057	35,906	10
3 1/2	400177	20,723	10	400191	37,590	10	400197	35,906	10
4	400178	22,335	10	400192	39,659	10	400198	39,662	5
4 1/2	400179	26,415	10	701136	46,634	10	400199	44,430	5
5	400180	28,700	10	701137	51,498	10	400200	49,215	5
5 1/2	701121	32,644	10	210047	53,619	10	183785	51,228	5
6	400182	35,830	10	400193	58,704	10	400201	57,170	5
6 1/2	400183	45,802	10	210048	1,01,917	5	210059	94,057	5
7	400184	46,863	10	701139	1,01,917	5	400202	97,438	5
7 1/2	210040	49,267	10	210050	1,05,601	5	210060	1,00,923	5
8	400185	48,897	10	210051	1,04,960	5	400203	1,04,305	5
8 1/2	210041	58,323	10	210052	1,13,861	5	210061	1,14,061	5
9	400186	58,323	10	210053	1,13,861	5	210062	1,17,345	5
10	701127	64,804	5	551078	1,29,574	5	210063	1,30,383	5

Grey highlighted items are full threaded

1. Specifications : Generally conforming to BS 2470.
2. Threads : BS Whitworth Fine, Medium as per BS 84.
3. Material : Unbrako high grade alloy steel.
4. Mechanical Properties : As per BS 2470
5. Note : Upto 4 Inch Dia can be manufactured against request.
6. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

*Note : "X" marking on SHCS is the internal coding for product traceability, it can be changed with any alphanumeric.

All Products of sizes smaller than M5 or 1/4" have no head marking due to space constraint



Countersunk Socket Head Cap Screws (CSK) - Metric

Diameter	M3 Wrench Key Size 2mm		M4 Wrench Key Size 2.5mm		M5 Wrench Key Size 3mm		M6 Wrench Key Size 4mm		M8 Wrench Key Size 5mm	
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
6	106283	1,043								
8	103303	1,223	103309	668	103318	977	103325	764		
10	103304	1,307	103311	668	103319	546	103328	771		
12	103305	1,402	103312	567	103320	567	103329	662	103337	1,005
14					401676	737	401678	819		
16	103306	1,591	103313	762	103321	762	103330	824	103338	976
18			401675	775	401677	771	401679	873	401681	989
20	103308	1,780	103315	785	103322	779	103331	887	103340	1,048
25	106284	1,958	103316	956	103323	916	103332	1,027	103341	1,202
30	106285	2,060	103317	1,150	103324	1,150	103333	1,182	103342	1,374
35			220001	2,373	106289	1,528	103334	1,342	103343	1,562
40			220002	2,546	220005	2,373	103335	1,579	103344	1,833
45			220003	2,882	220006	2,704	220008	2,812	106297	2,057
50			220004	3,229	220007	3,018	220009	3,518	220011	3,223
55							220010	3,869	220012	3,850
60									220013	4,198
70									106301	5,247
Qty. Per Box	200									

Diameter	M10 Wrench Key Size 6mm		M12 Wrench Key Size 8mm		M16 Wrench Key Size 10mm		M20 Wrench Key Size 12mm		M24 Wrench Key Size 14mm	
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
12	103345	1,718								
16	103347	1,633								
20	103348	1,403	103353	3,166						
25	103349	1,622	103354	2,961						
30	103350	1,859	103355	3,376	103359	5,759				
35	103351	2,126	103356	3,664	103360	6,206	106328	12,078		
40	103352	2,436	103357	3,951	103361	6,631	106332	10,478		
45	106302	2,751	106311	4,472	106318	7,082	106334	11,228		
50	106303	3,087	103358	4,879	103362	7,534	106335	12,384	220032	25,425
55	106304	3,502	106312	5,481	106320	7,954	106336	13,273	220033	27,557
60	220014	3,875	106313	5,906	103363	8,405	106337	14,612	401689	29,685
65	220015	4,548	220020	6,647	183908	9,245	183912	15,784	220034	31,816
70	220016	4,899	220021	7,156	106321	9,718	106338	16,819	401690	33,948
75	220017	6,297	220022	7,697	220025	10,196	183913	17,854	220035	36,078
80	220018	6,717	220023	8,285	220026	10,710	106339	18,889	401691	38,207
90	220019	7,558	551715	9,800	106325	12,143	106341	19,924	401692	42,470
100					629621	14,684	106342	24,063	401693	48,293
110							220029	27,944	701356	54,115
120							220030	30,639	183179	59,940
130							220031	33,333	701358	65,763
Qty. Per Box	100		50		10		5			

Quantity per box 25



Quantity per box 200



Quantity per box 25



1. Note : All sizes are fully threaded. 2. Specifications : Generally conforming to IS 6761, ISO 10642, DIN 7991.

3. Threads : ISO Metric, 5g6g as per IS 4218. 4. Material : UNBRAKO high grade alloy steel.

5. Mechanical Properties : Property Class 12.9 as per IS 1367, ISO 898 Part - I

6. Bold black lines are used to indicate quantity per box.

7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



Socket Low Head Cap Screws (LHCS) - Metric

Diameter	M4 Wrench Key Size 3mm		M5 Wrench Key Size 4mm		M6 Wrench Key Size 5mm		M8 Wrench Key Size 6mm	
Length	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs
8	106250	1,166	106262	1,192	106263	1,239		
10	106251	924	103500	824	103508	825		
12	106255	835	103501	835	103509	828	103519	1,075
15			400790	767	400792	1,132	400791	1,317
16	106256	877	103502	767	103511	798	103520	966
20	106257	935	103597	824	103512	872	103521	1,003
25	106260	966	103503	882	103515	966	103525	1,082
30	406185	1,699	103505	1,019	103516	1,084	103526	1,217
35					103517	1,187	103528	1,319
40					103518	1,770	103529	1,420
45					106264	1,964		
Qty. Per Box	200							

DIA	M10 Wrench Key Size 8mm			M12 Wrench Key Size 10mm			M16 Wrench Key Size 12mm			M20 Wrench Key Size 14mm		
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	103532	1,487	200									
20	103533	1,314	200	103549	3,657	100						
25	103534	1,453	200	103550	3,245	100						
30	103535	1,628	200	103551	3,127	100	103562	6,425	25			
35	103536	1,723	200	103552	3,162	100	103563	6,906	25			
40	103538	1,858	100	103553	3,185	50	103564	6,785	25	103578	16,163	25
45	106271	3,162	100				106277	6,425	25			
50	103541	3,435	100	103554	3,434	50	103565	7,312	25	103580	18,994	25
55	106272	3,720	100									
60				103555	4,963	50	103566	10,722	25	103581	21,826	25
90							103574	15,289	25			
100							103575	16,461	25	103599	33,860	25

Grey highlighted items are full threaded

1. Specifications : Generally conforming to Unbrako Specification DIN 7984 + 6912 (Except for Head & Socket Dims), ASME B18.3.1M
2. Threads : ISO Metric (Coarse Series) 5g6g.
3. Mechanical Properties : Property Class 10.9 as per IS 1367, ISO 898 Part I.
4. For sizes beyond those listed, prices on request.
5. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



Socket Head Shoulder Screws - Metric

Diameter	M6 (M5) Wrench Key Size 3mm			M8 (M6) Wrench Key Size 4mm			M10 (M8) Wrench Key Size 5mm			M12 (M10) Wrench Key Size 4mm		
	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	105364	4,890	50									
12	105365	5,305	50	105375	4,882	50						
15	401484	6,128	50	401486	6,134	50	401487	7,472	50	401485	16,222	25
16	105366	6,128	50	105377	6,293	50	105388	7,685	50	105404	9,987	25
20	105368	6,950	50	105379	7,063	50	105390	8,537	50	105406	10,989	25
25	105370	7,980	50	105380	8,028	50	105392	9,609	50	105407	12,247	25
30	105372	9,011	50	105381	8,996	50	105393	10,674	50	105410	13,504	25
40	105373	10,627	50	105383	10,928	50	105394	12,806	50	105411	16,018	25
50				105386	11,999	50	105395	13,449	50	105412	17,913	25
60							105396	14,215	50	105416	20,342	25
70							105402	16,012	50	105417	21,613	25
80							106422	17,788	50	105420	22,597	25
90										105427	22,867	25
100										105433	26,954	25

Diameter	M16 (M12) Wrench Key Size 8mm			M20 (M16) Wrench Key Size 10mm			M24 (M20) Wrench Key Size 12mm		
	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
30	105434	20,779	25						
40	105435	24,432	25	105441	57,000	10			
50	105436	28,084	25	105442	64,471	10	401488	1,97,146	5
60	105437	31,734	25	105444	71,940	10	401489	2,15,705	5
70	105438	35,387	25	105448	79,412	10	401490	2,34,262	5
80	105440	37,735	25	105449	86,881	10	401491	2,52,827	5
90	106343	39,132	25	105450	94,353	10	401492	2,71,383	5
100	106344	46,341	25	106347	1,01,820	10	401493	2,89,942	5
120	106346	71,522	25	106348	1,16,761	10	401494	3,27,063	5

1. Specifications : Generally conforming to BS 4168, DIN 9841, ISO 7379.
2. Thread Class : 5g6g (Precision Ground to h8 tolerance on the Shoulder (Size Indicator Ground Diameter))
3. Material : Unbrako High Grade Alloy Steel.
4. Mechanical Properties : Properties Class conforming to 12.9 as per ISO 898 Part - I.
5. Method of Specifying : The nominal diameter of a shoulder screw is the diameter of the shoulder & not the thread diameter but it is recommended that both are quoted, e.g. 16mm (M12) x 70mm long to BS 4168.
6. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



Socket Set Screws (Grub Screws)

Knurled Cup Point

Metric

Diameter	M3 Wrench Key Size 1.5mm		M4 Wrench Key Size 2mm		M5 Wrench Key Size 2.5mm		M6 Wrench Key Size 3mm		M8 Wrench Key Size 4mm	
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
3	104076	411								
4	103172	406	103182	341	809760	237				
5	103175	411	103185	341	103194	237				
6	103176	406	103186	345	103195	240	103207	251	180002	514
8	103177	412	103187	369	103196	240	103208	273	103224	316
10	103178	435	103188	363	103197	262	103209	281	103227	336
12	103179	461	103189	416	103198	315	103211	352	103228	383
16	103180	492	103191	492	103199	336	103212	394	103229	466
20	551093	638	103193	689	103202	450	103214	485	103230	603
25	551678	803	701961	747	103203	589	103217	604	103231	914
30			406498	1,361	103204	707	103218	749	103235	1,105
35			551679	1,809	181179	1,109	103219	1,274	103236	1,525
40			551680	2,328	551094	1,387	103220	1,441	103237	1,781
45							103221	1,591	701998	2,063
50							103222	1,872	103240	2,345
55									551095	3,665
60									551096	4,461
65									551097	4,628
Qty. Per Box	200									

1. Specification : Generally conforming to the following standards
2. Threads : ISO Metric, 5g6g as per IS 4218, ISO 261, ISO 965.
3. Material : Unbrako high grade alloy steel.
4. Mechanical Properties : Property Class 45H as per IS 1367, ISO 898 Part V.
5. NOTE : PRICE FOR SPECIAL POINTS SHOWN BELOW WILL BE 25% EXTRA (MOQ applicable).
6. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Orders for sizes with special points will be accepted subject to our confirmation.

Standard				
	FLAT	CONE	DOG / HALF DOG	PLAIN CUP
IS	6094	6094	6094	6094
DIN	913	914	915	916
ISO	ISO-4026	ISO-4027	ISO-4028	ISO-4029



Socket Set Screws (Grub Screws)

Knurled Cup Point

Metric

Diameter	M10 Wrench Key Size 5mm		M12 Wrench Key Size 6mm		M16 Wrench Key Size 8mm		M20 Wrench Key Size 10mm	
Length	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs
8	180099	659						
10	103241	494	551687	971				
12	103244	576	103256	816				
16	103245	767	103258	1,171	106352	2,708		
20	103246	946	103259	1,237	103274	3,046	104149	7,315
25	103247	1,384	103260	1,696	103276	3,723	103286	8,470
30	103249	1,707	103261	2,012	103277	4,264	103287	9,792
35	103251	2,070	103262	2,662	103278	5,127	103288	11,165
40	103252	2,358	103263	3,369	103279	5,903	103289	12,030
45	103253	2,692	103269	4,147	103281	7,284	103290	17,389
50	103254	3,128	103270	4,542	103282	8,266	103292	18,955
55	551098	4,637	103271	7,814	103283	11,097	103293	21,187
60	183091	6,093	103272	6,992	103284	11,608	103294	22,514
65	551099	6,364	551100	10,155	551102	16,924	551105	25,372
70			551101	11,791	182790	23,693	551106	26,784
75					551103	26,510	551107	29,119
80					551104	27,079	793979	32,239
Qty. Per Box	100				50			

1. Specifications : Generally conforming to the following standards

//// Quantity per box 200

2. Threads : ISO Metric, 5g6g as per IS 4218, ISO 261, ISO 965.

3. Material : Unbrako high grade alloy steel.

4. Mechanical Properties : Property Class 45H as per IS 1367, ISO 898 Part V.

5. NOTE : PRICE FOR SPECIAL POINT SHOWN BELOW WILL BE 25% EXTRA (MOQ applicable).

6. Bold black lines are used to indicate quantity per box.

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

8. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Orders for sizes with special points will be accepted subject to our confirmation.

Standard				
	FLAT	CONE	DOG / HALF DOG	PLAIN CUP
IS	6094	6094	6094	6094
DIN	913	914	915	916
ISO	ISO-4026	ISO-4027	ISO-4028	ISO-4029



Socket Set Screws (Grub Screws)

Knurled Cup Point

Inch

Diameter	3/16 Wrench Key Size 3/32"		1/4 Wrench Key Size 1/8"		5/16 Wrench Key Size 5/32"		3/8 Wrench Key Size 3/16"	
Length	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs
3/16	400949	256						
1/4	400951	250	400961	297				
5/16	400952	263	400963	313	400986	313		
3/8	400953	272	400965	328	400977	328	400988	439
1/2	400954	312	400967	334	400978	397	400989	519
5/8	551209	351	400969	435	400979	422	400990	613
3/4	400956	432	400970	660	400980	553	400991	914
1	400957	612	400972	644	400982	776	400993	1,218
1 1/4			400973	749	400984	914	400994	1,329
1 1/2			400974	1,268	400983	1,857	400995	2,640
1 3/4			551108	1,896	551109	1,984	400996	2,843
2			180730	1,695	400985	2,348	400997	3,358
Qty. Per Box	200						100	

Diameter	1/2 Wrench Key Size 1/4"		5/8 Wrench Key Size 5/16"		3/4 Wrench Key Size 3/8"	
Length	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs	Part No.	₹ Price/ 100 Pcs
1/2	401003	876				
5/8	401005	983	401015	2,319		
3/4	401006	1,388	401016	2,390	401024	5,296
1	401008	2,183	401017	2,759	401025	6,377
1 1/4	401009	2,137	401018	4,263	551110	7,857
1 1/2	401010	4,962	401019	6,723	401026	10,925
1 3/4	401012	6,461	401020	9,065	401027	12,863
2	401013	7,068	401021	8,243	401028	15,133
2 1/2	401014	8,900	401022	12,011	401029	18,526
3	702408	10,913	401023	17,231	401030	26,374
Qty. Per Box	100		50			

1. Specifications : As per standard ASME/ANSI B18.3.
2. Threads : BS Whitworth, Medium as per BS 84
3. Material : Unbrako high grade alloy steel.
4. Mechanical Properties : As per BS 2470.
5. NOTE : PRICES FOR SPECIAL POINTS 25% EXTRA (MOQ applicable).
6. Socket set screws with BSF/UNC/UNF threads can also be manufactured subject to MOQ. Price on request.
7. Bold black lines are used to indicate quantity per box.
8. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
9. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Button Head Socket Screws - Metric

Diameter	M3 Wrench Key Size 2mm			M4 Wrench Key Size 2.5mm			M5 Wrench Key Size 3mm			M6 Wrench Key Size 4mm		
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
5	180248	902	200									
6	106353	902	200	180200	651	200	180398	1,185	200			
8	106354	731	200	106360	651	200	180175	1,130	200	180249	1,379	200
10	106357	839	200	106361	651	200	106365	651	200	106372	856	200
12	106358	932	200	106363	715	200	106366	715	200	106373	700	200
15				401218	870	200	401219	839	200	401222	995	200
16	106359	1,181	200	106364	843	200	106367	839	200	106374	995	200
18							406269	1,834	200	401223	995	200
20							106368	938	200	106375	1,073	200
22							401220	2,145	200			
25							106369	1,097	200	106376	1,118	200
30							106370	1,323	200	106378	1,167	200

Diameter	M8 Wrench Key Size 5mm			M10 Wrench Key Size 6mm			M12 Wrench Key Size 8mm		
Length	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
10	106379	1,431	200						
12	106380	1,213	200						
15	401226	1,243	200						
16	106382	1,036	200	106392	1,974	200	106403	4,196	100
20	106384	1,274	200	106393	1,621	200	106404	4,507	100
25	106385	1,492	200	106396	1,874	200	106405	4,694	100
30	106386	1,709	200	106399	2,139	200	106406	5,252	100
35	106389	1,935	200	106401	2,441	200	106407	5,813	100
40	106390	2,205	200	106402	2,705	100	106408	6,370	50
50							106413	7,491	50

1. Specifications : Generally conforming to BS 4168.
2. Thread : ISO Metric (Coarse Series) 5g6g.
3. Material : Unbrako High Grade Alloy Steel.
4. Mechanical Properties : Properties Class conforming to 12.9 as per BS 6104, ISO 898 Part - I.
5. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
6. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

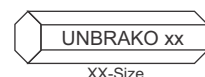


Flange Button Head Socket Screws - Metric

M3 Wrench Key Size 2mm				M4 Wrench Key Size 2.5mm			M5 Wrench Key Size 3mm		
Diameter	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
Length									
6	404977	1,535	200						
8				404982	1,352	200			
10				404983	1,571	200	404988	1,398	200
12				404984	1,741	200	404989	1,521	200
16				404986	2,010	200	404991	1,834	200
20							404992	1,928	200
25							404994	2,052	200

M6 Wrench Key Size 4mm				M8 Wrench Key Size 5mm			M10 Wrench Key Size 6mm		
Diameter	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
Length									
10	180079	2,006	200	405005	4,260	200			
12	404997	1,973	200	405007	1,928	200			
16	404999	2,315	200	405009	2,238	200	405016	3,885	200
20	405001	2,647	200	405011	2,518	200	405017	4,352	200
25	405003	3,063	200	405012	2,907	200	405018	4,942	200
30	405004	3,482	200	405013	3,296	200	405019	5,548	200
40				405015	4,041	200			

1. Specification : Generally conforming to Unbrako specification.
2. Thread : ISO Metric (Coarse Series) 5g6g.
3. Material : Unbrako high grade alloy steel.
4. Mechanical Properties : Properties Class conforming to 12.9 as per ISO 898 Part - I.
5. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
6. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



XX-Size

Marking*

Hexagon Wrenches

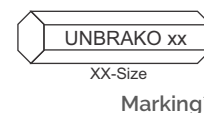
Wrench Size (Across Flat)	Part No.	₹ Price/ 100 Pcs	Box Qty	Wrench Size (Across Flat)	Part No.	₹ Price/ 100 Pcs	Box Qty
1/16	108468	1,331	100	1.5	125648	1,331	100
5/64	110164	1,468	100	2	122263	1,331	100
3/32	110180	1,468	100	2.5	122270	1,331	100
1/8	110213	1,468	100	3	121093	1,468	100
5/32	110246	1,739	100	4	119953	2,304	100
3/16	115915	2,253	100	5	122245	2,811	100
7/32	115948	3,063	50	6	121066	4,003	50
1/4	115981	4,437	50	8	115557	7,537	50
5/16	115997	7,371	25	10	120859	12,579	25
3/8	116013	10,903	25	12	120806	23,663	25
1/2	116046	25,156	10	14	111100	34,806	25
9/16	116063	32,187	10	17	138487	55,048	10
5/8	116080	46,999	10	19	111133	75,963	10
3/4	116096	75,999	10	22	402603	1,19,728	5
				24	402604	1,60,977	5
				27	402605	2,71,006	2
				32	402606	4,76,594	2

Hex Wrench Sets

STANDARD (METRIC)				
Sets	Wrenches Box Set	Part No.	₹ Price/100 Pcs	Box Qty
Standard (Metric)	 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm, Set of 9	402616	41,328	40
STANDARD (INCH)				
Sets	Wrenches Box Set	Part No.	₹ Price/100 Pcs	Box Qty
Standard (Inch)	 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8", Set of 10	402615	43,353	40

1. Specifications :

- A. Inch Series : BS 2470 B. Metric Series : IS 3082, DIN 911 and ISO 2936.
2. Material : UNBRAKO high grade alloy steel.
3. Mechanical Properties : Hardness : HRC 47 (Min).
4. Plating : No guarantee can be given for Unbrako Products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
5. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



Ballpoint Hexagon Wrenches

Wrench Size (Across Flat)	Part No.	₹ Price/ 100 Pcs	Box Qty
1/16"	835672	4,800	300
5/64"	835673	5,100	200
3/32"	835674	5,600	200
1/8"	835675	6,400	200
5/32"	835676	6,800	100
3/16"	835677	8,000	150
7/32"	835678	8,000	100
1/4"	835679	8,800	100
5/16"	835680	12,700	50
3/8"	835681	18,800	40

Wrench Size (Across Flat)	Part No.	₹ Price/ 100 Pcs	Box Qty
1.5	835663	4,800	200
2	835664	5,100	200
2.5	835665	5,600	200
3	835666	6,400	200
4	835667	6,800	200
5	835668	8,000	150
6	835669	8,700	80
8	835670	12,600	50
10	835671	18,800	40

Ballpoint Hexagon Wrench Sets

STANDARD (METRIC)					
Sets	Wrenches Box Set		Part No.	₹ Price/100 Pcs	Box Qty
Standard (Metric)		1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm, Set of 9	836741	81,500	16 Sets
STANDARD (INCH)					
Sets	Wrenches Box Set		Part No.	₹ Price/100 Pcs	Box Qty
Standard (Inch)		1/16", 5/64", 3/32", 1/8", 5/32", 3/16" 7/32", 1/4", 5/16", 3/8", Set of 10	836740	89,500	16 Sets

Specifications :

- Material: UNBRAKO high grade alloy steel.
- Mechanical Properties: Hardness : HRC 57-62
- Prices are excluding of all taxes.



DON'T RISK IT - JUST FIX IT

Unbrako Shield Self Drilling Screws

Unbrako RustGuard Coating
(Min 1000 hrs salt spray life)

ElectroZinc Coating
(Min 96 hrs salt spray life)





Dowel Pins

Metric

Diameter	M2			M3		
Length	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
8	407831	1,076	40			
10	407832	1,090	40	115001	1,240	40
12	407833	1,105	40	115002	1,254	40
14						
16	407835	1,131	40	115003	1,308	40
18	407836	1,131	40	402118	1,336	40
20	407837	1,145	40	115004	1,348	40
28				402120	1,500	40
30				115007	1,567	40
32				402121	1,635	40
36				406345	1,772	40
40				402124	1,908	40

Diameter	M4			M5		
Length	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
10	115010	1,377	40	402133	1,444	40
12	115011	1,417	40	115021	1,485	40
14				402134	1,527	40
16	115012	1,500	40	115022	1,567	40
20	115015	1,567	40	115024	1,662	40
24	407127	1,649	40	407128	1,744	40
28	402128	1,772	40	402137	1,893	40
30	115017	1,854	40	115026	1,989	40
32				402138	2,072	40
36				406347	2,248	40
40				115028	2,426	40
50	402132	2,711	40	115031	2,917	40

1. Specifications : Generally conforming to DIN 6325.

2. Material : Unbrako high grade alloy steel.

Unbrako dowel pins are through hardened and precision ground from nominal to 0.0002" over size on Inch sizes and a surface finish of 0.15 micrometers max. On both Metric and Inch products.

Genuine Unbrako Dowel Pins should only be supplied against these List Prices.

CAUTION: Unbrako advise that correct tools should be used for the application.

Safety goggles should be worn for your security and protection.

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



Dowel Pins

Metric

Diameter	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
12	402141	1,813	40						
16	115032	1,935	40						
18	402143	1,989	40						
20	115034	2,057	40	115049	2,889	40	115063	3,980	40
24	115037	2,179	40	406349	3,107	40	406351	4,320	40
28	402145	2,357	40	402150	3,378	40			
30	115038	2,468	40	115053	3,543	40	115066	4,960	40
32	402146	2,576	40	402151	3,693	40			
36	406348	2,793	40	406350	4,007	40	406352	5,641	40
40	115043	3,013	40	115055	4,307	40	115070	6,105	40
45				115056	4,756	40	115071	6,759	40
50	115046	3,597	40	115057	5,151	40	402161	7,344	40
55				402153	5,560	40			
60	115047	4,142	40	115058	5,954	40	402163	8,531	40
70							402164	9,716	40
90							402167	12,100	40
100							402169	13,313	40

Diameter	M12			M16		
Length	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
24	406353	5,505	40			
30	402174	6,364	40			
32				406218	12,429	20
36	406354	7,277	40			
40	402178	7,889	40	406220	14,908	20
50	402180	9,511	40			
60	402182	11,079	40			
70	402183	12,645	40	406225	24,582	20
80	402184	14,212	40	406226	27,797	20
90				406227	31,042	20
100	402186	17,400	40			

1. Specifications : Generally conforming to DIN 6325.

2. Material : Unbrako high grade alloy steel.

Unbrako dowel pins are through hardened and precision ground from nominal to 0.0002" over size on Inch sizes and a surface finish of 0.15 micrometers max. On both Metric and Inch products.

Genuine Unbrako Dowel Pins should only be supplied against these List Prices.

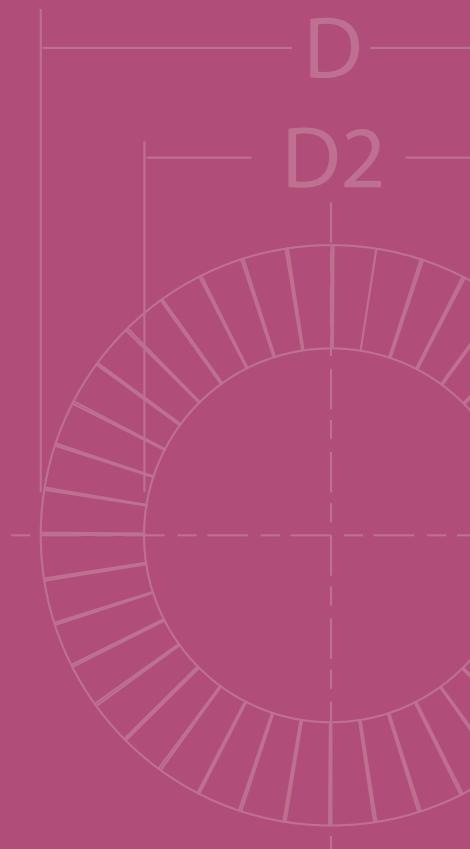
CAUTION: Unbrako advise that correct tools should be used for the application.

Safety goggles should be worn for your security and protection.

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

Durlok

Page	Contents
35	Durlok® Screws
36	Durlok® Nuts
36	Durlok® Washers



Durlok[®] Anti-Vibration self-locking fasteners

Will not loosen or unscrew even under the most severe transverse jarring and vibration.

Effectiveness at elevated temperatures upto 300° C is ensured.

Reusability is guaranteed with locking ability maintained.

Unique head design ensures absence of 'notch-effect' after assembly

Embedding is no greater than with standard types of fasteners.

Closely controlled manufacturing for extra safety and reliability.



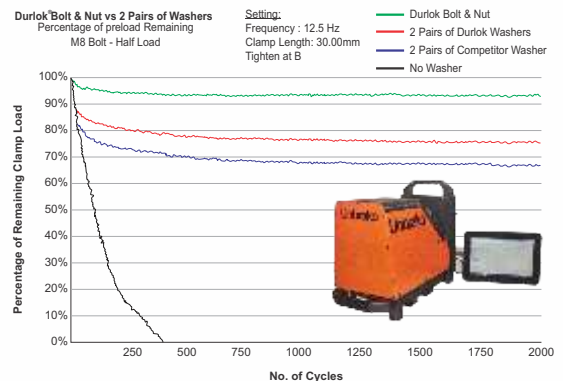
Advantages

During the 1960's, Dr. Junker while working in Unbrako's Koblenz facility in Germany completed his seminal work on the self-loosening behavior of bolted joints. This in turn led to the design of the original Durlok[®] anti-vibration nuts & bolts. The Durlok 12.9 nuts & bolts are designed for high-performance critical applications and do not require a washer. However, our industrial OEM customers requested a Durlok product in washer form for applications where it was deemed desirable to use a washer in the joint design. Thus we began researching and developed Unbrako's new Durlok locking wedge washer.



The Durlok[®] washer when used in combination with standard hex helps achieve self-locking properties. It is an anti-vibration solution that not only prevents bolted joint failure, but also enables the bolted joint to retain its pre-load, thus reducing maintenance requirements. The test regime highlighted this feature (fig 1).

Vibration Resistance Testing / Junker Test



Durlok[®] Applications

Automotive Engines
Power Unit Accessories
Transmission Units
Frames and Chassis Units
Bodywork
Vibratory Feeders
Shaking Chutes, Hoppers

Electrical equipments
Construction Machinery and
Ancillary Equipments
Agriculture Machinery
Percussion Drilling Tools
& Power Wrenches
Domestic Appliance





Durlok® Screws - Metric

The Durlok 12.9 nuts & Screws are designed for high-performance critical anti-vibration applications and do not require a washer.

Diameter	M6			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	Part No.	₹ Price/ 100 Pcs	Box Qty
12	190540	3,405	200	190570	3,494	200						
16	190560	2,604	200	190590	3,079	200	190620	4,071	200			
20	190160	2,872	200	190210	3,331	200	190270	3,182	200	183640	5,861	100
25	190170	3,198	200	190220	3,672	200	190280	3,464	200	190320	6,009	100
30	190180	3,522	200	190230	3,996	200	190290	3,775	200	190330	6,067	100
35				190600	4,350	200	190630	4,707	200	190660	6,218	100
40				190240	4,677	200	190300	5,063	100	190340	6,691	50
45				408127	5,476	200	190640	5,417	100	190670	7,134	50
50				190610	5,861	100	190310	5,773	100	190350	7,578	50
55										190680	8,022	50
60				407393	6,580	200				190360	8,910	50
70										190700	9,858	50
80										190710	10,776	50

Diameter	M14			M16			M20		
Length	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty	Part No.	₹ Price/ 100 Pcs	Box Qty
25	190730	11,634	25						
30	190370	12,137	25	190410	25,991	25			
35	190740	12,878	25	190420	25,991	25			
40	190380	13,025	25	190430	25,991	25	190875	42,924	25
45	190750	13,410	25	190820	20,395	25	405793	37,744	25
50	190760	14,209	25	190440	20,958	25			
55				405105	22,054	25			
60	190770	15,275	25	190450	23,593	25	190885	42,332	25
70				190460	25,812	25	190890	44,403	25
80				190855	26,940	25	190900	48,253	25
90				190860	29,099	25	190910	52,100	25
100				190870	31,232	25			

1. Specification : Conforming to Unbrako Standard. (Separate catalogue available on request).
2. Thread : Conforming to DIN 13 Medium Fit (6g)
3. Material : Unbrako high grade alloy steel.
4. Mechanical Properties : Property Class 12.9 as per 898 part - I.
5. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Durlok® Nuts

Length	Part No.	₹ Price/100 Pcs	Box Qty
M6	404916	967	200
M8	404917	1,453	200
M10	405202	2,196	200
M12	404918	4,040	100
M14	405240	6,185	50
M16	404915	7,449	50
M20	403618	15,780	50

1. Specification: conforming to Unbrako Standard. 2. Thread: According to DIN 13 6H.
3. Material: Unbrako high grade alloy steel. 4. Mechanical Properties: Property Class 12.

Durlok® Washers



Durlok Washers are used with standard Hex bolt & nut for self-locking anti-vibration properties.

Length	Part No.	₹ Price/100 Pcs	Box Qty	Length	Part No.	₹ Price/100 Pcs	Box Qty
M6	551087	2,773	200	M18	550262	10,871	100
M6L	551088	3,616	200	M18L	550263	19,183	100
M8	551089	3,616	200	M20	550264	10,871	100
M8L	550253	4,896	200	M20L	550265	19,183	100
M10	550254	4,896	200	M22	550266	15,026	100
M10L	550255	5,116	200	M22L	550267	28,454	100
M12	550256	5,116	200	M24	550268	19,183	100
M12L	550257	7,513	100	M24L	550269	34,528	50
M14	550258	7,513	100	M27	550270	27,654	50
M14L	550259	10,871	100	M27L	550271	34,528	50
M16	550260	7,034	100	M30	550272	29,733	50
M16L	550261	10,871	100	M30L	550273	43,800	25

1. Note: L = Larger Outer Dia
2. Inch series available on request.
3. Stainless Steel prices available on request.
4. Plating: No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

INTRODUCING

Unbrako Lock Nuts

Unbrako
THE WORLD LEADER

Hex Bolts

Page Contents

39	Hex Head Bolts/Screws - Grade 10.9
45	Hex Head Bolts/Screws - Grade 8
47	Hex Nut - Grade 8 / 10
49	Hex Nut - Inch
50	Lock Nuts
51	Nylock Nut Blue Ring DIN 985 - Grade 8 /10
51	Nylock Nut Blue Ring ISO 7040 - Grade 8 /10
51	All Metal Prevailing Torque Nut DIN 980M & DIN 980V
52	Spring Washer - Square Section
52	Spring Washer - Flat Section
52	Hardened Washer



Hex Head Bolts / Screws

In-house Destructive And Non destructive Testing:

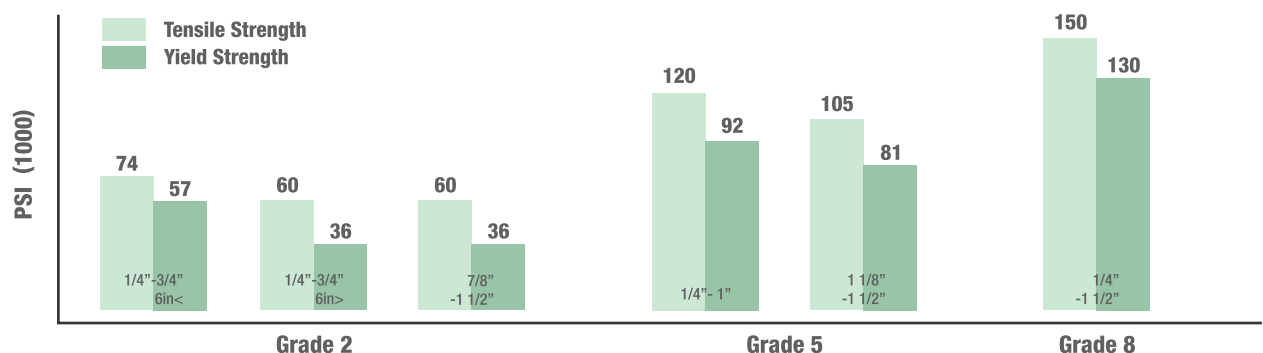
- Chemical product check analysis
- Room temperature tension tests (or at 0° C)
- Low temperature impact tests (upto -196° c)
- X-Ray Fluorescence Analysis
- Hardness tests
- UTS test
- Proof load test
- Microstructure Examination
- Macrostructure Examination
- Grains size
- Decarburization tests
- Ultrasonic Testing (UT)
- M.P.I tests
- Stress rupture tests

Advantages

- **ROLLED THREADS** : Rolling threads results in best quality highest -strength thread because of; (1) more accurate and uniform thread dimensions, giving a better fit between threaded parts and fewer concentrated loads at points of misfit; (2) smoother thread surfaces &, thus, fewer scratches and other markings to initiate cracks, or galling; and (3) higher yield, tensile, & shear properties to better withstand service loads.
- **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.



Comparison of Different Grades





10.9 Hex Head Bolts/Screws - Metric

DIA (Spanner Size)	M4 (7mm)			M5 (8mm)			M6 (10mm)			M8 (13mm)		
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
8	550616	413	500				550628	660	500			
10	170001	368	500	170013	391	500	170029	517	500	550642	886	500
12	170002	383	500	170014	398	500	170030	545	500	170049	750	500
16	170003	616	500	170015	572	500	170031	543	500	170050	761	200
18	170004	628	500	170016	644	500	170032	572	500	170051	637	200
20	170005	532	500	170017	508	500	170033	565	500	170052	637	200
22	170006	552	500	170018	551	500	170034	581	500	170053	775	200
25	170007	552	500	170019	532	500	170035	583	500	170054	774	200
30	170008	551	500	170020	587	500	170036	610	500	170055	866	200
35	170009	565	500	170021	593	500	170037	655	200	170056	872	200
40	170010	600	500	170022	628	500	170038	685	200	170057	972	200
45	170011	674	500	170023	686	500	170039	729	200	170058	1,063	200
50	170012	751	500	170024	826	500	170040	780	200	170059	1,159	200
55	240001	826	500	170025	870	500	170041	858	200	170060	1,245	100
60	240002	902	500	170026	949	200	170042	937	200	170061	1,435	100
65				170027	1,077	200	170043	1,016	100	170062	1,472	100
70				170028	1,161	200	170044	1,096	100	170063	1,560	100
75				240003	1,245	200	170045	1,106	100	170064	1,618	100
80							170046	1,164	100	170065	1,794	100
90							170047	1,312	100	170066	2,248	100
100							170048	1,459	100	170067	2,512	50
110							551178	2,243	100	240010	2,841	50
120							550866	2,440	100	240011	3,618	50
130							550867	2,628	100	240012	3,816	50
140							550868	2,823	100	550872	4,555	50
150							550869	3,014	100	550873	5,090	50
160										787951	6,154	50
170										787952	6,472	50
180										787953	6,639	50
190										787954	7,157	50
200										787955	7,491	50

Grey highlighted items are full threaded

- Specifications : Generally conforming to IS 1364, ISO 4014/4017.
- Threads : ISO Metric 6g as per IS 4218.
- Material and Mechanical Properties : Property Class 10.9 as per IS 1367.
- Note : 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 Diameter can be manufactured against request.
- Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
- Bolts/Screws as per DIN 931/933 will be manufactured against specific order with minimum order quantity of each size.
- Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



10.9 Hex Head Bolts/Screws - Metric

DIA (Spanner Size)	M10 (ISO-16mm/DIN-17mm)			M12 (ISO-18mm/DIN-19mm)			M14 (ISO-21mm/DIN-22mm)			M16 (24mm)		
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	1,259	200	550673	2,414	100						
18	170069	1,326	200									
20	170070	1,181	200	170093	2,055	100				170142	4,647	50
22	170071	1,377	200							170143	4,647	50
25	170072	1,352	200	170094	2,167	100	170121	3,364	50	170144	4,680	25
30	170073	1,397	100	170095	2,151	100	170122	3,460	50	170145	4,946	25
35	170074	1,397	100	170096	2,269	100	170123	3,601	25	170146	4,961	25
40	170075	1,767	100	170097	2,211	100	170124	3,800	25	170147	5,020	25
45	170076	1,837	100	170098	2,766	50	170125	3,523	25	170148	5,382	25
50	170077	1,986	100	170099	2,965	50	170126	3,963	25	170149	5,701	25
55	170078	2,117	100	170100	3,076	50	170127	4,747	25	170150	6,084	25
60	170079	2,267	100	170101	3,238	50	170128	4,548	25	170151	6,536	25
65	170080	2,417	50	170102	3,398	50	170129	5,072	25	170152	6,906	25
70	170081	2,566	50	170103	3,785	50	170130	5,649	25	170153	7,334	25
75	170082	2,717	50	170104	3,941	50	170131	5,930	25	170154	7,851	25
80	170083	3,164	50	170105	4,170	50	170132	6,255	25	170155	8,569	25
90	170084	3,512	50	170106	4,570	25	170133	6,847	25	170156	9,161	25
100	170085	3,815	50	170107	5,338	25	170134	7,896	25	170157	9,959	15
110	170086	4,140	50	170108	5,930	25	170135	8,961	25	170158	10,809	15
120	170087	4,887	25	170109	6,314	25	170136	9,486	25	170159	12,059	15
130	170088	5,878	50	170110	6,713	25	170137	10,217	25	170160	14,417	15
140	170089	6,077	50	170111	8,074	25	170138	14,416	25	170161	14,713	15
150	170090	7,383	30	170112	11,197	25	170139	15,912	25	170162	17,404	15
160	170091	7,873	25	170113	11,593	20	170140	17,767	25	170163	18,129	15
180	170092	8,856	25	170114	12,576	20	170141	19,061	25	170164	20,391	15
200	550876	9,843	25	170115	16,628	25	550887	20,554	25	170165	22,077	10
220				170116	24,956	25	550888	28,907	20	170166	29,744	10
240				170117	25,570	20	550889	31,268	20	170167	32,011	10
260				170118	26,122	20	550890	33,626	20	170168	32,660	10
280				170119	28,527	18	550891	36,209	18	170169	36,055	10
300				170120	30,564	18	550892	38,641	18	170170	42,224	10
310										200017	44,444	8
320										551922	45,817	8
330										200018	47,190	8
340										812869	48,563	8
350										200019	49,936	8
360										552401	51,308	8
370										583898	52,681	6
380										200020	54,054	6
390										200021	55,427	30
400										552418	56,800	30

Grey highlighted items are full threaded



10.9 Hex Head Bolts/Screws - Metric

DIA (Spanner Size)	M18 (27mm)			M20 (30mm)			M22 (ISO-32mm/DIN-33mm)		
Length	Part No.	₹ Price/ 100 pcs	Box Qty	Part No.	₹ Price/ 100 pcs	Box Qty	Part No.	₹ Price/ 100 pcs	Box Qty
30				550751	10,351	25			
35	550735	8,473	25	170190	10,199	25			
40	170171	9,112	25	170191	10,199	25	550775	13,819	10
45	170172	9,497	25	170192	10,351	25	550776	12,295	10
50	170173	9,790	25	170193	10,605	25	170215	13,626	10
55	170174	10,460	25	170194	11,142	25	170216	14,668	10
60	170175	10,787	25	170195	11,800	25	170217	15,194	10
65	170176	11,152	25	170196	12,185	10	170218	17,064	10
70	170177	11,800	25	170197	12,512	10	170219	17,633	10
75	170178	12,503	10	170198	13,154	10	170220	18,239	10
80	170179	12,503	10	170199	13,530	10	170221	18,942	10
90	170180	13,293	10	170200	14,387	10	170222	20,177	10
100	170181	14,099	10	170201	15,216	10	170223	20,488	10
110	170182	15,505	10	170202	16,066	10	170224	23,438	10
120	170183	16,347	10	170203	17,404	10	170225	25,012	10
130	170184	17,079	10	170204	18,595	10	170226	26,380	10
140	170185	17,841	10	170205	19,334	10	170227	27,688	10
150	170186	19,082	10	170206	20,398	10	170228	28,997	10
160	170187	21,160	10	170207	23,194	10	170229	31,563	5
180	170188	22,913	10	170208	25,220	10	170230	34,254	5
200	170189	24,658	10	170209	27,156	10	170231	35,230	5
220	240020	29,678	10	170210	47,440	5	170232	65,002	5
240	240021	32,951	10	170211	49,819	5	170233	70,412	5
260	240022	35,697	10	170212	52,199	6	170234	73,120	5
280	240023	38,444	8	170213	56,945	6	170235	81,269	5
300	240024	41,191	8	170214	61,668	6	170236	87,077	5
310				551131	70,270	5			
320				552466	72,415	5			
330				631419	74,560	5			
340				812872	76,705	5			
350				550916	78,850	5			
360				552486	80,995	5			
370				200022	83,140	5			
380				631421	85,285	4			
390				200023	87,430	4			
400				812873	89,575	4			

Grey highlighted items are full threaded



10.9 Hex Head Bolts/Screws - Metric

DIA (Spanner Size)	M24 (36mm)			M27 (41mm)			M30 (46mm)		
Length	Part No.	₹ Price/ 100 pcs	Box Qty	Part No.	₹ Price/ 100 pcs	Box Qty	Part No.	₹ Price/ 100 pcs	Box Qty
40	550791	21,255	10						
45	550792	17,160	10						
50	170237	17,160	10	170259	39,331	5	170281	47,794	5
55	170238	17,220	10	170260	39,331	5	170282	50,662	5
60	170239	17,841	10	170261	39,331	5	170283	47,794	5
65	170240	17,841	10	170262	39,331	5	170284	47,794	5
70	170241	19,578	10	170263	39,331	5	170285	47,794	5
75	170242	20,302	10	170264	42,299	5	170286	47,794	5
80	170243	22,307	10	170265	44,088	5	170287	49,737	5
90	170244	23,808	10	170266	48,189	5	170288	53,990	5
100	170245	25,737	10	170267	52,138	5	170289	58,102	5
110	170246	26,758	5	170268	56,221	5	170290	63,911	5
120	170247	28,250	10	170269	57,647	5	170291	65,321	5
130	170248	29,596	5	170270	59,544	5	170292	68,264	5
140	170249	31,001	5	170271	63,315	5	170293	72,497	5
150	170250	32,524	5	170272	67,084	5	170294	76,569	3
160	170251	35,370	5	170273	70,970	5	170295	90,400	3
170	240025	35,370	5	550941	70,970	5	550947	96,463	3
180	170252	38,431	5	170274	78,438	5	170296	99,716	3
190	240026	39,895	5						
200	170253	41,448	5	170275	85,528	5	170297	1,08,685	4
220	170254	74,823	5	170276	1,17,993	4	170298	1,31,072	3
240	170255	77,503	5	170277	1,26,984	4	170299	1,40,417	3
260	170256	80,187	4	170278	1,35,560	3	170300	1,49,756	2
280	170257	88,187	4	170279	1,43,789	3	170301	1,59,093	2
300	170258	1,07,808	4	170280	1,50,487	3	170302	1,69,666	2
310	813503	1,07,808	4	200027	1,53,654	3	200036	1,81,925	2
320	551149	1,11,105	3	200028	1,58,158	3	551148	1,87,150	2
330	200024	1,14,308	3	200029	1,62,663	3	790791	1,92,375	2
340	550933	1,17,512	3	200030	1,67,167	3	551125	2,00,322	2
350	830416	1,20,715	3	834275	1,71,672	3	550950	2,02,825	2
360	825628	1,23,918	3	200031	1,76,176	2	550951	2,08,050	2
370	200025	1,27,121	3	200032	1,80,681	2	200037	2,13,275	2
380	200026	1,30,324	3	200033	1,85,185	2	828512	2,18,500	2
390	825629	1,33,619	3	200034	1,89,690	2	200038	2,23,725	10
400	823821	1,36,822	12	200035	1,94,194	10	550952	2,32,451	8

1. Specifications : Generally conforming to IS 1364, ISO 4014/4017.

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

3. Material and Mechanical Properties : Property Class 10.9 as per IS 1367.

4. Note : 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 Diameter can be manufactured against request.

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

8. Bolts/Screws as per DIN 931/933 will be manufactured against specific order with minimum order quantity of each size.

9. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Grey highlighted items are full threaded



10.9 Hex Head Bolts/Screws - Metric

DIA (Spanner Size)	M33 (50mm)			M36 (55mm)			M39* (60mm)			M42 (65mm)		
Length	Part No.	₹ Price/ 100 pcs	Ctn Qty	Part No.	₹ Price/ 100 pcs	Ctn Qty	Part No.	₹ Price/ 100 pcs	Ctn Qty	Part No.	₹ Price/ 100 pcs	Ctn Qty
70				550845	90,312	20						
75	170303	71,568	25	550846	88,822	20				631194	1,30,205	12
80	170304	72,456	25	170320	85,407	20				550858	1,34,859	12
90	170305	76,937	25	170321	91,910	18				170336	1,34,782	12
100	170306	82,179	20	170322	95,614	18	200051	1,28,128	12	170337	1,51,080	12
110	170307	88,538	20	170323	1,02,117	16	811670	1,35,450	12	170338	1,59,334	12
120	170308	90,755	20	170324	1,10,342	15	833560	1,36,079	12	170339	1,60,562	8
130	170309	95,606	16	170325	1,09,549	12	620737	1,39,682	12	170340	1,67,342	8
140	170310	1,01,587	16	170326	1,22,747	12	828563	1,46,455	8	170341	1,76,655	8
150	170311	1,11,970	16	170327	1,29,326	12	550966	1,58,645	8	170342	1,85,948	8
160	170312	1,12,026	16	170328	1,35,937	12	550967	1,66,434	8	170343	1,95,251	8
180	170313	1,22,858	12	170329	1,57,947	12	550969	1,81,926	8	170344	2,12,987	8
200	170314	1,33,682	12	170330	1,71,019	8	550970	1,89,414	8	170345	2,22,623	6
220	170315	1,61,696	12	170331	2,05,015	8	200052	2,41,863	8	170346	2,85,560	6
240	170316	1,73,644	12	170332	2,19,934	9	550972	2,59,554	8	170347	3,06,753	6
260	170317	1,86,723	8	170333	2,34,862	8	200053	2,77,244	6	170348	3,28,014	4
280	170318	1,99,765	8	170334	2,49,398	8	200054	3,02,787	6	170349	3,49,233	4
300	170319	2,12,467	8	170335	2,82,501	7	200055	3,29,375	6	170350	3,70,436	4
310	200039	2,36,236	8	200048	2,91,377	8	200056	3,42,445	6	200065	4,06,692	4
320	200040	2,43,243	8	550962	2,99,614	4	200057	3,53,153	6	200066	4,18,018	4
330	200041	2,50,250	8	550963	3,07,850	4	836949	3,64,478	6	200067	4,29,343	4
340	200042	2,57,257	8	792681	3,16,087	4	200058	3,75,804	5	200068	4,40,669	4
350	200043	2,64,264	8	550964	3,24,324	4	200059	3,87,130	5	200069	4,51,994	4
360	583899	2,71,271	8	629762	3,32,561	4	200060	3,98,455	5	200070	4,63,320	4
370	200044	2,78,278	6	200049	3,40,798	4	200061	4,09,781	10	551152	4,74,646	4
380	200045	2,85,285	6	811375	3,49,034	6	200062	4,21,106	10	809540	4,85,971	8
390	200046	2,92,292	6	200050	3,57,271	10	200063	4,32,432	10	200071	4,97,297	8
400	200047	2,99,299	12	823800	3,65,508	10	200064	4,43,758	10	837530	5,08,622	8

1. Specifications : Generally conforming to IS 1364, ISO 4014/4017.

Grey highlighted items are full threaded

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

3. Material and Mechanical Properties : Property Class 10.9 as per IS 1367.

4. Note : 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 Diameter can be manufactured against request.

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

8. Bolts/Screws as per DIN 931/933 will be manufactured against specific order with minimum order quantity of each size.

9. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

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

*These are non preferred sizes and shall be serve as per MOQ basis

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



10.9 Hex Head Bolts/Screws - Metric

DIA (Spanner Size)	M45* (70mm)			M48* (75mm)			M52* (80mm)			M56* (85mm)		
Length	Part No.	₹ Price/ 100 pcs	Ctn Qty	Part No.	₹ Price/ 100 pcs	Ctn Qty	Part No.	₹ Price/ 100 pcs	Ctn Qty	Part No.	₹ Price/ 100 pcs	Ctn Qty
100	200072	1,74,414	10	787845	2,04,157	8	200096	2,65,473	6	200119	3,18,286	6
110	814490	1,84,104	8	787846	2,15,376	8	200097	2,78,338	6	200120	3,33,912	4
120	200073	1,84,770	8	787847	2,16,642	8	200098	2,81,114	6	200121	3,36,346	4
130	200074	1,93,393	8	787848	2,25,670	8	200099	2,92,409	6	200122	3,50,084	4
140	200075	1,97,818	8	811312	2,52,092	6	200100	2,99,614	6	200123	3,57,779	4
150	200076	2,06,847	8	606587	2,63,499	6	200101	3,11,915	6	815157	3,72,717	4
160	200077	2,31,229	6	811313	2,70,232	6	200102	3,19,839	5	200124	3,81,386	4
180	815934	2,50,099	6	550981	2,91,614	4	200103	3,44,539	5	200125	4,09,226	4
200	815935	2,64,988	6	550982	3,08,706	4	200104	3,97,083	5	200126	4,31,678	4
220	550976	3,08,021	4	550983	3,57,232	4	200105	4,56,626	4	200127	5,34,628	6
240	200078	3,28,887	4	550984	3,81,047	4	615331	4,86,528	4	200128	5,69,362	6
260	550979	3,83,769	4	787851	4,44,694	4	200106	5,63,949	4	200129	6,59,699	6
280	200079	4,06,751	4	551123	4,70,841	4	200107	5,96,595	8	200130	6,97,620	6
300	833095	4,29,734	4	551143	4,96,988	4	200108	6,29,241	8	200131	7,35,541	6
310	200080	4,84,221	4	200090	5,60,308	4	200109	7,04,898	6	200132	8,23,794	6
320	200081	4,96,782	4	551182	5,74,723	4	200110	7,22,722	6	200133	8,44,444	6
330	200082	5,09,446	4	200091	5,89,034	6	200111	7,40,546	6	200134	8,65,201	5
340	200083	5,22,007	4	551163	6,03,449	6	200112	7,58,369	6	551117	8,85,851	5
350	200084	5,34,671	4	200092	6,17,760	6	200113	7,76,193	6	200135	9,06,609	5
360	200085	5,47,232	4	200093	6,32,071	6	200114	7,93,907	6	200136	9,27,258	5
370	200086	5,59,794	4	200094	6,46,486	6	200115	8,11,731	6	200137	9,47,907	5
380	200087	5,72,458	4	823362	6,60,797	6	200116	8,29,554	6	200138	9,68,665	5
390	200088	5,85,019	4	200095	6,75,212	6	200117	8,47,378	6	200139	9,89,314	4
400	200089	5,97,580	4	809702	6,89,523	6	200118	8,65,201	6	200140	10,09,963	4

1. Specifications : Generally conforming to IS 1364, ISO 4014/4017.

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

3. Material and Mechanical Properties : Property Class 10.9 as per IS 1367.

4. Note : 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 Diameter can be manufactured against request.

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

8. Bolts/Screws as per DIN 931/933 will be manufactured against specific order with minimum order quantity of each size.

9. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Grey highlighted items are full threaded

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

*These are non preferred sizes and shall be serve as per MOQ basis

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Gr. 8 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	642	500	170364	864	500	170381	1,363	200			
5/8	170352	796	500	170365	827	500	170382	1,363	200			
3/4	170353	724	500	170366	796	200	170383	1,188	200	170400	2,507	100
7/8	170354	653	200	170367	870	200	170384	1,436	200	170401	2,542	100
1	170355	712	200	170368	866	200	170385	1,173	200	170402	2,698	100
1 1/4	170356	729	200	550992	953	200	170386	1,302	200	170403	2,795	100
1 1/2	170357	808	200	170370	1,142	200	170387	1,412	100	170404	2,758	50
1 3/4	170358	884	200	170371	1,253	200	170388	1,538	100	170405	3,451	25
2	170359	970	200	170372	1,289	200	170389	1,678	100	170406	3,759	25
2 1/4	170360	1,066	200	170373	1,479	100	170390	1,803	100	170407	4,151	25
2 1/2	170361	1,188	200	170374	1,479	100	170391	1,937	100	170408	4,419	25
2 3/4	170362	1,277	200	170375	1,647	100	170392	2,115	100	170409	4,184	25
3	170363	1,427	200	170376	1,736	100	170393	2,331	100	170410	5,366	25
3 1/4	240027	1,643	200	170377	1,750	100	170394	2,506	50	170411	4,851	25
3 1/2	240028	1,661	100	170378	1,875	100	170395	2,682	50	170412	5,952	25
3 3/4	240029	1,772	100	170379	2,592	100	170396	3,246	25	170413	5,404	25
4	240030	1,902	100	170380	2,732	100	170397	3,452	25	170414	6,524	25
4 1/4				551064	2,812	100	170398	3,402	25	170415	6,058	25
4 1/2	787956	2,117	100	551065	2,966	100	170399	3,534	25	170416	7,548	25
5	551063	2,340	100	551066	2,732	100	240034	3,778	50	170417	8,244	25
5 1/2				787957	4,073	100	240035	5,799	50	170418	10,065	25
6				787958	4,415	100	240036	6,326	50	170419	12,222	25
6 1/2										240037	12,784	25
7										170420	13,855	20
7 1/2										170421	14,971	25
8										170422	15,593	25

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 be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

6. For Hex Bolt/Screws BSW, above prices will apply.

7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



Gr. 8 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	4,714	25									
1 1/4	170424	5,249	25	551032	9,371	25						
1 1/2	170425	5,520	25	170445	9,970	25	551044	14,121	10	170487	19,600	10
1 3/4	170426	5,619	25	170446	10,349	25	787988	14,794	10	170488	19,600	10
2	170427	5,893	25	170447	11,026	25	170467	15,541	10	170489	19,638	10
2 1/4	170428	6,225	25	170448	11,711	25	170468	26,070	10	170490	23,112	10
2 1/2	170429	6,832	25	170449	12,280	25	170469	17,235	10	170491	21,316	10
2 3/4	170430	7,386	25	170450	13,405	10	170470	18,040	10	170492	22,750	10
3	170431	7,940	25	170451	13,915	10	170471	18,868	10	170493	23,793	10
3 1/4	170432	8,450	25	170452	14,883	10	170472	21,087	10	170494	25,899	10
3 1/2	170433	9,153	25	170453	15,371	10	170473	24,286	10	170495	26,994	10
3 3/4	170434	9,508	25	170454	16,746	10	170474	22,240	10	170496	28,029	10
4	170435	10,373	25	170455	17,235	10	170475	23,438	10	170497	29,715	10
4 1/4	170436	10,773	25	170456	17,951	10	170476	25,367	10	170498	37,081	10
4 1/2	170437	11,171	25	170457	18,477	10	170477	30,317	10	170499	32,694	5
5	170438	12,569	25	170458	19,667	10	170478	27,918	10	170500	34,912	5
5 1/2	170439	11,992	20	170459	20,960	10	170479	29,404	10	170501	37,130	5
6	170440	14,817	10	170460	22,077	10	170480	31,194	10	170502	39,422	5
6 1/2	170441	16,850	10	170461	23,282	10	170481	32,989	5	170503	41,736	5
7	170442	17,626	10	170462	24,480	10	170482	34,756	5	170504	43,961	5
7 1/2	170443	18,418	10	170463	25,596	10	170483	44,690	5	170505	46,173	5
8	170444	19,231	10	170464	26,794	10	170484	38,240	5	170506	49,234	5
9	551069	24,708	10	170465	31,916	10	170485	53,019	5	170507	70,861	5
10	551070	27,457	10	170466	35,906	8	170486	55,474	5	170508	77,703	4
11				240038	38,164	8				170509	81,592	4
12				551222	41,634	8				170510	89,006	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 be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
6. For Hex Bolt/Screws BSW, above prices will apply.
7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



Gr. 8 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	24,468	5						
1 1/4	170512	26,535	5						
1 1/2	170513	28,956	10						
1 3/4	170514	29,938	10						
2	170515	32,237	10						
2 1/4	170516	34,552	5	551302	45,708	5			
2 1/2	170517	36,524	5	170534	48,371	5	170551	58,571	5
2 3/4	170518	38,496	5	170535	50,670	5	170552	61,200	5
3	170519	40,794	5	551062	52,969	5	170553	64,163	5
3 1/4	170520	43,108	5	170537	55,936	5	170554	67,780	5
3 1/2	170521	45,077	5	170538	58,571	5	170555	71,075	5
3 3/4	170522	47,378	5	170539	61,526	5	170556	74,692	5
4	170523	49,677	5	170540	64,163	4	170557	77,983	5
4 1/4	170524	51,987	5	170541	66,791	5	170558	81,603	4
4 1/2	170525	54,288	5	170542	69,755	4	170559	84,894	4
5	170526	58,571	5	170543	75,346	5	170560	91,804	4
5 1/2	170527	63,171	5	170544	80,610	3	170561	98,714	3
6	170528	67,455	5	170545	86,212	4	170562	1,05,625	3
6 1/2				551072	92,738	3			
7	170529	76,340	3	170546	97,067	3	170563	1,19,120	3
7 1/2	170530	80,610	5	170547	1,02,335	3	170564	1,26,030	3
8	170531	85,220	3	170548	1,07,924	3	170565	1,32,939	3
9	170532	1,19,120	4	170549	1,19,120	3	170566	1,46,757	2
10	170533	1,02,989	3	170550	1,29,971	3	170567	1,60,578	2

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 be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
6. For Hex Bolt/Screws BSW, above prices will apply.
7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



Gr. 8 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	73,700	5	170585	1,19,026	3	170602	1,66,636	2
2 3/4	170569	77,320	5	170586	1,24,067	3	170603	1,73,481	2
3	170570	80,950	5	170587	1,29,122	3	170604	1,79,981	2
3 1/4	170571	84,229	4	170588	1,34,533	2	170605	1,86,825	2
3 1/2	170572	88,514	4	170589	1,39,573	2	170606	1,93,684	2
3 3/4	170573	92,459	4	170590	1,44,986	2	170607	2,00,539	2
4	170574	96,740	3	170591	1,51,125	2	170608	2,07,386	2
4 1/4	170575	1,00,688	3	170592	1,57,255	2	170609	2,14,245	2
4 1/2	170576	1,04,969	3	170593	1,63,384	2	170610	2,22,176	2
5	170577	1,13,188	3	170594	1,75,655	2	170611	2,38,414	2
5 1/2	170578	1,21,419	3	170595	1,87,914	2	170612	2,54,277	2
6	170579	1,29,649	2	170596	2,00,184	2	170613	2,70,514	2
7	170580	1,45,439	2	170597	2,23,979	2	170614	3,01,167	2
7 1/2	170581	1,53,668	3	170598	2,35,881	2	170615	3,17,405	2
8	170582	1,61,896	2	170599	2,48,505	2	170616	3,33,628	2
9	170583	1,78,346	2	170600	2,73,034	2	170617	3,65,371	2
10	170584	1,94,800	2	170601	2,97,562	2	170618	3,97,831	2

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 be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
6. For Hex Bolt/Screws BSW, above prices will apply.
7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



Hex Nuts - ISO 4032 - Class 8/10

Size (mm)	Grade	Part No.	₹ Price/100 pcs	Pcs. Per Box	Pcs. Per Carton
M4 X 0.7	8	793230	119	1000	18000
M5 X 0.8	8	793201	147	700	12600
M6 X 1	8	550303	205	500	9000
M8 X 1.25	8	550304	263	200	2400
M10 X 1.5	8	550305	489	200	2400
M12 X 1.75	8	550306	761	200	1600
M16 X 2	8	550307	1,753	100	800
M6 X 1	10	170619	237	500	9000
M8 X 1.25	10	170620	280	200	2400
M10 X 1.5	10	170621	517	200	2400
(M12) X 1.5	10	170623	811	200	2400
M12 X 1.75	10	170622	779	200	2400
(M14) X 1.5	10	170625	1,553	100	800
M14 X 2	10	170626	1,614	100	800
M16 X 2	10	170627	1,996	100	800
(M18) X1.5	10	170629	2,950	100	600
M18 X 2.5	10	170630	2,950	100	600
(M20) X 1.5	10	170631	3,834	50	300
M20 X 2.5	10	170632	3,834	50	300
M22 X 2.5	10	170633	4,623	50	200
M24 X 3	10	170634	6,425	50	200
M27 X 3	10	170635	11,281	25	150
M30 X 3.5	10	170636	16,118	25	150
M33 X 3.5	10	170637	22,284	10	80
M36 X 4	10	170638	28,849	10	80
M39 X 4	10	170639	39,349	10	40
M42 X 4.5	10	170640	48,333	10	40
M45 X 4.5	10	170641	57,741	10	40
M48 X 5	10	170642	69,565	10	40
M52 X 5	10	170643	77,702	4	16
M56 X 5.5	10	170644	1,06,461	4	16
M60 X 5.5	10	550301	1,93,962	3	12
M64 X 6	10	170645	2,00,867	3	12
M72 X 6	10	550302	3,70,425	2	8

1. Specifications : 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 1367-6, ISO 898, Part-II.
4. Note : Size in brackets are non-preferred standards.
5. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
6. Nuts as per DIN934 will be manufactured against specific order with minimum order quantity of each size
7. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



Hex Nuts - Grade 8 UNC

Size	Part No	₹ Price /100 pcs	Pcs. Per Box	Pcs. Per Carton
1/4	170646	218	500	9000
5/16	170647	273	500	9000
3/8	170648	414	200	2400
7/16	170658	703	200	1600
1/2	170649	989	200	1600
5/8	170650	2,116	200	1600
3/4	170651	3,727	50	400
7/8	170652	4,769	50	200
1	170653	7,356	50	200
1-1/8	170654	10,831	25	150
1-1/4	170655	15,811	25	100
1-3/8	170656	19,051	25	100
1-1/2	170657	25,910	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 be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
5. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



INTRODUCING Unbrako Lock Nuts



Marking*

Lock Nut (High-Tensile)

Standard IS 1364-4 / ISO 4035, Grade 04
(suitable for screws / bolts upto Grade 8.8)

Size	Part No.	₹ Price/ 100 pcs	Pcs per Box	Pcs per Carton
M10	828536	418	250	3000
M12	787157	610	200	2000
M16	830475	1,612	100	1200
M20	787158	3,097	50	500
M24	830476	5,191	50	300
M27	838164	7,940	50	200
M30	821022	10,925	40	160

Standard IS 1364-4 / ISO 4035, Grade 05
(suitable for screws / bolts upto Grade 12.9)

Size	Part No.	₹ Price/ 100 pcs	Pcs per Box	Pcs per Carton
M10	830477	464	250	3000
M12	830478	677	200	2000
M16	551800	1,791	100	1200
M20	551801	3,442	50	500
M24	830479	5,767	50	300
M27	834947	8,686	50	200
M30	821144	11,954	40	160

1. Specifications : Nuts with Metric Threads IS 1364, ISO 4035
2. Threads : ISO Metric 6H as per IS 4218, ISO 261, ISO 965.
3. Material Mechanical Properties : Property Class as tabulated as per IS 1367-6, ISO 898, Part-II.
4. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Marking*

Nylock Nut

(Nylon Ring Insert) (Duly White Zinc Plated)

DIN 985

Grade-8

Size (mm)	Part No.	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton
M6	290001	153	500	9000
M8	290002	306	200	2400
M10	290003	662	200	2400
M12	290004	970	200	2400
M12 X1.5	290005	1,041	200	2400
M14	290006	1,594	100	800
M16	560957	2,146	100	800
M16X1.5	630379	2,198	100	800
M20	630380	4,630	50	300
M20 X1.5	630381	4,909	50	300
M24	791270	9,514	50	200
M30	791271	23,375	25	100
M36	818459	45,656	-	40

Nylock Nut

(Nylon Ring Insert) (Duly White Zinc Plated)

ISO 7040

Grade-8

Size (mm)	Part No.	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton
M6	630448	222	500	9000
M8	630449	397	200	2400
M10	630450	879	200	2400
M12	630451	1,257	200	2400
M12X1.5	630452	1,335	200	2400
M14	630453	2,046	100	800
M16	630454	2,646	100	800
M16X1.5	630455	2,708	100	800
M20	630456	5,371	50	300
M20X1.5	630457	5,746	50	300
M24	630768	10,940	50	200
M30	814795	27,198	25	100

DIN 985

Grade-10

Size (mm)	Part No.	₹ Price/ 100 Pcs.	Pcs. Per Box	Pcs. Per Carton
M8	836160	370	200	2400
M10	630305	784	200	2400
M12	630306	1,158	200	2400
M16	290007	2,469	100	800
M16 X 1.5	290008	2,552	100	800
M20	290009	4,917	50	300
M24	290010	9,996	50	200
M30	791686	24,507	25	100
M36	794385	47,939	-	40

ISO 7040

Grade-10

Size (mm)	Part No.	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton
M8	836161	476	200	2400
M10	630458	1,015	200	2400
M12	630459	1,436	200	2400
M16	630460	2,814	100	800
M16 X1.5	630461	2,677	100	800
M20	630462	5,697	50	300
M24	630463	12,678	50	200
M30	830474	28,668	25	100



All Metal Prevailing Torque Nut

DIN 980V / ISO7042

(Duly White Zinc Plated)

Grade-10

Size (mm)	Part No. DIN	Part No. ISO	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton
M6	796311		447	500	9000
M8	796314		867	200	2400
M10	816933	796315	1,509	200	2400
M12	816934	796313	2,384	200	2400
M16	796312		4,523	100	800
M20	796310		8,702	50	300
M24	787170		16,459	50	300



Metal Insert Prevailing Torque Nut - DIN 980M

(Duly White Zinc Plated)

Grade-10

Size (mm)	Part No.	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton
M6	815003	1,266	500	9000
M8	815004	1,406	200	2400
M10	815005	1,560	200	2400
M12	815006	2,274	200	2400
M14	815013	3,445	100	800
M16	814419	4,548	100	800
M20	814420	9,536	50	300
M22	815007	13,645	50	300
M24	814421	20,623	50	300

1. Plating : No guarantee can be 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

Nominal Size (mm)	Part No.	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton	Nominal Size (mm)	Part No.	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton
3	171758	20	2000	160000	18	171767	315	100	2400
4	171759	24	2000	90000	20	171768	584	100	1500
5	171760	29	2000	48000	22	171769	654	50	1000
6	171761	27	1000	30000	24	171770	869	50	1200
8	171762	53	1000	24000	27	171771	997	50	700
10	171763	95	500	12000	30	171772	1,743	50	500
12	171764	115	500	7000	33	171773	2,054	25	400
14	171765	190	200	4800	36	171774	2,984	25	350
16	171766	286	100	3000	39	171775	3,231	25	250

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



Spring Washer - Flat Section

Nominal Size (mm)	Part No.	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton	Nominal Size (mm)	Part No.	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton
3	171776	20	2000	140000	18	171785	508	100	1800
4	171777	23	2000	120000	20	171786	757	100	1400
5	171778	29	2000	60000	22	171787	820	50	800
6	171779	52	1000	32000	24	171788	1,227	50	700
8	171780	87	1000	14000	27	171789	1,369	50	700
10	171781	125	500	7000	30	171790	2,498	50	500
12	171782	186	500	5000	33	171791	3,997	25	200
14	171783	289	200	3200	36	171792	4,185	25	350
16	171784	436	100	3000	39	171793	4,392	25	250

1. Specifications : Generally conforming to DIN 127 B, IS 3063 & BS 4464



Hardened Washer for 10.9 Bolts

Nominal Size (mm)	Part No.	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton
12	551111	617	500	4000
16	551112	1,080	200	1600
20	551113	1,636	100	800
22	631368	1,972	100	800
24	551114	2,308	100	600
27	630476	3,872	100	400
30	630477	4,840	100	400
33	793331	7,064	50	300
36	796066	7,891	100	400
39	793826	13,500	25	125
42	811369	18,500	25	100
45	811370	22,120	20	80
48	811371	30,030	15	60
52	200016	33,033	15	60
56	811372	42,600	10	40



1. Specifications : Generally conforming to 300HV minimum. For Unbrako Hardened Washer 10.9 Bolts

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

3. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Construction

Page Contents

55	IS 3757 Heavy Hex Structural Bolts
56	IS 6623 Heavy Hex Nuts
56	IS 6649 Structural Washer
57	High Tensile Track Shoe Bolts & Square Nuts
60	High Tensile Plow Bolts & Hex Nuts
61	Drop In Anchors
61	Drop In Anchors Setting Tools
61	Weld Nut
62	Direct Tension Indicator - BS EN 14399-9
62	Rebar Coupler
64	Twist-off Type Tension Control Bolt BS EN 14399-10
66	Nut - BS EN 14399-10 (HRD) k-class K0
66	Washer - BS EN 14399-6

IS : 3757



CM/L-9700156815

IS : 6623



CM/L-9700156916

IS : 6649



CM/L-9700157017



Construction Fasteners

Arc Welding Stud

*Prices available on request.



The UNBRAKO ARC Welding Stud also known as Shear Connector is used in the construction of tall buildings, bridges and steel structures. Drawn-arc process is used for stud welding. It improves the strength of the structure.

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

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

Direct Tension Indicator



UNBRAKO Direct Tension Indicators, also known as Auto Torque Indicators, 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 & EN 14399-3, EN 14399-4 or as per IS 3757

Auto Torque Check Bolt Assembly (TC Bolt)



UNBRAKO Auto Torque Check Bolt also known as Tension Control Bolt is an easy to install Heavy Duty Bolt used in Steel Frame Construction. It has its own built-in torque control device. The outer socket of wrench rotates the nut until the torque control groove in the spline shears off on achieving proper bolt tension.

Product Range :
Metric: M12 – M36 (any length) – As Per BS EN 14399 - 10

Unbrako Electric Shear Wrench is also Available.

Rebar Coupler

The Rebar 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. It is suitable for joining reinforcement bars end to end.



Total Solution Bolt Assembly Tamper Proof



The Innovative 6 wedge shaped design acts to convert radial force into axial force, increasing pressure onto the contact surface of the application. Even under extreme vibration, bolt does not loosen.



IS 3757 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	5,825	25	300021	10,765	25			
45	300002	6,345	25	300022	11,586	25			
50	300003	6,675	25	300023	12,115	25	300041	16,431	10
55	300004	6,893	25	300024	12,653	25	300042	16,897	10
60	300005	7,351	25	300025	13,521	20	300043	17,590	10
65	300006	7,754	25	300026	14,116	20	300044	19,199	10
70	300007	8,195	25	300027	14,622	10	300045	20,112	10
75	300008	8,770	25	300028	15,179	10	300046	20,741	10
80	300009	9,631	25	300029	15,607	10	300047	21,471	10
90	300010	10,100	25	300030	16,589	10	300048	23,604	10
100	300011	10,956	25	300031	17,546	10	300049	24,140	10
110	300012	11,832	25	300032	18,225	10	300050	26,060	10
120	300013	13,048	15	300033	19,769	10	300051	27,784	10
130	300014	14,981	10	300034	21,259	10	300052	29,333	10
140	300015	15,221	10	300035	21,916	10	300053	30,675	10
150	300016	18,047	10	300036	23,097	10	300054	32,166	10
160	300017	19,532	10	300037	27,512	10	300055	36,499	5
170	300018	20,741	10	300038	28,677	10	300056	38,032	5
180	300019	21,949	10	300039	29,847	10	300057	39,558	5
200	300020	24,757	10	300040	33,471	10	300058	42,524	5
220				630603	45,555	10			

1. Specifications : Bolts IS 3757.
2. Threads : Bolts ISO Metric 6g as per IS 4218.
3. Material and Mechanical Properties: Bolts - Property Class 10.9S as per IS 1367.
4. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
5. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



ISO 9001

IATF 16949

ISO 14001

ISO 45001





IS 3757 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 Qty	International Part No.	₹ Price/ 100 pcs	Box Qty
55	300059	21,398	10									
60	300060	22,154	10	300076	45,113	5						
65	300061	23,995	10	300077	47,221	5						
70	300062	24,364	10	300078	46,903	5						
75	300063	26,503	10	300079	50,123	5	300092	60,542	5			
80	300064	27,016	10	300080	52,376	5	300093	62,685	5			
90	300065	29,851	5	300081	55,647	5	300094	64,417	5			
100	300066	32,062	5	300082	59,744	5	300095	69,078	5			
110	300067	32,848	5	300083	62,202	5	300096	75,195	5			
120	300068	34,136	5	300084	63,932	5	300097	76,655	5	581151	1,35,515	5
130	300069	35,617	5	300085	65,762	5	300098	80,337	5	581153	1,43,259	4
140	300070	37,147	5	300086	69,716	5	300099	85,099	5	581155	1,50,780	4
150	300071	38,825	5	300087	73,628	5	300100	89,690	5	581157	1,58,597	4
160	300072	44,118	5	300088	81,094	5	300101	1,01,279	4	581159	1,66,044	4
170	300073	47,817	5	300089	89,494	5	300102	1,11,337	4	581161	1,73,489	4
180	300074	49,977	5	300090	89,294	5	300103	1,11,159	4	581163	1,81,234	4
200	300075	53,693	5	300091	96,906	5	300104	1,20,929	4	581167	1,95,827	3
220	792919	65,619	5				581122	1,30,700	3	581171	2,10,717	3
240							581126	1,40,472	3	581175	2,25,611	3
260	786800	77,123	4				581130	1,50,245	3	581179	2,41,248	3
280										581183	2,56,139	3
300										581186	2,71,031	3

IS 6623 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	2,846	5,764	6,730	9,659	15,624	19,776	34,102
Box Quantity	100	50	50	25	10	10	10

IS 6649 Structural Washer

Metric

Diameter	M16	M20	M22	M24	M27	M30	M36
International Part No.	132001	132002	132003	132004	132005	132006	581349
₹ Price/100 pcs	1,802	2,256	3,213	3,396	5,460	6,792	10,350
Box Quantity	200	100	100	100	100	100	10

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. Washer: Hardness: HRC 38-45 as per IS 6649

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

5. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST





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	9,788
-----	M16 x 1.5 x 73	T.S. Bolt	D50, D50A 15	834073	15,805
130.32.11220	M16 x 1.5	T.S. Sq. Nut	D50, D50A 15	330002	4,060
130.32.11212/130.32.11220	M16 x 1.5 x 57	T.S. Bolt & Sq. Nut	D50, D50A 15	550287	13,848
-----	M16 x 1.5 x 73	T.S. Bolt & Sq. Nut	D50, D50A 15	834072	19,865
-----	M18 x 1.5 x 55	T.S. Bolt	Pc220	834070	13,050
205.32.51210	M18 x 1.5 x 58	T.S. Bolt	Pc220	330003	13,413
01803.01824	M18 x 1.5	T.S. Sq. Nut	Pc220	330004	4,930
-----	M18 x 1.5 x 55	T.S. Bolt & Sq. Nut	Pc220	834069	17,980
205.32.51210/01803.01824	M18 x 1.5 x 58	T.S. Bolt & Sq. Nut	Pc220	550288	18,343
113CT51096	M19 x 1.5 x 62	T.S. Bolt	D80, D80A 12	330006	15,225
150.32.11210	M19 x 1.5 x 65	T.S. Bolt	D80, D80A 12	330005	15,950
150.32.21311	M19 x 1.5	T.S. Sq. Nut	D80, D80A 12	330007	5,583
113CT51096/150.32.21311	M19 x 1.5 x 62	T.S. Bolt & Sq. Nut	D80, D80A 12	550290	20,808
150.32.11210/150.32.21311	M19 x 1.5 x 65	T.S. Bolt & Sq. Nut	D80, D80A 12	550289	21,533
207.32.11350	M20 x 1.5 x 63	T.S. Bolt	PC300	330008	17,400
-----	M20 x 1.5	T.S. Sq. Nut	PC300	550308	5,945
207.32.11350	M20 x 1.5 x 63	T.S. Bolt & Sq. Nut	PC300	550291	23,345
176.32.11210	M24 x 1.5 x 78.5	T.S. Bolt	D155	330009	30,450
178.32.11220	M24 x 1.5	T.S. Sq. Nut	D155	330010	10,513
176.32.11210/178.32.11220	M24 x 1.5 x 78.5	T.S. Bolt & Sq. Nut	D155	550292	40,963
195.32.11210	M27 x 1.5 x 82.5	T.S. Bolt	D355	330011	41,325
195.32.11221	M27 x 1.5	T.S. Sq. Nut	D355	330012	15,515
195.32.11210/195.32.11221	M27 x 1.5 x 82.5	T.S. Bolt & Sq. Nut	D355	550294	56,840

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 be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
4. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.



FLANGE TRACK SHOE BOLT

Suitable for BEML (KOMATSU) Earthmovers

International Part No.	Size	Description	₹ Price/ 100 pcs
834480	16 x 1.5 x 75	T.S. Flange Bolt	16,313
834074	16 x 1.5	T.S. Sq. Nut	4,060
834479	16 x 1.5 x 75	T.S. Bolt & Sq. Nut	20,373
798239	20 x 1.5 x 56	T.S. Flange Bolt	16,893
798098	20 x 1.5 x 65	T.S. Flange Bolt	17,763
550308	20 x 1.5	T.S. Sq. Nut	5,945
798241	20 x 1.5 x 56	T.S. Flange Bolt + Nut	22,838
799552	20 x 1.5 x 65	T.S. Flange Bolt + Nut	23,708
200001	22 x 1.5 x 67	T.S. Flange Bolt	21,750
200002	22 x 1.5	T.S. Sq. Nut	7,758
200003	22 x 1.5 x 67	T.S. Flange Bolt + Nut	29,508
832741	24 x 1.5 x 72	T.S. Flange Bolt	27,550
330010	24 x 1.5	T.S. Sq. Nut	10,513
832740	24 x 1.5 x 72	T.S. Flange Bolt + Nut	38,063
200004	27 x 2 x 93	T.S. Flange Bolt	46,763
200005	27 x 2	T.S. Sq. Nut (Collar Nut)	18,705
200006	27 x 2 x 93	T.S. Flange Bolt + Nut	65,468



SEGMENT BOLT

International Part No.	Size	Description	₹ Price/ 100 pcs	O.E. Part No. (For Ref. Only)
833988	22 x 2 x 70	SEGM TRACK BOLT	37,421	154-27-12320
833989	22 x 2	Hex Nut	12,305	01803-02228
833987	22 x 2 x 70	SEGM BOLT + NUT	49,726	154-27-12320/01803-02228
200007	24 x 2 x 80	SEGM TRACK BOLT	51,175	178-27-11150
200008	24 x 2	Hex Nut	15,525	01803-02430
200009	24 x 2 x 80	SEGM BOLT + NUT	66,700	178-27-11150/01803-02430

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 be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
4. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



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" UNF x 2.3/32"	T.S. Bolt	D4, D5	330016	7,736
5M-8756	5/8" UNF x 2 1/4"	T.S. Bolt	D4, D5	330017	8,154
1M-1408	5/8" UNF	T.S. Sq. Nut	D4, D5	330018	4,128
7H-3597 / 1M-1408	5/8 " UNF x 2.3/32"	T.S. Bolt & Sq. Nut	D4, D5	550295	11,864
5M-8756 / 1M-1408	5/8" UNF x 2 1/4"	T.S. Bolt & Sq. Nut	D4, D5	550296	12,282
7H-3598	3/4 " UNF x 2.3/8"	T.S. Bolt	D6, D7	330019	15,443
7H-3598	3/4" UNF x 2.3/4"	T.S. Bolt	D6, D7	630419	18,850
7H-3598	3/4" UNF x 60"	T.S. Bolt	D6, D7	834067	15,443
7H-3598	3/4" UNF x 63/36"	T.S. Bolt	D6, D7	838430	16,675
	3/4" UNF x 78"	T.S. Bolt	D6, D7	200010	19,076
7H-3598	3/4" UNF x 80/38"	T.S. Bolt	D6, D7	838432	21,025
----	3/4" UNF x 105"	T.S. Bolt	D6, D7	200011	22,838
1S-1860	3/4" UNF	T.S. Sq. Nut	D6, D7	330020	5,510
7H-3598/'1S-1860	3/4" UNF x 2.3/8"	T.S. Bolt & Sq. Nut	D6, D7	550297	20,953
7H-3598/'1S-1860	3/4" UNF x 2.3/4"	T.S. Bolt & Sq. Nut	D6, D7	816932	24,360
7H-3598/'1S-1860	3/4" UNF x 60"	T.S. Bolt & Sq. Nut	D6, D7	834066	20,953
7H-3598/'1S-1860	3/4" UNF x 63/36"	T.S. Bolt & Sq. Nut	D6, D7	838429	22,185
	3/4" UNF x 78"	T.S. Bolt & Sq. Nut	D6, D7	200012	24,586
7H-3598/'1S-1860	3/4" UNF x 80/38"	T.S. Bolt & Sq. Nut	D6, D7	838431	26,535
----	3/4" UNF x 105"	T.S. Bolt & Sq. Nut	D6, D7	200013	28,348
7H-3598	7/8" UNF x 2.66"	T.S. Bolt	D8	833278	24,300
1S-1860	7/8" UNF	T.S. Sq. Nut	D8	330015	8,625
7H-3598/1S-1860	7/8" UNF x 2.66"	T.S. Bolt & Sq. Nut	D8	833277	32,925
9M-7445	1" UNF x 2.94"	T.S. Bolt	D9	330021	36,150
1S-6421	1" UNF	T.S. Sq. Nut	D9	330022	13,050
9M-7445/1S-6421	1" UNF x 2.94"	T.S. Bolt & Sq. Nut	D9	550299	49,200

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 be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
4. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



High Tensile PLOW Bolts & Hex Nuts - Zinc Phosphate Finish

Suitable for Caterpillar Earthmovers

O.E. Part No. (For Ref. Only)	Size	Description	International Part No.	₹ Price/ 100 pcs
3F-5108	5/8" UNC x 57.5"	Plow Bolt	833985	9,150
4K-0367	5/8" UNC	Hex Nut	833986	3,155
3F-5108/4K-0367	5/8" UNC x 57.5"	Plow Bolt & Hex Nut	833984	12,305
5J-4773	3/4" UNC x 63.5"	Plow Bolt	833982	13,600
	3/4" UNC x 71.0"	Plow Bolt	200014	14,025
2J-3506	3/4" UNC	Hex Nut	833983	4,250
5J-4773/2J-3506	3/4" UNC x 63.5"	Plow Bolt & Hex Nut	833981	17,850
	3/4" UNC x 71.0"	Plow Bolt & Hex Nut	200015	18,275

High Tensile Segment Bolt - Zinc Phosphate Finish

Suitable for Caterpillar Earthmovers

6V-0937	5/8" UNC x 54"	Segment Bolt	834076	12,075
7H-3607	5/8" UNC	Hex Nut	834077	4,410
6V-0937/7H-3607	5/8" UNC x 54"	Segment Bolt & Hex Nut	834075	16,485

High Tensile Track Shoe Bolts & Square Nuts

Suitable for HM-TEREX & HM DEMAG Earthmovers

O.E. Part No. (For Ref. Only)	Size	Description	Model	International Part No.	₹ Price/ 100 pcs
01801340	3/4" x UNF x 2.3/4"	T.S. Bolt	H31, H36, H41	630419	18,850
06400140	3/4" UNF	T.S. Sq. Nut	H36	330020	5,510
01801340/06400140	3/4" x UNF x 2.3/4"	T.S. Bolt & Sq. Nut	H31, H36, H41	816932	24,360
06327940	7/8" UNF x 3.11/32" (84.9 mm)	T.S. Bolt	H51, H55	330023	27,750
06400240	7/8" UNF	T.S. Sq. Nut	H51	330015	8,625
06327940/06400240	7/8" UNF x 3.11/32" (84.9 mm)	T.S. Bolt & Sq. Nut	H51, H55	550300	36,375

High Tensile Track Shoe Bolts & Square Nuts

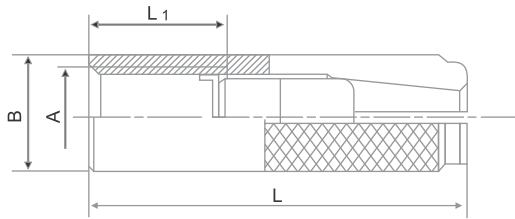
Suitable for L & T Poclain Earthmovers

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	8,154
K 01345.36	5/8" UNF	T.S. Sq. Nut	90 CK	330018	4,128
W 00 330.71/K 01345.36	5/8" UNFx2.1/4"	T.S. Bolt & Sq. Nut	90 CK	550296	12,282
U 02330-77	7/8" UNFx2.66"	T.S. Bolt	300 CK	833278	24,300
Z 02345-07	7/8" UNF	T.S. Sq. Nut	300 CK	330015	8,625
U 02330-77/Z 02345-07	7/8" UNFx2.66"	T.S. Bolt & Sq. Nut	300 CK	833277	32,925

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Drop In Anchors



Raw Material:
Special steel developed by UNBRAKO USA

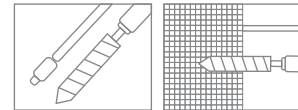
Value Are In KN

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

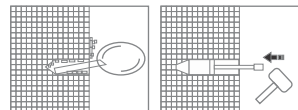
Drop In Anchors

Code	International Part No.	Size (A)	External Diameter (B)	Thread Length (L1)	Body Length (L)	Box Quantity	Carton Quantity	₹ Price/ 100 pcs
DANCH0625ZP	551654	M6	8.0	10	25	100	3600	708
DANCH0830ZP	551655	M8	10.0	13	30	100	1800	924
DANCH1040ZP	551656	M10	12.0	15	40	50	1000	1,438
DANCH1250ZP	530269	M12	16.0	20	50	50	600	3,407
DANCH1660ZP	551657	M16	20.0	25	60	25	300	5,741

DROP IN ANCHORS



HAMMER SET ANCHORS



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

Hexagon Weld Nut

Size (mm)	Part No.	₹ Price/ 100 pcs	Pcs. Per Box	Pcs. Per Carton
M6	136004	157	500	9000
M8	136001	299	200	2400
M10	136002	550	200	2400
M12	136003	783	200	1600



1. Specifications : Generally conforming to DIN 929. Grade 6
2. Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
3. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.
4. No head marking.



Direct Tension Indicator BS EN 14399-9

(Auto Torque Indicator) For 8.8S Bolt Assembly

(Duly Mechanical Zinc Plated)

Size	International Part No.	₹ Price/100 pcs	Pcs/Box	Pcs/Carton
M16	630330	3,187	100	1200
M20	370002	5,696	100	800
M22	370003	6,895	50	400
M24	370004	9,235	50	400
M27	370005	11,693	50	300

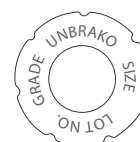


Direct Tension Indicator BS EN 14399-9

(Auto Torque Indicator) For 10.9 S Bolt Assembly

(Duly Mechanical Zinc Plated)

Size	International Part No.	₹ Price/100 pcs	Pcs/Box	Pcs/Carton
M24	370006	9,235	50	400
M27	370007	11,693	50	300
M30	370008	17,058	25	200
M36	370009	24,501	25	150



1. Specification : Generally conforming to BS EN 14399-9

Note : Separate catalogue can be provided on request.

2. Products can be supplied with Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Unbrako Upset Parallel Threaded Coupler

DIA	International Part No.	Bar Designation No. [mm]	Outer Dia [mm]	Length in mm	Thread size	₹ Price/ 100 pcs	Carton
12	787739	4 [13]	20	28	M14x2	8,290	400
16	787740	5 [16]	26	40	M20x2.5	13,470	200
20	787741	6 [19]	34	48	M24x3	17,961	100
25	787743	8 [25]	42	60	M30x3.5	27,632	60
28	787744	9 [29]	48	66	M33x3.5	41,447	40
32	787745	10 [32]	53	72	M36x4	50,082	28
36	787746	11 [36]	60	84	M42x4.5	80,132	23
40	787747	14 [43]	65	90	M45x4.5	1,03,274	20



1. Specifications: ASTM A615, A706, A775, IS 1786, 16172

2. Material and Mechanical Properties: as per Unbrako Spec.

3. Finish: Self/Plain

Separate Construction Catalogue available on request

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST

TWIST-OFF TYPE TENSION CONTROL STRUCTURAL BOLT

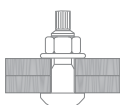
Tension control structural bolt is an easy to install heavy duty bolt used in steel frame construction. The combination of high tensile strength and ductility results in a structural bolt that can be employed in almost all steel work connections. This high strength positive tension shear bolt has its own built in torque control device.

Unbrako electric shear wrench is used for tightening the bolt. The outer socket rotates the nut until the torque control groove in the spline shears off, thereby achieving proper bolt tension. This shear area is designed to facilitate the ideal seating torque requirements for the installation of the bolt. No specialist operator expertise is required as the correct installation is automatically realized through the design of the bolt.

Installation Procedure:

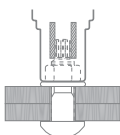
(Step 1)

- Place bolt through hole in the joining members. Attach washer & run up nut finger tight to the working members.



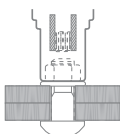
(Step 2)

- Fit the inner socket of the drive unit firmly over the bolt tip (spline).
- Engage the outer socket over the nut by pushing the shear wrench.
- Pull lever switch to on. The outer socket rotates the nut. As the tensile load increases the torque tension in the bolt also increases until the bolt reaches its designed shear strength and shears in the designated portion of the bolt.



(Step 3)

- Turn off wrench when bolt tip (Spline) shears off.



(Step 4)

- Pull the shear wrench back to remove outer socket from the nut.
- Pull the eject lever on the wrench to discharge the severed bolt tip (Spline) from the inner socket



Unbrako Electric Torque/Shear Wrench

	EXTENSION SOCKETS						
	M12	M16	M20	M22	M24	M27	M30
UNB-16E	●	●					
UNB-20E	●	●	●				
UNB-22E	●	●	●	●			
UNB-24E		●	●	●	●		
UNB-27E		●	●	●	●	●	
UNB-30E						●	●

Unbrako Electric wrenches are available with various socket extensions to match different sizes of Unbrako Tension Control Bolts, allowing easy & accurate installation.

Advantages of Tension Control Bolts

- Quick, safe and easy to Install
- Speed of Installation.
- Visual inspection.
- Substantial cost savings.
- Consistent Tension is assured in application.
- No specialist torque wrenches or gauges required.
- No specialist operator expertise required for installation.
- Single operator installation & Reduced operator fatigue.



Applications

- Stadium
- Bridges
- Buildings
- Airport / Railway Station
- Gantry Advertisement
- Rivet Replacement



Pre-Load Tension Control Structural Bolts System HRC - BS EN 14399-10

Metric

DIA	M12			M16			M20		
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
30	550001	3,341	50						
35	550002	3,640	50						
40	550003	3,940	50	550009	7,001	25	797881	13,883	25
45	550004	4,246	50	550010	7,537	25	797882	14,564	25
50	550005	4,546	50	550011	7,846	25	550037	14,267	25
55	550006	4,860	50	550012	8,073	25	550038	14,818	25
60	550007	5,165	50	550013	8,590	25	550039	15,659	25
65	550008	5,479	50	550014	9,077	25	550040	16,282	20
70	550231	5,784	50	550015	9,621	25	550041	16,888	10
75				550016	10,323	25	550042	17,517	10
80				550017	11,330	25	550043	18,041	10
85				550018	11,800	25	550044	19,029	10
90				550019	11,705	25	550045	19,418	10
95				550020	12,526	25	550046	20,625	10
100				550021	12,899	25	550047	20,768	10
110				550023	13,765	25	550049	21,489	10
120				550025	15,151	15	550051	23,231	10
130				550027	16,814	15	550053	24,863	10
140				550029	16,839	10	550055	25,540	10
150				550031	19,791	10	550057	26,869	10
160				550033	21,204	10	550059	31,494	10
170				550035	22,340	10	550061	32,464	10
180				550236	23,468	5	550063	33,535	10
190				550237	24,944	5	550065	35,655	10
200				550238	26,096	5	550067	36,875	10

1. Specifications : Bolts BS EN 14399-10
2. Material and Mechanical Properties: Bolts - Property Class 10.9 HRC
3. Finish: Black Oxide

NOTE:

- Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
- Products also available in Zinc-Flake and KoteEnviroGrin® coating. Prices available on request.
- Tension Control Structural Bolt with Hex Head also available on request, prices will remain same.



*Unbrako Electric Shear Wrench

For assembly & installation of Tension Control Structural Bolt at site
Unbrako electric shear wrench can be made available for hire/sale.

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Pre-Load Tension Control Structural Bolts System HRC - BS EN 14399-10

Metric

DIA	M22			M24			M27		
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	797884	20,353	10						
55				795192	27,389	10			
60	550069	20,798	10	550098	27,358	10	797885	52,600	5
65	550070	22,179	10	550099	29,527	10	797886	54,854	5
70	550071	23,561	10	550100	29,808	10	550144	54,721	5
75	550072	24,331	10	550101	32,351	10	550145	58,266	5
80	550073	25,101	10	550102	32,866	10	550146	60,531	5
85	550074	26,362	10	550103	34,746	10	550147	62,229	5
90	550075	27,621	10	550104	36,181	10	550148	64,311	5
95	550076	27,944	10	550105	37,289	10	550149	66,915	5
100	550077	28,281	10	550106	38,735	10	550150	68,600	5
110	550079	30,481	10	550108	39,608	10	550152	72,085	5
120	550081	32,395	10	550110	40,867	5	550154	74,098	5
130	550083	34,109	10	550112	42,618	5	550156	75,987	5
140	550085	35,626	10	550114	44,301	5	550158	81,220	5
150	550087	37,398	5	550116	46,145	5	550160	85,004	5
160	550089	41,250	5	550118	52,347	5	550162	93,924	5
170	550091	42,494	5	550120	56,541	5	550164	1,03,630	5
180	550093	43,687	5	550122	58,759	5	550166	1,03,466	5
190	550095	45,032	5	550124	61,230	5	550168	1,08,073	5
200	550097	46,310	5	550126	59,938	5	550170	1,08,407	5

1. Specifications : Bolts BS EN 14399-10
2. Material and Mechanical Properties: Bolts - Property Class 10.9 HRC
3. Finish: Black Oxide

NOTE:

- Plating : No guarantee can be given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
- Products also available in Zinc-Flake and KoteEnviroGrin® coating. Prices available on request.
- Tension Control Structural Bolt with Hex Head also available on request, prices will remain same.



*Unbrako Electric Shear Wrench

For assembly & installation of Tension Control Structural Bolt at site
Unbrako electric shear wrench can be made available for hire/sale.

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Pre-Load Tension Control Structural Bolts System HRC - BS EN 14399-10

DIA	M30			M36		
Length	International Part No.	₹ Price/ 100 pcs	Box Quantity	International Part No.	₹ Price/ 100 pcs	Box Quantity
60	795195	65,294	5			
70	550251	71,130	5	797889	1,22,846	4
75	797888	70,480	5	797890	1,26,214	4
80	550188	72,853	5	797891	1,29,583	4
85	550189	73,410	5	797892	1,28,923	4
90	550190	74,131	5	797893	1,33,278	4
95	550191	77,041	5	797894	1,35,484	4
100	550192	79,689	5	797895	1,39,771	4
110	550194	87,254	5	797896	1,47,488	3
120	550196	88,513	5	797897	1,55,956	3
130	550198	92,287	5	797898	1,64,531	3
140	550200	97,876	5	797899	1,73,105	3
150	550202	1,03,504	5	797900	1,81,681	3
160	550204	1,16,893	4	797901	1,90,256	3
170	550206	1,28,505	4	797902	1,98,830	3
180	550208	1,28,202	4	797903	2,07,405	3
190	550210	1,34,786	3	797904	2,15,873	3
200	550212	1,39,511	4	797905	2,24,448	3

1. Specifications : Bolts BS EN 14399-10

2. Material and Mechanical Properties:

Bolts - Property Class 10.9 HRC

3. Finish: Black Oxide

NOTE:

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

• Products also available in Zinc-Flake and KoteEnviroGrin® coating. Prices available on request.

• Tension Control Structural Bolt with Hex Head also available on request, prices will remain same.

Nut - BS EN 14399-10 (HRD) k-class K1

Metric

Diameter	M12	M16	M20	M22	M24	M27	M30	M36
International Part No.	798047	798048	798049	630627	798050	798051	630628	798052
₹ Price/100 pcs	1,348	2,988	5,750	6,701	10,500	14,740	18,657	34,612
Box Quantity	100	100	50	50	25	10	10	10

Washer - BS EN 14399-6

Metric

Diameter	M12	M16	M20	M22	M24	M27	M30	M36
International Part No.	625773	625774	625775	630632	625776	802087	625777	625778
₹ Price/100 pcs	850	1,605	2,260	3,216	3,184	5,264	6,289	11,444
Box Quantity	200	200	100	100	100	100	50	50

Washer - JIS B 1186

Metric

Diameter	M12	M16	M20	M22	M24	M27	M30	M36
International Part No.	819318	819319	819320	819321	819322	819323	819324	819325
₹ Price/100 pcs	1,130	2,306	3,304	6,067	6,180	8,664	12,961	18,739
Box Quantity	200	200	100	100	100	100	50	50

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST

Petrochemical

Page Contents

69	Studbolt - Metric
72	Studbolt - Inch
75	Heavy Hex Nut



Petrochemical Fasteners

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

ISO 9001:2015 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

Diameter Range	Inch : 3/8" to 4"
	Metric : M10 to M100
Length Range	Inch : upto 10 feet
	Metric : upto 3 meters



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 - Metric without nuts

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	552001	2,065	552013	3,795						
70	552002	2,409	552014	4,427	552033	5,735				
80	552003	2,753	552015	5,059	552034	6,554	552055	7,917		
90	552004	3,097	552016	5,692	552035	7,374	552056	8,907	552078	10,979
100	552005	3,442	552017	6,324	552036	8,194	552057	9,895	552079	12,200
110	552006	3,785	552018	6,956	552037	9,012	552058	10,885	552080	13,421
120	552007	4,131	552019	7,589	552038	9,832	552059	11,875	552081	14,641
130	552008	4,474	552020	8,221	552039	10,651	552060	12,865	552082	15,860
140	552009	4,818	552021	8,854	552040	11,471	552061	13,854	552083	17,080
150	552010	5,163	552022	9,487	552041	12,290	552062	14,844	552084	18,300
160	552011	5,507	552023	10,119	552042	13,109	552063	15,834	552085	19,520
170	552012	5,850	552024	10,751	552043	13,928	552064	16,823	552086	20,741
180			552025	11,383	552044	14,748	552065	17,812	552087	21,960
190			552026	12,016	552045	15,566	552066	18,802	552088	23,180
200			552027	12,648	552046	16,387	552067	19,792	552089	24,400
210			552028	13,281	552047	17,206	552068	20,781	552090	25,620
220			552029	13,914	552048	18,025	552069	21,771	552091	26,839
230			552030	14,546	552049	18,844	552070	22,760	552092	28,059
240			552031	15,177	552050	19,663	552071	23,750	552093	29,280
250			552032	15,810	552051	20,482	552072	24,739	552094	30,500
260					552052	21,303	552073	25,729	552095	31,721
270					552053	22,121	552074	26,719	552096	32,940
280					552054	22,941	552075	27,709	552097	34,160
290							552076	28,697	552098	35,380
300							552077	29,687	552099	36,600
320									552100	39,040

1. Studbolt Specification : Generally conforming to ASTM A193 / Grade B7.
2. Note : Prices for ASTM Grade B7M, L7, L7M, L43, B16, B8, B8M. Check availability in stock at the time of order.
3. Plating : No guarantee can be given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
4. Products can be supplied with Yellow Zinc Cr6+, Xylan® PTFE, Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

**Note: Above prices are only for the Fully Stud Bolt without Nuts.
For Nuts please follow the prices on Page no. 71**



Stud Bolt - Metric without nuts

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	552101	12,925								
100	552102	14,361								
110	552103	15,797	552126	20,601						
120	552104	17,232	552127	22,474	552151	27,713				
130	552105	18,669	552128	24,347	552152	30,021	552180	37,324		
140	552106	20,105	552129	26,220	552153	32,330	552181	40,195	552208	47,436
150	552107	21,540	552130	28,092	552154	34,641	552182	43,067	552209	50,824
160	552108	22,978	552131	29,965	552155	36,949	552183	45,937	552210	54,213
170	552109	24,414	552132	31,838	552156	39,258	552184	48,808	552211	57,600
180	552110	25,849	552133	33,711	552157	41,569	552185	51,680	552212	60,989
190	552111	27,285	552134	35,584	552158	43,878	552186	54,551	552213	64,377
200	552112	28,722	552135	37,456	552159	46,186	552187	57,421	552214	67,766
210	552113	30,157	552136	39,329	552160	48,497	552188	60,293	552215	71,155
220	552114	31,593	552137	41,202	552161	50,806	552189	63,164	552216	74,542
230	552115	33,030	552138	43,075	552162	53,114	552190	66,035	552217	77,930
240	552116	34,465	552139	44,948	552163	55,425	552191	68,906	552218	81,318
250	552117	35,901	552140	46,821	552164	57,734	552192	71,777	552219	84,707
260	552118	37,339	552141	48,693	552165	60,043	552193	74,648	552220	88,094
270	552119	38,775	552142	50,566	552166	62,353	552194	77,520	552221	91,483
280	552120	40,210	552143	52,439	552167	64,662	552195	80,390	552222	94,871
290	552121	41,646	552144	54,312	552168	66,971	552196	83,262	552223	98,260
300	552122	43,083	552145	56,185	552169	69,282	552197	86,132	552224	1,01,648
320	552123	45,954	552146	59,930	552170	73,899	552198	91,874	552225	1,08,425
340	552124	48,826	552147	63,676	552171	78,518	552199	97,618	552226	1,15,202
360	552125	51,698	552148	67,422	552172	83,136	552200	1,03,358	552227	1,21,978
380			552149	71,167	552173	87,755	552201	1,09,102	552228	1,28,754
400			552150	74,913	552174	92,375	552202	1,14,844	552229	1,35,531
420					552175	96,992	552203	1,20,586	552230	1,42,307
440					552176	1,01,612	552204	1,26,328	552231	1,49,084
460					552177	1,06,231	552205	1,32,071	552232	1,55,860
480					552178	1,10,848	552206	1,37,812	552233	1,62,637
500					552179	1,15,468	552207	1,43,555	552234	1,69,413

1. Studbolt Specification : Generally conforming to ASTM A193 / Grade B7.
2. Note : Prices for ASTM Grade B7M, L7, L7M, L43, B16, B8, B8M. Check availability in stock at the time of order.
3. Plating : No guarantee can be given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
4. Products can be supplied with Yellow Zinc Cr6+, Xylan® PTFE, Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Note: Above prices are only for the Fully Stud Bolt without Nuts.
For Nuts please follow the prices on Page no. 71

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Stud Bolt - Metric without nuts

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	552235	61,063										
160	552236	65,134	552261	74,787								
170	552237	69,205	552262	79,461	552286	93,263						
180	552238	73,276	552263	84,135	552287	98,749	552310	1,10,966				
190	552239	77,346	552264	88,810	552288	1,04,235	552311	1,17,131	552333	1,40,640		
200	552240	81,418	552265	93,485	552289	1,09,721	552312	1,23,296	552334	1,48,042		
210	552241	85,488	552266	98,159	552290	1,15,207	552313	1,29,460	552335	1,55,444	823506	1,84,897
220	552242	89,558	552267	1,02,833	552291	1,20,694	552314	1,35,625	552336	1,62,846	823507	1,93,703
230	552243	93,630	552268	1,07,507	552292	1,26,179	552315	1,41,791	552337	1,70,248	823508	2,02,508
240	552244	97,700	552269	1,12,181	552293	1,31,666	552316	1,47,955	552338	1,77,650	823509	2,11,312
250	552245	1,01,772	552270	1,16,855	552294	1,37,151	552317	1,54,120	552339	1,85,053	823510	2,20,116
260	552246	1,05,842	552271	1,21,530	552295	1,42,638	552318	1,60,284	552340	1,92,455	823511	2,28,921
270	552247	1,09,912	552272	1,26,204	552296	1,48,123	552319	1,66,449	552341	1,99,856	823512	2,37,726
280	552248	1,13,984	552273	1,30,878	552297	1,53,610	552320	1,72,615	552342	2,07,259	823513	2,46,531
290	552249	1,18,054	552274	1,35,552	552298	1,59,096	552321	1,78,779	552343	2,14,661	823514	2,55,335
300	552250	1,22,125	552275	1,40,226	552299	1,64,582	552322	1,84,944	552344	2,22,063	823515	2,64,139
320	552251	1,30,267	552276	1,49,574	552300	1,75,554	552323	1,97,272	552345	2,36,868	823516	2,81,749
340	552252	1,38,408	552277	1,58,923	552301	1,86,525	552324	2,09,603	552346	2,51,671	823517	2,99,359
360	552253	1,46,550	552278	1,68,272	552302	1,97,498	552325	2,21,932	552347	2,66,476	823518	3,16,968
380	552254	1,54,693	552279	1,77,620	552303	2,08,470	552326	2,34,262	552348	2,81,279	823519	3,34,576
400	552255	1,62,834	552280	1,86,968	552304	2,19,442	552327	2,46,591	552349	2,96,083	823520	3,52,187
420	552256	1,70,976	552281	1,96,316	552305	2,30,414	552328	2,58,921	552350	3,10,887	823521	3,69,796
440	552257	1,79,118	552282	2,05,664	552306	2,41,386	552329	2,71,251	552351	3,25,692	823522	3,87,405
460	552258	1,87,260	552283	2,15,014	552307	2,52,358	552330	2,83,580	552352	3,40,495	823523	4,05,014
480	552259	1,95,400	552284	2,24,362	552308	2,63,331	552331	2,95,909	552353	3,55,300	823524	4,22,623
500	552260	2,03,542	552285	2,33,710	552309	2,74,304	552332	3,08,240	552354	3,70,105	823525	4,40,233

1. Studbolt Specification : Generally conforming to ASTM A193 / Grade B7.
2. Note : Prices for ASTM Grade B7M, L7, L7M, L43, B16, B8, B8M. Check availability in stock at the time of order.
3. Plating : No guarantee can be given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
4. Products can be supplied with Yellow Zinc Cr6+, Xylan® PTFE, Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Note: Above prices are only for the Fully Stud Bolt without Nuts.
For Nuts please follow the prices on Page no. 71



Stud Bolt - Inch without nuts

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	552375	2,340								
2 3/4	552376	2,726	552388	4,329						
3	552377	3,111	552389	4,908	552404	7,160				
3 1/2	552378	3,497	552390	5,487	552405	8,076	823540	11,087		
4	552379	3,882	552391	6,065	552406	8,992	823541	12,339	823545	15,986
4 1/2	823526	4,269	552392	6,643	552407	9,908	552421	13,593	823546	17,625
4 3/4	823527	4,654	552393	7,222	552408	10,824	552422	14,846	823547	19,263
5	552382	5,039	552394	7,801	552409	11,740	552423	16,100	823548	20,902
5 1/2	823528	5,425	552395	8,378	552410	12,655	552424	17,353	552438	22,542
6	552384	5,810	552396	8,957	552411	13,571	552425	18,606	552439	24,180
6 1/2	823529	6,582	823532	10,355	552412	15,404	552426	20,487	552440	27,457
7	823530	6,967	552398	10,934	552413	16,029	552427	22,366	552441	29,097
7 1/2	823531	7,353	823533	11,559	823537	16,945	552428	23,378	552442	31,025
8			552400	12,766	552415	17,813	552429	24,584	823549	33,435
8 1/2			823534	13,391	823538	18,681	552430	26,415	823550	35,363
9			823535	13,970	552417	20,464	823542	28,246	552445	37,291
9 1/2			823536	14,596	823539	21,331	823543	29,500	552446	38,255
10							823544	30,705	823551	41,629
10 1/2									823552	43,075
11									823553	45,003
11 1/2									823554	46,449

1. Studbolt Specification : Generally conforming to ASTM A193 / Grade B7.
2. Note : Prices for ASTM Grade B7M, L7, L7M, L43, B16, B8, B8M. Check availability in stock at the time of order.
3. Plating : No guarantee can be given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
4. Products can be supplied with Yellow Zinc Cr6+, Xylan® PTFE, Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Note: Above prices are only for the Fully Stud Bolt without Nuts.
For Nuts please follow the prices on Page no. 71



Stud Bolt - Inch without nuts

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	823555	23,225						
4 3/4	823556	25,153	823570	31,594				
5	823557	27,563	823571	34,005				
5 1/2	823558	29,491	823572	36,415	823587	55,389		
6	823559	31,419	823573	39,307	823588	59,246	823614	68,316
6 1/2	815620	35,757	552476	44,609	823589	66,958	823615	77,474
7	815621	37,685	823574	47,019	823590	70,813	823616	81,813
7 1/2	815622	39,613	552478	49,430	823591	75,152	823617	86,150
8	815623	42,988	552479	54,732	823592	82,864	823618	95,310
8 1/2	812570	45,880	815624	57,624	823593	86,721	823619	99,647
9	815627	47,808	815625	59,552	823594	90,577	823620	1,04,468
9 1/2	823560	50,219	823575	62,445	823595	94,915	823621	1,08,806
10	823561	54,075	823576	67,747	552504	1,02,627	823622	1,17,483
10 1/2	823562	56,484	823577	70,156	823596	1,06,483	823623	1,22,303
11	823563	58,412	552485	73,049	823597	1,08,894	823624	1,26,641
11 1/2	823564	60,341	823578	75,458	552507	1,11,304	823625	1,30,979
12	823565	64,679	823579	80,521	823598	1,19,016	823626	1,40,620
12 1/2	823566	66,607	823580	83,171	823599	1,22,872	823627	1,45,439
13	823567	68,777	823581	85,823	823600	1,26,728	823628	1,50,020
13 1/2	823568	73,115	823582	91,125	823601	1,34,441	823629	1,59,178
14	823569	75,283	823583	93,776	823602	1,38,297	823630	1,63,757
14 1/2			823584	96,427	823603	1,42,153	823631	1,68,336
15			823585	99,078	823604	1,46,010	823632	1,72,916
15 1/2			823586	1,04,380	823605	1,53,240	823633	1,81,592
16					823606	1,57,096	823634	1,86,172
16 1/2					823607	1,60,953	823635	1,90,750
17					823608	1,64,809	823636	1,95,330
17 1/2					823609	1,72,521	823637	2,04,489
18					823610	1,76,378	823638	2,09,067
18 1/2					823611	1,80,233	823639	2,13,647
19					823612	1,87,945	823640	2,22,806
19 1/2					823613	1,91,802	823641	2,27,384
20							823642	2,31,964
20 1/2							823643	2,36,542
21							823644	2,45,219
22							823645	2,54,378

1. Studbolt Specification : Generally conforming to ASTM A193 / Grade B7.
2. Note : Prices for ASTM Grade B7M, L7, L7M, L43, B16, B8, B8M. Check availability in stock at the time of order.
3. Plating : No guarantee can be given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
4. Products can be supplied with Yellow Zinc Cr6+, Xylan® PTFE, Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Note: Above prices are only for the Fully Stud Bolt without Nuts.

For Nuts please follow the prices on Page no. 71

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Stud Bolt - Inch without nuts

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	823646	90,883	823677	1,05,038				
7	823647	96,185	823678	1,10,822				
7 1/2	823648	1,01,488	823679	1,17,088				
8	823649	1,12,093	823680	1,29,621				
8 1/2	823650	1,17,395	823681	1,35,405	823708	1,54,817		
9	823651	1,22,697	823682	1,41,671	823709	1,61,566	823737	2,07,315
9 1/2	823652	1,27,999	552593	1,47,938	823710	1,68,797	823738	2,16,473
10	823653	1,39,086	823683	1,59,988	823711	1,82,775	823739	2,34,790
10 1/2	823654	1,44,388	823684	1,66,255	823712	1,90,005	823740	2,43,948
11	823655	1,49,690	823685	1,72,039	823713	1,96,754	823741	2,53,107
11 1/2	823656	1,54,993	823686	1,78,305	823714	2,03,984	823742	2,62,265
12	823657	1,65,597	823687	1,90,598	823715	2,18,204	823743	2,80,582
12 1/2	823658	1,70,900	823688	1,96,623	823716	2,25,193	823744	2,89,740
13	823659	1,76,202	823689	2,02,888	823717	2,32,183	823745	2,98,899
13 1/2	823660	1,86,566	823690	2,15,181	823718	2,46,162	823767	3,17,216
14	823661	1,91,627	823691	2,21,205	823719	2,53,150	823768	3,26,374
14 1/2	823662	1,96,929	552603	2,27,231	823720	2,60,140	823748	3,35,532
15	823663	2,02,231	823692	2,33,256	823721	2,67,130	823749	3,44,691
15 1/2	823664	2,12,835	823693	2,46,753	815626	2,81,590	823750	3,59,152
16	823665	2,18,138	823694	2,52,778	823722	2,88,338	823751	3,68,311
16 1/2	823666	2,23,441	823695	2,58,803	823723	2,95,087	823752	3,77,469
17	823667	2,28,984	823696	2,64,829	823724	3,02,077	552667	3,86,387
17 1/2	823668	2,38,865	823697	2,77,120	823725	3,16,055	823753	4,04,462
18	823669	2,43,203	823698	2,83,387	823726	3,23,043	823754	4,13,620
18 1/2	823670	2,49,470	823699	2,89,413	552640	3,30,034	823755	4,22,538
19	823671	2,61,038	823700	3,01,704	823727	3,44,012	823756	4,40,374
19 1/2	823672	2,66,341	823701	3,07,970	823728	3,51,001	823757	4,49,291
20	823673	2,71,643	823702	3,14,236	823729	3,57,992	823758	4,57,967
20 1/2	823674	2,76,945	823703	3,20,503	823730	3,64,980	823759	4,67,125
21	823675	2,87,549	823704	3,32,553	823731	3,78,958	823760	4,85,443
22	823676	2,98,154	823705	3,45,086	823732	3,93,420	823761	5,03,277
23			823706	3,63,403	823733	4,14,388	823762	5,23,040
24			823707	3,75,695	823734	4,28,367	823763	5,48,348
25					823735	4,49,816	823764	5,75,099
26					823736	4,63,313	823765	5,92,934
27							823766	6,20,169

1. Studbolt Specification : Generally conforming to ASTM A193 / Grade B7.
2. Note : Prices for ASTM Grade B7M, L7, L7M, L43, B16, B8, B8M. Check availability in stock at the time of order.
3. Plating : No guarantee can be given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
4. Products can be supplied with Yellow Zinc Cr6+, Xylan® PTFE, Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Note: Above prices are only for the Fully Stud Bolt without Nuts.

For Nuts please follow the prices on Page no. 71

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST



Marking*

Heavy Hex Nuts (ASTM A194 GR2H)

Metric

Size	Part No.	₹ Price/100 Pcs	Box Quantity
M12	551700	1,495	200
M16	270001	2,819	150
M18	270002	3,686	100
M20	270003	5,393	75
M22	270004	6,716	50
M24	270005	9,311	50
M27	270006	13,381	25
M30	270007	17,299	25
M33	270008	22,744	20
M36	270009	29,780	10
M39	270010	37,991	10
M42	270011	49,388	8
M45	270012	60,592	5
M48	270013	73,927	5
M52	270014	1,22,052	4
M56	270015	1,38,968	4

Inch

Size	Part No.	₹ Price/100 Pcs	Box Quantity
1/2"	470001	1,530	200
5/8"	470002	2,767	125
3/4"	470003	4,508	75
7/8"	470004	6,922	50
1"	470005	9,899	30
1 1/8"	470006	13,794	25
1 1/4"	470007	19,103	15
1 3/8"	470008	24,784	15
1 1/2"	470009	31,847	10
1 5/8"	470010	39,396	8
1 3/4"	470011	49,609	6
1 7/8"	470012	58,615	6
2"	470013	1,19,907	5
2 1/4"	812801	1,40,053	5

1. Nut Specification : Generally conforming to ASTM A194 / Grade 2H
2. Note : Prices for ASTM Grade 2HM, 4, 7, L43, B16, B8, B8M. Check availability in stock at the time of order.
3. Plating : No guarantee can be given for unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.
4. Products can be supplied with Yellow Zinc Cr6+, Xylan® PTFE, Hot Dip Galvanized and Electro Galvanized Plating. Prices available on request.

Recommended Retail Prices in Rupees per 100 Pieces Exclusive of GST

Prestigious Petrochemical Clientele



Separate Petrochemical Catalogue available on request

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, or work stoppages.

Disclaimer

All information contained in this Pricelist 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. .

Whilst every care has been taken to ensure that all information and technical data is accurate, DFL will not be liable to any customer that relies on any matter, fact or representation nor will it be liable for any subsequent damage or loss resulting from the use of any information contained in this catalogue. Customers are advised to make their own enquiries or seek independent advice regarding the fitness and suitability of the products listed. The products listed in this Pricelist might not be stocked at DFL at all times and customers are advised to enquire the availability of the same. E. & O.E.

NOTE: Unbrako standards meet or in many instances, exceed the requirement of the standards listed. Different standards are the responsibility of various organizations and are not always identical. A direct or indirect reference to a standard shall not be construed to represent that the fastener meets all the requirements of the standard. Unbrako reserves the right to update or modify its manufacturing specifications & other particulars contained in this pricelist without prior notice. Deepak Fasteners Limited, through its Unbrako Division and associated companies offers Limited Warranty and Exclusive Remedy (complete information on www.unbrako.com).

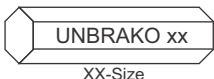
Comparison of Different Strength Grades

SAE	B.S.	IS 1.S.D. DIN	Ultimate Tensile Strength			Yield Strength Min.		Hardness		
			Tonnes/In ² (Kgf/mm ²)	Newtons/mm ² Min. (Kgf/mm ²)	Pounds/In ² Min. (Kgf/mm ²)	Newtons/mm ² Min. (Kgf/mm ²)	Pounds/In ² Min. (Kgf/mm ²)	HBW	HRb	HRc
		4.6		400 (40.8)		240 (24.5)		114 / 238	67 / 99.5	
Grade 1					60,000 (42.3)		36,000 (25.4)	(121 / 241)	70 / 100	
		4.8		420 (42.8)		340 (34.7)		124 / 238	71 / 99.5	
		5.6		500 (51.0)		300 (30.6)		147 / 238	79 / 99.5	
Grade 2					74,000 (52.1)		57,000 (40.2)	(154 / 241)	80 / 100	
		5.8		520 (53.0)		420 (42.8)		152 / 238	82 / 99.5	
	P		35 / 45 (55.2 / 71.0)					152 / 240		
		6.8		600 (61.2)		480 (48.9)		181 / 238	89 / 99.5	
	R		45 / 55 (71.0 / 86.8)					201 / 285		
	S		50 / 60 (78.9 / 94.7)					223 / 310		(20 / 33)
		8.8		800 ≤ M16 800 ≥ M16 (81.6) (84.6)		640 (65.2) 660 (67.3)		238 / 304 242 / 319		22 / 32 23 / 34
Grade 5					1,20,000 (84.6)		92,000 (64.8)	(266) / (318)		25 / 34
	T		55 / 65 (86.8 / 102.6)							(24/36)
	U		60 / 70 (94.7 / 110.5)							(28/36)
	V		65 / 75 (102.6 / 118.4)							(31/40)
Grade 8					1,50,000 (105.7)		1,30,000 (91.6)	(311) / (362)		33 / 39
		10.9		1,040 (106.0)		840 (95.8)		304 / 362		32 / 39
	W		70 / 80 (110.5 / 126.3)							(33 / 41)
	X		75 / 85 (118.4 / 134.2)							(37 / 44)
		12.9		1,220 (124.4)		1100 (112.0)		366 / 412		39 / 44
	Y		80 / 90 (126.3 / 142.0)							(39 / 46)
	Z		100 min (157.8)							(47)

Note:

- 1Kgf=9.81 Newtons 1Kgf/mm²=1421.7 Psi
- Values in brackets are approximate conversions

How to Identify Unbrako Products

PRODUCT	Marking	PRODUCT	Marking
Socket Head Cap Screw Metric : M5 to M42 Inch : 1/4" to 1" BSW		Nylock Nut M6 to M24 Grade : 8 and 10	 
		Lock Nut M10 to M30	 
Socket Countersunk Cap Screw M5 & M24		Hardened Washer (Type A) M12 to M56	
Socket Low Head Cap Screw M5 to M20		High Strength Structural Bolt M16 to M36	 
Socket Head Shoulder Screw M6 to M24		High Strength Structural Nut M16 to M36	 
Button Head Socket Screw M5 to M12		High Strength Structural Washer	
Flange Button Head Socket Screw M5 to M10		Track Shoe Bolt and Square Nut Metric : M16 to M27 Inch : 5/8" to 1"	 
Hexagon Wrench Set Metric : 4 A/F to 32 A/F Inch : 5/32" A/F to 3/4" A/F			
Durlok Bolt & Nut M6 to M20	 	Direct Tension Indicator Washer M16 to M27	
Hex Head Bolt/Screw Metric : M04 to M56 Inch : All Sizes	 	Stainless Steel Socket Head Cap Screw M5 to M30	 
		Stainless Steel Hex Head Bolt/Screws M5 to M30 SS-304/316	 
Hex Nut Metric : M6 to M72, Inch : 1/4" to 1 1/2" Grade 8 - UNC	 	Stainless Steel Hex Nut M5 to M30 SS-304/316	 
		Stainless Steel Plain Washer	 
Studbolt and Nuts Metric : M12 to M56 Inch : 1/2" to 2 1/4"			 

According to stamping area on the Product either Unbrako or U130 marking will be used
 Note : "X" marking on SHCS is the internal coding for product traceability, it can be changed with any alphanumeric.
 All Products of sizes smaller than M5 or 1/4" have no head marking due to space constraint



Specialized Coating

A Product's lifespan and performance is not only measured by it's quality, grade 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	METALLIC COATING ZINC FLAKE	PTFE
Type of material		All metals	Steels	All metals	All metals
Process temperature		Bath temp. 90°C max. Baking temp. 200°C max.	460°C - 550°C	Bath temp. 20°C max. Baking temp. 300°C max.	Bath temp. 30°C max. Baking temp. 300°C max.
Maximum service temperature without damage of coating		70°C max	300°C max	300°C max	300°C max
Usual thickness		3 µm to 15 µm	min. Individual - 43µm min. Average - 54µm	min. 5 µm max. Subject to required SST Life	15 µm min
Average Friction Coefficient Average Friction Coefficient	without lubrication	0.16 - 0.22	Seizure risks when bolt stress is >40% YS	0.12 - 0.25	0.08 - 0.16
	with lubrication	0.08 - 0.12	0.10 - 0.16	0.08 - 0.16	no additional lubrication required
Salt spray test (SST) (red corrosion)		Zinc 5 to 7µm : 48 h min Zinc chromating 5 to 7 µm : 96 h min Reinforced chromating : 200 h min	70µm : 400 h min	500 Hrs. to 1000 Hrs. Subjected to coating Thickness	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
Aspect		Bright	Matt or glossy	Matt aluminum	Matt Blue

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



Products are manufactured to meet these standards.

ONE-OF-A-KIND FASTENER APP IN THE INDUSTRY.

**INVALUABLE
RESOURCE**
at Your Fingertips





Download
Catalogue & Brochure
www.unbrako.com

CORPORATE OFFICE

DEEPAK FASTENERS LTD.

First Mall, Mall Road, Ludhiana - 141001, Punjab, India.

Tel. No. 0161-5131111, 0161-7131111

WhatsApp No.: 783 713 1111

E-mail: sales@deepakfasteners.com



EASTERN REGION OFFICE

Deepak Fasteners Ltd.

H.M.P. House, Mezzanine Floor,
Room No.34, No.4 Fairlie Place,

Kolkata-700001. Mob. 93782-07773

E-mail: kolkata@deepakfasteners.com

SOUTHERN REGION OFFICE

Deepak Fasteners Limited

Ega Trade Centre, 1st Floor, Office No. 5, 809,

Poonamallee High Road, Kilpauk,

Chennai - 600010. Mob.: 90251-17708

Tel. No. 044-26612451, 42858843

E-mail: chennai.mkt@deepakfasteners.com

WESTERN REGION OFFICES

MUMBAI

Deepak Fasteners Limited.

Office-233, Bldg-D-8, 2nd Floor, Bhumi World,

Pimplas Mumbai Nasik Highway (NH-3)

Dist, Thane-421311.

Mob. 93237-69275, 93205-62822.

E-mail: vilas@deepakfasteners.com,

mumbai@deepakfasteners.com

PUNE

Deepak Fasteners Limited.

Office No-202, Tower 2, World Trade Center,

Kharadi, Pune - 411014, India

Mob. 82910-85474, 93205-62822

Landline: 020 4604 7663, 020 4604 7663

E-mail: vilas@deepakfasteners.com,

AHMEDABAD

Deepak Fasteners Limited.

308, Basant Complex, opp. Hdfc Bank House,

Above State Bank of India, Char Rasta, Navrangpura,

Ahmedabad-380009, Mob. 93756-90170

E-mail: gujarat.sales1@deepakfasteners.com



UNBRAKO EUROPE

Deepak Fasteners Shannon Ltd.

Bays 25-30 Shannon Industrial

Estate, County Clare, Ireland

Tel: +353-61-716-550

Fax: +353-61-716-584

E-mail: sales.eu@deepakfasteners.com



UNBRAKO UK

Deepak Fasteners UK Ltd.

12-14 Tower Street, New Town

Birmingham - B19 3RR, U.K.

Tel: +44-121-333-4610

Fax: +44-121-333-4525

E-mail: sales.uk@deepakfasteners.com



UNBRAKO INDIA

Deepak Fasteners India Ltd.

4th Floor, First Mall, Mall Road

Ludhiana- 141001 (Pb.) India

Tel: +91-161-5131111, 7131111

E-mail: sales@deepakfasteners.com