

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 to 300 mm	3/16" to 10"	2269	4762	912	4168 2470	B18.3.1M	B1176
Socket Countersunk Head Screws 	160000	1,050 (12.9)	M3 to M24	3/16" to 5/16"	6 to 60 mm	3/8" to 1.1/4"	6761	--	7991	4168 2470	B18.3.5M	--
Socket Button Head Cap Screws 	--	1,050 (12.9)	M3 to M12	--	6 to 50 mm	--	--	7380	9427	4168	B18.3.4M --	--
Socket Head Shoulder Screw 	--	(12.9)	M6 to M24	--	10 to 120 mm	--	--	7379	9841	4168	--	--
Socket Set Screws Knurled Cup 	Hardness HRc 45 Min.		M3 to M20	1/8" to 3/4"	3 to 85 mm	3/16" to 3"	6094	4026 4027 4028 4029	913 914 915 916	4168 2470	B18.3.6M	B1177
Durlok Bolt 	--	12.9	M6 to M20	--	12 to 100 mm	--	As Per Unbrako Specification					
Hex Wrenches 	Hardness HRc 47 Min.		1.5 to 32 mm	1/16" to 3/4"	--	--	3082	2936	911	4168 2470	B18.3.2M	B4648
Hex Head Bolts 	800/830 (8.8) 1,040 (10.9)	Grade R,S V	M4 to M42	1/4" to 2"	10 to 300 mm	1/2" to 12"	1364	4014 4017	931 933	1083 1768	B18.2.1	B1180
Hex Nuts 	Nut Grade 8/10	Nut Grade 8/5	M6 to M72	1/4" to 1-1/2"	--	--	1364	4032	934	1083 1768	B18.2.4.1M B18.2.2	B1181
High Strength Structural Bolts, Nuts, Washers 	Bolts 8.8/10.9 Nuts 8/10	--	M16 to M30	--	40 to 300 mm	--	3757 6623 6649	7412 4775 7415	6914 6915 6916	4395	B18.2.3.7M B18.2.4.6M	B1186
Stud With 2 Heavy nuts 	Stud B7 Nut 2H		M12-M56	1/2" to 2-1/4"	60 to 500 mm	2.1/4" to 27"					A193 A194	
Special Products 	--	800/830 (8.8) 1,040 (10.9)	M3 to M42	1/8" to 1"	6 to 410 mm	3/8" to 12"	As per customer specifications					

*Thread type in any of the following inch series : BSW, BA, UNC & UNF.
 ** Thread type in NPTF
 Note : UNBRAKO standards meet, or in many instances, exceed the requirements of the standards listed.

Plating : No guarantee can be given for UNBRAKO products which have been plated by the 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 & T.P.I.				Major Dia		SIZE	T.P.I.		Major Dia	SIZE	T.P.I.		Major Dia	T.P.I.	Major Dia
	COARSE		FINE					UNC	UNF			inch	BSW			
	PITCH (mm)	T.P.I.	PITCH (mm)	T.P.I.	mm	Inch				inch				inch	inch	
M3	0.50	51	—	—	3.00	0.118	#5	40	44	0.125	1/8	40	-	0.125		
							#6	32	40	0.138	5 BA				43.1	0.126
											4 BA				38.5	0.142
M4	0.70	36	—	—	4.00	0.157	#8	32	36	0.164	3 BA	24	32	0.187	34.8	0.161
M5	0.80	32	—	—	5.00	0.197	#10	24	32	0.190	3/16					
											2 BA				31.3	0.185
											1 BA				28.2	0.209
M6	1.0	25	—	—	6.00	0.236	1/4	20	28	0.250	1/4	20	26	0.250	25.4	0.236
											0 BA					
M8	1.25	20	1.00	25	8.00	0.315	5/16	18	24	0.313	5/16	18	22	0.313		
M10	1.50	17	1.25	20	10.00	0.394	3/8	16	24	0.375	3/8	16	20	0.375		
M12	1.75	14.5	1.25	20	12.00	0.472	1/2	13	20	0.500	7/16	14	18	0.438		
(M14)	2.00	12.5	1.50	17	14.00	0.551					1/2	12	16	0.500		
M16	2.00	12.5	1.50	17	16.00	0.630	5/8	11	18	0.625						
(M18)	2.50	10	1.50	17	18.00	0.709										
M20	2.50	10	1.50	17	20.00	0.787	3/4	10	16	0.750	3/4	10	12	0.750		
(M22)	2.50	10	1.50	17	22.00	0.866	7/8	9	14	0.875	7/8	9	11	0.875		
M24	3.00	8.5	2.00	13	24.00	0.945	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	8.50	2.00	13	27.00	1.063										
M30	3.50	7.25	2.00	13	30.00	1.181	1-1/4	7	12	1.250	1-1/4	7	9	1.250		
(M33)	3.50	7.25	2.00	13	33.00	1.299										
M36	4.00	6.40	3.00	8.5	36.00	1.417	1-1/2	6	12	1.500	1-1/2	6	8	1.500		
(M39)	4.00	6.40	3.00	8.5	39.00	1.535										
M42	4.50	5.60	3.00	8.5	42.00	1.653										

Note : Sizes in brackets are non-preferred standards

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Dowel Pins

Metric

M2				M3		
DIA	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty
8	407831	1,984	40			
10	407832	1,984	40	115001	1,984	40
12	407833	1,984	40	115002	1,984	40
14						
16	407835	1,984	40	115003	1,984	40
18	407836	1,984	40	402118	1,984	40
20	407837	1,984	40	115004	1,984	40
24						
28				402120	1,984	40
30				115007	2,171	40
32				402121	2,171	40
36				406345	2,336	40
40				402124	2,500	40

M4				M5		
DIA	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty
10	115010	2,035	40	402133	2,171	40
12	115011	2,115	40	115021	2,429	40
14				402134	2,429	40
16	115012	2,171	40	115022	2,429	40
18						
20	115015	2,171	40	115024	2,687	40
24	407127	2,171	40	407128	2,687	40
28	402128	2,171	40	402137	2,687	40
30	115017	2,500	40	115026	2,852	40
32				402138	2,852	40
36				406347	3,016	40
40				115028	3,176	40
50	402132	2,500	40	115031	3,176	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 given for Unbrako products which are plated by users or by outside plates, who may not have considered hydrogen embrittlement problem.



Dowel Pins

Metric

DIA	M6			M8			M10		
Length	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty
12	402141	2,688	40						
16	115032	2,709	40						
18	402143	2,729	40						
20	115034	2,729	40	115049	4,671	40	115063	5,703	40
24	115037	3,180	40	406349	4,891	40	406351	6,031	40
28	402145	3,527	40	402150	5,323	40			
30	115038	3,532	40	115053	5,323	40	115066	7,007	40
32	402146	3,532	40	402151	5,323	40			
36	406348	3,532	40	406350	5,718	40	406352	7,692	40
40	115043	3,668	40	115055	5,872	40	115070	8,015	40
45				115056	6,036	40	115071	8,723	40
50	115046	3,992	40	115057	6,519	40	402161	9,047	40
55				402153	7,227	40			
60	115047	4,671	40	115058	7,692	40	402163	10,084	40
70							402164	11,059	40
90							402167	13,235	40
100							402169	14,098	40

DIA	M12			M16		
Length	Part No.	Price/ 100 Pcs	Box Qty	Part No.	Price/ 100 Pcs	Box Qty
24	406353	7,692	40			
30	402174	8,888	40			
32				406218	18,099	20
36	406354	9,413	40			
40	402178	10,379	40	406220	18,099	20
50	402180	12,902	40			
60	402182	18,263	40			
70	402183	18,263	40	406225	26,724	20
80	402184	20,758	40	406226	30,439	20
90				406227	31,522	20
100	402186	25,814	40			

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