



## Unbrako Hexagon Wrenches

An Unbrako Hexagon Wrench (also known as a Hex Key) is not an ordinary hexagon wrench – it is a precision internal wrenching tool of great strength and ductility. It's through hardened to resistant distortion at up to 20% more torque, resulting in safer and stronger adjusting than can be applied with an ordinary key.

### PRODUCT ATTRIBUTES

Through hardened alloy steel-key is hard, tough and ductile for longer life and retention of dimensional accuracy.

Accurately sized across flats and corners to insure snug fit and full wall contact.

Square cut end engages the socket full depth for better tightening of all styles of hex socket screws.

Size stamped for easy identification.

### WHERE YOU WILL FIND OPPORTUNITY

Machine Building	Robotics & Automation
Stamping Presses	Mold Making
Tools Assembly	Aerospace
Petrochemical	Heavy Machinery
Military	Electronics

### THIS PRODUCT IS OFTEN CALLED...

Allen Key  
Allen Wrench  
Hex Key



### ADDITIONAL UNBRAKO SOCKET PRODUCTS

Socket Head Cap Screws  
Socket Low Head Cap Screws  
Socket Head Shoulder Screws  
Button Head Socket Screws  
Flat Head Countersunk Socket Screws  
Flange Button Head Socket Screws  
Hardened Ground Machine Dowel Pins  
Socket Set Screws  
Taper Pressure Plugs  
Pull Out Dowel Pins

### AVAILABLE VALUE ADDED SERVICES

Custom plating

BACKED BY THE EARNEST  
**Service**  
GUARANTEE

**The right part.  
The right quantity.  
On-time.  
Everytime.**



### UNBRAKO HEXAGON WRENCHES - INCH & METRIC

Unbrako Hexagon Wrenches are manufactured in accordance with the latest revision of the following industry standards:

**Inch: ASME B18.3 for Short and Long Arm Series (the "short arm" series is the standard hex key wrench size)**

**Metric: ISO 2936 / ASME B18.3.2M / BS 4168**

Unbrako Metric Long arm similar to ISO extra long

### PLATING

Black Oxide

Custom plating available

### NOTE

Please specify arm length required at time of purchase.

### UNBRAKO HEXAGON WRENCHES - INCH

#### Chemical Composition:

CARBON (C)	PHOSPHORUS (P)	SULFUR (S)
Min	Max	Max
0.40	0.04	0.05

#### Alloy

##### CONTAINS ONE OF THE FOLLOWING ALLOYS

Mn, Cr, Mo, Ni, V

#### Hardness:

##### ROCKWELL HARDNESS

HRC 47/57

### UNBRAKO HEXAGON WRENCHES- METRIC

#### Chemical Composition:

CARBON (C)	PHOSPHORUS (P)	SULFUR (S)
Min	Max	Max
0.40	0.04	0.05

#### Alloy

##### CONTAINS ONE OF THE FOLLOWING ALLOYS

Mn, Cr, Mo, Ni, V

#### Hardness:

##### ROCKWELL HARDNESS

HRC 47/57

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**TORSIONAL SHEAR AND YIELD STRENGTH - INCH**

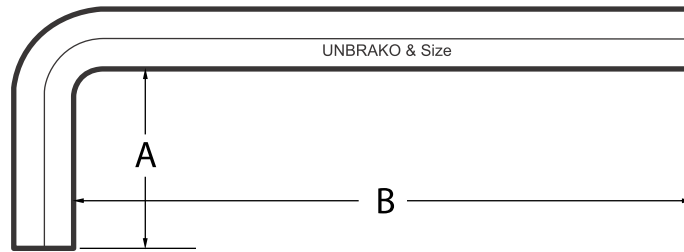
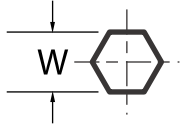
SIZE	TORSIONAL SHEAR STRENGTH	TORSIONAL YIELD
NOMINAL	in-lb	in-lb
0.028	1.1	0.9
0.035	2.3	2.0
0.050	6.5	5.6
1/16	12.2	10.5
5/64	25.0	21.0
3/32	43.0	35.0
7/64	68.0	60.0
1/8	98.0	85.0
9/64	146.0	125.0
5/32	195.0	165.0
3/16	342.0	295.0
7/32	535.0	460.0
1/4	780.0	670.0
5/16	1,600.0	1,370.0
3/8	2,630.0	2,260.0
7/16	4,500.0	3,870.0
1/2	6,300.0	5,420.0
9/16	8,900.0	7,650.0
5/8	12,200.0	10,500.0
3/4	19,500.0	16,800.0
7/8	29,000.0	24,900.0
1	43,500.0	37,400.0
1 1/4	71,900.0	62,500.0
1 1/2	124,000.0	108,000.0
1 3/4	198,000.0	172,000.0
2	276,000.0	240,000.0

**TORSIONAL SHEAR AND YIELD STRENGTH - METRIC**

SIZE	TORSIONAL SHEAR STRENGTH		TORSIONAL YIELD	
NOMINAL	Nm	in-lb	Nm	in-lb
0.71	0.12	1.1	0.1	0.9
0.89	0.26	2.3	0.23	2.0
1.27	0.73	6.5	.63	5.6
1.5	1.19	10.5	1.02	9.0
2.0	2.90	26	2.4	21
2.5	5.40	48	4.4	39
3.0	9.30	82	8.0	71
4.0	22.2	196	18.8	166
5.0	42.7	378	36.8	326
6.0	74.0	655	64	566
8.0	183.0	1,620	158	1,400
10.0	345.0	3,050	296	2,620
12.0	634.0	5,610	546	4,830
14.0	945.0	8,360	813	7,200
17.0	1,690	15,000	1,450	12,800
19.0	2,360	20,900	2,030	18,000
22.0	3,670	32,500	3,160	28,000
24.0	4,140	36,600	3,560	31,500
27.0	5,870	51,900	5,050	44,700
32.0	8,320	73,600	7,150	63,300
36.0	11,800	104,000	10,200	90,300

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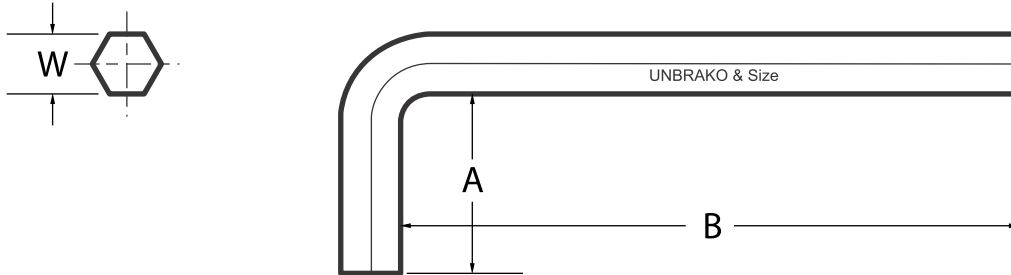
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**UNBRAKO HEXAGON WRENCH - INCH DIMENSIONS**


INCH SIZE	WIDTH ACROSS FLATS (W)		LENGTH OF SHORT ARM (A)		SHORT SERIES (B)		LONG SERIES (B)		6" INCH SERIES (B)	
	NOM	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
0.028	0.0280	0.0275	0.312	0.125	1.312	1.125	2.688	2.500	69	-
0.035	0.0350	0.0345	0.438	0.250	1.312	1.125	2.766	2.578	71	-
0.050	0.0500	0.0490	0.625	0.438	1.750	1.562	2.938	2.750	75	-
1/16	0.0625	0.0615	0.656	0.469	1.844	1.656	3.094	2.906	78	-
5/64	0.0781	0.0771	0.703	0.516	1.969	1.781	3.281	3.094	83	6.000
3/32	0.0937	0.0927	0.750	0.562	2.094	1.906	3.469	3.281	90	6.000
7/64	0.1094	0.1079	0.797	0.609	2.219	2.031	3.656	3.469	100	6.000
1/8	0.1250	0.1235	0.844	0.656	2.344	2.156	3.844	3.656	106	6.000
9/64	0.1406	0.1391	0.891	0.703	2.469	2.281	4.031	3.844	118	6.000
5/32	0.1562	0.1547	0.938	0.750	2.594	2.406	4.219	4.031	140	6.000
3/16	0.1875	0.1860	1.031	0.844	2.844	2.656	4.594	4.406	160	6.000
7/32	0.2187	0.2172	1.125	0.938	3.094	2.906	4.969	4.781	170	6.000
1/4	0.2500	0.2485	1.219	1.031	3.344	3.156	5.344	5.156	212	6.000
5/16	0.3125	0.3110	1.344	1.156	3.844	3.656	6.094	5.906	236	6.000
3/8	0.3750	0.3735	1.469	1.281	4.344	4.156	6.844	6.656	250	6.000
7/16	0.4375	0.4355	1.594	1.406	4.844	4.656	7.594	7.406	280	-
1/2	0.5000	0.4975	1.719	1.531	5.344	5.156	8.344	8.156	335	-
9/16	0.5625	0.5600	1.844	1.656	5.844	5.656	9.094	8.906	375	-
5/8	0.6250	0.6225	1.969	1.781	6.344	6.156	9.844	9.656	-	-
3/4	0.7500	0.7470	2.219	2.031	7.344	7.156	11.344	11.156	-	-
7/8	0.8750	0.8720	2.469	2.281	8.344	8.156	12.844	12.656	-	-
1	1.0000	0.9970	2.719	2.531	9.344	9.156	14.344	14.156	-	-
1 1/4	1.2500	1.2430	3.250	2.750	11.500	11.000	-	-	-	-
1 1/2	1.5000	1.4930	3.750	3.250	13.500	13.000	-	-	-	-
1 3/4	1.7500	1.7430	4.250	3.750	15.500	15.000	-	-	-	-
2	2.0000	1.9930	4.750	4.250	17.500	17.000	-	-	-	-

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## UNBRAKO HEXAGON WRENCH - METRIC DIMENSIONS



METRIC SIZE	WIDTH ACROSS FLATS (W)		LENGTH OF SHORT ARM (A)		UNBRAKO ASME SHORT SERIES (B)		UNBRAKO ASME LONG SERIES (B)		COMPETITIVE ISO LONG ARM (B)	
	NOM	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
0.71	0.711	0.698	5.5	-	31	-	-	-	69	-
0.89	0.889	0.876	9	-	31	-	-	-	71	-
1.27	1.270	1.244	13.5	-	42	-	-	-	75	-
1.5	1.500	1.470	14	13	45	43	90	88	78	76
2.0	2.000	1.970	16	15	50	48	100	98	83	81
2.5	2.500	2.470	18	17	56	53	112	109	90	87
3.0	3.000	2.955	20	19	63	60	126	123	100	97
4.0	4.000	3.955	25	24	70	66	142	138	106	102
5.0	5.000	4.955	28	27	80	76	160	156	118	114
6.0	6.000	5.955	32	30	90	86	180	176	140	136
8.0	8.000	7.955	36	34	100	95	200	195	160	155
10.0	10.000	9.955	40	38	112	106	224	218	170	164
12.0	12.000	11.955	45	43	125	119	250	244	212	206
14.0	14.000	13.930	55	53	140	133	280	273	236	229
17.0	17.000	16.930	63	60	160	152	320	312	250	242
19.0	19.000	18.930	70	67	180	171	360	351	280	271
22.0	22.000	21.930	80	76	200	190	400	390	335	325
24.0	24.000	23.930	90	86	224	213	448	437	375	364
27.0	27.000	26.820	100	96	250	238	500	488	-	-
32.0	32.000	31.820	125	121	315	300	630	615	-	-
36.0	36.000	35.820	140	135	355	338	710	693	-	-

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## Unbrako Hexagon Wrenches - Inch

SIZE	SERIES	MATERIAL	FINISH	UNBRAKO PART #	EARNEST PART #
1/16	Short Arm	Alloy Steel	Black Oxide	108468	963000
1/16	Long Arm	Alloy Steel	Black Oxide	108485	963003

5/64	Short Arm	Alloy Steel	Black Oxide	110164	963006
5/64	Long Arm	Alloy Steel	Black Oxide	117441	963012
5/64	6" Long Arm	Alloy Steel	Black Oxide	107503	963009

3/32	Short Arm	Alloy Steel	Black Oxide	110180	963015
3/32	Long Arm	Alloy Steel	Black Oxide	117457	963018
3/32	6" Long Arm	Alloy Steel	Black Oxide	107504	963021

7/64	Short Arm	Alloy Steel	Black Oxide	110197	963024
7/64	Long Arm	Alloy Steel	Black Oxide	117473	963027
7/64	6" Long Arm	Alloy Steel	Black Oxide	107505	963030

1/8	Short Arm	Alloy Steel	Black Oxide	110213	963033
1/8	Long Arm	Alloy Steel	Black Oxide	114614	963039
1/8	6" Long Arm	Alloy Steel	Black Oxide	107507	963036

9/64	Short Arm	Alloy Steel	Black Oxide	115080	963042
9/64	Long Arm	Alloy Steel	Black Oxide	113098	963045
9/64	6" Long Arm	Alloy Steel	Black Oxide	107508	963048

5/32	Short Arm	Alloy Steel	Black Oxide	110246	963051
5/32	Long Arm	Alloy Steel	Black Oxide	114630	963057
5/32	6" Long Arm	Alloy Steel	Black Oxide	107509	963054

3/16	Short Arm	Alloy Steel	Black Oxide	115915	963063
3/16	Long Arm	Alloy Steel	Black Oxide	114647	963066
3/16	6" Long Arm	Alloy Steel	Black Oxide	107511	963060

7/32	Short Arm	Alloy Steel	Black Oxide	115948	963072
7/32	Long Arm	Alloy Steel	Black Oxide	114679	963075
7/32	6" Long Arm	Alloy Steel	Black Oxide	107513	963069

1/4	Short Arm	Alloy Steel	Black Oxide	115981	963081
1/4	Long Arm	Alloy Steel	Black Oxide	114712	963084
1/4	6" Long Arm	Alloy Steel	Black Oxide	107514	963078

5/16	Short Arm	Alloy Steel	Black Oxide	115997	963090
5/16	Long Arm	Alloy Steel	Black Oxide	114728	963093
5/16	6" Long Arm	Alloy Steel	Black Oxide	107515	963087

## Unbrako Hexagon Wrenches - Inch

SIZE	SERIES	MATERIAL	FINISH	UNBRAKO PART #	EARNEST PART #
3/8	Short Arm	Alloy Steel	Black Oxide	116013	963102
3/8	Long Arm	Alloy Steel	Black Oxide	114744	963099
3/8	6" Long Arm	Alloy Steel	Black Oxide	107516	963096

7/16	Short Arm	Alloy Steel	Black Oxide	116029	963108
7/16	Long Arm	Alloy Steel	Black Oxide	114761	963105

1/2	Short Arm	Alloy Steel	Black Oxide	116046	963114
1/2	Long Arm	Alloy Steel	Black Oxide	114777	963111

9/16	Short Arm	Alloy Steel	Black Oxide	116063	963120
9/16	Long Arm	Alloy Steel	Black Oxide	114794	963117

5/8	Short Arm	Alloy Steel	Black Oxide	116080	963126
5/8	Long Arm	Alloy Steel	Black Oxide	107209	963123

3/4	Short Arm	Alloy Steel	Black Oxide	116096	963132
3/4	Long Arm	Alloy Steel	Black Oxide	107225	963129

7/8	Short Arm	Alloy Steel	Black Oxide	116112	963138
7/8	Long Arm	Alloy Steel	Black Oxide	107242	963135

1	Short Arm	Alloy Steel	Black Oxide	116128	963144
1	Long Arm	Alloy Steel	Black Oxide	107258	963141

## Unbrako Hexagon Wrenches - Metric

SIZE	SERIES	MATERIAL	FINISH	UNBRAKO PART #	EARNEST PART #
0.71	Short Arm	Alloy Steel	Black Oxide	110230	963147

0.89	Short Arm	Alloy Steel	Black Oxide	115932	963150
0.89	Long-Arm "ASME"	Alloy Steel	Black Oxide	C14663	963153

1.27	Short Arm	Alloy Steel	Black Oxide	115965	963156
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1.5	Short Arm	Alloy Steel	Black Oxide	125648	963159
1.5	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04118	963162

2.0	Short Arm	Alloy Steel	Black Oxide	122263	963195
2.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04119	963198



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## Unbrako Hexagon Wrenches - Metric

SIZE	SERIES	MATERIAL	FINISH	UNBRAKO PART #	EARNEST PART #
2.5	Short Arm	Alloy Steel	Black Oxide	122270	963201
2.5	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04120	963204
3.0	Short Arm	Alloy Steel	Black Oxide	121093	963216
3.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04122	963219
4.0	Short Arm	Alloy Steel	Black Oxide	119953	963225
4.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04123	963228
5.0	Short Arm	Alloy Steel	Black Oxide	122245	963231
5.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04127	963234
6.0	Short Arm	Alloy Steel	Black Oxide	121066	963237
6.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04129	963240
8.0	Short Arm	Alloy Steel	Black Oxide	115557	963243
8.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04130	963246
10.0	Short Arm	Alloy Steel	Black Oxide	120859	963168
10.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04131	963165
12.0	Short Arm	Alloy Steel	Black Oxide	120860	963171
12.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04132	963174
14.0	Short Arm	Alloy Steel	Black Oxide	111100	963180
14.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04133	963177
17.0	Short Arm	Alloy Steel	Black Oxide	138487	963186
17.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04134	963183
19.0	Short Arm	Alloy Steel	Black Oxide	111133	963192
19.0	Long-Arm "ASME"	Alloy Steel	Black Oxide	C04135	963189
22.0	Short Arm	Alloy Steel	Black Oxide	402603	963207
24.0	Short Arm	Alloy Steel	Black Oxide	402604	963210
27.0	Short Arm	Alloy Steel	Black Oxide	402605	963213
32.0	Short Arm	Alloy Steel	Black Oxide	402606	963222