

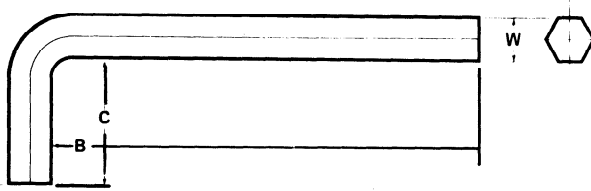


## Unbrako

### Engineering Data

### Standard Hex Keys

### Inch/Metric



**Material:** "Unbrako" high grade alloy steel

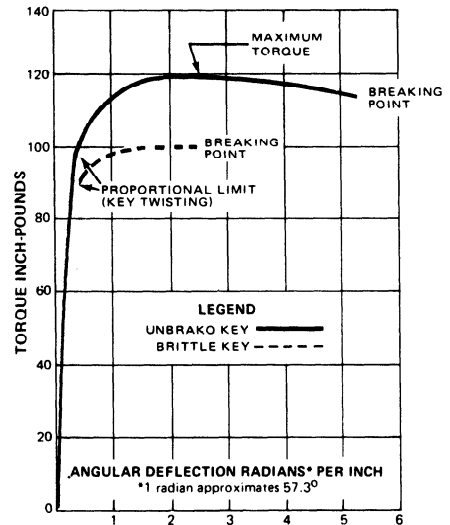
**Heat Treat:** Rc 47-57

**Applicable or Similar Standards**

Inch—GGG-K-275 ANSI B18.3

Metric — ISO 2936, DIN 911, ANSI B18.3.2M

- Accurately sized across flats and corners to insure snug fit and full wall contact.
- Heat treated alloy steel — key is tough and ductile clear through; hard surface, free of decarburization, provides for longer life and better dimensional accuracy retention.
- Square cut end engages the socket full depth for better tightening of screw.



Torque-Angular Displacement Curve 1/8" Hexagon Keys. This chart compares UNBRAKO keys with ordinary keys. It shows how much torque you must apply before a key takes a permanent set (twisting force) and how much before it breaks (shear force). The lower the ratio between twisting force and shearing force, the tougher and less brittle the key.

DIMENSIONS—INCH (All dimensions in inches)						MECHANICAL PROPERTIES			SCREW SIZE SELECTOR TABLE						
Key Size W-Inch		B Nom.				C Nom.	Torsional Shear Strength Inch-Lbs. Min.	Torsional Yield Inch-Lbs. Min.	Socket Head Cap Screws		Button Head Screws	Flat Head Screws	Shoulder Screws	Low Head and Socket Set Screws	† Pressure Plugs
Max.	Min.	Short Arm	Long Arm	6" Long Arm	1936 Series				1960 Series						
.028	.0275	1.219	*2.594	—	.219	1.2	1.1	—	—	—	—	—	#0	—	
.035	.0345	1.219	2.672	—	.344	2.4	2.1	—	—	#0	#0	—	#1, #2	—	
.050	.049	1.656	2.844	—	.531	7.0	6.0	#0, #1	#0	#1, #2	#1, #2	—	#3, #4	—	
1/16	.0615	1.750	3.000	—	.562	12.5	11	#2	#1	#3, #4	#3, #4	—	#5, #6	—	
5/64	.0771	1.875	3.188	6.000	.609	26	23	#3, #4	#2, #3	#5, #6	#5, #6	—	#8	—	
3/32	.0927	2.000	3.375	6.000	.656	46	40	#5, #6	#4, #5	#8	#8	—	#10	—	
7/64	.1079	2.215	3.562	6.000	.703	73	63	—	#6	—	—	—	—	—	
1/8	.1235	2.250	3.750	6.000	.750	108	94	#8	—	#10	#10	1/4	1/4	—	
9/64	.1391	2.375	3.960	6.000	.796	154	134	—	#8	—	—	—	—	—	
5/32	.1547	2.500	4.125	6.000	.844	210	183	#10	#10	1/4	1/4	5/16	5/16	1/16	
3/16	.1860	2.750	4.500	6.000	.938	364	317	1/4	1/4	5/16	5/16	3/8	3/8	1/8	
7/32	.2172	3.000	4.875	6.000	1.031	580	502	5/16	—	3/8	3/8	—	7/16	—	
1/4	.2485	3.250	5.250	6.000	1.125	860	750	—	5/16	—	7/16	1/2	1/2, 9/16	1/4	
5/16	.3110	3.750	6.000	6.000	1.250	1,685	1,465	3/8, 7/16	3/8	1/2	1/2, 9/16	5/8	5/8	3/8	
3/8	.3735	4.250	6.740	6.000	1.375	2,900	2,520	1/2, 9/16	7/16, 1/2	5/8	5/8	3/4	3/4	1/2	
7/16	.4355	4.750	7.500	—	1.500	4,400	3,860	—	9/16	—	—	—	—	—	
1/2	.4975	5.250	8.250	—	1.625	6,600	5,750	5/8	5/8	—	3/4	7/8, 1	7/8	—	
9/16	.5600	5.750	9.000	—	1.750	9,200	8,000	3/4, 7/8	—	—	7/8	—	1, 1-1/8	3/4	
5/8	.6225	6.250	9.750	—	1.875	12,650	11,000	1	3/4	—	1	1-1/4	1-1/4, 1-3/8	1	
3/4	.7470	7.250	11.250	—	2.125	20,800	18,100	1-1/8, 1-1/4, 1-3/8	7/8, 1	—	—	—	1-1/2	1-1/4, 1-1/2	
7/8	.8720	8.250	12.750	—	2.375	29,200	25,400	—	1-1/8, 1-1/4	—	—	1-1/2	—	—	
1	.9970	9.250	14.250	—	2.625	43,700	38,000	1-1/2	1-3/8, 1-1/2	—	—	1-3/4	1-3/4, 2	1-1/2, 2	
1-1/4	1.243	11.250	—	—	3.000	71,900	62,500	—	1-3/4	—	—	2	—	—	
1-1/2	1.493	13.250	—	—	3.500	124,000	108,000	—	2	—	—	—	—	—	
* 1-3/4	1.743	15.250	—	—	4.000	198,000	172,000	—	2-1/4, 2-1/2	—	—	—	—	—	
* 2	1.993	17.250	—	—	4.500	276,000	240,000	—	2-3/4	—	—	—	—	—	

\*Non-stock sizes All keys—5/64" and larger size, stamped for easy identification. † 1-1/2" LEVL-SEAL has 3/4" socket. 1-1/2" DRYSEAL has 1" socket.