

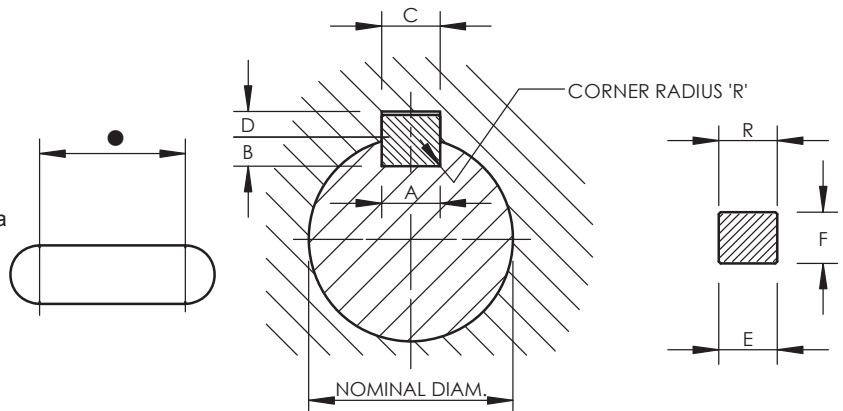
IMPERIAL
(BS 46 : PART 1 : 1958)

Safe working loads on keys.

Torque inch/pounds = 9000 x length x F x shaft dia (inches)

$$HP = \frac{\text{Torque(inch/pounds)} \times \text{RPM}}{63025}$$

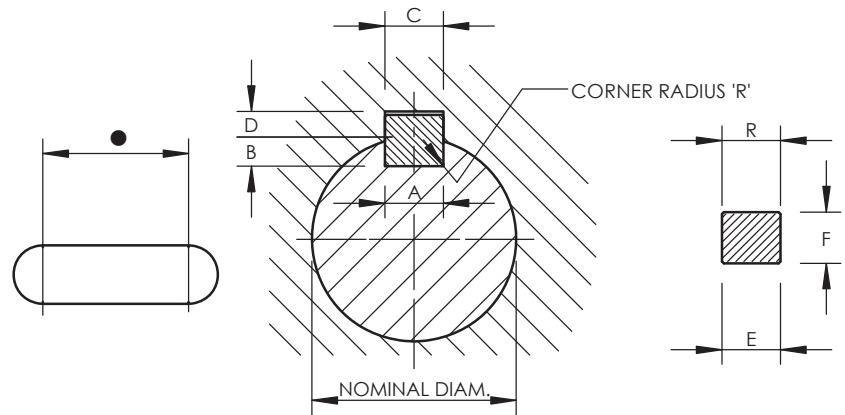
Square Keys:



NOMINAL SHAFT DIAM.		KEY SIZE	DIMENSIONS (INCHES)						
OVER	TO (Incl.)		A	B	C	D	E	F	R
1/4"	1/2"	1/8" x 1/8"	0.124 0.125	0.072 0.078	0.125 0.126	0.060 0.066	0.127 0.125		0.010
1/2"	3/4"	3/16" x 3/16"	0.187 0.188	0.107 0.113	0.188 0.189	0.088 0.094	0.190 0.188		0.010
3/4"	1"	1/4" x 1/4"	0.249 0.250	0.142 0.148	0.250 0.251	0.115 0.121	0.252 0.250		0.010
1"	1.1/4"	5/16" x 5/16"	0.311 0.312	0.177 0.183	0.312 0.313	0.142 0.148	0.314 0.312		0.010
1.1/4"	1.1/2"	3/8" x 3/8"	0.374 0.375	0.213 0.219	0.375 0.376	0.169 0.175	0.377 0.375		0.010
1.1/2"	1.3/4"	7/16" x 7/16"	0.437 0.438	0.248 0.254	0.438 0.439	0.197 0.203	0.440 0.438		0.020
1.3/4"	2"	1/2" x 1/2"	0.499 0.500	0.283 0.289	0.500 0.501	0.224 0.230	0.502 0.500		0.020
* 2"	2.1/4"	9/16" x 9/16"	0.562 0.563	0.321 0.327	0.563 0.564	0.245 0.251	0.565 0.563		0.020
2"	2.1/2"	5/8" x 5/8"	0.624 0.625	0.354 0.360	0.625 0.626	0.278 0.284	0.627 0.625		0.020
2.1/2"	3"	3/4" x 3/4"	0.749 0.750	0.424 0.430	0.750 0.751	0.333 0.339	0.752 0.750		0.020
3"	3.1/2"	7/8" x 7/8"	0.874 0.875	0.495 0.501	0.875 0.876	0.387 0.393	0.877 0.875		0.062
3.1/2"	4"	1" x 1"	0.999 1.000	0.566 0.572	1.000 1.001	0.442 0.448	1.003 1.000		0.062
* 4"	4.1/2"	1.1/8" x 1.1/8"	1.123 1.125	0.640 0.646	1.125 1.127	0.489 0.495	1.128 1.125		0.062
4"	5"	1.1/4" x 1.1/4"	1.248 1.250	0.707 0.713	1.250 1.252	0.551 0.557	1.253 1.250		0.062
* 5"	5.1/2"	1.3/8" x 1.3/8"	1.373 1.375	0.782 0.788	1.375 1.377	0.598 0.604	1.378 1.375		0.062
5"	6"	1.1/2" x 1.1/2"	1.498 1.500	0.848 0.854	1.500 1.502	0.661 0.667	1.504 1.500		0.062
* 6.1/2"	7"	1.3/4" x 1.3/4"	1.748 1.750	0.993 0.999	1.750 1.752	0.762 0.768	1.754 1.750		0.062
* 7.1/2"	8"	2" x 2"	1.998 2.000	1.134 1.140	2.000 2.002	0.872 0.878	2.004 2.000		0.062

* :- Indicates Non Standard Key.

IMPERIAL
(BS.46 : PART 1 : 1958)



Safe working loads on keys.

Torque inch/pounds = 9000 x length x F x shaft dia (inches)

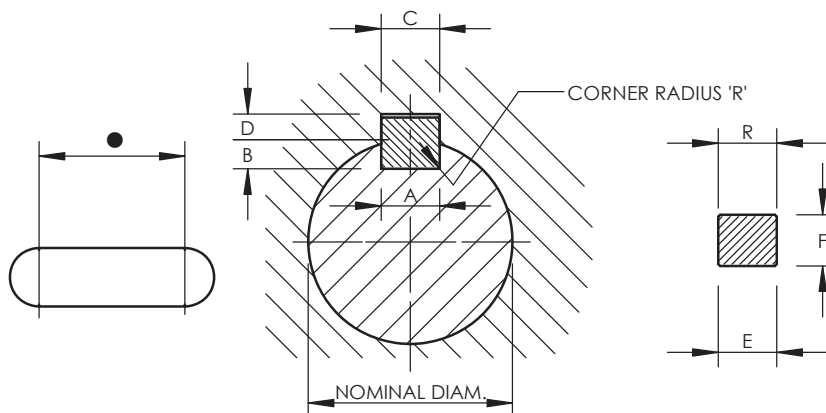
$$HP = \frac{\text{Torque(inch/pounds)} \times \text{RPM}}{63025}$$

Rectangular Keys:

NOMINAL SHAFT DIAM.		KEY SIZE	DIMENSIONS (INCHES)						
OVER	TO (Incl.)		A	B	C	D	E	F	R
1"	1.1/4"	5/16" x 1/4"	0.311	0.146	0.312	0.112	0.314	0.253	0.010
			0.312	0.152	0.313	0.118	0.312	0.250	
1.1/4"	1.1/2"	3/8" x 1/4"	0.374	0.150	0.375	0.108	0.377	0.253	0.010
			0.375	0.156	0.376	0.114	0.375	0.250	
*		3/8" x 5/16"	0.374	0.182	0.375	0.139	0.377	0.315	0.010
*			0.375	0.188	0.376	0.145	0.375	0.312	
		7/16" x 1/4"	0.437	0.154	0.438	0.104	0.440	0.253	0.020
			0.438	0.160	0.439	0.110	0.438	0.250	
1.1/2"	1.3/4"	7/16" x 5/16"	0.437	0.186	0.438	0.135	0.440	0.315	0.020
			0.438	0.192	0.439	0.141	0.438	0.312	
1.3/4"	2"	1/2" x 5/16"	0.499	0.190	0.500	0.131	0.502	0.315	0.020
			0.500	0.196	0.501	0.137	0.500	0.312	
*		1/2" x 7/16"	0.499	0.256	0.500	0.189	0.502	0.440	0.020
			0.500	0.262	0.501	0.195	0.500	0.438	
2"	2.1/2"	5/8" x 7/16"	0.624	0.260	0.625	0.185	0.627	0.441	0.020
			0.625	0.266	0.626	0.191	0.625	0.438	
*		5/8" x 1/2"	0.624	0.295	0.625	0.213	0.627	0.502	0.020
			0.625	0.301	0.626	0.219	0.625	0.500	
2.1/2"	3"	3/4" x 1/2"	0.749	0.299	0.750	0.209	0.752	0.503	0.020
			0.750	0.305	0.751	0.215	0.750	0.500	
*		3/4" x 5/8"	0.749	0.366	0.750	0.274	0.752	0.629	0.020
			0.750	0.372	0.751	0.280	0.750	0.625	
3"	3.1/2"	7/8" x 5/8"	0.874	0.370	0.875	0.264	0.877	0.629	0.062
			0.875	0.376	0.876	0.270	0.875	0.625	
*		1" x 5/8"	0.999	0.374	1.000	0.260	1.003	0.629	0.062
			1.000	0.380	1.001	0.266	1.000	0.625	
3.1/2"	4"	1" x 3/4"	0.999	0.441	1.000	0.318	1.003	0.754	0.062
			1.000	0.447	1.001	0.324	1.000	0.750	
4"	5"	1.1/4" x 7/8"	1.248	0.518	1.250	0.366	1.253	0.879	0.062
			1.250	0.524	1.251	0.372	1.250	0.875	
5"	6"	1.1/2" x 1"	1.498	0.599	1.500	0.412	1.504	1.006	0.062
			1.500	0.605	1.501	0.418	1.500	1.000	

* :- Indicates Non Standard Key.

METRIC (Normal)
(BS.4235 : PART 1 : 1972)



Safe working loads on keys.

Torque Nm = 0.065 x length x F x shaft dia (mm)

$$kW = \frac{\text{Torque(Nm)} \times \text{RPM}}{9550}$$

NOMINAL SHAFT DIAM.		KEY SIZE	DIMENSIONS (mm)						
OVER	TO (Incl.)		A	B	C	D	E	F	R
8	10	3 x 3	2.970 3.000	1.8 1.9	2.985 3.015	1.4 1.5	3.030 2.970		0.16
10	12	4 x 4	3.970 4.000	2.5 2.6	3.985 4.015	1.8 1.9	4.030 3.970		0.16
12	17	5 x 5	4.970 5.000	3.0 3.1	4.985 5.015	2.3 2.4	5.030 4.970		0.25
17	22	6 x 6	5.970 6.000	3.5 3.6	5.985 6.015	2.8 2.9	6.030 5.970		0.25
*		8 x 8	7.964 8.000	5.0 5.2	7.982 8.018	3.3 3.5	8.000 7.970		0.25
*		10 x 10	9.964 10.000	6.0 6.2	9.982 10.018	4.3 4.5	10.000 9.964		0.40
*		12 x 12	11.957 12.000	7.5 7.7	11.979 12.021	4.9 5.1	12.000 11.957		0.40
*		16 x 16	15.957 16.000	10.0 10.2	15.979 16.021	6.4 6.6	16.000 15.957		0.40
*		20 x 20	19.948 20.000	12.0 12.3	19.974 20.026	8.4 8.7	20.000 19.957		0.60
*		22 x 22	21.948 22.000	13.0 13.3	21.974 22.026	9.4 9.7	22.000 21.948		0.60
22	30	8 x 7	7.964 8.000	4.0 4.2	7.982 8.018	3.3 3.5	8.000 7.964	7.000 6.910	0.25
30	38	10 x 8	9.964 10.000	5.0 5.2	9.982 10.018	3.3 3.5	10.000 9.964	8.000 7.910	0.40
38	44	12 x 8	11.957 12.000	5.0 5.2	11.979 12.021	3.3 3.5	12.000 11.957	8.000 7.910	0.40
*		12 x 10	11.957 12.000	6.0 6.2	11.979 12.021	4.3 4.5	12.000 11.957	10.000 9.964	0.40
44	50	14 x 9	13.957 14.000	5.5 5.7	13.979 14.021	3.8 4.0	14.000 13.957	9.000 8.910	0.40
50	58	16 x 10	15.957 16.000	6.0 6.2	15.979 16.021	4.3 4.5	16.000 15.957	10.000 9.910	0.40
58	65	18 x 11	17.957 18.000	7.0 7.2	17.979 18.021	4.4 4.6	18.000 17.957	11.000 10.890	0.40
65	75	20 x 12	19.948 20.000	7.5 7.7	19.974 20.026	4.9 5.1	20.000 19.948	12.000 11.890	0.60
75	85	22 x 14	21.948 22.000	9.0 9.2	21.974 22.026	5.4 5.6	22.000 21.948	14.000 13.890	0.60

* :- Indicates Non Standard Key.

Continued

METRIC (Normal)
(BS.4235 : PART 1 : 1972)

Continued

NOMINAL SHAFT DIAM.		KEY SIZE	DIMENSIONS (mm)						
OVER	TO (Incl.)		A	B	C	D	E	F	R
85	95	25 x 14	24.948	9.0	24.974	5.4	25.000	14.000	0.60
			25.000	9.2	25.026	5.6	24.948	13.890	
95	110	28 x 16	27.948	10.0	27.974	6.4	28.000	16.000	0.60
			28.000	10.2	28.026	6.6	27.948	15.890	
110	130	32 x 18	31.938	11.0	31.969	7.4	32.000	18.000	0.60
			32.000	11.2	32.031	7.6	31.938	17.890	
130	150	36 x 20	35.938	12.0	35.969	8.4	36.000	20.000	1.00
			36.000	12.3	36.031	8.7	35.938	19.870	
150	170	40 x 22	39.938	13.0	39.969	9.4	40.000	22.000	1.00
			40.000	13.3	40.031	9.7	39.938	21.870	
170	200	45 x 25	44.938	15.0	44.969	10.4	45.000	25.000	1.00
			45.000	15.3	45.031	10.7	44.938	24.870	
200	230	50 x 28	49.938	17.0	49.969	11.4	50.000	28.000	1.00
			50.000	17.3	50.031	11.7	49.938	27.870	

* :- Indicates Non Standard Key.

Hercus “HERKEY”

IS A BRIGHT DRAWN CARBON KEY STOCK SUITABLE FOR THE MANUFACTURE OF KEYS TO THE FOLLOWING STANDARDS:-

IMPERIAL - BS 46 : PART 1 : 1958 METRIC -BS 4235 : PART 1 : 1972
 STRENGTH U.T.S. – 35 to 45 TONS/SQ.INCH (540 to 700 MPa)
 ELONGATION - 12% MIN.
 MATERIAL - EN6 (0.40 Max. Carbon – 0.5 to 0.9 Manganese)
 STOCKED IN LENGTHS UP TO 3.0 Metres.

IMPERIAL (Inches)			
Cat. No.	Size	Tolerance -0.000"	
		Width	Thickness
ATK009	1/16" x 1/16"	+ 0.0020	+ 0.0020
ATK100	3/32" x 3/32"	+ 0.0020	+ 0.0020
ATK101	1/8" x 1/8"	+ 0.0020	+ 0.0020
ATK219	5/32" x 5/32"	+ 0.0025	+ 0.0020
ATK102	3/16" x 3/16"	+ 0.0025	+ 0.0025
ATK220	7/32" x 7/32"	+ 0.0025	+ 0.0025
ATK103	1/4" x 1/4"	+ 0.0025	+ 0.0025
ATK221	9/32" x 9/32"	+ 0.0025	+ 0.0025
ATK104	5/16" x 5/16"	+ 0.0025	+ 0.0025
ATK222	11/32" x 11/32"	+ 0.0025	+ 0.0025
ATK105	3/8" x 3/8"	+ 0.0025	+ 0.0025
ATK106	7/16" x 7/16"	+ 0.0025	+ 0.0025
ATK107	1/2" x 1/2"	+ 0.0025	+ 0.0025
ATK108	9/16" x 9/16"	+ 0.0025	+ 0.0025
ATK109	5/8" x 5/8"	+ 0.0025	+ 0.0025
ATK223	11/16" x 11/16"	+ 0.0025	+ 0.0025
ATK110	3/4" x 3/4"	+ 0.0025	+ 0.0025
ATK224	13/16" x 13/16"	+ 0.0025	+ 0.0025
ATK111	7/8" x 7/8"	+ 0.0025	+ 0.0025
ATK225	15/16" x 15/16"	+ 0.0030	+ 0.0030
ATK112	1" x 1"	+ 0.0030	+ 0.0030
ATK116	1.1/8" x 1.1/8"	+ 0.0030	+ 0.0030
ATK227	1.3/16" x 1.3/16"	+ 0.0030	+ 0.0030
ATK113	1.1/4" x 1.1/4"	+ 0.0030	+ 0.0030
ATK118	1.3/8" x 1.3/8"	+ 0.0030	+ 0.0030
ATK114	1.1/2" x 1.1/2"	+ 0.0040	+ 0.0040
ATK119	1.5/8" x 1.5/8"	+ 0.0040	+ 0.0040
ATK115	1.3/4" x 1.3/4"	+ 0.0040	+ 0.0040
ATK228	1.7/8" x 1.7/8"	+ 0.0040	+ 0.0040
ATK117	2" x 2"	+ 0.0040	+ 0.0040

ATK300	3/32" x 1/8"	+ 0.0020	+ 0.0020
ATK301	3/16" x 1/8"	+ 0.0025	+ 0.0020
ATK302	1/4" x 1/8"	+ 0.0025	+ 0.0020
ATK303	1/4" x 3/16"	+ 0.0025	+ 0.0025
ATK304	5/16" x 3/16"	+ 0.0025	+ 0.0025
ATK201	5/16" x 1/4"	+ 0.0025	+ 0.0025
ATK305	3/8" x 3/16"	+ 0.0025	+ 0.0025
ATK202	3/8" x 1/4"	+ 0.0025	+ 0.0025
ATK213	3/8" x 5/16"	+ 0.0025	+ 0.0025
ATK214	7/16" x 1/4"	+ 0.0025	+ 0.0025

IMPERIAL (Inches)			
Cat. No.	Size	Tolerance -0.000"	
		Width	Thickness
ATK203	7/16" x 5/16"	+ 0.0025	+ 0.0025
ATK332	7/16" x 3/8"	+ 0.0025	+ 0.0025
ATK306	1/2" x 3/16"	+ 0.0025	+ 0.0025
ATK307	1/2" x 1/4"	+ 0.0025	+ 0.0025
ATK204	1/2" x 5/16"	+ 0.0025	+ 0.0025
ATK310	1/2" x 3/8"	+ 0.0025	+ 0.0025
ATK215	1/2" x 7/16"	+ 0.0025	+ 0.0025
ATK308	9/16" x 5/16"	+ 0.0025	+ 0.0025
ATK314	9/16" x 1/2"	+ 0.0025	+ 0.0025
ATK309	5/8" x 5/16"	+ 0.0025	+ 0.0025
ATK311	5/8" x 3/8"	+ 0.0025	+ 0.0025
ATK205	5/8" x 7/16"	+ 0.0025	+ 0.0025
ATK216	5/8" x 1/2"	+ 0.0025	+ 0.0025
ATK317	5/8" x 9/16"	+ 0.0025	+ 0.0025
ATK312	3/4" x 3/8"	+ 0.0025	+ 0.0025
ATK313	3/4" x 7/16"	+ 0.0025	+ 0.0025
ATK206	3/4" x 1/2"	+ 0.0025	+ 0.0025
ATK217	3/4" x 5/8"	+ 0.0025	+ 0.0025
ATK322	3/4" x 11/16"	+ 0.0025	+ 0.0025
ATK315	11/16" x 1/2"	+ 0.0025	+ 0.0025
ATK320	11/16" x 5/8"	+ 0.0025	+ 0.0025
ATK316	7/8" x 1/2"	+ 0.0025	+ 0.0025
ATK207	7/8" x 5/8"	+ 0.0025	+ 0.0025
ATK323	7/8" x 11/16"	+ 0.0025	+ 0.0025
ATK325	7/8" x 3/4"	+ 0.0025	+ 0.0025
ATK218	1" x 5/8"	+ 0.0030	+ 0.0025
ATK318	1" x 9/16"	+ 0.0030	+ 0.0025
ATK324	1" x 11/16"	+ 0.0030	+ 0.0025
ATK208	1" x 3/4"	+ 0.0030	+ 0.0025
ATK329	1" x 7/8"	+ 0.0030	+ 0.0025
ATK326	1.1/8" x 3/4"	+ 0.0030	+ 0.0025
ATK330	1.1/8" x 7/8"	+ 0.0030	+ 0.0025
ATK319	1.1/4" x 9/16"	+ 0.0030	+ 0.0025
ATK321	1.1/4" x 5/8"	+ 0.0030	+ 0.0025
ATK327	1.1/4" x 3/4"	+ 0.0030	+ 0.0025
ATK209	1.1/4" x 7/8"	+ 0.0030	+ 0.0025
ATK331	1.1/4" x 1"	+ 0.0030	+ 0.0030
ATK328	1.1/2" x 3/4"	+ 0.0040	+ 0.0025
ATK210	1.1/2" x 1"	+ 0.0040	+ 0.0030
ATK211	2.1/4" x 1.1/2"	+ 0.0040	+ 0.0040
ATK212	2.3/4" x 1.7/8"	+ 0.0040	+ 0.0040

* :- Indicates Non Standard Key.

Hercus “HERKEY”

IS A BRIGHT DRAWN CARBON KEY STOCK SUITABLE FOR THE MANUFACTURE OF KEYS TO THE FOLLOWING STANDARDS:-

IMPERIAL - BS 46 : PART 1 : 1958 METRIC -BS 4235 : PART 1 : 1972
 STRENGTH U.T.S. – 35 to 45 TONS/SQ.INCH (540 to 700 MPa)
 ELONGATION - 12% MIN.
 MATERIAL - EN6 (0.40 Max. Carbon – 0.5 to 0.9 Manganese)
 STOCKED IN LENGTHS UP TO 3.0 Metres.

METRIC (mm)			
Cat. No.	Size	Tolerance +0.000mm	
		Width	Thickness
ATK500	3mm x 3mm	-0.030	-0.030
ATK501	4mm x 4mm	-0.030	-0.030
ATK502	5mm x 5mm	-0.030	-0.030
ATK503	6mm x 6mm	-0.030	-0.030
ATK629	7mm x 7mm	-0.030	-0.030
ATK504	8mm x 8mm	-0.030	-0.030
ATK505	10mm x 10mm	-0.036	-0.036
ATK506	12mm x 12mm	-0.043	-0.043
ATK621	14mm x 14mm	-0.043	-0.043
ATK507	16mm x 16mm	-0.043	-0.043
ATK625	18mm x 18mm	-0.043	-0.043
ATK616	20mm x 20mm	-0.043	-0.043
ATK508	22mm x 22mm	-0.052	-0.052
ATK509	25mm x 25mm	-0.052	-0.052

ATK626	8mm x 5mm	-0.030	-0.090
ATK601	8mm x 7mm	-0.030	-0.090
ATK627	10mm x 6mm	-0.036	-0.090
ATK602	10mm x 8mm	-0.036	-0.090
ATK618	12mm x 6mm	-0.043	-0.090
ATK603	12mm x 8mm	-0.043	-0.090

METRIC (mm)			
Cat. No.	Size	Tolerance +0.000mm	
		Width	Thickness
ATK617	12mm x 10mm	-0.043	-0.090
ATK628	14mm x 6mm	-0.043	-0.090
ATK604	14mm x 9mm	-0.043	-0.090
ATK630	16mm x 7mm	-0.043	-0.090
ATK605	16mm x 10mm	-0.043	-0.090
ATK631	18mm x 7mm	-0.043	-0.090
ATK606	18mm x 11mm	-0.043	-0.110
ATK632	20mm x 8mm	-0.043	-0.090
ATK607	20mm x 12mm	-0.043	-0.110
ATK633	22mm x 9mm	-0.052	-0.090
ATK608	22mm x 14mm	-0.052	-0.110
ATK609	25mm x 14mm	-0.052	-0.110
ATK600	25mm x 22mm	-0.052	-0.110
ATK610	28mm x 16mm	-0.052	-0.110
ATK634	28mm x 25mm	-0.052	-0.110
ATK611	32mm x 18mm	-0.062	-0.110
ATK612	36mm x 20mm	-0.062	-0.130
ATK613	40mm x 22mm	-0.062	-0.130
ATK614	45mm x 25mm	-0.062	-0.130
ATK615	50mm x 28mm	-0.062	-0.130

* :- Indicates Non Standard Key.

HERKEY is a quality keysteel manufactured for Hercus and is available in Metric and Imperial sizes, HERKEY is sold in standard lengths of 75mm, 300mm and 3000mm full length bars.

HERKEY is accurately rolled from EN6 steel and the 300mm lengths are Zinc Plated. Some sizes are also available in 316 Stainless Steel.

Utilise Stainless Steel HERKEY for those applications where OHWS dictate or where corrosion may occur.

A HERKEY KIT of selected sizes in Metric or Imperial are available in 75mm lengths and is a great investment to have on the shelf, just right for that unexpected breakdown.

A HERKEY Cube of selected sizes in Metric or Imperial are in 300mm lengths which are zinc coated, the cube is ideal for industrial transmission resellers or maintenance engineers.

HERKEY in 3000mm lengths is available for the Steel Stockists and are also utilised by engineering companies wishing to make their own special keys.

Please contact your nearest stockist for pricing and availability.