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KEYSTEEL - HERKEY



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KEYSTEEL - KEYWAY STANDARDS

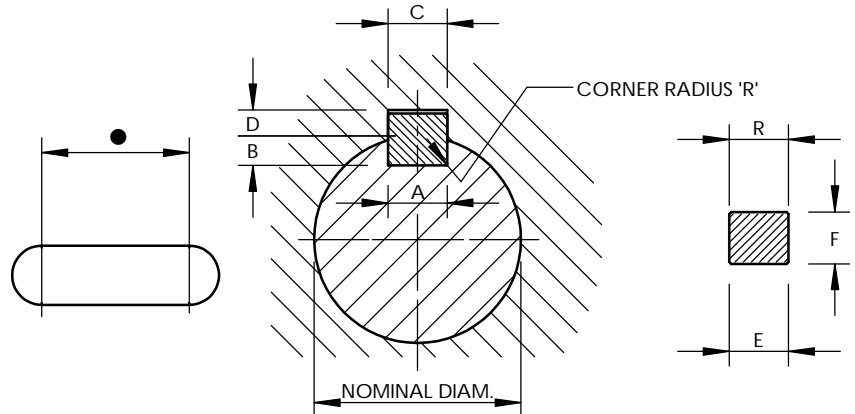
IMPERIAL
(BS 46 : PART 1 : 1958)

Safe working loads on keys.

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

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

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"	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"	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"	3/4" 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"	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"	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"	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"	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"	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"	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"	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"	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.

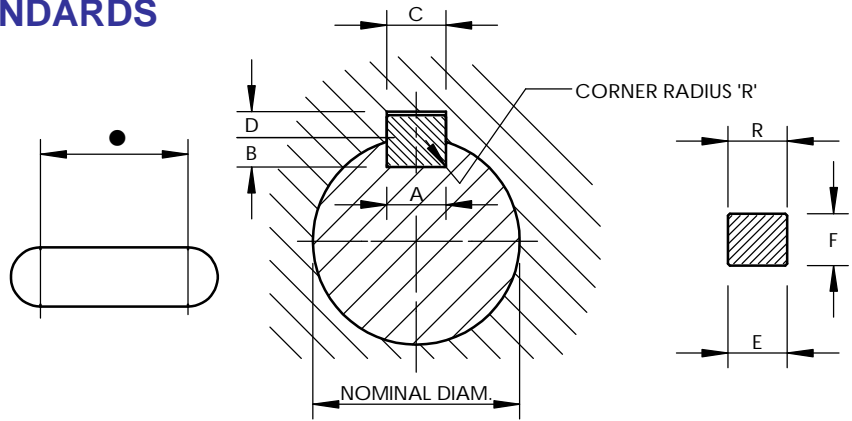
KEYSTEEL - KEYWAY STANDARDS

IMPERIAL
(BS.46 : PART 1 : 1958)

Safe working loads on keys.

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

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



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

* :- Indicates Non Standard Key.

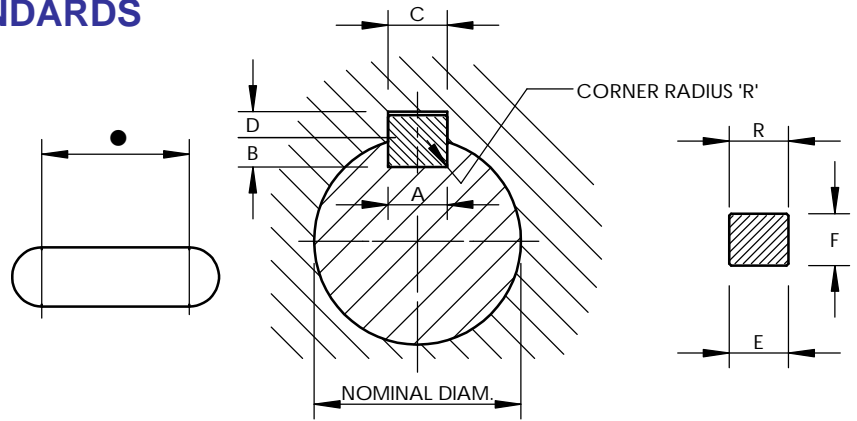
KEYSTEEL - KEYWAY STANDARDS

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

Safe working loads on keys.

Torque Nm = 0.065 x λ 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
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.

KEYSTEEL - KEYWAY STANDARDS

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.

KEYSTEEL - TOLERANCES

HERKEY – 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 3.2 Metres.

IMPERIAL (Inches)				IMPERIAL (Inches)			
Cat. No.	Size	Tolerance -0.000"		Cat. No.	Size	Tolerance -0.000"	
		Width	Thickness			Width	Thickness
ATK009	1/16" x 1/16"	+ 0.0020	+ 0.0020	ATK203	7/16" x 5/16"	+ 0.0025	+ 0.0025
ATK100	3/32" x 3/32"	+ 0.0020	+ 0.0020	ATK332	7/16" x 3/8"	+ 0.0025	+ 0.0025
ATK101	1/8" x 1/8"	+ 0.0020	+ 0.0020	ATK306	1/2" x 3/16"	+ 0.0025	+ 0.0025
ATK219	5/32" x 5/32"	+ 0.0025	+ 0.0020	ATK307	1/2" x 1/4"	+ 0.0025	+ 0.0025
ATK102	3/16" x 3/16"	+ 0.0025	+ 0.0025	ATK204	1/2" x 5/16"	+ 0.0025	+ 0.0025
ATK220	7/32" x 7/32"	+ 0.0025	+ 0.0025	ATK310	1/2" x 3/8"	+ 0.0025	+ 0.0025
ATK103	1/4" x 1/4"	+ 0.0025	+ 0.0025	ATK215	1/2" x 7/16"	+ 0.0025	+ 0.0025
ATK221	9/32" x 9/32"	+ 0.0025	+ 0.0025	ATK308	9/16" x 5/16"	+ 0.0025	+ 0.0025
ATK104	5/16" x 5/16"	+ 0.0025	+ 0.0025	ATK314	9/16" x 1/2"	+ 0.0025	+ 0.0025
ATK222	11/32" x 11/32"	+ 0.0025	+ 0.0025	ATK309	5/8" x 5/16"	+ 0.0025	+ 0.0025
ATK105	3/8" x 3/8"	+ 0.0025	+ 0.0025	ATK311	5/8" x 3/8"	+ 0.0025	+ 0.0025
ATK106	7/16" x 7/16"	+ 0.0025	+ 0.0025	ATK205	5/8" x 7/16"	+ 0.0025	+ 0.0025
ATK107	1/2" x 1/2"	+ 0.0025	+ 0.0025	ATK216	5/8" x 1/2"	+ 0.0025	+ 0.0025
ATK108	9/16" x 9/16"	+ 0.0025	+ 0.0025	ATK317	5/8" x 9/16"	+ 0.0025	+ 0.0025
ATK109	5/8" x 5/8"	+ 0.0025	+ 0.0025	ATK312	3/4" x 3/8"	+ 0.0025	+ 0.0025
ATK223	11/16" x 11/16"	+ 0.0025	+ 0.0025	ATK313	3/4" x 7/16"	+ 0.0025	+ 0.0025
ATK110	3/4" x 3/4"	+ 0.0025	+ 0.0025	ATK206	3/4" x 1/2"	+ 0.0025	+ 0.0025
ATK224	13/16" x 13/16"	+ 0.0025	+ 0.0025	ATK217	3/4" x 5/8"	+ 0.0025	+ 0.0025
ATK111	7/8" x 7/8"	+ 0.0025	+ 0.0025	ATK322	3/4" x 11/16"	+ 0.0025	+ 0.0025
ATK225	15/16" x 15/16"	+ 0.0030	+ 0.0030	ATK315	11/16" x 1/2"	+ 0.0025	+ 0.0025
ATK112	1" x 1"	+ 0.0030	+ 0.0030	ATK320	11/16" x 5/8"	+ 0.0025	+ 0.0025
ATK116	1.1/8" x 1.1/8"	+ 0.0030	+ 0.0030	ATK316	7/8" x 1/2"	+ 0.0025	+ 0.0025
ATK227	1.3/16" x 1.3/16"	+ 0.0030	+ 0.0030	ATK207	7/8" x 5/8"	+ 0.0025	+ 0.0025
ATK113	1.1/4" x 1.1/4"	+ 0.0030	+ 0.0030	ATK323	7/8" x 11/16"	+ 0.0025	+ 0.0025
ATK118	1.3/8" x 1.3/8"	+ 0.0030	+ 0.0030	ATK325	7/8" x 3/4"	+ 0.0025	+ 0.0025
ATK114	1.1/2" x 1.1/2"	+ 0.0040	+ 0.0040	ATK218	1" x 5/8"	+ 0.0030	+ 0.0025
ATK119	1.5/8" x 1.5/8"	+ 0.0040	+ 0.0040	ATK318	1" x 9/16"	+ 0.0030	+ 0.0025
ATK115	1.3/4" x 1.3/4"	+ 0.0040	+ 0.0040	ATK324	1" x 11/16"	+ 0.0030	+ 0.0025
ATK228	1.7/8" x 1.7/8"	+ 0.0040	+ 0.0040	ATK208	1" x 3/4"	+ 0.0030	+ 0.0025
ATK117	2" x 2"	+ 0.0040	+ 0.0040	ATK329	1" x 7/8"	+ 0.0030	+ 0.0025
ATK300	3/32" x 1/8"	+ 0.0020	+ 0.0020	ATK326	1.1/8" x 3/4"	+ 0.0030	+ 0.0025
ATK301	3/16" x 1/8"	+ 0.0025	+ 0.0020	ATK330	1.1/8" x 7/8"	+ 0.0030	+ 0.0025
ATK302	1/4" x 1/8"	+ 0.0025	+ 0.0020	ATK319	1.1/4" x 9/16"	+ 0.0030	+ 0.0025
ATK303	1/4" x 3/16"	+ 0.0025	+ 0.0025	ATK321	1.1/4" x 5/8"	+ 0.0030	+ 0.0025
ATK304	5/16" x 3/16"	+ 0.0025	+ 0.0025	ATK327	1.1/4" x 3/4"	+ 0.0030	+ 0.0025
ATK201	5/16" x 1/4"	+ 0.0025	+ 0.0025	ATK209	1.1/4" x 7/8"	+ 0.0030	+ 0.0025
ATK305	3/8" x 3/16"	+ 0.0025	+ 0.0025	ATK331	1.1/4" x 1"	+ 0.0030	+ 0.0030
ATK202	3/8" x 1/4"	+ 0.0025	+ 0.0025	ATK328	1.1/2" x 3/4"	+ 0.0040	+ 0.0025
ATK213	3/8" x 5/16"	+ 0.0025	+ 0.0025	ATK210	1.1/2" x 1"	+ 0.0040	+ 0.0030
ATK214	7/16" x 1/4"	+ 0.0025	+ 0.0025	ATK211	2.1/4" x 1.1/2"	+ 0.0040	+ 0.0040
				ATK212	2.3/4" x 1.7/8"	+ 0.0040	+ 0.0040

KEYSTEEL - TOLERANCES

HERKEY – 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 3.2 Metres.

METRIC (mm)			
Cat. No.	Size	Tolerance +0.000mm	
		Width	Thickness
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