

## Keyway Broaches — Metric



- Specialty tools designed for cutting keyways in machined holes
- Typically used manually with an arbor press or hydraulic press to produce the keyways
- Well suited for use in a variety of ferrous and non-ferrous materials



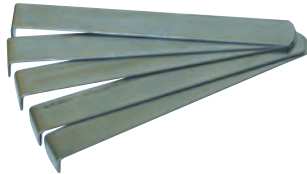
Broach	Keyway Width Tol.	Dim.	No. Shims	Cut Length Min/Max	Hassay EDP No.	Code No.	Price \$
2mm-I (A)	0.0787-0.0792	1/8 x 5-1/4	0	13/64-1-1/8	11102	182318	132.00
3mm-I (A)	0.1181-0.1186	1/8 x 5-1/4	1	13/64-1-1/8	11103	182320	132.00
4mm-II (B)	0.1575-0.1580	1/4 x 7	1	19/64-1-11/16	11204	182322	156.81
5mm-II (B)	0.1968-0.1973	1/4 x 7	1	19/64-1-11/16	11205	182324	156.81
5mm-III (C)	0.1968-0.1973	3/8 x 11-7/8	1	13/32-2-1/2	11305	182326	197.87
6mm-III (C)	0.2362-0.2367	3/8 x 11-7/8	1	13/32-2-1/2	11306	182328	197.87
7mm-III (C)	0.2756-0.2761	3/8 x 11-7/8	1	13/32-2-1/2	11307	182330	197.87
8mm-III (C)	0.3150-0.3155	3/8 x 11-7/8	1	13/32-2-1/2	11308	182332	197.87
10mm-IV (D)	0.3937-0.3942	9/16 x 13-7/8	2	3/4-6	11410	182334	302.29
12mm-IV (D)	0.4724-0.4730	9/16 x 13-7/8	2	3/4-6	11412	182336	302.29
14mm-IV (D)	0.5512-0.5519	9/16 x 13-7/8	2	3/4-6	11414	182338	302.29
16mm-V (E)	0.6299-0.6306	3/4 x 15-1/4	3	3/4-6	11516	182340	504.53
18mm-V (E)	0.7087-0.7093	3/4 x 15-1/4	3	3/4-6	11518	182342	504.53
20mm-VI (F)	0.7874-0.7883	1 x 19-1/4	3	3/4-6	11620	182344	1,038.60
22mm-VI (F)	0.8661-0.8669	1 x 19-1/4	4	3/4-6	11622	182346	1,038.60
24mm-VI	0.9449-0.9458	1 x 19-1/4	4	3/4-6	11624	182348	1,038.60
25mm-VI	0.9842-0.9851	1 x 19-1/4	4	3/4-6	11625	182350	1,038.60
28mm	1.1030-1.1040	1-1/8 x 23	5	3/4-6	11628	182352	2,720.18
30mm	1.1817-1.1827	1-1/4 x 23	5	3/4-6	11630	182354	2,766.67
32mm	1.2605-1.2615	1-1/4 x 23	5	3/4-6	11632	182356	3,097.44
36mm	1.4180-1.4190	1-7/16 x 23	5	3/4-6	11636	182358	3,753.99

## Shim Sets For Keyway Broaches — Metric



### NOTE:

Extra shims are available in sets. Please refer to the column Shims Required in the broach chart. Note that shims correspond to broach size, not the bushing type.



Size	Length Thickness	Hassay x Width	EDP No.	Set Size	Code No.	Price \$
3mm-I (A)	0.031	1-3/8 x 1/8	31103	1	182370	9.73
4mm-II (B)	0.038	1-7/8 x 1/4	31204	1	182372	9.73
5mm-II (B)	0.050	1-7/8 x 1/4	31205	1	182374	9.73
5mm-III (C)	0.047	2-7/8 x 3/8	31305	1	182376	9.73
6mm-III (C)	0.062	2-7/8 x 3/8	31306	1	182378	9.73
7mm-III (C)	0.062	2-7/8 x 3/8	31307	1	182380	9.73
8mm-III (C)	0.078	2-7/8 x 3/8	31308	2	182382	19.19
10mm-IV (D)	0.056	6-1/4 x 9/16	31410	2	182384	26.33
12mm-IV (D)	0.056	6-1/4 x 9/16	31412	2	182386	26.33
14mm-IV (D)	0.062	6-1/4 x 9/16	31414	2	182388	26.33
16mm-V (E)	0.062	6-3/4 x 3/4	31516	3	182390	40.79
18mm-V (E)	0.062	6-3/4 x 3/4	31518	3	182392	40.79
20mm-VI (F)	0.062	6-3/4 x 1	31620	3	182394	47.75
22mm-VI (F)	0.062	6-3/4 x 1	31622	4	182396	64.62
24mm-VI (F)	0.062	6-3/4 x 1	31624	5	182398	78.72
25mm-VI (F)	0.062	6-3/4 x 1	31625	4	182400	64.62
28mm	0.062	7 x 1	31628	5	182402	78.72
32mm	0.062	7 x 1-1/4	31632	5	182406	162.26

## Collared & Plain Bushings — Metric



- Used in conjunction with keyway broaches and shims to cut the keyway
- Used manually with an arbor press or hydraulic press and broaches to produce the keyways
- Straight precision slot acts as a guide for the broach



Diameter (mm)	Diameter (in.)	Hassay EDP No.	Code No.	Price \$
<b>I (A) Collared Bushings</b>				
6mm	0.2362	22106	182410	36.32
7mm	0.2756	22107	182412	38.91
8mm	0.3150	22108	182414	36.32
9mm	0.3543	22109	182416	38.91
10mm	0.3937	22110	182418	38.91
<b>II (B) Collared Bushings</b>				
11mm	0.4331	22211	182420	36.32
12mm	0.4724	22212	182422	38.91
13mm	0.5118	22213	182424	38.91
14mm	0.5512	22214	182426	38.91
15mm	0.5905	22215	182428	36.32
16mm	0.6299	22216	182430	38.91
17mm	0.6693	22217	182432	41.59
18mm	0.7087	22218	182434	41.59
19mm	0.7480	22219	182436	41.59
<b>III (C) Collared Bushings</b>				
17mm	0.6693	22317	182440	46.32
18mm	0.7087	22318	182442	1,549.92
19mm	0.7480	22319	182444	46.32
20mm	0.7874	22320	182446	46.32
22mm	0.8661	22322	182448	46.32
24mm	0.9449	22324	182450	48.64
25mm	0.9842	22325	182452	48.64
26mm	1.0236	22326	182454	48.64
27mm	1.0630	22327	182456	48.64
28mm	1.1024	22328	182458	53.55
30mm	1.1811	22330	182460	53.55
32mm	1.2598	22332	182462	55.96
34mm	1.3386	22334	182464	55.96
35mm	1.3779	22335	182466	55.96
36mm	1.4173	22336	182468	55.96
<b>IV (D) Plain Bushings</b>				
32mm	1.2598	22432	182451	70.60
34mm	1.3386	22434	182453	70.60
35mm	1.3779	22435	182455	70.60
36mm	1.4173	22436	182457	70.60
38mm	1.4961	22438	182459	70.60
40mm	1.5748	22440	182461	77.83
42mm	1.6535	22442	182463	77.83
44mm	1.7323	22444	182465	77.83
45mm	1.7716	22445	182467	85.14
46mm	1.8110	22446	182469	85.14
48mm	1.8898	22448	182470	90.14
50mm	1.9685	22450	182472	90.14
52mm	2.0472	22452	182474	121.56
54mm	2.1260	22454	182476	121.56
55mm	2.1653	22455	182478	121.56
56mm	2.2047	22456	182480	121.56
<b>V (E) Plain Bushings</b>				
52mm	2.0472	22552	182482	150.74
54mm	2.1260	22554	182484	150.74
55mm	2.1653	22555	182486	153.15
56mm	2.2047	22556	182488	153.15
58mm	2.2835	22558	182490	153.15
60mm	2.3622	22560	182492	155.74
62mm	2.4409	22562	182494	155.74
64mm	2.5197	22564	182496	167.52
65mm	2.5590	22565	182498	167.52
66mm	2.5984	22566	182500	170.11
68mm	2.6772	22568	182502	170.11
70mm	2.7559	22570	182504	170.11
72mm	2.8346	22572	182506	170.11

Cutting Tools