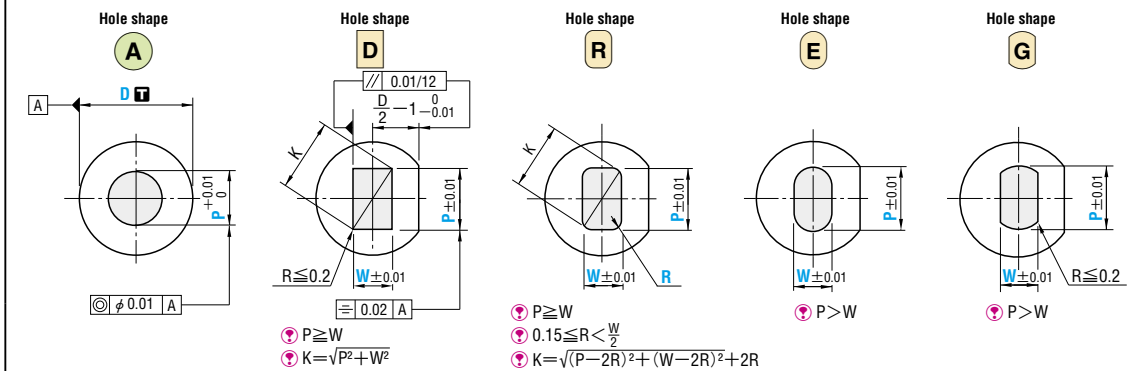
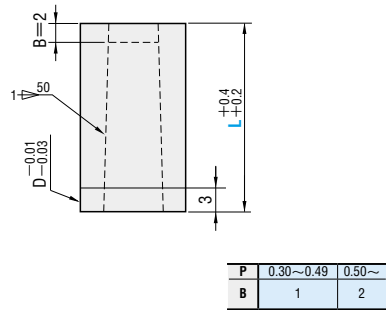


ANGULAR BUTTON DIES

—STRAIGHT—

Straight type	Shank diameter D tolerance	M H	D dimension	Catalog No.	The hole shape can be selected from A D R E G below.
<p>RoHS</p>	Dn5	M H	Equivalent to SKH51 61~64HRC	D3~5	ASD
			Equivalent to SKD11 60~63HRC	D6~25	ASD
			Equivalent to SKD11 60~63HRC	D8~25	ASD
			Powdered high-speed steel 64~67HRC	D3~25	PASD
				D8~25	PASD
				D3~5	A-ASD
D+0.005/0	D+0.005/0	M H	Equivalent to SKH51 61~64HRC	D3~5	A-ASD
			Equivalent to SKD11 60~63HRC	D6~16	A-ASD
			Equivalent to SKD11 60~63HRC	D8~16	A-ASD
			Powdered high-speed steel 64~67HRC	D3~16	A-PASD
				D8~16	A-PASD
				D3~16	A-PASD



D tolerance	Catalog No.	Type	D	L	0.01mm increments		
					A	D R E G	R
D n5	(Dn5)	(D+0.005/0)	(3)	8 13	0.30~0.70	-	-
+0.008/+0.004	A ASD PASD A-ASD A-PASD	(Equivalent to SKH51) (Powdered high-speed steel) (Equivalent to SKH51) (Powdered high-speed steel)	(4)	8 13 16 20 22 25 30	0.50~1.50	-	-
			(5)	8 13 16 20 22 25 30	0.50~2.50	-	-
+0.013/+0.008	A ASD PASD A-ASD A-PASD	(Equivalent to SKD11) (Powdered high-speed steel) (Equivalent to SKD11) (Powdered high-speed steel)	(6)	16 20 22 25 30 35	1.00~3.00	-	-
			(8)	16 20 22 25 30 35	1.00~4.00	4.00	1.00
+0.016/+0.010	D ASDD PASDD A-ASDD A-PASDD	(Equivalent to SKD11) (Powdered high-speed steel) (Equivalent to SKD11) (Powdered high-speed steel)	(10)	16 20 22 25 30 35	2.00~6.00	6.00	1.20
			(13)	16 20 22 25 30 35	3.00~8.00	8.00	1.50
+0.020/+0.012	R ASDR PASDR A-ASDR A-PASDR	(Equivalent to SKD11) (Powdered high-speed steel) (Equivalent to SKD11) (Powdered high-speed steel)	(16)	16 20 22 25 30 35	5.00~10.00	10.00	2.00
			(20)	16 20 22 25 30 35	7.00~12.00	12.00	3.00
+0.024/+0.015	E ASDE PASDE A-ASDE A-PASDE	(Equivalent to SKD11) (Powdered high-speed steel) (Equivalent to SKD11) (Powdered high-speed steel)	(25)	16 20 22 25 30 35	10.00~16.00	16.00	3.00

D=(3), (4), (5), and (6) are specifications available for A shape (round) only. They are not available for shapes D R E G.
 D=(20) and (25) are specifications available for shank diameter tolerance of Dn5 only.

Order Catalog No. - L - P - W - R (R only)
 ASDE 8 - 20 - P3.80 - W2.00

Days to Ship Quotation

Alterations Catalog No. - L(LC-SLC) - P(PC) - W(WC) - R - (BC-KC, etc.)
 ASD 6 - 16 - P2.47 - ANF1.2

Alteration	Code	A	D R E G	1Code
Alterations to shaped hole	PC	Shaped hole diameter change min.: $P > PC \geq \frac{P_{min}}{2} \geq 0.50$ 0.01 mm increments	Shaped hole diameter change min.: $P > PC \geq \frac{P \cdot W_{min}}{2} \geq 1.00$ 0.01 mm increments	
	WC	max.: $\frac{P}{W} < \frac{PC}{WC} \leq P \cdot K_{max} + 0.2$ 0.01 mm increments		
	BC	Shaped hole depth change $1 \leq BC \leq 4$ 0.1 mm increments Cannot be used for $P < 1.0$.		
Alterations to full length	PKC	Shaped hole diameter tolerance change $P \pm 0.01 \Rightarrow +0.005$ Cannot be used for $P < 1.00$.	Shaped hole diameter tolerance change $P \cdot W \pm 0.01 \Rightarrow +0.01$ 0	
	LC	Full length change $10 \leq LC < L$ 0.1 mm increments (If combined with LKC-LKZ, 0.01 mm increments can be selected.) Press-in lead is reduced by $(L-LC)$.		
	LKC	Full length tolerance change $L \pm 0.2 \Rightarrow +0.05$ 0 Cannot be used for $L(LC) < 10$.		
	LKZ	Full length tolerance change $L \pm 0.2 \Rightarrow +0.01$ 0 Cannot be used for $L(LC) < 16$.		
SLC	Changes to full length and full length tolerance are processed using a single code. The allowable range of change, increment, ordering process, and notes (P) are the same as for LC. Full length change + Full length tolerance change $L \pm 0.2 \Rightarrow +0.05$ 0			

Alteration	Code	A	D R E G	1Code																							
Others	KC	Addition of single key flat Cannot be used for D<6. Cannot be used for D3~6.	Key flat position change 180° 270° 90° 0° 1° increments																								
	WKC	Addition of double key flats in parallel Can be combined with KC for shapes D R E G. Cannot be used for $L(LC) < 16$. Cannot be used for D3~6.																									
	KM	Addition of key groove to prevent lifting Cannot be used for D<6. Cannot be combined with WKC-ANF. If D=6, can be used for hole shape A only.	<table border="1"> <tr> <td>D</td> <td>h</td> <td>l</td> </tr> <tr> <td>6</td> <td>1</td> <td></td> </tr> <tr> <td>8</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>1.5</td> <td></td> </tr> <tr> <td>13</td> <td></td> <td></td> </tr> <tr> <td>16</td> <td></td> <td></td> </tr> <tr> <td>20</td> <td>2</td> <td></td> </tr> <tr> <td>25</td> <td></td> <td></td> </tr> </table> $5 \leq l < L$ 0.1mm increments KM machining adds key flats in symmetrically opposite positions.	D	h	l	6	1		8			10	1.5		13			16			20	2		25		
D	h	l																									
6	1																										
8																											
10	1.5																										
13																											
16																											
20	2																										
25																											
ANF	Angular angle change $0.6 \leq ANF \leq 1.2$ 0.2° increments $d \leq d_{max}$ $d = P + 2((L-B) \tan(ANF))$ $P - B \tan(ANF) \geq 0.6$ $W - B \tan(ANF) \geq 0.6$ Cannot be used for $P, W < 1.0$. Cannot be used for D=3. Taper 1/50 Angle (one side) 10.573°	<table border="1"> <tr> <td>D</td> <td>d max.</td> </tr> <tr> <td>4</td> <td>2.4</td> </tr> <tr> <td>5</td> <td>2.9</td> </tr> <tr> <td>6</td> <td>3.4</td> </tr> <tr> <td>8</td> <td>4.4</td> </tr> <tr> <td>10</td> <td>6.4</td> </tr> <tr> <td>13</td> <td>8.4</td> </tr> <tr> <td>16</td> <td>10.6</td> </tr> <tr> <td>20</td> <td>12.6</td> </tr> <tr> <td>25</td> <td>16.6</td> </tr> </table>	D	d max.	4	2.4	5	2.9	6	3.4	8	4.4	10	6.4	13	8.4	16	10.6	20	12.6	25	16.6					
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4	2.4																										
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25	16.6																										

Price Quotation

BUTTON DIES