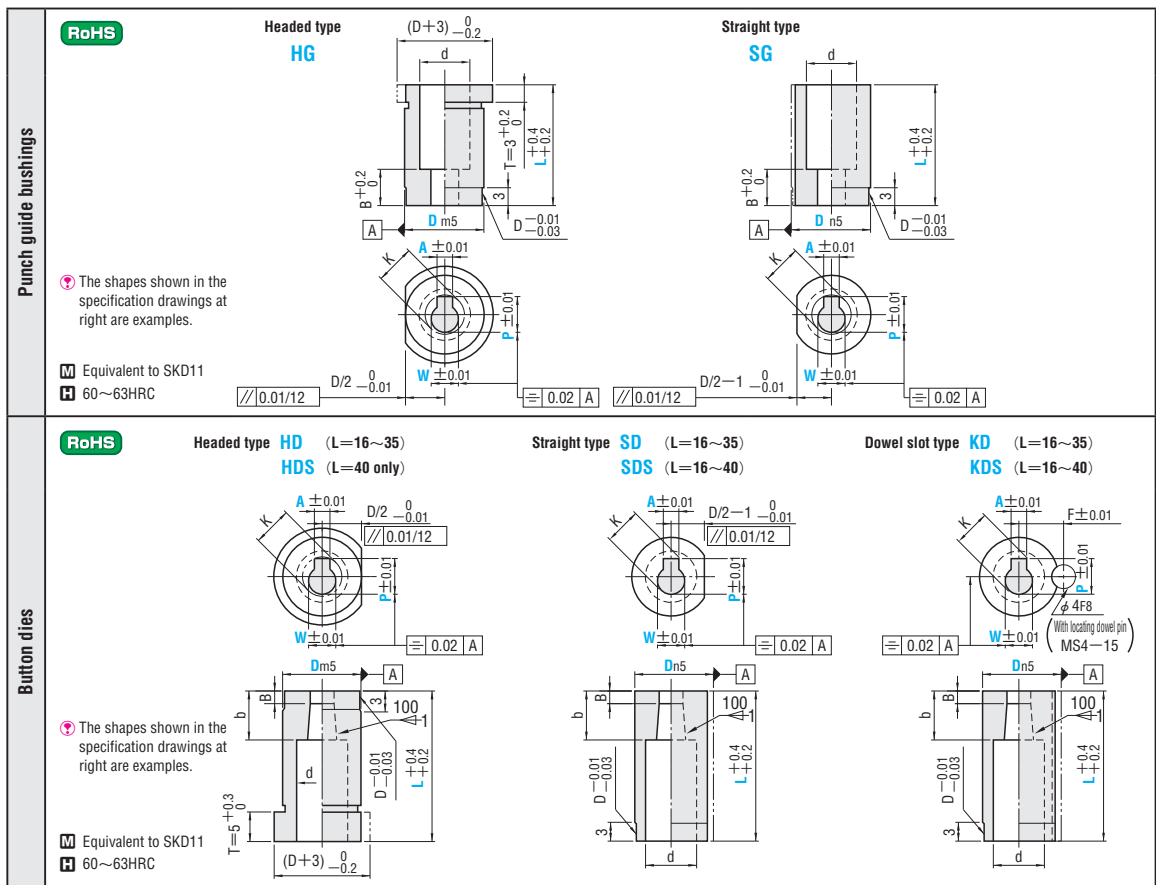


SPECIAL SHAPED PUNCH GUIDE BUSHINGS & BUTTON DIES



Catalog No.		D	L	P-K max.	P-W min.	Punch guide		Button dies		Tilting button dies		d	F
Type	Shape					HG-SG	B	HD-SD-KD	b	B	HDS-SDS-KDS	b	B
Punch guide	HG SG	2H~12H	8	10	4.00	2.00	4	—	—	—	—	4.4	—
		2J~18J	10	13	6.00	2.00						6.4	
		3K~29K	13	16	8.00	3.00						8.4	
		2L~7L	16	22	10.00	3.00						10.6	
Button dies	HD HD-SD	6	6	3.00	2.00	—	—	3	—	—	—	3.4	—
		8	8	4.00	2.00							4.4	
		10	(16)	6.00	2.00							6.4	
		13	20	8.00	2.00							8.4	
	HD HDS SD SDS KD KDS	16	22	10.00	2.50							10.6	
		20	25	12.00	3.00							12.6	
		25	30	16.00	4.00							16.6	
		32	35	20.00	5.00							20.6	
		38	35	26.00	6.00							26.6	
		45	(40)	35.00	6.00							36.0	
		50		40.00	7.00							41.0	
		56		45.00	8.00							46.0	

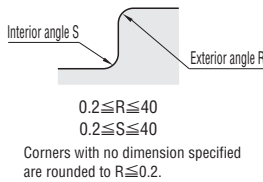
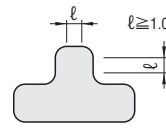
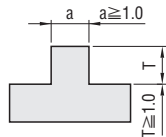
If L = (16) · (40), the applicable types and D dimensions are as shown at right.

L	D	Type
(16)	6	HD
	38	SD SDS KD KDS
(40)	10	HDS
	56	SDS KDS

If Y dimension is smaller than min.Y, button die blanks with pilot holes (prepared holes for machining) cannot be used, and therefore express are not available.

D	min.Y
6~16	0.7
20	0.8
25	1.2
32~56	1.7

Machining limit



Increment

Dimension tolerance	Increment
W ± 0.01	0.01mm increments
P ± 0.01	0.01mm increments
A ± 0.01	0.01mm increments
B ± 0.01	0.01mm increments
C ± 0.01	0.01mm increments
Q	0.01mm increments
R	0.01mm increments
S	0.01mm increments
C(R)	0.01mm increments
A° (Angle)	0.1° increments



Order Catalog No. — L — P · W · A · B · C · Q · R · S ... 0.01mm increments
HD8J 25 — 25 — P14.00—W11.00—R4.00



Dispatch 9 Days



Alterations Catalog No. — L(LC) — P(PC) · W(WC) · A · B · C · Q · R · S — (BC · HC · TC, etc.)
HD8J 25 — 25 — P14.00—W11.00—R4.00 — BC4—KFC225

Alteration	Code	Spec.	Rs./Code
Alterations to shaped hole	PC WC	Shaped hole diameter change $\min. \frac{P}{W} > \frac{PC}{WC} \geq \frac{P \cdot W_{min}}{2} \geq 1.00$ 0.01mm increments $\max. \frac{P}{W} < \frac{PC}{WC} \leq P \cdot K_{max} + 0.2$ 0.01mm increments	168
	BC	Shaped hole depth change $1 \leq BC \leq b$ 0.1mm increments ✗ Cannot be used for HG · SG.	168
Alterations to full length	LC	Full length change (reduction in shaped hole depth) 0.1mm increments Punch guide bushing: $10 \leq L - (b - 1) \leq LC < L$ ✗ B dimension and press-in lead are shortened by (L - LC). Button die: $10 \leq L - (b - 1) \leq LC < L$ ✗ Dimension b and press-in lead are shortened by (L - LC).	168
	LKC	Full length tolerance change $L + 0.4 \Rightarrow +0.05$ $L + 0.2 \Rightarrow 0$	336
	LKZ	Full length tolerance change $L + 0.4 \Rightarrow +0.01$ $L + 0.2 \Rightarrow 0$ ✗ Cannot be used for L < 16. ✗ Cannot be used for D > 25.	504



Volume discount price P.37

Quantity	1~9	10~19	20~29	30~50	For larger orders, ask about prices/delivery.
Discount rate (Base unit price)	—	5%	10%	15%	

Base unit price for punch guide bushing

D	HG SG
8	4,746
10	4,746
13	4,948
16	5,359

Base unit price for button die

D	HD SD	HDS SDS	KD	KDS
6	4,721	—	—	—
8	4,721	—	—	—
10	4,721	5,418	5,552	5,956
13	4,914	5,645	5,712	6,216
16	5,334	6,082	6,157	6,611
20	5,611	6,418	6,493	6,947
25	6,040	6,829	6,888	7,342
32	6,401	7,291	7,342	7,787
38	7,384	8,299	8,350	8,912
45	10,710	12,163	11,777	12,634
50	12,037	13,793	13,163	14,196
56	13,348	15,364	14,515	15,700

