

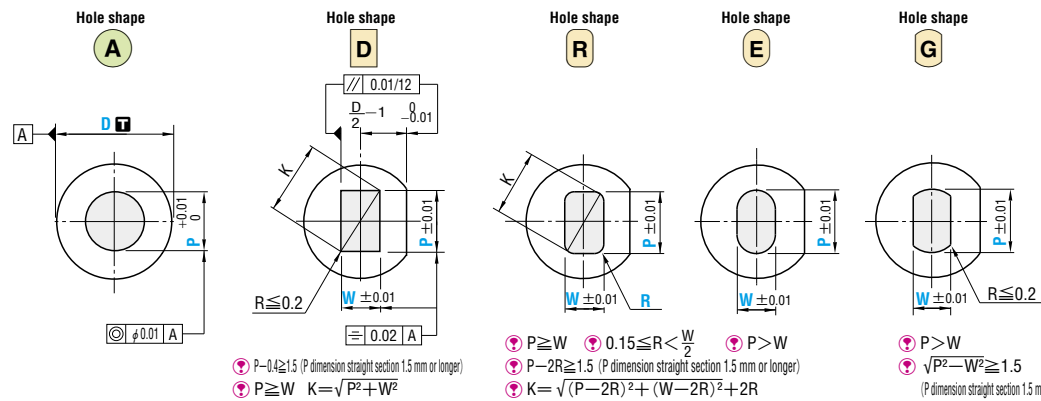
SCRAP RETENTION BUTTON DIES

— STRAIGHT TYPE (REGULAR) —



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.
	D _{n5}	Equivalent to SKH51 61~64HRC Equivalent to SKD11 60~63 HRC Equivalent to SKD11 60~63 HRC	D4~5	SR-MSD	
			D6~56	SR-SD□	
			D6~25	SR-PMSD	
			D8~25	SR-PSD□	
			Powdered high-speed steel 64~67 HRC	D4~5	
	D6~16	SRA-SD□			
	D6~16	SRA-PMSD			
	D8~16	SRA-PSD□			
	D8~16	SRA-PSD□			
	D8~16	SRA-PSD□			

For shank diameter tolerance D, select either n5 or +0.005/0



D tolerance	D n5 +0.005/0	Catalog No.	Type	D	L	0.01mm increments				MT (workpiece material thickness)	C (clearance)	b	d
						A	D R E G	R	R				
+0.013 +0.008	+0.013 +0.008	(Equivalent to SKH51) (D _{n5}) (D _{0+0.005})	SR-MSD SRA-MSD	(4)	16 20 22 25 28 30	1.00~2.00	—	—	—	MT ≥ 0.15 Select a workpiece material thickness of 0.15 mm or more.	C ≥ 0.010 Select a clearance of 0.010mm or more.	8	2.4
				(5)	16 20 22 25 28 30	1.00~2.50	—	—	—				2.9
				(6)	16 20 22 25 28 30 32 35	1.00~3.00	—	—	—				3.4
				(8)	16 20 22 25 28 30 32 35	1.00~4.00	4.00	1.00	—				4.4
				(10)	16 20 22 25 28 30 32 35 (40)	2.00~6.00	6.00	1.20	—				6.4
				(13)	16 20 22 25 28 30 32 35 (40)	3.00~8.00	8.00	1.50	—				8.4
				(16)	16 20 22 25 28 30 32 35 (40)	5.00~10.00	10.00	2.00	—				10.6
				(20)	16 20 22 25 28 30 32 35 (40)	7.00~12.00	12.00	3.00	—				12.6
				(22)	16 20 22 25 28 30 32 35 (40)	8.00~14.00	14.00	3.00	—				14.6
				(25)	16 20 22 25 28 30 32 35 (40)	10.00~16.00	16.00	3.00	—				16.6
				(32)	16 20 22 25 28 30 32 35	15.00~20.00	20.00	4.00	—				20.6
				(38)	16 20 22 25 30 35	19.00~26.00	26.00	5.00	—				26.6
				(45)	20 22 25 30 35	25.00~35.00	35.00	6.00	—				36.0
				(50)	20 22 25 30 35	33.00~40.00	40.00	7.00	—				41.0
				(56)	20 22 25 30 35	38.00~45.00	45.00	8.00	—				46.0
				+0.013 +0.008	+0.013 +0.008	(Powdered high-speed steel) (D _{n5}) (D _{0+0.005})	SR-PMSD SRA-PMSD	(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	—	4.4			
(10)	16 20 22 25 30 35	2.00~6.00	6.00					1.20	—	6.4			
(13)	16 20 22 25 30 35	3.00~8.00	8.00					1.50	—	8.4			
(16)	16 20 22 25 30 35	5.00~10.00	10.00					2.00	—	10.6			
(20)	16 20 22 25 30 35	7.00~12.00	12.00					3.00	—	12.6			
(25)	16 20 22 25 30 35	10.00~16.00	16.00					3.00	—	16.6			

(4), (5), and (6) are specifications available for shape A (round) only. They are not available for shapes D R E G. (6) Can be used only for workpiece materials with tensile strengths up to 1177 N/mm² (120 kgf/mm²).
 D = (20), (22), (25), (32), (38), (45), (50), (56) are specifications available for shank diameter tolerance of D_{n5} only.
 L = (40) is a specification available for shank dia. tolerance of D_{n5} only.
 MT (workpiece material thickness) and C (clearance) are used as data for machining the scrap retention grooves. Specify the shaped hole dimensions (P-W-R) when selecting the button die finishing dimensions.

Order **Catalog No.** — L — P — W — R (R only) — MT — C
 SR-SDR 13 — 35 — P5.25 — W2.82 — R0.40 — MT1.50 — C0.105

Days to Ship **Quotation**

Alterations **Catalog No.** — L (LC-SLC) — P (PC) — W (WC) — R — MT — C — (BC-KC-LKC, etc.)
 SR-SDD 13 — 35 — P5.58 — W2.25 — MT1.50 — C0.105 — LKC

Alteration	Code	A	D R E G	1Code
	PC WC	Shaped hole diameter change min: $\frac{P}{W} > \frac{PC}{WC} \geq \frac{P-Wmin.}{2} \geq 1.00$ 0.01 mm increments For A only, if PC is 1.00~1.99, then b=4. max: $\frac{P}{W} < \frac{PC}{WC} \leq P \cdot Kmax. + 0.2$ 0.01 mm increments		Quotation
		Shaped hole depth change min: 1.00~1.99 3 2.00~3.99 5 4.00~ 6 max: 1 ≤ BC ≤ Bmax. 1 ≤ BC ≤ b 0.1 mm increments	Shaped hole depth change 1 ≤ BC < b 0.1 mm increments	
	BC	Shaped hole diameter tolerance change $P + 0.01 \Rightarrow +0.005$ $0 \Rightarrow 0$	Shaped hole diameter tolerance change $P-W \pm 0.01 \Rightarrow +0.01$ $0 \Rightarrow 0$	

Alteration	Code	A	D R E G	1Code
	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 shortened by (L-LC).		Quotation
	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 (⊗) are the same as for LC. Full length change + Full length tolerance change $L + 0.4 \Rightarrow +0.05$ $L + 0.2 \Rightarrow 0$ Can be selected in 0.01 mm increments.	LKC Full length tolerance change $L + 0.4 \Rightarrow +0.05$ $L + 0.2 \Rightarrow 0$	
	LKC LKZ	Full length tolerance change $L + 0.4 \Rightarrow +0.05$ $L + 0.2 \Rightarrow 0$ Full length tolerance change $L + 0.4 \Rightarrow +0.01$ $L + 0.2 \Rightarrow 0$ ⊗ Cannot be used for L (LC) < 16. ⊗ Cannot be used for D > 25.		
	KC	Addition of single key flat ⊗ Cannot be used for D4~6. Key flat position 180° change 1° increments		
	WKC	Addition of double key flats in parallel ⊗ Cannot be used for D4~6. Can be combined with KC for shapes D R E G.		

Price **Quotation**