

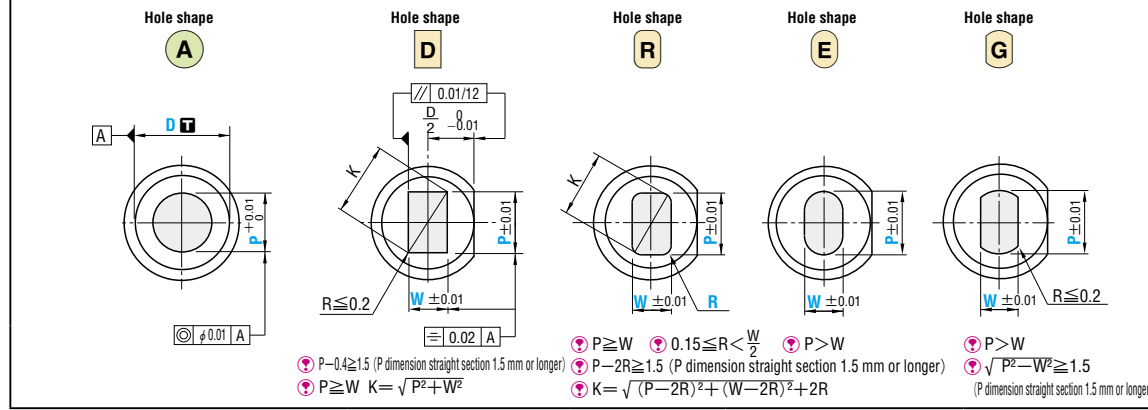
SCRAP RETENTION BUTTON DIES

— HEADED TYPE (REGULAR) —



Headed	Shank diameter D tolerance	Material	D dimension	Catalog No.	The hole shape can be selected from A D R E G below.
	D _{m5}	Equivalent to SKH51 61~64HRC Equivalent to SKD11 60~63 HRC Powdered high-speed steel 64~67 HRC	D4-5	SR-MHD	Regular type
			D6~56	SR-HD	
			D6~56	SR-PMHD	
			D6~25	SR-PHD	
D ₀ ^{+0.005}	Equivalent to SKH51 61~64HRC Equivalent to SKD11 60~63 HRC Equivalent to SKD11 60~63 HRC Powdered high-speed steel 64~67 HRC	D4-5	SRA-MHD		
		D6~16	SRA-HD		
		D6~16	SRA-PMHD		
		D6~16	SRA-PHD		

For shank diameter tolerance D, select either m5 or 0.



D tolerance	Catalog No.	Type	D	0.01mm increments					C (clearance)	b	d	H	T			
				A	D	R	E	G								
D ₀ ^{+0.005}	(Equivalent to SKH51) (D _{m5}) (D ₀ ^{+0.005})	SR-MHD SRA-MHD	(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.		
			(5)	16	20	22	25	28	30	1.00~2.50	—	—	—			
			(6)	16	20	22	25	28	30	32	35	1.00~3.00	3.00		1.00	
			(8)	16	20	22	25	28	30	32	35	4.00	4.00		1.00	
			(10)	16	20	22	25	28	30	32	35	4.00	6.00		1.20	
			(13)	16	20	22	25	28	30	32	35	4.00	8.00		1.50	
			(16)	16	20	22	25	28	30	32	35	4.00	10.00		2.00	
			(20)	16	20	22	25	28	30	32	35	4.00	12.00		3.00	
			(22)	16	20	22	25	28	30	32	35	4.00	14.00		3.00	
			(25)	16	20	22	25	28	30	32	35	4.00	16.00		3.00	
D ₀ ^{+0.005}	(Equivalent to SKD11) (D _{m5}) (D ₀ ^{+0.005})	SR-MHD SRA-MHD	(32)	16	20	22	25	28	30	32	35	15.00~20.00	20.00	4.00		
			(38)	16	20	22	25	30	35	19.00~26.00	26.00	5.00	—			
			(45)	20	22	25	30	35	25.00~35.00	35.00	6.00	—				
			(50)	20	22	25	30	35	33.00~40.00	40.00	7.00	—				
			(56)	20	22	25	30	35	38.00~45.00	45.00	8.00	—				
			D ₀ ^{+0.005}	(Powdered high-speed steel) (D _{m5}) (D ₀ ^{+0.005})	SR-PMHD SRA-PMHD	(6)	16	20	22	25	30	35	1.00~3.00	3.00	1.00	0.15 ≤ R < W/2 (R only)
						(8)	16	20	22	25	30	35	1.00~4.00	4.00	1.00	
						(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	
						(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				
(25)	16	20				22	25	30	35	10.00~16.00	16.00	3.00				
D ₀ ^{+0.005}	(SR-PMHD SRA-PMHD)	(20)				16	20	22	25	30	35	7.00~12.00	12.00	3.00		
		(25)				16	20	22	25	30	35	10.00~16.00	16.00	3.00		
		D ₀ ^{+0.005}				(SR-PHD SRA-PHD)	(16)	16	20	22	25	30	35	5.00~10.00	10.00	
			(20)	16	20		22	25	30	35	7.00~12.00	12.00	3.00			
			(25)	16	20		22	25	30	35	10.00~16.00	16.00	3.00			

* Can be used only for workpiece materials with tensile strengths up to 1177 N/mm² (120 kgf/mm²).
 * 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.
 * D = (4) and (5) are specifications available for shape A (round) only. They are not available for shapes D R E G.
 * D = (20), (22), (25), (32), (38), (45), (50), (56) are specifications available for shank diameter tolerance of D_{m5} only.
 * L = (45) is a specification available for shank dia. tolerance of D_{m5} only.

Order Catalog No. — L — P — W — R (R only) — MT — C
 SR-MHD 13 — 30 — P7.00 — MT1.50 — C0.105

Days to Ship Quotation

Alterations Catalog No. — L (LC) — P (PC) — W (WC) — R — MT — C — (BC-HC-TC-CKC-MKC, etc.)
 SR-MHD 13 — 30 — P7.00 — MT1.50 — C0.105 — TC3

Alteration	Code	A	D R E G	1Code
Alterations to shaped hole	PC	Shaped hole diameter change $\frac{P}{W} > \frac{PC}{WC} \geq \frac{P-Wmin.}{2} \geq 1.00$ 0.01 mm increments * For A only, if PC is 1.00~1.99, then b=4.		
	WC	$\frac{P}{W} > \frac{PC}{WC} \geq P \cdot Kmax. + 0.2$ 0.01 mm increments		
	BC	Shaped hole depth change $\frac{P}{W} > \frac{BC}{WC} \geq \frac{P-Bmax.}{6}$ 1.00~1.99 3 2.00~3.99 5 4.00~ 6 1 ≤ BC ≤ Bmax. 1 ≤ BC ≤ b 0.1 mm increments	Shaped hole depth change 1 ≤ BC < 2 0.1 mm increments	
Alterations to full length	PKC	Shaped hole diameter tolerance change $P \pm 0.01 \Rightarrow \pm 0.005$	Shaped hole diameter tolerance change $P-W \pm 0.01 \Rightarrow \pm 0.01$	
	LC	Full length change (reduction in shaped hole depth) $10 \leq L - (b-1) \leq LC < L$ 0.1 mm increments (If combined with LKC-LKZ-CKC-MKC, 0.01 mm units can be selected.) * Dimension b and press-in lead are shortened by (L-LC).		
	LKC	Full length tolerance change $L \pm 0.4 \Rightarrow \pm 0.05$ $L \pm 0.2 \Rightarrow 0$		
Alterations to head	HC	Head diameter change $D \leq HC < H$ 0.1 mm increments		
	TC	Head thickness change $2 \leq TC < T$ 0.1 mm increments (If combined with TKC-TKM-CKC-MKC, 0.01 mm increments can be selected.) * Full length L is shortened by (T-TC). If combined with LC, full length is equal to L.C.		
	TKC	Head thickness tolerance change $T \pm 0.3 \Rightarrow \pm 0.02$ $T \pm 0.2 \Rightarrow 0$		
Alterations to shank	TKM	Head thickness tolerance change $T \pm 0.3 \Rightarrow \pm 0.02$ $T \pm 0.2 \Rightarrow 0$		
	RC	Head thickness is machined to a tolerance of -0.04~0 relative to the retainer surface. * Cannot be used for L (LC) < 30.		
	SKC	Single key flat on shank * Can be used for D ≥ 8 and L (LC) ≥ 20. * Cannot be combined with KC-WKC-KFC.		

Price Quotation

BUTTON DIES