

# SCRAP RETENTION REVERSE ANGULAR BUTTON DIES

— DOWEL SLOT TYPE —

Patent pending



**RoHS**

Equivalent to SKD11  
60~63HRC  
MS4-15

**SRT-KSD**  
**SRT-KD**

Select a push-in amount of punch greater than FH dimension. Pushing in until the straight part is effective against scrap retention and scrap clogging.

Tip shape **A**

$F \pm 0.01$   
 $\phi 4f8$   
 $D_{n5}$   
 $P \pm 0.01$   
 $\phi 0.01$

Tip shape **D**

$R \leq 0.2$   
 $W \pm 0.01$   
 $P \pm 0.01$   
 $0.02$

Tip shape **R**

$W \pm 0.01$   
 $R$

Tip shape **E**

$W \pm 0.01$   
 $P \pm 0.01$

Tip shape **G**

$R \leq 0.2$   
 $W \pm 0.01$   
 $P \pm 0.01$

$P \geq W$     $K = \sqrt{P^2 + W^2}$     $P > W$   
 $P - 0.4 \geq 1.5$     $K = \sqrt{(P-2R)^2 + (W-2R)^2} + 2R$     $P > W$   
 $P - 2R \geq 1.5$     $\sqrt{P^2 - W^2} \geq 1.5$

(P dimension straight section 1.5mm or longer)

D tolerance	Catalog No.	L	0.01mm increments					MT (workpiece material thickness)	C (clearance)	Select TS (Tensile strength (N/mm <sup>2</sup> ))	FH (Taper depth)	b	d	F								
			A	D	R	E	G															
10	(Equivalent to SKD11) (Dn5)	10	16	20	22	25	28	30	32	35	2.00~6.00	6.00	2.00	0.15 ≤ R < W/2 MT ≥ 0.5	C ≥ 0.060 (But C ≥ 0.050 if the clearance is 10% or below C ≥ 0.050) Clearance	Select the level of tensile strength Level   Tensile strength (N/mm <sup>2</sup> ) H   800~ M   600~ L   ~599	1.0~5.0	6	6.4	6.0		
13	<b>A</b> SRT-KSD	13	16	20	22	25	28	30	32	35	3.00~8.00	8.00	2.00								8.4	7.5
16	<b>D</b> SRT-KDD	16	16	20	22	25	28	30	32	35	5.00~10.00	10.00	2.00								10.6	8.0
20	<b>R</b> SRT-KDR	20	16	20	22	25	28	30	32	35	7.00~12.00	12.00	3.00								12.6	10.0
22	<b>E</b> SRT-KDE	22	16	20	22	25	28	30	32	35	8.00~14.00	14.00	3.00								14.6	11.0
25	<b>G</b> SRT-KDG	25	16	20	22	25	28	30	32	35	10.00~16.00	16.00	3.00	16.6	12.5							

Use with the clearance (C) less than 20% of the processed plate material thickness (MT), otherwise the effect will not be as expected. Clearance (C) ≤ Processed plate material thickness (MT) × 20%

1/100 of relief taper length is as follows. Relief taper length = b - (FH + 1)

P dimension will change if regrinding is applied. Note that the change amount varies with the taper width (max. 0.05mm on one side) and taper depth & regrinding amount.

**Order**

**Days to Ship**

**Alterations**

Catalog No. — L — P — W — R (R only) — MT — C — TS — FH

SRT-KDD16 — 25 — P9.20 — W2.00 — MT1.0 — C0.1 — M — FH2.0

SRT-KSD16 — 25 — P9.2 — MT1.0 — C0.1 — H — FH2.0

**Quotation** Price **Quotation**

Catalog No. — L(LC) — P(PC) — W(WC) — R — MT — C — TS — FH — (KC...etc.)

SRT-KDD 16 — 25 — P9.20 — W2.00 — MT1.00 — C0.100 — M — FH2.0 — KC90

Alterations	Code	A	D	R	E	G
Alterations to tip	PC WC		Shaped hole diameter change min.: $\frac{P}{W} > \frac{PC}{WC} \geq \frac{P \cdot W_{min}}{2} \geq 2.00$ 0.01mm increments			
			max.: $\frac{P}{W} < \frac{PC}{WC} \leq P \cdot K_{max} + 0.2$ 0.01mm increments			
Alterations to full length	LC		Full length change $10 \leq LC < L$ 0.1mm increments (If combined with LKC-LKZ, 0.01 mm increments can be selected.) Press-in lead is shortened by (L-LC)			
	LKC LKZ		Full length tolerance change $L +0.4 \rightarrow +0.05$ $+0.2 \rightarrow 0$			
Others	KC		Key flat position change $180^\circ$ to $90^\circ$ 1° increments			

BUTTON DIES