

BURRING PUNCHES

PRODUCTS DATA

P.1599

BURRING PUNCHES

—NORMAL · LAPPING—

RoHS

SPM
—Dicoat® treatment—
T-SPM

Jector type
SJM

Calculating the projection length of the jector pin (reference value) **P.241**
 • For details of jector holes, refer to Jector Punch Blanks. (Blanks are based on SJB.) **P.236**
 • For details of jector pins, refer to Jector Pin Sets. **P.239** (Example of burring)

Catalog No.		L	Type	V	P	B	S	E	M × P	d: Die inner diameter, h: Burring height, Workpiece: SPCC (measured data)							
Type	M									Type	t	0.6	0.8	1.0	1.2	1.6	2.0
SPM —Dicoat® treatment— T-SPM	2.6	41	A	2.22	1.5	6	2	2.7	M2.6 × 0.45	A	d	3.12	3.34	3.72			
			B	2.25						d	3.15	3.37	3.75				
			C	2.32						d	3.22	3.44	3.82				
			D	2.35						d	3.25	3.47	3.85				
SPM —Dicoat® treatment— T-SPM	3	41	A	2.59	1.9	8	3	3.6	M3 × 0.5	A	d	3.49	3.79	3.99	4.39		
			B	2.63						d	3.53	3.83	4.03	4.43			
			C	2.72						d	3.62	3.92	4.12	4.52			
			D	2.76						d	3.66	3.96	4.16	4.56			
	4	71	8	3.9	4.1	M4 × 0.7	A	d	4.29	4.59	4.79	5.07	5.79				
							B	3.44	d	4.34	4.64	4.84	5.12	5.84			
							C	3.64	d	4.54	4.84	5.04	5.32	6.04			
							D	3.69	d	4.59	4.89	5.09	5.37	6.09			
SJM	5	4	2.8	5.4	M5 × 0.8	A	d			5.83	6.01	6.57	7.33				
						B	4.38	d			5.88	6.06	6.62	7.38			
						C	4.62	d			6.12	6.30	6.86	7.62			
						D	4.67	d			6.17	6.35	6.91	7.67			
	5	4	2.8	5.6	M5 × 0.8	A	d			5.83	6.01	6.57	7.33				
						B	4.38	d			5.88	6.06	6.62	7.38			
						C	4.62	d			6.12	6.30	6.86	7.62			
						D	4.67	d			6.17	6.35	6.91	7.67			

TYPEA-B is for cut thread taps and C-D is for rolled thread taps.

Order **Catalog No.** — **L** **Type**
SPM 3 — 51 B

Days to Ship **Quotation**

Price **Quotation**

RoHS

SPMBS
SPMBL

—Lapping—
L-SPMBS
L-SPMBL

Enlarged view

Equivalent to SKD11
60~63HRC

B	H	Catalog No.		D	0.1mm increments L	0.01mm increments P	R		Base unit price 1~9 pieces	
		Type	Tip length				SPMB	L-SPMB		
10	5	SPMB —Lapping— L-SPMB	S	3	40.0~80.0	1.50~2.99	2	3		
	7			2.00~2.99		2	3			
	8			3.00~3.99		3	4			
	9			2.00~2.99		2	3			
15	11	SPMB —Lapping— L-SPMB	S	8	45.0~80.0	3.00~4.99	3	4		
	13			2.50~2.99		2	3			
	16			3.00~4.99		3	4			
	16			5.00~5.99		4	4			
15	8	SPMB —Lapping— L-SPMB	L	5	45.0~80.0	3.00~4.99	3	4		
	9			2.00~2.99		2	3			
	11			3.00~4.99		3	4			
	13			5.00~5.99		4	4			
21	11	SPMB —Lapping— L-SPMB	L	8	50.0~80.0	3.00~4.99	3	4		
	13			5.00~6.99		4	4			
	16			3.00~7.99		4	5	6		
	16			8.00~9.99		5	6	6		

P > D - 0.03 → ℓ = 0 If P > D - 0.03, D - 0.01 (press-in lead) is not included. With lapping, P dimension can be selected in 0.001mm increments.

Order **Catalog No.** — **L** — **P** — **R**
SPMBS 4 — 42.0 — P3.64 — R3

Days to Ship **Quotation**

Price **Quotation**

Alterations **Catalog No.** — **L** — **P** — **R** — (BC·HC·TC, etc.)
SPMBS 6 — 51.0 — P2.50 — R2 — KC

EX Example

Burring punch Round punch
Stripper backing plate
Stripper plate
Punch guide bushing
Workpiece (Burring pilot hole)

Alteration	Code	Spec.	1Code
Alterations to tip	BC	Tip length change R + 2 ≤ BC ≤ BCmax. 0.1mm increments Full length must be 30 mm longer than tip length.	Quotation
Alterations to head	PKC	P dimension tolerance change P + 0.01 → + 0.005 0 → 0 Cannot be used with lapping.	
Alterations to head	HC	Head diameter change D ≤ HC < H 0.1mm increments	
Alterations to head	TC	Head thickness change 2 ≤ TC < 5 0.1mm increments (if combined with TKC, 0.01mm increments can be selected.) The full length remains as specified.	
Alterations to head	TCC	Chamfering of head This improves the strength of the punch head. 0.1mm increments 0.5 ≤ TCC ≤ (H - D)/2 If H ≤ 5, then TCC is 0.5.	

Alteration	Code	Spec.	1Code
Alterations to head	KC	Addition of single key flat to head	
Alterations to head	WKC	Addition of double key flats in parallel	
Alterations to head	TKC	Head thickness tolerance change T + 0.3 → + 0.02 0 → 0	Quotation
Alterations to head	TKM	Head thickness tolerance change T + 0.3 → 0 0 → - 0.02	
Others	NDC	No press-in lead ℓ ≥ 3 → ℓ = 0	