

BURRING PUNCHES

PRODUCTS DATA

P.1215

BURRING PUNCHES

—NORMAL · LAPPING—

Rs The volume discount rate is also applicable to alteration costs. **P.39**

RoHS

SPM
—Dicoat® treatment—
T—SPM

Jector type
SJM

Calculating the projection length of the jector pin (reference value) **P.191**
 • For details of jector holes, refer to Jector Punch Blanks. (Blanks are based on SJB.) **P.186**
 • For details of jector pins, refer to Jector Pin Sets. **P.189** (Example of burring)

Catalog No.	S	M	H
SPM	—	Equivalent to SKD11	60~63HRC
T—SPM	Dicoat®	Equivalent to SKD11 Surface 3000HV	60~63HRC
SJM (jector)	—	SKH51	61~64HRC

Catalog No.	Type	M	L	Type	V	P	B	S	E	M × P	d: Die inner diameter, h: Burring height, Workpiece: SPCC (measured data)						
											Type	t	0.6	0.8	1.0	1.2	1.6
SPM —Dicoat® treatment— T—SPM		2.6		A	1.5	6	2	2.7	M2.6 × 0.45	A	d	3.12	3.34	3.72			
				B						d	3.15	3.37	3.75				
				C						d	3.22	3.44	3.82				
				D						d	3.25	3.47	3.85				
SPM —Dicoat® treatment— T—SPM		3	41	A	1.9	8	3	3.6	M3 × 0.5	A	d	3.49	3.79	3.99	4.39		
				B						d	3.53	3.83	4.03	4.43			
				C						d	3.62	3.92	4.12	4.52			
				D						d	3.66	3.96	4.16	4.56			
				A						d	4.29	4.59	4.79	5.07	5.79		
				B						d	4.34	4.64	4.84	5.12	5.84		
				C						d	4.54	4.84	5.04	5.32	6.04		
				D						d	4.59	4.89	5.09	5.37	6.09		
SPM —Dicoat® treatment— T—SPM		4	71	A	2.4	8	3	3.9	M4 × 0.7	A	d	4.29	4.59	4.79	5.07	5.79	
				B						d	4.34	4.64	4.84	5.12	5.84		
				C						d	4.54	4.84	5.04	5.32	6.04		
				D						d	4.59	4.89	5.09	5.37	6.09		
				A						d	4.29	4.59	4.79	5.07	5.79		
				B						d	4.34	4.64	4.84	5.12	5.84		
				C						d	4.54	4.84	5.04	5.32	6.04		
				D						d	4.59	4.89	5.09	5.37	6.09		
SJM		5		A	2.8	4	4	5.4	M5 × 0.8	A	d			5.83	6.01	6.57	7.33
				B						d			5.88	6.06	6.62	7.38	
				C						d			6.12	6.30	6.86	7.62	
				D						d			6.17	6.35	6.91	7.67	
				A						d			2.27	2.47	2.85	3.50	
				B						d			2.30	2.52	2.90	3.52	
				C						d			2.42	2.65	3.00	3.62	
				D						d			2.45	2.70	3.05	3.65	

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

Price **Volume discount price** **P.37**

Quantity	1~9	10~29	30~99	100~200
Discount rate	Base unit price	5%	10%	15%

For larger orders, ask about prices/delivery.

Catalog No.	Base unit price 1~9 pieces
SPM	361
T—SPM	1,462
SJM	1,210

Dispatch **7** Days

• If size changes to length L, dimension S, or other dimensions are required, use drawing punch shape 8C. **P.598**

• Specifications of half-made types **P.583**·**P.584**

RoHS

SPMBS
SPMBL

—Lapping—
L—SPMBS
L—SPMBL

Equivalent to SKD11 **P.39**
60~63HRC

B	H	Catalog No.		0.1mm increments L	0.01mm increments P	R	Base unit price 1~9 pieces	
		Type	Tip length				SPMB	L—SPMB
10	5	SPMB	S	3	1.50~2.99	2 3	563	1,705
	7			2.00~2.99	2 3	580	1,722	
	8			3.00~3.99	3 4	605	1,747	
	9			2.00~2.99	2 3	622	1,764	
15	11	SPMB	S	4	3.00~4.99	3 4	714	1,856
	13			2.50~2.99	2 3	882	2,016	
	16			3.00~4.99	3 4	966	2,100	
	15			5.00~5.99	4			
15	5	L	L	3	1.50~2.99	2 3	563	1,705
	7			2.00~2.99	2 3	580	1,722	
	8			3.00~3.99	3 4	605	1,747	
	9			2.00~2.99	2 3	622	1,764	
21	11	L	L	4	3.00~4.99	3 4	714	1,856
	13			2.50~2.99	2 3	882	2,016	
	16			3.00~4.99	3 4	966	2,100	
	15			5.00~5.99	4			

• 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

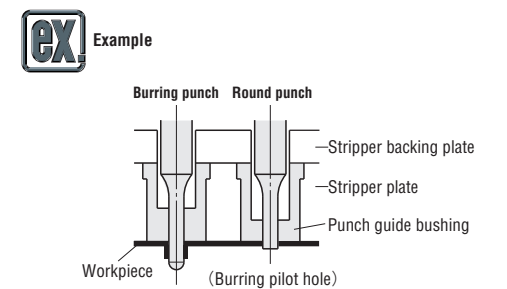
Dispatch **9** Days

Price **Volume discount price** **P.37**

Quantity	1~9	10~29	30~99	100~200
Discount rate	Base unit price	5%	10%	15%

For larger orders, ask about prices/delivery.

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



Alteration	Code	Spec.	Rs./Code
Alterations to tip	BC	Tip length change R + 2 ≤ BC ≤ BCmax. 0.1mm increments Full length must be 30 mm longer than tip length.	168
Alterations to head	PKC	P dimension tolerance change P + 0.01 → + 0.005 0 → 0 Cannot be used with lapping.	336
Alterations to head	HC	Head diameter change D ≤ HC < H 0.1mm increments	168
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.	168
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.	168

Alteration	Code	Spec.	Rs./Code
Alterations to head	KC	Addition of single key flat to head	168
Alterations to head	WKC	Addition of double key flats in parallel	336
Alterations to head	TKC	Head thickness tolerance change T + 0.3 → + 0.02 0 → 0	168
Alterations to head	TKM	Head thickness tolerance change T + 0.3 → 0 0 → - 0.02	168
Others	NDC	No press-in lead ℓ ≥ 3 → ℓ = 0	0