

Type	Shank diameter D Tolerance	M H	Catalog No.			The tip shape can be selected from Tip shape A~G in the figure below.
			Type	Tip shape	Tip length	
	D _{m5}	SKD11 59-62 HRC	SP	A D R	S L	
			SH	E G	X	
<p>Tip shape A: </p> <p>Tip shape D: </p> <p>Tip shape R: </p> <p>Tip shape E: </p> <p>Tip shape G: </p> <p>⊙ P ≥ W ⊙ R = 0 can be selected. ⊙ K = √(P² + W²)</p> <p>⊙ P ≥ W ⊙ 0.15 ≤ R < W/2 ⊙ K = √((P-2R)² + (W-2R)²) + 2R</p> <p>⊙ P > W ⊙ P > W</p>						

Catalog No.			D	L						0.01 mm increments				B	H							
Type	Tip shape	Tip length		A D R E G R																		
			min. P max.			P · Kmax. P · Wmin.		R		R												
SP (SKD11)	A D R	S	3	40	50	60	70	80	90	100	1.00~	2.99	3.97	1.00	0.15 ≤ R < W/2	8	5					
			4	40	50	60	70	80	90	100	1.00~	3.99	4.97	1.20			7					
			5	40	50	60	70	80	90	100	2.00~	4.99	5.97	1.50			8					
			6	40	50	60	70	80	90	100	2.00~	5.99	7.97	2.00			9					
			8	(40)	50	60	70	80	90	100	3.00~	7.99	9.97	2.50			11					
			10	(40)	50	60	70	80	90	100	3.00~	9.99	12.97	3.00			13					
			13	(40)	50	60	70	80	90	100	6.00~	12.99	15.97	4.00			16					
			16	(40)	50	60	70	80	90	100	10.00~	15.99	19.97	5.00			19					
			20	(40)	50	60	70	80	90	100	13.00~	19.99	24.97	6.00			23					
			25	(40)	50	60	70	80	90	100	18.00~	24.99					28					
			SH (SKH51)	A D R E G	L	3		50	60	70	80	90	100	1.00~			2.99	3.97	2.00	0.15 ≤ R < W/2	13	5
						4		50	60	70	80	90	100	1.00~			3.99	4.97	2.00			7
						5		50	60	70	80	90	100	2.00~			4.99	5.97	2.00			8
						6		50	60	70	80	90	100	2.00~			5.99	7.97	2.50			9
						8		50	60	70	80	90	100	3.00~			7.99	9.97	2.50			11
10		50				60	70	80	90	100	3.00~	9.99	12.97	3.00	13							
13		50				60	70	80	90	100	6.00~	12.99	15.97	4.00	16							
16		60				70	80	90	100	10.00~	15.99	19.97	5.00	19								
20		60				70	80	90	100	13.00~	19.99	24.97	6.00	23								
25		60				70	80	90	100	18.00~	24.99			28								
		X				3		50	60	70	80	90	100	1.20~	2.99	3.97	2.00	0.15 ≤ R < W/2	19			5
						4		50	60	70	80	90	100	1.20~	3.99	4.97	3.50					7
						5		60	70	80	90	100	2.00~	4.99	5.97	3.50	8					
						6		60	70	80	90	100	2.00~	5.99	7.97	5.00	9					
						8		60	70	80	90	100	3.00~	7.99	9.97	5.00	11					
			10		60	70	80	90	100	3.00~	9.99	12.97	5.00	13								
			13		60	70	80	90	100	6.00~	12.99			16								
			16		70	80	90	100	10.00~	15.99			19									
			20		70	80	90	100	13.00~	19.99			23									
			25		70	80	90	100	18.00~	24.99			28									

- ⊙ A: P > D - 0.03 → ℓ = 0 If P > D - 0.03 for a round punch, D_{-0.03}^{-0.01} (press-in lead) is not included.
- ⊙ D R E G: P · K > (D - 0.05) → ℓ = 0 If P · K > (D - 0.05) for a shaped punch, D_{-0.03}^{-0.01} (press-in lead) is not included.
- ⊙ L(40) → B = 8 If full length is (40), tip length is 8 mm in all cases.
- ⊙ D(12) → D12 can be used for SPAS and SPAL only.
- ⊙ A: P > D - 0.03 → ℓ = 0 P > D - 0.03时, 圆形凸模不带D_{-0.03}^{-0.01} (导入部)。
- ⊙ D R E G: P · K > (D - 0.05) → ℓ = 0 P · K > (D - 0.05)时, 非圆形凸模不带D_{-0.03}^{-0.01} (导入部)。
- ⊙ L(40) → B = 8 全长(40)时, 刃口长度一律为8mm。



Catalog No. - D - L - P - W - R (R only)

SP - D13 - L80 - P10.50 - W7.34