

DRAWING DIES / KNOCKOUT PINS

—STEEL—

Headed type



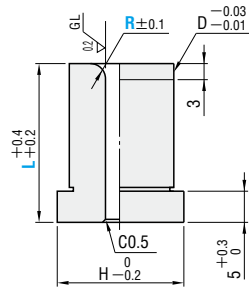
Straight type



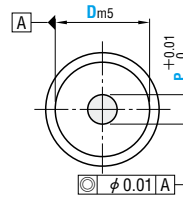
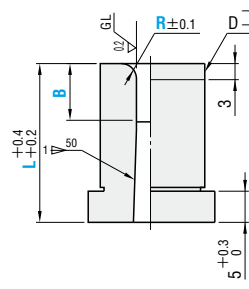
RoHS

Headed type	Straight type	M	H
HDC2S HDC2B	HSC2S HSC2B	Equivalent to SKD11	60~63HRC
PHC2S PHC2B	PSC2S PSC2B	Powdered high-speed steel	64~67HRC

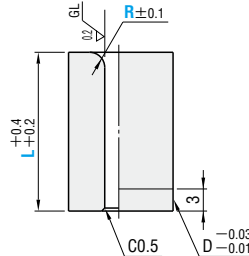
HDC2S M Equivalent to SKD11
PHC2S M Powdered high-speed steel



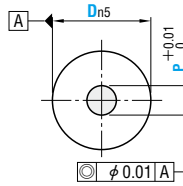
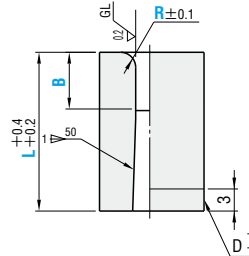
HDC2B M Equivalent to SKD11
PHC2B M Powdered high-speed steel



HSC2S M Equivalent to SKD11
PSC2S M Powdered high-speed steel



HSC2B M Equivalent to SKD11
PSC2B M Powdered high-speed steel



Catalog No.	Type	D	0.1mm increments		0.01mm increments		1mm increments		H						
			L	R	min. P max.	B	R								
M Equivalent to SKD11 HDC2S HSC2S		6	16.0 ~ 25.0	0.2 ~ $\frac{D-P-2}{2}$ (R=0 can be selected.)	2.20 ~ 3.00	—			9						
		8			2.50 ~ 4.00				11						
		10			3.00 ~ 5.00				13						
		13			4.00 ~ 6.50				16						
		16			5.00 ~ 8.00				19						
M Powdered high-speed steel PHC2S PSC2S		20	16.0 ~ 35.0	0.2 ~ $\frac{D-P-2}{2}$ (R=0 can be selected.)	8.00 ~ 10.00	B ≤ P × 3 and B ≤ $\frac{L}{2} + 2$			23						
		25			10.00 ~ 12.50				28						
		M Equivalent to SKD11 HDC2B HSC2B							6	16.0 ~ 35.0	0.2 ~ $\frac{D-P-2}{2}$ (R=0 can be selected.)	2.20 ~ 3.00			9
									8			2.50 ~ 4.00			11
10	3.00 ~ 5.00		13												
13	4.00 ~ 6.50		16												
16	5.00 ~ 8.00		19												
M Powdered high-speed steel PHC2B PSC2B		20	16.0 ~ 35.0	0.2 ~ $\frac{D-P-2}{2}$ (R=0 can be selected.)	8.00 ~ 10.00	B ≤ P × 3 and B ≤ $\frac{L}{2} + 2$			23						
		25			10.00 ~ 12.50				28						

Order **Catalog No.** — **L** — **P** — **B** — **R**
 PHC2S 13 — 22.0 — P5.50 — R1.4
 HDC2B 13 — 22.0 — P5.50 — B8 — R1.4

Days to Ship **Quotation**

Alterations **Catalog No.** — **L(LC)** — **P** — **B** — **R** — (HC-TC, etc.)
 HSC2B 13 — LC21.0 — P5.50 — B8 — R1.4 — HC15

Alteration	Code	Spec.	1Code
Alterations to full length	LC	Full length change 13 ≤ LC < 16 0.1mm increments (If combined with LKC, 0.01mm increments can be selected.) ⊕ Press-in lead is shortened by (L-LC).	Quotation
	LKC	Full length tolerance change L +0.4 → +0.05 L +0.2 → 0	

Alteration	Code	Spec.	1Code
Alterations to head	HC	Head diameter change D ≤ HC < H 0.1mm increments	Quotation
	TC	Head thickness change 2 ≤ TC < 5 0.1mm increments (If combined with TKC-TKM, 0.01mm increments can be selected.) ⊕ The full length remains as specified.	
	TKC TKM	Head thickness tolerance change T +0.3 → +0.02 0 → 0 ⊗ Cannot be used for L < 16. Head thickness tolerance change T +0.3 → 0 0 → -0.02 ⊗ Cannot be used for L < 16.	
Others	PKC	P dimension tolerance change P +0.01 → +0.005 0 → 0	Quotation
	RKC	R dimension tolerance change R ± 0.1 → ± 0.05	

Price **Quotation**

Knockout pin **RoHS** **KOP**

Equivalent to SK4
53~58HRC

T	H	Catalog No.	0.1mm increments L	0.01mm increments min. P max.	Base unit price 1~19 pieces
3	6	KOP	4	1.00 ~ 4.00	Quotation
	8		6	1.00 ~ 6.00	
5	10		8	2.00 ~ 8.00	
	12		10	3.00 ~ 10.00	
	14		12	4.00 ~ 12.00	
	16		13	6.00 ~ 13.00	

Order **Catalog No.** — **L** — **P**
 KOP 6 — 15.5 — P3.50

Days to Ship **Quotation**

Alterations **Catalog No.** — **L** — **P** — (HC-TC, etc.)
 KOP 6 — 45.5 — P5.50 — VSC

Price **Quotation**

Alteration	Code	Spec.	1Code
Alterations to tip	RC	Rounding of pin end to R0.2~0.3.	Quotation
	VSC	Lapping of pin end	
Full length	LKC	L dimension tolerance L ± 0.1 → ± 0.02 change	Quotation
Alterations to head	HC	Head diameter change P ≤ HC < H 0.1mm increments	
	TC	Head thickness change 3.5 ≤ TC < 5 0.1mm increments ⊕ Can be used for KOP6~13.	
	TRN	Addition of undercut (Plate chamfering is not necessary.)	
	TRC	Change of R under head R0.2~0.5 is changed to 0.6~1.0. ⊕ Can be used for H—P ≥ 3.5.	

Example

- Features
- Use these products as knockout pins for drawing dies (P691).
 - The head diameter is such that the head can be inserted into the relief hole in the drawing die.
 - The R shape under the head can be changed by alteration. Change it according to the required strength and mounting conditions.