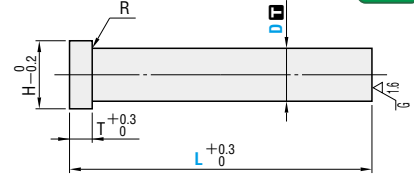


PUNCH BLANKS

Regular punch blanks

RoHS



D	R
1.0 ~ 2.5	R ≤ 0.2
3 ~ 25	R ≤ 0.5

Catalog No.	Shank diameter tolerance	M	H	Applicable dim. D
SPB	D _{m5}	Equivalent to SKD11	60~63HRC	D3 ~ 25
SHB	D _{m5}	Equivalent to SKH51	61~64HRC	D1.0~25
PHB	D _{m5}	Powdered high-speed steel	64~67HRC	D1.6~25
A-SPB	D _{m5} +0.005	Equivalent to SKD11	60~63HRC	D3 ~ 25
A-SHB	D _{m5} +0.005	Equivalent to SKH51	61~64HRC	D1.0~25
A-PHB	D _{m5} +0.005	Powdered high-speed steel	64~67HRC	D1.6~25

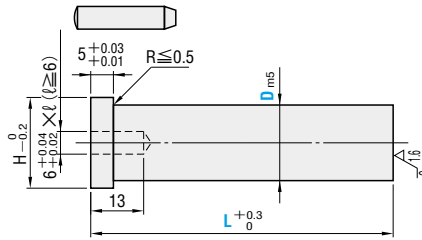
H	T	Catalog No. Type	10mm increments		Base unit price 1 ~ 9 pieces						
			D	L	SPB	SHB	PHB	A-SPB	A-SHB	A-PHB	
2.0	3	(D _{m5}) SPB	1.0	30~50							
2.6			1.6								
3.0			2.0								
3.5	5	SHB	2.5	40~100							
5			3								
7			4								
8	5	PHB	5	40~100							
9			6								
11			8								
13	5	(D _{m5} +0.005) A-SPB	10	40~100							
16			13								
19			16								
23	5	A-SHB	20	40~100							
25			25								

Quotation

Punch blanks with locating dowel holes

SPB-C

RoHS



- M Material equivalent to SKD11
- H Hardness 60 ~ 63HRC
- A Accessory MS6-25

H	Catalog No. Type	10mm increments		Base unit price 1~9 pieces
		D	L	
13	SPB-C	10	40~150	Quotation
16		13		
19		16		
23		20		
28		25		
35		32		
41		38		
48		45		

Quotation



Price

Quotation



Alterations

Catalog No. - [LC] - (HC-TC, etc.)
SHB 3 - LC65

Punch blanks other than jector

Alteration	Code	Spec.	1Code
LC	LC	•SPB → SHB •A-SPB → A-SHB → 15 ≤ LC < L •SPB-C → 20 ≤ LC < L •PHB-A-PHB → 30 ≤ LC < L 0.1mm increments (If combined with LKC-LKZ, 0.01mm increments can be selected.)	
LKC	LKC	Full length tolerance change $L +0.3 \begin{smallmatrix} + \\ 0 \end{smallmatrix} +0.05$	
LKZ	LKZ	Full length tolerance change $L +0.3 \begin{smallmatrix} + \\ 0 \end{smallmatrix} +0.01$ Cannot be used for D > 25.	
KC	KC	Addition of single key flat to head	Quotation
WKC	WKC	Addition of double key flats in parallel	
HC	HC	Head diameter change $D \leq HC < H$ 0.1 mm increments	
TC	TC	$3.5 \leq TC < 5$ 0.1mm increments (If combined with TKC-TKM, 0.01mm increments can be selected.) Full length L is shortened by (5-TC). If combined with LC, full length is equal to LC.	
TKC	TKC	Head thickness tolerance change $T +0.3 \begin{smallmatrix} + \\ 0 \end{smallmatrix} +0.02$	
TKM	TKM	Head thickness tolerance change $T +0.3 \begin{smallmatrix} + \\ 0 \end{smallmatrix} -0.02$	
AC	AC	The jector pin is removed to create an air path and the side vent hole is plugged from the inside by inserting a resin (ABS) ring. Cannot be used for LFSJB-A-LFSJB.	
NC	NC	The jector pin is removed. Cannot be combined with AC.	

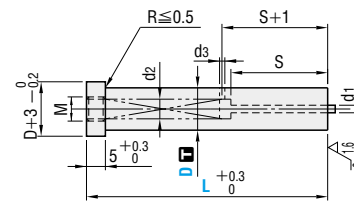
Jector punch blanks

Alteration	Code	Spec.	1Code
Alterations to full length	LC	•SJB-SJB-PJB-PJVB-SJFB •A-SJB-A-SJB-A-PJB-A-PJVB → 30 ≤ LC < L •SJB-SJB-C-SJB-C-SJBL •A-SJB-A-SJB-A-PJB-A-PJB-A-SJBL LFSJB-LFSJB-A-LFSJB-A-LFSJB → 40 ≤ LC < L •SJB-C-SJB-C-SJB-C → 90 ≤ LC < L 0.1mm increments (S dimension is shortened accordingly. (If combined with LKC-LKZ, 0.01 mm increments can be selected.)	
Alterations to full length	LKC	Full length tolerance change $L +0.3 \begin{smallmatrix} + \\ 0 \end{smallmatrix} +0.05$	
	LKZ	Full length tolerance change $L +0.3 \begin{smallmatrix} + \\ 0 \end{smallmatrix} +0.01$ Cannot be used for D > 25.	
Alterations to head	KC	Addition of single key flat to head	Quotation
	WKC	Addition of double key flats in parallel	
Alterations to head	HC	Head diameter change $D \leq HC < H$ 0.1 mm increments	
	TC	$3.5 \leq TC < 5$ 0.1mm increments (If combined with TKC-TKM, 0.01mm increments can be selected.) Full length L is shortened by (5-TC). If combined with LC, full length is equal to LC.	
Alterations to head	TKC	Head thickness tolerance change $T +0.3 \begin{smallmatrix} + \\ 0 \end{smallmatrix} +0.02$	
	TKM	Head thickness tolerance change $T +0.3 \begin{smallmatrix} + \\ 0 \end{smallmatrix} -0.02$	
Alterations to shank	AC	The jector pin is removed to create an air path and the side vent hole is plugged from the inside by inserting a resin (ABS) ring. Cannot be used for LFSJB-A-LFSJB.	
	NC	The jector pin is removed. Cannot be combined with AC.	

Calculating the projection length of the jector pin (reference value) P241 SJB-CMS will be eliminated beginning from the next edition of the catalog.

Jector punch blanks

RoHS

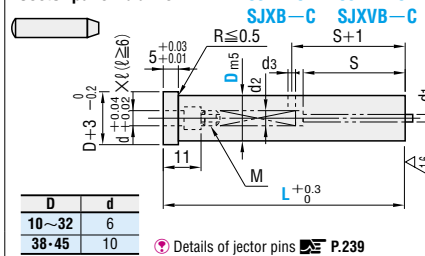


Catalog No.	Shank diameter tolerance	M	H
SJB	D _{m5}	D4 ~ 6 Equivalent to SKH51 D8 ~ 25 Equivalent to SKD11	61~64HRC 60~63HRC
SJB			
SJBL			
SJXB			
SJXVB			
SJFB		Powdered high-speed steel	64~67HRC
LFSJB			
LFSJB			
PJB			
PJVB			
PJBL	D _{m5} +0.005	D4 ~ 6 Equivalent to SKH51 D8 ~ 25 Equivalent to SKD11	61~64HRC 60~63HRC
A-SJB			
A-SJB			
A-SJBL			
A-SJXB			
A-SJXVB		Powdered high-speed steel	64~67HRC
A-LFSJB			
A-LFSJB			
A-PJB			
A-PJB			

Details of jector pins P.239

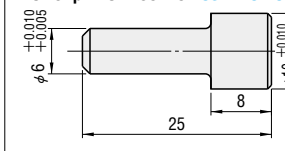
Jector punch blanks with locating dowel holes

RoHS



Material Equivalent to SKD11 Accessory D10~32-MS6-25
Hardness 60~63HRC D38-45-MS6-25

Dowel pin for D38-45 SJB-CMS



Material SUJ2
Hardness 58HRC



Catalog No. - L
SHB 3 - 50



Days to Ship Quotation

Jector pin diameter	d1 (hole dia.)	d2	d3	S	M	Catalog No. Type	10mm increments		Base unit price 1~9 pieces			
							D	L	SJB	PJB	A-SJB-A-PJB	SJVB
0.35	0.4	2.1	1.0	13	2.5	(D _{m5}) SJB	(4)	40~80				
0.65	0.7	2.0		20	3	Spring reinforced type SJB	(5)					
0.65	0.7	2.6		20	3	Spring reinforced type SJB	(6)					
1.0	1.1	3.4	4.4	27	4	(D _{m5} +0.005) SJB	8	(40)~100				
1.4	1.5	1.5		28	5	A-SJB	10					
1.7	1.8			A-SJB		13						
2.7	2.8	4.4	1.5	36	5	Spring reinforced type A-SJB	16	(40)(50)~100				
						Spring reinforced type A-SJB	20					
						Spring reinforced type A-SJB	25					

Quotation

L(40) → φ D 5 ~ 13 = S15 φ D 16 ~ 25 = S17 L(50) → φ D 16 ~ 25 = S24 φ D (4), (5) and (6) are specifications available for SJB-PJB-A-SJB-A-PJB only.

Jector pin diameter	d1 (hole dia.)	d2	d3	S	M	Catalog No. Type	10mm increments		Base unit price 1~9 pieces			
							D	L	SJBL	PJBL	A-SJBL	A-PJBL
0.35	0.4	2.1	1.0	20	2.5	(D _{m5}) SJBL	4	50~80				
						(D _{m5} +0.005) SJBL						

Quotation

Jector pin diameter	d1 (hole dia.)	d2	d3	S	M	Catalog No. Type	10mm increments		Base unit price 1~9 pieces			
							D	L	SJXB	A-SJXB	SJXVB	A-SJXVB
0.65	0.7	2.1	1.0	32	2.5	(D _{m5}) SJXB	(5)	60~80				
0.65	0.7	2.6		3	Spring reinforced type SJXB	(6)						
1.0	1.1	3.4		4	Spring reinforced type SJXB	8						
1.4	1.5	4.4	1.5	40	5	(D _{m5} +0.005) SJXB	10	70~100				
1.7	1.8					A-SJXB	13					
						A-SJXB	16					
2.7	2.8	4.4	1.5	50	5	Spring reinforced type A-SJXB	20	80~100				
						Spring reinforced type A-SJXB	25					

Quotation

D(5) and (6) are specifications available for SJXB-A-SJXB only.

Jector pin diameter	d1 (hole dia.)	d2	d3	S	M	Catalog No. Type	10mm increments		Base unit price 1~9 pieces			
							D	L	LFSJB	LFSJB	A-LFSJB	A-LFSJB
0.65	0.7	2.1	1.0	32	2.5	(D _{m5}) LFSJB	(5)	(50)~80				
0.65	0.7	2.6		3	Spring reinforced type LFSJB	(6)						
1.0	1.1	3.4		4	Spring reinforced type LFSJB	8						
1.4	1.5	4.4	1.5	40	5	(D _{m5} +0.005) LFSJB	10	60~100				
1.7	1.8					A-LFSJB	13					
						A-LFSJB	16					
2.7	2.8	4.4	1.5	50	5	Spring reinforced type A-LFSJB	20	70~100				
						Spring reinforced type A-LFSJB	25					

Quotation

L(50) → S=30 D(5) and (6) are specifications available for LFSJB-A-LFSJB only.

Jector pin diameter	d1 (hole dia.)	d2	d3	S	M	Catalog No. Type	10mm increments		Base unit price 1~9 pieces			
							D	L	SJFB	PJFB	A-SJFB	A-PJFB
2.7	2.8	4.4	1.0	27	5	(D _{m5}) SJFB	8	(50)~100				
				28	8							
4.0	4.2	6.9		36		10						

Quotation

Jector pin diameter	d1 (hole dia.)	d2	d3	S	M	Catalog No. Type	10mm increments		Base unit price 1~9 pieces			
							D	L	SJB-C	SJVB-C		
1.4	1.5	4.4	1.5	28	5	SJB-C	10	60~120				
1.7	1.8								13			
										16		
2.7	2.8	4.4	1.5	36	5	Spring reinforced type SJB-C	20	(60)~120				
							25					
							32					
4.0	4.2	6.9	1.5	37	8	Spring reinforced type SJB-C	(38)	(60)~120				
							(45)					

Quotation

L(60) → φ D 16~45 = S24 D(38) and (45) are specifications available for SJVB-C only.

Jector pin diameter	d1 (hole dia.)	d2	d3	S	M	Catalog No. Type	10mm increments		Base unit price 1~9 pieces			
							D	L	SJXB-C	SJVB-C		
1.4	1.5	4.4	1.5	40	5	SJXB-C	10	100~120				
1.7	1.8								13			
										16		
2.7	2.8	4.4	1.5	50	5	Spring reinforced type SJXB-C	20	100~120				
							25					
							32					

Quotation

Catalog No.	Base unit price 1~9 pieces
SJB-CMS	Quotation