

# ROUND CORE PINS FOR BOSS

Ⓜ Non JIS material definition is listed on P.1351 - 1352

**RoHS**

Type		M	H	HRC	T		
Shaft diameter (D) selection type	Shaft diameter (P) designation type				DorP	A	B
BCDS-□□	BCDBS-□□	SKD61 equivalent	48~52	-0.01 -0.02	0	±0.02	
BCPS-□□	BCPBS-□□				0		
BCHS-□□	BCHBS-□□				0		
BCVS-□□	BCVBS-□□	SKH51 equivalent	58~60	0	0	0	

**Shape**

SS	CS	RS	BL										
<ul style="list-style-type: none"> <li>0.2 ≤ C ≤ 0.5</li> <li>C ≤ ((DorP) - A - 0.2) / 2</li> </ul>	<ul style="list-style-type: none"> <li>0.3 ≤ R ≤ 0.5</li> <li>R ≤ ((DorP) - A - 0.2) / 2</li> </ul>	<ul style="list-style-type: none"> <li>0.8 × (DorP) ≤ SR ≤ 2 × (DorP)</li> <li>B ≤ SR</li> <li>a ≤ (DorP) - 0.4</li> <li>a = 2 / √(SR² - (SR - B)²)</li> </ul>	<ul style="list-style-type: none"> <li>0.5 ≤ SR ≤ 2 × (DorP)</li> <li>B ≤ SR</li> <li>a ≤ (DorP) - 1</li> <li>a = 2 / √(SR² - (SR - B)²)</li> </ul>										
SG	CG	RG	BS										
<ul style="list-style-type: none"> <li>0.25 ≤ G ≤ 1.0</li> <li>A ≥ 2G + 0.5</li> </ul>	<ul style="list-style-type: none"> <li>0.2 ≤ C ≤ 0.5</li> <li>C ≤ ((DorP) - A - 0.2) / 2</li> <li>0.25 ≤ G ≤ 1.0</li> <li>A ≥ 2G + 0.5</li> </ul>	<ul style="list-style-type: none"> <li>0.3 ≤ R ≤ 0.5</li> <li>0.25 ≤ G ≤ 1.0</li> <li>A ≥ 2G + 0.5</li> </ul>	<ul style="list-style-type: none"> <li>0.5 ≤ SR ≤ 2 × (DorP)</li> <li>B ≤ SR</li> <li>a ≤ (DorP) - 1</li> <li>a = 2 / √(SR² - (SR - B)²)</li> </ul>										
SQ	CQ	RQ	Unit of designation										
			<table border="1"> <thead> <tr> <th>T</th> <th>Unit of designation</th> </tr> </thead> <tbody> <tr> <td>C ± 0.1</td> <td rowspan="5">0.05mm increments</td> </tr> <tr> <td>R ± 0.1</td> </tr> <tr> <td>G ± 0.1</td> </tr> <tr> <td>Q ± 0.1</td> </tr> <tr> <td>SR ± 0.1</td> </tr> <tr> <td>B ± 0.02</td> <td>0.01mm increments</td> </tr> </tbody> </table>	T	Unit of designation	C ± 0.1	0.05mm increments	R ± 0.1	G ± 0.1	Q ± 0.1	SR ± 0.1	B ± 0.02	0.01mm increments
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B ± 0.02	0.01mm increments												
<ul style="list-style-type: none"> <li>0.25 ≤ Q ≤ 1.0</li> <li>A ≥ 2Q + 0.5</li> </ul>	<ul style="list-style-type: none"> <li>0.2 ≤ C ≤ 0.5</li> <li>C ≤ ((DorP) - A - 0.2) / 2</li> <li>0.25 ≤ Q ≤ 1.0</li> <li>A ≥ 2Q + 0.5</li> </ul>	<ul style="list-style-type: none"> <li>0.3 ≤ R ≤ 0.5</li> <li>0.25 ≤ Q ≤ 1.0</li> <li>A ≥ 2Q + 0.5</li> </ul>											

**Shaft Diameter (D) Selection Type**

H	Part Number	0.01mm increments			
Type	Shape	D	L	A	B
4	BCDS- BCPS- (SKD61 equivalent)	SS 2	10.00	1.0 ≤ A ≤ D - 1	0.50 ≤ B ≤ 3.00 and B ≤ 2 × A
5		SG 2.5			
6		SQ 3	100.00		
7	BCHS- BCVS- (SKH51 equivalent)	CS 3.5	10.00	1.0 ≤ A ≤ D - 1.5	When [Shape] BL · BS are selected 0.30 ≤ B ≤ 3.00
8		CG 4			
9		CQ 4.5			
10	BCDBS- BCHBS-	RS 5	120.00	1.0 ≤ A ≤ D - 2	
11		BS 6			

**Shaft Diameter (P) Designation (0.01mm increments) Type**

H	Part Number	0.01mm increments				
Type	Shape	No.	L	P	A	B
4	BCDBS- BCPBS- (SKD61 equivalent)	SS 2	10.00	1.50~1.99	1.0 ≤ A ≤ P - 1	0.50 ≤ B ≤ 3.00 and B ≤ 2 × A
5		SG 2.5		2.00~2.49		
6		SQ 3	100.00	2.50~2.99		
7	BCHBS- BCVBS- (SKH51 equivalent)	CS 3.5	10.00	1.00~1.49	1.0 ≤ A ≤ P - 1.5	When [Shape] BL · BS are selected 0.30 ≤ B ≤ 3.00
8		CG 4				
9		CQ 4.5				
10	BCDBS- BCHBS-	RS 5	120.00	1.50~1.99	1.0 ≤ A ≤ P - 2	
11		BS 6				

Ⓜ No.2 ... Applicable to [Shape] BL only.

**Order**

Part Number — L — P — A — B — C · R · SR · G · Q

(Shaft diameter (D) selection type) BCDS-CG4 — 38.00 — A2.50 — B2.50 — C0.5 — G0.3

(Shaft diameter (P) designation type) BCHBS-BL3 — 50.00 — P2.80 — B0.40 — SR2.00

**Price Quotation**

Alterations

Part Number — L — P — A — B — Tip size (C · R · SR · G · Q) — (KC · WKC...etc.)

BCDS-CG4 — 38.00 — A3.00 — B2.50 — C0.3 — G0.3 — RKC3.0

BCHBS-BL6 — 50.00 — P5.70 — B0.40 — SR2.60 — TRN

Alteration details P.495

Alterations	Code	Spec.	1Code
	KC	Single flat cutting (DorP)/2 ≤ KC < H/2	
	WKC	Two flats cutting (DorP)/2 ≤ WKC < H/2	
	KAC KBC	Varied width parallel flats cutting (DorP)/2 ≤ KAC < H/2 KBC = 0.1mm increments only KAC < KBC < H/2	
	RKC	Two flats (right angled) cutting (DorP)/2 ≤ RKC < H/2	
	DKC	Three flats cutting (DorP)/2 ≤ DKC < H/2	
	SKC	Four flats cutting (DorP)/2 ≤ SKC < H/2	
	KGC	Two flats (angled) cutting (DorP)/2 ≤ KGC < H/2 AG = 1° increments 0 < AG < 360	
	KTC	Three flats cutting at 120° (DorP)/2 ≤ KTC < H/2	

**Spec.**

(1) To align the key flat with the shaft diameter

(2) To designate arbitrary key flat dimensions

Unit of designation: 0.1mm

**Quotation**

Alterations	Code	Spec.	1Code
	HC	Head diameter change HC = 0.1mm increments (DorP) ≤ HC < H Ⓜ In relation to the diameter tolerance, alteration may create a straight piece with little diameter difference between the head and shaft.	
	HCC	Head diameter change (precision) HCC = 0.1mm increments (DorP) + 0.5 ≤ HCC < H - 0.3	
	TC	Head thickness change TC = 0.1mm increments 1.5 ≤ TC < 4 (Dimension L remains unchanged.) 4 - TC ≤ Lmax - L	
	TRN	Relief under the head (Makes plate chamfering unnecessary)	
	NHC	Numbering on the head How to order P.496 Ⓜ Combination with SKC not available. Available when H ≥ 2.	

Ⓜ Note that finished products may not release if the core pin's A/B ratio, material, molding conditions, etc. are inappropriate.

Shaped Inlay Core Pins for Boss