

HPM1  
equivalent  
SKD61

# SPRUE BUSHINGS

STRING ELIMINATOR TYPE

—NORMAL BOLT TYPE • FLANGE THICKNESS 10mm • BOARD THICKNESS (Y) SELECTION TYPE—

Details of string eliminator (P.747)

—Straight type—

Part Number	Material	Hardness
SBBJH	HPM1 equivalent	37~43HRC
SBBYH	SKD61	48~52HRC

RoHS

CB5—12 (2 pcs.)

Dh6	Part Number Type	D	L <sup>(*)2</sup> 0.1mm increments	SR	P	A <sup>°</sup> 0.5 <sup>°</sup> increments	Y
10	—Straight type—	10	0~120.0	0	2.5 <sup>(*)3</sup>		
13	String eliminator type (HPM1 equivalent) (SKD61) <b>SBBJH</b> <b>SBBYH</b>	13	0~150.0	11	3 <sup>(*)3</sup>	0.5 <sup>(*)3</sup>	0.5
16		16		12	4	4.0	0.6

(\*1) The value of  $\alpha$  is set in accordance with L dimension. (\*2) L dimension limits (\*3) Working limits  
 $D - \alpha \geq 2$   
 Conversion Chart of Trigonometric Functions P.1337  
 (Calculation of  $\alpha$  value)  $\alpha = P + 2(L + (U + 7)) \tan \frac{A}{2}$   
 U: with ZC alteration

P	2.5	3	3.5~4.5
A	0.5 1	1.5~4.0	0.5 1~1.5 0.5
L dimension limits	45 50	85 60	85 60

Order Part Number **SBBJH10** — **L** 50.0 — **SR** SR11 — **P** P3.5 — **A** A2 — **Y** Y0.6

Days to Ship **Quotation**

Price **Quotation**

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

Alterations Part Number **SBBJH16** — **L** 83.25 — **SR** SR16 — **P** P2.5 — **A** A2 — **Y** Y0.6 — **LKC**

Alterations	Code	AIW	AHW	AXW	ATW	AJW	ALW	APW	Spec.																					
<b>Shape A</b> (Trapezoid)	Spec.								Designation method AIW10—GC7 + Bolt hole position • W dimension and GC <sup>°</sup> selection <table border="1"> <thead> <tr> <th>W</th> <th>t</th> <th>GC<sup>°</sup></th> </tr> </thead> <tbody> <tr><td>3</td><td>2.5</td><td></td></tr> <tr><td>4</td><td>3</td><td>7<sup>°</sup></td></tr> <tr><td>5</td><td>3.5</td><td></td></tr> <tr><td>6</td><td>4</td><td>10<sup>°</sup></td></tr> <tr><td>8</td><td>5.5</td><td></td></tr> <tr><td>10</td><td>7</td><td></td></tr> </tbody> </table>	W	t	GC <sup>°</sup>	3	2.5		4	3	7 <sup>°</sup>	5	3.5		6	4	10 <sup>°</sup>	8	5.5		10	7	
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ⓧ Combination with ZC not available. ⓧ Combination with RC not available. ⓧ ATW, AJW, ALW and APW have working limits as follows. when $D=10, (\alpha - 0.6) \geq W$ when $D \geq 13, (\alpha - 0.4) \geq W$ ⓧ The trapezoidal taper angle, which was previously fixed at 10 <sup>°</sup> , is now selectable from 10 <sup>°</sup> and 7 <sup>°</sup> . Designation method AHW4—GC7 Specify in the sequence "(shape) (W dimension)—GC <sup>°</sup> ". If you do not make a specification, (AHW4, for example) will be 10 <sup>°</sup> .																														
Alterations	Code	BIR	BHR	BXR	BTR	BJR	BLR	BPR	Spec.																					
<b>Shape B</b> (Semicircle)	Spec.								Designation method BXR2 + Bolt hole position • R dimension selection <table border="1"> <tbody> <tr><td>1</td></tr> <tr><td>1.25</td></tr> <tr><td>1.5</td></tr> <tr><td>1.75</td></tr> <tr><td>2</td></tr> <tr><td>2.25</td></tr> <tr><td>2.5</td></tr> <tr><td>3</td></tr> <tr><td>3.5</td></tr> <tr><td>4</td></tr> </tbody> </table>	1	1.25	1.5	1.75	2	2.25	2.5	3	3.5	4											
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ⓧ Combination with ZC not available. ⓧ Combination with RC not available. ⓧ BTR, BJR, BLR and BPR have working limits as follows. when $D=10, (\alpha - 0.6) \geq 2 \times R$ when $D \geq 13, (\alpha - 0.4) \geq 2 \times R$																														
Alterations	Code	CIQ	CHQ	CXQ	CTQ	CJQ	CLQ	CPQ	Spec.																					
<b>Shape C</b> (Arc+Tangent)	Spec.								Designation method CTQ5 + Bolt hole position • Q dimension selection <table border="1"> <tbody> <tr><td>2</td></tr> <tr><td>2.5</td></tr> <tr><td>3</td></tr> <tr><td>3.5</td></tr> <tr><td>4</td></tr> <tr><td>5</td></tr> <tr><td>6</td></tr> <tr><td>8</td></tr> </tbody> </table>	2	2.5	3	3.5	4	5	6	8													
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ⓧ Combination with ZC not available. ⓧ Combination with RC not available. ⓧ CTQ, CJQ, CLQ and CPQ have working limits as follows. when $D=10, (\alpha - 0.6) \geq Q \times 1.09$ when $D \geq 13, (\alpha - 0.4) \geq Q \times 1.09$																														

Alterations	Code	Spec.	1Code
	BC	Increases No. of bolt holes. No. of bolt holes : 2 → 4 (Supplied bolts : 4)	Quotation
	BN	Decreases No. of bolt holes. No. of bolt holes : 2 → 0 (Supplied bolts : 0) Available for equivalent of material HPM1	
	LKC	L dimension tolerance alteration $L +0.1 \dots L -0.02$ L dimension can be designated at 0.01mm increments when LKC is used. ⓧ Combination with ZC not available.	Quotation
	ZC	Undercut machining S, T, U=0.1mm increments $S \geq \alpha + 2$ $\alpha + 2 \leq T \leq D(V - 2U \tan \alpha)$ $1.5 \leq U \leq 5$ L max. $\geq L + U$ Designation method ZC—S3.5—T4.0—U2.0	
	RC	The step R is processed in the tip bore to prevent the connection between the sprue and the runner from breaking when releasing from the mold. Dimension selection of step R 1 2 Available for $\alpha \geq 5$ $D - \alpha - (2 \times RC) \geq 2$ ⓧ Combination with shapes A, B and C not available. ⓧ Combination with ZC not available.	Quotation

### Feature

The thickness of the metal sheet of this product that is lightly press-fit for eliminating stringing can be selected. The metal sheet is thinner than that of a normal type product, and also the height direction is set on the short side.

### Expected effectiveness

Minimizes reduction of the injection pressure.  
Reduction of frequency of occurrence of sticking of the sprue to the metal sheet

### Guide to the selection of metal sheet (for reference)

It is recommended that you select the sheet thickness taking into consideration the size of the molding machine, resin used, etc.  
Y0.5 → 15t or 30t class molding machine  
Y0.6 → Molding machine of 50t or greater class