SPRUE BUSHINGS

—NORMAL BOLT TYPE • FLANGE THICKNESS 8mm—

Sprue Bushings Locating Rings

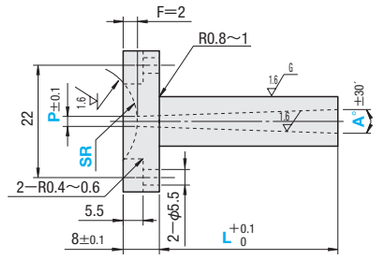
Non JIS material definition is listed on P.1351 - 1352

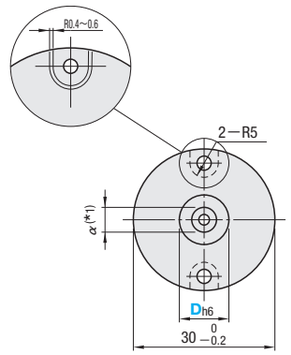
Sprue bushings —Normal bolt type • Flange thickness 8mm— are standardized for small molding machine of 15 ton or less. Use it when the entrance size is less than 150.

— Straight type —

RoHS

Part Number P=1.7	Part Number P=2・2.5	M	H
SBBZS	SBBZ	HPM1 equivalent	37～43HRC
SBBVS	SBBV	SKD61	48～52HRC



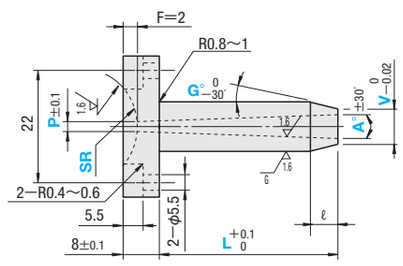


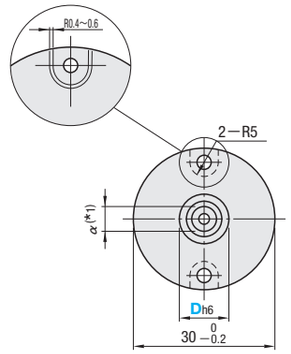
A CB5—12 (2 pcs.)

— Tapered type —

RoHS

Part Number P=1.7	Part Number P=2・2.5	M	H
SBBZTS	SBBZT	HPM1 equivalent	37～43HRC
SBBVTS	SBBVT	SKD61	48～52HRC





A CB5—12 (2 pcs.)

Dh6		Part Number Type	D	L(*2) 0.1mm increments	SR	P	A° 0.5° increments	V 0.1mm increments	G° 1° increments
		When P=1.7 / When P=2・2.5							
8	0 −0.009	—Straight type— (HPM1 equivalent) SBBZS SBBZ (SKD61) SBBVS SBBV	8	0～80.0	11	1.7(*4)	1～4(*3)	D>V≧α+2 Available for tapered type only	1～10 Available for tapered type only
10		—Tapered type— (HPM1 equivalent) SBBZTS SBBZT (SKD61) SBBVTS SBBVT	10			2 2.5			

(*1) The value of α is set in accordance with L dimension.
(*2) L dimension is restricted by A.
(*3) L dimension limits

A	Lmax.
1	50

(*4) P=1.7 is applicable for A° 1, 2 only until L=40.

Working limits
・Straight type D−α≧2 (Calculation of α value) $\alpha = P + 2(L+6)\tan\frac{A}{2}$
・Tapered type V−α≧2, L−ℓ≧10 $\ell = \frac{D-V}{2\tan(G-0.25)}$
*0.25 is a value that takes G tolerance into account.
Please note that normal bolt 8mm thick flange type is to be L−ℓ≧10.

Conversion Chart of Trigonometric Functions P.1337

When using FC code
When FC1 $\alpha = P + 2(L+7)\tan\frac{A}{2}$
When FC3 $\alpha = P + 2(L+5)\tan\frac{A}{2}$

Order

Part Number	L	SR	P	A	V	G
SBBV 10	50.0	SR11	P2	A2		
SBBVT10	50.0	SR11	P2	A2	V8	G6

Days to Ship Quotation

Price Quotation

Alterations

Part Number	L	SR	P	A	V	G	(AIW・AXW…etc.)	
SBBVT10	50.00	SR11	P2	A2	V8	G6	BXR2	LKC
SBBZ 10	40.1	SR11	P2	A2			FC1	

Quotation

Alterations	Code	AIW	AHW	AXW	ATW	AJW	ALW	APW	Spec.
Shape A (Trapezoid)	Spec.								Designation method AIW4—GC7 ┼Bolt hole position ┤KC position (When KC code is used)
	1Code				Quotation				

・W dimension and GC° selection

W	t	GC°
3	2.5	7° 10°
4	3	

ATW, AJW, ALW and APW have working limits of (α −0.6)≧W
The trapezoidal taper angle, which was previously fixed at 10°, is now selectable from 10° and 7°.
Designation method AHW4—GC7 "Specify in the sequence (shape) (W dimension)—GC°". If you do not make a specification, (AHW4, for example) will be 10°.

Alterations	Code	BIR	BHR	BXR	BTR	BJR	BLR	BPR	Spec.
Shape B (Semicircle)	Spec.								Designation method BXR2 ┼Bolt hole position ┤KC position (When KC code is used)
	1Code				Quotation				

・R dimension selection: 1 / 1.25 / 1.5 / 1.75 / 2 / 2.25 / 2.5 / 3

BTR, BJR, BLR and BPR have working limits of (α −0.6)≧2×R

Alterations	Code	CIQ	CHQ	CXQ	CTQ	CJQ	CLQ	CPQ	Spec.
Shape C (Arc+Tangent)	Spec.								Designation method CTQ3 ┼Bolt hole position ┤KC position (When KC code is used)
	1Code				Quotation				

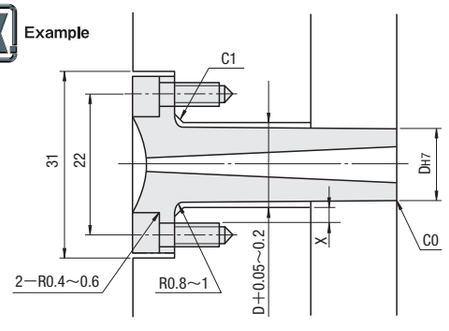
・Q dimension selection: 2 / 2.5 / 3

CTQ, CJQ, CLQ and CPQ have working limits (α −0.6)≧Q×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) M Available for equivalent of material HPM1	
L T	LKC	L dimension tolerance alteration L +0.1 0 ⋯ L 0 −0.02 L dimension can be designated at 0.01mm increments when LKC is used.	

Alterations	Code	Spec.	1Code
FC	FC	For the alteration of nozzle touch part (SR) depth FC1 and FC3 can be selected. Note that when you use the FC code, the method of calculating the α dimension changes.	Quotation
	KC	Single flange cutting KC=0.5mm increments D/2≦KC<15 Combination with BC not available Interference with the SR part may occur.	
	WKC	Two parallel flange cutting WKC=0.5mm increments D/2≦WKC<15 Combination with BC not available Interference with the SR part may occur.	

Example



[Example of hole machining and assembling for sprue bushing]

The position of sprue bushing hole and that of tap hole is adjacent. Please be careful when hole processing because the thickness of X dimension is thin.

■Recommended X Dimension

D	Xmm
8	4.4～4.475
10	3.4～3.475

To decrease the concentration of stress, R part is designed on the root of flange.