

SPRUE BUSHINGS

— OLD JIS A TYPE —

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

Electroforming P.773

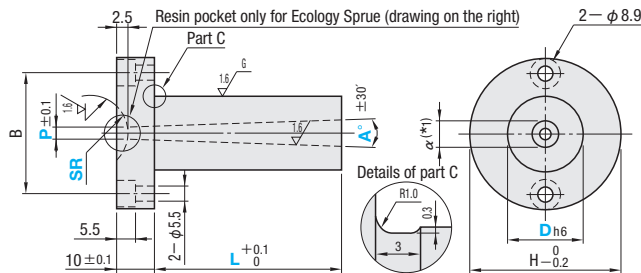
Details of string eliminator (P.747)

Straight type



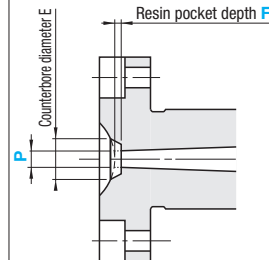
RoHS

Part Number			M	H
Normal	Ecology	String eliminator type		
SJAC	SJACE	SJACH	S45C	—
SJAM	SJAME	SJAMH	HPM1 equivalent	37~43HRC
SJAD	SJADE	SJADH	SKD61	48~52HRC



CB5-12 (two)

Details for the resin pocket



Ecology Sprue is available for SR10.5 · 11, P2 · 2.5 · 3 only.

Sprue diameter P	Counterbore diameter E
2	6.5
2.5	7
3	7

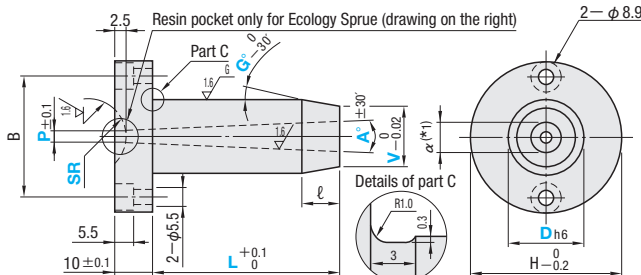
For the details of resin pocket depth F, refer to the "Selection of resin pocket depth F" P.742 of 2009 catalog.

Tapered type



RoHS

Part Number			M	H
Normal	Ecology	String eliminator type		
SJGC	SJGCE	SJGCH	S45C	—
SJGM	SJGME	SJGMH	HPM1 equivalent	37~43HRC
SJGD	SJGDE	SJGDH	SKD61	48~52HRC



CB5-12 (two)

H	B	Dh6	Part Number			L ^{(*)2}	SR	P	A°	F	V	G°		
			Type										D	
35	25	0 -0.009	—Straight type—			8 ^{(*)5}	0 10.5	2 3	2.5 3.5	1~3	0.3 0.5 0.8 1 1.2 1.5 1.8 2	D > V ≥ α + 2	1~10	
			Normal	Ecology ^{(*)6}	String eliminator type									10 12
			(S45C)	SJAC	SJACE									
	(HPM1 equivalent)	SJAM	SJAME	SJAMH										
	(SKD61)	SJAD	SJADE	SJADH										
	50	36	0 -0.011	—Tapered type—			13	12	3 ^{(*)3}	3 ^{(*)3}	1~4 ^{(*)3}	Available for tapered type only	Available for tapered type only	
Normal				Ecology ^{(*)6}	String eliminator type									
(S45C)				SJGC	SJGCE	SJGCH								
(HPM1 equivalent)	SJGM	SJGME	SJGMH											
(SKD61)	SJGD	SJGDE	SJGDH											
50	36	0 -0.013	—Tapered type—			20	10.5 11 12 13	4 4.5 5	4 4.5 5	1~4 ^{(*)3}	Available for Ecology Sprue only	Available for tapered type only		
			Normal	Ecology ^{(*)6}	String eliminator type									
			(S45C)	SJGC	SJGCE								SJGCH	
(HPM1 equivalent)	SJGM	SJGME	SJGMH											
(SKD61)	SJGD	SJGDE	SJGDH											

(*)1 The value of α is set in accordance with L dimension. (*)2 L dimension limits
 (*)3 L dimension limits
 (*)4 Not available for products with string eliminator.
 (*)5 Available only for SJAM, SJAME, SJAD, and SJADE.
 (*)6 Ecology Sprue is available for SR10.5 · 11, P2 · 2.5 · 3 only.

Working limits
 • Straight type
 $D - \alpha \geq 2$ (Calculation of α) $\alpha = P + 2(L + (U) + 7.5) \tan \frac{A}{2}$
 U: with ZC alteration

• Tapered type
 $V - \alpha \geq 2$
 $L - \ell \geq 3$ (Calculation of ℓ) $\ell = \frac{D - V}{2 \tan(G - 0.25)}$ ※0.25 is a value that takes G tolerance into account.

Conversion chart of trigonometric functions P.1337

Order	Part Number	L	SR	P	A	F	V	G
	SJAC10	82.5	SR11	P3	A2			
	SJGME20	85.0	SR10.5	P2.5	A2	F2	V18.0	G8

Days to Ship **Quotation**

Price **Quotation**



Alterations

Part Number	L	SR	P	A	V	G	(AIW · AXW...etc.)
SJAC16	65.02	SR11	P3.5	A3			CTQ5-LKC

Quotation

Alterations	Code	AIW	AHW	AXW	ATW	AJW	ALW	APW	Spec.
Shape A (Trapezoid)	Spec.								Designation method AIW10—GC10 + Bolt hole position + Dowel hole position (When NC, KP code is used) † KC position (When KC code is used)
	1Code	Quotation							W dimension and GC° selection W t GC° 3 2.5 7° 4 3 10° 5 3.5 6 4 8 5.5 10 7
ⓧ Combination with ZC not available ⓧ ATW · AJW · ALW · and APW have working limits as follows. ⓧ Combination with RC not available When D ≤ 10, (α - 0.6) ≥ W when D ≥ 12, (α - 0.4) ≥ W ⓧ Previously the trapezoidal taper angle was fixed at 10°, but it is possible to select a taper angle of either 10° or 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 + Dowel hole position (When NC, KP code is used) † 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 3.5 4
ⓧ Combination with ZC not available ⓧ BTR · BJR · BLR · and BPR have working limits as follows. ⓧ Combination with RC not available When D ≤ 10, (α - 0.6) ≥ 2 × R when D ≥ 12, (α - 0.4) ≥ 2 × R									

Alterations	Code	CIQ	CHQ	CXQ	CTQ	CJQ	CLQ	CPQ	Spec.
Shape C (Arc + Tangent)	Spec.								Designation method CTQ5 + Bolt hole position + Dowel hole position (When NC, KP code is used) † KC position (When KC code is used)
	1Code	Quotation							Q dimension selection 2 2.5 3 3.5 4 5 6 8
ⓧ Combination with ZC not available ⓧ CTQ · CJQ · CLQ · and CPQ have working limits as follows. ⓧ Combination with RC not available When D ≤ 10, (α - 0.6) ≥ Q × 1.09 when D ≥ 12, (α - 0.4) ≥ Q × 1.09									

Alterations	Code	Spec.	1Code
	BC	Increases No. of bolt holes. No. of bolt holes: 2 → 4 (Supplied bolts: 4) ⓧ Combination with NC not available	
	BN	Decreases No. of bolt holes. No. of bolt holes: 2 → 0 (Supplied bolts: 0) ⓧ Available for S45C and HPM1 equivalent	
	NC	Dowel hole boring ⓧ Not available for string eliminator type	Quotation
	KP	Dowel hole boring (longitudinal) ⓧ Not available for string eliminator type ⓧ Combination with NC not available ⓧ Available for HPM1 equivalent only ⓧ The effective length of dowel hole is 10mm below underhead part. (recessed hole φ6.5)	Quotation
	LKC	L dimension tolerance alteration L ^{+0.1} ₀ → L ⁰ _{0.02} ⓧ When LKC is used, L dimension alteration in 0.01mm increments possible ⓧ Combination with ZC not available	
	GKC	Changes the G tolerance. G ₃₀ → G ₁₅ ⓧ Available for tapered type when ℓ ≤ 15 and (L - ℓ) ≥ 10 ⓧ Combination with ZC not available	

Alterations	Code	Spec.	1Code
	KC	Single flange cutting KC = 0.5mm increments D/2 ≤ KC < H/2 ⓧ Combination with BC not available ⓧ Not available for string eliminator type ⓧ Combination with NC · KP not available ⓧ Interference with the SR part may occur.	
	WKC	Two parallel flange cutting WKC = 0.5mm increments D/2 ≤ WKC < H/2 ⓧ Combination with BC not available ⓧ Not available for string eliminator type ⓧ Combination with NC · KP not available ⓧ Interference with the SR part may occur.	
	ZC	Undercut machining S, T, U = 0.1mm increments S ≥ α + 2 α + 2 ≤ T ≤ D(V - 2UtanG) 1.5 ≤ U ≤ 5 Specification Lmax. ≥ L + U [Designation method] ZC—S3.5—T4.0—U2.0 ⓧ Not available for D8	Quotation
	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 α ≥ 5 ⓧ Straight type D - α - (2 × RC) > 2 ⓧ Tapered type V - α - (2 × RC) > 2 ⓧ Combination with shapes A · B · C not available ⓧ Combination with ZC not available	