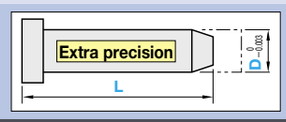
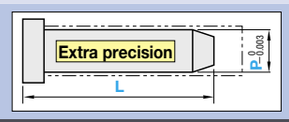
EXTRA PRECISION STRAIGHT CORE PINS WITH TIP PROCESS

—SHAFT DIAMETER (D) SELECTION TYPE／SHAFT DIAMETER (P) DESIGNATION (0.001mm INCREMENTS) TYPE—





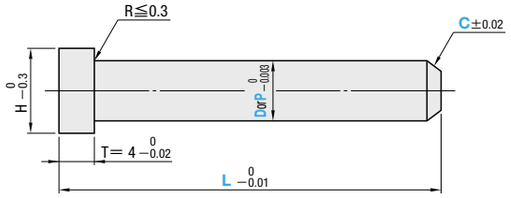
Non JIS material definition is listed on P.1351 - 1352

RoHS

M H	Part Number	
	Type	Shape
SKH51 equivalent 58～60HRC	Shaft diameter (D) selection type **CPML** Shaft diameter (P) designation type **CPMBL**	C G T R B

Shape (Tip shape)

Shape C (C chamfered)



C···0.05mm increments

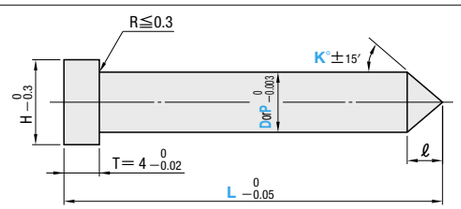
$0.1 \leqq C \leqq \frac{(D \text{ or } P)-0.2}{2}$

and

L−C≧9.5

※When GVC code is used ℓ=C

Shape G (Cone)



K···0.5° increments

20≦K≦60

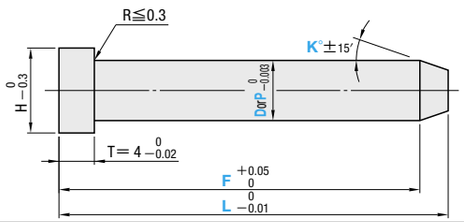
and

(L− ℓ)≧10

ℓ calculation formula

$\ell = \frac{(D \text{ or } P)}{2 \tan K}$

Shape T (Tapered)



F···0.01mm increments

F≧10.00

and

$0.3 \leqq (L-F) \leqq \frac{L}{2}$

and

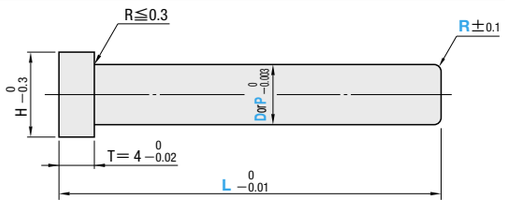
$\frac{(D \text{ or } P)}{2} - (L-F)\tan K \geqq 0.1$

K···1° increments

1≦K≦45

※When GVC code is used ℓ=L−F

Shape R (R chamfered)



R···0.1mm increments

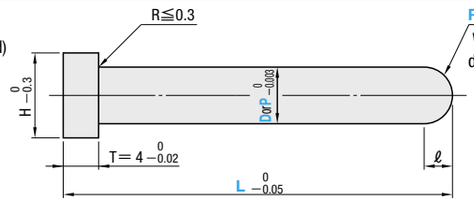
$0.2 \leqq R \leqq \frac{(D \text{ or } P)-0.2}{2}$

and

L−R≧10

※When GVC code is used ℓ=R

Shape B (Spherical processed)



When R=(D or P)/2 designate RQR

When R>(D or P)/2

R···0.1mm increments

(D or P)/2<R≦1.5×(D or P)

{(D or P)≧4 ⇢ (D or P)/2<R≦3×(D or P)}

However, R≦32 and L−ℓ≧10

ℓ calculation formula

$\ell = R - \sqrt{R^2 - \frac{(D^2 \text{or} P^2)}{4}}$

■Shaft diameter (D) selection type

H	Part Number Type	Shape	D	L 0.01mm increments	Shape (Tip size)
3	CPML	C	0.6	10.00～60.00	Shape C C···0.05mm increments Shape G K···0.5° increments Shape T F···0.01mm increments K···1° increments Shape R R···0.1mm increments Shape B When R=D/2 designate RQR When R>D/2 R···0.1mm increments Refer to the working limits shown in the drawing.
			0.8		
			1		
			1.5		
4		G	2		
5			2.5		
6		T	3		
7			3.5		
			4		
8		R	4.5		
			5		
9			5.5		
			6		
10		B	6.5		
			7		
11			8		
15			10		
18			13		

■Shaft diameter (P) designation type

H	Part Number Type	Shape	No.	L 0.01mm increments	P 0.001mm increments	Shape (Tip size)
3	CPMBL	C	0.8	10.00～60.00	0.600～ 0.799	Shape C C···0.05mm increments Shape G K···0.5° increments Shape T F···0.01mm increments K···1° increments Shape R R···0.1mm increments Shape B When R=P/2 designate RQR When R>P/2 R···0.1mm increments Refer to the working limits shown in the drawing.
			1		0.800～ 0.999	
			1.5		1.000～ 1.499	
4		G	2		1.500～ 1.999	
5			2.5		2.000～ 2.499	
6		T	3		2.500～ 2.999	
7			3.5		3.000～ 3.499	
			4		3.500～ 3.999	
8		R	4.5		4.000～ 4.499	
			5		4.500～ 4.999	
9			5.5		5.000～ 5.499	
			6		5.500～ 5.999	
10		B	6.5		6.000～ 6.499	
			7		6.500～ 6.999	
11			8		7.000～ 7.999	
15			10		8.000～ 9.999	
18			13		10.000～12.999	

Order

Part Number	L	P	Tip size (C・F・K・R)
CPMLC 3	35.72		C0.2
CPMBLB 3	35.72	P2.770	R2.1

Price **Quotation**

Days to Ship **Quotation**

Alterations

Part Number	L	P	Tip size (C・F・K・R)	(KC・WKC…etc.)
CPMLR3.5	45.47		R0.3	WKC2.3
CPMBLT5	34.00	P4.560	F30.00	K5 HC6

Alteration details P.395

Alterations	Code	Spec.	1Code
KC 0 -0.01	KC	Single flat cutting (D or P)/2≦KC<H/2	Quotation
WKC 0 -0.01	WKC	Two flats cutting (D or P)/2≦WKC<H/2	
KAC KBC 0 -0.01	KAC KBC	Varied width parallel flats cutting (D or P)/2≦KAC<H/2 KBC=0.1mm increments only KAC<KBC<H/2	
RKC 0 -0.01	RKC	Two flats (right angled) cutting (D or P)/2≦RKC<H/2	
DKC 0 -0.01	DKC	Three flats cutting (D or P)/2≦DKC<H/2	
SKC 0 -0.01	SKC	Four flats cutting (D or P)/2≦SKC<H/2	
AG° ±0.5 0° KGC KGC 0 -0.01	KGC	Two flats (angled) cutting (D or P)/2≦KGC<H/2 0<AG<360 AG=1° increments	
120° 120° KTC 0 -0.01	KTC	Three flats cutting at 120° (D or P)/2≦KTC<H/2	
L T	LKC	L dimension tolerance alteration L 0 -0.01 ⇢ L 0 -0.005 (L dimension: designation in 0.005mm increments possible) Available when 1.5≦(D or P)≦5 Available when Shape C・T・R	

About Designation Unit for Key Flat Cutting

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

Unit of designation

Shaft diameter (D) selection 0.05mm increments possible

Shaft diameter (P) designation 0.0005mm increments possible

(2)To designate arbitrary key flat dimensions

Unit of designation 0.1mm

Alterations	Code	Spec.	1Code
H HC 0 -0.3	HC	Head diameter change HC=0.1mm increments (D or P)≦HC<H In relation to the diameter tolerance, alteration may create a straight piece with little diameter difference between the head and shaft.	
H HCC 0 -0.02	HCC	Head diameter change (precision) HCC=0.1mm increments (D or P)+0.5≦HCC<H−0.3	
TC 0 -0.02 4	TC	Head thickness change TC=0.1mm increments 1.5≦TC<4 (Dimension L remains unchanged.) 4−TC≦Lmax.−L	Quotation
	TRN	Relief under the head (No need for plate chamfering)	
A15 8	NHC	Numbering on the head How to order P.396 Available when H≧2 Combination with SKC not available.	
GS GB L	GVC	Gas vent machining GS・GB=1mm increments Available when (D or P)≧2 2+ℓ≦GS≦12 GS+2≦GB≦30 L−GB≧10 How to order P.396	