

High Speed Steel  
SKH51 equivalent

# GAS RELEASE STRAIGHT CORE PINS WITH CUTTING FACETS

— SHAFT DIAMETER (D) SELECTION / (P) DESIGNATION TYPE —



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

RoHS

Type		M	Group	L	
Shaft diameter (D) selection	Shaft diameter (P) designation			D or P	L
GW-CPX-L GWS-CPX-L	GW-CPXB-L GWS-CPXB-L	SKH51 equivalent 58~60HRC	Standard	-0.01 -0.02	+0.02 0
GW-CPH-L GWS-CPH-L	GW-CPHB-L GWS-CPHB-L			0 -0.005	
GW-CPV-L GWS-CPV-L	GW-CPVB-L GWS-CPVB-L			0 -0.005	+0.01 0

Ⓜ Limit of E±0.01 is within 10mm from the tip.

## ■ Shaft diameter (D) selection type

H	Part Number Type	D	L		E	SV								
			0.01mm increments	0.01mm increments										
2		0.5	15.00~60.00		0.02~0.05	<table border="1" style="margin: auto;"> <tr><td>L</td><td>SV</td></tr> <tr><td>15.00~50.00</td><td>L-10</td></tr> <tr><td>50.01~80.00</td><td>40</td></tr> <tr><td>80.01~120.00</td><td>50</td></tr> </table>	L	SV	15.00~50.00	L-10	50.01~80.00	40	80.01~120.00	50
L	SV													
15.00~50.00	L-10													
50.01~80.00	40													
80.01~120.00	50													
3	Single flat cutting GW-CPX-L GW-CPH-L GW-CPV-L	0.6	15.00~100.00											
		0.7												
		0.8												
4	Four flats cutting (D≥1) GWS-CPX-L GWS-CPH-L GWS-CPV-L	0.9	15.00~120.00											
		1												
		1.2												
5		1.5	15.00~120.00											
6		2												
7		3												
8		3.5	15.00~120.00											
9		4												
10		4.5												
11		5	15.00~120.00											
15		6												
18		7												
		8	15.00~120.00											
		10												
		13												

## ■ Shaft diameter (P) designation type

H	Part Number Type	No.	L	P		E	SV								
				0.01mm increments	0.005mm increments										
3	Single flat cutting GW-CPXB-L GW-CPHB-L GW-CPVB-L	0.6	15.00~100.00	0.50~0.59	0.500~0.595	0.02~0.05	<table border="1" style="margin: auto;"> <tr><td>L</td><td>SV</td></tr> <tr><td>15.00~50.00</td><td>L-10</td></tr> <tr><td>50.01~80.00</td><td>40</td></tr> <tr><td>80.01~120.00</td><td>50</td></tr> </table>	L	SV	15.00~50.00	L-10	50.01~80.00	40	80.01~120.00	50
		L		SV											
		15.00~50.00		L-10											
50.01~80.00	40														
80.01~120.00	50														
1	0.60~0.99	0.600~0.995													
2	1.00~1.49	1.000~1.495													
4	Four flats cutting (P≥1.000) GWS-CPXB-L GWS-CPHB-L GWS-CPVB-L	2	15.00~120.00	1.50~1.99	1.500~1.995										
		2.5		2.00~2.49	2.000~2.495										
		3		2.50~2.99	2.500~2.995										
5		3.5	15.00~120.00	3.00~3.49	3.000~3.495										
		4		3.50~3.99	3.500~3.995										
		4.5		4.00~4.49	4.000~4.495										
6		5	15.00~120.00	4.50~4.99	4.500~4.995										
		6		5.00~5.99	5.000~5.995										
		7		6.00~6.99	6.000~6.995										
7		8	15.00~120.00	7.00~7.99	7.000~7.995										
		10		8.00~9.99	8.000~9.995										
		13		10.00~12.99	10.000~12.995										

Order **Part Number** — **L** — **P** — **E**

GW-CPV-L3 — 18.36 — E0.02

GW-CPVB-L1 — 20.05 — P0.995 — E0.02

Days to Ship **Quotation**

**P** Price **Quotation**

**A** Alterations **Part Number** — **L** — **P** — **E** — (KC · WKC...etc.)

GW-CPV-L3 — 18.36 — E0.02 — WKC1.5

GW-CPVB-L1 — 20.05 — P0.995 — E0.02 — TRN

Alterations	Code	Spec.	1Code
	KC	Single flat cutting (D or P)/2 ≤ KC < H/2 (D or P) ≥ 0.6	<b>Quotation</b>
	WKC	Two flats cutting (D or P)/2 ≤ WKC < H/2 (D or P) ≥ 0.6	
	KAC KBC	Varied width parallel flats cutting (D or P)/2 ≤ KAC < H/2 KBC = 0.1mm increments only (D or P) ≥ 0.6 KAC < KBC < H/2	

Alterations	Code	Spec.	1Code
	HC	Head diameter change HC = 0.1mm increments (D or P) ≤ HC < H	<b>Quotation</b>
	HCC	Head diameter change (precision) HCC = 0.1mm increments (D or P) + 0.5 ≤ HCC < H - 0.3, (D or P) ≥ 0.6	
	TC	Head thickness change TC = 0.1mm increments (Dimension L remains unchanged.) 4 - TC ≤ Lmax. - L	
	TRN	Relief under the head (No need for plate chamfering) (D or P) ≥ 0.6	
	NHC	Numbering on the head How to order <b>P.396</b> Available when H ≥ 2	
	SVC	Extend the flat section SV to the bottom. SVC is only available for single face cutting in the upper position of four flats cutting. (D or P) < 1 ... L = Applicable until 60 When used concurrently with key flat cutting, SVC processing is done perpendicularly to the key flat surface.	

Ⓜ Flat cutting position is set at 90° of cutting facet in counterclockwise direction.

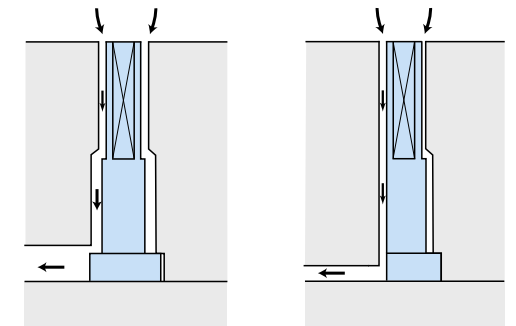
## ■ Characteristics

For the molds using the resin which generates gas easily, this core pin performs good effect of gas release from inside cavity through the clearance.

**ex** Example

Assemble at the surface of product to release gas.

Gas is released from the clearance. (Example of four flats cutting)



<AlterationSVC>  
Please use SVC alteration when processing plate by wire cutting.