

# GAS RELEASE ONE-STEP CORE PINS WITH CUTTING FACETS

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

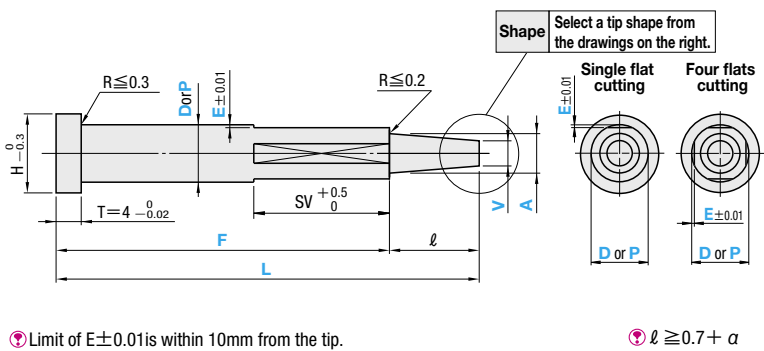


☎ Non JIS material definition is listed on P.1351 - 1352

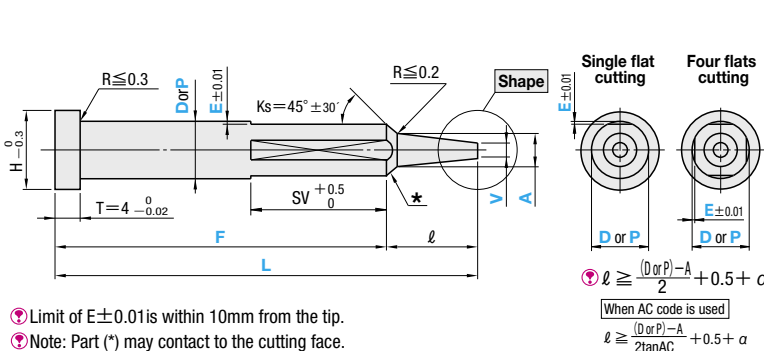
RoHS	M	Part Number				Group	D		
		Type		Step	Shape		D or P	A · V	L · F
		Shaft diameter (D) selection type	Shaft diameter (P) designation type						
SKH51 equivalent 58~60HRC	H	GW-CPX-	GW-CPXB-	1B	C	Standard	-0.01 -0.02	±0.015	+0.02 0
		GWS-CPX-	GWS-CPXB-						
		GW-CPH-	GW-CPHB-	1C	G	Standard	0	±0.01	[GB] only L-0.1
		GWS-CPH-	GWS-CPHB-						
		GW-CPV-	GW-CPVB-	1D	T	Precision	0	±0.005	+0.01 0
		GWS-CPV-	GWS-CPVB-						

## Step type selected from 1B~1D below

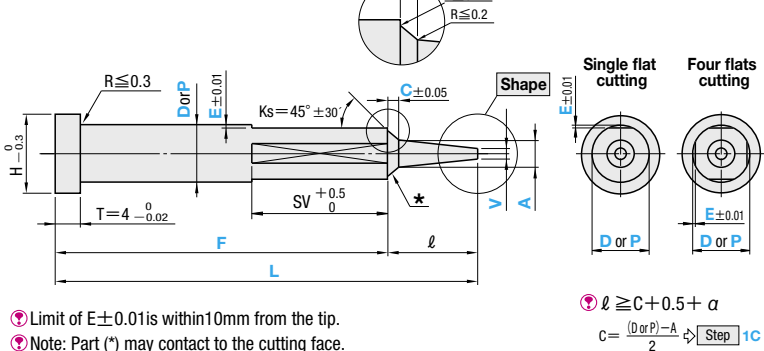
1B



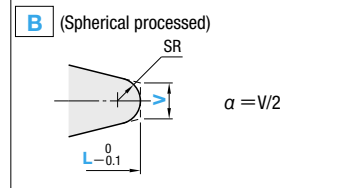
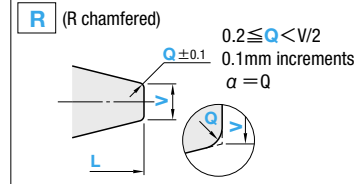
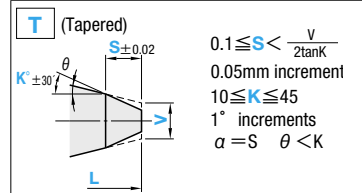
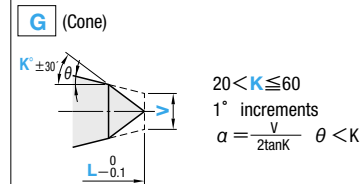
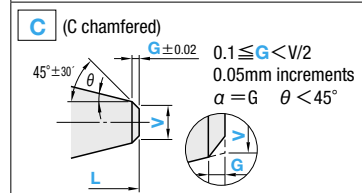
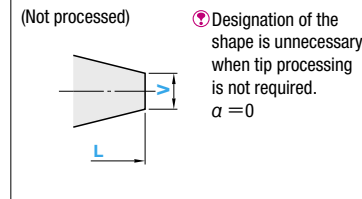
1C



1D



## Shape (Tip shape: V is dimension before tip processing.)



(Calculation of tip gradient  $\theta$  ☎ P.1315)

## Shaft diameter (D) selection type

H	Part Number			0.01mm increments				0.1mm increments	0.01mm increments	SV	ℓmax.				
	Type	Step	Shape	D	L	F	A	Vmin.	C			E			
3	[Single flat cutting] GW-CPX- GW-CPH- GW-CPV- [Four flats cutting] GWS-CPX- GWS-CPH- GWS-CPV-	1B 1C 1D	C G T R B	1	16.50	25.00	[Step] 1B D-2E>A≥V	1.00	Only [Step] 1D designated C < $\frac{D-A}{2}$ - E and ※0.1 ≤ C ≤ 4.0 ※ When CVC code is used 0.10 ≤ CVC ≤ 1.00	0.02 ~ 0.05	F 25.00~50.00 50.01~80.00 80.01~	SV F-10 40 50	A×6 and 50.00		
4				1.5											
5				2											
6				2.5	100.00	3.5	16.50	L-ℓmin.	[Step] 1C, 1D D>A≥V	1.50	[Step] 1C, 1D designated C < $\frac{D-A}{2}$ - E and ※0.1 ≤ C ≤ 4.0 ※ When CVC code is used 0.10 ≤ CVC ≤ 1.00	0.02 ~ 0.05	F 25.00~50.00 50.01~80.00 80.01~	SV F-10 40 50	A×6 and 50.00
7				3											
8				4											
9				4.5	120.00	5	16.50	L-ℓmin.	[Step] 1C, 1D D>A≥V	2.00	[Step] 1C, 1D designated C < $\frac{D-A}{2}$ - E and ※0.1 ≤ C ≤ 4.0 ※ When CVC code is used 0.10 ≤ CVC ≤ 1.00	0.02 ~ 0.05	F 25.00~50.00 50.01~80.00 80.01~	SV F-10 40 50	A×6 and 50.00
10				5.5											
11				6											
15				7	120.00	6	16.50	L-ℓmin.	[Step] 1C, 1D D>A≥V	2.00	[Step] 1C, 1D designated C < $\frac{D-A}{2}$ - E and ※0.1 ≤ C ≤ 4.0 ※ When CVC code is used 0.10 ≤ CVC ≤ 1.00	0.02 ~ 0.05	F 25.00~50.00 50.01~80.00 80.01~	SV F-10 40 50	A×6 and 50.00
18				13											

## Shaft diameter (P) designation type

H	Part Number			P		0.01mm increments				0.1mm increments	0.01mm increments	SV	ℓmax.					
	Type	Step	Shape	No.	L	Standard 0.01mm increments	Precision 0.005mm increments	F	A	Vmin.	C			E				
3	[Single flat cutting] GW-CPXB- GW-CPHB- GW-CPVB- [Four flats cutting] P≥1.000 GWS-CPXB- GWS-CPHB- GWS-CPVB-	1B 1C 1D	C G T R B	1	16.50	0.80 ~ 0.99	1.00 ~ 1.49	25.00	[Step] 1B P-2E>A≥V	1.00	Only [Step] 1D designated C < $\frac{P-A}{2}$ - E and ※0.1 ≤ C ≤ 4.0 ※ When CVC code is used 0.1 ≤ CVC ≤ 1.00	0.02 ~ 0.05	F 25.00~50.00 50.01~80.00 80.01~	SV F-10 40 50	A×6 and 50.00			
4				1.5														
5				2														
6				2.5	100.00	3.5	16.50	2.00 ~ 2.49	2.50 ~ 2.99	2.00 ~ 2.49	L-ℓmin.	[Step] 1C, 1D P>A≥V	1.50	[Step] 1C, 1D designated C < $\frac{P-A}{2}$ - E and ※0.1 ≤ C ≤ 4.0 ※ When CVC code is used 0.1 ≤ CVC ≤ 1.00	0.02 ~ 0.05	F 25.00~50.00 50.01~80.00 80.01~	SV F-10 40 50	A×6 and 50.00
7				3														
8				4														
9				4.5	120.00	5	16.50	3.50 ~ 3.99	3.50 ~ 3.99	3.50 ~ 3.99	L-ℓmin.	[Step] 1C, 1D P>A≥V	2.00	[Step] 1C, 1D designated C < $\frac{P-A}{2}$ - E and ※0.1 ≤ C ≤ 4.0 ※ When CVC code is used 0.1 ≤ CVC ≤ 1.00	0.02 ~ 0.05	F 25.00~50.00 50.01~80.00 80.01~	SV F-10 40 50	A×6 and 50.00
10				5.5														
11				6														
15				7	120.00	6	16.50	4.00 ~ 4.49	4.00 ~ 4.49	4.00 ~ 4.49	L-ℓmin.	[Step] 1C, 1D P>A≥V	2.00	[Step] 1C, 1D designated C < $\frac{P-A}{2}$ - E and ※0.1 ≤ C ≤ 4.0 ※ When CVC code is used 0.1 ≤ CVC ≤ 1.00	0.02 ~ 0.05	F 25.00~50.00 50.01~80.00 80.01~	SV F-10 40 50	A×6 and 50.00
18				13														

Order Part Number L P F A V C Tip size (K · S · G · Q) E  
 GW-CPVB-1BR6 46.00 P5.500 F38.00 A5.00 V3.00 Q1.0 E0.04

Days to Ship Quotation Price Quotation

Alterations Part Number L P F A V(C) C(CVC) Tip size (K · S · G · Q) E (KC · WKC...etc.)  
 GW-CPVB-1B 5 58.00 P4.995 F50.00 A4.20 V4.00 E0.02 NHC-23

Alteration details ☎ P.441

Alterations	Code	Spec.	1Code	Alterations	Code	Spec.	1Code
	KC	Single flat cutting (D or P) 2 ≤ KC < H/2			TRN	Relief under the head (No need for plate chamfering)	
	WKC	Two flats cutting (D or P) 2 ≤ WKC < H/2			NHC	Numbering on the head How to order ☎ P.442 Available when H ≥ 2	
	KAC KBC	Varied width parallel flats cutting (D or P) 2 ≤ KAC < H/2 KBC = 0.1mm increments only KAC < KBC < H/2			AC	Changes the standard angle (Ks=45°) AC = 1° increments Available for [Step] 1C/1D 30 ≤ AC ≤ 60 Combination with CVC not available. 1D, C ≤ 1.0 · A + 2(C · tan AC) < (D or P)	
	HCC	Head diameter change (precision) HCC = 0.1mm increments (D or P) + 0.5 ≤ HCC < H - 0.3			CVC	C dimension can be designated at 0.01mm increments. 0.10 ≤ CVC ≤ 1.00 Available for [Step] 1D CVC < [(D or P) - A] / 2 Combination with AC not available.	
	HC	Head diameter change HC = 0.1mm increments (D or P) ≤ HC < H			VC	Vmin. is enlarged. VC = 0.01mm increments 1 ~ 1.5 0.50 0.40 3.5 ~ 4 1.00 0.70 5.5 1.50 1.00 [Step] 1B 6 ~ 10 2.00 1.50	
	TC	Head thickness change TC = 0.1mm increments 1.5 ≤ TC < 4 (Dimensions L and F remain unchanged.) 4 - TC ≤ Lmax. - L			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. When P < 1... Available for L = 60 or less. 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.