

GAS RELEASE ONE-STEP CORE PINS

—SHAFT DIAMETER (D) SELECTION TYPE—



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

RoHS	M H	Part Number			I	
		Type	Step	Shape	D · DC	A · V
	NAK80 37~43HRC	GV-CPN-	1A	C	-0.01 -0.02	±0.015
	DH2F 38~42HRC	GV-CPF-				
	SKD61 equivalent 48~52HRC	GV-CPD-				
	SKH51 equivalent 58~60HRC	GV-CPX-				
	NAK80 37~43HRC	GV-CPK-	1C	T	0 -0.005	±0.01
	DH2F 38~42HRC	GV-CPG-	1D	R		
	SKD61 equivalent 48~52HRC	GV-CPP-		B		
	SKH51 equivalent 58~60HRC	GV-CPH-				

Step type selected from 1A~1D below

1A

Shape Select a tip shape from the drawings on the right.

When $D = -0.01$, $DC = D$ can't be designated DC
 $l \geq 0.5 + a$

1B

Shape

When $D = -0.01$, $DC = D$ can't be designated DC
 $l \geq 0.7 + a$

1C

Shape

When $D = -0.01$, $DC = D$ can't be designated DC
 $l \geq \frac{D-A}{2} + 0.5 + a$
 (When AC code is used)
 $l \geq \frac{D-A}{2 \tan AC} + 0.5 + a$

1D

Shape

When $D = -0.01$, $DC = D$ can't be designated DC
 $l \geq C + 0.5 + a$
 $c = \frac{D-A}{2} \rightarrow$ [Step] 1C

Common with 1A~1D

D	d	a
1~2.5	D-0.2	0.1
3~4	D-0.4	0.2
4.5~5	D-0.6	0.3
5.5~13	D-1.0	0.5

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

(Not processed)

Designation of the shape is unnecessary when tip processing is not required.
 $\alpha = 0$

(C chamfered)

$0.5 \leq G < V/2$
 0.1mm increments
 $\alpha = G \quad \theta < 45^\circ$

(Cone)

$20 < K \leq 60$
 1° increments
 $\alpha = \frac{V}{2 \tan K} \quad \theta < K$

(Tapered)

$0.1 \leq S < \frac{V}{2 \tan K}$
 0.1mm increments
 $10 \leq K \leq 45$
 1° increments
 $\alpha = S \quad \theta < K$

(R chamfered)

$0.2 \leq Q < V/2$
 0.1mm increments
 $\alpha = Q$

(Spherical processed)

$\alpha = V/2$

(Calculation of tip gradient θ P.1315)

H	Part Number				0.01mm increments				0.1mm increments	0.005mm increments	0.1mm increments	0.5mm increments	lmax.		
	Type	Step	Shape	D	L	F	A	Vmin.	C	DC	N	SV			
3	GV-CPN- GV-CPF- GV-CPD- GV-CPX- GV-CPK- GV-CPG- GV-CPP- GV-CPH-	1A	C G T R B	1	16.50	14.50	DC > A ≥ V	0.70	Only [Step] 1D designated	D-0.08 ≤ DC ≤ D	When D = -0.01, can't be designated DC	0.3~10.0	2.0~50.0	15.00	
4				1.5										20.00	
5				2										25.00	
6				2.5	100.00	3	16.50	L = lmin.	DC > V	1.00	C < $\frac{D-A}{2}$ and	When DC=D, DCX is applied.	0.5~15.0	2.0~60.0	30.00
7				3.5	35.00										
8				4	40.00										
9				4.5	45.00										
10				5	50.00										
11				5.5	55.00										
15				6	120.00	7	120.00	Refer to the drawing	No designation necessary for A	1.50	* 0.1 ≤ C ≤ 4.0 ** When CVC code is used 0.50 ≤ CVC ≤ 1.00	When DC=D, DCX is applied.	0.5~15.0	2.0~60.0	50.00
16				7	50.00										
18				8	50.00										
18							13								

Order

Part Number	L	F	A	V	C	Tip size (K·S·G·Q)	DC(DCX)	N	SV	
GV-CPN-1A 5	58.00	F40.00	A5.00	V4.50				N2	SV10	
GV-CPG-1BR6	46.00	F38.00	A5.00	V3.00			Q1.0	N4	SV15	
GV-CPP-1CC5	54.50	F48.35	A4.50	V4.30			G0.5	DC4.990	N2	SV20
GV-CPH-1DG6	50.00	F40.00	A5.10	V3.00	C0.3		K40	DC5.960	N4	SV10

Days to Ship **Quotation** **Price Quotation**

Alterations

Part Number	L	F	A	V(VC)	C(CVC)	Tip size (K·S·G·Q)	DC(DCX)	N	SV(SVC)	(KC·WKC...etc.)
GV-CPG-1BC6	50.00	F40.00	A5.00	V3.10		G1.0	DCX	N4	SV10	HC8.0
GV-CPP-1A 5	58.00	F50.00	A5.00	V4.00			DC4.990	N2	SV15	NHC-23

Alterations details P.441

Alterations	Code	Spec.	1Code
	TC	Head thickness change TC=0.1mm increments 1.5 ≤ TC < 4 (Dimensions L and F remain unchanged.) 4 - TC ≤ Lmax. - L	
	TRN	Relief under the head (No need for plate chamfering)	
	NHC	Numbering on the head How to order P.442 Available when H ≥ 2	
	AC	Changes the standard angle (Ks=45°) AC=1° increments Available for [Step] 1C/1D 30 ≤ AC ≤ 60 Combination with RR · CVC not available. 1D, C ≤ 1.0, A + 2(C × tan AC) < D	
	RR	Changes R (normally 0.2 or less) to R0.3~0.5. (Strength has been improved) Designation method RR Available for [Step] 1B/1C/1D D - A ≥ 1.0 [Step] When 1D, C ≥ 0.5	
	CVC	C dimension can be designated at 0.01mm increments. 0.50 ≤ CVC ≤ 1.00 Available for [Step] 1D CVC < (D - A)/2 Combination with AC not available.	
	VC	Vmin. is enlarged. VC=0.01mm increments l ≥ A × 5, l ≤ 50 (D × 5 for [Step] 1A) DC > A ≥ VC * Regarding D=2~3, 4.5, 5 and 13, Vmin. is the machining limit, and VC cannot be used.	
	SVC	Extend the flat section SV to the bottom. GV-CPN- · Available for GV-CPK- only D ≥ 2 When used concurrently with key flat cutting, SVC processing is done perpendicularly to the key flat surface.	