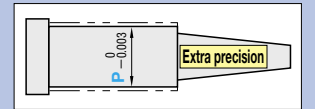


EXTRA PRECISION ONE-STEP CORE PINS

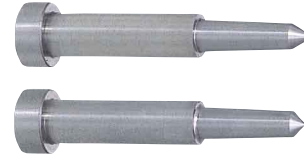
—SHAFT DIAMETER (P) DESIGNATION (0.001mm INCREMENTS) TYPE—



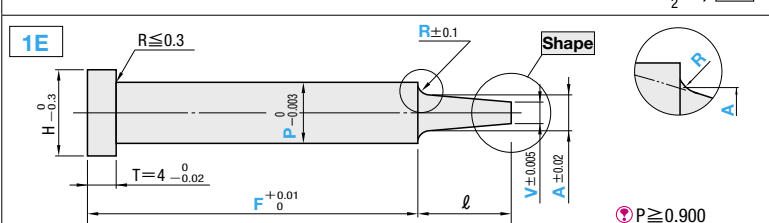
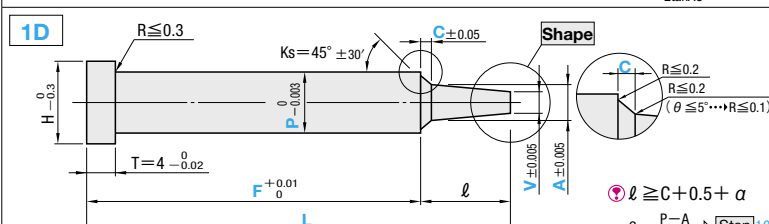
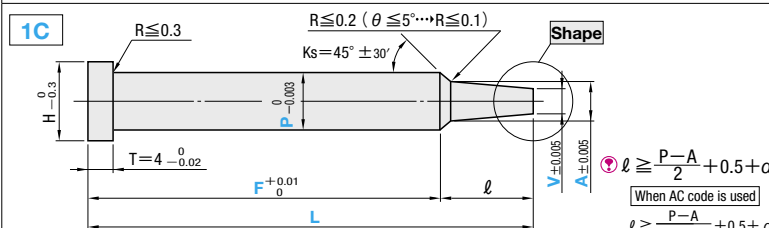
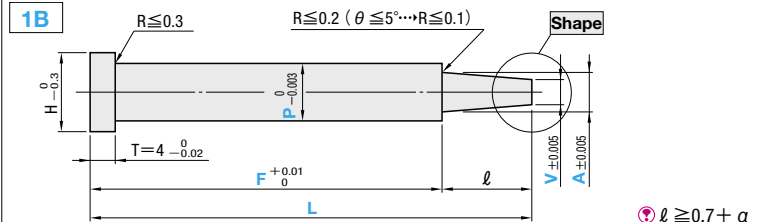
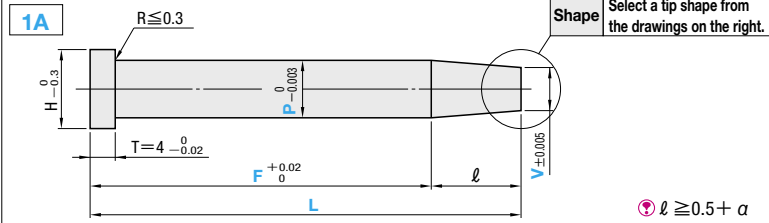
Ⓜ Non JIS material definition is listed on P.1351 - 1352

Ⓜ When exceeds the working limit of tip (ℓ) dimension (Refer to the step drawing lower right) → Details of the tip (ℓ) short type Ⓜ P.459

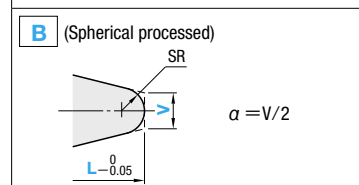
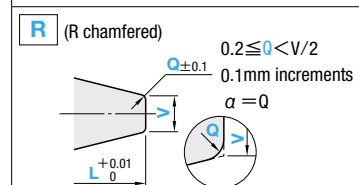
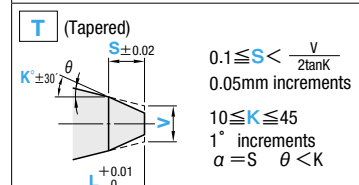
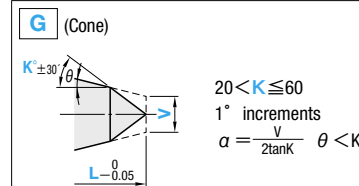
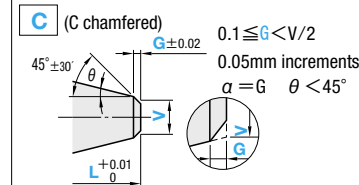
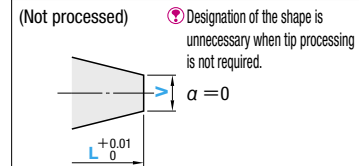
| RoHS | M | Part Number | | |
|------------------------------|-------|-------------|---------------|-------|
| | | Type | Step | Shape |
| SKH51 equivalent 58~60HRC | CPMB- | 1A | Not processed | |
| | | 1B | C | |
| | | 1C | G | |
| | | 1D | T | |
| | | 1E | R | |



Step type selected from 1A~1E below



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



| H | Part Number | | | | 0.01mm increments | | 0.001mm increments | | 0.01mm increments | | 0.005mm increments | | 0.1mm increments | | ℓmax. | |
|----|-------------|---------------|---|-----|-------------------|--------|--------------------|---------|-----------------------------------|-------|---|-------|---------------------------|---------------------------|-----------------------------------|-------------|
| | Type | Step | Shape | No. | min. | max. | min. | max. | min. | max. | A | Vmin. | C | R | | |
| 3 | CPMB- | 1A | Designation is unnecessary when tip processing is not required. | 1 | 14.00 | 100.00 | 12.00 | L-ℓmin. | ℓmin. Refer to the [Step] drawing | P>A≥V | Step] 1A P>V No designation necessary for A | 0.500 | Only [Step] 1D designated | Only [Step] 1E designated | A×6 (P×6 for [Step] 1A) and 50.00 | |
| 4 | | | | 1.5 | | | | | | | | | | | | 0.800~0.999 |
| 5 | | | | 2 | | | | | | | | | | | | 1.000~1.499 |
| 6 | | | | 2.5 | | | | | | | | | | | | 1.500~1.999 |
| 7 | | | | 3 | | | | | | | | | | | | 2.000~2.499 |
| 8 | | | | 3.5 | | | | | | | | | | | | 2.500~2.999 |
| 9 | | | | 4 | | | | | | | | | | | | 3.000~3.499 |
| 10 | | | | 4.5 | | | | | | | | | | | | 3.500~3.999 |
| 11 | | | | 5 | | | | | | | | | | | | 4.000~4.499 |
| 12 | | | | 5.5 | | | | | | | | | | | | 4.500~4.999 |
| 13 | | | | 6 | | | | | | | | | | | | 5.000~5.499 |
| 14 | | | | 6.5 | | | | | | | | | | | | 5.500~5.999 |
| 15 | | | | 7 | | | | | | | | | | | | 6.000~6.499 |
| 16 | 7.5 | 6.500~6.999 | | | | | | | | | | | | | | |
| 17 | 8 | 7.000~7.999 | | | | | | | | | | | | | | |
| 18 | 8.5 | 8.000~9.999 | | | | | | | | | | | | | | |
| 19 | 9 | 10.000~12.999 | | | | | | | | | | | | | | |

Ⓜ [Step] 1E for No.1 (P≥0.900)

Order

| Part Number | L | P | F | A | V | C·R | Tip size (K·S·G·Q) |
|-------------|-------|--------|--------|--------|--------|------|--------------------|
| CPMB-1A 5 | 42.00 | P4.650 | F36.50 | | V3.800 | | G0.8 |
| CPMB-1BC6 | 48.55 | P5.865 | F40.00 | A5.000 | V4.500 | | G0.8 |
| CPMB-1DR5.5 | 52.60 | P5.480 | F41.10 | A4.900 | V4.600 | C0.2 | Q0.5 |

Days to Ship

Alterations

Quotation

Price Quotation

| Part Number | L | P | F(FC) | A | V(VC) | C(CVC)·R | Tip size (K·S·G·Q) | Alteration |
|-------------|-------|--------|--------|--------|--------|----------|--------------------|------------|
| CPMB-1A 5 | 42.00 | P4.650 | F36.50 | | V3.800 | | G0.8 | KC2.4 |
| CPMB-1DC6 | 51.00 | P5.755 | F40.05 | A3.200 | V3.050 | CVC0.25 | G0.6 | HC8 |

Alteration details Ⓜ P.441

| Alterations | Code | Spec. | 1Code | Alterations | Code | Spec. | 1Code |
|-------------|------|--|---|-------------|------|---|-------|
| | KC | Single flat cutting $P/2 \leq KC < H/2$ | | | TRN | Relief under the head (No need for plate chamfering) | |
| | WKC | Two flats cutting $P/2 \leq WKC < H/2$ | About Designation Unit for Key Flat Cutting | | NHC | Numbering on the head How to order Ⓜ P.442 Ⓜ Available when H≥2 Ⓜ Combination with SKC not available. | |
| | KAC | Varied width parallel flats cutting $P/2 \leq KAC < H/2$ KBC=0.1mm increments only $KAC < KBC < H/2$ | (1)To align the key flat with the shaft diameter [Unit of designation] 0.0005mm increments possible | | AC | Changes the standard angle (Ks=45°) AC=1° increments Ⓜ Available for [Step] 1C/1D Ⓜ 30°AC≤60° Ⓜ Combination with CVC not available. Ⓜ When [Step] 1D, C≤1.0, A+2(C×tanAC)<P | |
| | KBC | | | | CVC | C dimension can be designated at 0.01mm increments. Ⓜ 0.10≤CVC≤1.00 Ⓜ Available for [Step] 1D Ⓜ CVC<(P-A)/2 Ⓜ Combination with AC not available. | |
| | RKC | Two flats (right angled) cutting $P/2 \leq RKC < H/2$ | (2)To designate arbitrary key flat dimensions [Unit of designation] 0.1mm | | VC | Vmin. is enlarged. VC=0.005mm increments Ⓜ ℓ≤A×5, ℓ≤50 Ⓜ (P×5 for [Step] 1A) Ⓜ P>A≥VC | |
| | DKC | Three flats cutting $P/2 \leq DKC < H/2$ | | | FC | F dimension becomes shorter than Fmin. Makes L dimension shorter than L min. too. FC≤5mm Ⓜ It can be designated up to Lmin.=6.5mm. | |
| | SKC | Four flats cutting $P/2 \leq SKC < H/2$ | Quotation | | LKC | Changes L dimension tolerance $L + \delta^{+0.01} \Rightarrow L + \delta^{+0.005}$ (L designation in 0.005mm increments possible) Ⓜ Available when 1.500≤P≤5.000 Ⓜ Combination with FC not available. Ⓜ No [Shape] machining Available for C/T/R | |
| | KGC | Two flats (angled) cutting $P/2 \leq KGC < H/2$ 0°<AG<360 AG=1° increments | | | GVC | Gas vent machining GS·GB=1mm increments Ⓜ Available when P≥2.00 Ⓜ 2≤GS≤10 GS+2≤GB≤30 Fmin.≤F-GB How to order Ⓜ P.442 | |
| | KTC | Three flats cutting at 120° $P/2 \leq KTC < H/2$ | | | HCC | Head diameter change (precision) HCC=0.1mm increments $P + 0.5 \leq HCC < H - 0.3$ | |
| | HC | Head diameter change HC=0.1mm increments $P \leq HC < H$ Ⓜ In relation to the diameter tolerance, alteration may create a straight piece with little diameter difference between the head and shaft. | | | TC | Head thickness change TC=0.1mm increments $1.5 \leq TC < 4$ (Dimensions L and F remain unchanged.) $4 - TC \leq Lmax. - L$ | |

Ⓜ For details of a Gas Release Core Pin, which is a product similar to alteration GVC, Ⓜ P.473