

Locating Pins Small Head Flat Type

-D, P Tolerance Selectable-

| Materials No. | M | S | H | Type | |
|------------------------|--|---|--|----------|---------------|
| | | | | Standard | Female Thread |
| (1) SKS3 | - | - | Hardening Hardness 60-63HRC | KFFSA | KFFSTA |
| (2) SKS3 | Hard Chrome Plating Plating Thickness 3um or More | - | Hardening Hardness 60-63HRC Plating Hardness 750HV~ | GKFFSA | GKFFSTA |
| (3) SKS3 | - | - | - | BKFFSA | BKFFSTA |
| (4) SUS304 | - | - | - | SKFFSA | SKFFSTA |
| (5) SUS304 | Hard Chrome Plating Plating Thickness 3um or More | - | Plating Hardness 750HV~ | HKFFSA | HKFFSTA |
| (6) SUS440C Equivalent | - | - | Hardening Hardness 50-55HRC | CKFFSA | CKFFSTA |

Standard

When D=P No relief.
(i) When D=P and tolerances are different

(ii) When D = P and tolerances are the same

(L+B) is the general tolerance.

Female Thread

When D=P (Large head) When D=P (Straight) When D>P (Small Head)

*SUS440C equivalent type has an identification groove on D part.

| D or P | Standard Class | | | | Precision Class | |
|--------|----------------|--------|--------|--------|-----------------|--------|
| | M | P | G | H | A | B |
| 1.50 | +0.008 | +0.012 | -0.002 | 0 | - | - |
| 3.00 | +0.006 | +0.006 | -0.008 | -0.010 | - | - |
| 3.01 | +0.012 | +0.020 | -0.004 | 0 | - | - |
| 6.00 | +0.004 | +0.012 | -0.012 | -0.012 | - | - |
| 6.01 | +0.015 | +0.024 | -0.005 | 0 | +0.005 | 0 |
| 10.00 | +0.006 | +0.015 | -0.014 | -0.015 | 0 | -0.005 |
| 10.01 | +0.018 | +0.029 | -0.006 | 0 | 0 | 0 |
| 18.00 | +0.007 | +0.018 | -0.017 | -0.018 | 0 | 0 |
| 18.01 | +0.021 | +0.035 | -0.007 | 0 | 0 | 0 |
| 30.00 | +0.008 | +0.022 | -0.020 | -0.021 | 0 | 0 |

⊕ The price of Precision Type is the price of Standard Type multiplying x1.1. (Round down to the nearest one yen)
⊗ Hard chrome plated is not applicable to precision tolerance.

| Type | D Tolerance Selection | P Tolerance Selection | D | Unit Price | | | | | | Qty. 1-4 | Standard Class | |
|---|------------------------------|-----------------------------------|----|------------------|---------------|-----------------|-----|---|---|----------|----------------|--|
| | | | | 0.01mm Increment | 1mm Increment | 0.1mm Increment | M | ℓ | C | | | |
| KFFSA GKFFSA† BKFFSA SKFFSA HKFFSA† CKFFSA | M P G H †A †B | S M P G H †A †B | 2 | 1.50-2.00 | 2-4 | 2.0-10.0 | 0.1 | | | | | |
| | | | 3 | 1.50-3.00 | 3-6 | 2.0-10.0 | 0.5 | | | | | |
| | | | 4 | 2.00-4.00 | 4-8 | 2.0-10.0 | 1 | | | | | |
| | | | 5 | 2.00-5.00 | 5-10 | 2.0-10.0 | 1 | | | | | |
| | | | 6 | 2.00-6.00 | 6-12 | 4.0-12.0 | 1 | | | | | |
| | | | 8 | 3.00-8.00 | 8-16 | 6.0-15.0 | 1.5 | | | | | |
| | | | 10 | 3.00-10.00 | 10-20 | 6.0-20.0 | 2 | | | | | |
| | | | 12 | 5.00-12.00 | 12-24 | 6.0-20.0 | 2 | | | | | |
| | | | 13 | 6.00-13.00 | 13-26 | 6.0-20.0 | 2 | | | | | |
| | | | 16 | 10.00-16.00 | 16-32 | 7.0-20.0 | 3 | | | | | |
| | | | 20 | 13.00-20.00 | 20-40 | 7.0-20.0 | 3 | | | | | |

⊕ Note the strength of under-head part. **P.833**

Order Example: Part Number **KFFSA G S 10 - P8.00 - L10 - B8.0**

Days to Ship: **3** Days

Alterations: Part Number **KFFSAG10 - P8.00 - L10 - B8.0 - RC**

Price: **¥500/piece** **P.92**

⊕ A flat charge of ¥1,350 for 3 or more identical pieces.
⊗ Express service is not available for hard SKS3 and hard SUS304.

| Alterations | Guide Part | Radius | Air Vent | C Chamfered Size |
|-------------|--------------------------------------|--|--------------------------------------|---|
| Code | GDC | RC | AC | CN |
| Spec. | Adds guide part. (Ordering Code) GDC | Changes the relief to R0.5. (Ordering Code) RC | Adds an air vent. (Ordering Code) AC | Adds C Chamfering to 0.5 or less for P dimension part. (Ordering Code) CN |
| Price Adder | 200 | 300 | 200 | Free of Charge |

Locating Pins Large Head/Small Head Flat Type

-Set Screws-

CAD Data Folder Name: Locating_Pins

| Materials No. | M | S | H | Type | | | Shape Code |
|------------------------|--|---|--|----------------------|-------|----------------|--------------------------|
| | | | | Circumference Groove | Notch | Set Screw Flat | |
| (1) SKS3 | - | - | Hardening Hardness 60-63HRC | JPGF | JPCF | JPDF | S (Round) D (Diamond) |
| (2) SKS3 | Hard Chrome Plating Plating Thickness 3um or More | - | Hardening Hardness 60-63HRC Plating Hardness 750HV~ | GJPGF | GJPCF | GJPDF | |
| (3) SUS304 | - | - | - | SJPGF | SJPCF | SJPDF | |
| (4) SUS440C Equivalent | - | - | Hardening Hardness 50-55HRC | CJPGF | CJPCF | CJPDF | |

Circumference Groove Shape **Notch Shape** **Set Screw Flat Shape**

⊕ SUS440C equivalent type has an identification groove on D part.

⊕ ℓ3 dimension shall be the dimension of recommended dimension of the position of set screw tip.

⊕ L>A+G+1

⊕ Select set screw position X or Y for Diamond or Notch Set Screw Type.

| D | g6 | P | C1 |
|-------|------------------|-------------|-----|
| 6 | -0.004 -0.012 | 2.00-2.50 | 0.3 |
| 8-10 | -0.005 -0.014 | 2.51-4.00 | 0.5 |
| 12-16 | -0.006 -0.017 | 10.01-13.00 | 1.5 |
| 20 | -0.007 -0.020 | 18.01-30.00 | 3 |

| Type | Shape | D | P | L | B | d | ℓ1 | ℓ2 | C | (W) | |
|---------------------------------|--------------------------|-----|-------------|-------|----------|-----|----|----|-----|----------|----------|
| | | | | | | | | | | When D<P | When D≥P |
| JPGF GJPGF SJPGF CJPGF | S (Round) D (Diamond) | 6 | 2.00-10.00 | 3-12 | 2.0-20.0 | 4.5 | 5 | 5 | 1 | 1 | 1.5 |
| | | 6S | 2.00-10.00 | 2-12 | 2.0-20.0 | 4.5 | 5 | 5 | 0.5 | 3 | 1.5 |
| | | 8 | 3.00-13.00 | 4-16 | 3.0-20.0 | 6.5 | 6 | 6 | 1.5 | 3.5 | 1.8 |
| | | 8S | 3.00-13.00 | 3-16 | 3.0-20.0 | 6.5 | 3 | 3 | 1 | 4 | 2.2 |
| | | 10 | 3.00-15.00 | 5-20 | 4.0-20.0 | 8 | 8 | 8 | 2 | 5 | 2.5 |
| | | 10S | 3.00-15.00 | 4-20 | 4.0-20.0 | 8 | 3 | 3 | 2 | 7 | 4 |
| | | 12 | 5.00-16.00 | 6-24 | 6.0-20.0 | 10 | 8 | 8 | 3 | 9 | 5 |
| | | 12S | 5.00-16.00 | 5-24 | 6.0-20.0 | 10 | 4 | 4 | 3 | 9 | 5 |
| | | 16 | 10.00-25.00 | 8-32 | 6.0-20.0 | 14 | 8 | 8 | 3 | 9 | 5 |
| | | 16S | 10.00-25.00 | 7-32 | 6.0-20.0 | 14 | 4 | 4 | 3 | 9 | 5 |
| | | 20 | 13.00-30.00 | 10-40 | 6.0-20.0 | 18 | 8 | 8 | 3 | 9 | 5 |

| Type | Shape | D | P | L | B | G | A | Flat Position | ℓ3 | ℓ4 | h | C | Applicable Set Screws | (W) | |
|---------------------------------|--------------------------|----|-------------|-------|-----------|---|------|---------------|------|-----|-----|-----|-----------------------|----------|----------|
| | | | | | | | | | | | | | | When D<P | When D≥P |
| JPCF GJPCF SJPCF CJPCF | S (Round) D (Diamond) | 6 | 5.00-10.00 | 12-20 | 5.0-20.0 | | 2-8 | X | 5.5 | 2.5 | 1.0 | 1 | M4 | 3 | 1.5 |
| | | 8 | 5.00-13.00 | 14-22 | 6.0-20.0 | | 2-12 | Y | 7.5 | 3.5 | 1.2 | 1.5 | M5 | 3.5 | 1.8 |
| | | 10 | 5.00-15.00 | 15-25 | 7.0-20.0 | | 2-16 | | 7.5 | 3.5 | 1.2 | 2 | M6 | 4 | 2.2 |
| | | 12 | 5.00-16.00 | 15-25 | 7.0-20.0 | | 2-20 | | 7.5 | 3.5 | 1.2 | 2 | M6 | 5 | 2.5 |
| | | 16 | 10.00-25.00 | 24-35 | 10.0-20.0 | | 2-28 | | 10.5 | 5.5 | 2.0 | 3 | M8 | 7 | 4 |
| | | 20 | 13.00-30.00 | 27-40 | 10.0-20.0 | | 2-36 | | 13.5 | 8.5 | 2.0 | 3 | M8 | 9 | 5 |

⊕ For set screws, those are the recommended sizes for notch shape.

Price: **Volume Discount Rate** (Round down to the nearest one yen.) **P.91**

| Quantity | 1-4 | 5-19 | 20-49 | 50-99 | 100+ |
|----------|------------|------|-------|-------|------|
| Rate | Price List | 5% | 10% | 15% | 15% |

⊕ For orders larger than indicated values, please request for quotation.

| D | Circumference Groove Shape | | | | Notch Shape | | | |
|-----|----------------------------|--------|--------|--------|-------------|--------|--------|--------|
| | JPGFS | GJPGFS | SJPGFS | CJPGFS | JPCFS | GJPCFS | SJPCFS | CJPCFS |
| 6 | 1,030 | 1,390 | 1,430 | 1,570 | 1,330 | 1,800 | 1,860 | 2,040 |
| 6S | 1,030 | 1,390 | 1,430 | 1,570 | 1,330 | 1,800 | 1,860 | 2,040 |
| 8 | 1,060 | 1,430 | 1,510 | 1,620 | 1,390 | 1,880 | 1,970 | 2,110 |
| 8S | 1,060 | 1,430 | 1,510 | 1,620 | 1,390 | 1,880 | 1,970 | 2,110 |
| 10 | 1,110 | 1,490 | 1,570 | 1,690 | 1,440 | 1,940 | 2,040 | 2,190 |
| 10S | 1,110 | 1,490 | 1,570 | 1,690 | 1,440 | 1,940 | 2,040 | 2,190 |
| 12 | 1,150 | 1,550 | 1,620 | 1,850 | 1,490 | 2,010 | 2,110 | 2,410 |
| 12S | 1,150 | 1,550 | 1,620 | 1,850 | 1,490 | 2,010 | 2,110 | 2,410 |
| 16 | 1,520 | 2,050 | 2,190 | 2,390 | 1,980 | 2,670 | 2,840 | 3,120 |
| 16S | 1,520 | 2,050 | 2,190 | 2,390 | 1,980 | 2,670 | 2,840 | 3,120 |
| 20 | 1,880 | 2,530 | 2,730 | 2,970 | 2,440 | 3,290 | 3,540 | 3,870 |

⊕ Precision Price

When A and B tolerance is selected, M 1.1 to the above price (Round down to the nearest ten yen)
Example of Price Calculation
KFFSAAA10-P8.00-L13-B15.1
1,330 (KFFSA10) x 1.1=1,460 yen

Set Screw Flat Shape

| D | Round Shape | | | | Diamond Shape | | | |
|----|-------------|--------|--------|--------|---------------|--------|--------|--------|
| | JPDFS | GJPDFS | SJPDFS | CJPDFS | JPDFD | GJPDFD | SJPDFD | CJPDFD |
| 6 | 1,540 | 2,070 | 2,310 | 2,540 | 1,990 | 2,680 | 2,980 | 3,280 |
| 8 | 1,590 | 2,140 | 2,380 | 2,620 | 2,080 | 2,800 | 3,120 | 3,430 |
| 10 | 1,660 | 2,240 | 2,490 | 2,730 | 2,160 | 2,910 | 3,240 | 3,560 |
| 12 | 1,720 | 2,320 | 2,580 | 2,830 | 2,230 | 3,010 | 3,340 | 3,670 |
| 16 | 2,280 | 3,070 | 3,420 | 3,760 | 2,970 | 4,000 | 4,450 | 4,900 |
| 20 | 2,820 | 3,800 | 4,230 | 4,650 | 3,660 | 4,940 | 5,490 | 6,030 |

⊕ Notch Shape Hard SKS3