# Locating Pins - Sphere Large Head

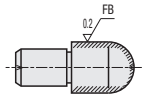
## Press Fit

**Features:** The Sphere Head can prevent the mating material from being scratched even when you insert by sliding horizontally against the pin end.


| Material No. | M Material | S Surface Treatment | H Hardness | P Selectable | | P, L, B Configurable | |
|---|---|---|---|---|---|---|---|
| | | | | Type | D Tolerance and Shape | Type | D Tolerance and Shape |
| (1) | SKS3 Equivalent | - | Treated Hardness: 60~63HRC | JPQ | <Round> B (m6) PB (p6) | FPQ | <Round> A (m6) PA (p6) <Diamond> D (m6) PD (p6) |
| (2) | SKS3 Equivalent | Hard Chrome Plating | Treated Hardness: 50~55HRC / Plating Hardness: 750HV ~ | - | | GFPQ | |
| (3) | SUS304* | - | - | SJPQ | | SFPQ | |
| (4) | SUS304 | Hard Chrome Plating | Plating Hardness: 750HV ~ | - | | HFPQ | |
| (5) | SUS440C or 13Cr stainless | - | Treated Hardness: 50~55HRC | CJPQ | | CFPQ | |
| (6) | SKS3 Equivalent | Buffing | Treated Hardness: 60~63HRC | - | | MFPQ | |
| (7) | SKS3 Equivalent | Hard Chrome Plating + Buffing | Treated Hardness: 50~55HRC / Plating Hardness: 750HV ~ | - | | MGFPQ | |
| (8) | SUS440C or 13Cr stainless | Buffing | Treated Hardness: 50~55HRC | - | | MCFPQ | |

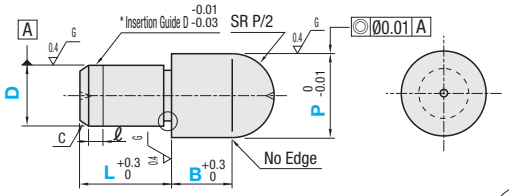
* For P Selectable Type, it is SUS304 equivalent.

Buffed at ▨ part only. (Except Diamond Cut Surface)

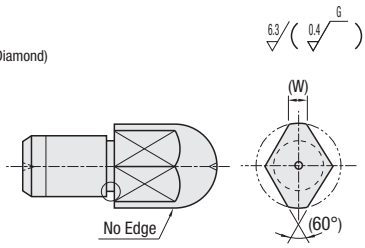



The boundary between Sphere part and B dimension is indistinct.

(Round)




(Diamond)





When D<3 a=0.5 d=D-0.1

When D≥3 a=1.0 d=D-0.2

Relief dimension is a reference value.

Locating Pins for Height Adjusting with shorter B fixed dimension is also available.

P.1669

* The insertion guide is applicable to tolerance p6 only.
SUS440C or 13Cr stainless has an identification groove at any position on D part.
Polished, centering hole is sometimes not available for SUS304.
When the P dimension is small, a centering hole will cause the sphere section to become small.
The spherical head may be polished.

### P Selectable

| Part Number: Type | D Tolerance and Shape | D | D Tol. m6 | D Tol. p6 | P Selection | L | B | C | ℓ |
|---|---|---|---|---|---|---|---|---|---|
| JPQ SJPQ CJPQ | <Round> B (m6) PB (p6) | 1 | +0.008 +0.002 | +0.012 +0.006 | 2 | 3 | 3 | 0.1 | 0 |
| | | 2 | | | 3 4 | 4 | | 0.5 | |
| | | 3 | | | 4 5 6 | 5 | 5 | | 1 |
| | | 4 | +0.012 +0.004 | +0.020 +0.012 | 5 6 7 | | 6 | 1 | |
| | | 5 | | | 6 7 8 | 10 | | | |
| | | 6 | | | 7 8 9 10 | | 8 | | |
| | | 8 | +0.015 +0.006 | +0.024 +0.015 | 9 10 11 12 | 15 | | 1.5 | |
| | | 10 | | | 12 13 | | 10 | 2 | |

### P, L, B Configurable

| Part Number: Type | D Tolerance and Shape | D | D Tol. m6 | D Tol. p6 | P 0.01mm Increment | L 1mm Increment | B 0.1mm Increment | C | ℓ | (W) |
|---|---|---|---|---|---|---|---|---|---|---|
| FPQ GFPQ SFPQ HFPQ CFPQ (Buff Finished) MFPQ MGFPQ MCFPQ Applicable when D≥5. | <Round> A (m6) PA (p6) <Diamond> D (m6) PD (p6) Applicable when D≥2 | 1 | +0.008 +0.002 | +0.012 +0.006 | 1.50~3.00(2.50) | 2, 3 | 1.5~5.0 | 0.1 | 0 | - |
| | | 2 | | | 2.50~6.00(4.00) | 2~6 | 1.5~15.0(10.0) | 0.5 | | 1.2 |
| | | 3 | | | 3.50~8.00 | 3~10 | 1.5~15.0(10.0) | | 1 | 1.5 |
| | | 4 | +0.012 +0.004 | +0.020 +0.012 | 4.50~8.00 | 3(4)~14 | 1.5~15.0(10.0) | 1 | | 1.8 |
| | | 5 | | | 5.50~10.00 | 5~15 | 1.5~15.0(10.0) | | | 2.2 |
| | | 6 | | | 6.50~10.00 | 5~15 | 1.5~30.0(15.0) | | | 3.0 |
| | | 8 | +0.015 +0.006 | +0.024 +0.015 | 8.50~15.00 | 5(6)~16 | 1.5~30.0(15.0) | 1.5 | | 3.5 |
| | | 10 | | | 11.00~17.00 | 5(10)~20 | 3.0~30.0(25.0) | 2 | | 4.0 |
| | | 12 | +0.018 +0.007 | +0.029 +0.018 | 13.00~18.00 | 6(10)~24 | 3.0~30.0(25.0) | | | 5.0 |
| | | 13 | | | 14.00~20.00 | 7(12)~26 | 5.0~30.0(25.0) | | 2 | 5.5 |
| | | 16 | | | 17.00~27.00 | 8(15)~32 | 5.0~30.0 | 3 | | 7.0 |
| | | 20 | +0.021 +0.008 | +0.035 +0.022 | 22.00~30.00 | 10(15)~40 | 5.0~30.0 | | | 9.0 |

P, L, B dimensions in ( ) are applicable to Diamond Shape.