

# ASAHI

Cat.No.BE13



JQA-1973  
JQA-EM4783

## HT400 SERIES INSERT BEARING UNITS

**NEW**

**HEAT RESISTANT**

**UP TO  
400°C**



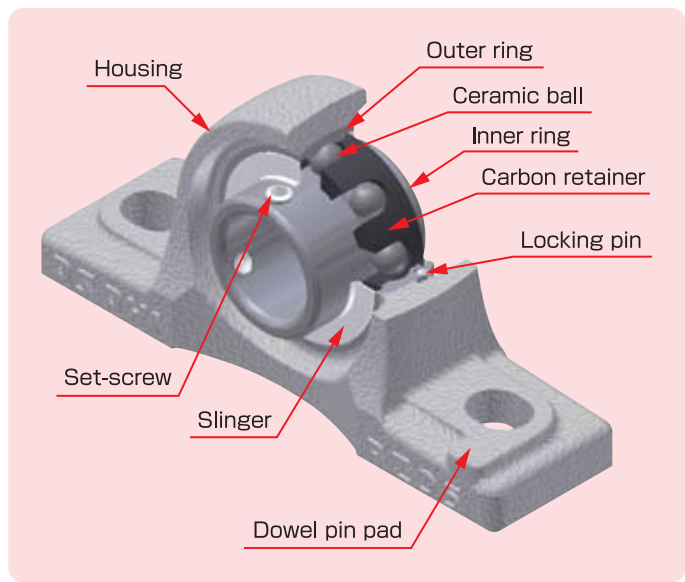
ASAHI SEIKO CO., LTD.

# HT400 Series    INSERT BEARING UNITS

## ●FEATURES

- Bearing rings : stainless steel coated with solid lubricant with special technique, preventing them from being oxidized and allowing stable bearing hardness
- Balls : ceramics (Si3N4) also coated with solid lubricant with special technique
- Retainer : self-lubricating carbon endurable even for high-temp application
- Housing : gray cast iron with special heat resistant paint

These special materials with superior features enable excellent performance of the bearing unit even under high-temp operation and provide satisfactory service life.  
In order to maximize the life expectancy, please consult with us for the operating conditions, such as ambient temperature, rotation speed, load, etc.



## ●NOMENCLATURE

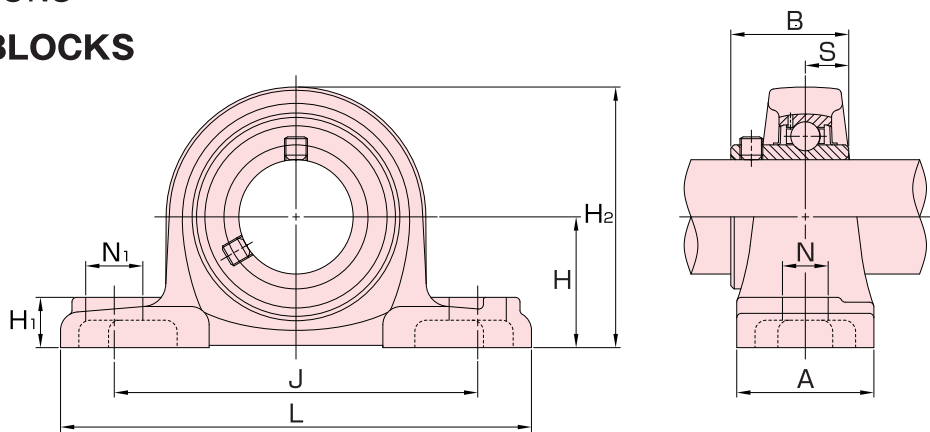
### Part number explanation

**HUC P 2 05 H**  
HUC stands for HT400 series  
P stands for Inside diameter (25 mm bore)  
2 stands for 200 series  
05 stands for Housing (Pillow block)  
H stands for Ceramic insert bearing

**HUC FL 2 07 H**  
HUC stands for HT400 series  
FL stands for Inside diameter (35 mm bore)  
2 stands for 200 series  
07 stands for Housing (2 bolt flange)  
H stands for Ceramic insert bearing

## ●DIMENSIONS

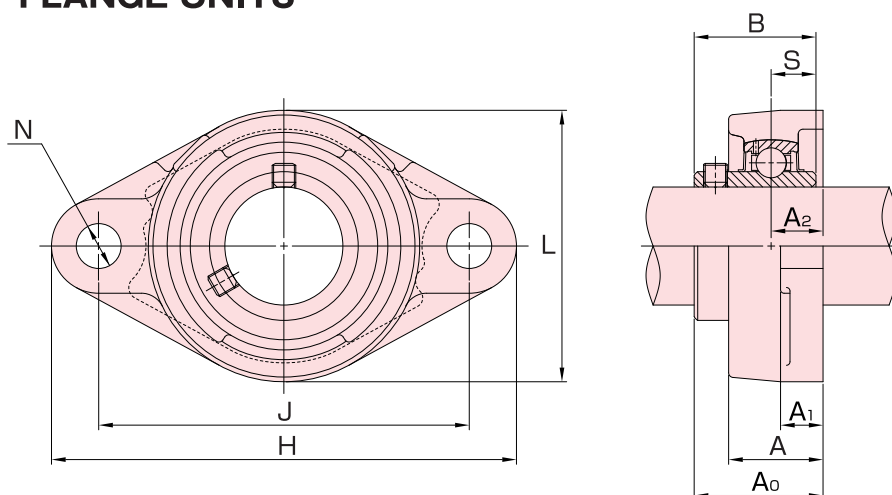
### PILLOW BLOCKS HUCP200H



| Shaft Dia.<br>(mm) | Unit No. | Dimensions (mm) |     |    |     |    |                |                |                |      |      | Bolt Size | Bearing No. | Housing No. | Weight (kg) |
|--------------------|----------|-----------------|-----|----|-----|----|----------------|----------------|----------------|------|------|-----------|-------------|-------------|-------------|
|                    |          | H               | L   | A  | J   | N  | N <sub>1</sub> | H <sub>1</sub> | H <sub>2</sub> | B    | S    |           |             |             |             |
| 20                 | HUCP204H | 33.3            | 127 | 38 | 95  | 13 | 19             | 15             | 65             | 31   | 12.7 | M10       | HUC204H     | P204G00-IZS | 0.65        |
| 25                 | HUCP205H | 36.5            | 140 | 38 | 105 | 13 | 16             | 16             | 70             | 34.1 | 14.3 | M10       | HUC205H     | P205G00-IZS | 0.79        |
| 30                 | HUCP206H | 42.9            | 165 | 48 | 121 | 17 | 21             | 18             | 83             | 38.1 | 15.9 | M14       | HUC206H     | P206G00-IZS | 1.26        |
| 35                 | HUCP207H | 47.6            | 167 | 48 | 127 | 17 | 21             | 19             | 94             | 42.9 | 17.5 | M14       | HUC207H     | P207G00-IZS | 1.59        |
| 40                 | HUCP208H | 49.2            | 184 | 54 | 137 | 17 | 25             | 19             | 100            | 49.2 | 19   | M14       | HUC208H     | P208G00-IZS | 1.92        |
| 45                 | HUCP209H | 54              | 190 | 54 | 146 | 17 | 22             | 20             | 108            | 49.2 | 19   | M14       | HUC209H     | P209G00-IZS | 2.19        |
| 50                 | HUCP210H | 57.2            | 206 | 60 | 159 | 20 | 25             | 22             | 114            | 51.6 | 19   | M16       | HUC210H     | P210G00-IZS | 2.59        |

## TWO-BOLT FLANGE UNITS

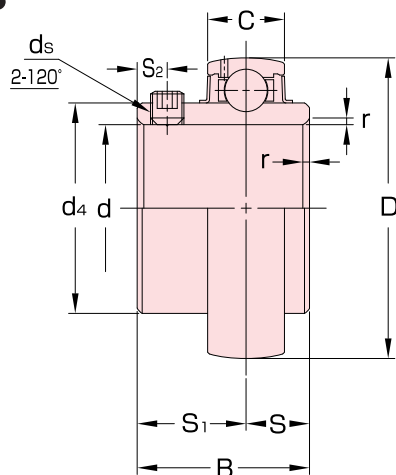
### HUCFL200H



| Shaft Dia.<br>(mm) | Unit No.  | Dimensions (mm) |     |      |     |    |                |                |                |      |      | Bolt Size | Bearing No. | Housing No.  | Weight (kg) |
|--------------------|-----------|-----------------|-----|------|-----|----|----------------|----------------|----------------|------|------|-----------|-------------|--------------|-------------|
|                    |           | H               | L   | A    | J   | N  | A <sub>1</sub> | A <sub>2</sub> | A <sub>0</sub> | B    | S    |           |             |              |             |
| 20                 | HUCFL204H | 113             | 60  | 25.5 | 90  | 12 | 12             | 15             | 33.3           | 31   | 12.7 | M10       | HUC204H     | FL204G00-IZS | 0.42        |
| 25                 | HUCFL205H | 130             | 68  | 27   | 99  | 16 | 14             | 16             | 35.8           | 34.1 | 14.3 | M14       | HUC205H     | FL205G00-IZS | 0.59        |
| 30                 | HUCFL206H | 148             | 80  | 31   | 117 | 16 | 14             | 18             | 40.2           | 38.1 | 15.9 | M14       | HUC206H     | FL206G00-IZS | 0.9         |
| 35                 | HUCFL207H | 161             | 90  | 34   | 130 | 16 | 16             | 19             | 44.4           | 42.9 | 17.5 | M14       | HUC207H     | FL207G00-IZS | 1.2         |
| 40                 | HUCFL208H | 175             | 100 | 36   | 144 | 16 | 16             | 21             | 51.2           | 49.2 | 19   | M14       | HUC208H     | FL208G00-IZS | 1.51        |
| 45                 | HUCFL209H | 188             | 108 | 38   | 148 | 19 | 18             | 22             | 52.2           | 49.2 | 19   | M16       | HUC209H     | FL209G00-IZS | 1.9         |
| 50                 | HUCFL210H | 197             | 115 | 40   | 157 | 19 | 18             | 22             | 54.6           | 51.6 | 19   | M16       | HUC210H     | FL210G00-IZS | 2.2         |

## INSERT BALL BEARINGS

### HUC200H



| Shaft Dia.<br>(mm) | Unit No. | Dimensions (mm) |    |      |    |                   |      |                |                |          |                | Weight (kg) |
|--------------------|----------|-----------------|----|------|----|-------------------|------|----------------|----------------|----------|----------------|-------------|
|                    |          | d               | D  | B    | C  | r <sub>smin</sub> | S    | S <sub>1</sub> | S <sub>2</sub> | ds       | d <sub>4</sub> |             |
| 20                 | HUC204H  | 20              | 47 | 31   | 17 | 1                 | 12.7 | 18.3           | 4.5            | M6×1     | 29             | 0.16        |
| 25                 | HUC205H  | 25              | 52 | 34.1 | 17 | 1                 | 14.3 | 19.8           | 5              | M6×1     | 34             | 0.19        |
| 30                 | HUC206H  | 30              | 62 | 38.1 | 19 | 1                 | 15.9 | 22.2           | 5              | M6×1     | 40.5           | 0.31        |
| 35                 | HUC207H  | 35              | 72 | 42.9 | 20 | 1.5               | 17.5 | 25.4           | 6              | M8×1     | 48             | 0.48        |
| 40                 | HUC208H  | 40              | 80 | 49.2 | 21 | 1.5               | 19   | 30.2           | 8              | M8×1     | 53             | 0.62        |
| 45                 | HUC209H  | 45              | 85 | 49.2 | 22 | 1.5               | 19   | 30.2           | 8              | M8×1     | 57.3           | 0.67        |
| 50                 | HUC210H  | 50              | 90 | 51.6 | 23 | 1.5               | 19   | 32.6           | 9              | M10×1.25 | 63             | 0.78        |

1. r<sub>smin</sub> is the minimum allowable value for dimension "r".

## ● MATERIAL

| Parts   |                     |                 |                                   |
|---------|---------------------|-----------------|-----------------------------------|
| Bearing | Balls               | Ceramic         | Si <sub>3</sub> N <sub>4</sub>    |
|         | Inner & Outer rings | Stainless steel | SUS440C (equiv.)                  |
|         | Retainer            | Self-lubricant  | Carbon                            |
|         | Slinger             | Stainless steel | SUS304                            |
|         | Set-screw           | Solid Lubricant | —                                 |
| Housing |                     | Gray cast iron  | FC200 (with heat resistant paint) |

## ● SET-SCREW TIGHTENING TORQUE

| Bearing No.<br>HUC | Spanner No. | Tightening Torque (N·m) |
|--------------------|-------------|-------------------------|
| 204~206            | 3           | 3.9                     |
| 207~209            | 4           | 8.3                     |
| 210                | 5           | 16.2                    |

## ● TOLERANCE

Unit : μm

| Bearing inner ring     |  |     |   |  |      | Housing                                  |  |   |  |     |
|------------------------|--|-----|---|--|------|--|--|---|--|-----|
| Shaft Dia.<br><br>(mm) | Deviation of mean bore diameter in plane of inner ring<br>Δdmp |     | Variation of bore diameter in plane of inner ring<br>Vdsp | Deviation of inner ring width<br>ΔBs(Ref.) |      | Radial runout of inner ring<br>Kia(Ref.) | Housing No.<br><br>P-G00-IZS<br>FL-G00-IZS | Pillow block  | Two-bolt flange                          |     |
|                        |  |     |   |  |      |  |  | Deviation of distance between mounting base and spherical-seat center | Positional tolerance of fixing bolt hole |     |
| Over Incl.             | High   | Low |   | High                                       | Low  | Max.                                     |  | ΔHs   | ΔA2s                                     | ×   |
| 18 30                  | +18  | 0   | 12  | 0  | -120 | 18                                       | 204~210                                    | ±150  | ±500                                     | 700 |
| 30 50                  | +21  | 0   | 14  | 0  | -120 | 20                                       |  |   |  |     |

## ● MAXIMUM OPERATING TEMPERATURE UP TO 400°C

## ● TYPICAL APPLICATION

- INDUSTRIAL FURNACE
- DRYING FURNACE
- DAMPER

## ● REMARKS

- Please contact us for other types of housing.
- Please contact us in advance for detail of operating conditions.
- Specifications are subject to change without prior notice.

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