



PEL® BH SPHERICAL PLAIN BEARING Patent HEF

MISALIGNMENT
HIGH RESISTANCE TO WEAR, SEIZURE AND CORROSION
UNDER HIGH PRESSURE, ABRASIVE ENVIRONNEMENT AND SHOCKS
LOW MAINTENANCE

These spherical plain bearings have grease reservoirs between the inner and the outer ring of the bushing and between the inner ring and the pin which provide ideal lubrication of the bushing to ensure long useful life and increase the interval of lubrication.

The duplex surface treatment provides high surface hardness, good conformability and excellent resistance to wear and seizure.

The use of a spherical bushing is particularly recommended in case of :

- Errors of alignment or angular misalignment.
- Deformation of components in operation such as flexions of pins, ...
- Use of wide tolerance (no problem of coaxiality, parallelism, ...)

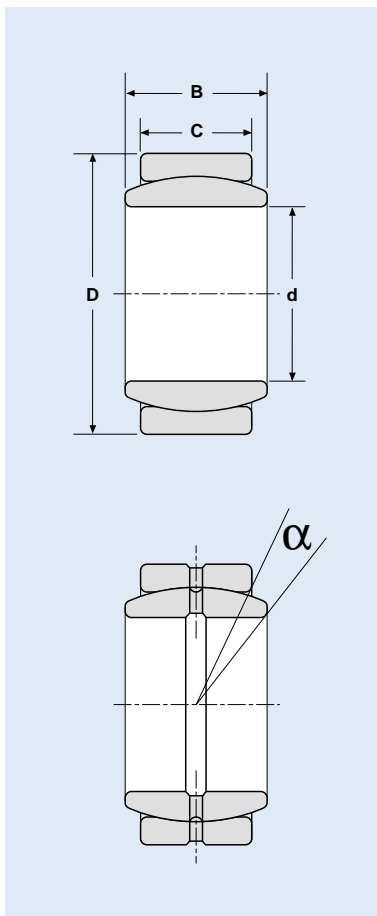
Applications :

- ▶ **Earth moving equipment**
 - Excavators
 - Articulated truck
 - ...
- ▶ **Handling equipments**
 - Handler
 - Travelling crane
 - ...
- ▶ **Carbage collection trucks**
 - Compression devices
 - ...
- ▶ **Agricultural equipment**
 - Tractors
 - Attachements
 - ...





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This solution is based on our experience in the field of tribology. Therefore, it should be tested and validated in your real working conditions before being adopted for permanent use.

Standard dimensions

| Main dimensions (mm) | | | | Tilt angle (°) | Load ratings (kN) | |
|----------------------|-----|----|----|----------------|----------------------------|----------------|
| d | D | B | C | α | C ₀ (static) | C (dynamic) |
| 20 | 35 | 16 | 12 | 9 | 38 | 220 |
| 30 | 47 | 22 | 18 | 6 | 74 | 430 |
| 40 | 62 | 28 | 22 | 7 | 115 | 700 |
| 50 | 75 | 35 | 28 | 6 | 180 | 1100 |
| 60 | 90 | 44 | 36 | 6 | 290 | 1700 |
| 70 | 105 | 49 | 40 | 6 | 360 | 2200 |
| 80 | 120 | 55 | 45 | 6 | 470 | 2800 |
| 90 | 130 | 60 | 50 | 5 | 575 | 3400 |
| 100 | 150 | 70 | 55 | 7 | 650 | 3800 |
| 110 | 160 | 70 | 55 | 6 | 720 | 4200 |
| 120 | 180 | 85 | 70 | 6 | 960 | 5300 |

Tolerances

Tolerances of the housing

| Housing | Applications |
|---------|--|
| H7 | Light load (possibility of axial displacement of the outer ring) |
| M7 | Heavy load |
| N7 | Light alloy housing |

Tolerances of the pin

| Pin | Applications |
|-------|--------------------------------|
| m6 | Pin fitted in the inner ring |
| h6/g6 | Sliding pin in the inner ring* |

*In this case, the pin must be hardened.

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