



# COD 11® & COD 11® BH BUSHING

## HIGH RESISTANCE TO OXIDATION, SEIZURE, WEAR IN SEVERE WORKING CONDITIONS AND WITH LOW MAINTENANCE

COD 11® bearings are manufactured from copper aluminium alloy with excellent resistance to oxidation, seizure and wear thanks to a hardened surface treatment and grease reservoirs on the contact area. With these bushings, the intervals of lubrication are considerably increased.

### Surface characteristics

The surface topography of the COD 11® bushings provides large grease reservoirs whose different forms are available : holes, cavities, cross hatching, while maintaining an optimum load distribution. The diffusion surface treatment provides high surface hardness and an excellent resistance to seizure and wear.

### COD 11® technology benefits

- Excellent resistance to wear and seizure. Long greasing intervals.
- Excellent performance in case of random lubrication.
- Excellent distribution of the lubricant on the friction area thanks to the surface topography

### Conditions of use

Dynamic pressure Max (MPa)	60
Max Speed (m/s)	0,2
Max temp of use (°C)	250 °C in regular greasing (up to 350 °C with initial greasing with special high temperature lubricant)
Lubrication	greased - only initial greasing in some applications

### Standard Tolerances

Housing	H 7
Bushings ID	H 9
Bushings OD	p 6
Shaft	f 7





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## Applications:

### ▶ Marine

- Bearings for harbour booms
- Propellers shaft bearings
- Hydraulic cylinder bearings

### ▶ Offshore

- Bearing for platform elevators

### ▶ Steel industry

- Screw and swivel for automatic adjustment of ingot mould sides
- Bushings of adjustment on rolling mills
- Joints of continuous casting chain
- Joints of sludge clarifier,
- Joints of hydraulic reversing machines
- Bushing blocks for overhead cranes
- Gasholder roller bushings
- Guiding slides for bloom charger
- Guiding slides for rolling mills

### ▶ Miscellaneous

- Cylinder bearings
- Guide bushings for piston pumps

## Mating shafts

For optimal performances of the joint, the surface roughness should be below to 0.8 µm Ra.

Under severe working conditions, shafts hardened  $\geq 55$  HRC or  $\geq 600$  Hv are recommended.

For optimal performances, special shafts are available from HEF DURFERRIT: COD ST, COD STC, COD OX, COD HT.

Shafts for marine applications : in sea water environment, we recommend COD EM shafts.

## Assembly instructions

COD 11® bushings are best assembled by press fitting or by nitrogen mounting. (Other assembly techniques can also be used). For further information please contact HEF DURFERRIT prior to use.

## Available basic forms

Different forms are available with COD 11® technology: bushings, flanged bushings, spherical plain bearings, sliding plates, washers, swivels.

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.



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