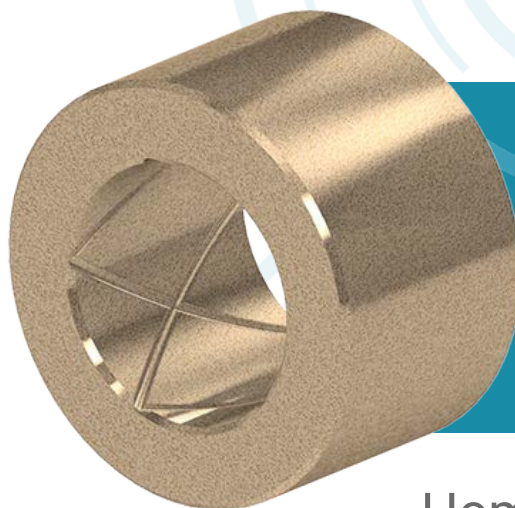
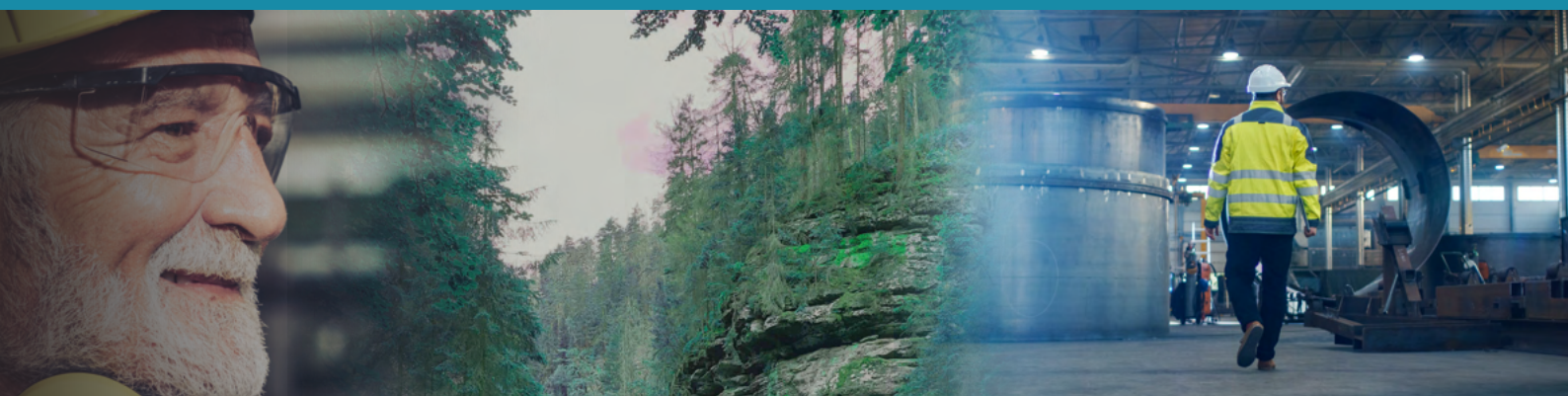


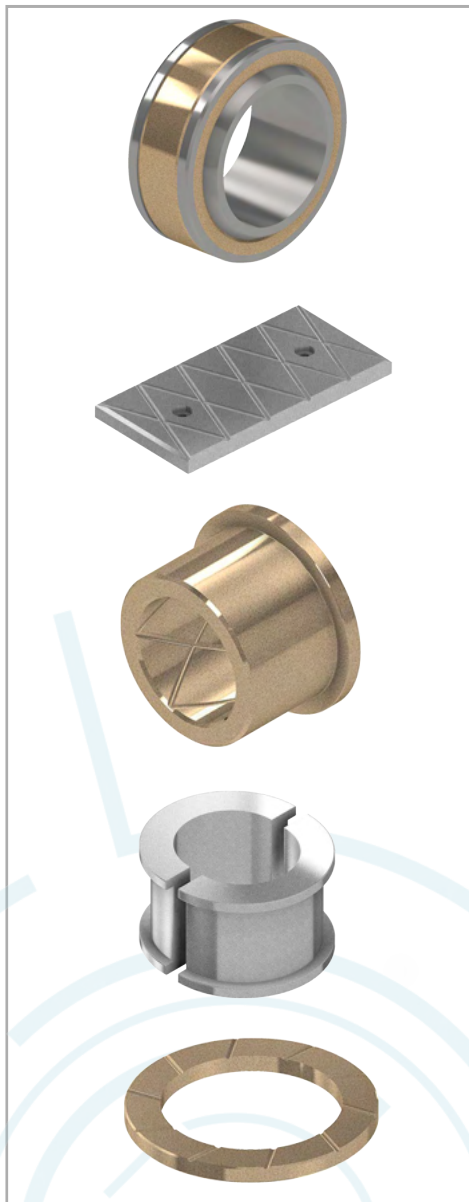


# **DATASHEET** HOWA-SMG



Homogenous Bearing  
Alloys made with  
Powder Metallurgy





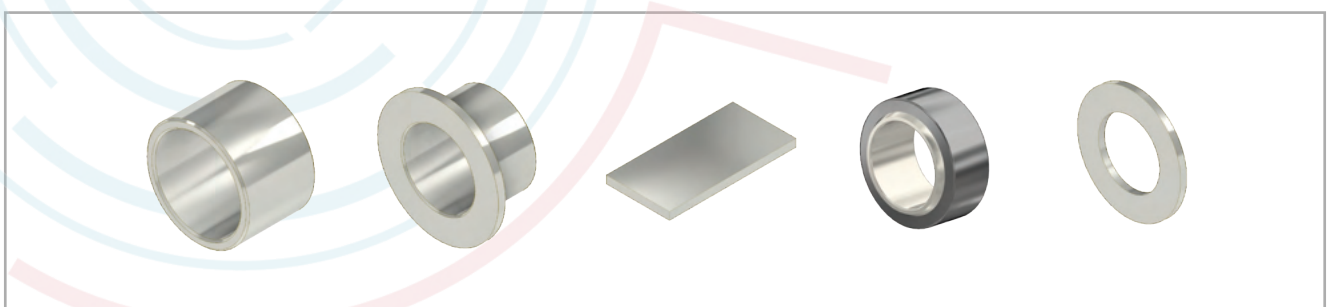
## FEATURES

- High-Strength Bearing made from Powder Metallurgy Process
- Self-Lubricating Metal Alloys with Dispersed Graphite and MoS<sub>2</sub> Lubricants
- Alloys with Resistance against Corrosion and High Temperatures (<650°C) are available

## TYPICAL INDUSTRIES

- Hydromechanical
- Civil Engineering
- Metallurgy
- Exhaust Systems
- Turbines (Gas & Hydro)
- Valves

## AVAILABLE GEOMETRIES



## BEARING PARAMETERS

| Material Grade | Compressive Strength | Load Capacity Static (max.) | Load Capacity Dynamic (max.) | Hardness | Coefficient of Friction |             | Max. Sliding Speed | PV Value | Temperature Strain |         | Counter Material Hardness (min.) | Base Metal Alloy |
|----------------|----------------------|-----------------------------|------------------------------|----------|-------------------------|-------------|--------------------|----------|--------------------|---------|----------------------------------|------------------|
|                |                      |                             |                              |          | dry                     | in water    |                    |          | min. °C            | max. °C |                                  |                  |
| SMG 520        | 250                  | 180                         | 90                           | 55       | 0.11 - 0.16             | 0.1 - 0.14  | 0.35               | 1.5      | -100               | 350     | 35                               | Bronze           |
| SMG 523        | 350                  | 230                         | 115                          | 85       | 0.12 - 0.18             | 0.11 - 0.17 | 0.35               | 1.5      | -100               | 350     | 45                               | Bronze           |
| SMG 524        | 400                  | 250                         | 130                          | 50       | 0.14 - 0.21             | 0.13 - 0.18 | 0.50               | 1.5      | -100               | 350     | 20                               | Bronze           |
| SMG 530        | 560                  | 155                         | 70                           | 80       | 0.25 - 0.45             | -           | 0.20               | 1.0      | 0                  | 650     | 45                               | Iron-Nickel      |
| SMG 533        | 400                  | 100                         | 50                           | 45       | 0.25 - 0.45             | -           | 0.20               | 0.8      | -200               | 200     | 45                               | Nickel           |
| SMG 535        | 380                  | 105                         | 55                           | 40       | 0.30 - 0.50             | -           | 0.20               | 0.8      | -200               | 450     | 45                               | Nickel-Copper    |

## MATING COMPONENTS

|              |                   |                                                                                               |
|--------------|-------------------|-----------------------------------------------------------------------------------------------|
| Housing Bore | Tolerance         | H7                                                                                            |
|              | Tolerance         | h7 (but others permitted due to flexibility during bearing machining)                         |
|              | Surface Roughness | Ra 0.2 - 0.8                                                                                  |
|              | Material          | Corrosive Environments: 1.4057, 1.4462<br>Normal Environments: 1.0503 (C45), 1.7225 (42CrMo4) |