

Sintered bearing with small internal diameter with outstanding velocity trait

Standard Product INDEX

OILES Cermet M Bushing **54B**

OILES Cermet M Flange bushing **54F**

OILES Cermet M Round Bar **54M**

OILES Cermet M Bushing material **54S**



Cermet M is a self-lub bearing consisting of a sintered alloy and solid lubricant, main component of which is molybdenum disulfide, uniformly dispersed across the alloy structure.

- Features**
- Applicable in self-lub state while further improved performance can be attained if lubricant oil is additionally used
 - Excellent wear resistance at locations where proper oil film is hard to be formed due to reciprocating, intermittent or oscillating motion
 - Available in standard products with various sizes and material for machining

| Service Range | | |
|--|-------------|----------------|
| Lub state | Self-lub | Periodical lub |
| Service temperature range | -40~+200 | -40~+150 |
| P max. N/mm ² { kgf/cm ² } | 10{ 102} | |
| V max. m/s{ m/min} | 0.85{ 51} | 1.65{ 99} |
| PV max. N/mm ² ·m/s{ kgf/cm ² ·m/min} | 1.65{ 1010} | 2.45{ 1500} |

| Mechanical Property | | | |
|---------------------------------|------------|---|------------------|
| Density | ----- | g/cm ³ | 6.7 |
| Radial crushing streng | JIS Z 2507 | N/mm ² { kgf/mm ² } | 137{ 14} |
| Hardness | JIS Z 2243 | ----- | HB40 (10/500) |
| Oil content | ----- | vol% | 3 |
| Coefficient of linear expansion | ----- | ×10 ⁻⁵ ℃ ⁻¹ | 1.9 |

* Values above are nominal values, not standard values

Test data

Journal rotating test

<Test conditions>

Mating material: S45C

Load: 1.96N/mm²{20kgf/cm²}

Velocity: 0.17m/s {10m/min}

Testing time: 100h

