

Product Data Sheet Advance Information



MDS.29.00

# MU-F51 SELF LUBRICATED SLIDING BEARINGS

Bronze Alloy





PTFE Modified
Supporting Shell
Duplex F51

#### **Sliding Layer**

Proprietary PTFE compound. Lead Free, complying with the European Parliament's "ELV" directive 2000/53/Ec

> Thickness 30 ÷ 90µm. Colour black/gray.

#### **Intermediate Layer**

Cu 90 - 93 % Max Al 7 - 10 % Max

Thickness 50 ÷ 150µm.

### **Supporting Shell**

C ≤0.03 % Mn ≤2.05 % Mo 2.50 - 3.50 % Ni 4.50 - 6.50 %

Si ≤1.00 % Cr 21.0 - 23.0 %

Characteristics Characteristics		
Working surface acceptable specific static pressure	Max 420 N/mm²	
Working surface acceptable specific dynamic pressure	Max 180 N/mm²	
Maximum sliding speed (dry)	2,50 m/s (500 fpm)	
Maximum sliding speed (oil)	10,00 m/s (2000 fpm)	
Working temperature	From -200°C to +280° C	
Friction factor Not affected by "stick – slip" effect	From 0.02 to 0.20	

#### **Performance**

MU-F51 bushing service life depend mainly from the load factor P x V (N/mm2  $\cdot$  m/s). Practical cases have shown that a working load factor of 2,50 to 3,60 (N/mm2  $\cdot$  m/s) is admissible for short periods. Long service life (dry) are suited with load factors ranging from 0,20 to 1,80 for continuous movements and 0,10 to 0,90 (N/mm2  $\cdot$  m/s) for alternate movements.

For the bushes the internal semi-surface, which is given by the result of the internal diameter multiplied by the length Di x L, must be considered.

We recommended to make previous test for new application / project.





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Friction		
Sliding Speed V (m/s)	Specific Load P (N/mm²)	Friction Factor
up to 0,001	180	0,02
from 0,001 to 0,005	from 179 to 62	from 0,04 to 0,07
from 0,005 to 0,05	from 61 to 11	from 0,07 to 0,10
from 0,05 to 0,50	from 10 to 1	from 0,10 to 0,15
from 0,50 to 2,50	<1	from 0,15 to 0,20

#### **Shaft**

For proper bushing performance we suggest having a shaft roughness of  $0.40\mu m$  Max.

#### Items

The MU-F51 can be supplied as many technical items, between them we indicate the followings:

- Trust Washers
- Plain Bearings according to ISO 3547 or according to customer's design drawing
- Plain Strips