

## Datasheet AE202MO



AS202MO is commonly used as a substitution material for bronze, aluminum and other non-ferro metals which needs a better sliding property and a slightly higher compressive strength. It has also an improved wear resistance and lower surface friction than AS202. Also, the moisture absorption is a bit lower.

## Application

Slide bearings with low coefficient of friction, sleeves, cams, gears, pinions, thrust washers, valve seats and bearings.

## Material

Polyamide with Molybdenum Disulphide.

## Availability

	Value	Unit
Rod diameters	6-100	mm
Tube inside diameter	10-240	mm
Tube outside diameter	25-310	mm
Length standard	3000	mm
Sheet thickness	1,5-6	mm
Sheet size	1000x2000	mm



## AE202MO - Specifications

### Physical properties

	Test standard	Value	Unit
Density		1,15	g/cm <sup>3</sup>
Thermal conductivity	Method A	0,37	W/m°K
Specific heat capacity	IEC 1006	1,7	J/g.K
Moisture absorption at 23°C, 50% RH	ISO 62	3	%
Water absorption at 23 °C	ISO 62	8	%
Flammability	UL 94	HB	[-]

### Mechanical properties

	Test standard	Value	Unit
Tensile strength	ISO 527	90	MPa
Hardness	ISO 868	80	SHORE-D
Yield stress	ISO 527	90	MPa
Elongation at break	ISO 527	27	%
Modulus of elasticity in tension	ISO 527	3600	MPa
Bending modulus	ISO 178	3400	MPa
Flexural strength	ISO 178	130	MPa
Charpy impact strength +23°C	ISO 179/1eU	no break	kJ/m <sup>2</sup>
Charpy notched impact strength +23°C	ISO/1eA	2,5	kJ/m <sup>2</sup>
Ball indentation hardness	ISO 2039-1	172	N/mm <sup>2</sup>
Compressive modulus	ISO 604	2400	MPa

### Thermal properties

	Test standard	Value	Unit
Min. working temperature		-40	°C
Max. working temperature		90	°C
Intermittent working temperature		160	°C
Heat distortion temperature	Method A ISO 75	100	°C
Melting temperature	ISO 3146	220	°C
Thermal coefficient of linear expansion	DIN 53752	9	1/K.10-5

### Friction properties

	Test standard	Value	Unit
--	---------------	-------	------

### Electrical properties

	Test standard	Value	Unit
Dielectric constant		on request	
Dielectric loss factor		on request	
Dielectric strength	IEC 243	25	KV/mm
Dielectric constant at 1MHZ		on request	

Electrical properties

Volume resistivity	IEC 93	$>10^{12}$	$\Omega\cdot\text{cm}$
Surface resistivity	IEC 93	$>10^{12}$	$\Omega$
Resistance to tracking (CTI)		on request	