

Datasheet ASRS80



ASRS80 bearing material is reinforced filament woven polymer material specially developed for extreme loads and has excellent high mechanical properties, even at high temperatures. It is the most robust synthetic bearing material available on the world market. The material is extremely tough and can withstand high radial and axial surface pressure. ASRS80 has good wear resistance and is suitable for use in dry, wet and lubricated conditions. ASRS80 has a medium coefficient of friction, is resistant to edge loading and hardly swells in water. ASEC Kunststoffen B.V. recommends providing the counter sides with a hardened surface to protect them against wear.

Application

Material

Synthetic fiber with polyimide resin with anti friction liner.

Availability

| | Value | Unit |
|-----------------------|------------|------|
| Tube inside diameter | on request | |
| Tube outside diameter | on request | |
| Length standard | on request | |
| Sheet thickness | on request | |
| Sheet size | on request | |
| Inside diameter | on request | |
| Outside diameter | on request | |
| Flange diameter | on request | |
| Flange height | on request | |
| Total length | on request | |

ASRS80 - Specifications

Physical properties

| | Test standard | Value | Unit |
|---------------------------|-----------------|-------|-------------------|
| Density | ISO 62-1 | 1,95 | g/cm ³ |
| Water absorption at 23 °C | ISO 62-1 | 25 | mg |
| Flammability | IEC 60695-11-10 | V-0 | [-] |

Mechanical properties

| | Test standard | Value | Unit |
|--|---------------|------------|-------------------|
| Compressive strength static | ISO 604 | 650 | MPa |
| Module of elasticity - Youngs modulus | ISO 178 | 25000 | MPa |
| Tensile strength | ISO 527 | 300 | MPa |
| Shear strength | | on request | |
| Impact strength | | on request | |
| Hardness | | on request | |
| Dynamic load capacity | | on request | |
| Izod impact strength, parallel with layers | ISO 180/2A | 55 | KJ/m ² |
| Shear strength parallel | ISO 60893-2 | 55 | Mpa |

Thermal properties

| | Test standard | Value | Unit |
|--|---------------|------------|------|
| Thermal expansion Parallel to laminate | | on request | |
| Thermal expansion Normal to laminate | | on request | |
| Min. working temperature | | on request | |
| Max. working temperature | | on request | |
| Intermittent working temperature | | on request | |
| Thermal endurance 20,000 h (T.I) | IEC 60216 | 200 | °C |

Friction properties

| | Test standard | Value | Unit |
|---------------------------------|---------------|------------|------|
| Coefficient of friction dynamic | | on request | |
| Max. sliding speed | | on request | |
| Max. Pv-load dry | | on request | |
| Max. Pv-load oil lubricated | | on request | |
| Max. Pv-load on regular greased | | on request | |

Electrical properties

| | Test standard | Value | Unit |
|------------------------------|---------------|-------|------|
| Resistance to tracking (CTI) | IEC 60112 | 250 | CTI |
| Permittivity 50Hz | IEC 60250 | 4 | [-] |
| Permittivity 1MHz | IEC 60250 | 0 | [-] |
| Dissipation factor 50Hz | IEC 60250 | 0,01 | [-] |

Electrical properties

| | | | |
|---|-----------|--------|-----|
| Dissipation factor 1 MHz | IEC 60250 | 0 | [-] |
| Insulation resistance after submersion in water | IEC 60167 | 500000 | MΩ |

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