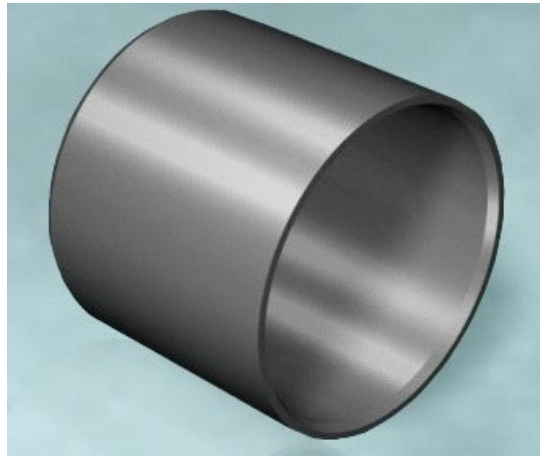


Datasheet AS TEMPG



ASEC AS TEMPG is a thermoplastic material with a wire of fibers mixed with solid lubricants. The product shows a good wear proofing feature, the solid lubricants reduces the friction factor and form, by micro abrasion, an excellent sliding surface with the counter-piece. There are several applications, ranging from office supplies, to medical equipment, pneumatic cylinders, hinges, rudder bars, etc. The TEMPG series includes cylindrical and flanged bearings as well as washers, and special parts are available on demand.

Characteristics:

- Dry self-lubrications
- Low friction factor, either static or dynamic
- Minimized wear and excellent service life
- Good chemical strength
- Ideal for rotary, swinging or linear movements
- Good abrasion resistance
- Easy to assembly
- Wide range of standard items available

Material	
Material	Thermoplastic with solid lubricants and technical fibers

Availability	Unit	Value
Minimum inside diameter (ID)	mm	8 (recommend shaft h9-h7)
Maximum outside diameter (OD)	mm	Standard 110 mm or on request
Length standard	mm	On request
Physical Properties	Test Standard	Unit Value
Density	ASTM D792	g/cm ³ 1.44
Max. swell in water at 20 °C	ISO-62	% 0.1

Mechanical Properties	Test Standard	Unit	Value
Compressive strength static	ASTM D695	MPa	70
Maximum load dynamic	ASTM D695	MPa	40
Module of elasticity	ASTM D695	MPa	2800
Tensile strength	ASTM D3410	MPa	140
Impact strength (unnotched)	ASTM D256	kJ/m ²	74

Thermal Properties	Test Standard	Unit	Value
Thermal expansion	ASTM D696	*10 ⁻⁵ /°C	1,4
Thermal conductivity	ASTM D696	W/M*K	0,26
Min. working temperature		°C	-50
Max. working temperature		°C	100
Intermittent working temperature		°C	130

Friction Properties	Test Standard	Unit	Value
Coefficient of friction dynamic dry	Pin-on-ring	Dry against steel	0.08-0,15
Coefficient of friction dynamic lubricated	Pin-on-ring	Lubricated	0,03-0,10
Maximum sliding speed rotating	Pin-on-ring	m/s	1
Maximum sliding speed linear	Pin-on-ring	m/s	3
Load at speed	Pin-on-ring	MPa*m/s	40MPa*0,01m/s
Load at speed	Pin-on-ring	MPa*m/s	4MPa*0,1m/s
Maximum P-v load dry	Pin-on-ring	MPa*m/s	0,4
Wear (at 3MPa and 0,1m/s)	Pin-on-ring	µm/km	8