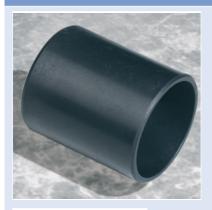


an EnPro Industries company

EP73™ Bearing Material



Characteristics

- Injection moulded polyamidimid based and modified bearing material
- · Irreversible cross-linked by thermal treatment
- High temperature material with low thermal expansion for demanding components
- High viscosity and mechanical strength
- Good chemical resistance
- High wear resistance in oscillating movements
- Colour: black

Applications

General

Generally applicable within the limits of the material properties

Automotive

Automatic gears, pumps, sealing in turbo compressors, piston rings, valve seats, sealings

Industrial

Continuous furnaces, drying furnaces for coating, textile machines and many more

Other

Aerospace: Weight saving by replacement of aluminium or metal alloys, while providing superior stability and viscosity.

Applicable in extreme high and low temperatures e.g. turbojet engine compressor blade

Composition & Structure	Operating Conditions		Availability	
Injection moulded thermoplastic dry bearing material PAI + Graphite + PTFE	dry	good	Ex Stock N/A To order	
	oiled	good		
	greased	good		
	water	fair	Bushes, special dimensions and shapes	
	process fluid	good after resistance testing		

Microsection	Bearing Properties	Unit	Value	
Injection moulded thermoplastic dry bearing material with additives homogeneously mixed in	Dry			
	Maximum sliding speed v	m/s	2.5	
	Maximum pv factor The pv Limit is depending on the heat dissipating surface to contact area ratio 1) $A_H/A_C = 5$ 2) $A_H/A_C = 10$ 3) $A_H/A_C = 20$	MPa x m/s	1) 0.10 2) 0.39 3) 1.57	
	Coefficient of friction f	-	0.19-0.31	
	Grease lubrication			
	Maximum sliding speed v	m/s	5.0	
	Maximum pv factor	MPa x m/s	-	
	Coefficient of friction f	-	-	
	General			
	Maximum temperature T _{max}	°C	+260	
	Minimum temperature T _{min}	°C	-200	
	Maximum load p static	MPa	105	
	Shaft surface finish R _a	μm	0.5±0.3	
	Shaft hardness	HV	>200	