DP31™ Bearing Material

GGB BEARING TECHNOLOGY

an EnPro Industries company

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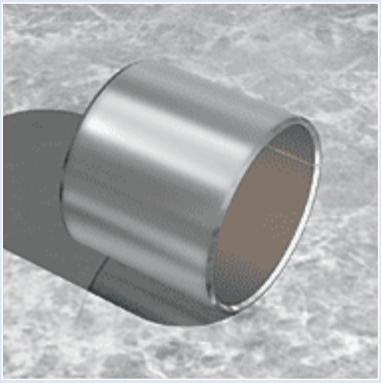
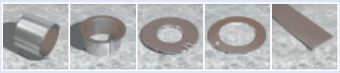




Characteristics

- Compliant with the European Union's End of Life Vehicles (ELV) directive 2000/53/EC on the elimination of hazardous materials in the construction of passenger cars and light trucks
- Compliant with the European Union directive 2002/95/EC concerning the restriction of the use of certain hazardous substances in electrical and electronic equipment (the RoHS Regulations)

Lubricated conditions

- Excellent wear resistance and low friction performance in lubricated hydraulic applications
- Excellent chemical resistance
- Excellent cavitation and flow erosion resistance
- Good fatigue strength

Applications

Automotive

Air conditioning compressors, gearbox and transmissions, heavy duty struts and shock absorbers, high performance pumps: axial piston, radial piston, gear, vane, etc.

Industrial

Compressors: scroll and reciprocating; pneumatic and hydraulic cylinders, high performance pumps axial piston, radial piston, gear, vane, etc.

Composition & Structure

Metal-polymer composite material

Steel + porous bronze sinter + PTFE + fluoropolymer + fillers

Operating Conditions

dry	fair
oiled	very good
greased	fair
water	fair
process fluid	good

Availability

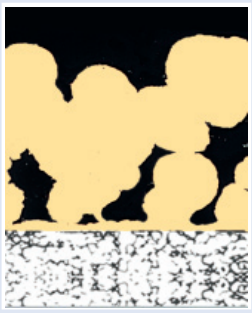
Ex Stock

- N/A

To order

- Cylindrical bushes, flanged bushes, thrust washers, flanged washers, strip, non-standard parts

Microsection



Sliding layer PTFE + fluoro-polymer + fillers

Porous bronze sinter

Steel backing

Bearing Properties

Bearing Properties	Unit	Value
Dry		
Maximum sliding speed v	m/s	-
Maximum pv factor	MPa x m/s	-
Coefficient of friction f	–	-
Oil lubrication		
Maximum sliding speed v	m/s	10.0
Maximum pv factor	MPa x m/s	10.0
Coefficient of friction f	–	0.01-0.05
General		
Maximum temperature T_{max}	°C	+280
Minimum temperature T_{min}	°C	-200
Maximum load p static	MPa	250
Maximum load p dynamic	MPa	140
Shaft surface finish R_a *	µm	≤0.05 - ≤0.4*
Shaft hardness	HB	>200

* depending on operating conditions