

DP31 – low maintenance bearing material

1. Structure

PTFE with Ca₂F, fluoropolymer and fillers (without Pb) on sinter bronze with steel backing.

2. Characteristics

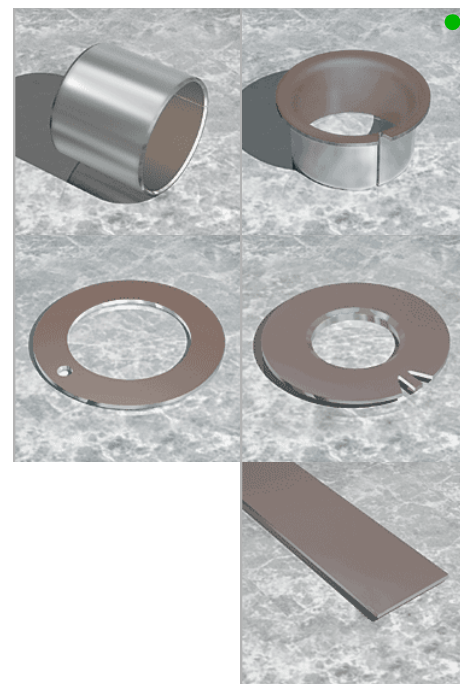
- designed for oil lubrication bearing material with good wear and friction performance over a wide range of loads, speeds, and temperature conditions,
- lead-free, complying with the European Parliament's End of Life Vehicles directive (ref. no 2000/53/EC) on the elimination of hazardous materials in construction of passenger cars and light trucks,
- excellent erosion and chemical resistance,
- good fatigue resistance.

3. Applications

- industrial: injection pumps and gear pumps, hydraulic motors, etc.
- automotive: pumps, motors, shock absorbers, struts and valves, etc.

4. Availability

- to order: cylindrical bushes, flanged bushes, thrust washers, flanged washers, strips and non standard parts.



5. Technical data

Parameter		Unit	Value
Maximum load	static	MPa	250
	dynamic		140
Maximum sliding speed	oil lubricated	m/s	10
Maximum p x v factor	oil lubricated	MPa x m/s	10
Work temperature	maximum	°C	+240
	minimum		-200
Coefficient of friction	oil lubricated	-	0,01 – 0,05
Surface Ra finish	shaft	µm	0,2 – 0,8
	housing		1,8 – 3,2
Fitting	shaft	<Ø5 mm	h6
		Ø5 – Ø75 mm	f7
		Ø80 mm	h8
	housing	<Ø5 mm	H6
≥Ø5 mm		H7	
Shaft hardness		HB	>200

6. Working conditions

dry	fair
oil lubricated	very good
grease lubricated	fair
water lubricated	fair
process fluid lubricated	fair

7. Assembly tips

Assemble with stepped shaft in housings with insertion chamfer. Before assembly moisten housing or bush with oil. Fixture: no additional fixture is necessary after press fitting in, however gluing is permissible in special applications or with reciprocating motion.

Caution: Do not use any lubricants containing MoS₂, graphite or any other solid ingredients (can result with increased wear due to higher friction).