fpm inbear ul. Inżynierska 39/1 PL-81-512 Gdynia

tel./fax +48 58 620 45 71 tel./fax +48 58 620 79 30

> inbear@inbear.pl www.inbear.pl

DS – low maintenance bearing material

1. Structure

Acetal with filler on sinter bronze with steel backing.

2. Characteristics

- marginally lubricated and dry bearing material developed for oscillating conditions,
- DS does not cause fretting corrosion damage to the shaft under low amplitude oscillating movements,
- performance similar to DX but with lower friction,
- lubrication indentations are constant dispensers of lubricant.

3. Applications

- industrial: mechanical handling and lifting equipment, machine slides, hydraulic cylinders, hydraulic motors, ski-lifts, pneumatic equipment, medical equipment, textile machinery, agricultural equipment, scientific equipment, etc,
- automotive: steering gear, power steering, pedal bushes, seat slides, king-pin bushes, tailgate pivots, brake caliper bushes, etc.

4. Availability

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

5. Technical data

Parameter			Unit	Value
Maximum load	static		MPa	110
Maximum load	dynamic			45
Maximum sliding speed	dry		m/s	1,5
	oil lubricated			10,0
	grease lubricated			2,5
Maximum p x v factor	dry		MPa x m/s	1,4
	oil lubricated			10,0
	grease lubricated			2,8
Work temperature	maximum		°C	+130
	minimum			-60
Coefficient of friction	dry		-	0,15 - 0,30
	oil lubricated			0,03 - 0,08
	grease lubricated			0,05 - 0,10
Surface Ra finish	shaft		μm	0,2 - 0,8
	housing			1,8 - 3,2
Fitting	shaft	<Ø4 mm	-	h6
		Ø5 – Ø75 mm		f7
		Ø80 mm		h6
	housing	<∅5,5 mm		H6
		>∅5,5 mm		H7
Shaft hardness	standard		НВ	>200
Share hardiness	for longer service life			>350

6. Working conditions

dry	good	
oil lubricated	good	
grease lubricated	good	
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 MoS_2 , graphite or any other solid ingredients (can result with increased wear due to higher friction).

After-machining is permissible.

