

## 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
	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	<Ø5,5 mm	H6
		>Ø5,5 mm	H7
Shaft hardness	standard	HB	>200
	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<sub>2</sub>, graphite or any other solid ingredients (can result with increased wear due to higher friction).

After-machining is permissible.

