

deva.metal – self lubricating bearing material

1. Structure

Bronze or tin bronze or iron or nickel composite with even distributed solid lubricant (graphite or PTFE).

2. Features

- self lubricating bearing material suitable for heavy working conditions,
- performs well under heavy loads,
- 800°C maximum working temperature,
- meets optimal working conditions in slow motion intermittent operation,
- high corrosion resistance,
- designed for particular working conditions,
- available also as semi finished products or blank material.

3. Applications

- ironworks, steelworks, turbines, food industry, mining equipment, ships, sewage treatment plants, pumps, compressors, packaging machines, etc.

4. Availability

- to order: cylindrical bushes, plates and special designs.

5. Technical data

Parameter		Unit	Value			
			bronze composites	iron composites	nickel composites	
Maximum load	static	MPa	230	150	100	
	dynamic		115	70	50	
Maximum sliding speed	dry	m/s	0,4	0,2	0,2	
Maximum p x v factor	dry	MPa x m/s	1,5	1,0	0,8	
Working temperature	maximum	°C	+350	+600	+450	
	minimum		-100	-200	-200	
Coefficient of friction	dry	-	0,11	0,25 – 0,43	0,3 – 0,45	
Surface Ra finish	shaft	µm	0,2 – 0,8			
	housing		3,2			
Fitting	shaft	-	d7			
	housing		H7			
	bush		outer	s6/s5		
			inner	C7 (after assembly D8)		
Shaft hardness		HB	180			
		HRC	35			

6. Working conditions

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

7. Assembly tips

The recommended method for installing bushes is supercooling (bronze alloys only) or press-fit. Additional lubrication improves bearing properties and bearing life.

