

## HX – low maintenance bearing material

### 1. Structure

PTFE and PEEK with fillers, with or without indentations, on sinter bronze with steel backing.

### 2. Characteristics

- Marginally lubricated bearing material with good wear resistance under thin film conditions,
- suitable for use with low viscosity fluids,
- suitable for use at higher temperatures,
- bearing polymer lining has good chemical resistance,
- good fatigue and chemical resistance of sliding layer,
- peak high loads permitted also in dry conditions, but constant dry work decreases bearing efficiency and increases wear,
- suitable for temperatures up to 250 °C,
- lubrication indentations are constant dispensers of lubricant.

### 3. Applications

- industrial: hydraulic motors and pumps, agricultural equipment, wind energy equipment, yaw and teeter bearings, etc.
- automotive: Diesel fuel pumps, gear pumps, etc.

### 4. Availability

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

### 5. Technical data

Parameter		Unit	Value
Maximum load	static	MPa	140
	dynamic		100
Maximum sliding speed	grease lubricated	m/s	2,5
	oil lubricated		10,0
Maximum p x v factor	grease lubricated	MPa x m/s	2,8
Work temperature	maximum	°C	+250
	minimum		-150
Coefficient of friction	grease lubricated	-	0,08 – 0,12
	oil lubricated		0,03 – 0,08
Surface Ra finish	shaft	µm	0,2 – 0,8
	housing		1,8 – 3,2
Fitting	shaft	-	h8
	housing		H7
Shaft hardness	standard	HB	>200
	for longer service life		>350

### 6. Working conditions

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

### 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).

