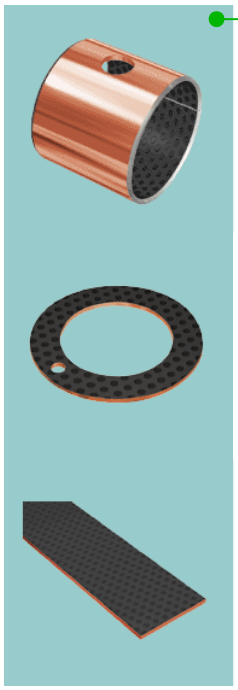
fpm inbear
ul. Inżynierska 39/1
PL-81-512 Gdynia
tel./fax +48 58 620 45 71
tel./fax +48 58 620 79 30
inbear@inbear.pl
www.inbear.pl



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_2, graphite or any other solid ingredients (can result with increased wear due to higher friction).