

SY



Bimetal Plain Bearings to Standard SAE 792

CHARACTERISTICS

- Bimetal bearing with steel backing and bronze overlay
- Particularly suitable for high specific loads with oscillating motion and low frequency
- Applicable in rough operation conditions
- High load capacity, very good resistance to fatigue strength at higher temperatures

AVAILABILITY

Bearing forms available in standard dimensions

-  Cylindrical bushes
-  Thrust washers

Bearing forms made to order: cylindrical bushes and thrust washers with non-standard dimensions, sliding plates, customized bearing designs



APPLICATIONS

Industrial: Mechanical handling and lifting equipment, hydraulic cylinders, agricultural equipment, off highway equipment etc.

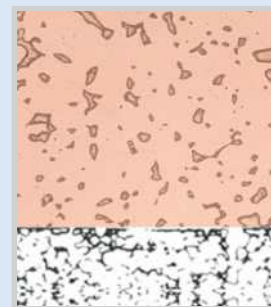


SY Technical Data

Bearing Properties		Imperial Units	Imperial Value	Metric Units	Metric Value
General					
Maximum load, p	Static	psi	44 000	N/mm ²	300
	Dynamic	psi	20 000	N/mm ²	140
Operating temperature	Min	°F	- 40	°C	- 40
	Max greased	°F	300	°C	150
	Max oil lubricated	°F	480	°C	250
Oil Lubricated					
Maximum sliding speed, U		fpm	500	m/s	2.5
Maximum pU factor		psi x fpm	80 000	N/mm ² x m/s	2.8
Coefficient of friction	Greased		0.5 - 0.12		0.05 - 0.12
	Oiled		0.4 - 0.12		0.04 - 0.12
Recommendations					
Shaft surface roughness, Ra	Normal	µin	≤ 32	µm	≤ 0.8
Shaft surface hardness	Normal	HB	>200	HB	>200
	For longer service life	HB	>350	HB	>350

Operating Performance	
Dry	Poor
Oil lubricated	Good
Grease lubricated	Very Good
Water lubricated	Poor
Process fluid lubricated	Poor

Microsection



Sliding layer with
lubrication indents
CuPb10Sn10 with
composition approx.:
Cu 80%
Pb 10%
Sn 10%

Steel Backing