

# ULTRAPRECISION SINTERED BRONZE BEARINGS

# SDP/SI

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SELF-LUBRICATING  
OIL-IMPREGNATED  
PLAIN



0 10

**S** Precision Component

**> MATERIAL:**  
Porous Sintered Bronze

**> LUBRICATION:**  
Vacuum-Impregnated with Oil.

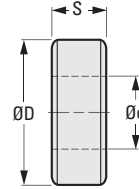
**> FEATURES:**  
Economical replacement for ball bearings.  
Dimensioned to be readily interchangeable  
with comparable ball bearings.



**> SPECIFICATIONS:**  
O.D. concentric to Bore within 0.005 mm.  
Faces square to Bore within 0.008 mm.

d Tolerance:  
3 mm +0.01/0  
4, 5 & 6 mm +0.012/0  
8 & 10 mm +0.015/0  
12 mm +0.018/0

Shaft & D Tolerance:  
3 mm 0/-0.006  
4, 5 & 6 mm 0/-0.008  
8 & 10 mm 0/-0.009  
12, 13 & 16 mm 0/-0.011  
19 & 20 mm 0/-0.013



Other bores / O.D.'s available as special order.

$$\text{Load} = \frac{\text{Load Speed Rating}}{\text{rpm}} = \text{Newtons}$$

## METRIC COMPONENT

Catalog Number	Shaft Size h6	d Bore H7	D Dia. h6	S Width 0 -0.17	Load Speed Rating N • rpm
S99BP3MPB030625	3	3	6	2.5	84000
S99BP3MPB030830	3	3	8	3	100000
S99BP3MPB031040	3	3	10	4	134000
S99BP3MPB040840	4	4	8	4	134000
S99BP3MPB051050	5	5	10	5	167000
S99BP3MPB051240	5	5	12	4	134000
S99BP3MPB051350	5	5	13	5	167000
S99BP3MPB061050	6	6	10	5	167000
S99BP3MPB061650	6	6	16	5	167000
S99BP3MPB081660	8	8	16	6	200000
S99BP3MPB101970	10	10	19	7	220000
S99BP3MPB122080	12	12	20	8	220000

SELF-LUBRICATING  
OIL-IMPREGNATED  
FLANGED

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**> MATERIAL:**

Porous Sintered Bronze

**> LUBRICATION:**

Vacuum-Impregnated with Oil.

**> FEATURES:**

Economical replacement for ball bearings.  
Dimensioned to be readily interchangeable  
with comparable ball bearings.



**> SPECIFICATIONS:**

O.D. concentric to Bore within 0.005 mm.  
Faces square to Bore within 0.008 mm.

d Tolerance:

- 3 mm +0.01/0
- 4, 5 & 6 mm +0.012/0
- 8 & 10 mm +0.015/0
- 12 mm +0.018/0

Shaft & D Tolerance:

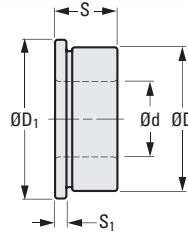
- 3 mm 0/-0.006
- 4, 5 & 6 mm 0/-0.008
- 8 & 10 mm 0/-0.009
- 12, 13 & 16 mm 0/-0.011
- 19 & 20 mm 0/-0.013

D<sub>1</sub> Tolerance:

- 8 mm 0/-0.36
- 10, 12, 14 & 18 mm 0/-0.43
- 21 & 22 mm 0/-0.52

Other bores / O.D.'s available as special order.

$$\text{Load} = \frac{\text{Load Speed Rating}}{\text{rpm}} = \text{Newtons}$$



**METRIC COMPONENT**

Catalog Number	Shaft Size h6	d Bore H7	D Dia. h6	S Width 0 -0.17	D <sub>1</sub> Flange Dia. h14	S <sub>1</sub> Flange Width 0 -0.05	Load Speed Rating N • rpm
S99BP4MFB030625	3	3	6	2.5	8	0.5	84000
S99BP4MFB030830	3	3	8	3	10	0.5	100000
S99BP4MFB031040	3	3	10	4	12	1	134000
S99BP4MFB040840	4	4	8	4	10	1	134000
S99BP4MFB051050	5	5	10	5	12	1	167000
S99BP4MFB051240	5	5	12	4	14	1	134000
S99BP4MFB051350	5	5	13	5	14	1	167000
S99BP4MFB061050	6	6	10	5	12	1	167000
S99BP4MFB061650	6	6	16	5	18	1	167000
S99BP4MFB081660	8	8	16	6	18	1	200000
S99BP4MFB101970	10	10	19	7	21	1.5	220000
S99BP4MFB122080	12	12	20	8	22	1.5	220000



SELF-LUBRICATING  
STANDARD SERIES

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**> MATERIAL:**

Oil-Impregnated Bronze,  
Self-Lubricating

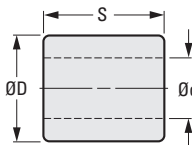
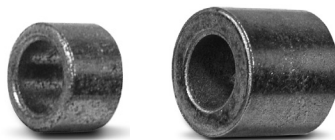
**> SPECIFICATIONS:**

d Tolerance:

- 2, 2.5 & 3 mm +0.024/+0.014
- 4, 5 & 6 mm +0.032/+0.020
- 7, 8, 9 & 10 mm +0.040/+0.025
- 12 mm +0.050/+0.032

D Tolerance:

- 4, 5 & 6 mm +0.027/+0.015
- 8 & 10 mm +0.034/+0.019
- 12, 14, 16, & 18 mm +0.041/+0.023



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**METRIC COMPONENT**

Catalog Number	d Bore E7	D Dia. r7	S Width 0 -0.20
A 7B 4MP020403	2	4	3
A 7B 4MP020404			4
A 7B 4MP020503			3
A 7B 4MP030503	3	5	4
A 7B 4MP030504			6
A 7B 4MP030506			4
A 7B 4MP040804	4	8	6
A 7B 4MP040806			8
A 7B 4MP040808			5
A 7B 4MP050805	5	10	8
A 7B 4MP050808			4
A 7B 4MP061004			6
A 7B 4MP061006	6	12	10
A 7B 4MP061010			8
A 7B 4MP061208			12
A 7B 4MP061212	7	10	8
A 7B 4MP071008			10
A 7B 4MP071010			10

Catalog Number	d Bore E7	D Dia. r7	S Width 0 -0.20
A 7B 4MP081206	8	12	6
A 7B 4MP081208			8
A 7B 4MP081212			12
A 7B 4MP081408	10	14	8
A 7B 4MP081412			12
A 7B 4MP081416			16
A 7B 4MP101410	12	16	10
A 7B 4MP101416			16
A 7B 4MP101610			10
A 7B 4MP101616	14	18	16
A 7B 4MP101620			20
A 7B 4MP121612			12
A 7B 4MP121620	16	20	20
A 7B 4MP121812			12
A 7B 4MP121816			16
A 7B 4MP121825	12	25	

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STANDARD SERIES

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**> MATERIAL:**

Oil-Impregnated Bronze,  
Self-Lubricating

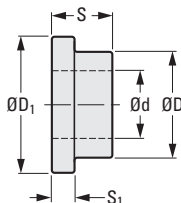
**> SPECIFICATIONS:**

d Tolerance:

- 1, 2, 2.5 & 3 mm +0.024/+0.014
- 4, 5 & 6 mm +0.032/+0.020
- 7, 8, & 10 mm +0.040/+0.025
- 12 mm +0.050/+0.032

D Tolerance:

- 3 mm +0.020/+0.010
- 4, 5 & 6 mm +0.027/+0.015
- 8 & 10 mm +0.034/+0.019
- 12, 16, & 18 mm +0.041/+0.023



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**METRIC COMPONENT**

Catalog Number	d Bore E7	D Dia. r7	S Width 0 -0.20	D <sub>1</sub> Flange Dia. ± 0.12	S <sub>1</sub> Flange Width 0 -0.20
A 7B 4MF010302	1	3	2	5	1
A 7B 4MF020404	2	4	4	6	1.5
A 7B 4MFH20603	2.5	6	3	9	
A 7B 4MF030504	3	5	4	8	
A 7B 4MF030604		6		9	
A 7B 4MF040806	4	8	6	10	2
A 7B 4MF050806	5			10	
A 7B 4MF051006	6	10	4	14	
A 7B 4MF061004		12	6		
A 7B 4MF061206		7	12	8	16
A 7B 4MF071208	8				
A 7B 4MF081208	10	16	10	20	3
A 7B 4MF101610	12	18	12	22	
A 7B 4MF121810					
A 7B 4MF121812					

MACHINED  
SELF-LUBRICATING

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**> MATERIAL:**

Ertalyte TX Polyester

**> COLOR:**

Gray

**> OPERATING TEMPERATURE:**

0°C to +99°C

**> FEATURES:**

Extremely low wear rate.  
High performance rating (PV) among sleeve bearing materials.  
Bearing O.D.'s compatible with standard sintered bronze sizes for upgrading existing equipment.  
Dynamic coefficient of friction varies, dependent upon customer's loads.  
Extremely low coefficient of friction.  
Inexpensive.

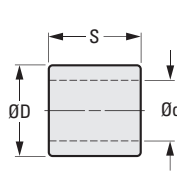


Fig. 1

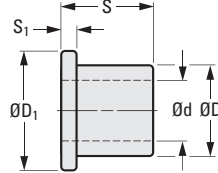


Fig. 2

For additional information on this material, see page 5-5.

## METRIC COMPONENT

Catalog Number	d Bore +0.04 0	D Dia. +0.05 0	S Length ± 0.13	D <sub>1</sub> Flange Dia. ± 0.13	S <sub>1</sub> Flange Width ± 0.08
<b>Fig. 1 Plain Bearings</b>					
A 7P 6MP0304E	3.06	6.05	4	—	—
A 7P 6MP0306E	3.06	6.05	6	—	—
A 7P 6MP0404E	4.06	8.06	4	—	—
A 7P 6MP0406E	4.06	8.06	6	—	—
A 7P 6MP0506E	5.06	10.05	6	—	—
A 7P 6MP0508E	5.06	10.05	8	—	—
A 7P 6MP0510E	5.06	10.05	10	—	—
A 7P 6MP0608E	6.07	10.05	8	—	—
A 7P 6MP0612E	6.07	10.05	12	—	—
A 7P 6MP0808E	8.08	12.07	8	—	—
A 7P 6MP0812E	8.08	12.07	12	—	—
A 7P 6MP1012E	10.1	16.07	12	—	—
A 7P 6MP1016E	10.1	16.07	16	—	—
<b>Fig. 2 Flanged Bearings</b>					
A 7P 6MF0404E	4.06	8.06	4	10	2
A 7P 6MF0406E	4.06	8.06	6	10	2
A 7P 6MF0508E	5.06	10.05	8	12	2
A 7P 6MF0510E	5.06	10.05	10	12	2
A 7P 6MF0608E	6.07	10.05	8	14	2
A 7P 6MF0612E	6.07	10.05	12	14	2
A 7P 6MF0808E	8.08	12.07	8	15.8	2
A 7P 6MF0812E	8.08	12.07	12	15.8	2
A 7P 6MF1012E	10.1	16.07	12	20	3
A 7P 6MF1016E	10.1	16.07	16	20	3

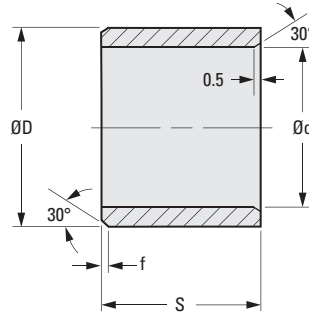
MAINTENANCE-FREE  
HIGH WEAR RESISTANCE  
ABOVE AVERAGE LOADS  
DRY RUNNING



➤ **MATERIAL:**  
G300® Polymer

➤ **OPERATING TEMPERATURE:**  
-40°C to +130°C

For additional information concerning the bearing material, see page 5-38.



**METRIC COMPONENT**

Catalog Number	d Bore	d Tolerance	D Dia.	S h13	I.D. After Pressfit	
					Max.	Min.
S99GGPM020403	2	+0.054/+0.014	3.5	3	2.054	2.014
S99GGPM030506	3	+0.054/+0.014	4.5	6	3.054	3.014
S99GGPM040604	4	+0.068/+0.020	5.5	4	4.068	4.020
S99GGPM050708	5	+0.068/+0.020	7	8	5.068	5.020
S99GGPM060808	6	+0.068/+0.020	8	8	6.068	6.020
S99GGPM081012	8	+0.083/+0.025	10	12	8.083	8.025
S99GGPM101212	10	+0.083/+0.025	12	12	10.083	10.025
S99GGPM121414	12	+0.102/+0.032	14	14	12.102	12.032
S99GGPM161820	16	+0.102/+0.032	18	20	16.102	16.032
S99GGPM202222	20	+0.124/+0.040	22	22	20.124	20.040

Catalog Number (Ref.)	Housing Bore		Shaft Size		f
	Max.	Min.	Max.	Min.	
S99GGPM020403	3.508	3.500	2.000	1.975	0.3
S99GGPM030506	4.512	4.500	3.000	2.975	0.3
S99GGPM040604	5.512	5.500	4.000	3.970	0.3
S99GGPM050708	7.015	7.000	5.000	4.970	0.3
S99GGPM060808	8.015	8.000	6.000	5.970	0.3
S99GGPM081012	10.015	10.000	8.000	7.964	0.5
S99GGPM101212	12.018	12.000	10.000	9.964	0.5
S99GGPM121414	14.018	14.000	12.000	11.957	0.5
S99GGPM161820	18.018	18.000	16.000	15.957	0.8
S99GGPM202222	22.021	22.000	20.000	19.948	0.8

MAINTENANCE-FREE  
HIGH WEAR RESISTANCE  
ABOVE AVERAGE LOADS  
DRY-RUNNING

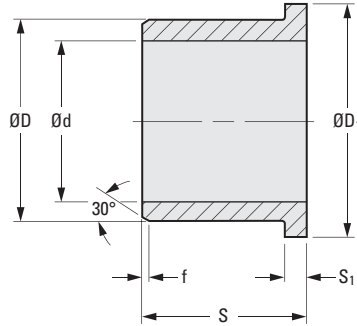
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➤ **MATERIAL:**  
G300® Polymer

➤ **OPERATING TEMPERATURE:**  
-40°C to +130°C

For additional information concerning the bearing material, see page 5-38.

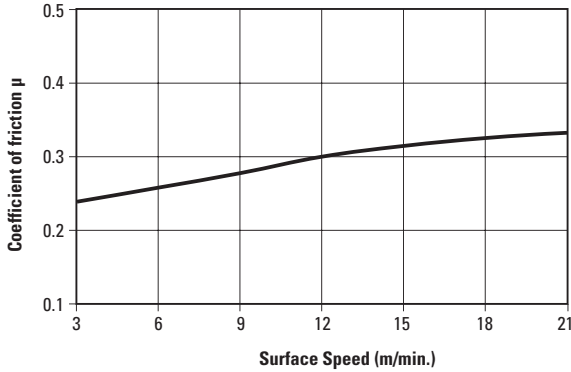


**METRIC COMPONENT**

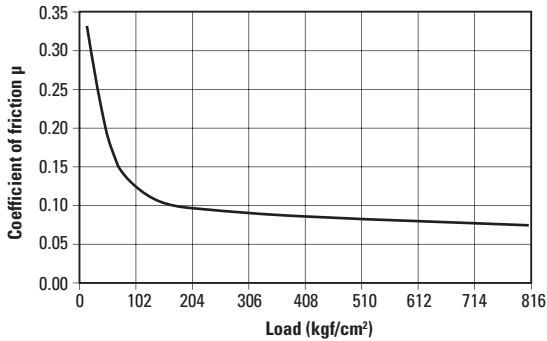
Catalog Number	d Bore	d Tolerance	D Dia.	D <sub>1</sub> Dia. d13	S h13	S <sub>1</sub> 0 -0.14	I.D. After Pressfit	
							Max.	Min.
S99GGFM030503	3	+0.054/+0.014	4.5	7.5	3	0.75	3.054	3.014
S99GGFM040604	4	+0.068/+0.020	5.5	9.5	4	0.75	4.068	4.020
S99GGFM050605	5	+0.040/+0.010	6	10	5	0.5	5.040	5.010
S99GGFM060808	6	+0.068/+0.020	8	12	8	1	6.068	6.020
S99GGFM081010	8	+0.083/+0.025	10	15	10	1	8.083	8.025
S99GGFM101212	10	+0.083/+0.025	12	18	12	1	10.098	10.040
S99GGFM121415	12	+0.102/+0.032	14	20	15	1	12.102	12.032
S99GGFM161817	16	+0.102/+0.032	18	24	17	1	16.102	16.032
S99GGFM202120	20	+0.072/+0.020	21	25	20	0.5	20.072	20.020

Catalog Number (Ref.)	Housing Bore		Shaft Size		f
	Max.	Min.	Max.	Min.	
S99GGFM030503	4.512	4.500	3.000	2.975	0.3
S99GGFM040604	5.512	5.500	4.000	3.970	0.3
S99GGFM050605	6.012	6.000	5.000	4.970	0.3
S99GGFM060808	8.015	8.000	6.000	5.970	0.3
S99GGFM081010	10.015	10.000	8.000	7.964	0.5
S99GGFM101212	12.018	12.000	10.000	9.964	0.5
S99GGFM121415	14.018	14.000	12.000	11.957	0.5
S99GGFM161817	18.018	18.000	16.000	15.957	0.8
S99GGFM202120	21.021	21.000	20.000	19.948	0.8

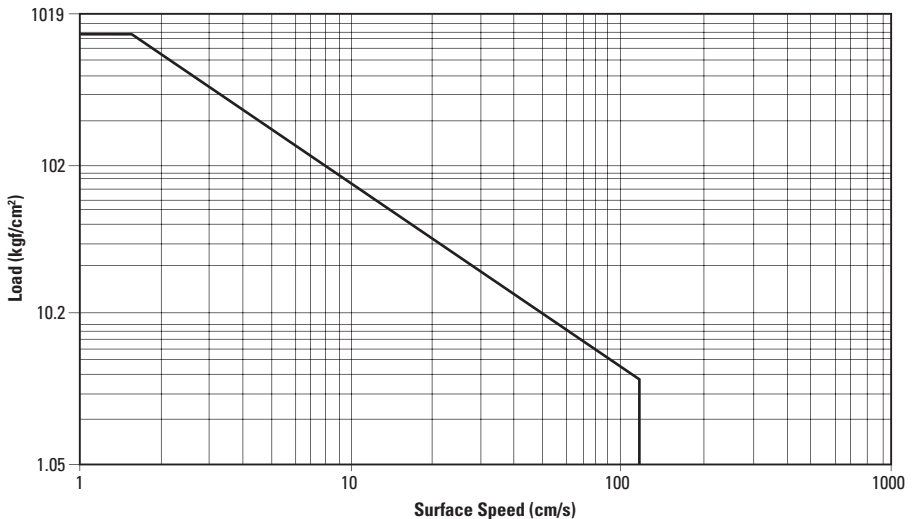
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Graph 1: Coefficient of friction of G300® as a result of the running speed;  $p = 7.6 \text{ kgf/cm}^2$



Graph 2: Coefficient of friction of G300® as a result of the load;  $v = 0.6 \text{ m/min.}$



Graph 3: Permissible  $p \times v$  - values for G300® running dry against a steel shaft, at 20°C.



HIGH COMPRESSIVE STRENGTH  
 VERY LOW MOISTURE ABSORPTION  
 UNIVERSAL RESISTANCE TO CHEMICALS

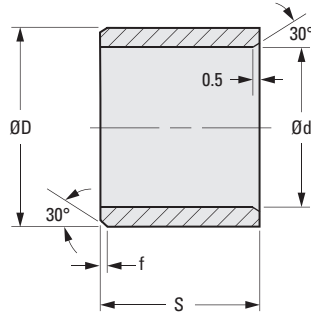
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➤ **MATERIAL:**  
 T500® Polymer

➤ **OPERATING TEMPERATURE:**  
 -100°C to +250°C

For additional information concerning the bearing material, see page 5-41.



**METRIC COMPONENT**

Catalog Number	d Bore	d Tolerance	D Dia.	S h13	I.D. After Pressfit	
					Max.	Min.
S99GTPM020403	2	+0.046/+0.006	3.5	3	2.046	2.006
S99GTPM030506	3	+0.046/+0.006	4.5	6	3.046	3.006
S99GTPM040604	4	+0.058/+0.010	5.5	4	4.058	4.010
S99GTPM050708	5	+0.058/+0.010	7	8	5.058	5.010
S99GTPM061008	6	+0.058/+0.010	10	8	6.058	6.010
S99GTPM081015	8	+0.071/+0.013	10	15	8.071	8.013
S99GTPM101212	10	+0.071/+0.013	12	12	10.071	10.013
S99GTPM121415	12	+0.086/+0.016	14	15	12.086	12.016
S99GTPM161820	16	+0.086/+0.016	18	20	16.086	16.016
S99GTPM202220	20	+0.104/+0.020	22	20	20.104	20.020

Catalog Number (Ref.)	Housing Bore		Shaft Size		f
	Max.	Min.	Max.	Min.	
S99GTPM020403	3.580	3.500	2.000	1.975	0.3
S99GTPM030506	4.512	4.500	3.000	2.975	0.3
S99GTPM040604	5.512	5.500	4.000	3.970	0.3
S99GTPM050708	7.015	7.000	5.000	4.970	0.3
S99GTPM061008	10.015	10.000	6.000	5.970	0.3
S99GTPM081015	10.015	10.000	8.000	7.964	0.5
S99GTPM101212	12.018	12.000	10.000	9.964	0.5
S99GTPM121415	14.018	14.000	12.000	11.957	0.5
S99GTPM161820	18.018	18.000	16.000	15.957	0.8
S99GTPM202220	22.021	22.000	20.000	19.948	0.8

HIGH COMPRESSIVE STRENGTH  
 VERY LOW MOISTURE ABSORPTION  
 UNIVERSAL RESISTANCE TO CHEMICALS

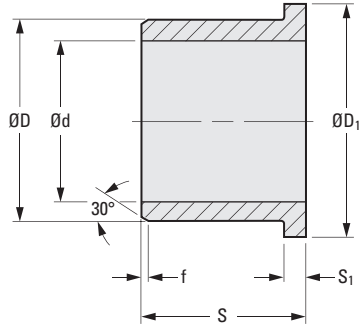
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> **MATERIAL:**  
 T500® Polymer

> **OPERATING TEMPERATURE:**  
 -100°C to +250°C

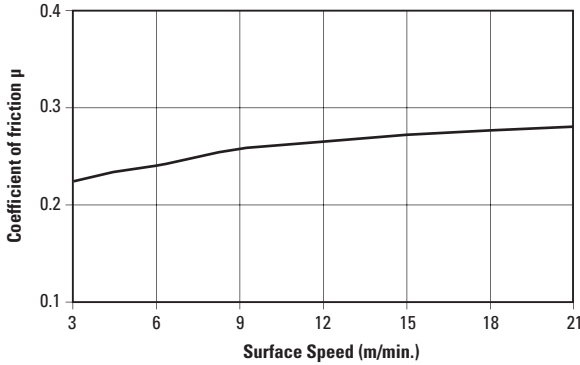
For additional information concerning the bearing material, see page 5-41.



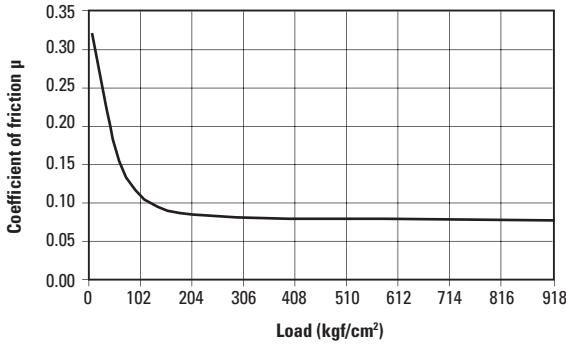
**METRIC COMPONENT**

Catalog Number	d Bore	d Tolerance	D Dia.	D <sub>1</sub> Dia. d13	S h13	S <sub>1</sub> 0 -0.14	I.D. After Pressfit	
							Max.	Min.
S99GTFM030505	3	+0.046/+0.006	4.5	7.5	5	0.75	3.046	3.006
S99GTFM040606	4	+0.058/+0.010	5.5	9.5	6	0.75	4.058	4.010
S99GTFM050705	5	+0.058/+0.010	7	11	5	1	5.058	5.010
S99GTFM060808	6	+0.058/+0.010	8	12	8	1	6.058	6.010
S99GTFM081009	8	+0.071/+0.013	10	15	9	1	8.071	8.013
S99GTFM101209	10	+0.071/+0.013	12	18	9	1	10.071	10.013
S99GTFM121412	12	+0.086/+0.016	14	20	12	1	12.086	12.016
S99GTFM161817	16	+0.086/+0.016	18	24	17	1	16.086	16.016
S99GTFM202321	20	+0.104/+0.020	23	30	21	1.5	20.104	20.020

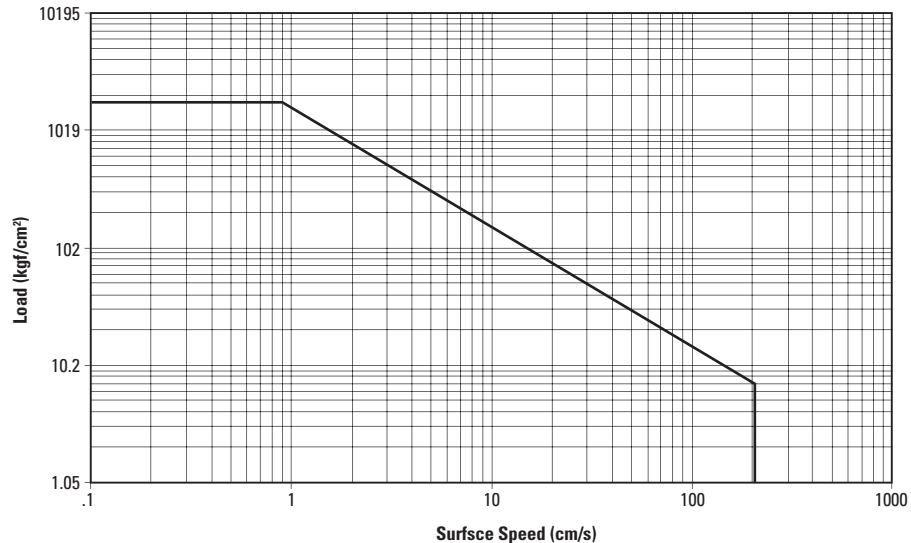
Catalog Number (Ref.)	Housing Bore		Shaft Size		f
	Max.	Min.	Max.	Min.	
S99GTFM030505	4.512	4.500	3.000	2.975	0.3
S99GTFM040606	5.512	5.500	4.000	3.970	0.3
S99GTFM050705	7.015	7.000	5.000	4.970	0.3
S99GTFM060808	8.015	8.000	6.000	5.970	0.3
S99GTFM081009	10.015	10.000	8.000	7.964	0.5
S99GTFM101209	12.018	12.000	10.000	9.964	0.5
S99GTFM121412	14.018	14.000	12.000	11.957	0.5
S99GTFM161817	18.018	18.000	16.000	15.957	0.8
S99GTFM202321	23.021	23.000	20.000	19.948	0.8



**Graph 1: Coefficient of friction for T500® as a result of the surface speed;  $p = 7.6 \text{ kgf/cm}^2$  shaft Cold Rolled Steel**



**Graph 2: Coefficient of friction for T500® as a result of the load;  $v = 0.6 \text{ m/min.}$**



**Graph 3: Permissible  $p \times v$  values for T500® running dry against a steel shaft, at 20°C**

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EXCELLENT VIBRATION DAMPENING  
HIGH IMPACT AND CORROSION RESISTANCE  
ABSORBS DIRT TO PROTECT SHAFT

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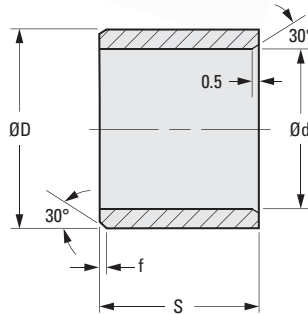
**> MATERIAL:**

M250® Polymer

**> OPERATING TEMPERATURE:**

-40°C to +80°C

For additional information concerning the bearing material, see page 5-52.



**METRIC COMPONENT**

Catalog Number	d Bore	d Tolerance	D Dia.	S h13	I.D. After Pressfit	
					Max.	Min.
S99GHPM030604	3	+0.080/+0.020	6	4	3.080	3.020
S99GHPM040806	4	+0.105/+0.030	8	6	4.105	4.030
S99GHPM050908	5	+0.105/+0.030	9	8	5.105	5.030
S99GHPM061008	6	+0.105/+0.030	10	8	6.105	6.030
S99GHPM081212	8	+0.130/+0.040	12	12	8.130	8.040
S99GHPM101616	10	+0.130/+0.040	16	16	10.130	10.040
S99GHPM121815	12	+0.160/+0.050	18	15	12.160	12.050
S99GHPM161820	16	+0.160/+0.050	18	20	16.160	16.050
S99GHPM202520	20	+0.195/+0.065	25	20	20.195	20.065

Catalog Number (Ref.)	Housing Bore		Shaft Size		f
	Max.	Min.	Max.	Min.	
S99GHPM030604	6.012	6.000	3.000	2.975	0.3
S99GHPM040806	8.015	8.000	4.000	3.970	0.3
S99GHPM050908	9.015	9.000	5.000	4.970	0.3
S99GHPM061008	10.015	10.000	6.000	5.970	0.3
S99GHPM081212	10.015	10.000	8.000	7.964	0.5
S99GHPM101616	16.018	16.000	10.000	9.964	0.5
S99GHPM121815	18.018	18.000	12.000	11.957	0.5
S99GHPM161820	18.018	18.000	16.000	15.957	0.8
S99GHPM202520	25.021	25.000	20.000	19.948	0.8



EXCELLENT VIBRATION DAMPENING  
HIGH IMPACT AND CORROSION RESISTANCE  
ABSORBS DIRT TO PROTECT SHAFT

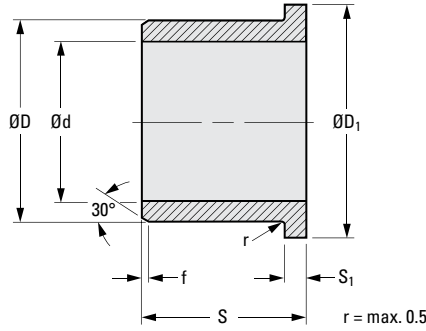
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➤ **MATERIAL:**  
M250® Polymer

➤ **OPERATING TEMPERATURE:**  
-40°C to +80°C

For additional information concerning the bearing material, see page 5-44.

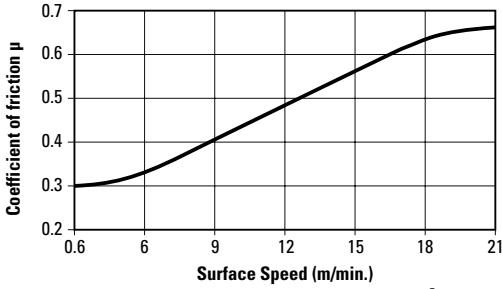


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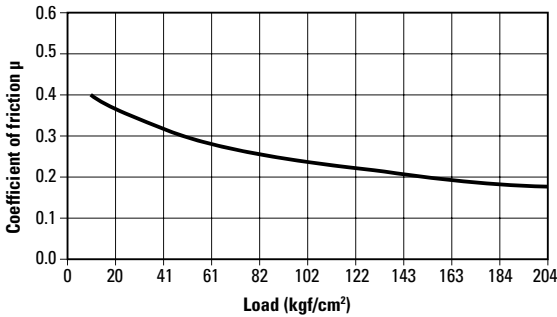
**METRIC COMPONENT**

Catalog Number	d Bore	d Tolerance	D Dia.	D <sub>1</sub> Dia. d13	S h13	S <sub>1</sub> 0 -0.14	I.D. After Pressfit	
							Max.	Min.
S99GHFM030604	3	+0.080/+0.020	6	9	4	1.5	3.080	3.020
S99GHFM040806	4	+0.105/+0.030	8	12	6	2	4.105	4.030
S99GHFM050908	5	+0.105/+0.030	9	13	8	2	5.105	5.030
S99GHFM061010	6	+0.105/+0.030	10	14	10	2	6.105	6.030
S99GHFM081212	8	+0.130/+0.040	12	16	12	2	8.130	8.040
S99GHFM101616	10	+0.130/+0.040	16	22	16	3	10.130	10.040
S99GHFM121810	12	+0.160/+0.050	18	22	10	3	12.160	12.050
S99GHFM161812	16	+0.160/+0.050	18	24	12	1	16.160	16.050
S99GHFM202620	20	+0.195/+0.060	26	32	20	3	20.195	20.065

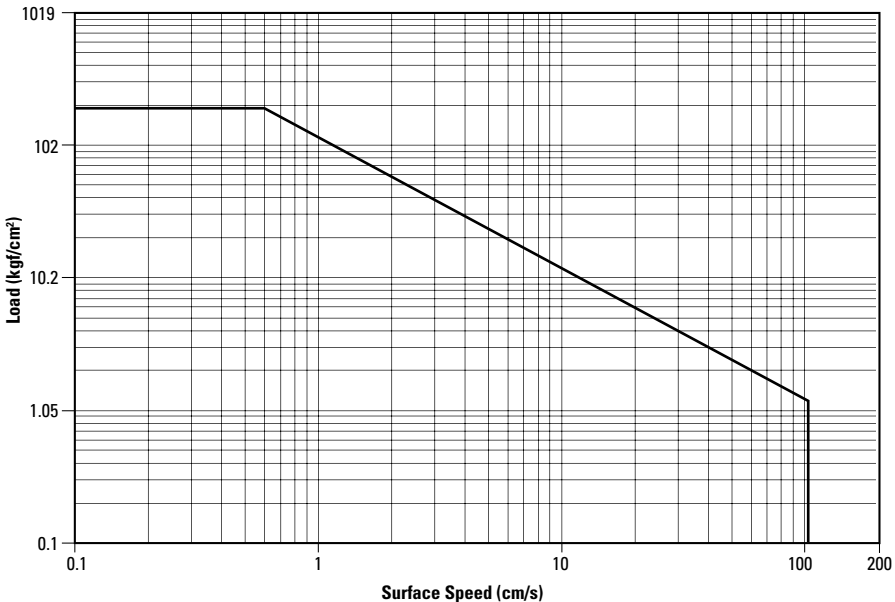
Catalog Number (Ref.)	Housing Bore		Shaft Size		f
	Max.	Min.	Max.	Min.	
S99GHFM030604	6.012	6.000	3.000	2.975	0.3
S99GHFM040806	8.015	8.000	4.000	3.970	0.3
S99GHFM050908	9.015	9.000	5.000	4.970	0.3
S99GHFM061010	10.015	10.000	6.000	5.970	0.3
S99GHFM081212	12.018	12.000	8.000	7.964	0.5
S99GHFM101616	16.018	16.000	10.000	9.964	0.5
S99GHFM121810	18.018	18.000	12.000	11.957	0.5
S99GHFM161812	18.021	18.000	16.000	15.957	0.8
S99GHFM202620	26.021	26.000	20.000	19.948	0.8



**Graph 1: Coefficient of friction of M250® as a result of the surface speed;  $p = 7.6 \text{ kgf/cm}^2$**



**Graph 2: Coefficient of friction of M250® as a result of the load;  $v = 0.6 \text{ m/min}$ .**



**Graph 3: Permissible  $p \times v$  value for M250® running dry against a steel shaft, at 20°C**



LOW CLEARANCE  
 MAINTENANCE-FREE  
 ECONOMICAL  
 HIGH PRECISION  
 HIGH WEAR RESISTANCE

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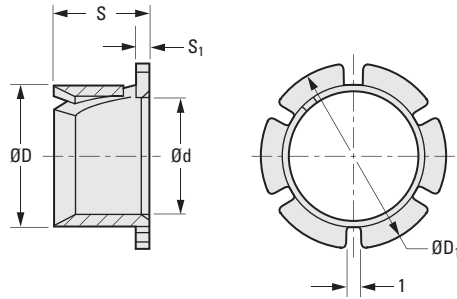
**> MATERIAL:**

M250® Polymer

**> OPERATING TEMPERATURE:**

Continuous: -40°C to +80°C

Intermittent: +170°C



## METRIC COMPONENT

Catalog Number	d Bore	D Dia	S Length	D <sub>1</sub> Flange Dia.	S <sub>1</sub> Flange Width	Recommended			
						Housing Bore		Shaft Size	
						Max.	Min.	Max.	Min.
S99GMYM040504	4	5.2	4	7	0.6	5.20	5.02	4.000	3.975
S99GMYM050605	5	6.2	5	8	0.6	6.20	5.98	5.000	4.975
S99GMYM060706	6	7.2	6	9.5	0.6	7.20	6.98	6.000	5.975
S99GMYM081008	8	9.6	8	12	0.8	9.60	9.38	8.000	7.975
S99GMYM101210	10	11.6	10	15	0.8	11.60	11.33	10.000	9.975
S99GMYM121412	12	13.6	12	18	0.8	13.60	13.33	12.000	11.975
S99GMYM141614	14	15.6	14	21	0.8	15.60	15.33	14.000	13.975
S99GMYM161816	16	17.6	16	24	0.8	17.60	17.33	16.000	15.975
S99GMYM202220	20	21.6	20	30	0.8	21.60	21.27	20.000	19.975
S99GMYM252825	25	27.4	25	37.5	1.2	27.40	27.07	25.000	24.962

# CLIP BEARINGS WITH DOUBLE FLANGE

**SDP/SI**

FOR USE WITH SHEET METAL PLATES

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**> MATERIAL:**

M250® Polymer

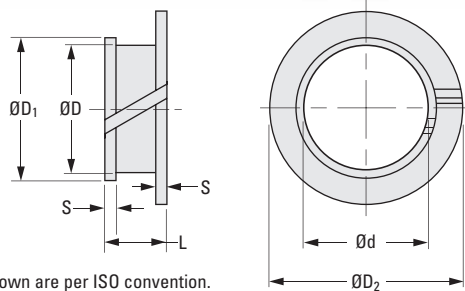
**> FEATURES:**

- Easy Installation
- Maintenance-Free & Self-Lubricating
- Smooth Operation
- Good Wear Resistance
- Used for Both Rotational & Linear Movements
- Lightweight

**> OPERATING TEMPERATURE:**

Continuous: -40°C to +80°C

Intermittent: +170°C



The projections shown are per ISO convention.

**METRIC COMPONENT**

Catalog Number	d Bore	D Dia.	Flange Dia.		S Flange Width	L Length	Recommended				
			D <sub>1</sub> Dia.	D <sub>2</sub> Dia.			Housing Bore		Shaft Size		Sheet Metal Thickness
							Max.	Min.	Max.	Min.	
S99GMCM0304832	3	4.2	4.8	6	0.6	3.2	4.380	4.200	3.000	2.975	1.45...1.92
S99GMCM0304842	3	4.2	4.8	6	0.6	4.2	4.380	4.200	3.000	2.975	2.45...2.92
S99GMCM0405932	4	5.2	5.9	7	0.6	3.2	5.380	5.200	4.000	3.975	1.45...1.92
S99GMCM0405942	4	5.2	5.9	7	0.6	4.2	5.380	5.200	4.000	3.975	2.45...2.92
S99GMCM0506832	5	6.2	6.8	8	0.6	3.2	6.420	6.200	5.000	4.975	1.45...1.92
S99GMCM0506842	5	6.2	6.8	8	0.6	4.2	6.420	6.200	5.000	4.975	2.45...2.92
S99GMCM0607832	6	7.2	7.8	11	0.6	3.2	7.420	7.200	6.000	5.975	1.45...1.92
S99GMCM0607842	6	7.2	7.8	11	0.6	4.2	7.420	7.200	6.000	5.975	2.45...2.92
S99GMCM0607852	6	7.2	7.8	11	0.6	5.2	7.420	7.200	6.000	5.975	3.45...3.92
S99GMCM0709846	7	9	9.8	13	0.8	4.6	9.220	9.000	7.000	6.975	2.45...2.92
S99GMCM0810436	8	9.6	10.4	13	0.8	3.6	9.820	9.600	8.000	7.975	1.45...1.92
S99GMCM0810446	8	9.6	10.4	13	0.8	4.6	9.820	9.600	8.000	7.975	2.45...2.92
S99GMCM0911436	9	10.6	11.4	14	0.8	3.6	10.870	10.600	9.000	8.975	1.45...1.92
S99GMCM1012436	10	11.6	12.4	15	0.8	3.6	11.870	11.600	10.000	9.975	1.45...1.92
S99GMCM1012446	10	11.6	12.4	15	0.8	4.6	11.870	11.600	10.000	9.975	2.45...2.92
S99GMCM1214436	12	13.6	14.4	17	0.8	3.6	13.870	13.600	12.000	11.975	1.45...1.92
S99GMCM1214446	12	13.6	14.4	17	0.8	4.6	13.870	13.600	12.000	11.975	2.45...2.92
S99GMCM1214456	12	13.6	14.4	17	0.8	5.6	13.870	13.600	12.000	11.975	3.45...3.92
S99GMCM1416446	14	15.6	16.4	19	0.8	4.6	15.870	15.600	14.000	13.975	2.45...2.92
S99GMCM1618436	16	17.6	18.4	21	0.8	3.6	17.870	17.600	16.000	15.975	1.45...1.92
S99GMCM1618446	16	17.6	18.4	21	0.8	4.6	17.870	17.600	16.000	15.975	2.45...2.92
S99GMCM1821050	18	20	21	23	1	5	20.330	20.000	18.000	17.975	2.45...2.92
S99GMCM2023050	20	22	23	25	1	5	22.330	22.000	20.000	19.975	2.45...2.92
S99GMCM2528050	25	27	28	30	1	5	27.330	27.000	25.000	24.975	2.45...2.92