

# OILES AMERICA CORPORATION

## Self-lube Bearings

The Self-Lube Innovator

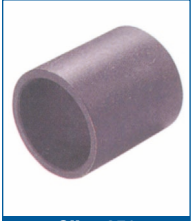


[www.oiles.com](http://www.oiles.com)





Oiles 80



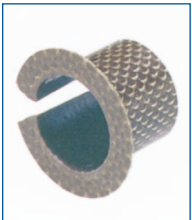
Oiles 250



Oiles Techmet E



Oiles Toughmet



Oiles Hiplast



Oiles 500SP1



Oiles 2000

Type	Group		Product Name	Description
Plastic	Thermoplastic		Oiles 80	Oil impregnated polyacetal bearing
	Thermosetting Plastic		Oiles 250	Oil impregnated phenol resin bearing
		Oiles Fiberflon FW	PTFE filament winding bearing for high-load applications	
Multi-layer	Steel-backed		Oiles Drymet ST	Steel-backed polyacetal bearing
			Oiles Drymet LF	Steel-backed PTFE bearing
			Oiles Techmet E	Electroconductive steel-backed PTFE bearing
			Oiles Lumet	Steel-backed PTFE bearing for lubrication
			Oiles Toughmet	Steel-backed sintered bronze bearing with dispersed solid lubricants
	Metal Meshed		Oiles Hiplast and Hiplast E	Metal-meshed PTFE bearing/Electroconductive
Metallic	Solid Lubricants	Plugged Embedded Dispensed	Oiles 500SP1	High strength brass alloy bearing
			Oiles 500SP5	Special high strength brass alloy bearing
			Oiles 500HP	High hardness special copper alloy bearing
			Oiles 500AB	Aluminum bronze bearing
			Oiles 500B	Bronze bearing
			Oiles 500F	Cast iron bearing
			Oiles 2000	Steel-backed sintered bearing
			Oiles 2000S	Sintered composite bearing
			Oiles Cermet M and G	Sintered alloy bearing
	Oil Impregnated		Oiles 300	Oil impregnated cast iron bearing

\* E = Excellent VG = Very Good G = Good F = Fair

\*\* L = Light M = Medium H = Heavy

MTO = Made to order

Foreign Particle Tolerance	Small Displacement	High-Impact Resistance	Electroconductivity	Not Requiring External Lubrication	Rough Surface Mounting Shafts	Chemical Resistant*	Load Capacity**	Temperature Range	Standard Sizes Available	Low Coefficient of Friction
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			X		G	M	-40° – +180°F	X	X
--	--	--	---	--	---	---	---------------	---	---

X		X	X		VG	M	-40° – +220°F	X	
	X	X	X		E	M-H		X	

			X		G	M	-40° – +260°F	X	X
			X		E	M-H	-325° – +482°F	x	x
	X		X		E	H			
					E	L-M	-328° – +536°F	MTO	X
	X		x		G	H	-40° – +350°F	X	x

			X	X		VG	L-M	-58° – +482°F	X	X
--	--	--	---	---	--	----	-----	---------------	---	---

X		X	X	X	G	H	40° – +575°F	X	
X		X	X	X	G	H		MTO	
			X		G	H	-40° – +320°F	X	
X		X	X	X	VG	H	-418° – +750°F	X	
			X			M-H		MTO	
			X		F	M-H	-40° – +800°F	X	
	X	X	X		F	H		X	X
	X	X	X		F	H		MTO	
	X		X		G	M	-40° – +400/500°F	X	X

					F	M-H	-40° – +310°F	X	
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# Oiles Bearings Selection Guide





# Table of Contents

<b>Oiles Bearing Selection Guide</b>	.....IFC-1
<b>About Oiles</b>	.....4
<b>Non-Metalic Resin Based Bearings</b>	.....5-11
<b>#80</b>	
Straight Bushings	80B .....7
Flanged Bushings	80F .....8
Flanged Bearings	80FL .....9
Pillow Blocks	80UP .....9
Plates	80P .....10
Tube Stock	80S .....10
Bar Stock	80M .....10
<b>250</b>	
Bushing Material	25S .....11
Fiberflon FW	
Bushings	FFB .....11
<b>Steelback Multi Layered Bearings</b>	.....12-19
<b>Drymet ST</b>	
Washers	70W .....13
Bushings	70B .....14
<b>Drymet LF</b>	
Straight Bushings	LFB .....16
Flanged Bushings	LFF .....18
Washers	LFW .....19
<b>Specialty Bearings</b>	.....20-22
<b>Toughmet</b>	
Bushings	TMB .....21
<b>Hiplast</b>	
Flanged Bushings	HPF .....22



# Table of Contents cont.

<b>Metallic Bearings</b>	<b>23-44</b>
<b>500SP</b>	
Straight Bushings	SPB.....26
Straight Bushings (Water Service)	SPBL.....28
Straight Bushings – (Inch Series)	SPBN.....29
Flanged Bushings	SPF.....30
Washers	SPW.....31
Washers – (Inch Series)	SPWN.....31
Stepped Plates	SLP.....32
Flat Plates	SFP.....33
<b>2000</b>	
Straight Bushings	CLB.....34
Flanged Bushings	CLF.....34
Flat Plates	CWI.....35
<b>Cermet</b>	
Cermet M Straight Bushings	54B.....36
Cermet M Flanged Bushings	54F.....37
Cermet M Round Bar Stock	54M.....37
Cermet M Bushing Material	54S.....37
Cermet G Round Bar Stock	55M.....37
Cermet G Bushing Material	55S.....37
<b>300</b>	
Bushings	30B.....38
Flanged Bushings	30F.....40
Bar Stock	30M.....41
Tube Stock	30S.....41
<b>Linear Slides / Slide Shifter</b>	<b>42-43</b>
Flanged	BBFK.....42
Guide Rail	GR.....43
Compact	STC.....43
Flanged	STF.....43
<b>Sintered Vents</b>	<b>44</b>
SV	SV.....44

All sizes are metric unless noted.



# About OILES



Sozo Kawasaki was the founder of Oiles (pronounced Oil-less) Corporation in Japan in 1925. While working for a tobacco company, Mr. Kawasaki noted that oil lubricated bearings had a tendency to contaminate the product. Mr. Kawasaki intently studied these bearings and after a lengthy trial and error process, was granted Japan's first patent for "Oilless Wooden Bearings". In 1942, he was further presented with a patent for an "Oilless Cast Iron Bearing". Oiles Corporation has continued with its heritage by leading the industry in the development of today's finest oil free bearings. An amazing fact is that Oiles Corporation has some 2000 patents, one for every employee. Not just a bearing producer, Oiles also manufactures seismic isolation bearings for large buildings, controlled window systems and bridge bearings designed for both seismic and expansion requirements.

Oiles America Corporation was established in 1976 to service and supply North America's automotive industry. With a manufacturing facility in Concord, North Carolina, Oiles produces quality components for today's leading automobile and heavy equipment manufacturers. No longer just a plain bearing supplier, Oiles manufactures components for steering, exhaust, suspension and hinge applications for vehicles. Chances are the car you are driving has Oiles components.

Oiles products carry a reputation for quality. The hydro electric industry regards Oiles as a leader of both quality and reliability. OEM's around North America insist upon Oiles lubrication free bearings as the only product to use.



Oiles has one of the most complete and adaptable product lines available in the industry. Oiles has a true engineered solution product line, designed to perform with minimal or no lubrication and with reduced concern of failure. This catalog is designed to present Oiles standard parts. For additional products and services contact Oiles and visit our website at [www.oiles.com](http://www.oiles.com).

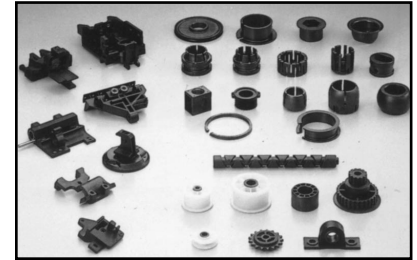




# NON-METALIC RESIN BASED BEARINGS

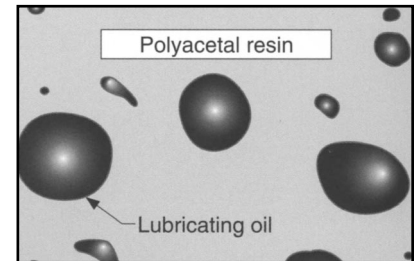
## OILES #80

Oiles #80 is a proprietary blend of polyacetal resins and uniformly dispersed bearing lubricants. There are several derivatives of this material, each specifically formulated to satisfy a wide variety of application requirements. Oiles #80 is available in both flanged, straight bore bushing and thrust washer styles in standard metric sizes. Rod stock, tube stock, and flat plate material is also available for local machining. Designed to provide superior service in applications where no lubrication is possible and where economical, high load, light weight performance is desirable. Oiles #80 is an alternative to applications where sintered bronze and specialty plastics are being used as a bearing medium. For temperature requirements exceeding the limits of Oiles #80, please refer to Oiles 500, 300 and LF series bearings.



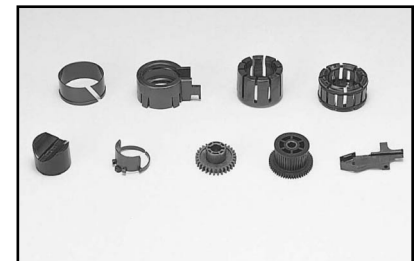
### Features:

- Self lubricating
- Light weight
- Economical
- Multiple product types and styles
- Excellent load and speed capability
- Available in a wide variety of shapes and sizes as an OEM item
- Off the shelf metric straight, flanged and thrust washer types
- Rod, tube and plate styles available for custom re-working
- Temperature range: -40 - +180°F (-40 - +80°C)



### Applications:

- Pivot shafts, ball joints and sliding surfaces
- Internal and external machine shafts
- Eccentric arms
- Conveyor rollers and guide rollers
- Lever arms
- Sliding door assemblies

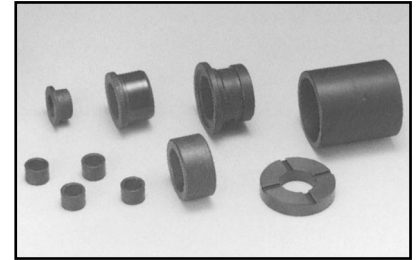






## OILES 250 MATERIAL

Oiles 250 material is a proprietary blend of oil and wax lubricants integrated in a cotton based phenol resin. Oiling intervals are dramatically reduced by using 250 bearings, however, extended life may be realized with supplemental lubrication. Oiles 250 handles particle contamination and embedding issues better than many forms of metallic bearings. Oiles 250 is light in weight, handles shock well and muffles sound and vibration. Oiles 250 is resistant to a broad range of chemicals and is very economical. Designed to service a vast range of applications, Oiles 250 is stocked in metric bored tubes and is easily reworked to provide inch and specialty profiled requirements.



### Features:

- Light weight and economical
- Excellent chemical resistance
- Excellent service in dusty and dirty environments
- Handles shock and vibration very well
- Self lubricating with low water absorption
- Temperature range -40 - +220°F (-14 - +100°C )

### Applications:

- Agricultural, lawn and garden equipment
- Construction equipment
- Exterior lifting equipment and cranes
- Pumps, valves and cylinders
- Chemical industry equipment
- Replacements for Oilite type products and 660 bronze bushings

## OILES FIBERFLON FW

Fiberflon is a unique self lubricating non-metallic PTFE filament wound bearing. The rigid body is comprised of high strength epoxy resin bound filament wound glass fibers. The wearing surface is a proprietary blend of PTFE resins and woven yarn fibers. Together they provide a superior low friction high strength bearing. Fiberflon is designed to function in environments where standard rolling element bearings cannot.



### Features:

- Extremely light weight and rugged design
- Functions well in corrosive environments
- Handles abrasive and dirty environments
- Low water and moisture absorption for wet service use
- Very low maintenance service
- Great dielectric strength and no electrolytic corrosion
- Excellent in food production areas

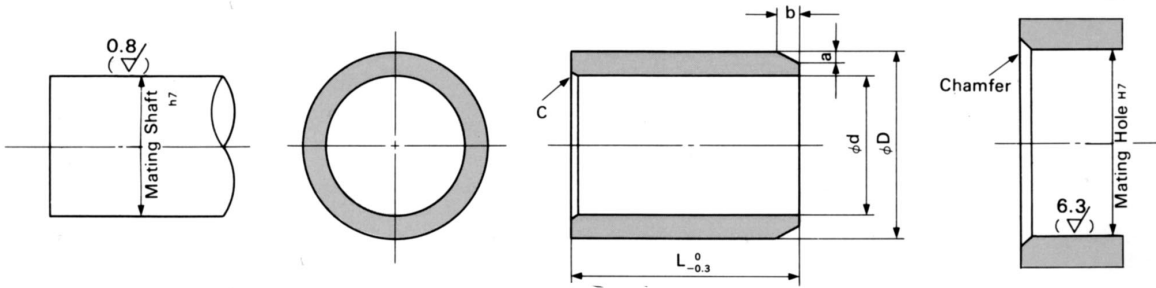
### Applications:

- Hydraulic cylinder support bearings
- Crane and lifting devise shaft support bearings
- Pumps, gate and butterfly valve shaft supports
- Hydroelectric and dam gate industry
- Food processing equipment
- Sewage treatment
- Mixer tank shaft support



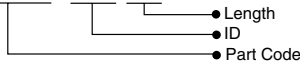


# OILES #80 Straight Bushings (80B)



Product Identification

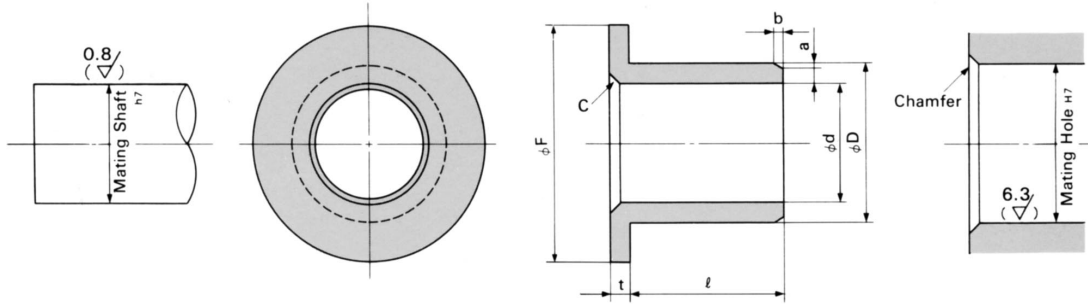
**80B-0203**



I.D.	O.D.	L	0										L	0					Average Max Load N	Range of Max Load N	Average Max Load lbs	Range of Max Load lbs	Max RPM
			-0.3	3	4	5	6	8	10	12	-0.5	15		20	25	30	40	50					
d	D	2	3	4	5	6	8	10	12	15	20	25	30	40	50								
2	0.065	4	0.107	X	X	X										106	71-142	24	16-32	8,117			
	0.015		0.032	X	X	X																	
3	0.08	5	0.107		X	X	X	X								239	159-319	54	36-72	5,411			
	0.03		0.032		X	X	X	X															
4	0.095	6	0.107		X	X	X	X								319	212-425	72	48-95	4,058			
	0.045		0.032		X	X	X	X															
5	0.095	7	0.157		X	X	X	X	X							460	266-708	103	60-159	3,247			
	0.045		0.045		X	X	X	X	X														
6	0.095	8	0.157			X	X	X	X	X						701	425-1,062	158	95-239	2,706			
	0.045		0.045			X	X	X	X	X													
7	0.095	9	0.157				X	X	X	X						898	620-1,239	202	139-279	2,319			
	0.045		0.045				X	X	X	X													
8	0.12	10	0.157					X	X	X	X					1,322	708-2,124	297	159-477	2,029			
	0.06		0.045					X	X	X	X												
9	0.12	11	0.193						X	X	X					1,529	797-2,390	344	179-537	1,804			
	0.06		0.058						X	X	X												
10	0.12	12	0.193							X	X	X				1,922	885-3,540	432	199-796	1,623			
	0.06		0.058							X	X	X											
12	0.12	14	0.193								X	X	X			2,513	1,274-4,248	565	286-955	1,353			
	0.06		0.058								X	X	X										
14	0.12	16	0.193									X	X	X		3,531	2,478-4,956	794	557-1,114	1,160			
	0.06		0.058									X	X	X									
15	0.12	17	0.193										X	X	X	4,956	2,655-7,965	1,114	597-1,791	1,082			
	0.06		0.058										X	X	X								
16	0.12	18	0.193											X	X	5,286	2,832-8,496	1,188	637-1,910	1,015			
	0.06		0.058											X	X								
18	0.12	20	0.221												X	5,947	3,186-9,558	1,337	716-2,149	902			
	0.06		0.071												X								
20	0.12	23	0.221													7,965	5,310-10,620	1,791	1,194-2,387	812			
	0.06		0.071																				
22	0.145	25	0.231													9,735	7,788-11,682	2,189	1,751-2,626	738			
	0.075		0.081																				
24	0.145	27	0.231													8,496	6,372-10,620	1,910	1,432-2,387	676			
	0.075		0.081																				
25	0.145	28	0.231													9,956	6,638-13,275	2,238	1,492-2,984	649			
	0.075		0.081																				
28	0.17	32	0.29													12,390	9,912-14,868	2,785	2,228-3,342	580			
	0.09		0.095																				
30	0.17	34	0.29													15,266	10,620-21,240	3,432	2,387-4,775	541			
	0.09		0.095																				
32	0.215	36	0.29													16,992	11,328-22,656	3,820	2,547-5,093	507			
	0.115		0.095																				
35	0.215	39	0.29													17,811	12,390-24,780	4,004	2,785-5,571	464			
	0.115		0.095																				
38	0.215	42	0.34													20,178	13,452-26,904	4,536	3,024-6,048	427			
	0.115		0.115																				
40	0.215	44	0.34													24,780	14,160-35,400	5,571	3,183-7,958	406			
	0.115		0.115																				
45	0.235	50	0.34													27,878	15,930-39,825	6,267	3,581-8,953	361			
	0.135		0.115																				
50	0.235	55	0.43													30,975	17,700-44,250	6,963	3,979-9,948	325			
	0.135		0.13																				



# OILES #80F Flanged Bushings (80F)

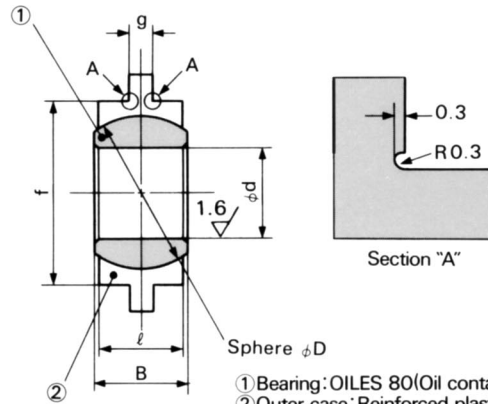
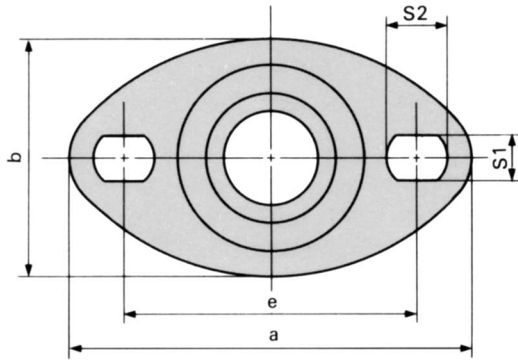


Product Identification  
**80F-0202**

- Length
- ID
- Part Code

I.D.	O.D.	Flange				L										Average Max Load N	Range of Max Load N	Average Max Load lbs	Range of Max Load lbs	Max RPM					
		F	t	0	-0	2	3	4	5	6	7	8	10	12	15						20	25	30	40	50
d	D			0	-0.1																				
2	0.065 0.015	4	0.107 0.032	6	1	0 -0.1	X	X	X												106	71-142	24	16-32	8,117
3	0.08 0.03	5	0.107 0.032	0	1	0 -0.1		X	X	X	X										239	159-319	54	36-72	5,411
4	0.095 0.045	6	0.107 0.032	9	1	0 -0.1		X	X	X	X										319	212-425	72	48-95	4,058
5	0.095 0.045	7	0.157 0.045	10	1	0 -0.1		X	X	X	X	X									460	266-708	103	60-159	3,247
6	0.095 0.045	8	0.157 0.045	12	1	0 -0.1		X		X	X		X	X							701	425-1,062	158	95-239	2,706
7	0.095 0.045	9	0.157 0.045	13	1	0 -0.1		X		X		X	X								898	620-1,239	202	139-279	2,319
8	0.12 0.06	10	0.157 0.045	15	1	0 -0.1		X		X	X		X	X	X	X					1,322	708-2,124	297	159-477	2,029
9	0.12 0.06	11	0.193 0.058	16	1	0 -0.1		X		X	X		X	X	X						1,529	797-2,390	344	179-537	1,804
10	0.12 0.06	12	0.193 0.058	18	1	0 -0.1		X		X	X		X	X	X	X					1,922	885-3,540	432	199-796	1,623
12	0.12 0.06	14	0.193 0.058	20	1	0 -0.1				X	X		X	X	X	X					2,513	1,274-4,248	565	286-955	1,353
14	0.12 0.06	16	0.193 0.058	22	1	0 -0.1							X	X	X	X					3,531	2,478-4,956	794	557-1,114	1,160
15	0.12 0.06	17	0.193 0.058	23	1	0 -0.1							X	X	X	X	X	X			4,956	2,655-7,965	1,114	597-1,791	1,082
16	0.12 0.06	18	0.193 0.058	24	1	0 -0.1							X	X	X	X	X	X			5,286	2,832-8,496	1,188	637-1,910	1,015
18	0.12 0.06	20	0.221 0.071	26	1	0 -0.1							X	X	X	X	X	X			5,947	3,186-9,558	1,337	716-2,149	902
20	0.145 0.075	23	0.221 0.071	31	1.5	0 -0.15							X	X	X	X	X	X			7,965	5,310-10,620	1,791	1,194-2,387	812
22	0.145 0.075	25	0.231 0.081	33	1.5	0 -0.15							X		X	X	X	X			9,735	7,788-11,682	2,189	1,751-2,626	738
25	0.17 0.09	28	0.231 0.081	36	1.5	0 -0.15							X	X	X	X	X	X			9,956	6,638-13,275	2,238	1,492-2,984	649
30	0.17 0.09	34	0.29 0.095	42	2	0 -0.15							X	X		X	X	X	X		15,266	10,620-21,240	3,432	2,387-4,775	541
32	0.215 0.115	36	0.29 0.095	46	2	0 -0.15										X	X	X	X		16,992	11,328-22,656	3,820	2,547-5,093	507
35	0.215 0.115	39	0.29 0.095	49	2	0 -0.15							X	X		X	X	X	X		17,811	12,390-24,780	4,004	2,785-5,571	464
38	0.215 0.115	42	0.34 0.115	52	2	0 -0.15										X		X	X		20,178	13,452-26,904	4,536	3,024-6,048	427
40	0.215 0.115	44	0.34 0.115	54	2	0 -0.15							X			X	X	X	X	X	24,780	14,160-35,400	5,571	3,183-7,958	406
45	0.235 0.135	50	0.43 0.13	60	2.5	0 -0.15										X	X	X	X	X	27,878	15,930-39,825	6,267	3,581-8,953	361
50	0.235 0.135	55	0.43 0.13	65	2.5	0 -0.15										X		X	X	X	30,975	17,700-44,250	6,963	3,979-9,948	325

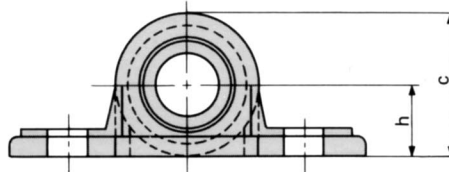
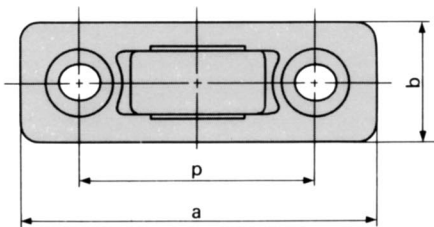
### 80FL



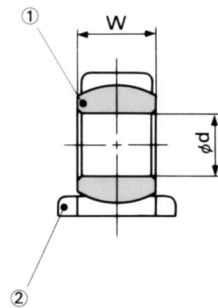
- ① Bearing: OILES 80 (Oil containing acetal resin)
- ② Outer case: Reinforced plastics

Part No.	I.D.		a	b	w	f		g	L	p	S1	S2	Set Screw	Allowable Tightening Torque (kgf cm)	Average Max Load N	Range of Max Load N	Average Max Load lbs	Range of Max Load lbs	Max RPM	
	d	d																		
80FL-06	6	0.068	38	20	7	14	0	2.5	6	26	4.5	5	13	M4	20(10)	701	425-1,062	158	95-239	2,706
		0.02				-0.07														
80FL-08	8	0.083	42	24	10	19	0	2.5	9	30	4.5	5	10	M4	25(15)	1,322	708-2,124	297	159-477	2,029
		0.025				-0.084														
80FL-10	10	0.083	48	28	11	22	0	3	10	35	5.5	6	8	M5	35(20)	1,922	885-3,540	432	199-796	1,623
		0.025				-0.084														
80FL-12	12	0.102	56	34	13	27	0	3	12	42	6.5	7	7	M6	55(40)	2,513	1,274-4,248	565	286-955	1,353
		0.032				-0.1														
80FL-15	15	0.102	64	40	16	31	0	4	15	48	6.5	7.5	6	M6	90(55)	4,956	2,655-7,965	1,114	597-1,791	1,082
		0.032				-0.1														
80FL-17	17	0.124	75	45	18	35	0	4.5	16	56	8.5	9.5	11	M8	110(70)	6,461	4,483-9,293	1,453	896-2,089	947
		0.04				-0.16														
80FL-20	20	0.124	82	50	20	38	0	5	18	63	8.5	10	9	M8	140(90)	7,965	5,310-10,620	1,791	1,194-2,387	812
		0.04				-0.16														

### 80UP



- ① Bearing: OILES 80
- ② Outer case: Reinforced plastics



Part No.	O.D.		a	b	W	h	c	p	S1	S2	Set Screw	Allowable Tightening Torque (kgf cm)	Average Max Load N	Range of Max Load N	Average Max Load lbs	Range of Max Load lbs	Max RPM	
	D	D																
80UP-06	6	0.068	39	12	7	7	14	26	4.5	5	13	M4	20(15)	701	425-1,062	158	95-239	2,706
		0.02																
80UP-08	8	0.083	45	15	10	9	18	30	4.5	5	10	M4	30(20)	1,322	708-2,124	297	159-477	2,029
		0.025																
80UP-10	10	0.083	53	16	11	11	22	36	5.5	6	8	M5	45(30)	1,922	885-3,540	432	199-796	1,623
		0.025																
80UP-12	12	0.102	60	18	13	13	26	42	6.5	7	7	M6	75(50)	2,513	1,274-4,248	565	286-955	1,353
		0.032																
80UP-15	15	0.102	67	21	16	15	30	48	6.5	7.5	6	M6	90(60)	4,956	2,655-7,965	1,114	597-1,791	1,082
		0.032																
80UP-17	17	0.124	79	24	18	17	34	56	8.5	9.5	11	M8	120(75)	6,461	4,483-9,293	1,453	896-2,089	947
		0.04																
80UP-20	20	0.124	88	26	20	19	38	63	8.5	10	9	M8	150(90)	7,965	5,310-10,620	1,791	1,194-2,387	812
		0.04																



# OILES #80 Bar Stock (80M) Tube Stock (80S) Plates (80P)

## 80M (Bar Stock)

Part No.	O.D. D		L
	80M-06	6.5	
80M-10	11	±0.4	500
80M-15	17	±0.4	500
80M-20	21.5	±0.4	500
80M-30	31.5	±0.4	500
80M-35	36	±0.5	500
80M-40	41	±0.5	500
80M-45	46.5	±0.5	500
80M-50	52	±0.5	500
80M-55	57	±0.5	500
80M-60	61.5	±0.6	500
80M-65	67	±0.6	500



## 80S (Tube Stock)

Part No.	I.D. d		O.D. D		L	Area
	80S-2030	19	±0.4	31.5		
80S-2535	24	±0.4	36.5	±0.4	500	12,500
80S-3040	28.5	±0.5	42	±0.5	500	15,000
80S-3545	34	±0.5	47	±0.5	500	17,500
80S-3550	34	±0.5	52	±0.5	500	17,500
80S-4055	38	±0.5	56.5	±0.5	500	20,000
80S-4060	38	±0.5	62.5	±0.5	500	20,000
80S-4560	43	±0.5	62.5	±0.5	500	22,500
80S-4565	43	±0.5	67	±0.6	500	22,500
80S-5060	47.5	±0.5	62.5	±0.5	500	25,000
80S-5065	48.5	±0.5	67	±0.6	500	25,000
80S-5070	48.5	±0.5	72.5	±0.6	500	25,000
80S-5565	53.5	±0.6	67.5	±0.6	500	27,500
80S-5570	53.5	±0.6	72.5	±0.6	500	27,500
80S-5575	53.5	±0.6	78	±0.6	500	27,500
80S-6075	58.5	±0.6	78	±0.6	500	30,000



## 80P (Plate)

Part No.	T		W		L	Area
	80P-08	8	±0.2	105		
80P-11	11	±0.2	80	±0.5	1000	11,000
80P-13	13	±0.2	105	±0.5	1000	13,000
80P-18	18	±0.3	105	±0.5	1000	18,000

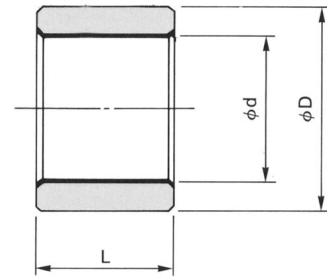
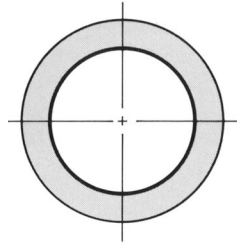




# Oiles 250 Material (25S) Fiberflon FW (FFB)

## 25S

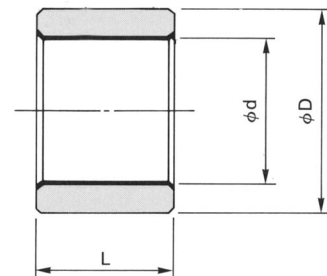
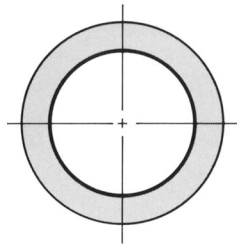
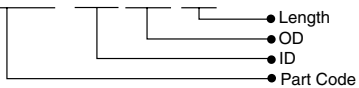
Part No.	I.D.	O.D.	L
	d	D	
25S-1932	19	32	500
25S-2437	24	37	500
25S-2944	29	44	500
25S-3447	34	47	500
25S-3952	39	52	500
25S-3958	39	58	500
25S-4362	43	62	500
25S-4972	49	72	500
25S-5374	53	74	500
25S-5882	58	82	500
25S-6384	63	84	500
25S-6889	68	89	500
25S-7395	73	95	500
25S-78103	78	103	1000
25S-83108	83	108	1000
25S-88113	88	113	1000
25S-98123	98	123	1000
25S-103128	103	128	1000
25S-108133	108	133	1000
25S-118143	118	143	1000



## FFB

Product Identification

**FFB-202830**



I.D.	O.D.	L	0										I.D. After Press Fitting
			±0.3										
d	D		20	25	30	40	50	60	70	80	100		
20	0.16	28	X		X							0.116	
	0.11											0.064	
25	0.16	35		X	X							0.11	
	0.11											0.058	
30	0.16	40		X	X							0.11	
	0.11											0.058	
35	0.19	45			X	X						0.14	
	0.12											0.068	
40	0.19	50			X	X	X					0.14	
	0.12											0.068	
45	0.19	55				X						0.134	
	0.12											0.062	
50	0.19	60			X	X	X	X				0.134	
	0.12											0.062	
60	0.22	75						X	X			0.166	
	0.14											0.082	
70	0.22	85						X	X			0.155	
	0.14											0.071	
80	0.22	100								X		0.155	
	0.14											0.071	
90	0.31	110								*X		0.221	
	0.17											0.081	
100	0.31	120							*X	*X		0.221	
	0.17											0.081	



# Steelback Multi Layered Bearings

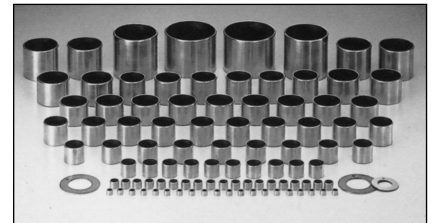
Oiles offers a diverse family of thin walled, low friction, multi-layered bearings. Styles are available in straight bore, flanged, washers, plates and made-to-order types. Oiles has several engineered solution bearing types each having an unique operational characteristics and each designed to perform lubrication free.

Oiles multi layered bearings incorporate two or three strategic layers to provide superior long life performance. The first layer, Oiles integrates various proprietary steel alloyed backing for rigidity and structural integrity. Second, a controlled layer of proprietary sintered bronze is fused to the steel backing. Third, Oiles integrates proprietary low friction bearing surfaces to create the world's finest thin walled bearing.

For application and engineering assistance, please feel free to contact Oiles America Corporation or an authorized Oiles agent.

## DRYMET ST

Oiles Drymet ST is a self lubricating bearing available in standard metric sizes from 2-50mm bore sizes. Drymet ST incorporates the structure as described above with an Oiles #80 material overlay.



### Features

- High load carrying capacity
- Excellent wear characteristics
- Low CF (coefficient of friction) without additional lubrication
- Thin walled design for compact low center of gravity performance
- Excellent dimensional stability and thermal conductivity
- Temperature range: -40 - +260°F (-40 - +120°C)

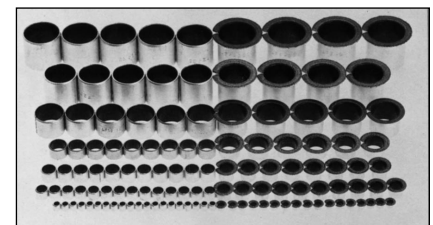
### Applications:

- Pivot joints
- Hinge pin applications
- Light weight
- Replacement for oil impregnated bronze bushings
- Economical and value for investment

\*\*Note: Performance, speeds and loads may be enhanced with lubrication.

## DRYMET LF

Oiles Drymet LF is a self lubricating, high performance lead free bearing, available in standard metric sizes from 2-50mm bore sizes. Larger bore sizes are available on a made-to-order basis. LF utilized a layer of proprietary tetrafluorethylene (PTFE) and other resins layered over a special sintered bronze layer integrated into the rigid steel backing. LF provides superior low friction performance.



### Features:

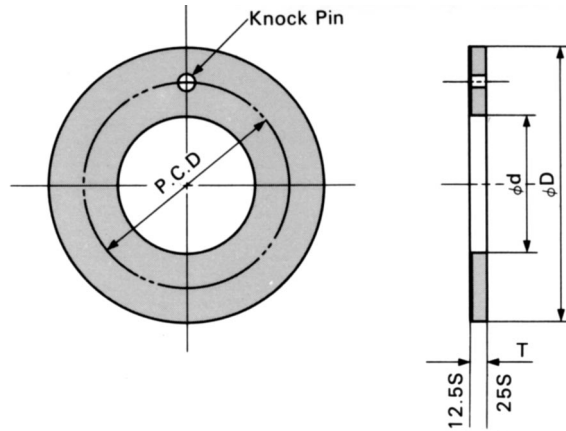
- High load at lower velocity applications
- Low CF (coefficient of friction) without additional lubrication
- Middle to higher velocity and increased PV when an approved lubricant is used
- Wide temperature range: -325 - +482°F (-165 - +250°C)
- Excellent chemical resistance
- Excellent dimensional stability, mechanical strength and thermal conductivity

### Applications:

- Rollers, guide wheels, caster wheels
- Pivot and hinge pins
- Stick, squeal or lubrication-free applications
- Slow speed rotating shafts (consult shaft finish data)
- Food processing equipment
- Automation equipment
- Jacks and lifting equipment
- Conveyor rolls

\*\*Note: Performance, speeds and loads may be enhanced with lubrication.





Part No.	I.D.		O.D.		Thickness		Knock Pin Hole		Screw Holes		Max RPM
	d	D	T	H	P.C.D.						
70W-0815	8	0.4 0.1	16	0 -0.3	1.5	-0.015 -0.115	1.5	0.25 0	12	0.1 -0.1	1,830
70W-1000	10	0.4 0.1	18	0 -0.3	1.5	-0.015 -0.115	1.5	0.25 0	14	0.1 -0.1	1,569
70W-1015	10	0.4 0.1	20	0 -0.3	1.5	-0.015 -0.115	1.5	0.25 0	15	0.1 -0.1	1,464
70W-1215	12	0.4 0.1	24	0 -0.3	1.5	-0.015 -0.115	1.5	0.25 0	18	0.1 -0.1	1,220
70W-1415	14	0.4 0.1	26	0 -0.3	1.5	-0.015 -0.115	2	0.25 0	20	0.1 -0.1	1,098
70W-1615	16	0.4 0.1	30	0 -0.3	1.5	-0.015 -0.115	2	0.25 0	23	0.1 -0.1	955
70W-1715	17	0.4 0.1	30	0 -0.3	1.5	-0.015 -0.115	2	0.25 0	23.5	0.1 -0.1	935
70W-1815	18	0.4 0.1	32	0 -0.3	1.5	-0.015 -0.115	2	0.25 0	25	0.1 -0.1	879
70W-2015	20	0.4 0.1	36	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	28	0.1 -0.1	784
70W-2215	22	0.4 0.1	38	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	30	0.1 -0.1	732
70W-2315	23	0.4 0.1	40	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	31.5	0.1 -0.1	697
70W-2415	24	0.4 0.1	42	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	33	0.1 -0.1	666
70W-2615	26	0.4 0.1	44	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	35	0.1 -0.1	628
70W-2815	28	0.4 0.1	48	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	38	0.1 -0.1	578
70W-3215	32	0.4 0.1	54	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	43	0.1 -0.1	511
70W-3415	34	0.4 0.1	58	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	46	0.1 -0.1	477
70W-3615	36	0.4 0.1	60	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	48	0.1 -0.1	458
70W-3815	38	0.4 0.1	62	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	50	0.1 -0.1	439
70W-3915	39	0.4 0.1	66	0 -0.3	1.5	-0.015 -0.115	3	0.25 0	52.5	0.1 -0.1	418
70W-4215	42	0.4 0.1	66	0 -0.3	1.5	-0.015 -0.115	4	0.25 0	54	0.1 -0.1	407
70W-4420	44	0.4 0.1	74	0 -0.3	2	-0.015 -0.115	4	0.25 0	59	0.1 -0.1	372
70W-4720	47	0.4 0.1	78	0 -0.3	2	-0.015 -0.115	4	0.25 0	62.5	0.1 -0.1	351
70W-4820	48	0.4 0.1	74	0 -0.3	2	-0.015 -0.115	4	0.25 0	61	0.1 -0.1	360
70W-5020	50	0.4 0.1	84	0 -0.3	2	-0.015 -0.115	4	0.25 0	67	0.1 -0.1	328
70W-5220	52	0.4 0.1	78	0 -0.3	2	-0.015 -0.115	5	0.25 0	65	0.1 -0.1	338
70W-5525	55	0.4 0.1	92	0 -0.3	2.5	-0.015 -0.115	5	0.25 0	73.5	0.1 -0.1	299
70W-6025	60	0.4 0.1	100	0 -0.3	2.5	-0.015 -0.115	5	0.25 0	80	0.1 -0.1	275
70W-6525	65	0.4 0.1	108	0 -0.3	2.5	-0.015 -0.115	5	0.25 0	86.5	0.1 -0.1	254

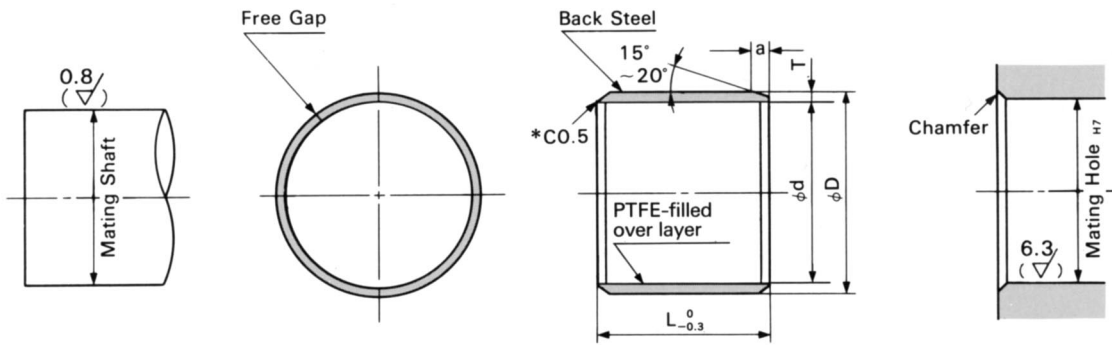






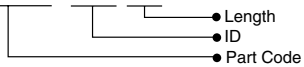


# Drymet LF Bushings (LFB)



Product Identification

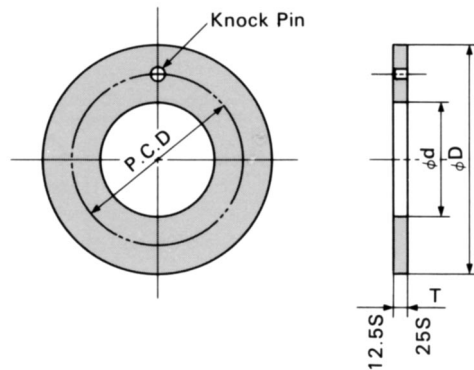
**LFB-0303**



I.D.	O.D.	Thickness	L	Q																	Average Max Load N	Range of Max Load N	Average Max Load lbs	Range of Max Load lbs	Max RPM				
				3	4	5	6	7	8	10	12	14	15	16	20	25	30	35	40	50						60	70	80	90
3	5	0.047	1	0	X	X	X	X																	662	441-882	149	99-198	4,138
		0.017	-0.025																										
4	6	0.047	1	0	X	X	X	X	X																1,019	588-1,568	229	132-353	3,104
		0.017	-0.025																										
5	7	0.055	1	0	X	X	X	X	X																1,274	735-1,960	286	165-441	2,483
		0.025	-0.025																										
6	8	0.055	1	0	X	X	X	X	X	X															2,021	882-3,528	454	198-793	2,069
		0.025	-0.025																										
7	9	0.055	1	0		X	X	X	X	X															2,744	1,715-4,116	617	386-925	1,773
		0.025	-0.025																										
8	10	0.055	1	0		X	X	X	X	X	X														3,528	1,960-5,880	793	441-1,322	1,552
		0.025	-0.025																										
9	11	0.06	1	0			X			X															3,528	2,646-4,410	793	595-991	1,379
		0.03	-0.025																										
10	12	0.06	1	0			X	X	X	X	X	X													5,460	2,940-9,800	1,227	661-2,203	1,241
		0.03	-0.025																										
12	14	0.06	1	0			X	X	X	X	X	X	X												6,958	3,528-11,760	1,564	793-2,644	1,035
		0.03	-0.025																										
13	15	0.06	1	0				X	X	X	X	X	X												8,281	5,096-12,740	1,862	1,146-2,864	955
		0.03	-0.025																										
14	16	0.065	1	0				X	X	X	X	X	X	X											9,310	5,488-13,720	2,093	1,234-3,084	887
		0.035	-0.025																										
15	17	0.065	1	0				X	X	X	X	X	X												11,025	5,880-18,375	2,479	1,322-4,131	828
		0.035	-0.025																										
16	18	0.07	1	0					X	X	X	X	X												12,858	7,840-19,600	2,891	1,763-4,406	776
		0.035	-0.025																										
17	19	0.07	1	0					X		X														10,413	8,330-12,495	2,341	1,873-2,809	730
		0.035	-0.025																										
18	20	0.075	1	0					X	X	X	X	X	X											16,464	8,820-26,460	3,701	1,983-5,948	690
		0.04	-0.025																										
19	22	0.075	1.5	0					X		X	X													13,965	9,310-18,620	3,139	2,093-4,186	653
		0.04	-0.03																										
20	23	0.08	1.5	0					X	X	X	X	X	X											18,293	9,800-29,400	4,113	2,203-6,609	621
		0.045	-0.03																										
22	25	0.08	1.5	0					X	X	X	X	X	X											20,123	10,780-32,340	4,524	2,423-7,270	564
		0.045	-0.03																										
24	27	0.08	1.5	0						X	X	X	X												26,460	17,640-35,280	5,948	3,966-7,931	517
		0.045	-0.03																										
25	28	0.085	1.5	0					X	X	X	X	X	X											25,725	12,250-42,875	5,783	2,754-9,639	497
		0.05	-0.03																										
26	30	0.085	2	0						X	X	X	X												28,665	19,110-38,220	6,444	4,296-8,592	477
		0.05	-0.03																										
28	32	0.09	2	0						X	X	X	X	X											27,989	16,464-41,160	6,292	3,701-9,253	443
		0.05	-0.03																										
30	34	0.09	2	0					X	X	X	X	X	X	X	X									41,711	17,640-73,500	9,377	3,966-16,523	414
		0.05	-0.03																										







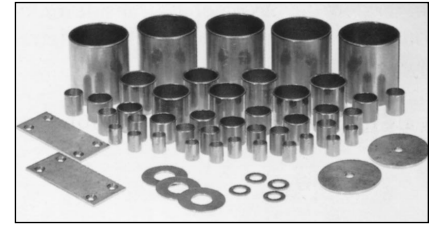
Part No.	I.D.		O.D.		Thickness		Knock Pin Hole		Screw Holes		Area of Bearing	Max RPM
	d		D		T		H		P.C.D.			
LFW-0815	8	$\frac{0.25}{0}$	16	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	1	$\frac{0.3}{0.1}$	12	$\pm 0.12$	12	1,035
LFW-1015	10	$\frac{0.25}{0}$	18	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	1	$\frac{0.3}{0.1}$	14	$\pm 0.12$	15	887
LFW-1215	12	$\frac{0.25}{0}$	24	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	1.5	$\frac{0.375}{0.125}$	18	$\pm 0.12$	18	690
LFW-1415	14	$\frac{0.25}{0}$	26	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	2	$\frac{0.375}{0.125}$	20	$\pm 0.12$	21	621
LFW-1615	16	$\frac{0.25}{0}$	30	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	2	$\frac{0.375}{0.125}$	23	$\pm 0.12$	24	540
LFW-1815	18	$\frac{0.25}{0}$	32	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	2	$\frac{0.375}{0.125}$	25	$\pm 0.12$	27	497
LFW-2015	20	$\frac{0.25}{0}$	36	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	3	$\frac{0.375}{0.125}$	28	$\pm 0.12$	30	443
LFW-2215	22	$\frac{0.25}{0}$	38	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	3	$\frac{0.375}{0.125}$	30	$\pm 0.12$	33	414
LFW-2415	24	$\frac{0.25}{0}$	42	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	3	$\frac{0.375}{0.125}$	33	$\pm 0.12$	36	376
LFW-2615	26	$\frac{0.25}{0}$	44	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	3	$\frac{0.375}{0.125}$	35	$\pm 0.12$	39	355
LFW-2815	28	$\frac{0.25}{0}$	48	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	4	$\frac{0.375}{0.125}$	38	$\pm 0.12$	42	327
LFW-3215 32	32	$\frac{0.25}{0}$	54	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	4	$\frac{0.375}{0.125}$	43	$\pm 0.12$	48	289
LFW-3815	38	$\frac{0.25}{0}$	62	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	4	$\frac{0.375}{0.125}$	50	$\pm 0.12$	57	248
LFW-4215	42	$\frac{0.25}{0}$	66	$\frac{0}{-0.25}$	1.5	$\frac{-0.03}{-0.08}$	4	$\frac{0.375}{0.125}$	54	$\pm 0.12$	63	230
LFW-4820	48	$\frac{0.25}{0}$	74	$\frac{0}{-0.25}$	2	$\frac{-0.03}{-0.08}$	4	$\frac{0.375}{0.125}$	61	$\pm 0.12$	96	204
LFW-5220	52	$\frac{0.25}{0}$	78	$\frac{0}{-0.25}$	2	$\frac{-0.03}{-0.08}$	4	$\frac{0.375}{0.125}$	65	$\pm 0.12$	104	191



# Specialty Bearings

## TOUGHMET

Oiles Toughmet is a bearing material designed to accommodate high temperature, high load applications. Consisting of two layers; a proprietary sintered copper alloy and a steel back. The sintered copper alloy layer contains uniformly dispersed solid lubricants.



### Features:

- High load carrying capacity
- Broad temperature range; -40 - +662°F (-40 - +350°C)
- Electroconductive (TME)
- Excellent in reciprocations and oscillation applications
- Performance enhanced with lubrication

### Applications:

- Baking and heat treat equipment
- Agricultural equipment
- Iron and steel manufacturer conveyers
- Applications requiring high-thermal conductivity

\*\*Note: Performance, speeds and loads may be enhanced with lubrication.

## LUMET (Special Order Only)

Oiles Lumet is a multi-layered bearing consisting of a Tetrafluorethylene (PTFE) resin, bonded to a sintered bronze layer that is fused to a steel backing. Developed exclusively for applications where shaft and boundary lubrication is present.



### Features:

- Superior wear resistance and load carrying capability
- Very low CF (coefficient of friction)
- Thin, lightweight and compact design
- Superior dimensional stability, mechanical strength and thermal conductivity
- Wide temperature range -328 - +536°F (-200 - +280°C)

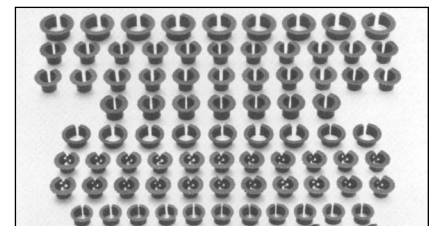
### Applications:

- Internally lubricated machinery and engines
- HVAC
- Food processing equipment
- Oil submersion applications
- Low resistance bearing support

\*\*Note: Performance, speeds and loads may be enhanced with lubrication.

## HIPLAST

Oiles Hiplast is a self-lubricating bearing consisting of expanded bronze mesh encapsulated within proprietary Tetrafluoroethylene (PTFE) resin. Hiplast does not have a steel backing but utilizes the bronze mesh to provide structural and dimensional integrity. Extremely lightweight and very narrow cross section, Hiplast conforms to the smallest of available spacing.



### Features:

- Outstanding load carrying capacity and wear resistance
- Thin wall thickness (0.5mm)
- Excellent wear resistance and performance in environments with a broad pH range
- Low CF (coefficient of friction)
- Excellent thermal conductivity
- Broad temperature range -58 - +482°F (-50 - +250°C)

### Applications:

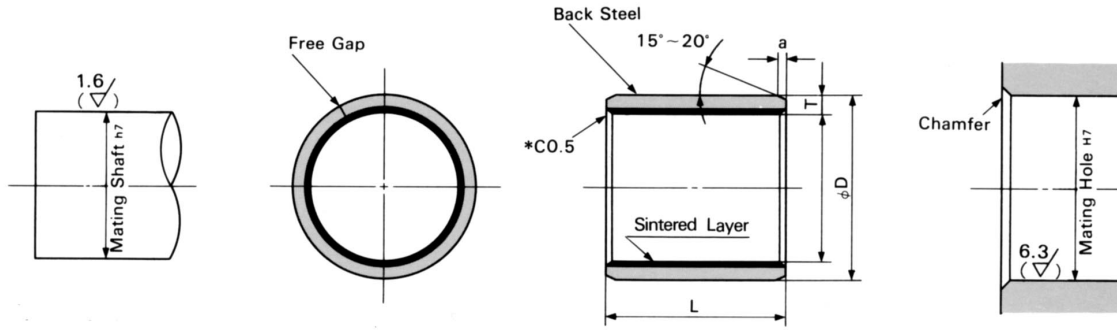
- Applications requiring very tight space restrictions
- Hinge and pivot shaft bushings
- Drawers and office equipment
- Prosthetic limb joints
- Applications requiring no slip stick or no squeal noises

\*\*Note: Performance, speeds and loads may be enhanced with lubrication.





# Toughmet Bushings (TMB)

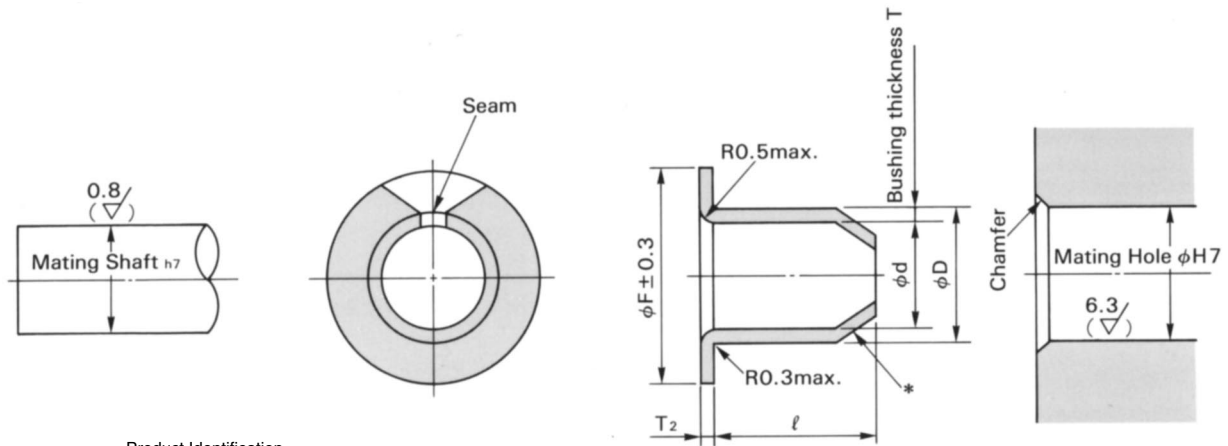


Product Identification

**TMB-0505**

- Length
- ID
- Part Code

Mating Shaft		Mating Hole		I.D.	O.D.	L	Surface Finish (Ra)																			Average Max Load N	Range of Max Load N	Average Max Load lbs	Range of Max Load lbs	Max RPM
d	h7	D	H7	d	D		5	6	8	10	12	15	20	25	30	35	40	50	60	70	80	95								
5	0 -0.012	7	0.015 0	5	7	0.055 0.025	X	X															780	600-960	175	135-216	1,528			
6	0 -0.012	8	0.015 0	6	8	0.055 0.025	X	X															1,152	864-1,440	259	194-324	1,273			
7	0 -0.015	9	0.015 0	7	9	0.055 0.025				X													2,016	2,016	2016	453	1,091			
8	0 -0.015	10	0.015 0	8	10	0.055 0.025		X	X	X	X												2,160	1,536-2,880	486	345-647	955			
9	0 -0.015	11	0.018 0	9	11	0.06 0.03			X														2,160	2,160	486	486	849			
10	0 -0.015	12	0.018 0	10	12	0.06 0.03			X	X	X												3,600	2,400-4,800	809	540-1,079	764			
12	0 -0.018	14	0.018 0	12	14	0.06 0.03			X	X	X												4,320	2,880-5,760	971	647-1,295	637			
14	0 -0.018	16	0.018 0	14	16	0.065 0.035	X	X	X	X													4,284	2,016-6,720	963	453-1,511	546			
15	0 -0.018	17	0.018 0	15	17	0.065 0.035			X	X	X	X											6,300	3,600-9,000	1,416	809-2,023	509			
16	0 -0.018	18	0.018 0	16	18	0.07 0.04				X	X	X											7,680	5,760-9,600	1,727	1,295-2,158	477			
18	0 -0.018	20	0.021 0	18	20	0.075 0.04				X	X												8,640	6,480-10,800	1,942	1,457-2,428	424			
20	0 -0.021	23	0.021 0	20	23	0.08 0.045				X	X	X	X										9,792	5,760-1,400	2,201	1,295-3,237	382			
22	0 -0.021	25	0.021 0	22	25	0.08 0.045			X		X	X											10,560	5,280-15,840	2,374	1,187-3,561	347			
24	0 -0.021	27	0.021 0	24	27	0.08 0.045							X										17,280	17,280	3,885	3,885	318			
25	0 -0.021	28	0.021 0	25	28	0.085 0.05			X	X	X	X	X	X									13,500	6,000-21,000	3,035	1,349-4,721	306			
26	0 -0.021	30	0.021 0	26	30	0.085 0.05							X										18,720	18,720	4,208	4,208	294			
28	0 -0.021	32	0.025 0	28	32	0.09 0.05					X	X	X	X									20,160	13,440-26,880	4,532	3,021-6,043	273			
30	0 -0.021	34	0.025 0	30	34	0.09 0.05				X	X	X	X	X	X								19,800	10,800-28,800	4,451	2,428-6,474	255			
31	0 -0.025	35	0.025 0	31	35	0.09 0.05									X								29,760	29,760	6,690	6,990	246			
32	0 -0.025	36	0.025 0	32	36	0.09 0.05				X					X								23,040	15,360-30,720	5,180	3,453-6,906	239			
35	0 -0.025	39	0.025 0	35	39	0.095 0.055				X	X	X	X	X	X								26,880	12,600-42,000	6,043	2,833-9,442	218			
38	0 -0.025	42	0.025 0	38	42	0.095 0.055						X		X									36,480	27,360-45,600	8,201	6,151-10,251	201			
40	0 -0.025	44	0.025 0	40	44	0.095 0.055						X	X	X	X								34,800	24,000-48,000	7,823	5,395-10,791	191			
42	0 -0.025	47	0.025 0	42	47	0.095 0.055									X								50,400	50,400	11,330	11,330	182			
45	0 -0.025	50	0.025 0	45	50	0.1 0.06							X		X								43,200	32,400-54,000	9,712	7,284-12,140	170			
50	0 -0.025	55	0.03 0	50	55	0.105 0.06						X	X	X	X	X							49,200	30,000-72,000	11,061	6,744-16,186	153			
55	0 -0.03	60	0.03 0	55	60	0.11 0.065					X		X			X							59,400	33,000-92,400	13,354	7,419-20,772	139			
60	0 -0.03	65	0.03 0	60	65	0.12 0.07						X	X	X	X								62,400	43,200-86,400	14,028	9,712-19,423	127			
65	0 -0.03	70	0.03 0	65	70	0.125 0.075						X	X	X									67,600	46,800-93,600	15,197	1,0521-21,042	118			
70	0 -0.03	75	0.03 0	70	75	0.125 0.075						X	X							X			84,000	50,400-134,400	18,884	11,330-30,214	109			
75	0 -0.03	80	0.03 0	75	80	0.13 0.075							X						X				108,000	72,000-144,000	24,279	16,186-32,372	102			
80	0 -0.03	85	0.035 0	80	85	0.13 0.075								X						X			115,200	76,800-153,600	25,898	17,265-34,531	95			
85	0 -0.035	90	0.035 0	85	90	0.13 0.075								X						X			122,400	81,600-163,200	27,517	18,344-36,689	90			
90	0 -0.035	95	0.035 0	90	95	0.13 0.075								X	X								108,000	86,400-129,600	24,279	19,423-29,135	85			
100	0 -0.035	105	0.035 0	100	105	0.14 0.08									X					X			174,000	120,000-228,000	39,117	26,977-51,256	76			



Product Identification

**HPF-0610**

- Length
- ID
- Part Code

Mating Shaft	I.D.	O.D.	Flange	Thickness	L	$\pm 0.3$						
d	d	D	F	T		5	6	8	10	12	15	20
4	0.051	4	5	8	0.5	$\pm 0.05$	X					
	0.029											
5	0.068	5	6	10	0.5	$\pm 0.02$	X		X			
	0.041											
6	0.068	6	7	11	0.5	$\pm 0.02$		X	X			
	0.041											
8	0.068	8	9	13	0.5	$\pm 0.02$			X		X	
	0.041											
10	0.068	10	11	16	0.5	$\pm 0.02$			X		X	
	0.041											
12	0.088	12	13	18	0.5	$\pm 0.02$				X		X
	0.055											
15	0.088	15	16	22	0.5	$\pm 0.02$					X	X
	0.055											



# Metallic Bearings

Oiles offers an extensive group of high performance metallic bearings, engineered to satisfy a broad range of heavy duty applications. Each with unique features and benefits and all designed to offer long life lube free service. For bearing selection, please consult the engineering data available in our catalogs, from Oiles customer service centers or the Oiles website at [www.oiles.com](http://www.oiles.com).

## 500 SERIES

Oiles 500 series bearings incorporate high quality copper alloy based metals with engineered solid lubricant plugs. These bearings are designed to accommodate a wide variety of application requirements demanded by today's equipment. Precise tolerances utilizing strategic plug location and plug compounds ensure performance delivery and lubrication free service. This bearing style is available in standard inch, metric and made to order sizes. 500 series bearings provide extreme temperature limits and high load capacity performance. Available in journal style bearings and flat wear plate.

### 500 SP1

#### Features:

- High strength brass alloy available with graphite, PTFE and/or custom plugs
- High load, medium to low velocity applications
- Standard stock
- Temperature range: -40 - +575°F (-40 - +300°C)

### 500 HP

#### Features:

- High strength proprietary copper alloy
- Extreme load and high contact pressure performance
- Extreme resistance to abrasion
- Available in standard and MTO sizes
- Temperature range: -40 - +320°F (-40 - + 150°C)

### 500 AB

#### Features:

- Extreme service aluminum bronze composition
- Provides excellent corrosion and heat resistance
- Performs very well submersed in sea water
- Available in standard and MTO sizes
- Extreme temperatures: -418 - +750°F (-250 - +400°C)

### 500 F

#### Features:

- Economical proprietary cast iron metal
- Designed for lube free mid load and low to medium speeds
- Superior wear in dry and hostile environments
- Available in standard and MTO sizes
- Extreme temperatures: -40 - +800°F (-40 - +410°C)

### 500 L (SPBL)

#### Features:

- Fabricated with a proprietary PTFE plugs
- Designed to operate in wet or dry environments
- Handles rotary and oscillating motion with high loading at lower speeds
- In dry applications, use a lithium based grease
- Temperatures: -40 - +200°F (-40 - +80°C)

#### Applications:

- Conveyor and construction equipment
- Heavy duty tractor and farm implement equipment
- Mining equipment
- Forestry equipment
- Hydro generation and dam gate bearings
- Underwater and partially submerged applications
- Sewage treatment plants
- Mixing tank bladeshaft support
- Foundry, furnace and steel production equipment
- HVAC applications
- Heavy duty caster and wheel support bearings
- Kiln kart and veneer dryer applications
- Consult the Oiles network for application assistance



## 2000 BEARING MATERIAL

Oiles 2000 is a patented and proprietary specialty bearing product. Comprised of a machined steel body with a special low friction integral liner, 2000 handles loads and speeds not normally associated with lube free bearings. 2000 bearings are available from stock in specific metric sized bearings as well as wear plate material. Oiles 2000 outlasts, out performs and exceeds the limits of most standard plain bearings, accepting loading and motion in both rotary and linear planes.

### Features:

- Multilayered bearing material, consisting of a sliding surface and a rugged steel backing. Backing may be machined and surface may be drilled in plate type products.
- Low CF (coefficient of friction) bearing surface utilizes a dry film lubricant
- Operates in applications with or without lubrication
- Able to handle motion in any direction; rotary, linear or any combination
- Custom die plates may be machined from blank plate stock
- Products are suited for custom sizes and high volume OEM applications

### Applications:

- Heavy duty on and off-road equipment
- Hinge, pivot and pin joints
- Cranes and lifting devices
- Drive line and conveyor shafts
- High pressure sliding surfaces
- Cable and drum pulley applications
- Heavy duty track wheel and caster wheels
- Mining equipment
- Forestry equipment
- Agricultural equipment
- Linear automation applications
- Consult the Oiles network for application assistance

## CERMET G and M MATERIAL BUSHINGS

Cermet bearings and material are comprised of a proprietary blend of sintered copper alloys and evenly dispersed solid lubricants. Designed to replace oil impregnated bushings and plastic bearings, Cermet offers greater load and temperature service without external lubrication. Cermet M and Cermet G are similar compounds, however Cermet G offers an extended temperature service. Cermet M and G are available in standard metric sizes in both straight bore and flanged styles. This material is available in rod and bar stock to facilitate machining, create inch sizes and non standard shapes.

### Features:

- Solid imbedded lubricant for seize free, worry free use
- Excellent temperature range
- Economical alternative to specialty brass and bronze bearings
- Available in standard metric straight bore and flanged bushings
- Available in rod and bar stock for custom machining and inch sizing.
- Wide Temperature range:  
Cermet M -40 - +400°F (-40 - +200°C)  
Cermet G -40 - +500°F (-40 - +250°C)

### Applications:

- Bakery equipment, kilns, and heat treating equipment
- Agricultural equipment, lawn and garden equipment
- Conveyors, compressors, agitators and mixing equipment
- Applications requiring superior service under frequent starts and stops
- Consult the Oiles network for application assistance



## OILES 300 SERIES

Oiles 300 series bearings offer an excellent alternative to oil impregnated and non metallic bearing materials. Designed to reduce lubrication intervals and provide a worry free, seize free bearing alternative. Available in finished metric straight bore and flanged sizes, bar stock and tube stock. Oiles 300 is recommended to be used with lubrication. This material is adaptable for machining from core stock to be applied in applications where catastrophic failure or shaft seizure problems are a concern.

### Features:

- Oil impregnated cast iron alloy
- Dramatically reduces lubrication intervals on high maintenance applications
- Available in finished bushings and bar stock for re-machining
- Allows rotary and/or linear motion and combined linear and rotary motion
- Recommended to operate in a lubricated environment
- Economical long life, seize free service
- Temperature range -40 - +310°F (-40 - +150°C)

### Applications:

- Lawn, garden and agricultural applications
- In lubricated machine and equipment applications
- Rotary, reciprocating and linear motion support
- Replacement for oil impregnated bronze bushings and non metallic sleeves
- Consult the Oiles network for application assistance

## OILES LINEAR SLIDES (SLIDE SHIFTERS)

Oiles produces a wide range of metric and specialty linear slide components. These linear motion products offer distinct advantages over rolling element linear bearing products. Many of the high maintenance and detrimental aspects of ball and roller linear bearings are eliminated with Oiles Linear Slides. The two greatest advantages are; reduced lubrication performance and the peace of mind that Oiles Linear Slides will never catastrophically fail.

### Features:

- Reduced lubrication - low maintenance performance
- Noise Reduction - Oiles Linear Slides provide a very low noise rating as compared to rolling element bearing linear slides
- High Load - Oiles Linear Slides provide a very high load carrying capacity - Size for size, Oiles Slides offer a greater load carrying area, less point contact and less shaft distortion and rail damage
- Particulate Resistance - Oiles Linear Slides have no elements to clog or seize with contaminated lubricants or foreign particles. Expensive seals and wipers are far less critical with Oiles Slide units
- Broad Product Range - Oiles offers a range of both profiled rail and round shaft type bearings
- Economical - Oiles Linear slide bearings offer an overall financial saving; less cost for the load handled, less maintenance, less replacement cost of components and greater overall efficiency

### Applications:

- Any inline or straight line motion support in any direction
- Guides and lifting devices
- Automation equipment
- Door and gate actuation
- Setup and base support slide rails
- Automated indexing and repetitious cycling



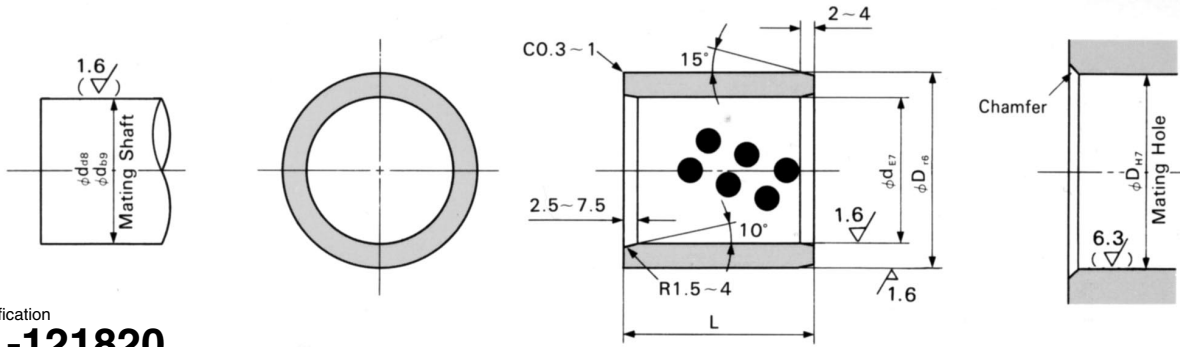






# OILES 500L

## Bushings (SPBL)



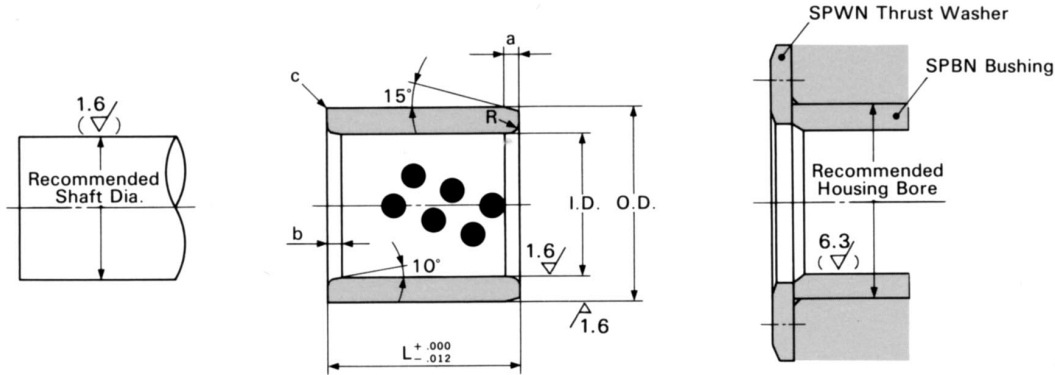
Product Identification

**SPBL-121820**

- Length
- OD
- ID
- Part Code

I.D.	O.D.	L	0																	Average Max Load N	Range of Max Load N	Average Max Load	Range of Max Load
			20	25	30	35	40	50	60	70	80	90	100	110	120	130	140	150	200				
12	0.05 0.032	18	0.034 0.023	X															6,960	6,960	1,565	1,564	
15	0.05 0.032	21	0.041 0.028	X															8,700	8,700	1,956	1,955	
16	0.05 0.032	22	0.041 0.028	X	X														11,600	9,280-13,920	2,608	2086.23	
18	0.05 0.032	24	0.041 0.028	X															10,440	10,440	2,347	2,347	
20	0.061 0.04	30	0.041 0.028	X	X	X													17,400	11,600-23,200	3,912	2,607-5,215	
25	0.061 0.04	35	0.05 0.034	X	X	X	X	X											23,925	14,500-36,250	5,379	3,259-8,149	
30	0.061 0.04	40	0.05 0.034	X	X	X	X	X											28,710	17,400-43,500	6,454	3,911-9,779	
35	0.075 0.05	45	0.05 0.034	X	X	X	X	X	X										39,754	20,300-60,900	8,937	4,563-13,690	
40	0.075 0.05	50	0.05 0.034		X	X	X	X											52,744	34,800-69,600	11,857	7,823-15,646	
40	0.075 0.05	55	0.06 0.041			X	X	X											52,744	34,800-69,600	11,857	7,823-15,646	
45	0.075 0.05	60	0.06 0.041		X		X	X											71,775	65,250-78,300	16,136	14,668-17,602	
50	0.075 0.05	60	0.06 0.041			X	X	X											76,643	58,000-101,500	17,230	13,038-22,818	
50	0.075 0.05	65	0.06 0.041			X	X	X	X										76,643	58,000-101,500	17,230	13,038-22,818	
55	0.09 0.06	70	0.06 0.041			X		X	X										90,383	63,800-111,650	20,319	14,342-21,514	
60	0.09 0.06	75	0.06 0.041				X	X	X	X									113,100	87,000-139,200	25,426	19,558-31,293	
65	0.09 0.06	80	0.06 0.041					X	X	X									131,950	113,100-150,800	29,664	25,425-33,901	
70	0.09 0.06	90	0.073 0.051					X	X	X	X	X							162,400	121,800-203,000	36,509	27,381-45,636	
75	0.09 0.06	95	0.073 0.051						X		X								184,875	217,500-152,250	41,562	48,895-34,227	
80	0.09 0.06	100	0.073 0.051					X	X	X	X	X	X						204,160	139,200-255,200	45,897	31,293-57,371	
90	0.107 0.072	110	0.076 0.054					X	X	X	X								215,325	156,600-261,000	48,407	35,205-58,675	
100	0.107 0.072	120	0.076 0.054					X	X		X	X							261,000	174,000-348,000	58,675	39,116-78,233	
110	0.107 0.072	130	0.088 0.063							X	X								334,950	319,000-350,900	75,300	71,714-78,885	
120	0.107 0.072	140	0.088 0.063						X	X	X								348,000	278,400-417,600	78,234	62,586-93,880	
130	0.125 0.085	150	0.09 0.065							X		X	X						477,533	377,000-565,500	107,354	84,753-127,129	
140	0.125 0.085	160	0.09 0.065								X		X	X					487,200	406,000-568,400	109,527	91,271-127,781	
150	0.125 0.085	170	0.093 0.068								X			X					543,750	435,000-652,500	122,240	97,791-146,688	
160	0.125 0.085	180	0.093 0.068								X				X				580,000	464,000-696,000	130,389	104,311-156,467	
170	0.125 0.085	190	0.106 0.077									X*			X*				616,250	493,000-739,500	138,538	110,831-166,246	
180	0.125 0.085	200	0.106 0.077									X*			X*				652,500	522,000-783,000	146,688	117,350-176,025	
190	0.146 0.1	210	0.109 0.08									X*			X*				688,750	551,000-826,500	154,837	123,870-185,805	
200	0.146 0.1	230	0.113 0.084												X*	X*			1,015,000	870,000-1,160,000	228,181	195,584-260,778	

\*made to order



(inch)

I.D.		O.D.		L		+.000 -.012											
d	D	1/2	5/8	3/4	7/8	1	1-1/4	1-1/2	1-3/4	2	2-1/2	3	3-1/2	4	5		
1/2	.5033 .5026	3/4	.7518 .7513	SPBN-081208	SPBN-081210	SPBN-081212	SPBN-081214	SPBN-081216									
5/8	.6283 .6276	7/8	.8768 .8763		SPBN-101410	SPBN-101412		SPBN-101416									
3/4	.7536 .7528	1-1/8	1.1268 1.1263		SPBN-121810	SPBN-121812		SPBN-121816									
7/8	.8788 .8780	1-1/4	1.2520 1.2513			SPBN-142012		SPBN-142016	SPBN-142020	SPBN-142024							
1	1.0042 1.0034	1-3/8	1.3772 1.3765			SPBN-162212		SPBN-162216	SPBN-162020	SPBN-162224	SPBN-162228	SPBN-162232					
1	1.0042 1.0034	1-1/2	1.5022 1.5015			SPBN-162412		SPBN-162416		SPBN-162424		SPBN-162432					
1-1/4	1.2546 1.2536	1-5/8	1.6272 1.6265					SPBN-202616	SPBN-202620	SPBN-202624	SPBN-202628	SPBN-202632					
1-1/2	1.5049 1.5039	2	2.0023 2.0015					SPBN-243216	SPBN-243220	SPBN-243224	SPBN-243228	SPBN-243232					
1-3/4	1.7551 1.7541	2-1/4	2.2523 2.2515					SPBN-283620	SPBN-283624	SPBN-283628	SPBN-283632	SPBN-283640	SPBN-283648	SPBN-283656	SPBN-283664		
2	2.0062 2.0050	2-1/2	2.503 2.5022					SPBN-324020	SPBN-324024		SPBN-324032	SPBN-324040	SPBN-324048				
2-1/4	2.2564 2.2552	2-3/4	2.7530 2.7522						SPBN-364424		SPBN-364432	SPBN-364440	SPBN-364448				
2-1/2	2.5066 2.5054	3	3.0030 3.0022						SPBN-404824		SPBN-404832		SPBN-404848				
2-3/4	2.7569 2.7557	3-3/8	3.3781 3.3772						SPBN-445424		SPBN-445432	SPBN-445440	SPBN-445448				
3	3.0073 3.0061	3-5/8	3.6283 3.6274								SPBN-485832	SPBN-485840	SPBN-485848	SPBN-485856			
3-1/2	3.5077 3.5063	4-1/8	4.1283 4.1274								SPBN-566632		SPBN-566648		SPBN-566664		
4	4.0083 4.0069	4-3/4	4.7535 4.7526								SPBN-647632		SPBN-647648		SPBN-647664		
4-1/2	4.5086 4.5072	5-3/8	5.3786 5.3776										SPBN-728648		SPBN-728664	SPBN-728680	
5	5.0096 5.008	6	6.0040 6.003										SPBN-809648		SPBN-809664	SPBN-809680	

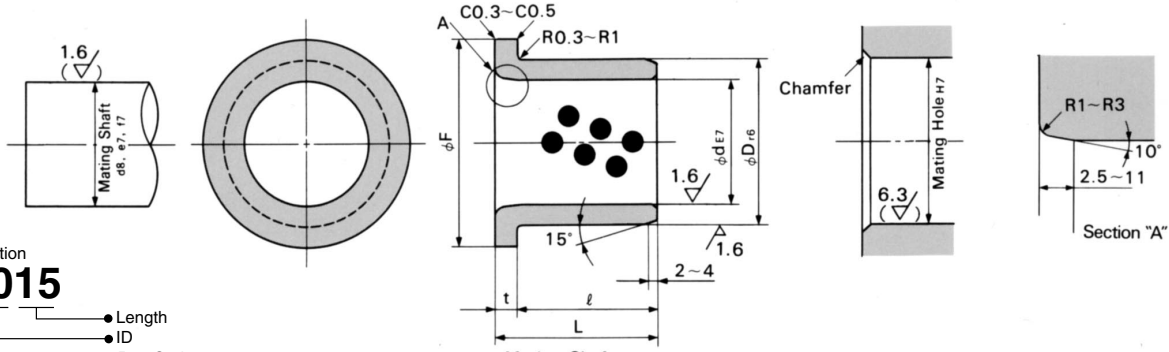
### SPBN Limits and Fits

Inside Dia.	Outside Dia.	Tolerances		Clearance Max. Min.	Pressfit Max. Min.	Recommended Shaft Dia.	Recommended Bore Dia.
		I.D. d	O.D. D				
1/2	3/4	.5033 .5026	.7518 .7513	.0030 .0008	.0018 .0008	.5000 .4995	.7505 .7500
5/8	7/8	.6283 .6276	.8768 .8763	.0030 .0008	.0018 .0008	.6250 .6245	.8755 .8750
3/4	1-1/8	.7536 .7528	1.1268 1.1263	.0033 .0010	.0018 .0008	.7500 .7495	1.1255 1.1250
7/8	1-1/4	.8788 .8780	1.2520 1.2513	.0035 .0010	.0020 .0008	.8750 .8745	1.2505 1.2500
1	1-3/8	1.0042 1.0034	1.3772 1.3765	.0037 .0012	.0022 .0010	1.0000 .9995	1.3755 1.3750
1	1-1/2	1.0042 1.0034	1.5022 1.5015	.0037 .0012	.0022 .0010	1.0000 .9995	1.5005 1.5000
1-1/4	1-5/8	1.2546 1.2536	1.6272 1.6265	.0041 .0014	.0022 .0010	1.2500 1.2495	1.6255 1.6250
1-1/2	2	1.5049 1.5039	2.0023 2.0015	.0044 .0016	.0023 .0010	2.0005 1.9995	2.0005 2.0000
1-3/4	2-1/4	1.7551 1.7541	2.2523 2.2515	.0046 .0018	.0023 .0010	1.7500 1.7495	2.2505 2.2500

Inside Dia.	Outside Dia.	Tolerances		Clearance Max. Min.	Pressfit Max. Min.	Recommended Shaft Dia.	Recommended Bore Dia.
		I.D. d	O.D. D				
2	2-1/2	2.0062 2.0050	2.5030 2.5022	.0060 .0020	.0030 .0012	2.0000 1.9990	2.5010 2.5000
2-1/4	2-3/4	2.2564 2.2552	2.7530 2.7522	.0062 .0022	.0030 .0012	2.2500 2.2490	2.7510 2.7500
2-1/2	3	2.5066 2.5054	3.0030 3.0022	.0064 .0024	.0030 .0012	2.5000 2.4990	3.0010 3.0000
2-3/4	3-3/8	2.7569 2.7557	3.3781 3.3772	.0067 .0026	.0031 .0012	2.7500 2.7490	3.3760 3.3750
3	3-5/8	3.0073 3.0061	3.6283 3.6274	.0069 .0028	.0033 .0014	3.0000 2.9990	3.6260 3.6250
3-1/2	4-1/8	3.5077 3.5063	4.1283 4.1274	.0073 .0030	.0033 .0014	3.5000 2.4990	4.1260 4.1250
4	4-3/8	4.0083 4.0069	4.7535 4.7526	.0077 .0034	.0035 .0016	4.0000 3.9990	4.7510 4.7500
4-1/2	5-3/8	4.5086 4.5072	5.3786 5.3776	.0080 .0036	.0036 .0016	4.5000 4.4990	5.3760 5.3750
5	6	5.0096 5.0080	6.0040 6.0030	.0086 .0040	.0040 .0020	5.0000 4.9990	6.0010 6.0000



# OILES 500SP Flanged Bushings (SPF)



Product Identification  
**SPF-1015**

- Length
- ID
- Part Code

I.D.	O.D.	Flange		L	0												Max Load N	Max Load lbs	Max RPM						
					-0																				
d	D	F	t	10	12	15	17	18	20	23	25	30	35	40	50	60	68	80	100	120					
6	0.032 0.02	10	0.028 0.019	16	2	0 -0.1	X	X															2,784	626	1,592
8	0.04 0.025	12	0.034 0.023	20	2	0 -0.1	X	X	X														4,640	1,043"	1,194
10	0.04 0.025	14	0.034 0.023	22	2	0 -0.1	X	X	X	X													6,380	1,434	955
12	0.05 0.032	18	0.034 0.023	25	3	0 -0.1	X	X	X			X		X	X								8,700	1,956	796
13	0.05 0.032	19	0.041 0.028	26	3	0 -0.1	X	X	X			X		X	X								9,802	2,204	735
14	0.05 0.032	20	0.041 0.028	27	3	0 -0.1			X			X		X									10,962	2,464	682
15	0.05 0.032	21	0.041 0.028	28	3	0 -0.1	X	X	X			X		X	X								12,180	2,738	637
16	0.05 0.032	22	0.041 0.028	29	3	0 -0.1		X	X			X	X	X	X	X							13,456	3,025	597
18	0.05 0.032	24	0.041 0.028	32	3	0 -0.1			X			X	X	X	X	X							16,704	3,755	531
20	0.061 0.04	30	0.041 0.028	40	5	0 -0.1			X			X	X	X	X	X							23,200	5,216	477
25	0.061 0.04	35	0.05 0.034	45	5	0 -0.1			X			X	X	X	X	X							32,625	7,334	382
30	0.061 0.04	40	0.05 0.034	50	5	0 -0.1						X	X	X	X	X							43,500	9,779	318
31.5	0.075 0.05	40	0.05 0.034	50	5	0 -0.1						X		X	X	X							45,675	10,268	303
35	0.075 0.05	45	0.05 0.034	60	5	0 -0.1						X		X	X	X	X						60,900	13,691	273
40	0.075 0.05	50	0.05 0.034	65	5	0 -0.1						X		X	X	X	X						75,400	16,951	239
45	0.075 0.05	55	0.06 0.041	70	5	0 -0.1								X	X	X	X						91,350	20,536	212
50	0.075 0.05	60	0.06 0.041	75	5	0 -0.1									X	X	X	X					108,750	24,448	191
55	0.09 0.06	65	0.06 0.041	80	5	0 -0.1										X	X						127,600	28,686	174
60	0.09 0.06	75	0.062 0.043	90	7.5	0 -0.1									X	X	X			X			156,600	35,205	159
63	0.09 0.06	75	0.062 0.043	85	7.5	0 -0.1											X						155,295	34,912	152
65	0.09 0.06	80	0.062 0.043	95	7.5	0 -0.1										X							179,075	40,258	147
70	0.09 0.06	85	0.073 0.051	105	7.5	0 -0.1										X				X			213,150	47,918	136
75	0.09 0.06	90	0.073 0.051	110	7.5	0 -0.1											X						239,250	53,786	127
80	0.09 0.06	100	0.073 0.051	120	10	0 -0.1											X		X	X			278,400	62,587	119
90	0.107 0.072	110	0.076 0.054	130	10	0 -0.1											X		X				339,300	76,278	106
100	0.107 0.072	120	0.076 0.054	150	10	0 -0.1												X	X				435,000	97,792	95
120	0.107 0.072	140	0.088 0.063	170	10	0 -0.1													X	X			591,600	132,997	80
130	0.125 0.085	150	0.09 0.065	180	10	0 -0.1													X*	X*			678,600	152,555	73
140	0.125 0.085	160	0.09 0.065	190	10	0 -0.1													X*	X*			771,400	173,418	68
150	0.125 0.085	170	0.093 0.068	200	10	0 -0.1														X*	X*		870,000	195,584	64
160	0.125 0.085	180	0.093 0.068	210	10	0 -0.1														X*	X*		974,400	219,054	60

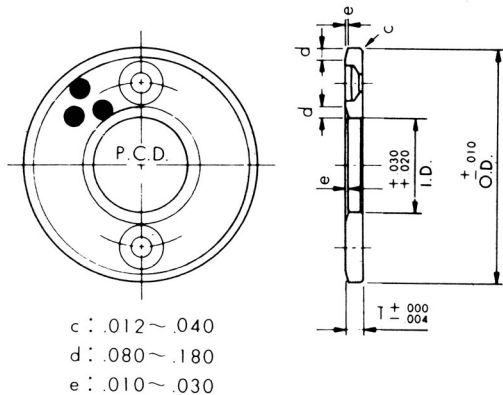
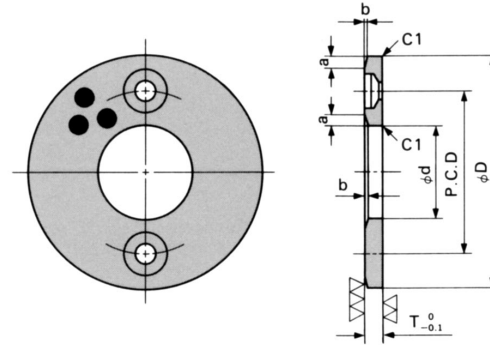
\*made to order



# OILES 500 SP

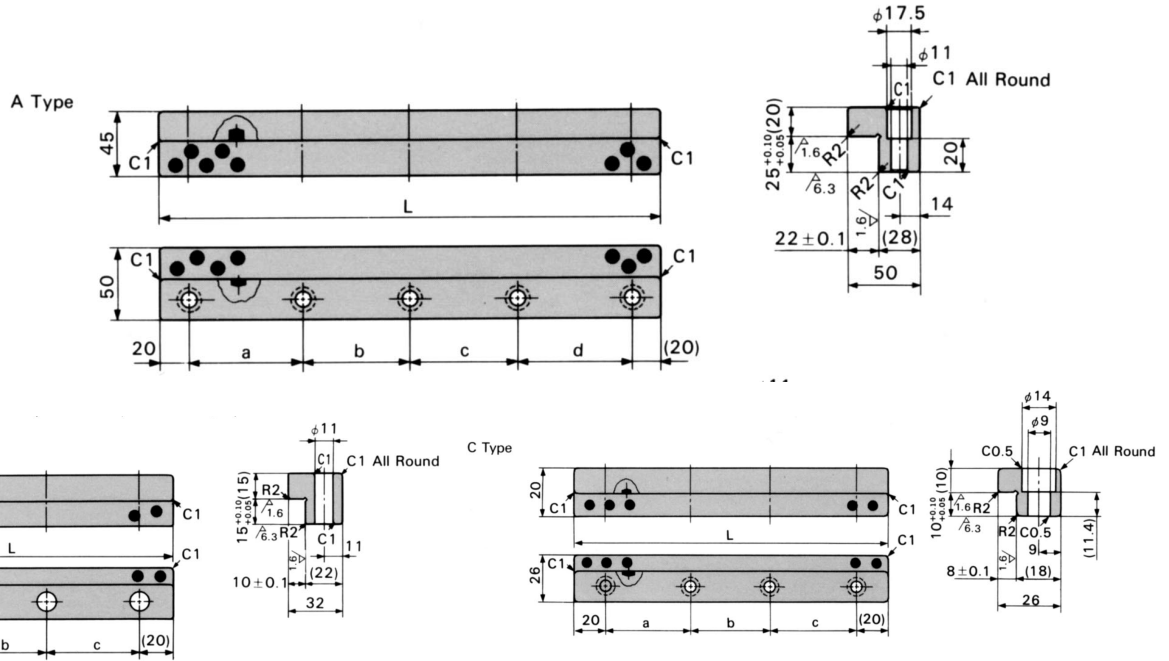
## Washers (SPW) Washers – Inch (SPWN)

Part No.	I.D.		O.D.	Thickness		Screw Holes			Max RPM
	d			T	P.C.D.	Number of Holes	Flat Head Screw		
SPW-0603	6.2	0.2 0.1	25	3	0 -0.1	15	2	M3	612
SPW-0803	8.2	0.2 0.1	28	3	0 -0.1	18	2	M3	528
SPW-1003	10.2	0.2 0.1	30	3	0 -0.1	20	2	M3	475
SPW-1203	12.2	0.2 0.1	40	3	0 -0.1	28	2	M3	366
SPW-1203N	12.2	0.2 0.1	40	3	0 -0.1	Flat Head Screw without Hole			366
SPW-1303	13.2	0.2 0.1	40	3	0 -0.1	28	2	M3	359
SPW-1403	14.2	0.2 0.1	40	3	0 -0.1	28	2	M3	352
SPW-1503	15.2	0.2 0.1	50	3	0 -0.1	35	2	M3	293
SPW-1603	16.2	0.2 0.1	50	3	0 -0.1	35	2	M3	288
SPW-1603N	16.2	0.2 0.1	50	3	0 -0.1	Flat Head Screw without Hole			288
SPW-1803	18.2	0.2 0.1	50	3	0 -0.1	35	2	M3	280
SPW-2005	20.2	0.2 0.1	50	5	0 -0.1	35	2	M5	272
SPW-2505	25.2	0.2 0.1	55	5	0 -0.1	40	2	M5	238
SPW-3005	30.2	0.2 0.1	60	5	0 -0.1	45	2	M5	212
SPW-3505	35.2	0.2 0.1	70	5	0 -0.1	50	2	M5	182
SPW-4007	40.2	0.2 0.1	80	7	0 -0.1	60	2	M6	159
SPW-4507	45.2	0.2 0.1	90	7	0 -0.1	70	2	M6	141
SPW-5008	50.3	0.3 0.1	100	8	0 -0.1	75	4	M6	127
SPW-5508	55.3	0.3 0.1	110	8	0 -0.1	85	4	M6	116
SPW-6008	60.3	0.3 0.1	120	8	0 -0.1	90	4	M8	106
SPW-6508	65.3	0.3 0.1	125	8	0 -0.1	95	4	M8	100
SPW-7010	70.3	0.3 0.1	130	10	0 -0.1	100	4	M8	95
SPW-7510	75.3	0.3 0.1	140	10	0 -0.1	110	4	M8	89
SPW-8010	80.3	0.3 0.1	150	10	0 -0.1	120	4	M8	83
SPW-9010	90.5	0.3 0.1	170	10	0 -0.1	140	4	M10	73
SPW-10010	100.5	0.3 0.1	190	10	0 -0.1	160	4	M10	66
SPW-12010	120.5	0.3 0.1	200	10	0 -0.1	175	4	M10	60

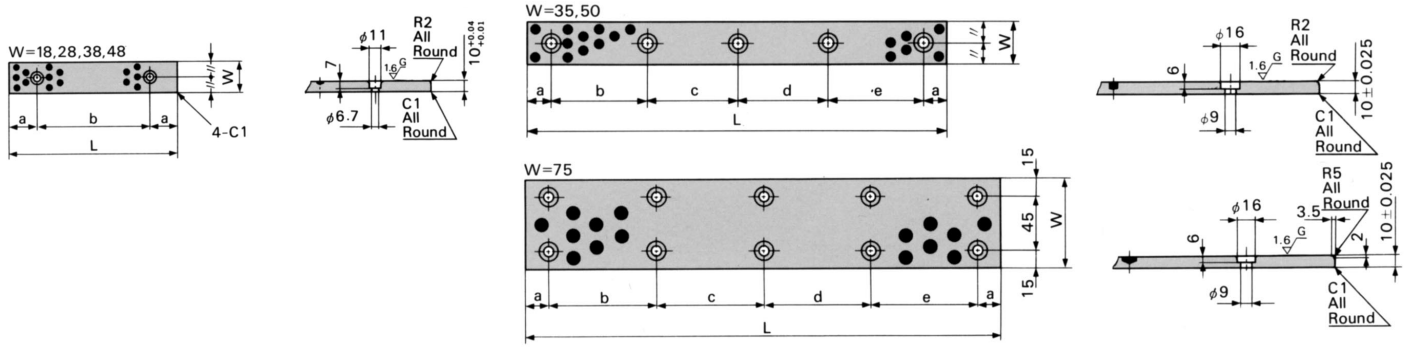


(inch)

Part No.	I.D.	O.D.	Thickness	P.C.D.	Number of Holes	Screw Size
	d	D				
SPWN-0802	1/2	1-1/2	1/8	1-1/16	2	1/8
SPWN-1002	5/8	1-3/4	1/8	1-5/16	2	1/8
SPWN-1203	3/4	2	3/16	1-1/2	2	3/16
SPWN-1403	7/8	2-1/8	3/16	1-5/8	2	3/16
SPWN-1603	1	2-1/4	3/16	1-3/4	2	3/16
SPWN-2004	1-1/4	2-1/2	1/4	1-15/16	2	3/16
SPWN-2404	1-1/2	3	1/4	2-3/8	2	3/16
SPWN-2804	1-3/4	3-1/2	1/4	2-3/4	2	1/4
SPWN-3205	2	4	5/16	3-3/16	4	1/4
SPWN-3605	2-1/4	4-1/2	5/16	3-5/8	4	1/4
SPWN-4005	2-1/2	4-3/4	5/16	3-3/4	4	5/16
SPWN-4406	2-3/4	5-1/8	3/8	4-1/8	4	5/16
SPWN-4806	3	5-1/2	3/8	4-1/2	4	5/16
SPWN-5606	3-1/2	6-3/4	3/8	5-1/2	4	3/8
SPWN-6406	4	7-1/2	3/8	6-1/4	4	3/8
SPWN-7208	4-1/2	7-3/4	1/2	6-3/8	4	3/8
SPWN-8008	5	8	1/2	6-3/4	4	3/8



Part No.	W	L	T	Mounting Hole Pitch						Mounting Bolt		Max Load N	Max Load lbs
				a	b	c	d	e	f	Type	Number		
SLP-50200A	50	200	45	55	50	55	-	-	-	M10	4	261,000	58,675
SLP-50250A	50	250	45	70	70	70	-	-	-	M10	4	326,250	73,344
SLP-50300A	50	300	45	65	65	65	65	-	-	M10	5	391,500	88,013
SLP-50350A	50	350	45	80	75	75	80	-	-	M10	5	456,750	102,681
SLP-50500A	50	500	45	80	75	75	75	75	80	M10	7	580,000	130,389
SLP-32100B	32	100	30	60	75	75	75	75	-	M10	2	87,000	19,558
SLP-32150B	32	150	30	55	55	75	75	75	-	M10	3	130,500	29,338
SLP-32200B	32	200	30	55	50	55	75	75	-	M10	4	174,000	39,117
SLP-32250B	32	250	30	70	70	70	75	75	-	M10	4	217,500	48,896
SLP-32400B	32	400	30	75	70	70	70	75	-	M10	6	348,000	78,234
SLP-26100C	26	100	20	60	-	-	-	-	-	M8	2	58,000	13,039
SLP-26150C	26	150	20	55	55	-	-	-	-	M8	3	87,000	19,558
SLP-26200C	26	200	20	55	50	55	-	-	-	M8	4	116,000	26,078
SLP-26400C	26	400	20	75	70	70	70	75	-	M8	6	232,000	52,156
SLP-2050	20	50	20	10	30	-	-	-	-	M8	2	29,000	6,519
SLP-20100	20	100	20	20	60	-	-	-	-	M8	2	58,000	13,039
SLP-20150	20	150	20	20	55	55	-	-	-	M8	3	87,000	19,558
SLP-20200	20	200	20	20	55	50	55	-	-	M8	4	196,000	44,063
SLP-1550	15	50	15	10	30	-	-	-	-	M6	2	21,750	4,890
SLP-15100	15	100	15	20	60	-	-	-	-	M6	2	43,500	9,779
SLP-15150	15	150	15	20	55	55	-	-	-	M6	3	43,500	9,779
SLP-15200	15	200	15	20	55	50	55	-	-	M6	4	87,000	19,558

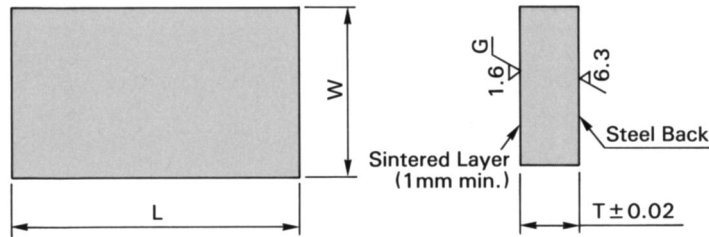


Part No.	W	L	T	Mounting Hole Pitch					Mounting Bolt		Max Load N	Max Load lbs	
				a	b	c	d	e	Type	Number			
SFP-1875	18	75	10	0.04	15	45				M6	2	39,150	8,801
				0.01						Hexagon socket head			
SFP-18100	18	100	10	0.04	25	50				M6	2	59,200	11,735
				0.01						Hexagon socket head			
SFP-18125	18	125	10	0.04	25	75				M6	2	665,250	14,669
				0.01						Hexagon socket head			
SFP-18150	18	150	10	0.04	25	100				M6	2	78,300	17,603
				0.01						Hexagon socket head			
SFP-2875	28	75	10	0.04	15	45				M6	2	60,900	13,691
				0.01						Hexagon socket head			
SFP-28100	28	100	10	0.04	25	50				M6	2	81,200	18,254
				0.01						Hexagon socket head			
SFP-28125	28	125	10	0.04	25	75				M6	2	101,500	22,818
				0.01						Hexagon socket head			
SFP-28150	28	150	10	0.04	25	100				M6	2	121,800	27,382
				0.01						Hexagon socket head			
SFP-2875	38	75	10	0.04	15	45				M6	2	82,650	18,580
				0.01						Hexagon socket head			
SFP-38100	38	100	10	0.04	25	50				M6	2	110,200	24,774
				0.01						Hexagon socket head			
SFP-38125	38	125	10	0.04	25	75				M6	2	137,750	30,967
				0.01						Hexagon socket head			
SFP-38150	38	150	10	0.04	25	100				M6	2	165,300	37,161
				0.01						Hexagon socket head			
SFP-4875	48	75	10	0.04	15	45				M6	2	104,400	23,470
				0.01						Hexagon socket head			
SFP-48100	48	100	10	0.04	25	50				M6	2	139,200	31,293
				0.01						Hexagon socket head			
SFP-48125	48	125	10	0.04	25	75				M6	2	174,000	39,117
				0.01						Hexagon socket head			
SFP-48150	48	150	10	0.04	25	100				M6	2	208,800	46,940
				0.01						Hexagon socket head			
SFP-35100	35	100	10	±0.025	20	60				M8	2	101,500	22,818
										Flat Head Screw			
SFP-35150	35	150	10	±0.025	20	55	55			M8	3	152,250	34,227
										Flat Head Screw			
SFP-35200	35	200	10	±0.025	20	55	50	55		M8	4	203,000	45,636
										Flat Head Screw			
SFP-35250	35	250	10	±0.025	20	70	70	70		M8	4	253,750	57,045
										Flat Head Screw			
SFP-35300	35	300	10	±0.025	20	65	65	65		M8	5	304,500	68,454
										Flat Head Screw			
SFP-35350	35	350	10	±0.025	20	80	75	80		M8	5	355,250	79,863
										Flat Head Screw			
SFP-50100	50	100	10	±0.025	20	60				M8	2	145,000	32,597
										Flat Head Screw			
SFP-50150	50	150	10	±0.025	20	55	55			M8	3	217,500	48,896
										Flat Head Screw			
SFP-50200	50	200	10	±0.025	20	56	50	55		M8	4	290,000	65,195
										Flat Head Screw			
SFP-50250	50	250	10	±0.025	20	70	70	70		M8	4	362,500	81,493
										Flat Head Screw			
SFP-50300	50	300	10	±0.025	20	65	65	65		M8	5	435,000	97,792
										Flat Head Screw			
SFP-50400	50	400	10	±0.025	20	90	90	90		M8	5	580,000	130,389
										Flat Head Screw			
SFP-75150	75	150	10	±0.025	20	110				M8	4	326,250	73,344
										Flat Head Screw			
SFP-75200	75	200	10	±0.025	20	80	80			M8	6	435,000	97,792
										Flat Head Screw			
SFP-75250	75	250	10	±0.025	20	105	105			M8	6	543,750	122,240
										Flat Head Screw			
SFP-75300	75	300	10	±0.025	20	85	90	85		M8	8	652,500	146,688
										Flat Head Screw			
SFP-75400	75	400	10	±0.025	20	120	120	120		M8	8	870,000	195,584
										Flat Head Screw			
SFP-75500	75	500	10	±0.025	20	115	115	115		M8	10	1,087,500	244,480
										Flat Head Screw			









**NOTES FOR APPLICATION:**

- The OILES Plate is suited for machining. Sliding surface may be drilled.
- Apply grease to sliding surface for first time use.

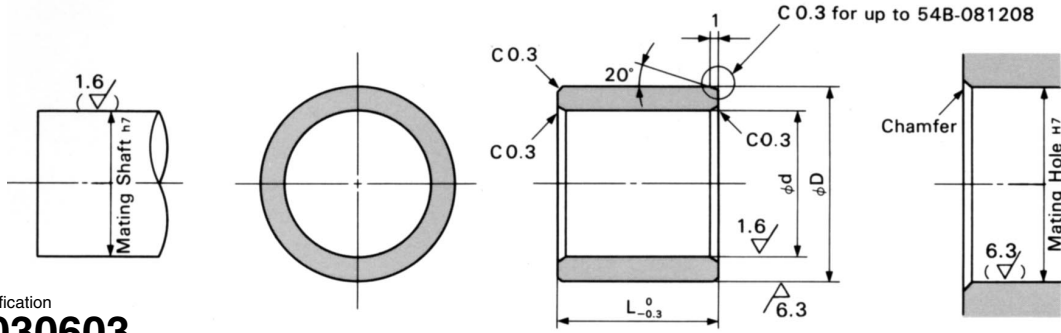
Part No.	W	L	T	
CWI-504806	50	480	6	±0.02
CWI-504808	50	480	8	±0.02
CWI-10020010	100	200	10	±0.02
CWI-4048010	40	480	10	±0.02
CWI-15048010	150	480	10	±0.02
CWI-10020012	100	200	12	±0.02
CWI-15048012	150	480	12	±0.02
CWI-10020015	100	200	15	±0.02
CWI-15048015	150	480	15	±0.02
CWI-12020020	120	200	20	±0.02
CWI-15025020	150	250	20	±0.02
CWI-15042020	150	420	20	±0.02
CWI-10015025	100	150	25	±0.02
CWI-15025025	150	250	25	±0.02
CWI-15025030	150	250	30	±0.02

**Service Range**

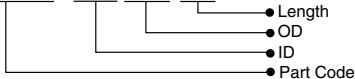
Lube State	Self-Lube	Periodic Lube
Service Temperature Range	-40 - +248°F (-40 - +120°C)	
P Max.	3,555 PSI (24.5 N/mm <sup>2</sup> ) (250 kgf/cm <sup>2</sup> )	7,111 PSI (49 N/mm <sup>2</sup> ) (500 kgf/cm <sup>2</sup> )
V Max.	1.64 ft/sec (0.50 m/s) (30 m/min)	3.2 ft/sec (1.0 m/s) (60 m/min)
PV Max.	1.63 N/mm <sup>2</sup> -m/s (1,000 kgf/cm <sup>2</sup> -m/min)	2.45 N/mm <sup>2</sup> -m/s (1,500 kgf/cm <sup>2</sup> -m/min)



# Cermet M Straight Bushings (54B)



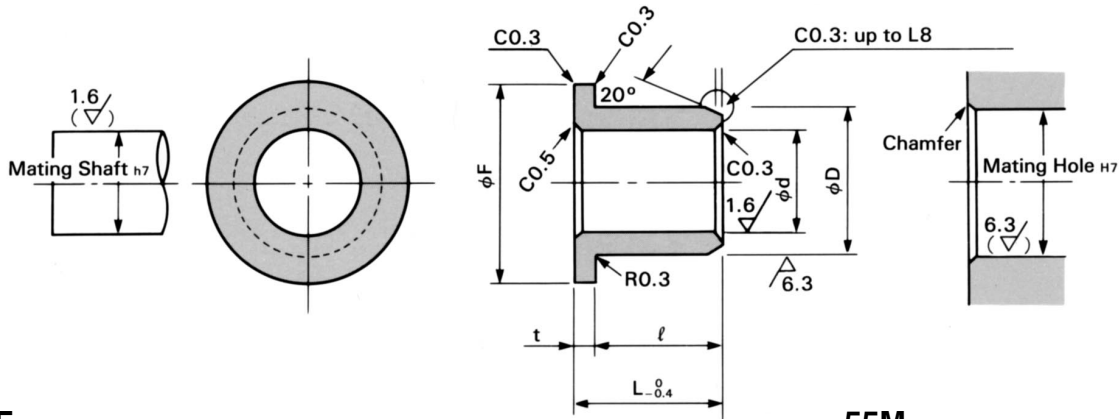
Product Identification  
**54B-030603**



I.D.	O.D.	L	-0.1												Average Max Load N	Range of Max Load N	Average Max Load lbs	Range of Max Load lbs	Max RPM	Max RPM With Lubrication
			-0.3																	
d	D	3	4	5	6	8	10	15	20	25	30	40								
3	6	0.024 0.014	0.027 0.015	X		X								120	90-150	27	20.23-33.72	3,183	5,411	
4	7	0.032 0.02	0.034 0.019		X	X	X							200	160-240	45	35.97-53.54	2,387	4,058	
5	8	0.032 0.02	0.034 0.019			X	X	X						317	250-400	71	56.20-89.92	1,910	3,247	
6	10	0.04 0.025	0.034 0.019			X	X	X	X					435	300-600	98	67.44-134.89	1,592	2,706	
8	12	0.04 0.025	0.041 0.023				X	X	X	X				780	480-1200	175	107.91-269.77	1,194	2,029	
10	16	0.04 0.025	0.041 0.023				X	X	X	X	X			1,180	600-2000	265	134.89-449.62	955	1,623	
12	18	0.05 0.032	0.041 0.023					X	X	X	X			1,590	960-2400	357	215.82-539.35	796	1,353	
14	20	0.05 0.032	0.049 0.028						X	X	X			2,100	1400-2800	472	314.73-629.47	682	1,160	
15	21	0.05 0.032	0.049 0.028						X	X	X	X		2,625	1500-3750	590	337.21-843.00	637	1,082	
16	22	0.05 0.032	0.049 0.028						X	X	X	X		2,800	1600-4000	629	359.69-899.24	597	1,015	
18	24	0.05 0.032	0.049 0.028						X	X	X	X	X	3,600	1800-5400	809	404.66-1,213.97	531	902	
20	28	0.061 0.04	0.049 0.028						X	X		X		4,333	3,000-6,000	974	674.43-1,348.85	477	812	
25	35	0.061 0.04	0.059 0.034						X	X	X			6,250	5,000-7,500	1,405	1,124.04-1,686.07	382	649	
30	40	0.061 0.04	0.059 0.034						X	X	X	X		8,625	6,000-12,000	1,939	1,348.85-2,697.71	318	541	



# Cermet M Flanged Bushings (54F) Cermet G Round Bar (54M) Bushing Material (54S) Cermet G Round Bar (55M) Bushing Material (55S)



## 54F

Part No.	I.D.		O.D.		Flange		Length		
	d	D	F	t	L	L1			
54F-0303	3	0.024	6	0.027	9	1.5	0	4.5	0
		0.014		0.015			-0.2		-0.4
54F-0404	4	0.032	7	0.034	10	1.5	0	5.5	0
		0.02		0.019			-0.2		-0.4
54F-0505	5	0.032	8	0.034	11	1.5	0	6.5	0
		0.02		0.019			-0.2		-0.4
54F-0606	6	0.032	10	0.034	14	2	0	8	0
		0.02		0.019			-0.2		-0.4
54F-0808	8	0.04	12	0.041	16	2	0	10	0
		0.025		0.023			-0.2		-0.4
54F-1010	10	0.04	16	0.041	20	2	0	12	0
		0.025		0.023			-0.2		-0.4
54F-1212	12	0.05	18	0.041	22	2	0	14	0
		0.032		0.023			-0.2		-0.4
54F-1414	14	0.05	20	0.049	24	3	0	17	0
		0.032		0.028			-0.2		-0.4
54F-1515	15	0.05	21	0.049	27	3	0	18	0
		0.032		0.028			-0.2		-0.4
54F-1616	16	0.05	22	0.049	28	3	0	19	0
		0.032		0.028			-0.2		-0.4
54F-1817	18	0.05	24	0.049	30	3	0	20	0
		0.032		0.028			-0.2		-0.4
54F-2021	20	0.061	28	0.049	34	4	0	25	0
		0.04		0.028			-0.2		-0.4
54F-2521	25	0.061	35	0.059	42	4	0	25	0
		0.04		0.034			-0.2		-0.4
54F-3026	30	0.061	40	0.059	48	4	0	30	0
		0.04		0.034			-0.2		-0.4

### NOTES :

For loads and speeds, refer to 54B Chart on page 36 with equivalent sizes.

## 54M

Part No.	O.D. D	L
54M-0910	9	10
54M-1316	13	16
54M-1821	18	21
54M-2126	21	26
54M-2631	26	31
54M-3341	33	41
54M-4146	41	46
54M-5249	52	49

## 54S

Part No.	I.D. d	O.D. D	L
54S-092323	9	23	23
54S-132841	13	28	41
54S-153145	15	31	45
54S-244133	24	41	33
54S-294143	29	41	43
54S-294933	29	49	33

## 55M

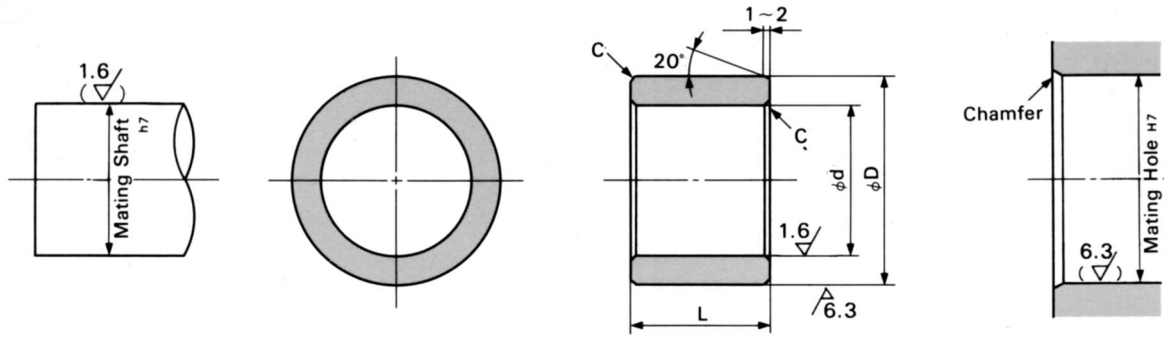
Part No.	O.D. D	L
55M-11	11	21
55M-15	15	31
55M-18	18	21
55M-23	23	31
55M-31	31	31

## 55S

Part No.	I.D. d	O.D. D	L
55S-193126	19	31	26
55S-243631	24	36	31
55S-284846	28	48	46
55S-294141	29	41	41
55S-344641	34	46	41
55S-345151	34	51	51
55S-395151	39	51	51
55S-395351	39	53	51
55S-395651	39	56	51
55S-445651	44	56	51
55S-466358	46	63	58
55S-496161	49	61	61
55S-496661	49	66	61
55S-517361	51	73	61
55S-547661	54	76	61
55S-568130	56	81	30
55S-568161	56	81	61
55S-597661	59	76	61
55S-618631	61	86	31
55S-618661	61	86	61



# OILES 300 Bushings (30B)



Product Identification

**30B-101610**

- Length
- OD
- ID
- Part Code

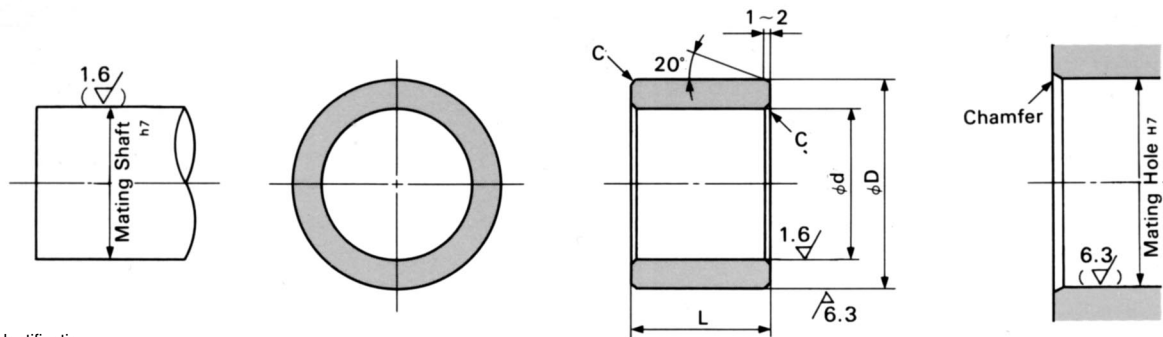
**NOTES:**

- Oiles 300 is recommended to be lubricated periodically

I.D.	O.D.	L	0								0		Average Max Load N	Range of Max Load N	Average Max Load lbs	Range of Max Load lbs	Max RPM	Max RPM With Lubrication
			-0.2															
d	D	10	15	20	25	30	40	50	60	80	100	120						
10	16	0.051 0.029	X	X									1,250	1,000-1,500	281	224-337	1,910	6,398
11	18	0.051 0.029	X	X									1,525	1,100-1,950	343	257-438	1,751	5,865
12	18	0.068 0.041	X		X								1,800	1,200-2,400	405	269-539	1,592	5,332
13	20	0.068 0.041	X		X								1,950	1,300-2,600	439	292-584	1,478	4,951
14	20	0.068 0.041	X		X								2,100	1,400-2,800	472	314-629	1,364	4,570
14	20	0.068 0.041	X		X								2,100	1,400-2,800	472	314-629	1,364	4,570
16	20	0.068 0.041		X		X							3,200	3,200-4,000	719	539-899	1,194	3,999
16	25	0.068 0.041		X		X							3,200	3,200-4,000	719	539-899	1,194	3,999
18	25	0.068 0.041		X		X							3,600	2,700-4,500	809	606-1,011	1,061	3,554
18	25	0.068 0.041		X		X							3,600	2,700-4,500	809	606-1,011	1,061	3,554
20	25	0.088 0.055			X	X	X						5,000	4,000-6,000	1,068	899-1,348	955	3,199
20	30	0.088 0.055			X	X	X						5,000	4,000-6,000	1,068	899-1,348	955	3,199
22	30	0.088 0.055			X		X						5,500	4,400-6,600	1,236	989-1,483	868	2,908
23	32	0.088 0.055			X		X						6,200	4,500-8,000	1,291	1,032-1,845	806	2,733
25	35	0.088 0.055			X		X	X					7,500	5,000-10,000	1,546	1,124-2,248	764	2,559
25	37	0.088 0.055			X		X	X					7,500	5,000-10,000	1,546	1,124-2,248	764	2,559
28	38	0.088 0.055				X		X					9,100	7,000-11,200	2,046	1,573-2,517	682	2,285
28	40	0.088 0.055				X		X					9,100	7,000-11,200	2,046	1,573-2,517	682	2,285
30	40	0.088 0.055				X	X	X					9,500	7,500-12,000	2,136	1,686-2,697	637	2,133
30	42	0.088 0.055				X	X	X					9,500	7,500-12,000	2,136	1,686-2,697	637	2,133
32	42	0.113 0.074					X	X					11,200	9,600-12,800	2,518	2,158-2,877	597	1,999
32	45	0.113 0.074					X	X					11,200	9,600-12,800	2,518	2,158-2,877	597	1,999
35	45	0.113 0.074					X	X	X				14,000	10,500-17,500	3,147	2,360-3,934	546	1,828
35	48	0.113 0.074					X	X	X				14,000	10,500-17,500	3,147	2,360-3,934	546	1,828
40	50	0.113 0.074					X	X	X				16,000	12,000-20,000	3,597	2,697-4,496	477	1,600



# OILES 300 Bushings (30B) cont.



Product Identification

**30B-101610**

- Length
- OD
- ID
- Part Code

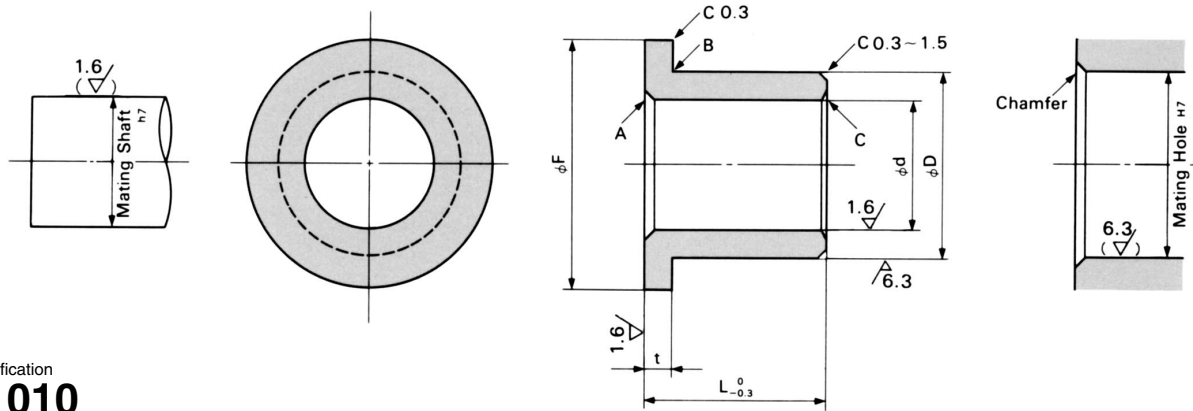
**NOTES:**

- Oiles 300 is recommended to be lubricated periodically

I.D.	O.D.	L	0										Average Max Load N	Range of Max Load N	Average Max Load lbs	Range of Max Load lbs	Max RPM	Max RPM With Lubrication	
			-0.2																
d	D		10	15	20	25	30	40	50	60	80	100	120						
40	55	0.113 0.074						X	X	X				16,000	12,000-20,000	3,597	2,697-4,496	477	1,600
45	55	0.113 0.074							X	X				20,250	18,000-22,500	4,552	4,046-5,058	424	1,422
45	60	0.113 0.074							X	X				20,250	18,000-22,500	4,552	4,046-5,058	424	1,422
50	60	0.113 0.074							X	X	X			25,000	20,000-30,000	5,620	4,496-6,744	382	1,280
50	65	0.113 0.074							X	X	X			25,000	20,000-30,000	5,620	4,496-6,744	382	1,280
55	70	0.144 0.098								X	X			30,250	27,500-33,000	6,800	6,182-7,418	347	1,163
55	75	0.144 0.098								X	X			30,250	27,500-33,000	6,800	6,182-7,418	347	1,163
60	75	0.144 0.098								X	X	X		38,000	30,000-48,000	8,543	6,744-10,790	318	1,066
60	80	0.144 0.098								X	X	X		38,000	30,000-52,000	8,543	6,744-10,790	318	1,066
65	80	0.144 0.098									X	X		45,500	39,000-52,000	10,229	8,767-11,690	294	984
65	85	0.144 0.098									X	X		45,500	39,000-52,000	10,229	8,767-11,690	294	984
70	85	0.144 0.098									X	X		49,000	42,000-56,000	11,016	9,441-12,589	273	914
70	90	0.144 0.098									X	X		49,000	42,000-56,000	11,016	9,441-12,589	273	914
75	90	0.144 0.098									X	X		52,500	45,000-60,000	11,802	10,116-13,488	255	853
75	95	0.144 0.098									X	X		52,500	45,000-60,000	11,802	10,116-13,488	255	853
80	95	0.144 0.098									X	X	X	64,000	48,000-80,000	14,388	10,790-17,984	239	800
80	100	0.144 0.098									X	X	X	64,000	48,000-80,000	14,388	10,790-17,984	239	800
85	100	0.188 0.134									X	X		76,500	68,000-85,000	17,198	15,287-19,108	225	753
85	105	0.188 0.134									X	X		76,500	68,000-85,000	17,198	15,287-19,108	225	753
90	110	0.188 0.134									X	X		81,000	72,000-90,000	18,210	16,186-20,232	212	711
90	115	0.188 0.134									X	X		81,000	72,000-90,000	18,210	16,186-20,232	212	711
95	115	0.188 0.134									X	X		85,500	76,000-95,000	19,221	17,085-21,356	201	673
95	120	0.188 0.134									X	X		85,500	76,000-95,000	19,221	17,085-21,356	201	673
100	120	0.188 0.134									X	X	X	100,000	80,000-120,000	22,481	17,984-26,977	191	640
100	125	0.188 0.134									X	X	X	100,000	80,000-120,000	22,481	17,984-26,977	191	640



# OILES 300 Flanged Bushings (30F)



Product Identification

**30F-1010**

- Length
- ID
- Part Code

I.D.	O.D.	Flange			L											Max Load N	Max Load lbs	Max RPM	Max RPM With Lubrication		
		F	t		10	15	20	25	30	40	50	60	80								
10	0.051 0.029	16	0.041 0.023	23	3	0 -0.1	X	X										2,300	517	1,910	6,398
12	0.068 0.041	18	0.041 0.023	25	3	0 -0.1	X	X										3,000	674	1,592	5,332
14	0.068 0.041	20	0.049 0.028	27	3	0 -0.1	X	X										3,780	850	1,364	4,570
16	0.068 0.041	22	0.049 0.028	29	3	0 -0.1	X	X	X									4,640	1,043	1,194	3,999
18	0.068 0.041	25	0.049 0.028	33	3.5	0 -0.1		X	X									5,940	1,335	1,061	3,554
20	0.088 0.055	28	0.049 0.028	38	4	0 -0.1		X	X	X								7,600	1,709	955	3,199
22	0.088 0.055	30	0.049 0.028	40	4	0 -0.1		X	X									8,800	1,978	868	2,908
25	0.088 0.055	35	0.059 0.034	45	5	0 -0.1			X	X								11,250	2,529	764	2,559
28	0.088 0.055	38	0.059 0.034	48	5	0 -0.1			X	X								13,440	3,021	682	2,285
30	0.088 0.055	40	0.059 0.034	50	5	0 -0.1				X	X							15,000	3,372	637	2,133
32	0.113 0.074	42	0.059 0.034	52	5	0 -0.1				X	X							16,640	3,741	597	1,999
35	0.113 0.074	45	0.059 0.034	60	5	0 -0.1				X	X							21,000	4,721	546	1,828
40	0.113 0.074	50	0.059 0.034	65	5	0 -0.1					X	X						26,000	5,845	477	1,600
45	0.113 0.074	55	0.073 0.041	70	5	0 -0.1					X	X						31,500	7,081	424	1,422
50	0.113 0.074	60	0.073 0.041	75	5	0 -0.1						X	X					37,500	8,430	382	1,280
55	0.144 0.098	70	0.073 0.041	85	7.5	0 -0.1						X	X					46,750	10,510	347	1,163
60	0.144 0.098	75	0.073 0.041	90	7.5	0 -0.1							X	X				54,000	12,140	318	1,066



# OILES 300

Bar Stock (30M)  
Tube Stock (30S)

## 30M (Bar Stock)

Part No.	O.D.		L
	D		
30M-15	15	1 0	150 3 0
30M-21	21	1 0	200 3 0
30M-23	23	1 0	200 3 0
30M-25	25	1 0	200 3 0
30M-27	27	1 0	200 3 0
30M-31	31	1 0	200 3 0
30M-33	33	1 0	200 3 0
30M-35	35	1 0	200 3 0
30M-37	27	1 0	200 3 0
30M-40	40	1 0	200 3 0
30M-43	43	1 0	200 3 0
30M-45	45	1 0	200 3 0
30M-47	47	1 0	200 3 0
30M-50	50	1 0	200 3 0
30M-55	55	1 0	200 3 0
30M-60	25	1 0	200 3 0
30M-65	60	1 0	200 3 0
30M-70	70	1 0	200 3 0
30M-80	80	1 0	250 3 0
30M-90	90	1 0	250 3 0
30M-100	100	1 0	250 3 0

## 30S (Tube Stock)

Part No.	I.D.		O.D.		L	
	d		D			
30S-2941	29	0 -1	41	1 0	100	3 0
30S-3143	31	-1	43	0	100	0
30S-3446	34	-1	46	0	150	0
30S-3449	34	-1	49	0	150	0
30S-3753	37	-1	53	0	150	0
30S-3951	39	-1	51	0	200	0
30S-3956	39	-1	56	0	200	0
30S-4456	44	-1	56	0	200	0
30S-4461	44	-1	61	0	200	0
30S-4961	49	-1	61	0	200	0
30S-4966	49	-1	66	0	200	0
30S-5471	54	-1	71	0	200	0
30S-5971	59	-1	71	0	200	0
30S-5976	59	-1	76	0	200	0
30S-6481	64	-1	81	0	200	0
30S-6486	64	-1	86	0	200	0
30S-6986	69	-1	86	0	200	0
30S-6991	69	-1	91	0	200	0
30S-7491	74	-1	91	0	200	0
30S-7496	74	-1	96	0	200	0
30S-7996	79	-1	96	0	200	0
30S-79101	79	-1	101	0	200	0
30S-84106	84	-1	106	0	200	0
30S-89111	89	-1	111	0	200	0
30S-94121	94	-1	121	0	200	0
30S-99126	99	-1	126	0	200	0
30S-103132	103	-1	132	0	250	0
30S-103142	103	-1	142	0	250	0
30S-108137	108	-1	137	0	250	0
30S-108147	108	-1	147	0	250	0
30S-113142	113	-1	142	0	250	0
30S-113152	113	-1	152	0	250	0
30S-118147	118	-1	147	0	250	0
30S-118157	118	-1	157	0	250	0
30S-123152	123	-1	152	0	250	0
30S-123162	123	-1	162	0	250	0

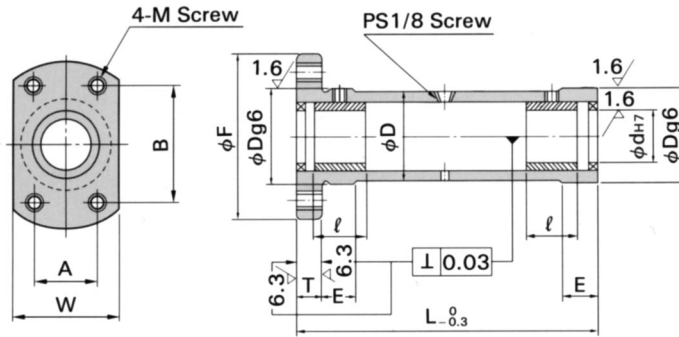
## 30S (Tube Stock-Heavy Duty)

Part No.	I.D.		O.D.		L	
	d		D			
30S-3570	35	0 -1	70	1 0	200	3 0
30S-4075	40	0 -1	75	1 0	200	3 0
30S-4580	45	0 -1	80	1 0	200	3 0
30S-5090	50	0 -1	90	1 0	200	3 0
30S-55100	55	0 -1	100	1 0	200	3 0
30S-60110	60	0 -1	110	1 0	200	3 0
30S-65120	65	0 -1	120	1 0	250	3 0
30S-70130	70	0 -1	130	1 0	250	3 0
30S-80140	80	0 -1	140	1 0	250	3 0

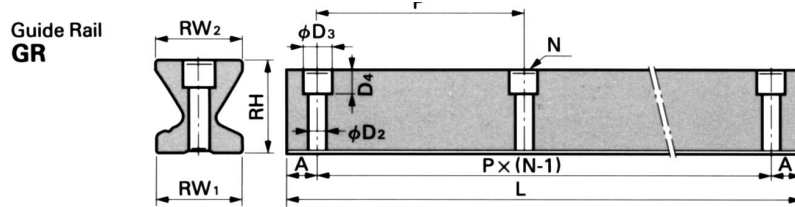




## Flange



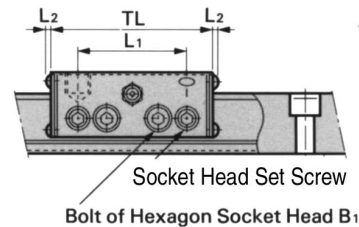
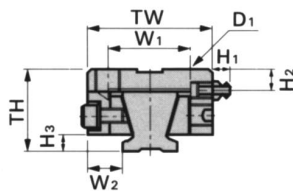
Part No.	I.D.		F	O.D.		L	W	D1	L1	T	E	A	B	Screw Holes	Mass Weight
	d			D										M	Kg
BBFK20-60	20	0.021	80	44	-0.009	60	50	40	35	12	15	30	55	M10	0.6
		0			-0.025										
BBFK20-100	20	0.021	80	44	-0.009	100	50	40	25	12	15	30	55	M10	0.8
		0			-0.025										
BBFK20-150	20	0.021	80	44	-0.009	150	50	40	25	12	15	30	55	M10	1
		0			-0.025										
BBFK25-80	25	0.021	100	54	-0.01	80	65	50	25	15	20	40	65	M10	1.3
		0			-0.029										
BBFK25-120	25	0.021	100	54	-0.01	120	65	50	30	15	20	40	65	M10	1.6
		0			-0.029										
BBFK25-180	25	0.021	100	54	-0.01	180	65	50	30	15	20	40	65	M10	2.1
		0			-0.029										
BBFK30-100	30	0.021	120	65	-0.01	100	80	60	30	18	25	50	75	M12	2.2
		0			-0.029										
BBFK30-150	30	0.021	120	65	-0.01	150	80	60	30	18	25	50	75	M12	2.6
		0			-0.029										
BBFK30-250	30	0.021	120	65	-0.01	250	80	60	30	18	25	50	75	M12	4
		0			-0.029										
BBFK35-120	35	0.025	130	75	-0.01	120	85	70	35	20	25	54	85	M12	3.2
		0			-0.029										
BBFK35-180	35	0.025	130	75	-0.01	180	85	70	35	20	25	54	85	M12	4.1
		0			-0.029										
BBFK35-270	35	0.025	130	75	-0.01	270	85	70	35	20	25	54	85	M12	6
		0			-0.029										
BBFK40-120	40	0.025	140	80	-0.01	120	90	74	40	20	30	60	90	M16	3.7
		0			-0.029										
BBFK40-180	40	0.025	140	80	-0.01	180	90	74	40	20	30	60	90	M16	4.8
		0			-0.029										
BBFK40-270	40	0.025	140	80	-0.01	270	90	74	40	20	30	60	90	M16	6.3
		0			-0.029										



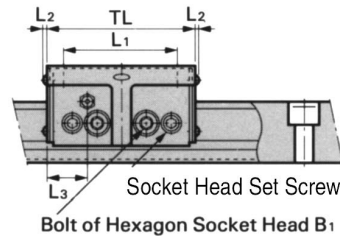
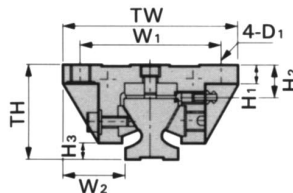
Part No.	Guide Rail											L	Mass Weight Kg
	RW <sub>1</sub>	RW <sub>2</sub>	RH	A	Numbr of setting holes N	P	φD <sub>2</sub>	φD <sub>3</sub>	φD <sub>4</sub>	Setting bold			
GR20-30	19.5	19.5	22	25	6	50	6.6	11	7	M6X30	300	0.8	
GR20-500				25	10						500	1.4	
GR20-1000				25	20						1000	2.8	
GR20-1500				25	30						1500	4.2	
GR20-2000				25	40						2000	5.6	
GR28-300	22	28	32	30	4	80	6.6	11	7	M6X40	300	1.5	
GR28-400				40	5						400	2.0	
GR28-600				20	8						600	3.0	
GR28-1000				20	13						1000	5.0	
GR28-1500				30	19						1500	7.5	
GR28-2000	40	25	2000	10.0									
GR38-400	39	38	42	42.5	4	105	9	14.2	12	M8X45	400	3.7	
GR38-600				37.5	6						600	5.6	
GR38-900				30	9						900	8.4	
GR38-1200				22.5	12						1200	11.2	
GR38-1500				15	15						1500	14.0	
GR38-2000	55	19	2000	18.5									
GR48-400	48	48	52	42.5	4	105	11	17.5	15	M10X60	400	6.2	
GR48-600				37.5	6						600	9.2	
GR48-900				30	9						900	13.7	
GR48-1200				22.5	12						1200	18.4	
GR48-1500				15	15						1500	23.0	
GR48-2000	55	19	2000	30.5									

Dimensions Shift Table

● Compact Type  
**STC20, (28)**



● Flange Type  
**STF28, 38, 48**



Part No.	Shift Table														
	TH	TW	TL	W <sub>1</sub>	W <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	D <sub>1</sub>	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	B <sub>1</sub>	B <sub>2</sub>	Mass Weight Kg
STC20	30	45	63	30	12.8	40	2		M8	9	9.5	6	M5X10	M8X8	0.32
STC28	50	60	78	44	16	50	2.6		M8	8.5	17	8	M6X10	M10X10	0.9
STF28	50	90	78	72	31	60	2.6	23	M10	10	7.5	8	M6X16	M10X10	0.94
STF38	65	110	100	90	36	80	2.6	25	M10	15	25	10	M8X18	M12X12	2.3
STF48	82	140	120	116	46	95	2.6	30	M12	20	30	11	M8X22	M12X15	4.95

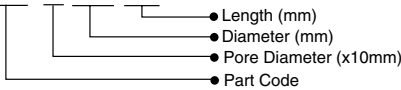
## SINTERED VENTS

Sintered vents utilize a unique manufacturing principle that incorporates a large number of parallel pores combined with powdered metallurgical technologies. They are manufactured in a variety of standard and custom metallic compositions and pore sizes. Pore sizes are available in standard diameters from 0.01mm to 0.5mm, with special diameters on a made to order basis. Oiles vents suit a wide range of casting and molding applications.

### Features:

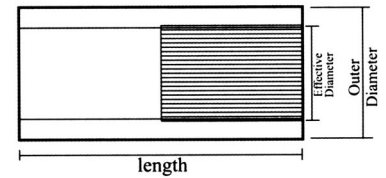
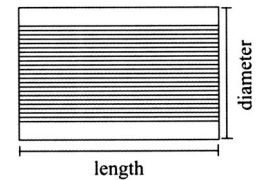
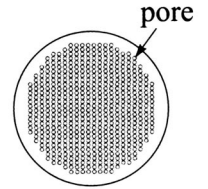
- High venting efficiencies
- Reduced defects
- Higher casting productivity
- Longer life
- Lower cost

### Product Identification SV-50310



### Applications:

- Die cast aluminum alloy molds
- Injection molding
- Plastic and foam



### Used for Gravity Die-Casting (Pore Diameter: 0.50mm)

Code	50310	50410	50510	50610	50615	50810	50815	51010	51015	51210	51215	51415	51615	51815	52015	52815
Diameter	3	4	5	6	6	8	8	10	12	12	12	14	16	18	20	28
No. of Pores	37	37	61	61	61	96	96	200	200	200	200	341	341	553	553	973
Length	10	10	10	10	15	10	15	10	15	10	15	15	15	15	15	15

### Used for Low Pressure Die-Casting or Vacuum Casting (Pore Diameter: 0.30mm)

Code	30510	30610	30615	30810	30815	31010	31015	31210	31215	31415
Diameter	5	6	6	8	8	10	10	12	12	14
No. of Pores	89	89	89	200	200	340	340	340	340	340
Length	10	10	15	10	15	10	15	10	15	15

### Used for Plastic Injection Molding (Pore Diameter: 0.030mm - 0.10mm)

Code	030610	030810	031010	050610	050810	051010	100810	101010
Outer Diameter	6	8	10	6	8	10	8	10
Effective Diameter	2.5	2.5	2.5	3.5	3.5	3.5	5.5	5.5
No. of Pores	880	880	880	880	880	880	880	880
Length	10	10	10	10	10	10	10	10

### Inch Series (Imperial Measurements)

Code	Used for Low Pressure - Vacuum Casting							Used for Gravity Casting								
	3-3/16	3-1/4	3-5/16	3-3/8	3-1/2	3-9/16	3-5/8	5-3/16	5-1/4	5-5/16	5-3/8	5-1/2	5-9/16	5-5/8	5-3/4	5-1
Diameter Inch	3/16	1/4	5/16	3/8	1/2	9/16	5/8	3/16	1/4	5/16	3/8	1/2	9/16	5/8	3/4	1
Pore Diameter mm	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
No. of Pores	101	96	200	200	341	553	553	61	61	96	200	200	341	341	553	973
Length	5/16	5/16	5/16	1/2	1/2	5/8	5/8	5/16	5/16	5/16	1/2	1/2	5/8	5/8	5/8	5/8



## OILES BEARING APPLICATION DATA SHEET

In order to serve you better, we request some information on the application for the part you are requiring. The data you supply is the basis for Oiles to make a recommendation. Please copy this form, complete it and fax it to **734-414-7484 in the US** or **905-890-2269 in Canada**.

Company: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_ Phone #: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ Fax #: \_\_\_\_\_

Quotation Quantity: \_\_\_\_\_ Distributor  Consumer  OEM  Agent

Application: Stamping Die  Machinery  Marine  Mold   
Experimental  Prototype  Agriculture  Other  \_\_\_\_\_

Replacement (if replacing existing conventional or self-lub bushing, state manufacture's name and part number) \_\_\_\_\_  
Current Life of bearing: \_\_\_\_\_ Expected Life: \_\_\_\_\_

- Linear application      Linear stroke seen by bushing \_\_\_\_\_ inches or mm.  
Max speed \_\_\_\_\_ RPM  
Radial load \_\_\_\_\_
- Radial application      Radial load \_\_\_\_\_ Max RPM \_\_\_\_\_
- Combination (Linear & Radial)      Linear stroke seen by bushing \_\_\_\_\_ inches or mm.  
Degrees of rotation seen by bushing \_\_\_\_\_  
Max speed \_\_\_\_\_ RPM

\* Hours of service: \_\_\_\_\_ Day    \_\_\_\_\_ Week    \_\_\_\_\_ Month    \_\_\_\_\_ Year

Material of shaft: \_\_\_\_\_ Material of HSG: \_\_\_\_\_

Temperature range: \_\_\_\_\_

Exposure to: Chemical  Water  Abrasive

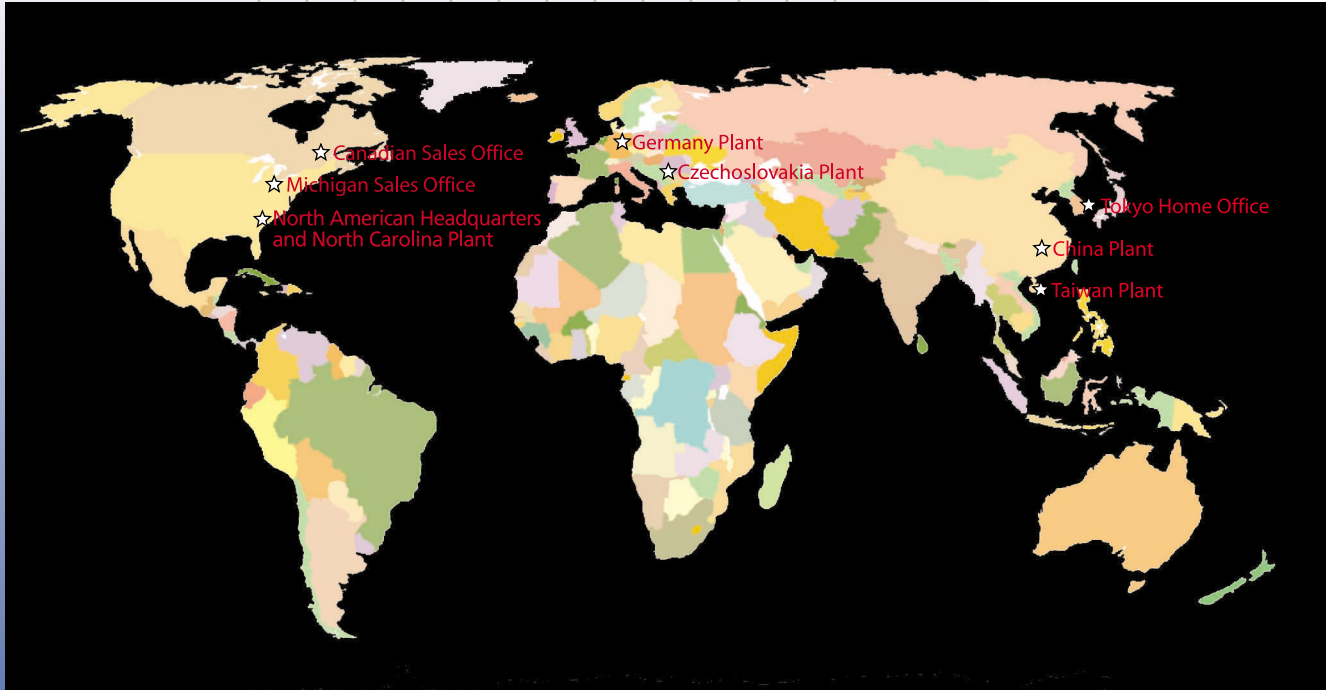
I.D. of bushing: \_\_\_\_\_  
O.D. of bushing: \_\_\_\_\_ Specify Press-fit -0.000 + \_\_\_\_\_ inches or mm. (if required)  
Length of bushing: \_\_\_\_\_ O.D. of flange: \_\_\_\_\_  
Specify ANSI/ISO fit class ("g6", "H7", etc) \_\_\_\_\_ (if required) Thrust load acting on flange: \_\_\_\_\_ lb-ft  
FOR "DU" or "LF", bushings require shaft finish: \_\_\_\_\_

Date Required: \_\_\_\_\_ Target Price: \_\_\_\_\_

Required Delivery: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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