

# LM76

Linear Motion Bearings that EXCEED the Challenge!



www.LM76.com  
1-800-513-3163



## Linear Motion Bearings

SPEED DEMON OSGR ( RAIL )											
Part No.	W	H	W1	H2	T	Shaft	Weight (g/m)	m	m1	dp	P
OSG-20	60	32	20	20.25	11.45	6	1230	5.5	9.5	5.5	60
OSG-25	80	37	25	24.75	13.93	8	2015	6.5	11	6.5	60
OSG-30	100	46	30	30.3	16.18	10	2987	6.5	11	6.5	60
OSG-40	130	55	40	36.2	18.7	12	5216	8.5	14	9	60

SPEED GUIDE OSGB ( BLOCK )													
Part No.	W	H1	L	B	L1	S	U	K	Yo Load (N)	Zo Load (N)	Mxo Moment (Nm)	Myo Moment (Nm)	Mzo Moment (Nm)
OSG-20	60	12	60	38	38	M5	M5	4.2	700	660	23.03	33.41	35.47
OSG-25	80	12	80	51	51	M6	M6	4.2	1000	1400	62.76	95.2	68
OSG-30	100	16.5	100	61	61	M8	M6	5.2	1800	2100	105.98	172.54	147.89
OSG-40	130	18	130	84	84	M12	M6	6.2	4000	4000	280.64	448	448

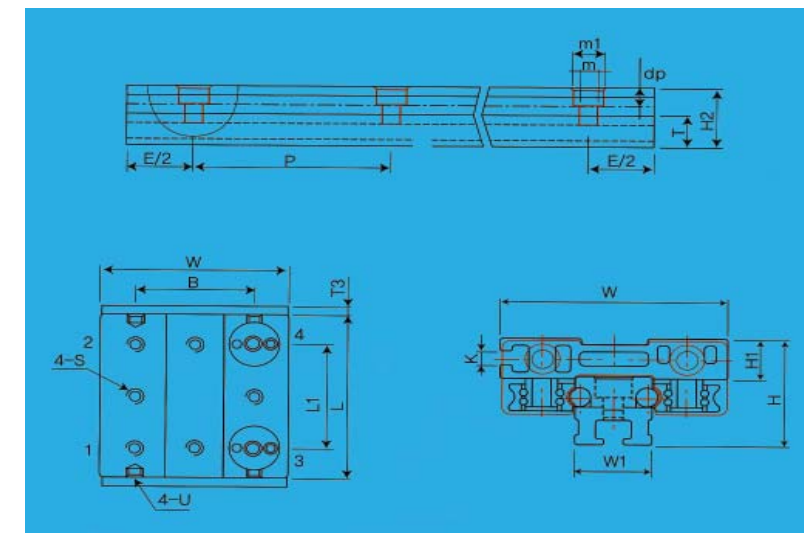
EXAMPLE PART NUMBER: OSG 20UU-2-2000

P/N Size = 20

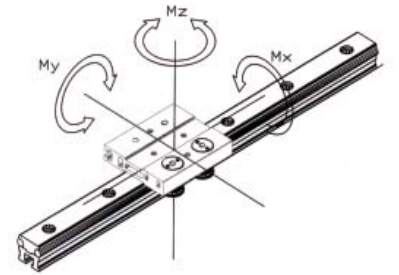
UU = seals

2 = Number of Bearing Blocks

2000 = Rail Length (mm)



Double angular rollers for smooth, high speed linear motion.



Moment Loading Legend



Easy adjustment of roller/shaft preload via conveniently located eccentric nuts.



Lightweight extruded aluminum rail features RC60 precision ground shafts. 440C stainless steel is available. Max Length is: 4000mm



**LM76** SG SPEED DEMON linear bearings feature an extruded aluminum, lightweight rail and block. SPEED DEMON blocks are available with 3, 4 or 5 double angular contact rollers which are factory lubricated and sealed for the life of the bearing.

SG bearing blocks also feature a unique eccentric adjustment nut which allows for easy adjustment of the running clearance ( preload ) between the double angular rollers and shafting.

Another design convenience is SG's integral felt wiper system, located on the bearing end caps. It is ideal for wiping debris and contamination from the shaft.

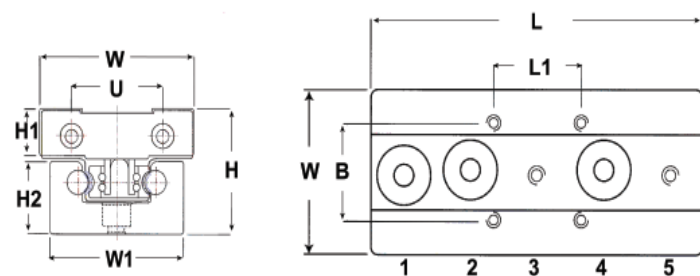
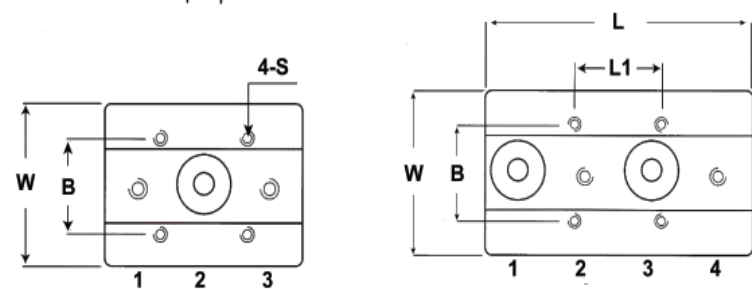
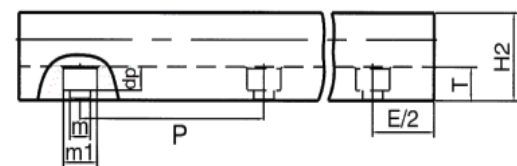
SG's aluminum extruded rail embodies a pair of RC60 precision ground and polished shafts. LM76 can also provide 440C stainless shafting.



SG blocks are available with 3,4 and 5 rollers depending on loading requirements.



Running clearance ( bearing preload ) is adjustable with SG's conveniently located eccentric nuts.



SG's aluminum extruded rails feature RC60 precision ground shafting. 440C is available. Max length is 4000mm

**LM76** SPEED DEMON SG Linear Bearings provide many advantages over traditional low profile ( rolling element ) linear guides. The most striking of these is SPEED DEMON's ability to roll at high speeds.

Rolling Element Low Profile Rail	SPEED DEMON SG Linear Bearing
Max Speed: 3m/sec	Max Speed: 10/ms
Requires continuous lubrication which attracts contaminants and debris.	Sealed roller with life time lubrication attracts no contaminants or debris.

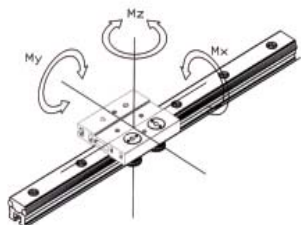
SPEED GUIDE SGR ( Rail )												
SGR RAIL	H	W	W1	H2	dp	P	Shaft Dia mm	Weight (g/m)	T	m1	m	H1
15N	32	44	38	8.5	6	120	6	1,651	8	8	4.5	12
15	32	46	46	18.5	6	120	6	1,784	8	8	4.5	12
20N	36	47	47	22.5	6	120	8	2,427	9	9.5	5.5	12
20	36	60	60	22.5	6	120	8	2,744	9	9.5	5.5	12
25	44	70	69	26	7	120	10	3,873	10	11	6.5	16.5
35	55	100	90	35	8.5	160	12	6,442	12	14	8.5	18

EXAMPLE PART NUMBER: SG 20N UU-4-2500

P/N Size: 20 Narrow UU = with seals 4 = number of bearing blocks 2500 = rail length in mm

- HIGH SPEED
- ADJUSTABLE
- LIGHTWEIGHT
- ROBUST & SECURE
- EASY TO INSTALL

1 (N) Newton = 0.2248 pound-force  
1 (Nm) Newton meter = 8.8507 inch pound force



SPEED DEMON SGB ( BLOCK )													
SG		L	B	L1	S	No. of Rollers	Eccentric Position	YO ZO Dynamic Working Load (N)		Mxo Load (Nm)	Myo Load (Nm)	Mzo Load (Nm)	Weight (g/ea)
15N	-3	60	26	26	M5	3	2	490	460	10.2	9.2	9.8	110
	-4	80						700	660	14.5	13.2	14	145
	-5	100						980	920	20.3	37	39	185
15	-3	52	32	36	M5	3	2	490	460	13.8	7.4	7.8	105
	-4	68						700	660	19.8	21.1	22.4	140
	-5	84						980	920	27.7	44.3	47	170
20N	-3	80	38	30	M6	3	2	700	980	29.4	25.4	18.2	195
	-4	106						1000	1400	42	72.8	52	265
	-5	132						1400	1960	58.8	152.8	109.2	325
20	-3	72	50	40	M6	3	2	700	980	42.1	21.5	15.4	210
	-4	94						1000	1400	60.2	61.6	44	280
	-5	116						1400	1960	84.2	129	92.4	350
25	-3	100	57	45	M8	3	2	1260	1470	67.62	48.51	41.58	460
	-4	133						1800	2100	96.6	138.6	118.8	615
	-5	166						2520	2940	135	291.06	249.48	775
35	-3	140	82	62	M10	3	2	2800	2800	159.6	126	126	1,100
	-4	184						4000	4000	228	360	360	1,450
	-5	230						5600	5600	319.2	758	756	1,835