



Quality Uncompromised

LINEAR SHAFTS GUIDANCE SYSTEM



LINEAR MOTION SHAFTS

Linear Motion Shafts have high surface hardness, exceptional straightness and surface finish which are the basic needs for Linear Ball Bushings.

Above qualities of Shafts incredibly reduce friction and wear, enhancing Shaft and Machine life.

A wide variety of Custom Designed Shafts can be delivered, including Tapped Holes, Inch Sizes, Special Machining and keyways along the length or at the ends of the Shaft.

Shafts are **Hard Chrome Plated** ensuring maximum safety against corrosion. This is a standard feature available from stock.

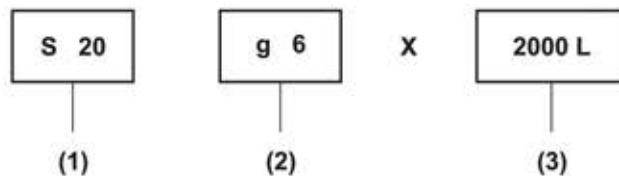
LM-SHAFT SPECIFICATIONS :

1. Main Material : C 45 ★
2. Heat Treatment : High Frequency Induction hardening
3. Hardness : Hrc 58-62
4. Surface Roughness : Polished, Ra<= 0.8μ
5. Shaft Straightness : Within 50μ per 300mm
6. Tolerance : g6
7. Corrosion Protection : Hard Chrome Plating

★ Other Material on Request.

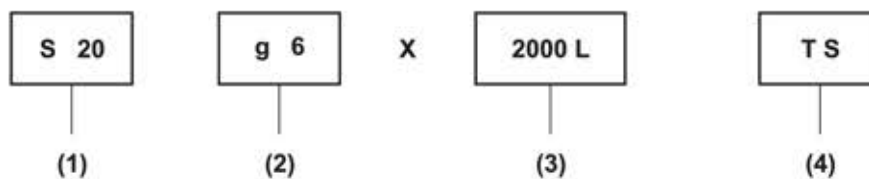
ORDERING EXAMPLE

Plain Shafts



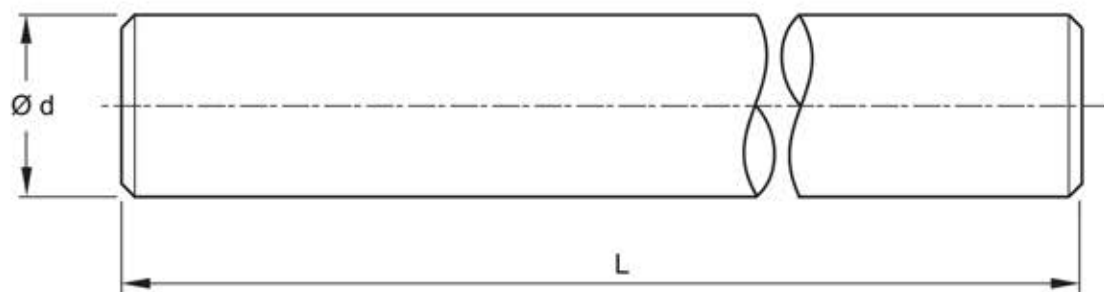
1. Model number (Shaft outside diameter 20 mm).
2. Shaft outer diameter Tolerance.
3. Total Shaft Length in mm.

Tapped Shafts



1. Model number (Shaft outer Diameter 20 mm)
2. Shaft outer Diameter Tolerance.
3. Total Shaft Length in mm.
4. Tapped Shaft

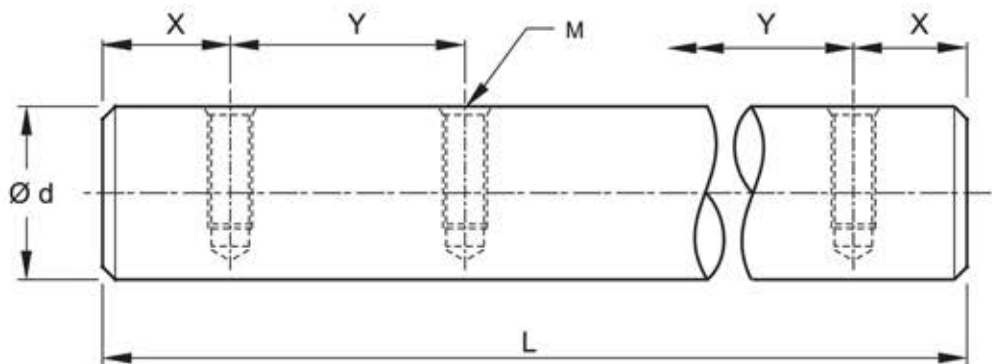
LINEAR PLAIN SHAFTS



Model No.	Diameter	Tolerance 0.001 mm	Max Length	Depth of effective hardness layer tolerance ± 0.5	Weight	
S	d	g6	L mm		kg/m	
S 8	8	- 5	6000	1.0	0.4	
S 10	10	-14			0.62	
S 12	12	- 6			0.89	
S 13	13				1.05	
S 16	16	-17			1.58	
S 20	20	- 7			2.47	
S 25	25			3.85		
S 30	30	- 20		5.55		
S 35	35	- 9		7.55		
S 40	40			9.87		
S 50	50	- 25		15.41		
S 60	60	-10		22.2		
S 80	80			39.46		
S 100	100	-12		61.66		
		-34				

LINEAR PLAIN SHAFTS

TAPPED SHAFTS



Model No.	Diameter d	Tolerance 0.001 mm	Depth of effective hardness layer tolerance ± 0.5	L Max	X	Y	M
		g6					
T S 16	16	-6 -17	1.0	6000	75	150	M5
T S 20	20	-7 -20	1.2				M6
T S 25	25		1.8				M8
T S 30	30		2.0				
T S 40	40	-9	2.2				M10
T S 50	50	-25	2.4				
T S 60	60	-10 -29	2.8				M12

LINEAR BALL BEARINGS



Example **SM 16 G UU AJ OP**

Standard

Inner contact diameter

Retainer material

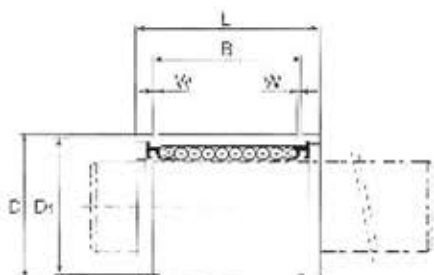
Blank	Steel
G	Resin

Open type

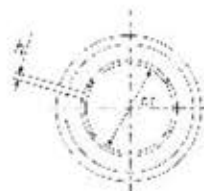
Clearance-adjustable type

Seal

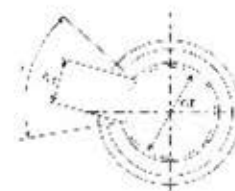
Blank	Without seal
U	Seal on one side
UU	Seals on both sides



SM



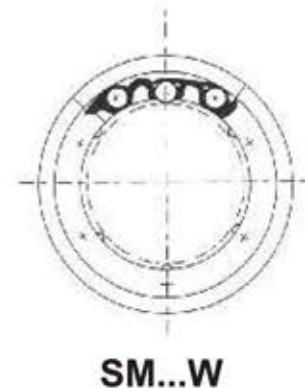
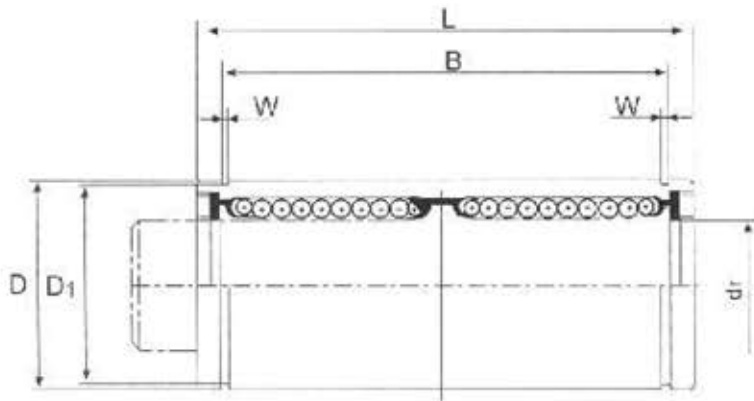
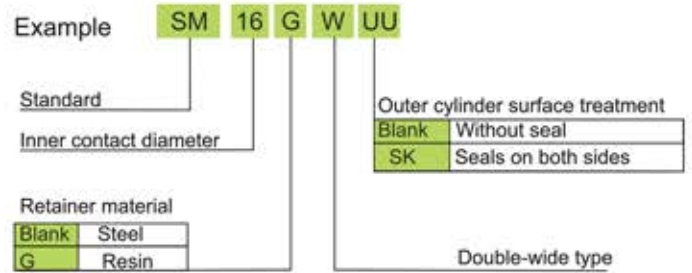
SM...AJ



SM...OP

Nominal Part No.				Nominal Shaft Diameter (mm)	Major Dimensions and Tolerance (mm)										Eccentricity (max) μ m	Radial Clearance (max) Mm	Basic Load Rating CN	Basic Rating CoN	Nominal Part No
Steel Retainer	Ball Weight	Adjustable Type	Open Type		dr Tolerance	D Tolerance	L Tolerance	B Tolerance	W	D ₁	h	h ₁	θ						
SM 4 SM 4G SM 5 SM 5G	4 1.4 4 4	— — — —	— — — —	4 $\begin{matrix} 0 \\ -0.008 \end{matrix}$ 5 $\begin{matrix} 0 \\ -0.008 \end{matrix}$	8 $\begin{matrix} 0 \\ -0.009 \end{matrix}$ 10 $\begin{matrix} 0 \\ -0.009 \end{matrix}$	12 $\begin{matrix} 0 \\ -0.12 \end{matrix}$ 15 $\begin{matrix} 0 \\ -0.12 \end{matrix}$	10.2 $\begin{matrix} 0 \\ -0.01 \end{matrix}$	—	1.1	9.6	—	—	—	8	-3	167	206	SM 5	
SM 6 SM 6G SM 8S SM 8SG SM 8 SM 8G	4 8 4 11 4 16	SM 6-AJ SM 6G-AJ SM 8S-AJ SM 8S-AJ SM 8-AJ SM 8G-AJ	— — — — — —	6 $\begin{matrix} 0 \\ -0.01 \end{matrix}$ 8 $\begin{matrix} 0 \\ -0.01 \end{matrix}$ 8 $\begin{matrix} 0 \\ -0.01 \end{matrix}$	12 $\begin{matrix} 0 \\ -0.011 \end{matrix}$ 15 $\begin{matrix} 0 \\ -0.011 \end{matrix}$ 15 $\begin{matrix} 0 \\ -0.011 \end{matrix}$	19 $\begin{matrix} 0 \\ -0.01 \end{matrix}$ 17 24	13.5 11.5 17.5	1.1 1.1 1.1	11.5 14.3 14.3	1 1 1	— — —	— — —	— — —	12 12 12	-5 -5 -5	200 170 260	260 220 400	SM 6 SM 8S SM 8	
SM 10 SM 10G SM 12 SM 12G SM 13 SM 13G	4 30 4 31.5 4 43	SM 10-AJ SM 10G-AJ SM 12-AJ SM 12G-AJ SM 13-AJ SM 13G-AJ	— — SM 12-OP SM 12G-OP SM 13-OP SM 13G-OP	10 0 12 $\begin{matrix} 0 \\ -0.009 \end{matrix}$ 13	19 $\begin{matrix} 0 \\ -0.013 \end{matrix}$ 21 $\begin{matrix} 0 \\ -0.013 \end{matrix}$ 23	29 30 0 32 -0.2	22 0 23 -0.2 23	1.3 1.3 1.3	18 20 22	1 1.5 1.5	8 8 9	80° 80° 80°	—	12 12 12	-5 -5 -5	370 410 500	540 590 770	SM 10 SM 12 SM 13	
SM 16 SM 16G SM 20 SM 20G SM 25 SM 25G	5 69 5 87 6 220	SM 16-AJ SM 16G-AJ SM 20-AJ SM 20G-AJ SM 25-AJ SM 25G-AJ	SM 16-OP SM 16G-OP SM 20-OP SM 20G-OP SM 25-OP SM 25G-OP	16 $\begin{matrix} 0 \\ -0.01 \end{matrix}$ 20 0 25 -0.010	28 $\begin{matrix} 0 \\ -0.016 \end{matrix}$ 32 0 40 -0.016	37 42 59	26.5 30.5 41	1.6 1.6 1.85	27 30.5 38	1.5 1.5 2	11 11 12	80° 60° 50°	—	12 15 15	-7 -9 -9	770 860 980	1170 1370 1560	SM 16 SM 20 SM 25	
SM 30 SM 30G SM 35 SM 35G	6 250 6 390	SM 30-AJ SM 30G-AJ SM 35-AJ SM 35G-AJ	SM 30-OP SM 30G-OP SM 35-OP SM 35G-OP	30 $\begin{matrix} 0 \\ -0.012 \end{matrix}$ 35 0 38 -0.012	45 $\begin{matrix} 0 \\ -0.019 \end{matrix}$ 52 0 70 -0.019	64 70 0 70 -0.3	44.5 49.5 0 49.5 -0.3	1.85 2.1 2.1	43 49 49	2.5 2.5 2.5	15 17 17	50° 50° 50°	—	15 20 20	-9 -13 -13	1560 1660 1660	2740 3130 3130	SM 30 SM 35	
SM 40 SM 40G SM 50 SM 50G SM 60 SM 60G	6 585 6 1580 6 2000	SM 40-AJ SM 40G-AJ SM 50-AJ SM 50G-AJ SM 60-AJ SM 60G-AJ	SM 40-OP SM 40G-OP SM 50-OP SM 50G-OP SM 60-OP SM 60G-OP	40 $\begin{matrix} 0 \\ -0.015 \end{matrix}$ 50 0 60 -0.015	60 $\begin{matrix} 0 \\ -0.022 \end{matrix}$ 80 0 90 -0.022	80 100 110	60.5 74 85	2.1 2.6 3.15	57 76.5 86.5	3 3 3	20 25 30	50° 50° 50°	—	20 20 25	-13 -13 -16	2150 3820 4700	4010 7930 9990	SM 40 SM 50 SM 60	

LINEAR BALL BEARINGS



Nominal Part No				Major Dimensions and Tolerance (mm)								Eccentricity μm	Basic load Rating		Nominal Part No		
Steel Retainer	Resin Retainer	Ball Circuit	Weight g	dr	Tolerance	D	Tolerance	L	Tolerance	B	Tolerance		W	D ₁		Dynamic C(N)	Static Co(N)
SM6W	SM6GW	4	16	6	$\left[\right]$	12	$\left[\begin{smallmatrix} 0 \\ -0.013 \end{smallmatrix} \right]$	35	$\left[\right]$	27	$\left[\right]$	1.1	11.5	15	323	530	SM 6W
SM8W	SM8GW	4	31	8	$\left[\right]$	15	$\left[\begin{smallmatrix} 0 \\ -0.013 \end{smallmatrix} \right]$	45	$\left[\right]$	35	$\left[\right]$	1.1	14.3	15	431	784	SM 8W
SM10W	SM10GW	4	62	10	0	19	$\left[\right]$	55	$\left[\right]$	44	$\left[\right]$	1.3	18	15	588	1,100	SM 10W
SM12W	SM12GW	4	80	12	-0.010	21	$\left[\begin{smallmatrix} 0 \\ -0.016 \end{smallmatrix} \right]$	57	0	46	0	1.3	20	15	657	1,200	SM 12W
SM13W	SM13GW	4	90	13	$\left[\right]$	23	$\left[\begin{smallmatrix} 0 \\ -0.016 \end{smallmatrix} \right]$	61	-0.3	46	-0.3	1.3	22	15	813	1,570	SM 13W
SM16W	SM16GW	5	145	16	$\left[\right]$	28	$\left[\right]$	70	$\left[\right]$	53	$\left[\right]$	1.6	27	15	1,230	2,350	SM 16W
SM20W	SM20GW	5	180	20	$\left[\right]$	32	$\left[\begin{smallmatrix} 0 \\ -0.019 \end{smallmatrix} \right]$	80	$\left[\right]$	61	$\left[\right]$	1.6	30.5	20	1,400	2,750	SM 20W
SM25W	SM25GW	6	440	25	0	40	$\left[\begin{smallmatrix} 0 \\ -0.019 \end{smallmatrix} \right]$	112	$\left[\right]$	82	$\left[\right]$	1.85	38	20	1,560	3,140	SM 25W
SM30W	SM30GW	6	580	30	-0.012	45	$\left[\right]$	123	$\left[\right]$	89	$\left[\right]$	1.85	43	20	2,490	5,490	SM 30W
SM35W	SM35GW	6	795	35	$\left[\right]$	52	$\left[\begin{smallmatrix} 0 \\ -0.022 \end{smallmatrix} \right]$	135	$\left[\right]$	99	$\left[\right]$	2.1	49	25	2,650	6,270	SM 35W
SM40W	SM40GW	6	1,170	40	0	60	$\left[\begin{smallmatrix} 0 \\ -0.022 \end{smallmatrix} \right]$	154	0	121	0	2.1	57	25	3,430	8,040	SM 40W
SM50W	SM50GW	6	3,100	50	-0.015	80	$\left[\right]$	192	-0.4	148	-0.4	2.6	76.5	25	6,080	15,900	SM 50W
SM60W	SM60GW	6	3,500	60	$\left[\begin{smallmatrix} 0 \\ -0.020 \end{smallmatrix} \right]$	90	$\left[\begin{smallmatrix} 0 \\ -0.025 \end{smallmatrix} \right]$	211	$\left[\right]$	170	$\left[\right]$	3.15	86.5	25	7,650	20,000	SM 60W

LINEAR BALL BEARINGS



Example **SMF 16 G UU SK**

Standard

Inner contact diameter

Outer cylinder surface treatment

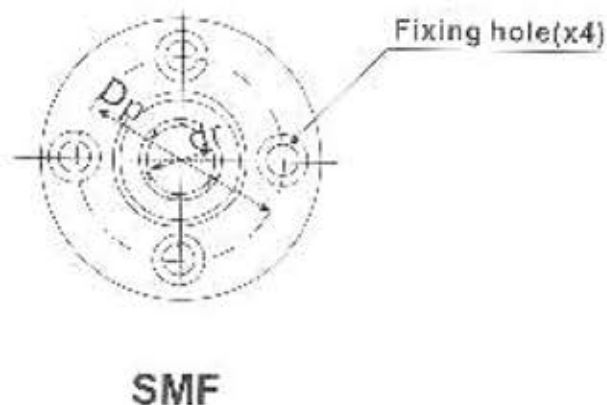
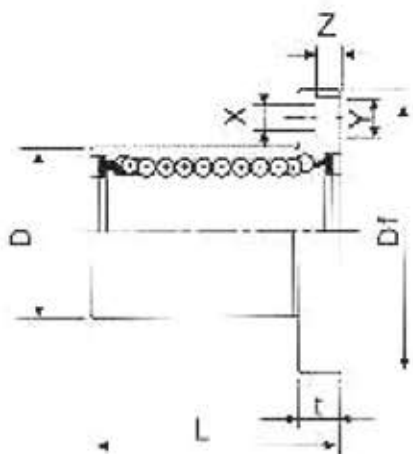
Blank	No surface treatment
SK	Electroless nickel plating

Retainer material

Blank	Steel
G	Resin

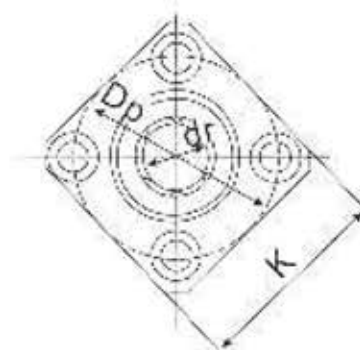
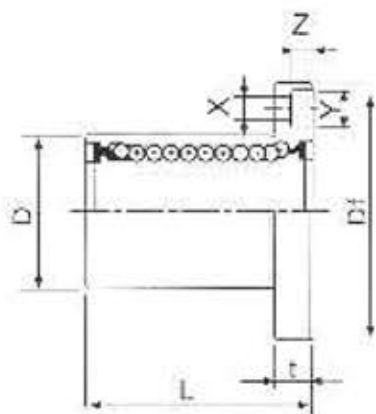
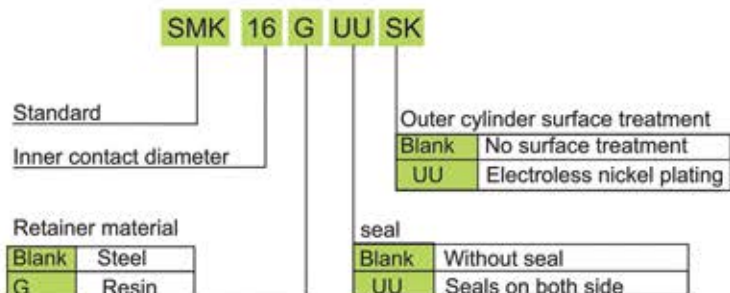
Seal

Blank	Without seal
UU	Seal on both sides



Nominal Part No				Major Dimensions and Tolerance (mm)											Eccentricity μm	Squareness μm	Basic load Rating		Nominal Part No	
Steel Retainer	Resin Retainer	Ball Circuit	Weight g	dr	Tolerance	D	Tolerance	L	Tolerance	Df	t	Flange					Dynamic C(N)	Static Co(N)		
												Dp	X	Y	Z					
SMF6	SMF6G	4	24	6		12	0	19		28	5	20	3.5	6	3.1	12	12	206	265	SMF6
SMF8S	SMF8SG	4	32	8		15	-0.013	17		32	5	24	3.5	6	3.1	12	12	176	216	SMF8S
SMF8	SMF8G	4	37	8	0	15		24		32	5	24	3.5	6	3.1	12	12	274	392	SMF8
SMF10	SMF10G	4	72	10	-0.009	19		29		40	6	29	4.5	7.5	4.1	12	12	372	549	SMF10
SMF12	SMF12G	4	76	12		21	0	30		42	6	32	4.5	7.5	4.1	12	12	510	784	SMF12
SMF13	SMF13G	4	88	13		23	-0.016	32		43	6	33	4.5	7.5	4.1	12	12	510	784	SMF13
SMF16	SMF16G	5	120	16		28		37		48	6	38	4.5	7.5	4.1	12	12	774	1,180	SMF16
SMF20	SMF20G	5	180	20		32		42	±0.3	54	8	43	5.5	9	5.1	15	15	882	1,370	SMF20
SMF25	SMF25G	6	340	25	0	40	0	59		62	8	51	5.5	9	5.1	15	15	980	1,570	SMF25
SMF30	SMF30G	6	470	30	-0.010	45	-0.019	64		74	10	60	6.6	11	6.1	15	15	1,570	2,740	SMF30
SMF35	SMF35G	6	650	35		52		70		82	10	67	6.6	11	6.1	20	20	1,670	3,140	SMF35
SMF40	SMF40G	6	1,060	40	0	60	0	80		96	13	78	9	14	6.1	20	20	2,160	4,020	SMF40
SMF50	SMF50G	6	2,200	50	-0.012	80	-0.022	100		166	13	98	9	14	8.1	20	20	3,820	7,940	SMF50
SMF60	SMF60G	6	3,000	60	0 -0.015	90	0 -0.025	110		134	18	112	11	17	11.1	25	25	4,700	10,000	SMF60

LINEAR BALL BEARINGS



SMF

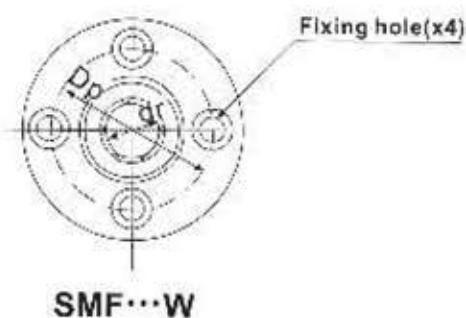
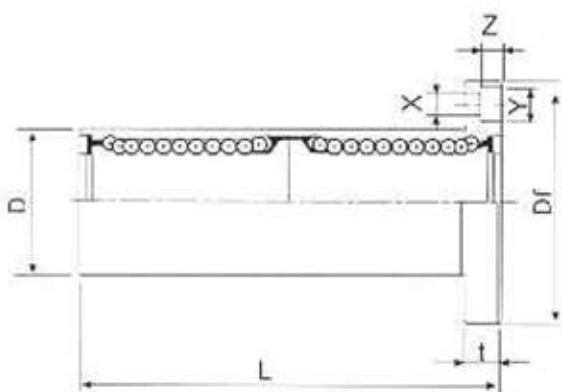
Nominal Part No				Major Dimensions and Tolerance (mm)										Eccentricity μm	Squareness μm	Basic load Rating		Nominal Part No
Steel Retainer	Resin Retainer	Ball Circuit	Weight g	dr Tolerance	D Tolerance	L Tolerance	Flange						Dynamic C(N)			Static Co(N)		
							Df	t	Dp	X	Y	Z						
SMK 6	SMK6G	4	24	6	12	19	28	5	20	3.5	6	3.1	12	12	206	265	SMK6	
SMK8	SSMK8SG	4	32	8	15	17	32	5	24	3.5	6	3.1	12	12	176	216	SMK8S	
SMK8	SMK8G	4	37	8	15	24	32	5	24	3.5	6	3.1	12	12	274	392	SMK8	
SMK10	SMK10G	4	72	10	19	29	40	6	29	4.5	7.5	4.1	12	12	372	549	SMK10	
SMK12	SMK12G	4	76	12	21	30	42	6	32	4.5	7.5	4.1	12	12	510	784	SMK12	
SMK13	SMK13G	4	88	13	23	32	43	6	33	4.5	7.5	4.1	12	12	510	784	SMK13	
SMK16	SMK16G	5	120	16	28	37	48	6	38	4.5	7.5	4.1	12	12	774	1,180	SMK16	
SMK20	SMK20G	5	180	20	32	42 ±0.3	54	8	43	5.5	9	5.1	15	15	882	1,370	SMK20	
SMK25	SMK25G	6	340	25	40	59	62	8	51	5.5	9	5.1	15	15	980	1,570	SMK25	
SMK30	SMK30G	6	470	30	45	64	74	10	60	6.6	11	6.1	15	15	1,570	2,740	SMK30	
SMK35	SMK35G	6	650	35	52	70	82	10	67	6.6	11	6.1	20	20	1,670	3,140	SMK35	
SMK40	SMK40G	6	1,060	40	60	80	96	13	78	9	14	8.1	20	20	2,160	4,020	SMK40	
SMK50	SMK50G	6	2,200	50	80	100	116	13	98	9	14	8.1	20	20	3,820	7,940	SMK50	
SMK60	SMK60G	6	3,000	60	90	110	134	18	112	11	17	11.1	25	25	4,700	10,000	SMK60	

LINEAR BALL BEARINGS



Example **SMF 16 G W UU SK**

Standard	SMF
Inner contact diameter	16
Retainer material	G
Double-wide type	W
Outer cylinder surface treatment	UU
Blank	No surface treatment
SK	Electroless nickel plating
Seal	Blank
Blank	Without seal
UU	Seal on both sides



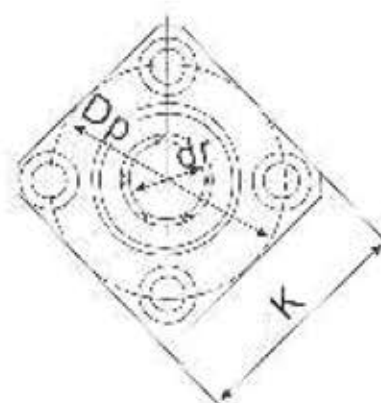
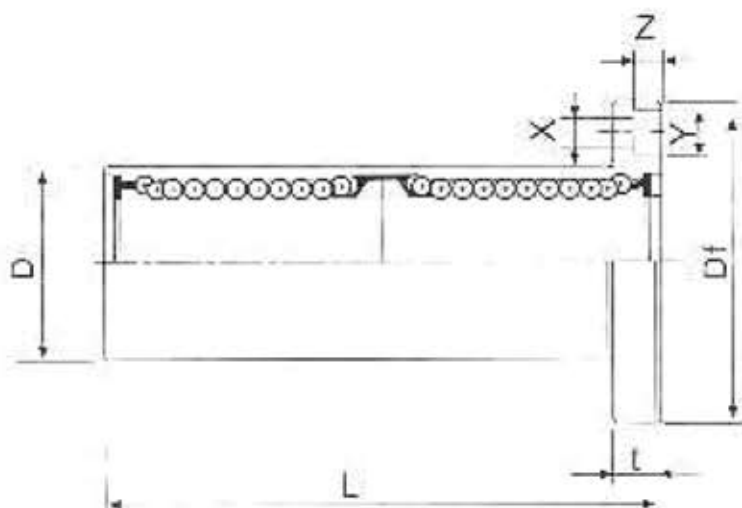
Nominal Part No				Major Dimensions and Tolerance (mm)												Eccentricity μm	Squareness μm	Basic load Rating		Nominal Part No
Steel Retainer	Resin Retainer	Ball Circuit	Weight g	dr	Tolerance	D	Tolerance	L	Tolerance	Df	t	Dp	X	Y	Z			Dynamic C(N)	Static Co(N)	
SMF6W	SMF6LW	4	31	6		12	0	35		28	5	20	3.5	6.5	3.1	15	15	323	530	SMF6W
SMF8W	SMF8GW	4	51	8		15	-0.010	45		32	5	24	3.5	6.5	3.1	15	15	431	784	SMF8W
SMF10W	SMF10GW	4	98	10	0	19		55		40	6	29	4.5	8	4.1	15	15	588	1,100	SMF10W
SMF12W	SMF12GW	4	110	12	-0.010	21	0	57		42	6	32	4.5	8	4.1	15	15	813	1,570	SMF12W
SMF13W	SMF13GW	4	130	13		12	-0.016	61		43	6	33	4.5	8	4.1	15	15	813	1,570	SMF13W
SMF16W	SMF16GW	5	190	16		28		70	-0.3	48	6	38	4.5	8	4.1	15	15	1,230	2,350	SMF16W
SMF20W	SMF20GW	5	260	20		32		80		54	8	43	5.5	9.5	5.1	20	20	1,400	2,740	SMF20W
SMF25W	SMF25GW	6	540	25	0	40	0	112		62	8	51	5.5	9.5	5.1	20	20	1,560	3,140	SMF25W
SMF30W	SMF30GW	6	680	30	-0.012	45	-0.019	123		74	10	60	6.6	11	6.1	20	20	2,490	5,490	SMF30W
SMF35W	SMF35GW	6	1,020	35	0	52	0	135		82	10	67	6.6	11	6.1	25	25	2,650	6,270	SMF35W
SMF40W	SMF40GW	6	1,570	40	-0.015	60	-0.022	154		96	13	78	9	14	8.1	25	25	3,430	8,040	SMF40W
SMF50W	SMF50GW	6	3,600	50	0	80	0	192		116	13	89	9	14	8.1	25	25	6,080	15,900	SMF50W
SMF60W	SMF60GW	6	4,500	60	-0.020	90	-0.025	211		134	18	112	11	17.5	11.1	30	30	7,550	20,000	SMF60W

LINEAR BALL BEARINGS



Example **SMK 16 G W UU SK**

Standard	SMK
Inner contact diameter	16
Retainer material	G
Blank	Steel
G	Resin
Double-wide type	W
Outer cylinder surface treatment	UU
Blank	No surface treatment
SK	Electroless nickel plating
Seal	
Blank	Without seal
UU	Seals on both sides

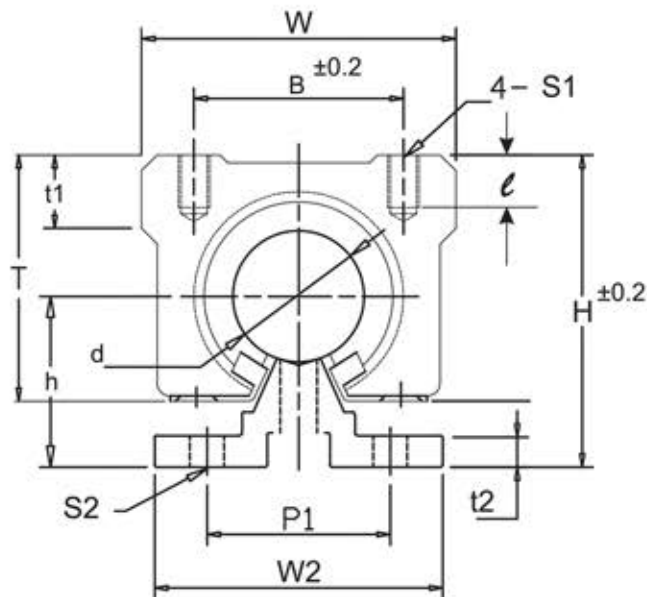


SMK...W

Nominal Part No				Major Dimensions and Tolerance (mm)											Eccentricity μm	Squareness μm	Basic load Rating		Nominal Part No
Steel Retainer	Resin Retainer	Ball Circuit	Weight g	dr Tolerance	D Tolerance	L Tolerance	Flange						Dynamic C(N)	Static Co(N)					
							Df	t	Dp	X	Y	Z							
SMK 6W	SMK 6GW	4	25	6	12	35	28	5	20	3.5	6.5	3.1	15	15	323	530	SMK 6W		
SMK 8W	SMK 8GW	4	43	8	15	45	32	5	24	3.5	6.5	3.1	15	15	431	784	SMK 8W		
SMK 10W	SMK 10GW	4	78	10	19	55	40	6	29	4.5	8	4.1	15	15	588	1,100	SMK 10W		
SMK 12W	SMK 12GW	4	90	12	21	57	42	6	32	4.5	8	4.1	15	15	813	1,570	SMK 12W		
SMK 13W	SMK 13GW	4	108	13	12	61	43	6	33	4.5	8	4.1	15	15	813	1,570	SMK 13W		
SMK 16W	SMK 16GW	5	165	16	28	70	48	6	38	4.5	8	4.1	15	15	1,230	2,350	SMK 16W		
SMK 20W	SMK 20GW	5	225	20	32	80	54	8	43	5.5	9.5	5.1	20	20	1,400	2,740	SMK 20W		
SMK 25W	SMK 25GW	6	500	25	40	112	62	8	51	5.5	9.5	5.1	20	20	1,560	3,140	SMK 25W		
SMK 30W	SMK 30GW	6	590	30	45	123	74	10	60	6.6	11	6.1	20	20	2,490	5,490	SMK 30W		
SMK 35W	SMK 35GW	6	930	35	52	135	82	10	67	6.6	11	6.1	25	25	2,650	6,270	SMK 35W		
SMK 40W	SMK 40GW	6	1,380	40	60	154	96	13	78	9	14	8.1	25	25	3,430	8,040	SMK 40W		
SMK 50W	SMK 50GW	6	3,400	50	80	192	116	13	89	9	14	8.1	25	25	6,080	15,900	SMK 50W		
SMK 60W	SMK 60GW	6	4,060	60	90	211	134	18	112	11	17.5	11.1	30	30	7,550	20,000	SMK 60W		

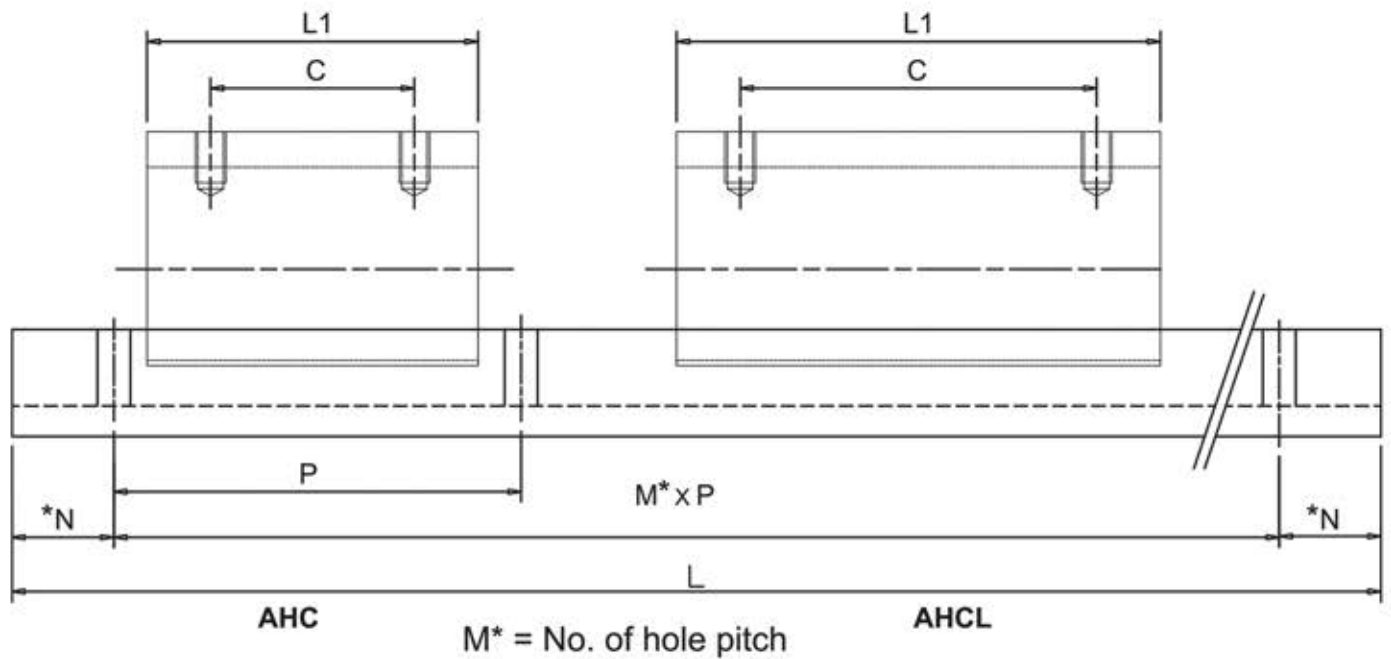
LM SHAFTS

LM SLIDE UNITS



Model No.	Shaft Diameter d	Dimensions of assembly			Dimensions of Block						
		H	h	W	L1	B	C	t1	ℓ	S1	T
AHC - 16	16	45	27.1	45	45	32	30	9	12	M5	33
AHC - 20	20	50	27.1	48	50	35	35	11		M6	39
AHC - 25	25	60	33.0	60	65	40	40	14		M6	47
AHC - 30	30	70	36.6	70	70	50	50	16.8	18	M8	56
AHC - 40	40	90	47	90	90	65	65	22	20	M10	72
AHC - 50	50	120	67	119.3	110	94	80	25	27	M10	91

SHAFTS WITH SUPPORT SYSTEM



Dimensions of track rail							Basics dynamic load rating	Basics static load rating	Model No.
W2	P1	t2	N	M X P	S2	L(max)	C (N)	Co (N)	
44.8	30	5.0	50	6 x 150	Ø6.5	1,000	770	1170	AHC - 16
							860	1370	AHC - 20
54	35	5.5					980	1560	AHC - 25
60	40	6.5			1560		2740	AHC - 30	
75	55	9			Ø9		2150	4010	AHC - 40
110	75	12	Ø13	3820	7930	AHC - 50			

HOUSING UNITS



HOUSINGS - OPEN TYPE

SME-UU Series are light weight but heavy duty extruded aluminum housings, fitted with sealed standard Ball Bushings for high running accuracy and extremely low friction. When mounting these open type of aluminum housings, the four securing holes should be provided with bolts to achieve the maximum load capacity and the best rigidity for every mounting position.

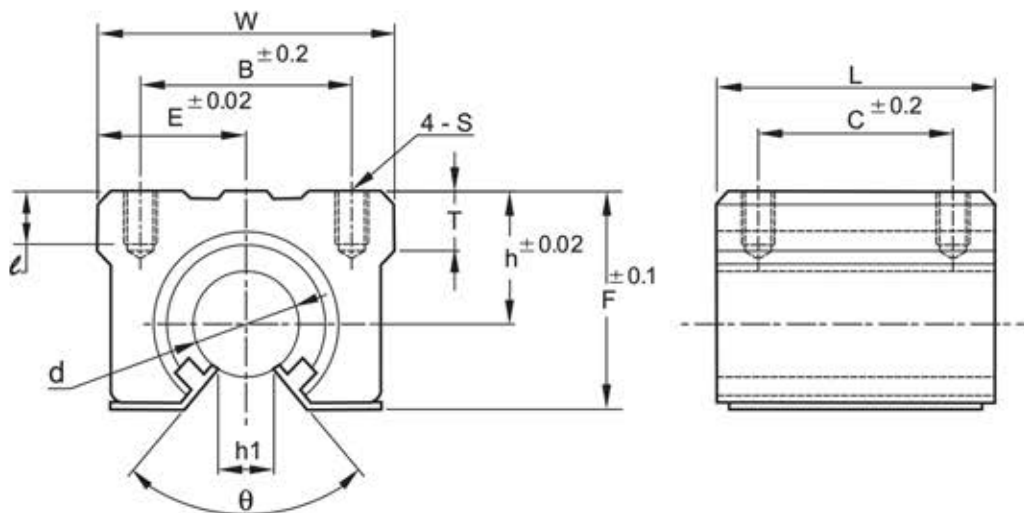
Standard Coating : Anodized.

HOUSINGS CLOSETYPE

SMA-UU Series are made of high quality extruded aluminum alloy. These units consist of sealed Ball Bushings for higher running accuracy and extremely low friction.

Standard Coating : Anodized

HOUSING UNITS

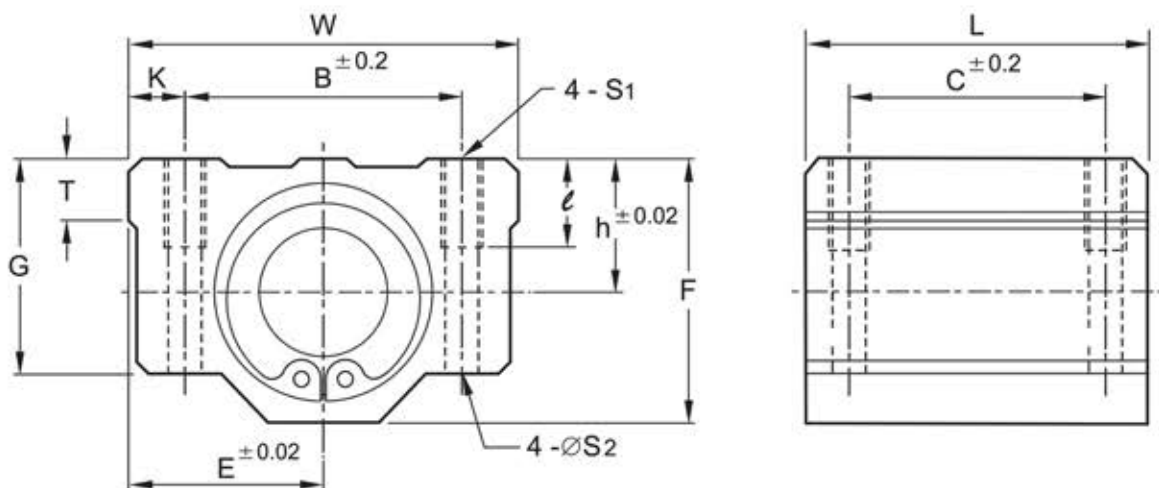


HOUSING-OPEN TYPE (SME - UU SERIES)

Model No.	Shaft Dia d	Main Dimensions.						Mounting Dimensions.				Linear ball bearing					
		h ±0.02	E ±0.02	W	L	F	T	h1	θ	B ±0.2	C ±0.2	S	ℓ	LM Bearing No.	Basic dynamic load rating C(kg)	Basic Static load rating Co(kg)	*Unit Weight g
SME 16	16	20.1	22.5	45	45	33	9	10	80°	32	30	M 5	12	LM 16UU OP	79	120	150
SME 20	20	23	24	48	50	39	11		60°	35	35	M 6		LM 20UU OP	90	140	200
SME 25	25	27	30	60	65	47	14	11.5	40	40	LM 25UU OP			100	160	450	
SME 30	30	33	35	70	70	56	16.8	14	50°	50	50	M 8	18	LM 30UU OP	160	280	630
SME 40	40	42	45	90	90	72	22	19		65	65	M 10	20	LM 40UU OP	220	410	1,330
SME 50	50	52	60	120	110	92	24	28		94	80	M 10	25	LM 50UU OP	382	793	2,900

* Includes weight of LM Bearing.

HOUSING UNITS

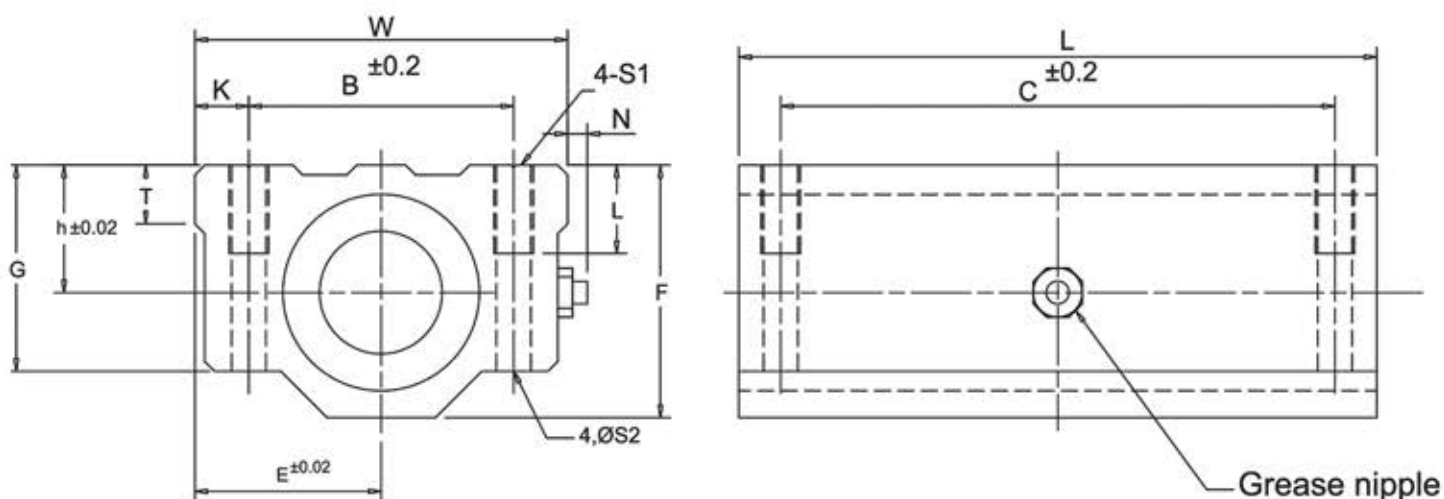


HOUSING-CLOSE TYPE (SMA-UU SERIES)

Model No.	Nominal shaft diameter	Main Dimensions							Mounting Dimensions					LM Bearing Model No.	dynamic C (kg)	static Co (kg)	* Unit Weight g	
		h	E	W	L	F	G	T	B	C	K	S ₁	S ₂					ℓ
SMA16	16	19	25	50	44	38.5	32.5	9	36	34	7	M5	4.3	12	LM16UU	79	120	200
SMA 20	20	21	27	54	50	41	35	11	40	40		M6	5.2		LM20UU	90	140	255
SMA 25	25	26	38	76	67	51.5	42	12	54	50	10	M8	7	18	LM25UU	100	160	600
SMA 30	30	30	39	78	72	59.5	49	15	58	58					LM30UU	160	280	735
SMA 35	35	34	45	90	80	68	54	18	70	60					LM35UU	170	320	1100
SMA 40	40	40	51	102	90	78	62	20	80	60	11	M10	8.7	25	LM40UU	220	410	1590

* Includes weight of LM Bearing.

HOUSING UNITS

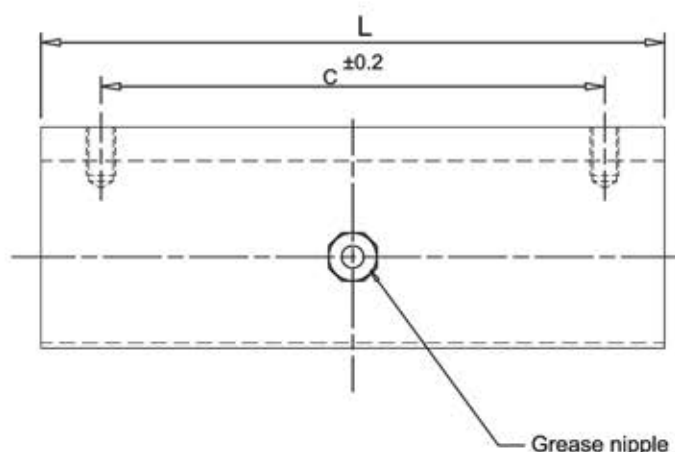
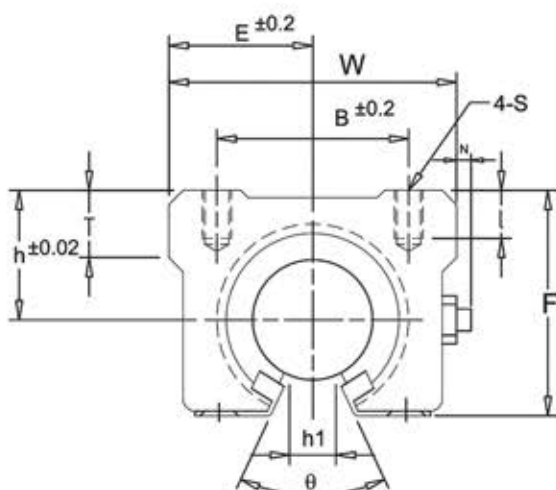
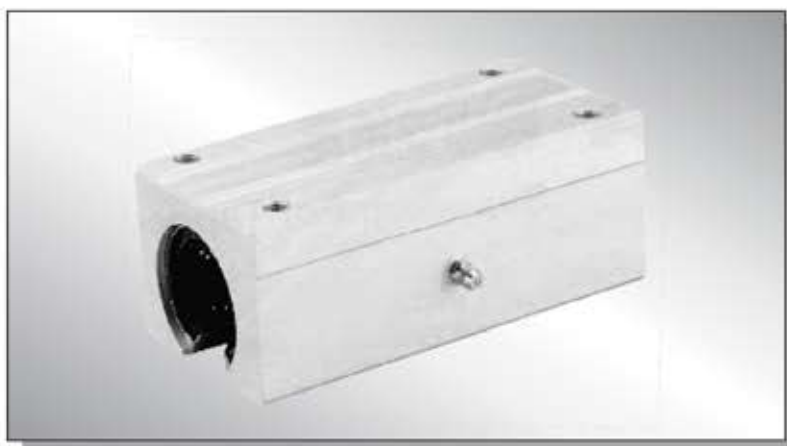


HOUSING-CLOSE TYPE (HFL-- UU SERIES)

Model No.	Nominal shaft diameter	Main Dimensions							Mounting Dimensions					LM Bearing Model No.	dynamic C (kg)	static Co (kg)	* Unit Weight g	
		h	E	W	L	F	G	T	B	C	K	S ₁	S ₂					ℓ
HFL16	16	19	25	50	85	38.5	32.5	9	36	60	7	M5	4.3	12	LM16UU	125	240	400
HFL20	20	21	27	54	96	41	35	11	40	70		M6	5.2		LM20UU	144	280	570
HFL25	25	26	38	76	130	51.5	42	12	54	100	10	M8	7	18	LM25UU	164	320	1200
HFL30	30	30	39	78	140	59.5	49	15	58	110					LM30UU	250	560	1480
HFL35	35	34	45	90	155	68	54	18	70	120	11	M10	8.7	25	LM35UU	270	640	2200
HFL40	40	40	51	102	175	78	62	20	80	140					LM40UU	350	820	3200

* Includes weight of LM Bearing.

HOUSING UNITS



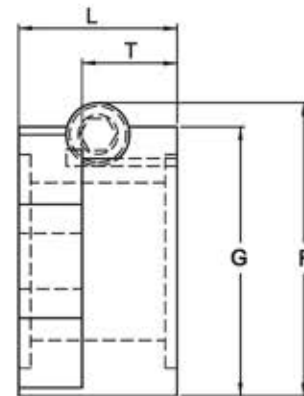
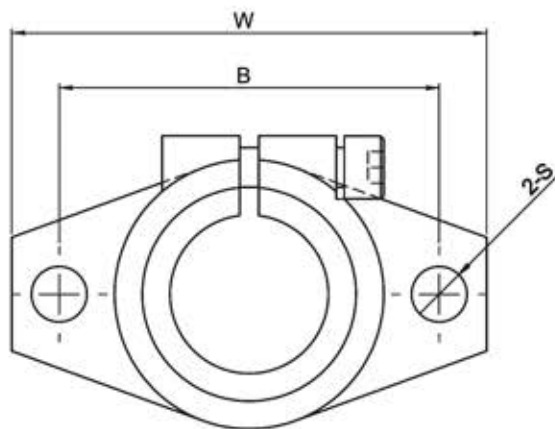
HOUSING-OPEN TYPE (HCL -- UU SERIES)

Model No.	Shaft Dia d	Main Dimensions.						Mounting Dimensions.						Linear ball bearing			
		h ±0.02	E ±0.02	W	L	F	T	h1	θ	B ±0.2	C ±0.2	S	ℓ	LM Bearing No.	Basic dynamic load rating C(kg)	Basic Static load rating Co(kg)	*Unit Weight g
HCL 16	16	20.1	22.5	45	85	33	9	10	80°	32	60	M 5	12	LM 16UU OP	158	240	300
HCL 20	20	23	24	48	96	39	11		60°	35	70	M 6		LM 20UU OP	180	280	400
HCL 25	25	27	30	60	130	47	14	11.5	40	100	LM 25UU OP			200	320	900	
HCL 30	30	33	35	70	140	56	16.8	14	50°	50	110	M 8	18	LM 30UU OP	320	560	1260
HCL 40	40	42	45	90	175	72	22	19		65	140	M 10	20	LM 40UU OP	440	820	2480

* Includes weight of LM Bearing.

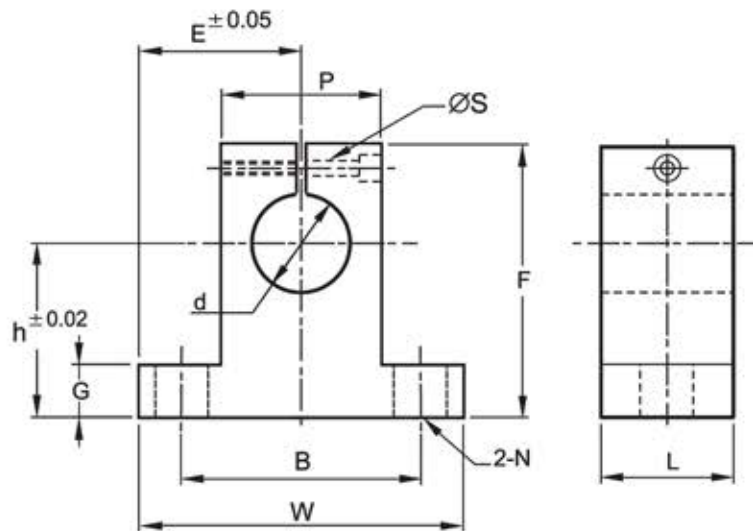
FLANGE TYPE SHAFT END SUPPORT

SHF- A



Model No.	Shaft Dimensions	Dimensions (mm)							Locking Bolt	Clamping Bolt	Weight (kg/m)
		W	L	T	F	G	B	S			
SHF 3A	3	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 4A	4	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 5A	5	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 6A	6	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 8A	8	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 10A	10	43	10	5	24	20	32	5.5	M4	M5	0.013
SHF 12A	12	47	13	7	28	25	36	5.5	M4	M5	0.020
SHF 13A	13	47	13	7	28	25	36	5.5	M4	M5	0.020
SHF 16A	16	50	16	8	31	28	40	5.5	M4	M5	0.027
SHF 20A	20	60	20	8	37	34	48	7	M5	M6	0.040
SHF 25A	25	70	25	10	42	40	56	7	M5	M6	0.060
SHF 30A	30	80	30	12	50	46	64	9	M6	M8	0.110
SHF 35A	35	92	35	14	58	50	72	12	M8	M10	0.380
SHF 40A	40	102	40	16	67	56	80	12	M10	M10	0.510
SHF 50A	50	122	50	19	83	70	96	14	M12	M12	0.890
SHF 60A	60	140	60	23	95	82	112	14	M12	M12	1.500

END SUPPORT UNITS



SHAFT END SUPPORT (SK - SERIES)

MODEL NO	Shaft diameter d	h ±0.02	E ±0.05	W	L	F	G	P	B	ØS	Locking bolt S	Mounting bolt N	Unit Weight g
SK 16	16	27	24	48	16	44	8	25	38	5.5	M4	M5	40
SK 20	20	31	30	60	20	51	10	30	45	6.6	M5	M6	70
SK 25	25	35	35	70	24	60	12	38	56		M6		130
SK 30	30	42	42	84	28	70		15	44	64	9	M8	M10
SK 35	35	50	49	98	32	82	50		74	11	M8		
SK 40	40	60	57	114	36	96	60	90	420				
SK 50*	50	70	63	126	40	120	18	74	100	14	M12	M12	750

- Other sizes upon request.
- * Check for availability