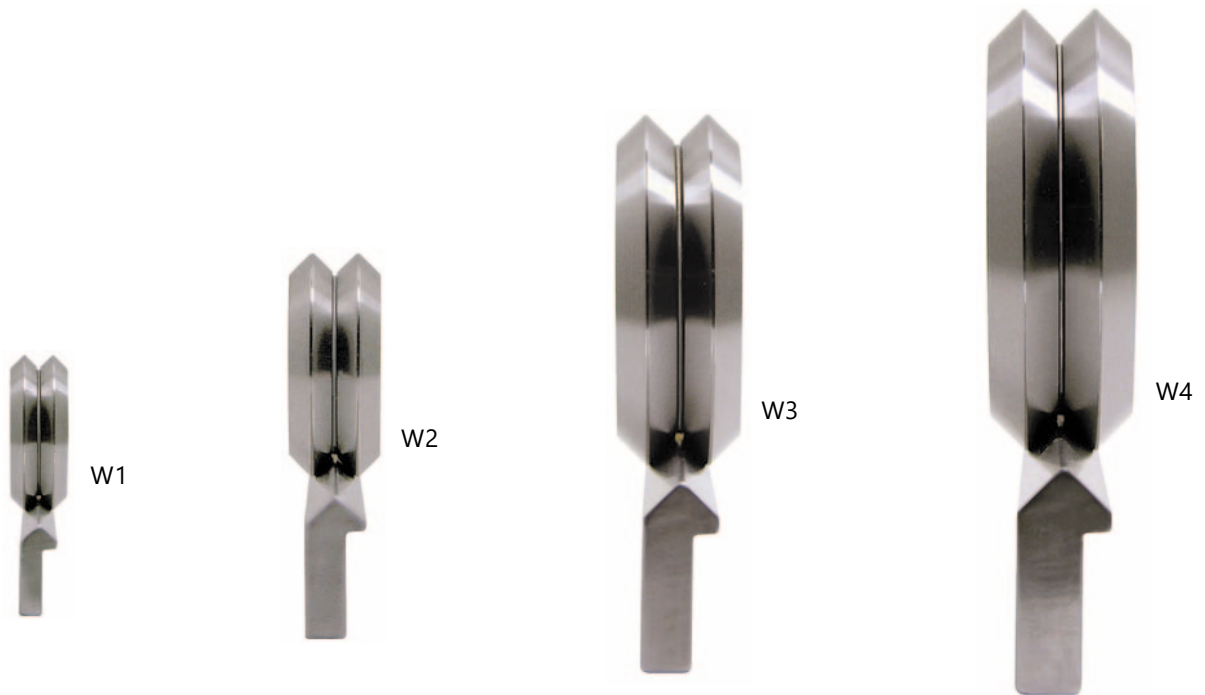


Designations



	Prefix	W Wheel	Size	Material	Closure	Application
<b>Example</b>	<b>WD</b>	<b>W</b>	<b>2</b>	<b>SS</b>	<b>2Z</b>	<b>227</b>
1	Blank -Others			Blank-52100	2Z-Shields	Blank-Standard
2	WD-Washdown			SS-440C	2RS-Seals	VAC-Vacuum
3				HC-Ceramic Balls		H1-Food/Pharma
4						227-High temp
5						300-Low temp.

### ▼ Feature of W Guide Wheel

◇ W Guide Wheels are the main components of the Linear Motion System, it is widely used in the industrial robot cutting machine, motion track, production flow and so on. The surface of outer ring is the " W " profile formed by the two " V " with an angle of 90 degrees. The internal or external side face can be matched separately with the concave or protrudable track that both have a " V " profile with the angle of 90 degrees, and also the internal side face can be matched well with the cylindrical track.

◇ Wheels feature the internal design of double row angular contact ball bearing and a thick-walled outer ring, so the wheels can accommodate higher loads.

◇ Wheels are made of the high-quality bearing steel, processed by heat treatment and precision grinding, and are filled with a long service life, high-grade and multipurposes grease. Wheels mantle the metal shields or rubber seals to prevent the dust. C&H also can supply stainless steel W guide wheels for corrosion resistant.

### ▼ Characteristics of Guide System that series W wheels are applied

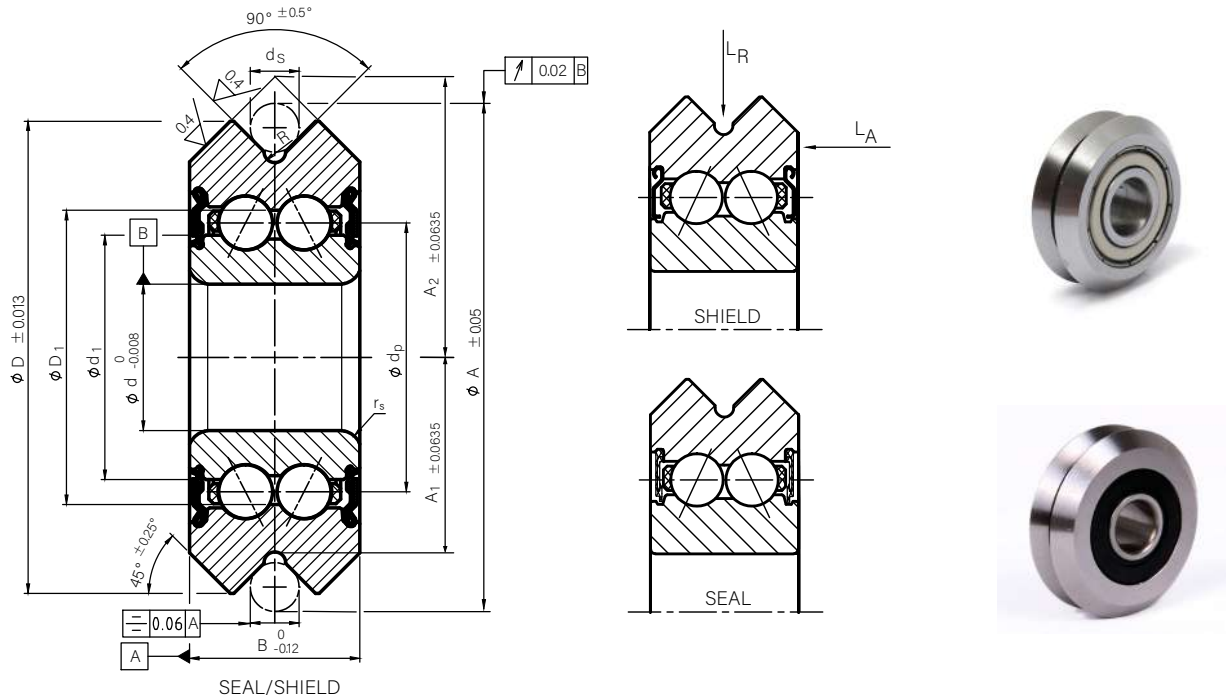
#### ◇ **Low resistance, long service life, widely-use**

After precision grinding, the roughness of working surface of the series W wheels are fine and the angle of 90 degrees is accurate. The wheels have good parallelism between the " W " profile groove and the mounting planes of inner ring relatively. When the wheels running, the stresses between the wheel and track is in equality and the friction resistance is low.

#### ◇ **Easy installation**

After wheels assembled the concentric or eccentric bushing, installation can be made conveniently. To adjust the eccentric one's eccentricity, the wheels can get the fitting preload.

Dimensions



Unit: Inch

Wheel Size	Bore Diameter d inch	Ouside Diameter D inch	Width B inch	V Radius Inside A1 inch	V Radius Outside A2 inch	Inner ring chamfer r <sub>s</sub> min inch	Actual radial bearing load Fr lbf	Actual axial bearing load Fa lbf	Weight m lb
0	0.1575	0.584	0.25	0.234	0.359	0.0079	146	28	0.011
1	0.1875	0.771	0.31	0.313	0.468	0.0157	274	57	0.024
2	0.375	1.21	0.438	0.5	0.719	0.0236	596	141	0.086
3	0.4724	1.803	0.625	0.75	1.063	0.0236	1326	382	0.287
4	0.5906	2.36	0.75	1	1.375	0.0236	2181	900	0.608
4XL	0.8661	2.968	1	1.25	1.75	0.0433	3215	1473	1.268

Unit: Metric

Wheel Size	Bore Diameter d mm	Ouside Diameter D mm	Width B mm	V Radius Inside A1 mm	V Radius Outside A2 mm	Inner ring chamfer r <sub>s</sub> min mm	Actual radial bearing load Fr N	Actual axial bearing load Fa N	Weight m kg
	+0 -0.008	±0.013	+0 -0.12	±0.06	±0.06				
0	4	14.834	6.35	5.94	9.12	0.2	650	123	0.0051
1	4.762	19.583	7.874	7.95	11.89	0.4	1220	252	0.0111
2	9.525	30.73	11.11	12.7	18.26	0.6	2650	625	0.039
3	12	45.796	15.88	19.05	27	0.6	5900	1701	0.1302
4	15	59.944	19.05	25.4	34.93	0.6	9700	4001	0.276
4XL	22	75.39	25.4	31.75	44.45	1.1	14300	6552	0.575

Tolerance: ABEC-3 ( standard is ABEC-1) ; Internal Clearance: CN ( normal)

Symmetry : 0.06mm

Runout : 0.015mm (size 0, 1, 2) ; 0.02mm (size 3, 4, 4XL)

Grease: Kluberplex BEM 34-132 / Kyodo Yushi Multemp SRL ( commercial Shell Alvania EP2 grease on request)

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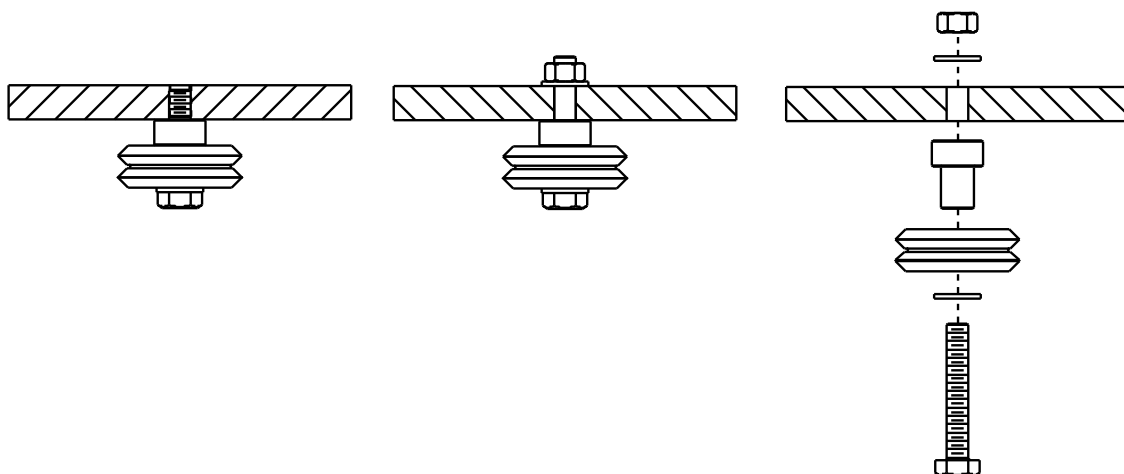
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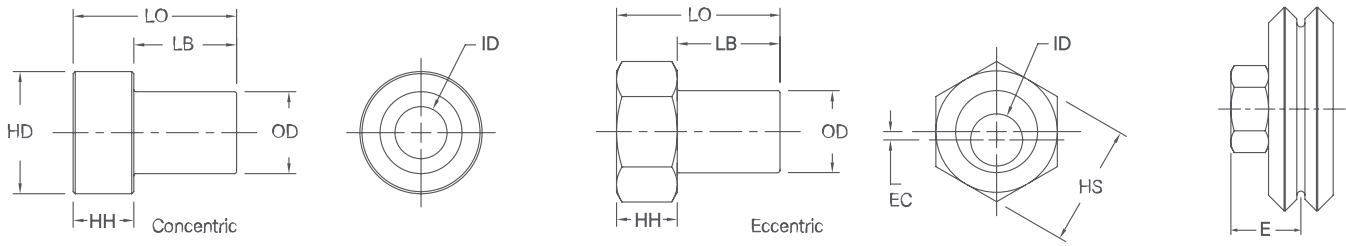


M	B	E	2	SS	LH
Blank - Inch	Bushing	C- Concentric/Stationary	Size	SS - Stainless Steel 303	Blank-Standard
M - Metric		E - Eccentric/Adjustable			LH-Low Head

- Guide bushings provide a simple method for mounting guide wheels in a precise and rigid fashion.
- Insert a fastener with a washer in the through hole to attach wheels to machinery.
- Concentric version is for mounting in a fixed location.
- The eccentric version has an offset hole to provide an adjustable position and allow wheel fit-up adjustment to parallel guide track.
- Standard and low profile head height configurations are available providing flexibility in wheel height position.
- Standard material is 303 stainless steel



Support Bushing - Standard



Guide bushings provide a simple method for mounting guide wheels in a precise and rigid fashion. Insert a fastener with a washer in the through hole to attach wheels to machinery. Concentric version is for mounting in a fixed location. The eccentric version has an offset hole to provide an adjustable position and allow wheel fit-up adjustment to parallel guide track.

Inch Version

Unit: inch

W Guide Wheel Size	Part Number	Ref. Fastener Size	Hex Size	Offset	Head Height		Length Body	Length Overall	Outside Diameter		Inside Diameter		Head Diameter	Weight g
			HS	EC	HH	LB	LO	OD	ID	HD				
1	BC1SS	#6	-	-	0.250	±.001	0.300	0.550	0.1873	+0.000 -0.001	0.1406	+0.002 -0.002	0.44	4.6
	BE1SS	#6	0.4375	0.012	0.281	±.001	0.425	0.706	0.3748	+0.000 -0.001	0.250	+0.002 -0.001	-	5.1
2	BC2SS	0.25	-	-	0.281	±.001	0.425	0.706	0.3748	+0.000 -0.001	0.250	+0.002 -0.001	0.56	10.3
	BE2SS	0.25	0.5625	0.024	0.281	±.001	0.425	0.706	0.3748	+0.000 -0.001	0.250	+0.002 -0.001	-	11.0
3	BC3SS	0.3125	-	-	0.375	±.001	0.615	0.990	0.4722	+0.000 -0.001	0.3125	+0.002 -0.001	0.75	25.0
	BE3SS	0.3125	0.75	0.042	0.375	±.001	0.615	0.990	0.4722	+0.000 -0.001	0.3125	+0.002 -0.001	-	27.1
4	BC4SS	0.3750	-	-	0.437	±.001	0.740	1.177	0.5904	+0.000 -0.001	0.375	+0.002 -0.001	0.88	42.4
	BE4SS	0.3750	0.875	0.060	0.437	±.001	0.740	1.177	0.5904	+0.000 -0.001	0.375	+0.002 -0.001	-	45.6
4XL	BC4XLSS	0.5625	-	-	0.565	±.001	0.990	1.555	0.8650	+0.000 -0.001	0.5625	+0.002 -0.001	1.25	112.8
	BE4XLSS	0.5625	1.25	0.060	0.565	±.001	0.990	1.555	0.8650	+0.000 -0.001	0.5625	+0.002 -0.001	-	121.4

Metric Version

Unit: mm

W Guide Wheel Size	Part Number	Ref. Fastener Size	Hex Size	Offset	Head Height		Length Body	Length Overall	Outside Diameter		Inside Diameter		Head Diameter	Weight g
			HS	EC	HH	LB	LO	OD	ID	HD				
1	MBC1SS	M4	-	-	6.22	±0.03	7.60	13.80	4.76	+0.000 -0.025	3.98	+0.050 -0.000	11.20	4.6
	MBE1SS	M4	12	0.25	6.22	±0.03	7.60	13.80	4.76	+0.000 -0.025	3.98	+0.050 -0.000	-	5.1
2	MB2SS	M6	-	-	6.65	±0.03	10.80	17.40	9.52	+0.000 -0.025	6.00	+0.050 -0.025	14.20	10.3
	MBE2SS	M6	14	0.61	6.65	±0.03	10.80	17.40	9.52	+0.000 -0.025	6.00	+0.050 -0.025	-	11.0
3	MB3SS	M8	-	-	9.47	±0.03	15.60	25.10	11.99	+0.000 -0.025	8.00	+0.050 -0.025	19.10	25.0
	MBE3SS	M8	19	1.07	9.47	±0.03	15.60	25.10	11.99	+0.000 -0.025	8.00	+0.050 -0.025	-	27.1
4	MB4SS	M10	-	-	11.10	±0.03	18.80	29.90	15.00	+0.000 -0.025	10.00	+0.050 -0.025	22.40	42.4
	MBE4SS	M10	22	1.52	11.10	±0.03	18.80	29.90	15.00	+0.000 -0.025	10.00	+0.050 -0.025	-	45.6
4XL	MBC4XLSS	M14	-	-	14.35	±0.03	25.10	39.50	21.97	+0.000 -0.025	14.00	+0.050 -0.025	31.80	112.8
	MBE4XLSS	M14	30	1.52	14.35	±0.03	25.10	39.50	21.97	+0.000 -0.025	14.00	+0.050 -0.025	-	121.4

Designation

M	B	E	2	SS
Blank - Inch	Bushing	C - Concentric/Stationary	Size	SS - Stainless Steel 303
M - Metric		X - Eccentric/Adjustable		

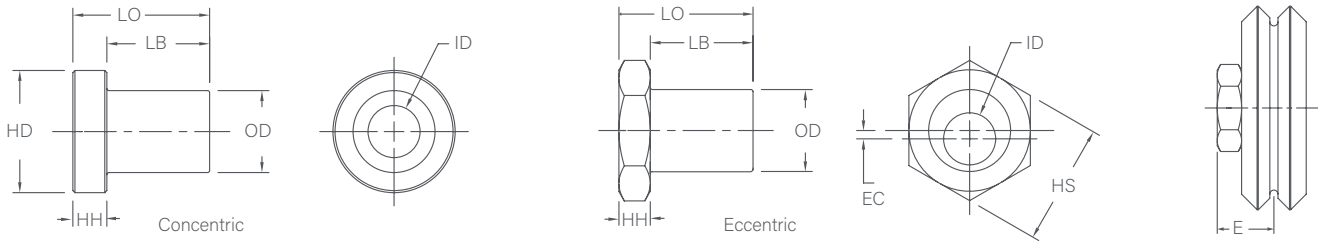
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Support Bushing - Low Head



W Guide Wheel	Part Number	Ref. Fastener Size	Hex Size	Offset	Head Height		Length Body	Length Overall	Outside Diameter		Inside Diameter		Head Diameter	Weight g	BWC
			HS	EC	HH	LB			LO	OD	ID	HD			
1	BC1LH	M4	-	-	0.080	±0.001	0.300	0.380	0.1873	+0.000 -0.001	0.1570	+0.002 -0.000	0.44	1.5	1PWBC
	BE1LH	M4	0.4375	0.007									-	1.6	1PWBX
2	BC2LH	0.25	-	-	0.100	±0.001	0.425	0.525	0.3748	+0.000 -0.001	0.250	+0.002 -0.001	0.56	5.7	2PWBC
	BE2LH	0.25	0.5625	0.024									-	6.0	2PWBX
3	BC3LH	0.3125	-	-	0.125	±0.001	0.615	0.740	0.4722	+0.000 -0.001	0.3125	+0.002 -0.001	0.75	13.4	3PWBC
	BE3LH	0.3125	0.75	0.042									-	14.1	3PWBX
4	BC4LH	0.375	-	-	0.125	±0.001	0.740	0.865	0.5904	+0.000 -0.001	0.375	+0.002 -0.001	0.88	23.0	4PWBC
	BE4LH	0.375	0.875	0.060									-	24.0	4PWBX
4XL	BC4XLLH	0.5625	-	-	0.188	±0.001	0.990	1.178	0.8650	+0.000 -0.001	0.5625	+0.002 -0.001	1.25	68.2	4XLPWBC
	BE4XLLH	0.5625	1.25	0.060									-	70.9	4XLPWBX

Metric Version

Unit: mm

W Guide Wheel	Part Number	Ref. Fastener Size	Hex Size	Offset	Head Height		Length Body	Length Overall	Outside Diameter		Inside Diameter		Head Diameter	Weight g	BWC
			HS	EC	HH	LB			LO	OD	ID	HD			
1	MBC1LH	M4	-	-	2.11	±0.03	7.60	9.70	4.76	+0.000 -0.025	3.98	+0.050 -0.000	11.20	1.5	M1PWBC
	MBE1LH	M4	12	0.18									-	1.6	M1PWBX
2	MBC2LH	M6	-	-	2.64	±0.03	10.80	13.40	9.52	+0.000 -0.025	6.00	+0.050 -0.025	14.20	5.7	M2PWBC
	MBE2LH	M6	14	0.61									-	6.0	M2PWBX
3	MBC3LH	M8	-	-	3.48	±0.03	15.60	19.10	11.99	+0.000 -0.025	8.00	+0.050 -0.025	19.10	13.4	M3PWBC
	MBE3LH	M8	19	1.07									-	14.1	M3PWBX
4	MBC4LH	M10	-	-	3.10	±0.03	18.80	21.90	15.00	+0.000 -0.025	10.00	+0.050 -0.025	22.40	23.0	M4PWBC
	MBE4LH	M10	22	1.52									-	24.0	M4PWBX
4XL	MBC4XLLH	M14	-	-	5.10	±0.03	25.10	30.30	21.97	+0.000 -0.025	14.00	+0.050 -0.025	31.80	68.2	M4XLPWBC
	MBE4XLLH	M14	30	1.52									-	70.9	M4XLPWBX

Designation

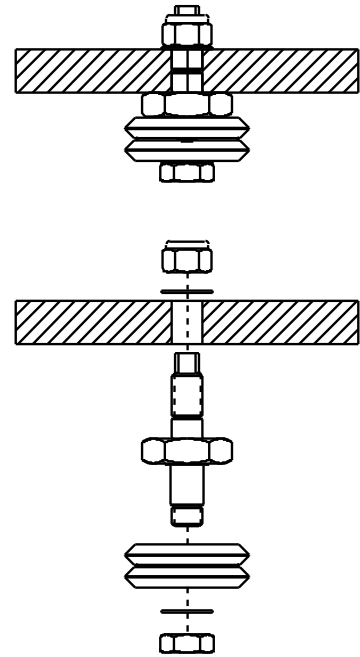
M	B	X	2	LH	SS
Blank - Inch	Bushing	C - Concentric/Stationary/Fixed	Size	LH-Low Head	SS - Stainless Steel 303
M - Metric		E- Eccentric/Adjustable			

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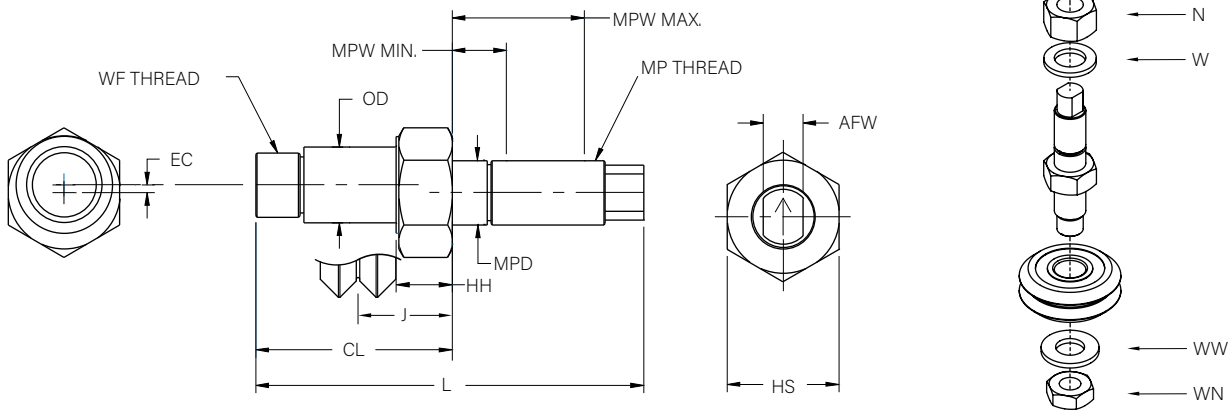
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M	J	X	2	A	Special
Mounting	Journal	C- Concentric/Stationary	Size	Assemblies	Blank-303
		E - Eccentric/Adjustable			

- Combines bushing and fastener into a single piece element
- Allows adjustments from the opposite side of the mounting surface for designs where access to the guide wheel is prohibitive
- Reduces overall number of components per guide wheel assembly
- Concentric and eccentric configurations available
- Standard and low profile head height configurations are available providing flexibility in wheel height position.
- Standard material is 304 stainless steel



Wheel Size	Part Number	Offset	Head Height	Clearance Length	Length Overall	Outside Diameter	Journal Diameter for Mounting Plate Bore	Mounting Plate Thread	Wheel Fastener	Adjustment Flat Width	Hex Size	Maximum Mounting Plate Width	Minimum Mounting Plate Width	Weight kg
		EC	HH	CL	L	OD <sup>1</sup> +0/-0.007	MPD <sup>2</sup> +/-0.002	MP THREAD	WF THREAD	AFW	HS	MPW MAX	MPW MIN	
0	MJX0A MJC0A	0.010 -	0.250	0.635	1.38	0.1570	0.250	1/4-28	8-32	0.125	3/8	0.375	0.125	14.0
1	MJX1A MJC1A	0.012 -	0.250	0.695	1.44	0.1873	0.250	1/4-28	10-32	0.125	7/16	0.375	0.125	16.1
2	MJX2A MJC2A	0.024 -	0.281	0.966	2.03	0.3748	0.375	3/8-24	5/16-24	0.250	9/16	0.500	0.187	45.7
3	MJX3A MJC3A	0.042 -	0.375	1.275	2.53	0.4722	0.437	7/16-20	7/16-20	0.250	3/4	0.625	0.250	78.0
4	MJX4A MJC4A	0.060 -	0.437	1.537	3.04	0.5904	0.500	1/2-20	1/2-20	0.312	7/8	0.750	0.375	133.1
4XL	MJX4XLA MJC4XLA	0.060 -	0.565	2.045	4.07	0.8653	0.750	3/4-16	3/4-16	0.437	1-1/4	1.125	0.750	375.1

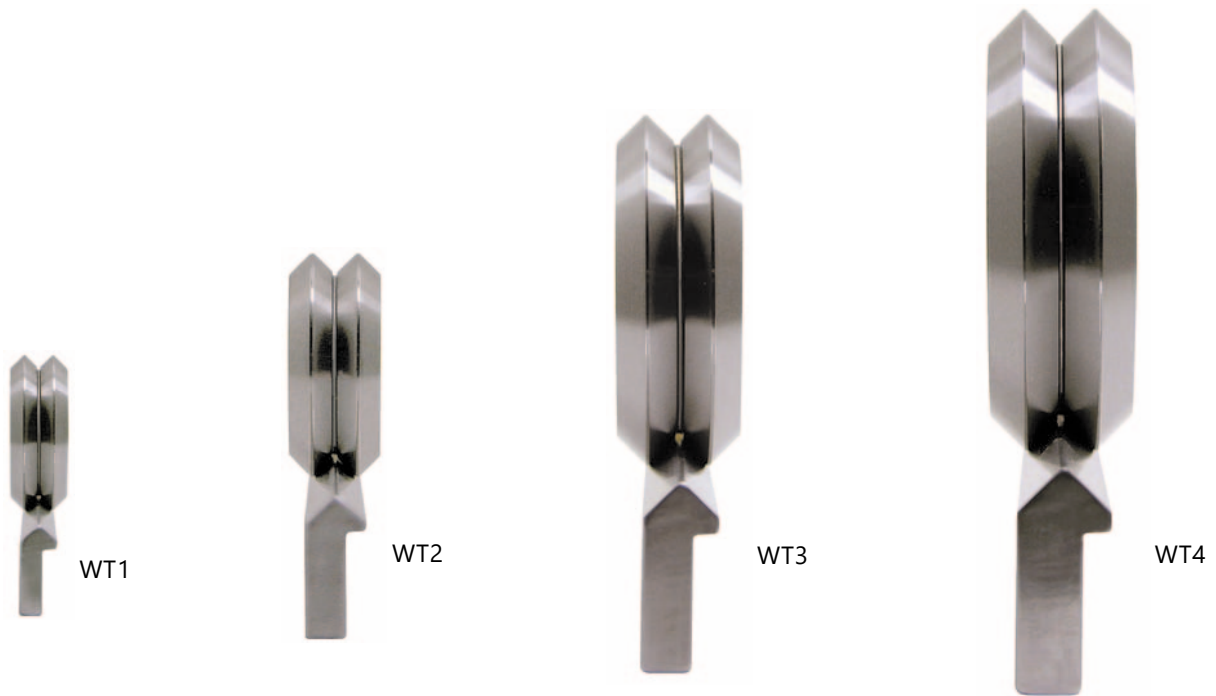
Wheel Size	Wheel Washer	Wheel Locknut <sup>6</sup>	Mounting Plate Washer	Mounting Plate Locknut <sup>7</sup>
	WW	WN	W	N
0	NA	#8 Nut	1/4 Flat Washer SST	1/4 Nut
1	#8 Flat Washer SST	#10 Nut	1/4 Flat Washer SST	1/4 Nut
2	5/16 Flat Washer SST	5/16 Nut	3/8 Flat Washer SST	3/8 Nut
3	7/16 Flat Washer SST	7/16 Nut	7/16 Flat Washer SST	7/16 Nut
4	1/2 Flat Washer SST	1/2 Nut	1/2 Flat Washer SST	1/2 Nut
4XL	3/4 Flat Washer SST	3/4 Nut	3/4 Flat Washer SST	3/4 Nut

Notes:

1. Outside diameter tolerance (OD) is +.0000", -.0007". Size 0 is +.0000", -.0005".
2. Journal diameter tolerance (MPD) is +.000", -.002".
3. Journal material is AISI 304 stainless steel. Washer material is AISI 304 stainless steel.
4. Eccentric (adjustable) journal - rotation of eccentric allows fit up adjustment between track and guide wheels.
5. Concentric (stationary) journal - since concentrically mounted wheels have a fixed position, these journals set the alignment of the carriage assembly to the rail.  
Concentrically mounted wheels should be configured to carry the majority of the load whenever possible.
6. Locknut, nylon insert Grade 2, zinc plated.
7. Locknut, nylon insert Grade 8, zinc plated.



Designations and Features



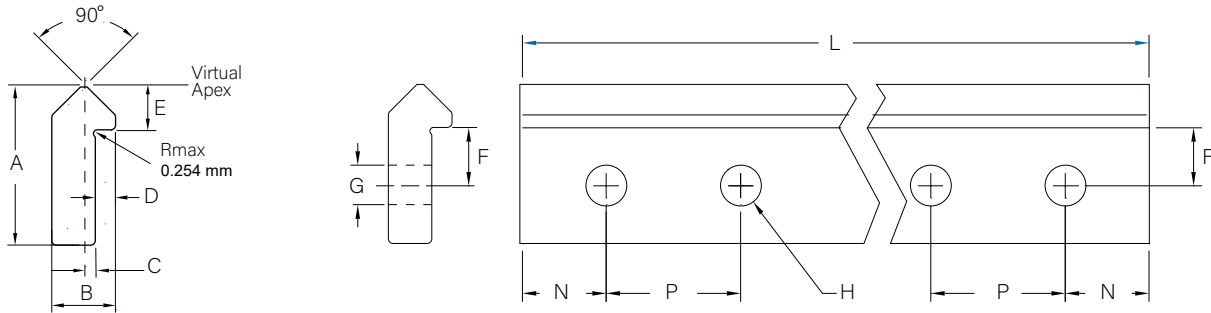
Designations

WT3	H	D	-	SS	-	7275	-	25	-	B
	Hardness	Drilled		Material		Lenth		Hole Num.		Surface
Size	H-Hardened	Blank-Undrilled		Blank-1045 Carbon Steel		72.75 inch		25 holes		Blank - Standard
	S-Soft	D-Drilled, Standard		SS-420 Stainless Steel						B - Black Oxide
		DC-Drilled, Custom Hole								N - Nickel Plate

Features

- Easy installation
- Patented mounting shoulder allows for accurate positioning of V ways
- Available "as formed," or induction hardened and polished
- Induction hardened track remains soft below the mounting shoulder, allowing for drilling or other machining
- Available in either AISI 1045 carbon steel or 420 stainless steel
- Can be easily butt-joined for stroke lengths exceeding maximum single piece lengths (20 feet hardened, 22 feet unhardened)
- Available coating/plating options include black oxide, thin dense chrome, and nickel.
- Non-standard hole patterns can be accommodated. Non-standard track options are quoted upon request.
- Optional ground track Ra 0.2 to 0.4µm (N4-N5 finish) to enhance corrosion resistance of stainless steel track is also available.
- Track finish is polished and oiled for corrosion resistance.

Dimensions in mm



Single Edge Track Undrilled (Maximum single piece track lengths are 20 feet hardened, or 22 feet soft)

Unit: mm

Rail Size	Width	Height	Mounting Shoulder Location	Mounting Shoulder to Center Line	Mounting Shoulder Depth	Mounting Hole Location	Hole diameter	End Hole Spacing	Hole to Hole Spacing	Overall Length	Weight
	A	B	E	C	D	F	G	N	P	L	kg/m
						±.13	±.13	±.13	±.13	±1.6	
WT1	11.1	4.75	3.18	0.7874	1.57	3.96	3.96	6.35	50.80	Standard or User specified	0.27
WT2	15.88	6.35	4.75	0.7874	2.39	5.56	5.16	8.00	76.20		0.51
WT3	22.23	8.71	6.35	1.5748	2.77	7.95	7.14	9.53	76.20		1.03
WT4	26.97	11.1	7.92	2.3622	3.18	9.53	8.74	12.70	101.60		1.64

Single Edge Track Drilled

Unit: mm

Rail Size	Part Number	Length	Number of Holes	Width	Height	Mounting Shoulder Location	Mounting Shoulder to Center Line	Mounting Shoulder Depth	Mounting Hole Location	Hole diameter	End Hole Spacing	Hole to Hole Spacing	Weight
		L		A	B	E	C	D	F	G	N	P	kg/m
		±.38							±.13	±.13	±.13	±.13	
1	WT1-1250-7	317.5	7	11.10	4.75	3.18	0.79	1.57	3.96	3.96	0.25	50.80	0.27
	WT1-2450-13	622.3	13										
	WT1-3650-19	927.1	19										
	WT1-4850-25	1231.9	25										
	WT1-6050-31	1536.7	31										
	WT1-7250-37	1841.5	37										
2	WT2-1263-5	320.8	5	15.88	6.35	4.75	0.79	2.39	5.56	5.16	0.32	76.20	0.51
	WT2-2463-9	625.6	9										
	WT2-3663-13	930.4	13										
	WT2-4863-17	1235.2	17										
	WT2-6063-21	1540.0	21										
	WT2-7263-25	1844.8	25										
3	WT3-1275-5	323.9	5	22.23	8.71	6.35	1.57	2.77	7.95	7.14	0.38	76.20	1.03
	WT3-2475-9	628.7	9										
	WT3-3675-13	933.5	13										
	WT3-4875-17	1238.3	17										
	WT3-6075-21	1543.1	21										
	WT3-7275-25	1847.9	25										
4	WT4-1300-4	330.2	4	26.97	11.10	7.92	2.36	3.18	9.53	8.74	0.50	101.60	1.64
	WT4-2500-7	635.0	7										
	WT4-3700-10	939.8	10										
	WT4-4900-13	1244.6	13										
	WT4-6100-16	1549.4	16										
	WT4-7300-19	1854.2	19										

1. Carbon steel track material is AISI 1045, running surface available soft at HRC2 2-25, as formed, oiled, or induction hardened 0.254mm deep to HRC 53 minimum, polished and oiled.
2. Stainless steel track material is AISI 420, running surface available soft at HRC 20-22, as formed, oiled, or induction hardened 0.254mm deep to HRC 40 minimum, polished and oiled.

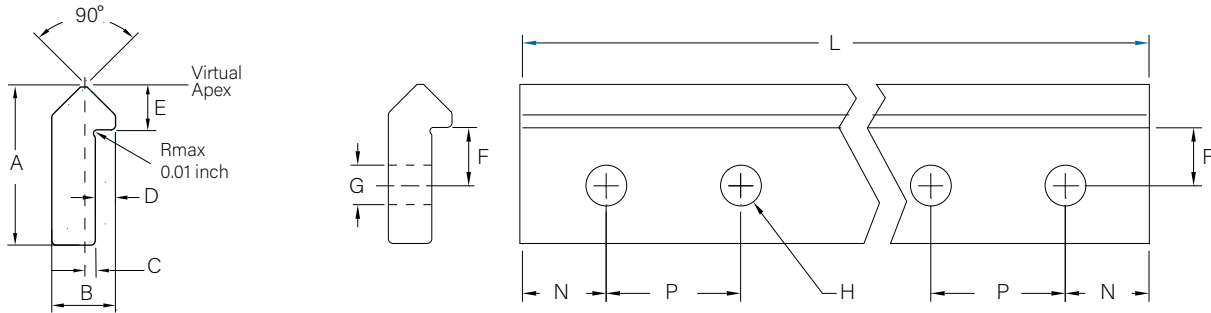
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E-mail: jason@chenghuibearing.com / chenghui-china.com

Dimensions in Inch



Single Edge Track Undrilled (Maximum single piece track lengths are 20 feet hardened, or 22 feet soft)

Unit: inch

Rail Size	Width	Height	Mounting Shoulder Location	Mounting Shoulder to Center Line	Mounting Shoulder Depth	Mounting Hole Location	Hole diameter	End Hole Spacing	Hole to Hole Spacing	Overall Length	Weight
	A	B	E	C	D	F	G	N	P	L	lbs./ft
						±.005	±.005	±.005	±.005	±.063	
WT1	0.437	0.187	0.125	0.031	0.062	0.156	0.156	0.250	2	Standard or User specified	0.183
WT2	0.625	0.25	0.187	0.031	0.094	0.219	0.203	0.315	3		0.343
WT3	0.875	0.343	0.25	0.062	0.109	0.313	0.281	0.375	3		0.69
WT4	1.062	0.437	0.312	0.093	0.125	0.375	0.344	0.500	4		1.1

Single Edge Track Drilled

Unit: inch

Rail Size	Part Number	Length	Number of Holes	Width	Height	Mounting Shoulder Location	Mounting Shoulder to Center Line	Mounting Shoulder Depth	Mounting Hole Location	Hole diameter	End Hole Spacing	Hole to Hole Spacing	Weight
		L		A	B	E	C	D	F	G	N	P	lbs./ft
		±.015							±.005	±.005	±.005	±.005	
1	WT1-1250-7	12.5	7	0.437	0.187	0.125	0.031	0.062	0.156	0.156	0.25	2	0.183
	WT1-2450-13	24.5	13										
	WT1-3650-19	36.5	19										
	WT1-4850-25	48.5	25										
	WT1-6050-31	60.5	31										
	WT1-7250-37	72.5	37										
2	WT2-1263-5	12.63	5	0.625	0.25	0.187	0.031	0.094	0.219	0.203	0.315	3	0.343
	WT2-2463-9	24.63	9										
	WT2-3663-13	36.63	13										
	WT2-4863-17	48.63	17										
	WT2-6063-21	60.63	21										
	WT2-7263-25	72.63	25										
3	WT3-1275-5	12.75	5	0.875	0.343	0.25	0.062	0.109	0.313	0.281	0.375	3	0.69
	WT3-2475-9	24.75	9										
	WT3-3675-13	36.75	13										
	WT3-4875-17	48.75	17										
	WT3-6075-21	60.75	21										
	WT3-7275-25	72.75	25										
4	WT4-1300-4	13	4	1.062	0.437	0.312	0.093	0.125	0.375	0.344	0.5	4	1.1
	WT4-2500-7	25	7										
	WT4-3700-10	37	10										
	WT4-4900-13	49	13										
	WT4-6100-16	61	16										
	WT4-7300-19	73	19										

1. Carbon steel track material is AISI 1045, running surface available soft at HRC 22-25, as formed, oiled, or induction hardened 0.01" deep to HRC 53 minimum, polished and oiled.
2. Stainless steel track material is AISI 420, running surface available soft at HRC 20-22, as formed, oiled, or induction hardened 0.01" deep to HRC 40 minimum, polished and oiled.

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## Designation

### Designations

Studded Wheel Series	Adjustability	Size	Material	Enclosure	Wheel Version	Material					
						Outer Ring	Inner Ring	Ball	Cage	Enclosure	
<b>SWI</b>	<b>C</b>	<b>2</b>	<b>SS</b>	<b>2Z</b>	<b>H1</b>						
SWS SWI SWA	C-Concentric E-Eccentric	0	-	2Z	Standard	52100	52100	52100	Nylon 66	Shield	
				2RS		52100	52100	52100	Nylon 66	Seal	
		1	SS	2RS	H1	440C	440C	440C	Nylon 66	Seal	
				2RS		440C	440C	440C	Nylon 66	Seal	
		2	SS	2Z	227	440C	440C	440C	304	Shield	
				2Z		300	440C	440C	440C	304	Shield
		3	SS	2Z	VAC	440C	440C	440C	440C	304	Shield
				2Z		WD	440C	440C	440C	440C	Nylon 66

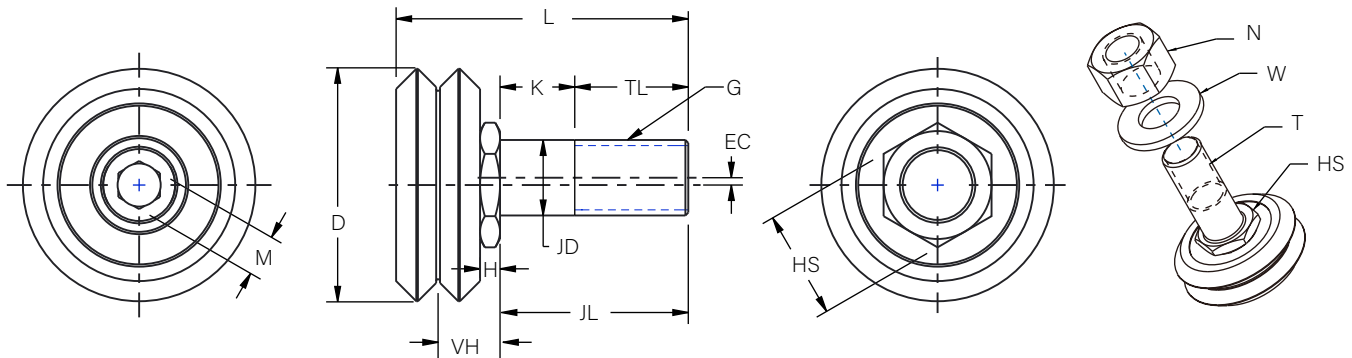
### Designations - Polymer Overmoulded

Studded Wheel Series	Adjustability	Size	Material	Enclosure	Wheel Version	Material				
						Outer Ring	Inner Ring	Ball	Cage	Enclosure
<b>SWI</b>	<b>C</b>	<b>2</b>	<b>SS</b>	<b>2Z</b>	<b>P</b>					
SWI	C-Concentric E-Eccentric	0 1 2	SS	2Z	P	Polymer Overmoulded 440C	440C	440C	304	Shield



# Studded W Guide Wheel

## SWA - Thru-Hole Style



### Studded W Guide Wheel - SWA

Unit: Inch

PART NUMBER CONCENTRIC	PART NUMBER ECCENTRIC	ECCENTRIC OFFSET	OVERALL LENGTH	WHEEL DIAMETER	JOURNAL DIAMETER	JOURNAL LENGTH	THREAD LENGTH	THREAD	HEX THICKNESS	V HEIGHT	HEX SIZE	END HEX	Weight lbs
		EC	L	D	JD	JL	TL	G	H	VH	HS	M	
		±0.005			+0/-0.0007				±0.001	±0.002			
SWAC0-2Z	SWAE0-2Z	0.024	0.74	0.584	0.1566	0.39	0.24	M4 x 0.7	0.08	0.205	0.433	-	0.02
SWAC1-2Z	SWAE1-2Z	0.024	1	0.771	0.2352	0.59	0.35	M6 x 1.0	0.083	0.238	0.472	0.098	0.044
SWAC2-2RS	SWAE2-2RS	0.038	1.54	1.21	0.3926	0.98	0.59	M10 x 1.5	0.104	0.323	0.55	0.236	0.165
SWAC3-2RS	SWAE3-2RS	0.06	1.967	1.803	0.4711	1.18	0.71	M12 x 1.75	0.137	0.45	0.748	0.315	0.425
SWAC4-2RS	SWAE4-2RS	0.06	2.477	2.36	0.6284	1.58	0.95	M16 x 2.0	0.122	0.497	0.866	0.398	0.887

Unit: mm

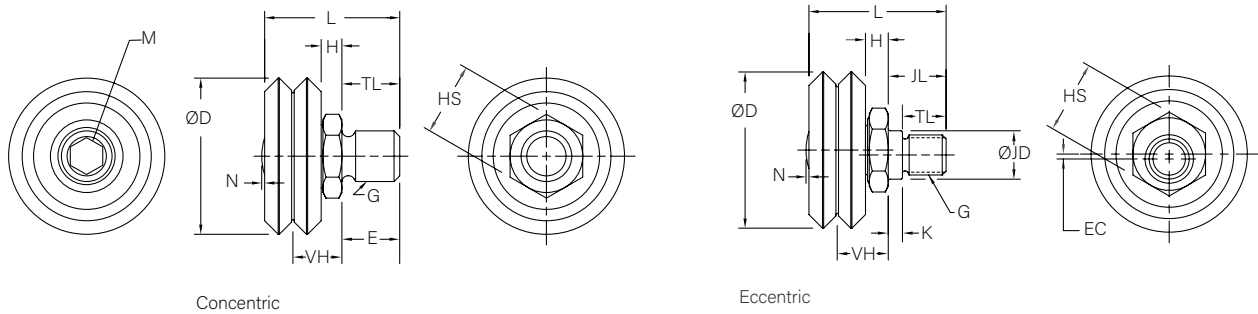
PART NUMBER CONCENTRIC	PART NUMBER ECCENTRIC	ECCENTRIC OFFSET	OVERALL LENGTH	WHEEL DIAMETER	JOURNAL DIAMETER	JOURNAL LENGTH	THREAD LENGTH	THREAD	HEX THICKNESS	V HEIGHT	HEX SIZE	END HEX	Weight g
		EC	L	D	JD	JL	TL	G	H	VH	HS	M	
		±0.13			+0/-0.02				±0.03	±0.05			
SWAC0-2Z	SWAE0-2Z	0.61	18.8	14.83	3.978	9.9	6.1	M4 x 0.7	2.03	5.2	11	-	9
SWAC1-2Z	SWAE1-2Z	0.61	25.4	19.58	5.974	15	8.9	M6 x 1.0	2.11	6.05	12	2.5	20
SWAC2-2RS	SWAE2-2RS	0.97	39.1	30.73	9.972	24.9	15	M10 x 1.5	2.64	8.2	14	6	75
SWAC3-2RS	SWAE3-2RS	1.5	49.96	45.8	11.966	30	17.9	M12 x 1.75	3.48	11.4	19	8	193
SWAC4-2RS	SWAE4-2RS	1.5	62.92	59.94	15.961	40.1	24.1	M16 x 2.0	3.1	12.6	22	10	403

#### Notes:

1. High temperature compatible. Heat stabilized components allow for operating temperatures to 500° F (260° C)
2. Journal diameter (JD) tolerance is +.0000, -.0007 inch (+0.00 mm, -0.02 mm).
3. Shoulder thickness (H) tolerance is ±.001 inch (±0.03 mm).
4. V height (VH) tolerance is ±.002 inch (±0.05 mm).
5. Eccentricity (EC) tolerance is ±.005 inch (±0.13 mm).
6. Nuts are manufactured to DIN standard 934 (18-8 stainless steel).
7. Washers are manufactured to DIN standard 125 (18-8 stainless steel).
8. See original guide wheel specifications for detailed data on wheels.
9. See load/life discussion in the technical reference section for sizing and selection information.



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### Studded Guide Wheels-SWS

Unit: Inch

PART NUMBER	ECCENTRIC OFFSET	ECCENTRIC SHOULDER DIAMETER	ECCENTRIC SHOULDER LENGTH	THREAD	THREAD LENGTH	OVERALL LENGTH	WHEEL DIA.	JOURNAL LENGTH	HEX THICK-NESS	VEE HEIGHT	HEX SIZE	OPTIONAL END HEX SIZE	MATERIAL PROTRUSION	Weight lbs
	EC	JD	K	G	TL	L	D	JL	H	VH	HS	M	N	
	+/-0.005	+0.02/-0.000						+/-0.003	+/-0.001	+/-0.002				
SWSC0-2Z	-	-	-	M6 x 1.0	0.3	0.667	0.584	0.3	0.117	0.242	0.375	-	0.017	0.02
SWSE0-2Z	0.024	0.219	0.085	M5 x 0.8	0.215									
SWSC1-2Z	-	-	-	M8 x 1.25	0.319	0.761	0.771	0.319	0.132	0.287	0.4375	-	0.025	0.037
SWSE1-2Z	0.024	0.248	0.085	M6 x 1.0	0.234									
SWSC2-2RS	-	-	-	M10 x 1.5	0.448	1.046	1.21	0.448	0.16	0.379	0.5625	0.236	-	0.123
SWSE2-2RS	0.038	0.375	0.11	M8 x 1.25	0.338									
SWSC3-2RS	-	-	-	M12 x 1.75	0.595	1.444	1.803	0.595	0.224	0.537	0.75	0.315	-	0.365
SWSE3-2RS	0.059	0.422	0.17	M10 x 1.5	0.425									
SWSC4-2RS	-	-	-	M14 x 2.0	0.748	1.767	2.36	0.748	0.269	0.644	0.875	0.394	-	0.744
SWSE4-2RS	0.079	0.5	0.177	M12 x 1.75	0.571									

### Studded Guide Wheels-SWS

Unit: mm

ADJUST-ABILITY	ECCENTRIC OFFSET	ECCENTRIC SHOULDER DIAMETER	ECCENTRIC SHOULDER LENGTH	THREAD	THREAD LENGTH	OVERALL LENGTH	WHEEL DIA.	JOURNAL LENGTH	HEX THICK-NESS	VEE HEIGHT	HEX SIZE	OPTIONAL END HEX SIZE	MATERIAL PROTRUSION	Weight g
	EC	JD	K	G	TL	L	D	JL	H	VH	HS	M	N	
	+/-0.13	+0.05/-0.00	+/-0.13					+/-0.1	+/-0.02	+/-0.05				
SWSC0-2Z	-	-	-	M6 x 1.0	7.62	16.95	14.83	7.62	2.97	6.15	9.53	-	0.43	9
SWSE0-2Z	0.61	5.56	2.16	M5 x 0.8	5.46									
SWSC1-2Z	-	-	-	M8 x 1.25	8.1	19.33	19.58	8.1	3.36	7.3	11.113	-	0.64	17
SWSE1-2Z	0.61	6.3	2.16	M6 x 1.0	5.94									
SWSC2-2RS	-	-	-	M10 x 1.5	11.38	26.57	30.73	11.38	4.07	9.63	14.288	6	-	56
SWSE2-2RS	0.97	9.53	2.79	M8 x 1.25	8.59									
SWSC3-2RS	-	-	-	M12 x 1.75	15.11	36.68	45.8	15.11	5.69	13.63	19.05	8	-	166
SWSE3-2RS	1.5	10.72	4.32	M10 x 1.5	10.8									
SWSC4-2RS	-	-	-	M14 x 2.0	19	44.88	59.94	19	6.83	16.36	22.23	10	-	338
SWSE4-2RS	2.01	12.7	4.5	M12 x 1.75	14.5									

Notes:

1. High temperature compatible. Heat stabilized components allow for operating temperatures to 500° F (260° C)
2. Journal diameter (JD) tolerance is +.0000, -.0007 inch (+0.00 mm, -0.02 mm).
3. Shoulder thickness (H) tolerance is ±.001 inch (±0.03 mm).
4. V height (VH) tolerance is ±.002 inch (±0.05 mm).
5. Eccentricity (EC) tolerance is ±.005 inch (±0.13 mm).
6. Nuts are manufactured to DIN standard 934 (18-8 stainless steel).
7. Washers are manufactured to DIN standard 125 (18-8 stainless steel).
8. See original guide wheel specifications for detailed data on wheels.
9. See load/life discussion in the technical reference section for sizing and selection information.

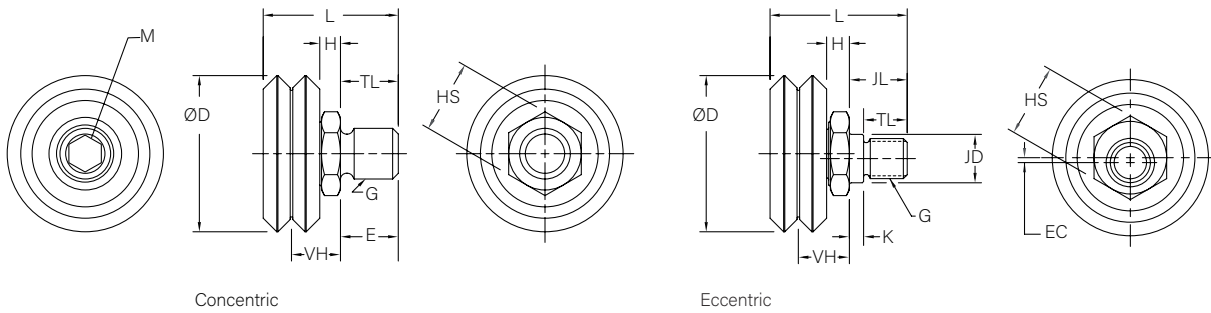


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### Studed Guide Wheels-SWI

Unit: Inch

PART NUMBER	ECCENTRIC OFFSET	ECCENTRIC SHOULDER DIAMETER	ECCENTRIC SHOULDER LENGTH	THREAD	THREAD LENGTH	OVERALL LENGTH	WHEEL DIA.	JOURNAL LENGTH	HEX THICKNESS	VEE HEIGHT	HEX SIZE	OPTIONAL END HEX SIZE	MATERIAL PROTRUSION	Weight lbs
	EC	JD	K	G	TL	L	D	JL	H	VH	HS	M	N	
	+/-0.005	+0.002/-0.000						+/-0.003	+/-0.001	+/-0.002				
SWIC0-2Z	-	-	-	M6 x 1.0	0.3	0.667	0.584	0.3	0.117	0.242	0.375		0.017	0.02
SWIE0-2Z	0.024	0.219	0.085	M5 x 0.8	0.215									
SWIC1-2Z	-	-	-	M8 x 1.25	0.319	0.761	0.771	0.319	0.132	0.287	0.4375		0.025	0.037
SWIE1-2Z	0.024	0.248	0.085	M6 x 1.0	0.234									
SWIC2-2RS	-	-	-	M10 x 1.5	0.448	1.046	1.21	0.448	0.16	0.379	0.5625	0.236		0.123
SWIE2-2RS	0.038	0.375	0.11	M8 x 1.25	0.338									
SWIC3-2RS	-	-	-	M12 x 1.75	0.595	1.444	1.803	0.595	0.224	0.537	0.75	0.315		0.365
SWIE3-2RS	0.059	0.422	0.17	M10 x 1.5	0.425									
SWIC4-2RS	-	-	-	M14 x 2.0	0.748	1.767	2.36	0.748	0.269	0.644	0.875	0.394		0.744
SWIE4-2RS	0.079	0.5	0.177	M12 x 1.75	0.571									

### Studed Guide Wheels-SWI

Unit: mm

PART NUMBER	ECCENTRIC OFFSET	ECCENTRIC SHOULDER DIAMETER	ECCENTRIC SHOULDER LENGTH	THREAD	THREAD LENGTH	OVERALL LENGTH	WHEEL DIA.	JOURNAL LENGTH	HEX THICKNESS	VEE HEIGHT	HEX SIZE	OPTIONAL END HEX SIZE	MATERIAL PROTRUSION	Weight g
	EC	JD	K	G	TL	L	D	JL	H	VH	HS	M	N	
	+/-0.13	+0.05/-0.00	+/-0.13					+/-0.1	+/-0.02	+/-0.05				
SWIC0-2Z	-	-	-	M6 x 1.0	7.62	16.95	14.83	7.62	2.97	6.15	11		0.43	9
SWIE0-2Z	0.61	5.56	2.16	M5 x 0.8	5.46									
SWIC1-2Z	-	-	-	M8 x 1.25	8.1	19.33	19.58	8.1	3.36	7.3	12		0.50	17
SWIE1-2Z	0.61	6.3	2.16	M6 x 1.0	5.94									
SWIC2-2RS	-	-	-	M10 x 1.5	11.38	26.57	30.73	11.38	4.07	9.63	14	6		56
SWIE2-2RS	0.97	9.53	2.79	M8 x 1.25	8.59									
SWIC3-2RS	-	-	-	M12 x 1.75	15.11	36.68	45.8	15.11	5.69	13.63	19	8		166
SWIE3-2RS	1.5	10.72	4.32	M10 x 1.5	10.8									
SWIC4-2RS	-	-	-	M14 x 2.0	19	44.88	59.94	19	6.83	16.36	22	10		338
SWIE4-2RS	2.01	12.7	4.5	M12 x 1.75	14.5									

#### Notes:

1. High temperature compatible. Heat stabilized components allow for operating temperatures to 500° F (260° C)
2. Journal diameter (JD) tolerance is +.0000, -.0007 inch (+0.00 mm, -0.02 mm).
3. Shoulder thickness (H) tolerance is ±.001 inch (±0.03 mm).
4. V height (VH) tolerance is ±.002 inch (±0.05 mm).
5. Eccentricity (EC) tolerance is ±.005 inch (±0.13 mm).
6. Nuts are manufactured to DIN standard 934 (18-8 stainless steel).
7. Washers are manufactured to DIN standard 125 (18-8 stainless steel).
8. See original guide wheel specifications for detailed data on wheels.
9. See load/life discussion in the technical reference section for sizing and selection information.

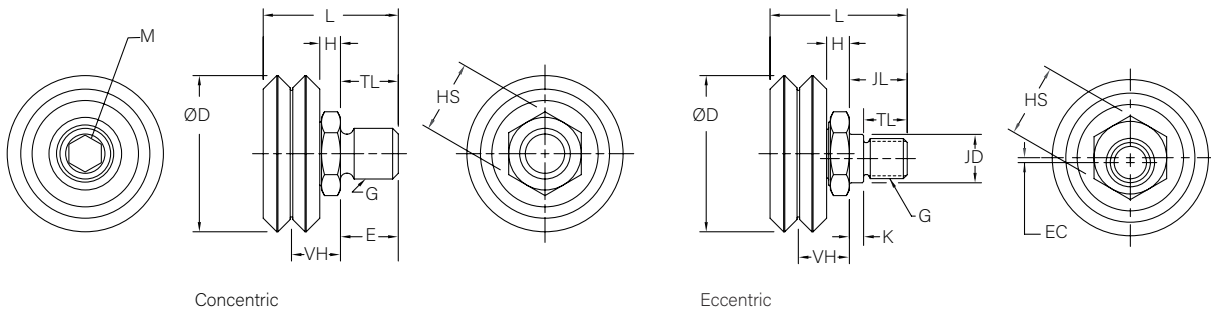


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Unit: Inch

PART NUMBER	ECCENTRIC OFFSET	ECCENTRIC SHOULDER DIAMETER	ECCENTRIC SHOULDER LENGTH	THREAD	THREAD LENGTH	OVERALL LENGTH	WHEEL DIAMETER	JOURNAL LENGTH	HEX THICKNESS	VEE HEIGHT	HEX SIZE	OPTIONAL END HEX SIZE	MATERIAL PROTRUSION	Weight lbs
	EC	JD	K	G	TL	L	D	JL	H	VH	HS	M	N	
	+/-0.005	+0.002/-0.000						+/-0.003	+/-0.001	+/-0.002				
SWIC0P	-	-	-	M6 x 1.0	0.3	0.667	0.584	0.3	0.117	0.242	0.433	-	-	0.0132
SWIE0P	0.032	0.219	0.085	M5 x 0.8	0.215									
SWIC1P	-	-	-	M8 x 1.25	0.319	0.761	0.771	0.319	0.132	0.287	0.472	-	-	0.0242
SWIE1P	0.033	0.248	0.085	M6 x 1.0	0.234									
SWIC2P	-	-	-	M10 x 1.5	0.448	1.046	1.21	0.448	0.16	0.379	0.551	0.158	-	0.0594
SWIE2P	0.038	0.375	0.11	M8 x 1.25	0.338									

Unit: mm

PART NUMBER	ECCENTRIC OFFSET	ECCENTRIC SHOULDER DIAMETER	ECCENTRIC SHOULDER LENGTH	THREAD	THREAD LENGTH	OVERALL LENGTH	WHEEL DIAMETER	JOURNAL LENGTH	HEX THICKNESS	VEE HEIGHT	HEX SIZE	OPTIONAL END HEX SIZE	MATERIAL PROTRUSION	Weight g
	EC	JD	K	G	TL	L	D	JL	H	VH	HS	M	N	
	+/-0.13	+0.05/-0.00	+/-0.13					+/-0.1	+/-0.02	+/-0.05				
SWIC0P	-	-	-	M6 x 1.0	7.62	16.95	14.83	7.62	2.97	6.15	11	-	-	6
SWIE0P	0.81	5.56	2.16	M5 x 0.8	5.46									
SWIC1P	-	-	-	M8 x 1.25	8.1	19.33	19.58	8.1	3.36	7.3	12	-	-	11
SWIE1P	0.84	6.3	2.16	M6 x 1.0	5.94									
SWIC2P	-	-	-	M10 x 1.5	11.38	26.57	30.73	11.38	4.07	9.63	14	4	-	27
SWIE2P	0.97	9.53	2.79	M8 x 1.25	8.59									

Notes:

1. Journal diameter (JD) tolerance is +.0000, -.0007 inch (+0.00 mm, -0.02 mm).
2. Shoulder thickness (H) tolerance is ±.001 inch (±0.03 mm).
3. V height (VH) tolerance is ±.002 inch (±0.05 mm).
4. Eccentricity (EC) tolerance is ±.005 inch (±0.13 mm).
5. Nuts are manufactured to DIN standard 934 (18-8 stainless steel).
6. Washers are manufactured to DIN standard 125 (18-8 stainless steel).
7. MOQ: 2000pcs
8. Delivery: 75-90 days

