

BISHOPWISECARVER®

UtiliTrak® Linear Guides



- Sleek, compact design
- Lowest installed cost in its class
- Easy installation
- High reliability
- 3, 4 and 5-wheel carriage plates

Created with Efficiency and Convenience in Mind

The UtiliTrak linear guide is well suited for a variety of environments where high speed motion is required. It is an ideal choice for running two systems in parallel, where one slide uses DualVee® guide wheels and the other uses MadeWell™ crown rollers, creating a slave side. By using these two different slides in parallel, the slides will compensate for mounting error.

UtiliTrak is offered in two series; SW Series steel wheels running on a hardened bearing steel rail for larger loads and smooth operation, and PW Series polymer wheels running on an anodized aluminum rail which provides a more economical choice for lighter duty applications where highly smooth operation is not as critical.

Eccentric and concentric studs allow customers to vary preload to a desired amount. Large thread diameters accommodate high installation torques, ensuring the wheels keep their adjusted preload value despite vibration.

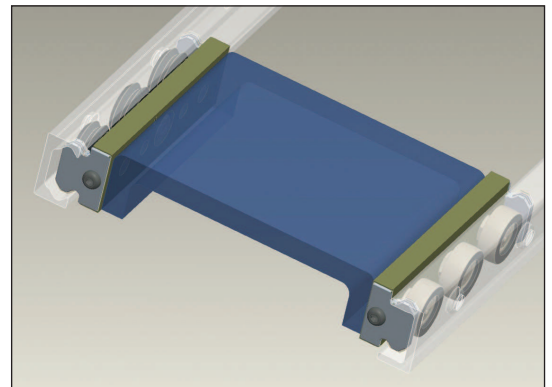
UtiliTrak rails are available in single piece lengths up to 3600mm. These rails can be butt jointed for longer length systems.

SW Series: Rail is one-piece ground 52100 carbon steel, and running surface is smooth to Ra 0.8µm. Steel DualVee wheels and crown rollers are available with shields or seals. Stainless steel composite UtiliTrak (not shown) and stainless steel DualVee wheels featuring sealed bearings are also available for high load requirements where corrosion resistance is critical.

- Loads to 16,800N
- Speeds to 8 m/s
- Acceleration to 5 g's

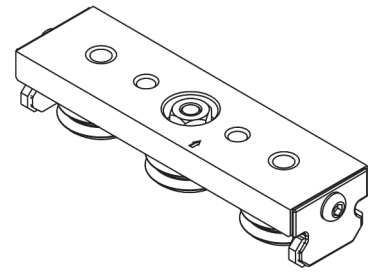
PW Series: Rail is 6063-T6 aluminum alloy. Wheels feature chemically resistant high temp polymer overmolded on a stainless steel bearing. Built-in wiper caps at each end of the carriage clear debris from the track surface.

- Loads to 311N
- Speeds to 1.5 m/s
- Acceleration to 3 g's



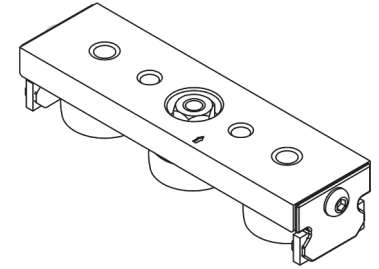
Vee Guide Carriage Plate Loads

Size	PW Series Carriage		SW Series Carriage					
	3-Wheel Only		3-Wheel		4-Wheel		5-Wheel	
	Radial N	Axial N	Radial N	Axial N	Radial N	Axial N	Radial N	Axial N
0	55	88	-	-	-	-	-	-
1	110	155	2300	1100	2300	1320	2760	1540
2	165	311	5300	1600	5300	1920	6360	2240
3	-	-	14000	6700	14000	8040	16800	11256



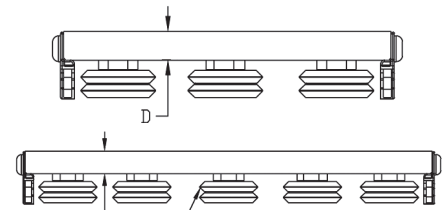
Crown Roller Carriage Plate Loads

Size	PW Series Carriage		SW Series Carriage					
	3-Wheel Only		3-Wheel		4-Wheel		5-Wheel	
	Radial N	Axial N	Radial N	Axial N	Radial N	Axial N	Radial N	Axial N
0	55	0	-	-	-	-	-	-
1	110	0	2300	0	2300	0	2760	0
2	165	0	5300	0	5300	0	6360	0
3	-	-	14000	0	14000	0	16800	0

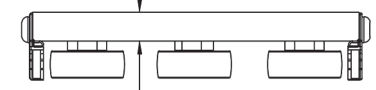


Carriage Assembly Details

Wheel Size	No. of Wheels	A	B	C Vee	C Crown (min-max)	D	E Nut Size	F	G
0	3	79.9	18	22	22-23.1	7.9	8	22	M4 x 0.7
1	3	113.5	24	26.3	25.3-27.6	8.8	10	40	M6 x 1.0
1	4 or 5	166.5	24	26.3	25.3-27.6	8.8	10	35	M6 x 1.0
2	3	144.2	38	35	34.7-37.4	11.8	13	45	M8 x 1.25
2	4 or 5	224.2	38	35	34.7-37.4	11.8	13	45	M8 x 1.25
3	3	201.3	55	50	46.9-53.4	15.8	15	60	M10 x 1.5
3	4 or 5	317.3	55	50	46.9-53.4	15.8	15	60	M10 x 1.5

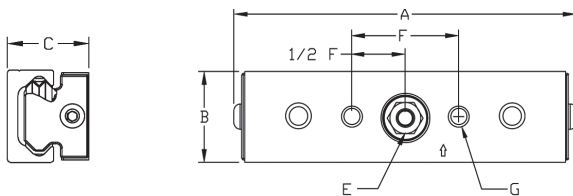


Vee Guide Carriage Assemblies

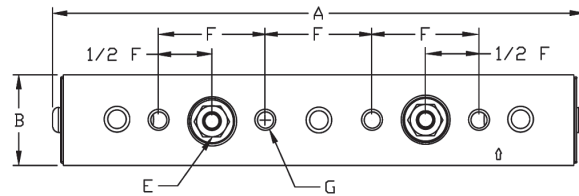


MadeWell™ Crown Roller Carriage Assembly

*1 This wheel omitted on 4-wheel assemblies



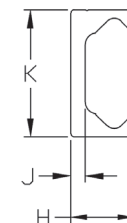
3-Wheel Carriage Assembly



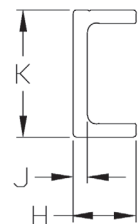
4 or 5-Wheel Carriage Assembly

Rail Dimensions

Size	H	J	K	L max	M	N (dia x depth)	O	P
0	11	4	20	3590	35	8.3 x 3	4.8	80
1	15	4	26	3590	35	9.8 x 2.8	5.8	80
2	19.7	4.5	40	3590	35	14.3 x 3	8.8	80
3	30	8	58	3590	35	14.3 x 5	8.8	80

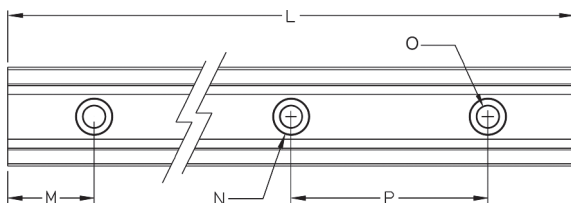


Vee Rail



Roller Rail

All dimensions in mm



*Stainless steel composite UtiliTrak not shown

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