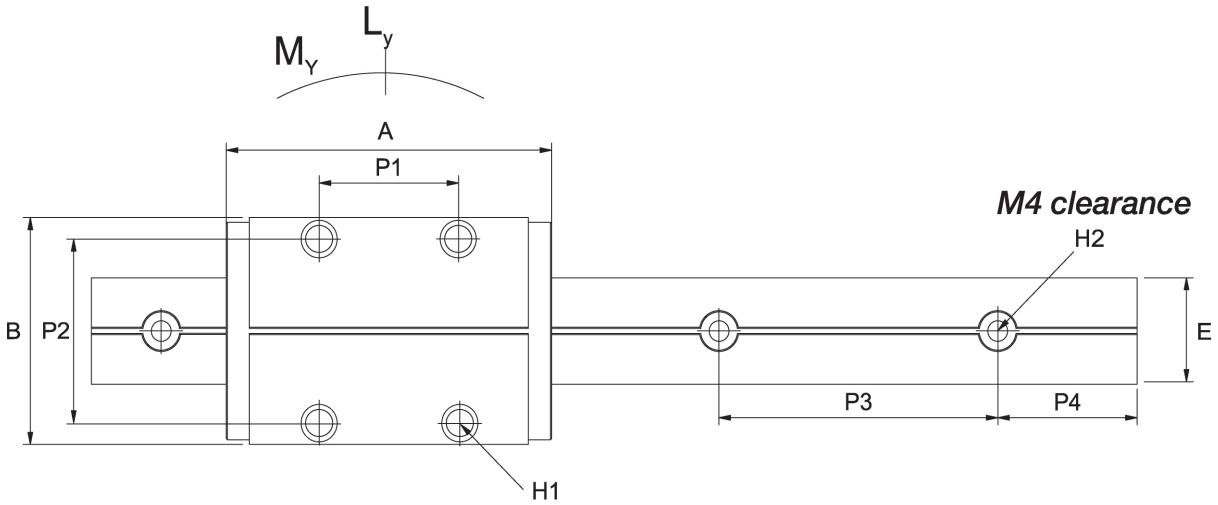
Accuride

Model FG115

APPLICATIONS:
Enable motion and guidance along a linear rail. Ideal for harsh environments, corrosion and vibration resistant. Used in automation and motion control.

Model FG115

Linear Friction Guide
Aluminum Rail
Aluminum Carriages
900 lbf [4,000N] Max. Load

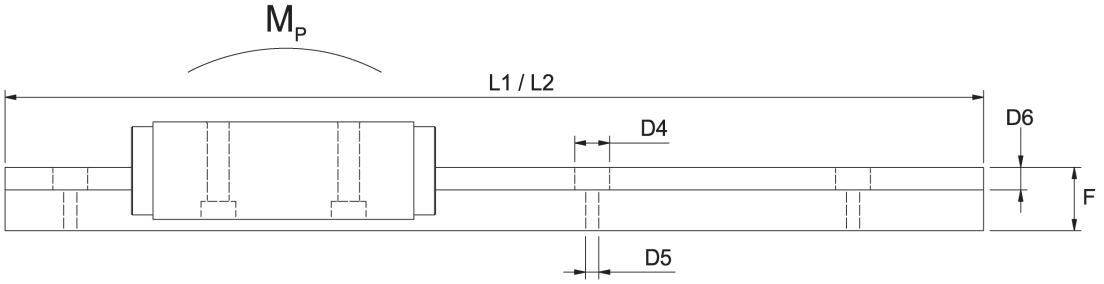


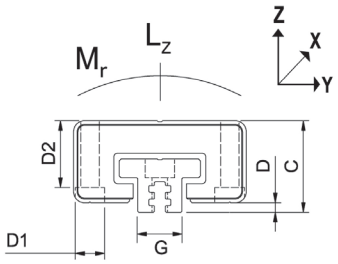
**M5 Tapp / M4 clearance*

Carriage Dimensions [mm/inch]

	A	B	C	D	P1	P2	H1*	D1	D2
Metric (mm)	70	47	24	2.5	30	38	M5	8	17.5
Imperial (inch)	2.76"	1.85"	0.94"	0.10"	1.18"	1.50"	–	0.31"	0.69"

*Carriage holes are tapped for M5 hardware. Hole clearance allows for M4 or #8 hardware.





Rail Dimensions [mm/inch]

							L1	L2				
	E	F	G	L1	L2	P3	P4		H2	D4	D5	D6
Metric (mm)	22	14	12	1000	2000	60	20	40	M4**	8	4.3	5
Imperial (inch)	0.87"	0.55"	0.47"	39.37"	78.74"	2.36"	0.79"	1.57"	#8	0.31"	0.17"	0.197"

**Rail fixing hole clearance allows for M4 or #8 hardware with head width of 0.31" and height of 0.197".

Technical Data

	Static Load			*Static Moments*			*Temp Range*	
	Ly	Lz	-Lz	My	Mr	Mp	Min	Max
Metric (mm)	2 kN	4 kN	4 kN	10 Nm	10 Nm	10 Nm	-10C	+90C
Imperial (inch)	450 lbf	900 lbf	900 lbf	88.5 in-lbs	88.5 in-lbs	88.5 in-lbs	14F	194F

Rail	Aluminum 6063 –T6 Hard Anodized
Carriage Chassis	
Friction Elements	Advanced Technical Polymer
Polymer Elements	Acetyl
Metal Components	Stainless Steel/Leaded Brass

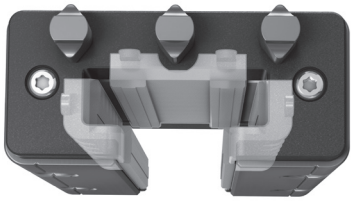
Rail length: 39.37" & 78.74" [1m and 2m]
Predrilled holes-according to ISO 12090
Mount: Side, flat, vertical
Hardware: M5 Tapped/M4 Clearance (not provided)

Max. Load Rating: 900 lbf [4000N]
Deviation: .039" [1mm]
Lubrication: 100% self-lubricated

Carriage Types

Non-Adjust
The non-adjustable carriage does not offer adjustment of the movement or clearances.

Manual Adjust
The manual adjust carriage can be fine tuned with an allen key to set the perfect clearance or preload for your application.



Auto Adjust
The auto adjust carriage offers constant preload force that will continue to operate throughout the life of the product.

Description	***Non-Adjust Carriage***	***Manual Adjust Carriage***	***Auto Adjust Carriage***
Model Number	FG115-CASSNA	FG115-CASSMA	FG115-CASSAA
Size	ISO Standard 12090		
Friction Element	Advanced Technical Polymer		
Clearance	± .005" [0.125mm] (Y & Z)	Adjustable ± .012" [0.30mm] (Y) ± .010" [0.25mm] (Z)	N/A
Preload	N/A	Adjustable up to 6.74 lbf [30N]	1.01 lbf (± .2 lbf) [4.5N (± 1N)]
Accuracy	± .018" [0.45mm] (Y) ± .019" [0.475mm] (Z)	± .027" [0.675mm] (Y) ± .030" [0.75mm] (Z)	± .027" [0.675mm] (Y) ± .030" [0.75mm] (Z)
Weight	3.25oz [92g]	3.49oz [99g]	3.39oz [96g]

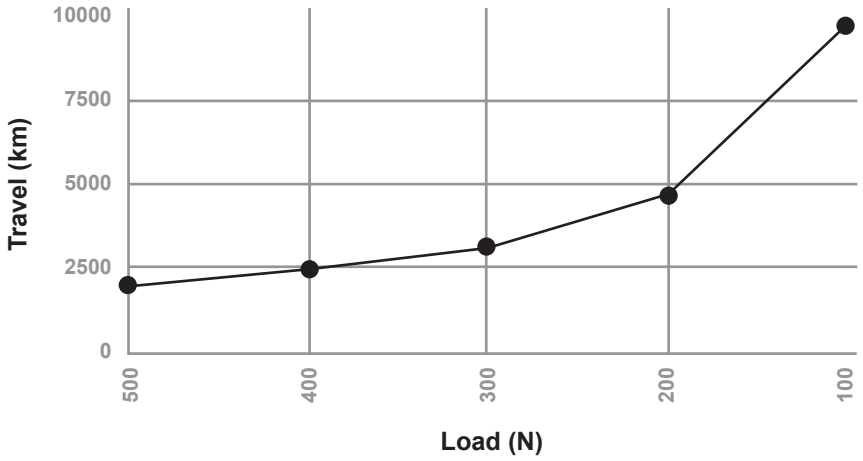
Ultra Low Wear

Wear is measured by total travel distance.

Data taken under constant speed of 1m/s and at ambient temp of 20°C.

Off center loads will apply additional wear.

Environment, temperature, and speed can affect performance. Please test products to your specific requirements.



Travel rating based on a single carriage.

Installation

Rail:

1. Cut rail to the determined length, or butt multiple rails together for a longer span (misalignment will result in excessive wear).
2. Using the predrilled holes secure rail using M5 Tapped / M4 Clearance (not provided).

Note: For optimal performance use all fixing holes.

Carriages: Use one or multiple carriages.

Non-Adjust (FG115-CASSNA):	Tension between the rail and the carriage can't be adjusted.
Manual Adjust (FG115-CASSMA):	Tension between the rail and the carriage can be manually adjusted by via a standard allen wrench (not provided).
Auto Adjust (FG115-CASSAA):	Tension between the rail and the carriage is preset via plastic pins (included). Internal springs provide constant and consistent tension.

Misalignment with Multiple Tracks

It is recommended to use Non-Adjust Carriages on one side of a parallel track system to compensate for any potential misalignments. The free floating Non-Adjust Carriage will act as a guide.

Rail and carriages are packaged and sold singly. Fasteners and technical sheets are not included.

Auto Adjust Carriage includes spring load tool pins required for installation.

Components

FG115-0100T:	39.37" [1m] Aluminum Rail
FG115-0200T:	78.74" [2m] Aluminum Rail
FG115-CASSNA:	Carriage – Non-Adjust
FG115-CASSMA:	Carriage – Manual Adjust
FG115-CASSAA:	Carriage – Auto Adjust

Order Example

Complete your Friction Guide order by specifying the following:

	QTY	P/N	Length
Total Rails	10 ea	FG115-0100T	39.37"
Total	**QTY**	**P/N**	**Type**
Carriages	20 ea	FG115-CASSAA	Auto-Adjust

NOTE: Specifications, materials, prices, terms, and delivery are subject to change without notice.

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