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TECHNICAL INFORMATION

Linear Guide System – Low Profile

Carriage glides smoothly on anodized aluminum rails without the need for lubricants. Their low profile design is ideal when space constraints are tight. The rails are offered in 4 widths.

Unique features include:
- Low friction without lubrication
- Resistance to dirt and dust
- Small mounting height and width
- Lightweight
- Replaceable polymer sliding elements
- Low-cost alternative to miniature ball bearing systems.

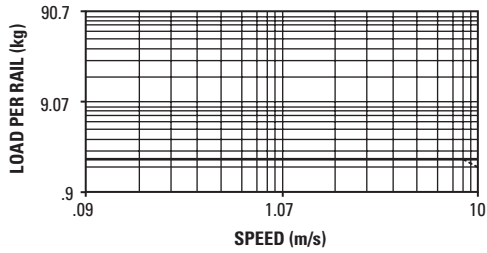
MAXIMUM LOAD PER CARRIAGE

Size 17	5 kg
Size 27	50 kg
Size 40	70 kg
Size 80	100 kg

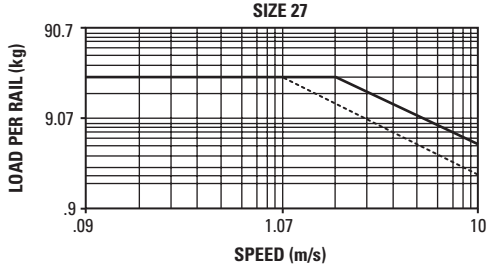
APPLICATION HINT: The mounting surface for rails and bearings should have a very flat surface (e.g. milled surface) in order to enhance performance.

MAXIMUM PERMISSIBLE DYNAMIC LOADS
NOTE: Dotted lines are Z direction.

SIZE 17



SIZE 27



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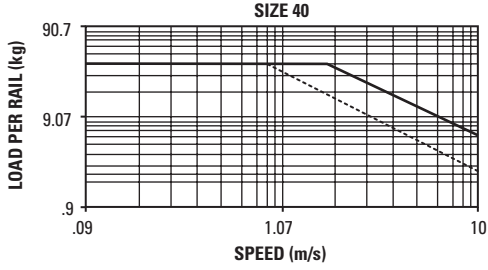

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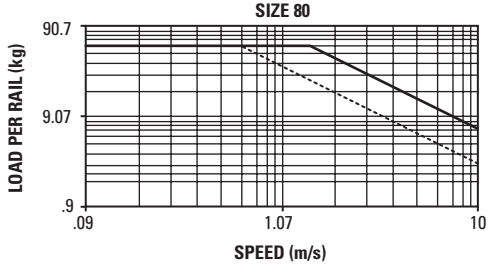

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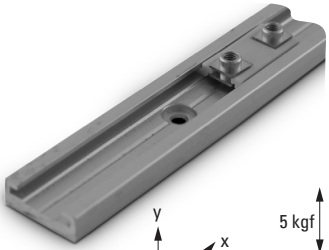
Metric
0 10

LOW-LOAD APPLICATIONS
REPLACEABLE GLIDE PADS
SELF-LUBRICATING
CORROSION-RESISTANT
LOW FRICTION

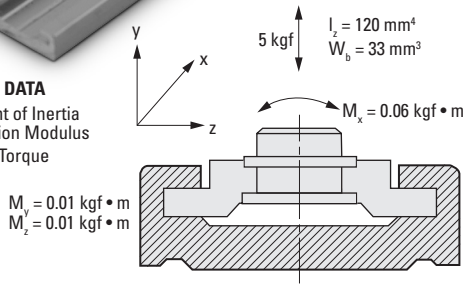


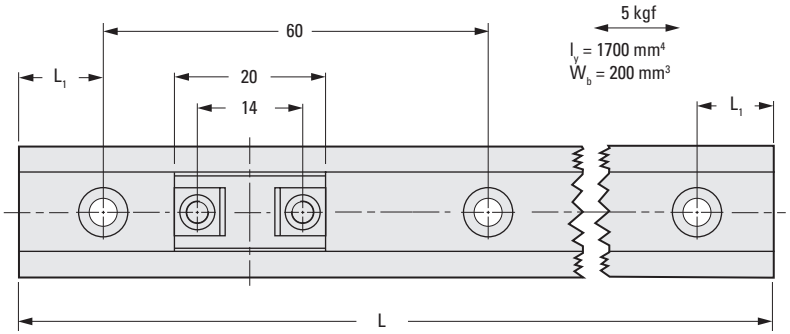
› MATERIAL:
Rails - Anodized Aluminum
Carriage Assembly - Plastic with Brass threaded inserts and J® Polymer Pads

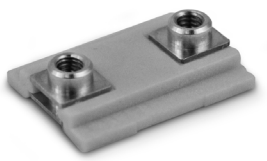
› OPERATING TEMPERATURE:
-40°C to +90°C

› SPECIFICATIONS:
Maximum Load: 50 N
Maximum Speed: 15 m/s

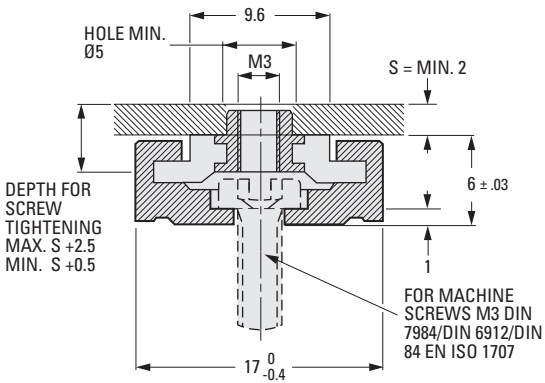
LOAD DATA
I = Moment of Inertia
W_b = Section Modulus
M = Max. Torque







Carriage Assembly
S99GNCM17202



METRIC COMPONENT

Catalog Number	L Length mm	L_1	Weight g
Rails			
S99GNRM170490	490	35	73.5
S99GNRM170980	980	40	147
S99GNRM171470	1470	45	220.5
S99GNRM171960	1960	20	294
Carriage Assembly			
S99GNCM17202	—	—	1.7

REV: 6.12.11 JC

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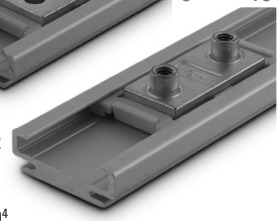
LOW- TO MEDIUM-LOAD APPLICATIONS
REPLACEABLE GLIDE PADS
LOW FRICTION
MOUNTING THROUGH HOLES OR THREADED ADJUSTING STUDS FOR MOUNTING

Metric
0 10

Fig. 1

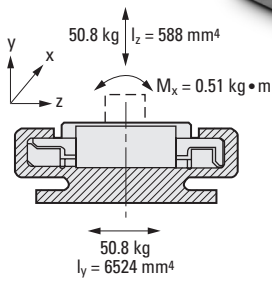
Fig. 2



› MATERIAL:
Rails - Anodized Aluminum
Carriage Assembly - Zinc, Chromated and J® Polymer Pads

› OPERATING TEMPERATURE:
-40°C to +90°C

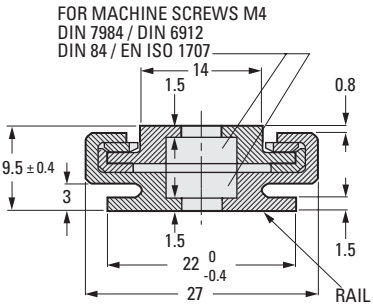
› SPECIFICATIONS:
Maximum Load: 500 N
Maximum Speed: 15 m/s



LOAD DATA:
WITH AND WITHOUT MOUNTING STUDS

I = Moment of Inertia
M = Max. Torque

M_y = 0.25 kg • m
M_z = 0.25 kg • m



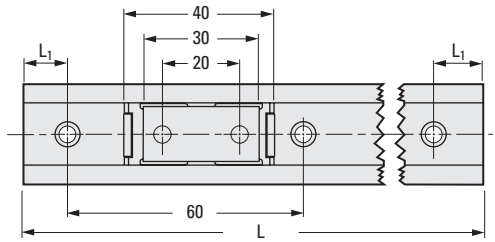
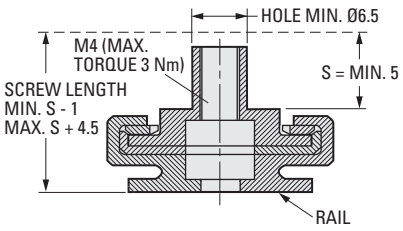


Fig. 1
Without Mounting Studs



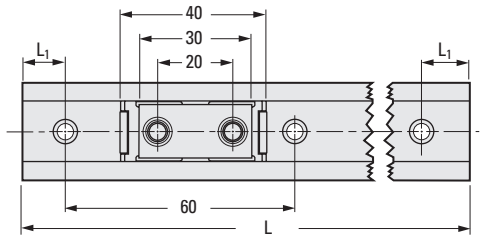


Fig. 2
With Mounting Studs

METRIC COMPONENT

Catalog Number	Fig. No.	L Length mm	L_1	Weight g
Rails				
S99GNRM271000	–	1000	20	290
S99GNRM272000	–	2000	40	580
S99GNRM273000	–	3000	30	870
Carriage Assembly				
S99GNCM27A401	1	–	–	10.8
S99GNCM27B402	2	–	–	12.5

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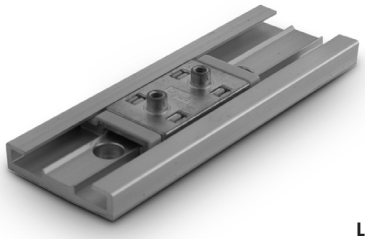
MEDIUM- TO HIGH-LOAD APPLICATIONS
REPLACEABLE GLIDE PADS
LOW FRICTION

Metric
0 10

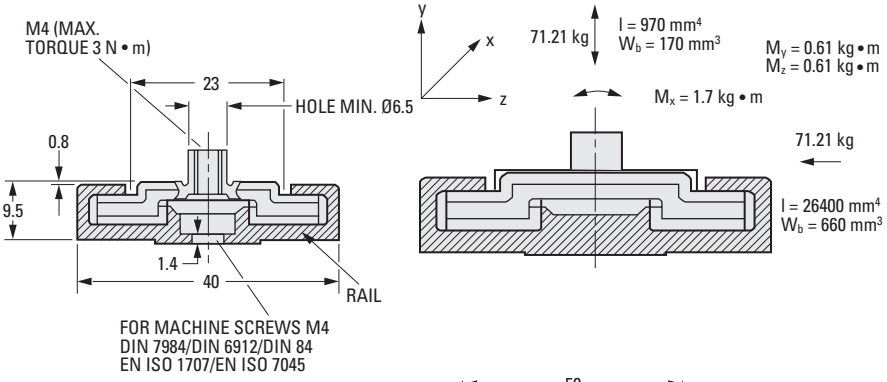


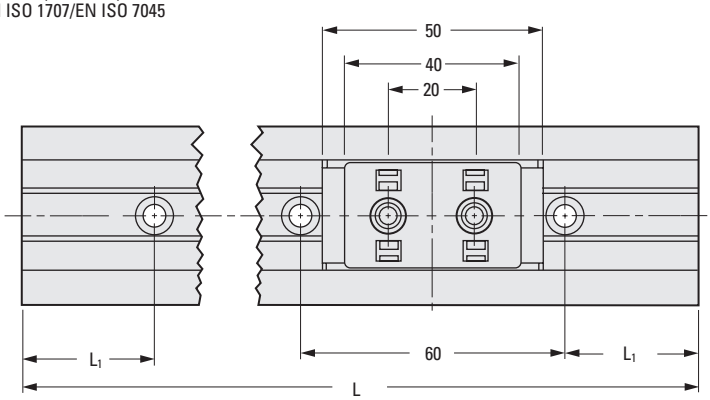
› MATERIAL:
Rails - Anodized Aluminum
Carriage Assembly - Zinc, Chromated and J® Polymer Pads

› OPERATING TEMPERATURE:
-40°C to +90°C

› SPECIFICATIONS:
Maximum Load: 700 N
Maximum Speed: 15 m/s

LOAD DATA
I = Moment of Inertia
W_b = Section Modulus
M = Max. Torque





METRIC COMPONENT

Catalog Number	L Length mm	L_1	Weight g
Rails			
S99GNRM401000	1000	20	450
S99GNRM402000	2000	40	900
S99GNRM403000	3000	30	1350
Carriage Assembly			
S99GNCM40502	—	—	30

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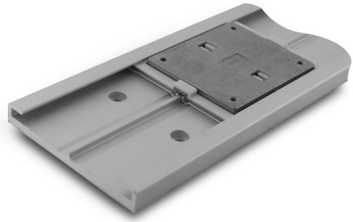
Metric

0 10

HIGH-LOAD APPLICATIONS
REPLACEABLE GLIDE PADS
LOW FRICTION

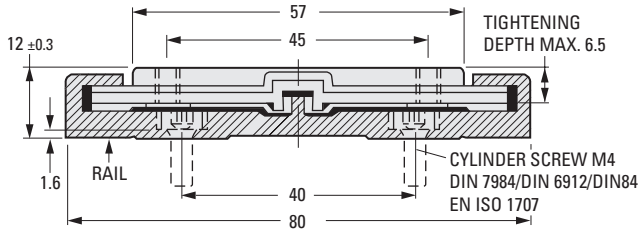


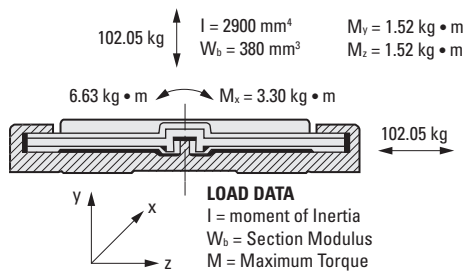
› MATERIAL:

Rails - Anodized Aluminum
Carriage Assembly - Zinc, Chromated and J® Polymer Pads

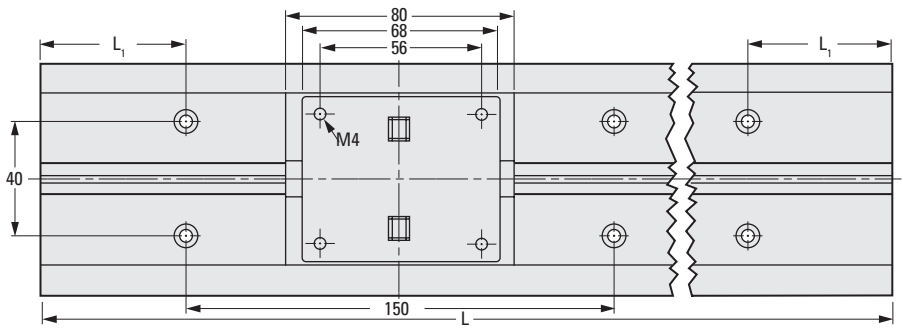
› SPECIFICATIONS:

Maximum Load - 50 N
Maximum Speed - 15 m/s
Operating Temperature: -40°C to +90°C





Catalog Number	Weight g
Carriage Assembly	
S99GNCM80802	100



METRIC COMPONENT

Catalog Number	L Length mm	L_1	Weight g
Rails			
S99GNRM800990	990	45	1128.6
S99GNRM801980	1980	90	2257.2
S99GNRM802970	2970	60	3385.8