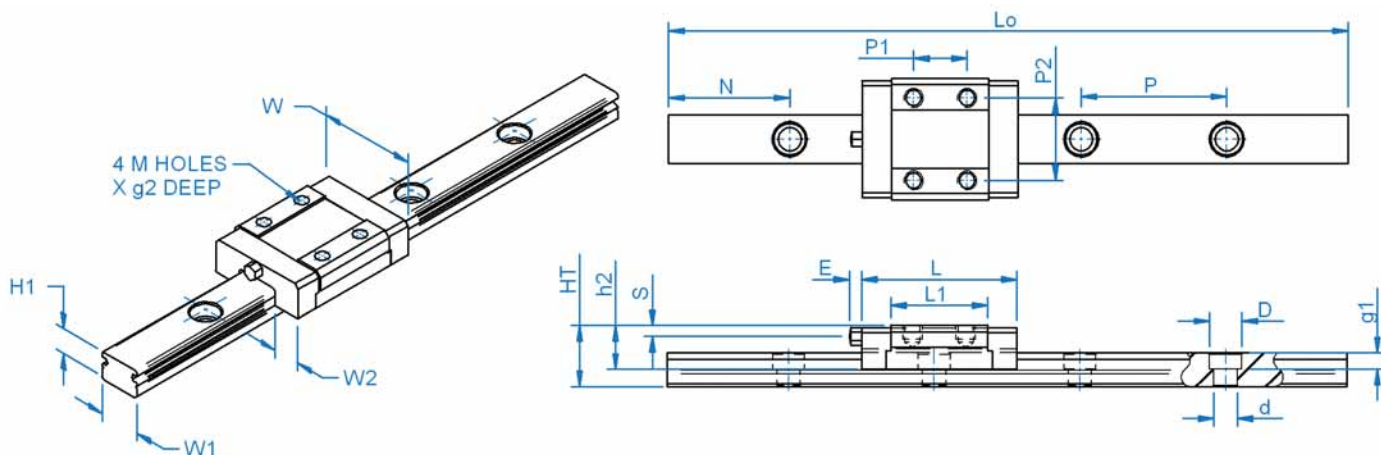




Linear Motion Guides Recirculating Ball Slide



RoHS Compliant



Size	Ass. Dimensions (mm)		Rail Dimensions (mm)					
	HT	W2	W1	H1	P	D	d	g1
RLG5	6	3.5	5	3.5	15	3.5	2.4	1
RLG7	8	5	7	4.7	15	4.2	2.4	2.3
RLG9	10	5.5	9	5.5	20	6	3.5	3.3
RLG12	13	7.5	12	7.5	25	6	3.5	4.5
RLG15	16	8.5	15	9.5	40	6	3.5	4.5

Size	Carriage Dimensions (mm)										Load Capacities (N)		Weight	
	W	L	L1	P1	P2	E	h2	M	g2	S	C (dynamic)	Co (static)	Block g	Rail g/m
RLG5	12	16	10	--	8	--	4.5	M2	1.5	1.1	335	550	3	120
RLG7	17	23.7	14.3	8	12	--	6.5	M2	2.5	1.7	890	1400	9	230
RLG9	20	30.5	19.5	10	15	--	7.8	M3	2.8	2.2	1570	2495	17	330
RLG12	27	35.4	22	15	20	--	10	M3	3.5	2.6	2308	3465	34	600
RLG15	32	43	27	20	25	3.6	12	M3	5.5	2.8	3810	5590	53	1010

Example Part No.

RLG - 12 - N - 220

Basic Part Number	Size	Single Piece Standard Rail Length (mm)														N1	
RLG	5	40	55	70	85	100											5
	7	40	55	70	85	100	130										10
	9	55	75	95	115	135	155	175	195	275	375						10
	12	70	95	120	145	170	195	220	245	270	320	370	470	570			15
	15	70	110	150	190	230	270	310	350	390	430	470	550	670	870		15

N indicates the class of accuracy, see technical data

Tel : +44 (0) 1484 601002
www.rpmechatronics.co.uk

Fax : +44 (0) 1484 601061
sales@rpmechatronics.co.uk

Technical Specifications:

Accuracy

Reliance linear guides are available in 3 classes of accuracy. Precision (**P**), High (**H**), and Normal (**N**).

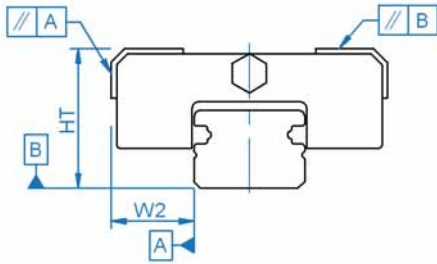


Table of Accuracy				
Accuracy Classes (µm)		Precision P	High H	Normal N
H Tolerance	HT	±10	±20	±40
W Tolerance	W ₂	±15	±25	±40

Note: Class of accuracy, Precision (**P**) and High (**H**) are both non-standard options, please enquire

Speed

The maximum speed of the RLG miniature guide = 3m/s and the maximum acceleration = 250m/s²

Pre-load

Reliance linear guides have two classes of pre-load. Proper pre-load can enhance the performance of the rigidity, precision and torque resistance, but will also affect life and friction.

Parallelism		Pre-load					
		Clearance (µm) Size					
	Pre-load Classes	Pre-load	5	7	9	12	15
	Standard	Small Clearance to Light Pre-loaded	+1.5 0.0	+2.0 -2.0	+2.0 -2.0	+3.0 -3.0	+5.0 -5.0
	V1 (non-standard)	Light Pre-load 2% of Dynamic Load Capacity	0.0 -1.0	0.0 -3.0	0.0 -4.0	0.0 -6.0	0.0 -10.0

Note: V1 is a non-standard option, please enquire

Permissible Operating Temperature

The Reliance linear guide can operate in a temperature range of -40°C to +80°C and for short periods can reach +100°C.

Lubrication

The Reliance linear guide must be lubricated before use.

Grease Lubrication

Mineral oil based lithium-soap with a viscosity between ISO VG32-100 is recommended.

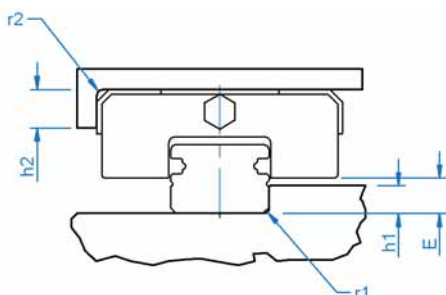
Oil Lubrication

Mineral oil CLP or CGLP or HLP with viscosity ranges between ISO VG32-100 for a working temperature between 0°C to +70°C is recommended. For lower temperatures Reliance recommends ISO VG-10.

Mounting

Height and Fillet of the Fitting Edge

To avoid any interface, the corner of the fitting edge with a recess is recommended. If not so please refer to the table below for the fillet of the fitting edge corner and the height of the fitting edge.



Size	h1	r1max	h2	r2max	E
5	1.2	0.2	1.9	0.3	1.5
7	1.2	0.3	2.8	0.3	1.5
9	1.5	0.3	3.0	0.3	2.2
12	2.5	0.5	4.0	0.5	3.0
15	2.5	0.5	4.5	0.5	4.0