

# TECHNICAL INFORMATION LINEAR ROLLER GUIDES





## **Product overview**

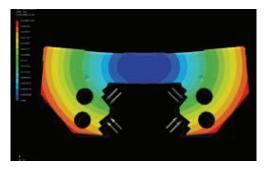
The Roller Guides are highly developed solutions for the high-tech industry. The optimized shape of the rails, the roller guides with logarithmic profiles and the integrated lubrication system multiplies the economical as well as the technical advantages.

### **Characteristics**

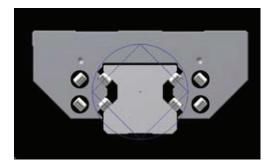
- · Long lifetime, high load capacity and stiffness.
- · Large contact surface on the entire load zone.
- · High operational safety, the construction eliminates transitions between the plastic and steel parts.
- · Rails optimized on preload and load capacity.
- · Rollers placed in O-shape gives a uniform load on all sides documented by FEM-analyses.
- Integrated lubrication system. Distribution in the front panel ensures the supply of the tracks with minimal oil or grease.
- Integrated wipers protect the guides in dirty environments. Designed to reduce the leakage of lubricant significantly

## **Application areas**

- · CNC machines
- · Punching or pressing machines
- High vibration applications

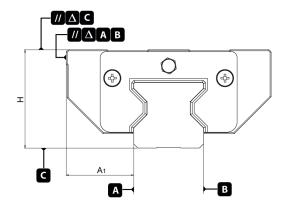


FEM-analyse of LC block



Rollers in O-shape

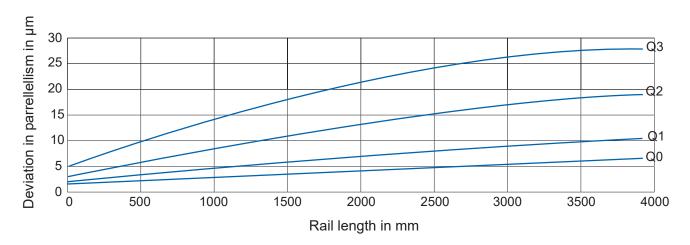
## **Precision class**



		Grade levels			
	QO	<b>Q</b> 1	Q2	Q3	
Measurement of H	± 5 μm	± 10 µm	± 20 µm	± 30 µm	
Measurement of A1	± 5 μm	± 7 μm	± 20 µm	± 20 µm	
Measurement of H when more blocks on one rail	3 µm	5 µm	7 μm	15 µm	
Measurement of A1 when more blocks on one rail	3 µm	5 μm	7 µm	15 µm	
Running accuracy $\Delta C$ to A-B		See diagram below			

Unit: µm

## Running accuracy - Block on rail



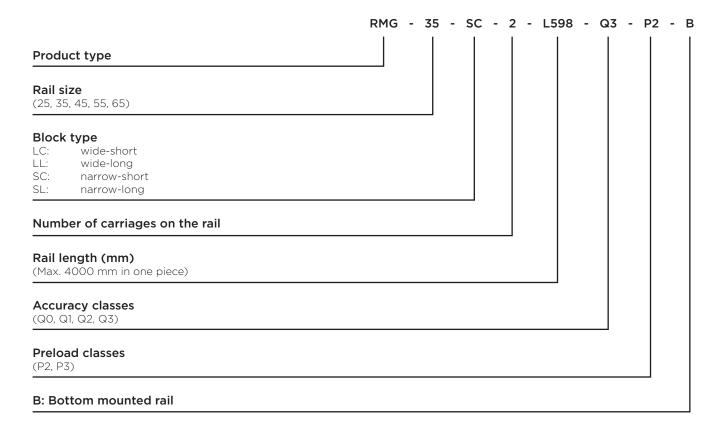
## **Preload class**

Preload Class	Preload	Precision Class
P2	0,08 x C	Q0 / Q1 / Q2 / Q3
Р3	0,13 x C	Q0 / Q1 / Q2 / Q3

4 ROLLCO

5

## **Mounted Rail & Block**



ROLLCO

# ALWAYS THE RIGHT SOLUTION AT THE RIGHT TIME.



With reliability, competence and commitment Rollco rapidly delivers the right solutions and components to create safe and cost-effective automation and linear movement.

#### **Rollco AB**

Box 22234 Ekvändan 3 250 24 Helsingborg Sweden Tel. +46 42 15 00 40 www.rollco.se

#### Rollco A/S

Skomagervej 13 E 7100 Vejle Denmark Tel. +45 75 52 26 66 www.rollco.dk

#### **Rollco Oy**

Sarankulmankatu 12 33900 Tampere Finland Tel. +358 207 57 97 90 www.rollco.fi

#### **Rollco Norge AS**

Industrigata 6 3414 Lierstrada Norway Tel. +47 32 84 00 34 www.rollco.no

#### **Rollco Taiwan**

No. 28, Lane 125, Da-an Road Shulin District 238 New Taipei City, Taiwan Tel. +886-2-8687-2726 Fax +886-2-8687-2720 www.rollco-tw.com