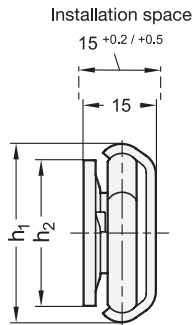


3 Type

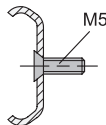
- A3** With one cam roller carriage with 3 rollers
- A5** With one cam roller carriage with 5 rollers
- B3** With two cam roller carriages with 3 rollers
- B5** With two cam roller carriages with 5 rollers

4 Identification no.

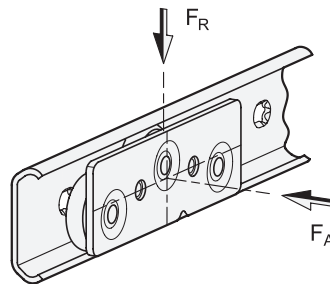
- 0** Without end stop
- 1** With one end stop
- 2** With two end stops



Mounting screws, guide rail



Load capacity per cam roller carriage



1 **2**

h ₁	l ₁ ±1						b	h ₂	l ₂ Cam roller carriage		F _R per cam roller carriage in N		F _A per cam roller carriage in N	
	394	474	554	634	714	794			3 rollers	5 rollers	3 rollers	5 rollers	3 rollers	5 rollers
29	394	474	554	634	714	794	29	23	92	158	425	650	175	350
29	874	954	1034	1194	1434	-	29	23	92	158	425	650	175	350
37	394	474	554	634	714	794	37	30	92	158	800	1150	200	400
37	874	954	1034	1194	1434	-	37	30	92	158	800	1150	200	400

Specification

- Guide rail
 - Steel **ZB**
 - Zinc plated, blue passivated
 - Stainless steel AISI 430 **NI**
 - Plain
- Cam roller carriage
 - Base body
 - Stainless steel AISI 304
 - Roller
 - Ball-bearing, 2RS
 - Stainless steel AISI 440C
 - Roller bearing grease
 - FDA compliant, class H1
 - Permanent lubrication
- End stop
 - Stainless steel AISI 304
 - Rubber stop (TPU), hardness ≈ 80 Shore A
- Operating temperature -20 °C to 100 °C
- RoHS

On request

- Other guide rail length (up to 3,994 mm)
- Other hole spacings / finish

5 Information

Linear guide rail systems GN 1490 are generally installed in pairs, with a horizontal alignment, either vertically (as shown) or perpendicularly. They are used where simple, linear movements must be executed, such as in automation or in vehicle or machine engineering.

Optimal travel properties combined with low maintenance requirements can be achieved in connection with cam roller carriages matched to the guide rails without any play. The system is ready for use immediately after insertion of the cam roller carriages.

The linear guide rail systems consist of a guide rail, one or two cam roller carriages and the selected number of end stops. The parts are delivered unassembled. The guide rail can be installed on either the left or right side of the application. During installation of the cam roller carriages, the direction in which the load is received (marking notch) must be taken into account. The lubrication and maintenance instructions must be followed.

see also...

- *Cam Roller Linear Guide Rails GN 2422* → Page 1921
- *Cam Roller Carriages GN 2424* → Page 1922

How to order

1	h ₁
2	l ₁
3	Type
4	Identification no.
5	Material (Finish)

GN 1490-29-1034-B3-2-NI

3.1

3.2

3.3

3.4

3.5

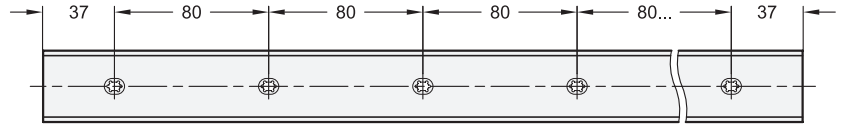
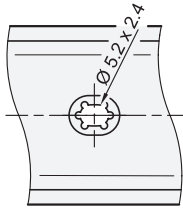
3.6

3.7

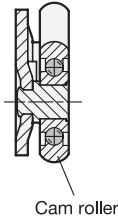
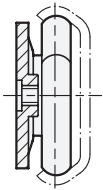
3.8

3.9

Guide rail

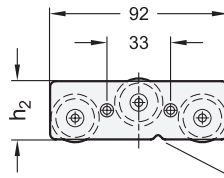


Cam roller carriage

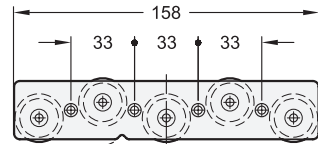


Cam roller

Type A3 / B3

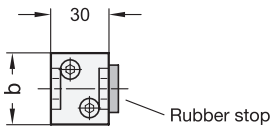
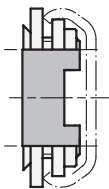


Type A5 / B5

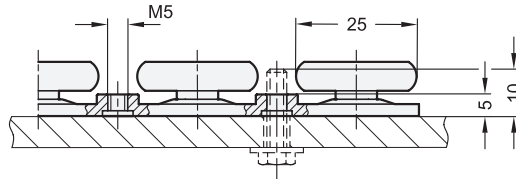


Marking notch for load receiving side

End stop



Rubber stop



Mounting holes, fastening screws

During assembly, all mounting slots in the guide rail and the fastening thread on the cam roller carriage must be used. This ensures that the forces resulting from the maximum load F_L / F_A are reliably transferred to the surrounding structure. Failure to use fastening screws reduces the load capacity accordingly. Other production-related holes in the guide rails are not shown.

Various screws with M5 threads can be used for mounting the cam roller carriages. In contrast, the guide rail must be mounted with the screws listed in the table. It is generally recommended to use screws of strength class 8.8 in accordance with the specified tightening torque. The maximum torque for the accompanying countersunk screws of the end stops is 4-5 Nm, which results in the highest retaining force without deforming the guide rails. The pre-installed rubber stops are automatically clamped by the countersunk screws and dampen the stops of the roller carriages at the respective end points.

Designation - standard		Inner slide
Hex socket countersunk head screw	DIN 7991	M 4 / M 5
Countersunk screw, Phillips	DIN 965	M 4 / M 5
Countersunk screw, Phillips	DIN 7997	Size 4,5 / 5

Lubrication and maintenance

The running surfaces of the guide rails must be lubricated with roller bearing grease before the first use. Possible lubricating greases include Cassida Grease GTX 2, Shell Gadus S2 V220 and Alvania EP 1 or Klüberplex BE 31-222. In food or pharmaceutical applications, FDA-compliant lubricating greases of class H1 or higher must be used as necessary. The grease should be distributed evenly over the entire length of the rail using a paintbrush.

After 50,000 cycles, the rails should be cleaned with a clean cloth and relubricated. If there is risk of soiling, the maintenance intervals should be shortened. In principle, however, soiling should be prevented with measures such as suitable covers or optimal positioning of the linear guide rail systems.