

- 2 Type**
- F** With rubber stop, locking device in retracted position, detach function
- 3 Identification no.**
- 1** Mounting with through holes

Metric table

l ₁	l ₂ ⁺³ / ₋₃ Stroke	l ₃	F _s per pair	
			at 10,000 cycles	at 100,000 cycles
300 11.81	300 11.81	600 23.62	330 N 74.19 lbf	240 N 53.95 lbf
350 13.78	350 13.78	700 27.56	380 N 85.43 lbf	290 N 65.19 lbf
400 15.75	400 15.75	800 31.50	430 N 96.67 lbf	340 N 76.44 lbf
450 17.72	450 17.72	900 35.43	430 N 96.67 lbf	340 N 76.44 lbf
500 19.69	500 19.69	1000 39.37	380 N 85.43 lbf	290 N 65.19 lbf

Dimensions in: millimeters - inches

l ₁	l ₂ ⁺³ / ₋₃ Stroke	l ₃	F _s per pair	
			at 10,000 cycles	at 100,000 cycles
550 21.65	550 21.65	1100 43.31	330 N 74.19 lbf	240 N 53.95 lbf
600 23.62	600 23.62	1200 47.24	320 N 71.94 lbf	240 N 53.95 lbf
650 25.59	650 25.59	1300 51.18	300 N 67.44 lbf	220 N 49.46 lbf
700 27.56	700 27.56	1400 55.12	300 N 67.44 lbf	220 N 49.46 lbf

Specification

- Slide profile
Steel, zinc plated, blue passivated finish **ZB**
- Balls
Rolling bearing steel, hardened
- Ball cage, outer slide
Plastic
- Ball cage, inner slide
Steel, zinc plated
- Rubber stop and detach function
Plastic / Elastomer
- Self-retracting mechanism
Steel, zinc plated / plastic
- Operating temperature -4 °F to +212 °F
(-20 °C to +100 °C)
- **RoHS compliant**

On request

- Other lengths and hole distances
- Other mounting options
- Other finishes

Information

GN 1412 telescopic slides are installed in pairs. The stroke reaches ≈ 100 % of the nominal length l₁ (full extension). The rubber stops dampen the impact of the slide in the end position. This feature minimizes noise development and increases the service life. If larger static or dynamic loads occur in the direction of extension, they should be absorbed by additional end stops.

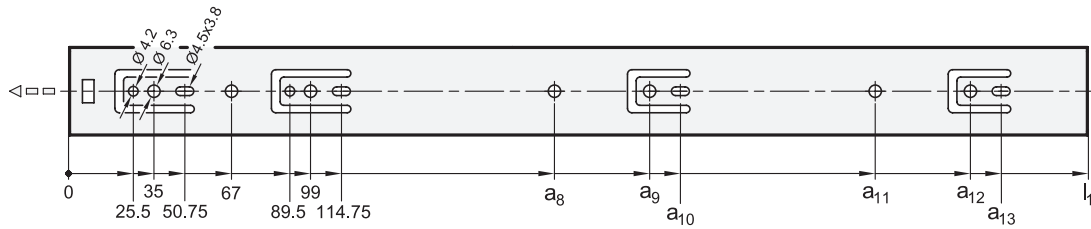
The telescopic slides are delivered in **pairs**. They can be installed on either the left or right side due to the design. All mounting holes are easy to reach through auxiliary holes. Only the mounting holes are shown, but other production-related holes may be present.

see also...

- [List of Telescopic Slide Types → page 1856](#)
- [Technical Information on Telescopic Slides → page 1901](#)
- [Telescopic Slides GN 1410 \(with Full Extension\) → page 1865](#)

<p>How to order</p> <p>GN 1412-500-F-1-ZB</p>	1 Length l ₁
	2 Type
	3 Identification no.
	4 Finish

Mounting holes - Outer slide



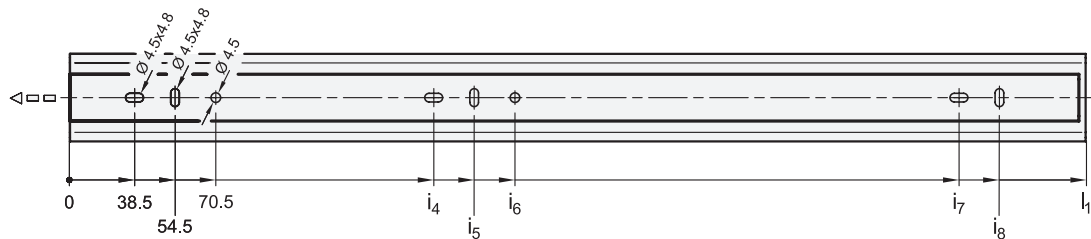
Metric table



Dimensions in: millimeters - inches

l_1	a_8	a_9	a_{10}	a_{11}	a_{12}	a_{13}
300 11.81	-	195 7.68	207.75 8.18	227 8.94	-	-
350 13.78	-	227 8.94	239.75 9.44	259 10.20	-	-
400 15.75	259 10.20	291 11.46	303.75 11.96	323 12.72	-	-
450 17.72	259 10.20	323 12.72	335.75 13.22	-	-	-
500 19.69	259 10.20	323 12.72	335.75 13.22	-	387 15.24	399.75 15.74
550 21.65	259 10.20	323 12.72	335.75 13.22	387 15.24	451 17.76	463.75 18.26
600 23.62	259 10.20	355 13.98	367.75 14.48	387 15.24	483 19.02	495.75 19.52
650 25.59	259 10.20	355 13.98	367.75 14.48	451 17.76	515 20.28	527.75 20.78
700 27.56	259 10.20	355 13.98	367.75 14.48	515 20.28	579 22.80	591.75 23.30

Mounting holes - Inner slide



Metric table



Dimensions in: millimeters - inches

l_1	i_4	i_5	i_6	i_7	i_8
300 11.81	230.5 9.07	246.5 9.70	262.5 10.33	-	-
350 13.78	150.5 5.93	166.5 6.56	182.5 7.19	292.5 11.52	308.5 12.15
400 15.75	170.5 6.71	186.5 7.34	202.5 7.97	341.5 13.44	357.5 14.07
450 17.72	195.5 7.70	211.5 8.33	227.5 8.96	391.5 15.41	407.5 16.04
500 19.69	220.5 8.68	236.5 9.31	252.5 9.94	441.5 17.38	457.5 18.01
550 21.65	250.5 9.86	266.5 10.49	282.5 11.12	492.5 19.39	508.5 20.02
600 23.62	260.5 10.26	276.5 10.89	292.5 11.52	541.5 21.32	557.5 21.95
650 25.59	260.5 10.26	276.5 10.89	292.5 11.52	602.5 23.72	618.5 24.35
700 27.56	260.5 10.26	276.5 10.89	292.5 11.52	652.5 25.69	668.5 26.32

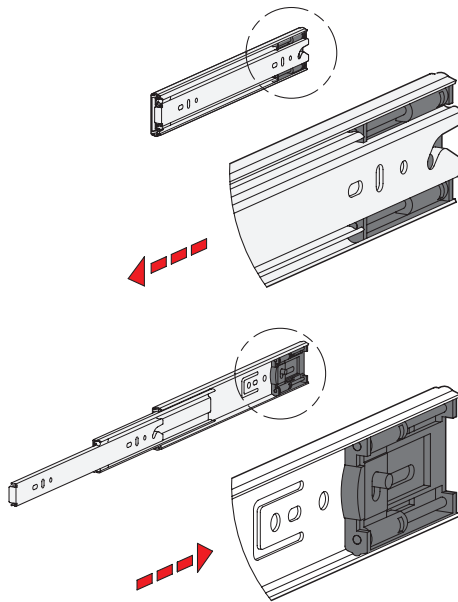
3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
3.10

Mounting screws

For the listed loading forces F_S to be absorbed reliably in the surrounding structure, all available through holes of the outer slide having a \varnothing of 4.2 mm and of the inner slide having a \varnothing of 4.5 mm must be used. Alternatively, the outer slide has holes with a \varnothing of 6.3 mm for metric screws. The slotted holes, \varnothing 4.5 x 3.8 mm of the outer slide and \varnothing 4.5 x 4.8 mm of the inner slide, are also used for mounting and facilitate adjustment. Failure to use mounting screws reduces the specified load capacity accordingly. The following screws can be used for mounting:

Designation - Standard		Outer slide	Inner slide
Socket button head screw	ISO 7380	M 4	M 4
Phillips pan head screw	ISO 7045	M 4	M 4
Phillips pan head self-tapping screw	ISO 7049	ST 3.9 / 4.2	ST 3.9 / 4.2

Self-retracting mechanism

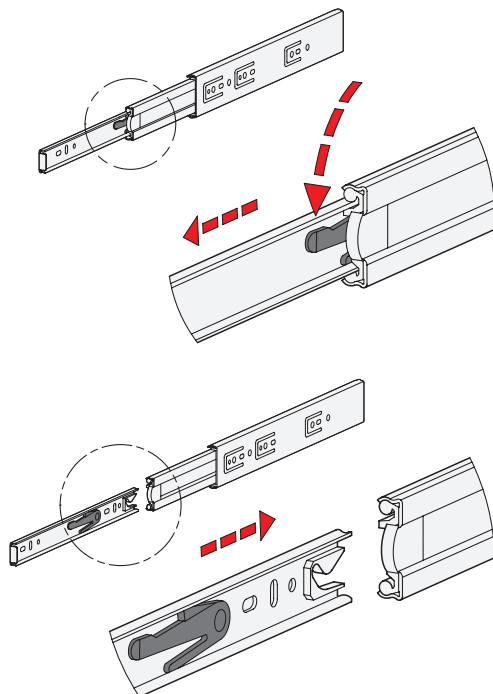


GN 1412 telescopic slides have an integrated self-retracting mechanism, which significantly improves the ease of use when closing the extensions.

By means of the retraction mechanism, the slides are automatically retracted on the last 30 mm of stroke with a force of approximately 25 newtons per slide pair and held in the retracted end position.

With this slide version, the available retraction force can be regarded as a locking device, which is noticeable through a slight restriction on opening the extension.

Detach function



The detach function allows the extension to be completely separated from one another in the area of the middle and inner slide. This feature not only facilitates mounting, it also allows the extension to be quickly removed, for example when frequent maintenance work is performed on the components located behind.

The telescopic slide can be quickly and easily detached in the extended position through activation of the release lever, allowing the inner slide to be removed from the front.

For re-attaching the slides, the ball cages need to be moved to the extended end position. Then the inner slide is inserted to the retracted end position where it locks into place automatically.

The protected arrangement of the release mechanism prevents accidental detachment of the slide.