

# GN 299

## Longitudinal scales

### • Specification

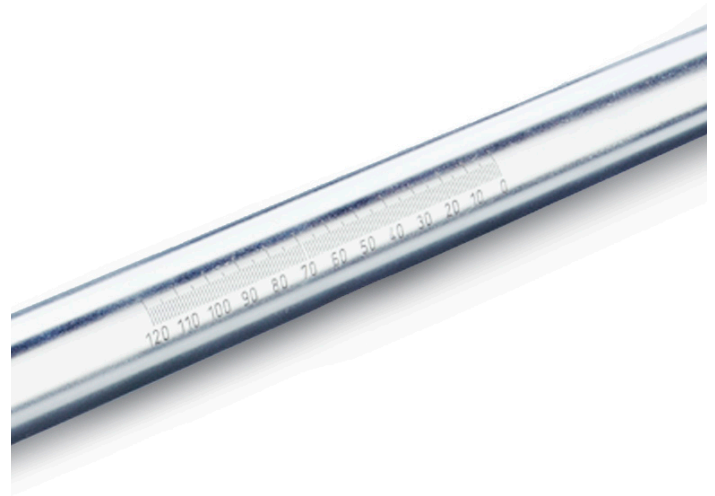
The longitudinal scales (for standard travel lengths  $l_1$  of the linear actuator) are engraved by precision laser.

### • Assembly

Longitudinal scales have to be ordered together with the linear actuators.

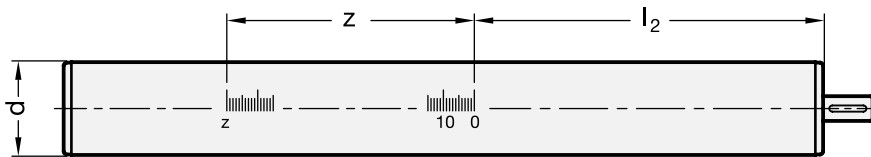
### Features and applications

The longitudinal scales GN 299 of types A and B are normally used in connection with the linear actuator units GN 291 and GN 291.1, the scales of types C and D are normally used for the linear actuator units GN 292 and GN 293.



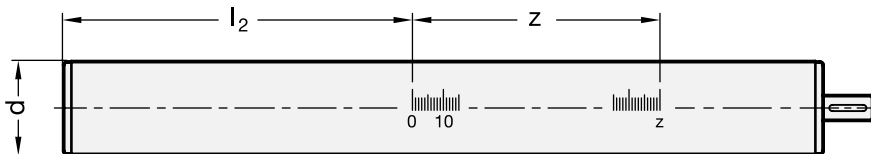
160

Tube clamp connectors, Linear actuators



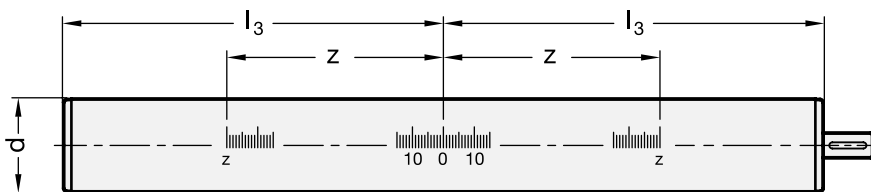
Type A

Scale numbers ascending to the left



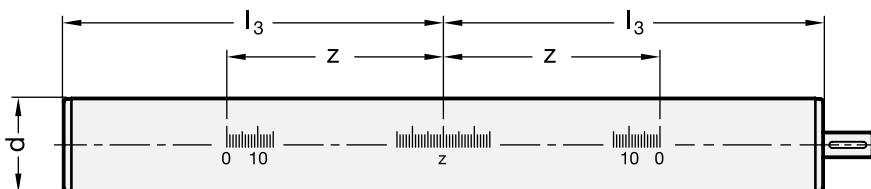
Type B

Scale numbers ascending to the right



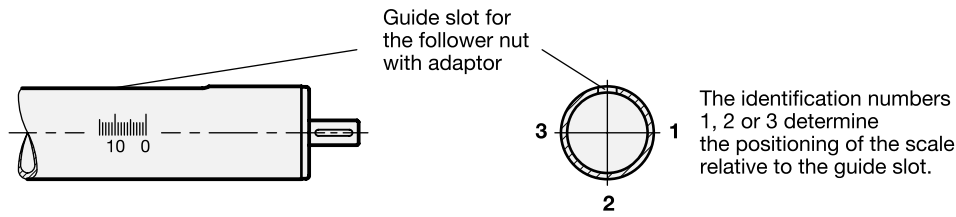
Type C

Scale numbers decreasing towards centre



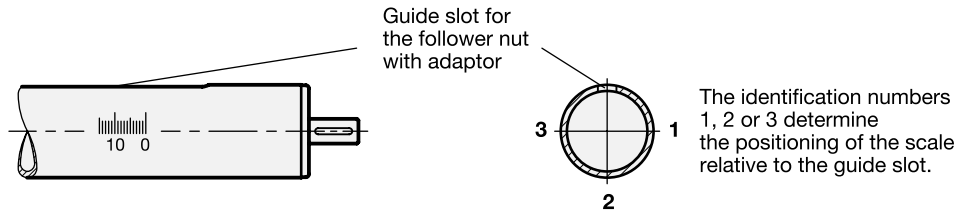
Type D

Scale numbers ascending towards centre



Standard Elements	Main dimensions				
	do Ø Linear actuator	l <sub>1</sub> Travel (Standard lengths)	l <sub>2</sub>	l <sub>3</sub>	z Scale length or highest figure
GN 299-18-65-A-*	18	65	82.5	147.5	90
GN 299-18-165-A-*	18	165	82.5	247.5	190
GN 299-18-265-A-*	18	265	82.5	347.5	290
GN 299-30-100-A-*	30	100	122.5	222.5	120
GN 299-30-150-A-*	30	150	122.5	272.5	170
GN 299-30-200-A-*	30	200	122.5	322.5	220
GN 299-30-300-A-*	30	300	122.5	422.5	320
GN 299-40-70-A-*	40	70	142.5	217.5	90
GN 299-40-170-A-*	40	170	142.5	317.5	190
GN 299-40-220-A-*	40	220	142.5	367.5	240
GN 299-40-270-A-*	40	270	142.5	417.5	290
GN 299-40-320-A-*	40	320	142.5	467.5	340
GN 299-50-65-A-*	50	65	147.5	217.5	90
GN 299-50-115-A-*	50	115	147.5	267.5	140
GN 299-50-215-A-*	50	215	147.5	367.5	240
GN 299-50-265-A-*	50	265	147.5	417.5	290
GN 299-50-315-A-*	50	315	147.5	467.5	340
GN 299-60-220-A-*	60	220	182.5	402.5	240
GN 299-60-720-A-*	60	720	182.5	902.5	740
GN 299-18-65-B-*	18	65	82.5	147.5	90
GN 299-18-165-B-*	18	165	82.5	247.5	190
GN 299-18-265-B-*	18	265	82.5	347.5	290
GN 299-30-100-B-*	30	100	122.5	222.5	120
GN 299-30-150-B-*	30	150	122.5	272.5	170
GN 299-30-200-B-*	30	200	122.5	322.5	220
GN 299-30-300-B-*	30	300	122.5	422.5	320
GN 299-40-70-B-*	40	70	142.5	217.5	90
GN 299-40-170-B-*	40	170	142.5	317.5	190
GN 299-40-220-B-*	40	220	142.5	367.5	240
GN 299-40-270-B-*	40	270	142.5	417.5	290
GN 299-40-320-B-*	40	320	142.5	467.5	340
GN 299-50-65-B-*	50	65	147.5	217.5	90
GN 299-50-115-B-*	50	115	147.5	267.5	140
GN 299-50-215-B-*	50	215	147.5	367.5	240
GN 299-50-265-B-*	50	265	147.5	417.5	290
GN 299-50-315-B-*	50	315	147.5	467.5	340
GN 299-60-220-B-*	60	220	182.5	402.5	240
GN 299-60-720-B-*	60	720	182.5	902.5	740

\* Complete the description of the standard item needed by adding the identification number of the scale (see drawing).



Standard Elements	Main dimensions				
Description	d <sub>0</sub> Ø Linear actuator	l <sub>1</sub> Travel (Standard lengths)	l <sub>2</sub>	l <sub>3</sub>	z Scale length or highest figure
GN 299-18-65-C-*	18	65	82.5	147.5	90
GN 299-18-165-C-*	18	165	82.5	247.5	190
GN 299-18-265-C-*	18	265	82.5	347.5	290
GN 299-30-100-C-*	30	100	122.5	222.5	120
GN 299-30-150-C-*	30	150	122.5	272.5	170
GN 299-30-200-C-*	30	200	122.5	322.5	220
GN 299-30-300-C-*	30	300	122.5	422.5	320
GN 299-40-70-C-*	40	70	142.5	217.5	90
GN 299-40-170-C-*	40	170	142.5	317.5	190
GN 299-40-220-C-*	40	220	142.5	367.5	240
GN 299-40-270-C-*	40	270	142.5	417.5	290
GN 299-40-320-C-*	40	320	142.5	467.5	340
GN 299-50-65-C-*	50	65	147.5	217.5	90
GN 299-50-115-C-*	50	115	147.5	267.5	140
GN 299-50-215-C-*	50	215	147.5	367.5	240
GN 299-50-265-C-*	50	265	147.5	417.5	290
GN 299-50-315-C-*	50	315	147.5	467.5	340
GN 299-60-220-C-*	60	220	182.5	402.5	240
GN 299-60-720-C-*	60	720	182.5	902.5	740
GN 299-18-65-D-*	18	65	82.5	147.5	90
GN 299-18-165-D-*	18	165	82.5	247.5	190
GN 299-18-265-D-*	18	265	82.5	347.5	290
GN 299-30-100-D-*	30	100	122.5	222.5	120
GN 299-30-150-D-*	30	150	122.5	272.5	170
GN 299-30-200-D-*	30	200	122.5	322.5	220
GN 299-30-300-D-*	30	300	122.5	422.5	320
GN 299-40-70-D-*	40	70	142.5	217.5	90
GN 299-40-170-D-*	40	170	142.5	317.5	190
GN 299-40-220-D-*	40	220	142.5	367.5	240
GN 299-40-270-D-*	40	270	142.5	417.5	290
GN 299-40-320-D-*	40	320	142.5	467.5	340
GN 299-50-65-D-*	50	65	147.5	217.5	90
GN 299-50-115-D-*	50	115	147.5	267.5	140
GN 299-50-215-D-*	50	215	147.5	367.5	240
GN 299-50-265-D-*	50	265	147.5	417.5	290
GN 299-50-315-D-*	50	315	147.5	467.5	340
GN 299-60-220-D-*	60	220	182.5	402.5	240
GN 299-60-720-D-*	60	720	182.5	902.5	740

\* Complete the description of the standard item needed by adding the identification number of the scale (see drawing).