

# BELT DRIVEN LINEAR UNIT



**ROLLCO**

SPECIALIZED  
ON LINEAR MOTION

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## Belt Driven Linear Units - Type RHL

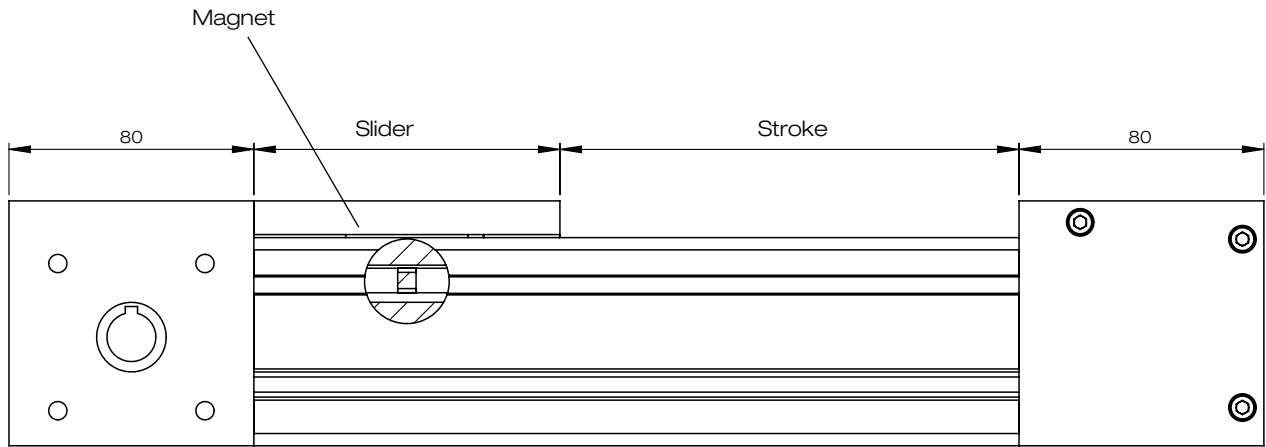


The Belt Driven Linear Unit type RHL 80 is a ready to mount, complete unit based on aluminium profile. Equipped with monorail, belt and pulleys which saves both cost and time in the construction phase.

The units are stocked in semi-finished components and can be assembled and shipped within a few days. The very short delivery time gives you more time to make the right choice for example in slider version and stroke.

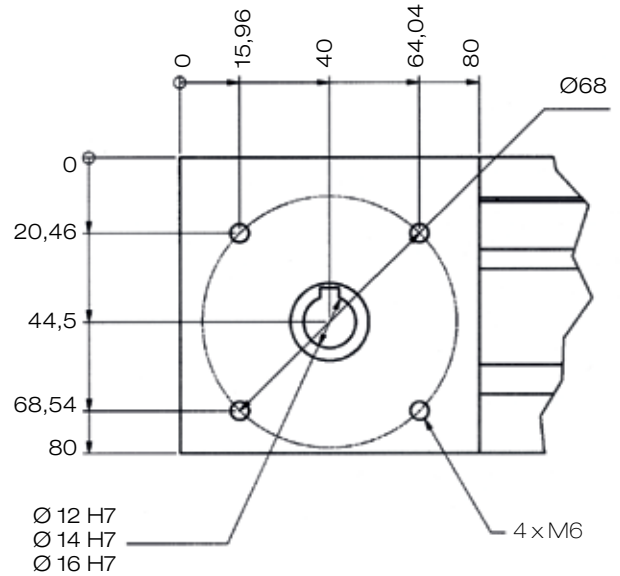
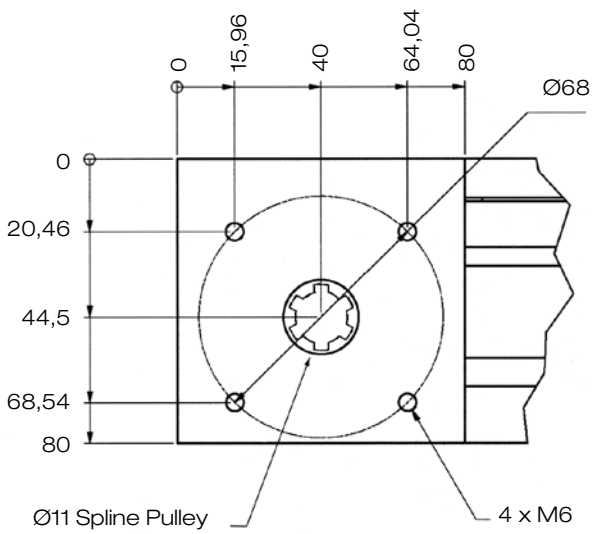
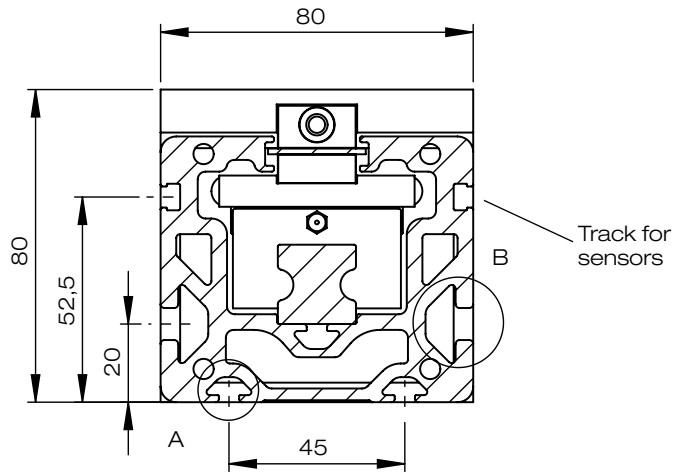
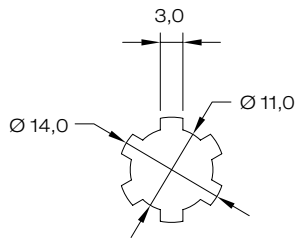
Customized versions can be made. Please contact Rollco.

# DIMENSIONS

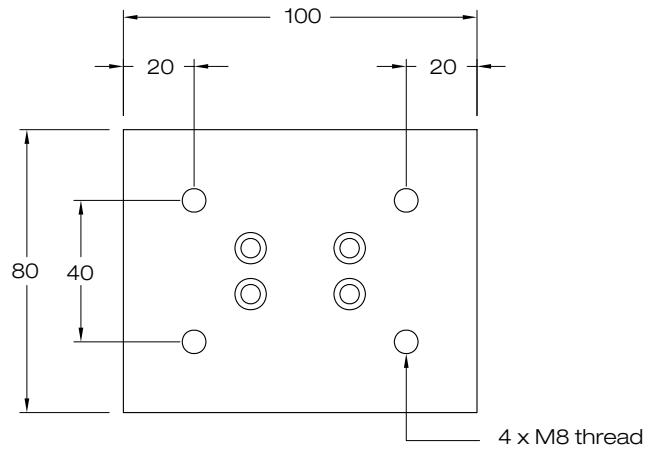


**Total length** = Stroke + slider + 160

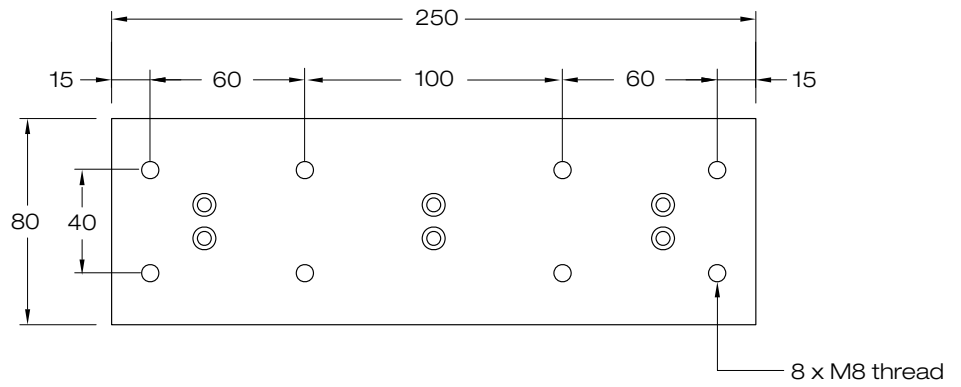
**Stroke:** We recommend to add min. 50 mm to the nominal stroke (stroke = nominal stroke + 50 mm)



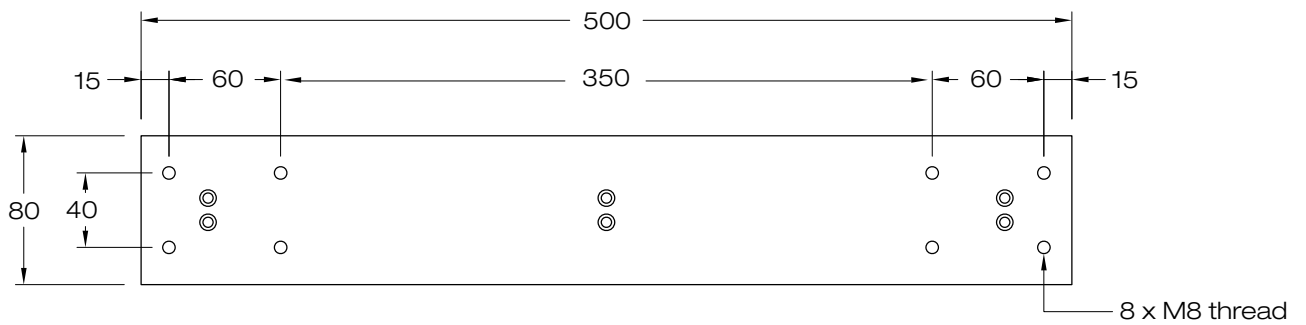
## Slider V100



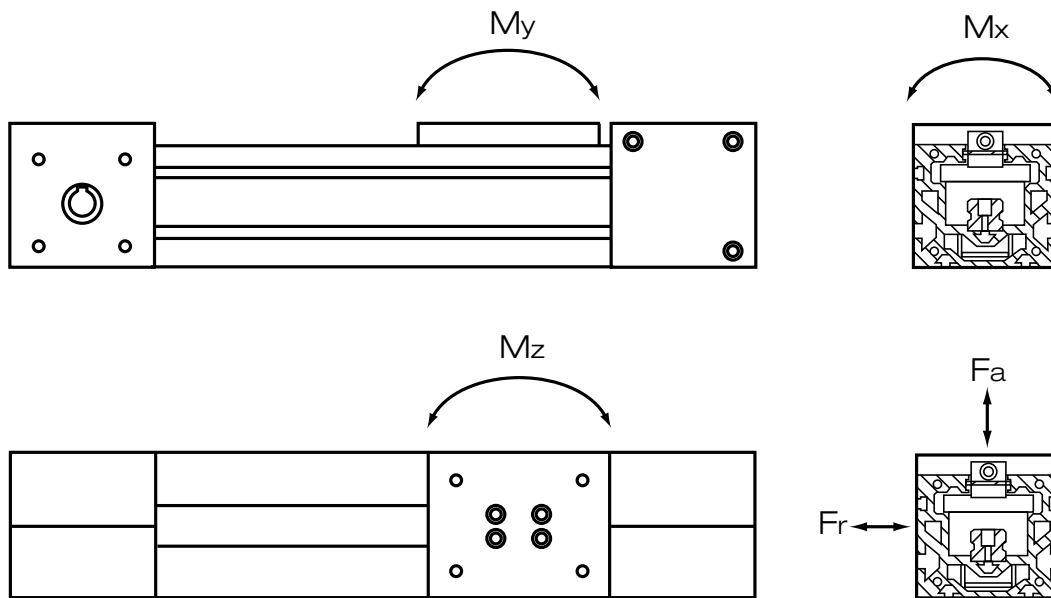
## Slider V250



## Slider V500



## TECHNICAL DATA

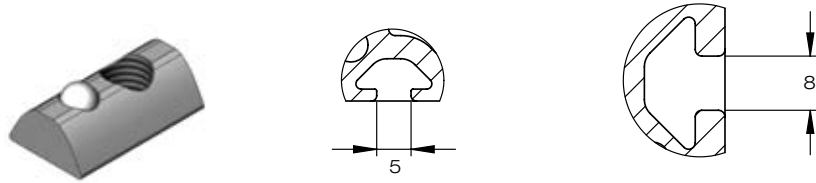


Type	Slider length mm	Weight/kg			Permissible load (N)		Static moment (Nm)		
		Mass of slider	Stroke 0 mm	Pr. 100 mm	$F_a$	$F_r$	$M_x$	$M_y$	$M_z$
RHL 80-V100	100	0,8	5,2	0,80	1000	500	50	50	50
RHL 80-V250	250	1,7	7,4	0,80	2000	1000	100	200	100
RHL 80-V500	500	2,6	10,1	0,80	2000	1000	100	450	450

## T-slot

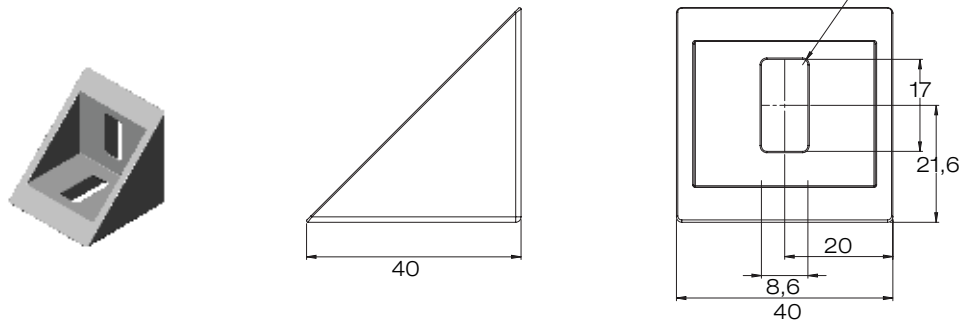
T-nuts available:

- RHL5-M5
- RHL8-M5
- RHL8-M6
- RHL8-M8



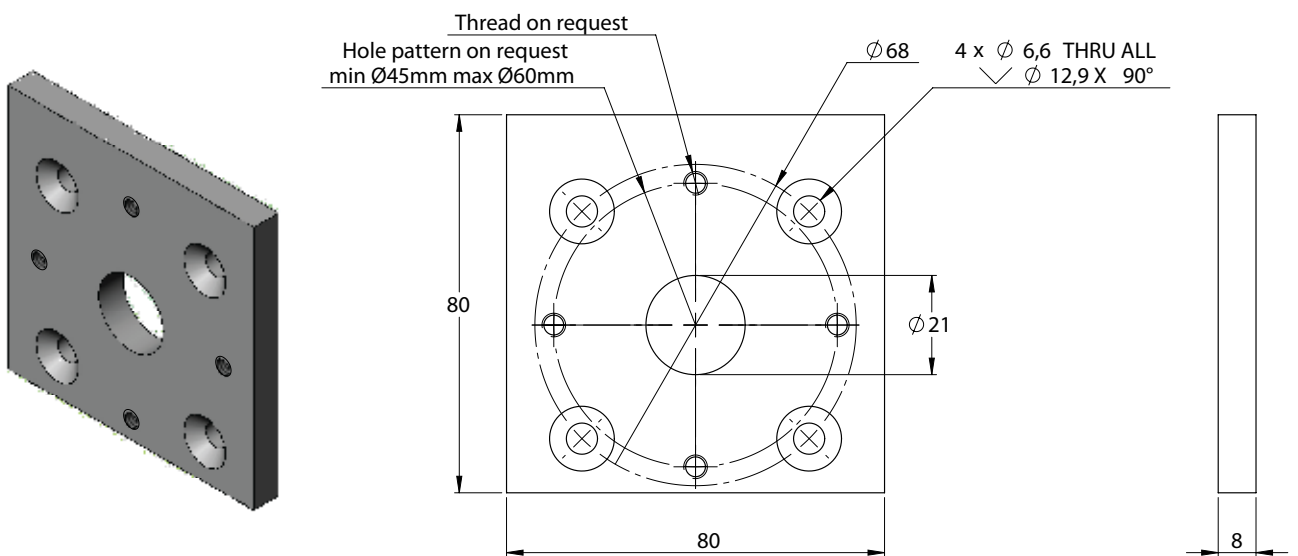
## Angle Bracket

RHL6-4040



## Mounting Plate

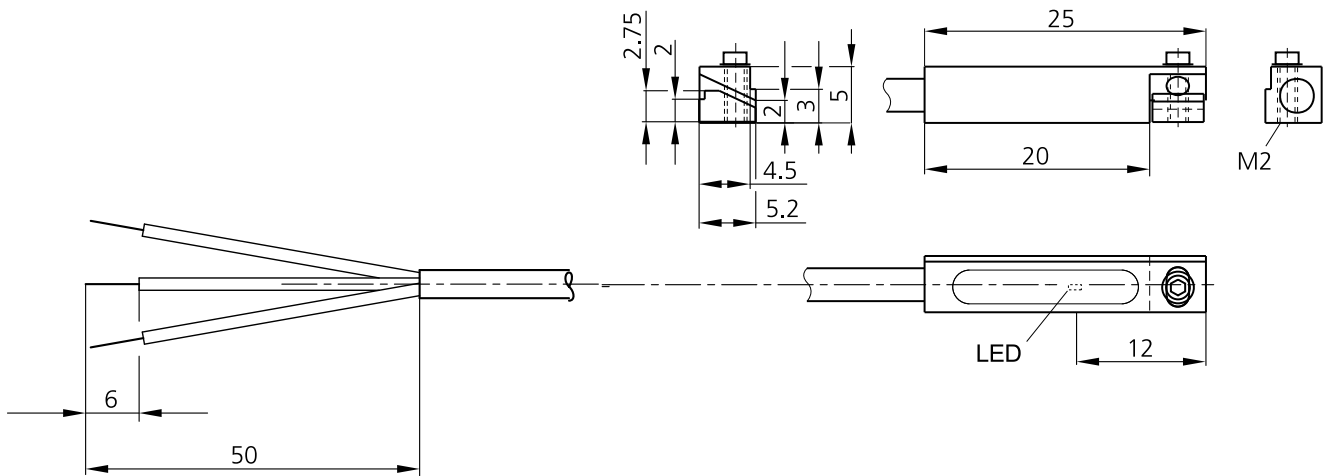
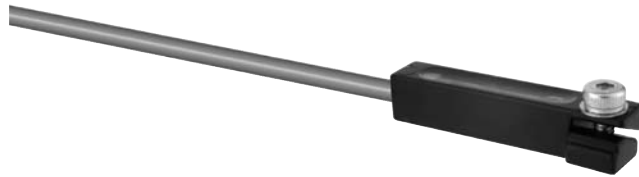
RHL80-MP



# Sensor

## RHL-MZEK 25 PLSK L=2,5 m

- Metal casing
- Precise readjustment
- All-electronically
- Vibration resistant
- High protection class



### Technical details:

Service voltage	10 ... 30 V DC
Output	transistor pnp, NO
Maximum rating	200 mA, not short-circuit-proof, polarity-safe
Contact rating	6 W max. (30 V, 200 mA)
Internal power consumption	< 10 mA
Voltage drop	< 2,0 V
Operating frequency	1.000 Hz
Reproducibility	< 0,1 mm
Ambient temperature	-25 ... +70 °C
Insulation voltage endurance	500 V
Protection class	IP 67
Indicators	LED: yellow - output signal
Mounting	clamping block, allen screw SW 1,5 mm
Casing material	die-cast zinc
Connection	cable PUR, 2,5 m as standard, 5 m as option

## Transmission

Max. speed	(m/s)	2,5
Max. moment of rotation	(Nm)	30
Pulley radius	(mm)	28,65
Belt type		AT 5
Belt width	(mm)	25
Tooth pitch	(mm)	5
Max traction load	(N)	600
Belt breaking strength	(N)	6370
Stroke for shaft revolution	(mm)	180

## Lubrication

The RHL system is equipped with sliders that are fitted with a lubrication system. This helps to keep the grease inside the block and reduce the need for relubrication. As an option the RHL system can be mounted with a so called "Maintenance Free Sealing" system, that under test has shown a life time of 32.000 KM with light load without any relubrication.

Please contact Rollco for more information.

## Order Code

**RHL 80 - 1700 - V250 - H14**

**Unit Type**

**Stroke**

**Slider type**

V100  
V250  
V500

**Drive Hollow Shaft with Keyway or spline pulley**

Ø 12 H7  
Ø 14 H7  
Ø 16 H7  
Ø 11 spline pulley

**T-slot, Angle Bracket, Mounting Plate and Sensor must be ordered separately.**

**Notes:**

## One Partner for Linear Components:



**LINEAR RAIL SYSTEM**  
Monorails. Compatible dimension. Very competitive product range.



**MINIATURE**  
Range from 3 mm up to 15 mm.



**EASY RAIL**  
The strong solution for short strokes.



**BALL BEARINGS**  
Linear ball bearings and hardened steel shafts.



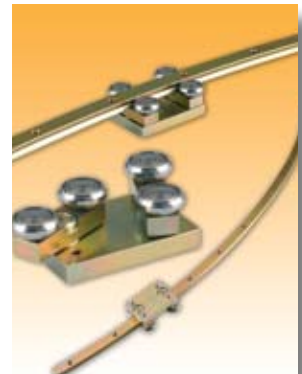
**LIGHT TELESCOPIC**  
Telescopic systems for smooth movement. Steel and aluminium.



**HEAVY TELESCOPIC**  
The strongest solution for extraction.



**COMPACT RAIL**  
No more problems with parallelism. Low noise guiding with lifetime lubricated bearings.



**CURVI LINE**  
A versatile solution for applications with non linear trajectories.



**BELLOWS**  
A wide range of protection bellows in many different materials.



**BALL SCREWS**  
Cylindrical and flange-nut.



**QUADRO TABLE**  
Complete linear drive unit. Can be supplied with protection bellow.



**C-RAIL**  
A simple and cost effective linear bearing system.

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