

BELT DRIVEN LINEAR UNIT



ROLLCO
SPECIALIZED
ON LINEAR MOTION

Index

Product overview	3
RHL80	4
Sliders for RHL80: V100, V250 & V500	5
RHL110	6
Sliders for RHL110: V200 & V500	7
Technical data	8
Mounting Plates	9
T-slot & Angle Bracket	10
Sensor	11
Transmission & Lubrication	12
Order code	13
One partner for linear components	15

Belt Driven Linear Unit

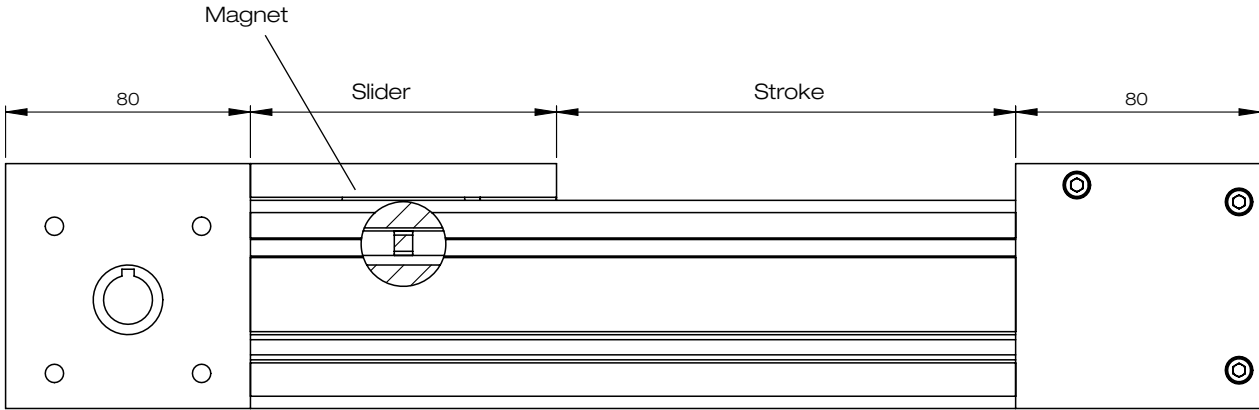


The Belt Driven Linear Unit type RHL80 and RHL110 are ready to mount, complete units based on aluminium profile. Equipped with monorail, belt and pulleys which saves both cost and time in the construction phase.

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.

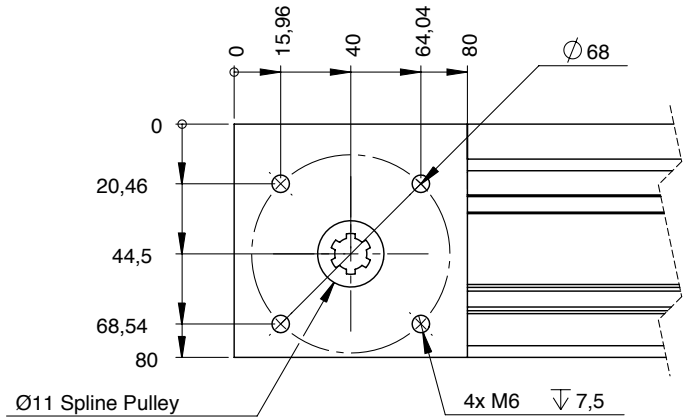
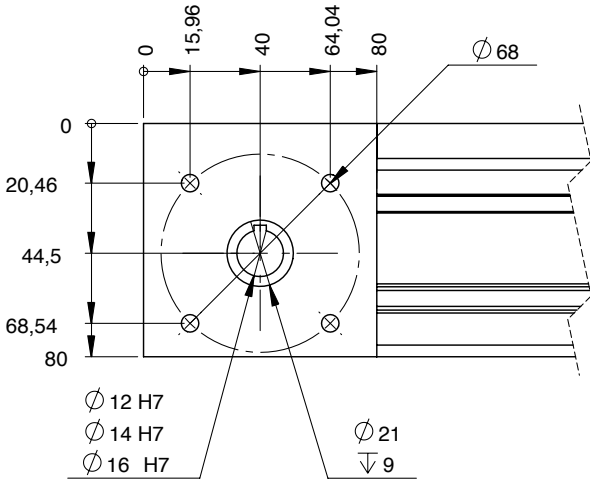
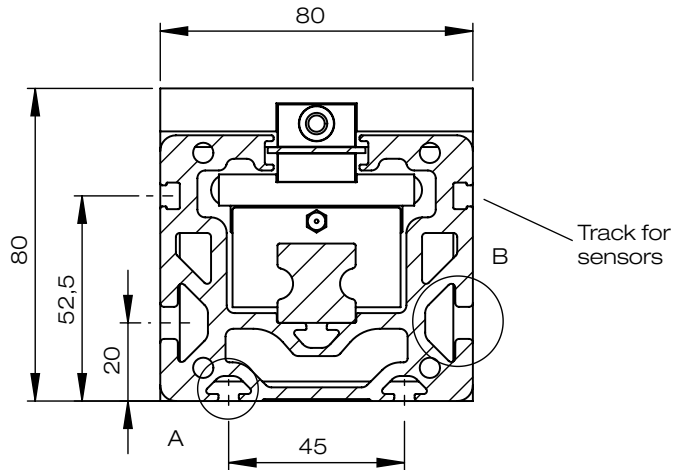
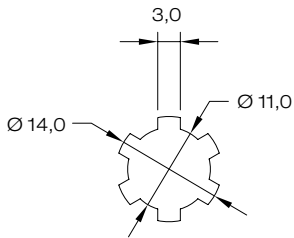
Customized versions can be made. Please contact Rollco.

RHL80

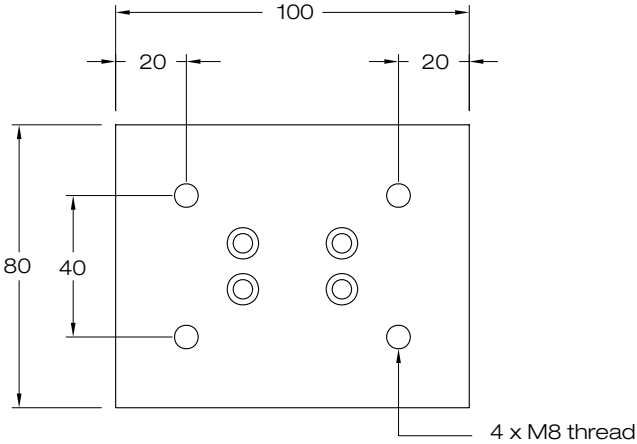


Total length = Stroke + slider + 160

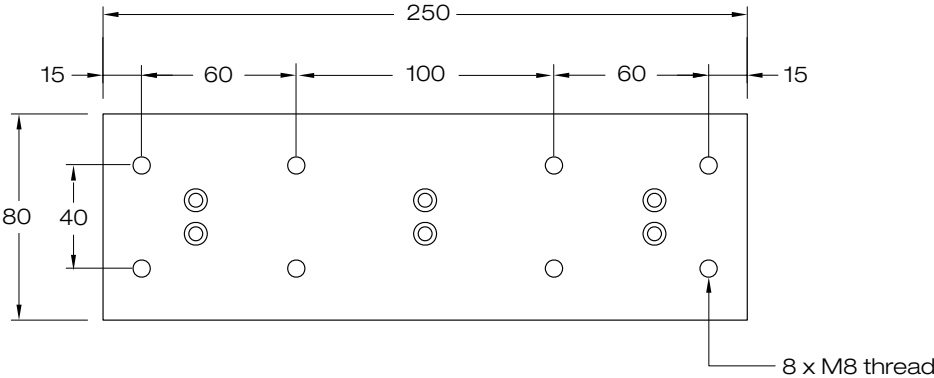
Stroke: We recommend to add min. 50 mm to the nominal stroke (stroke = nominal stroke + 50 mm)



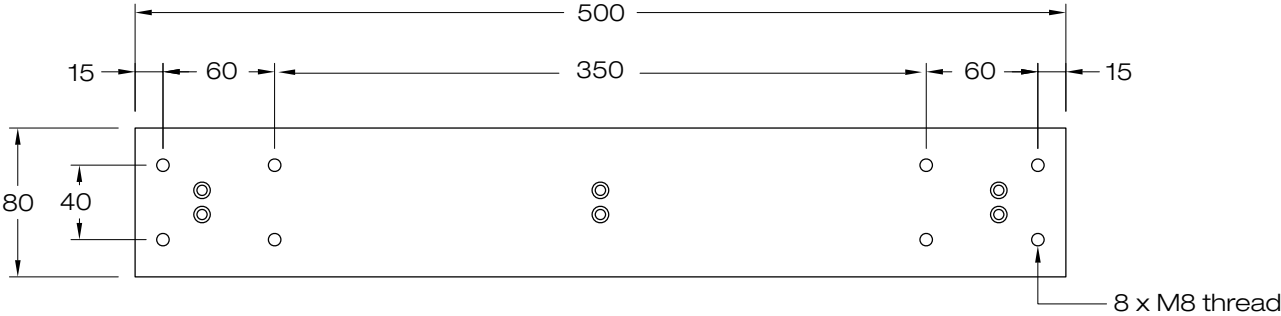
Slider V100 for RHL80



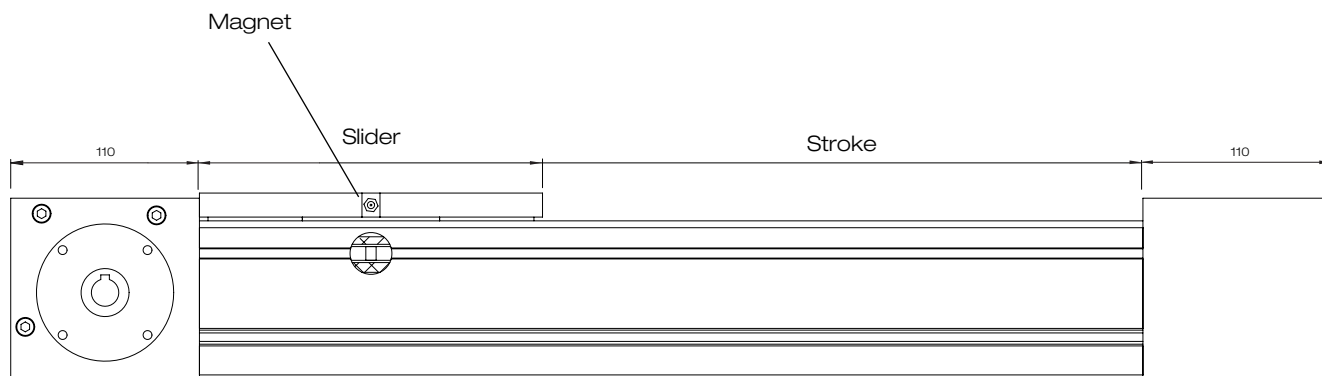
Slider V250 for RHL80



Slider V500 for RHL80

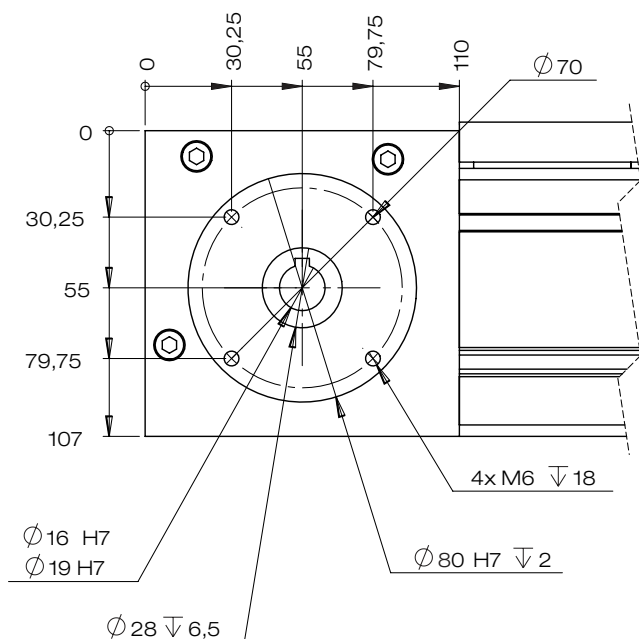
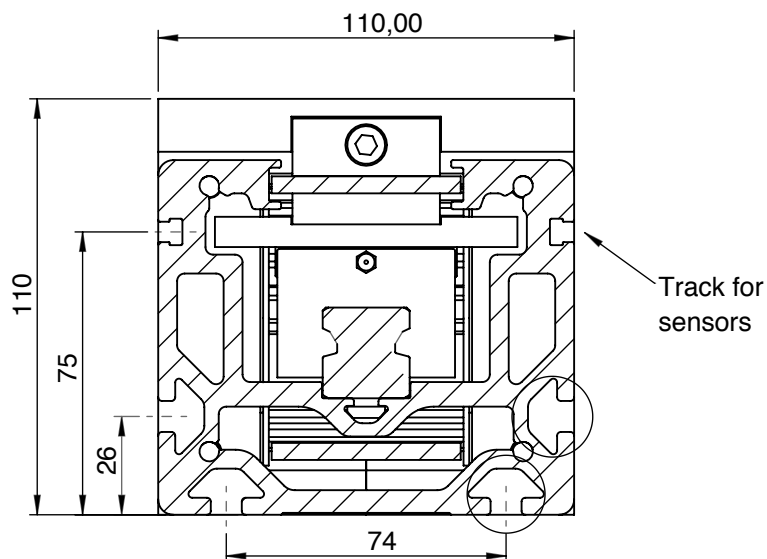


RHL110

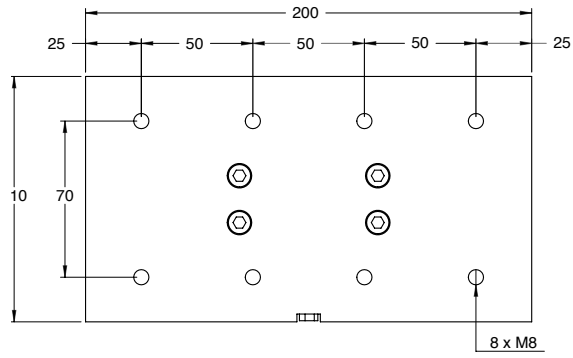


Total length = Stroke + slider + 220

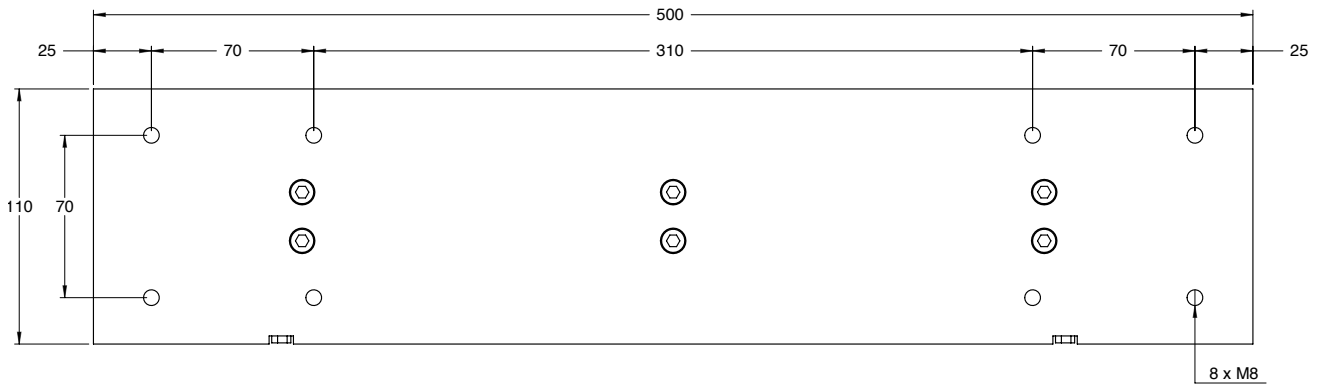
Stroke: We recommend to add min. 50 mm to the nominal stroke (stroke = nominal stroke + 50 mm)



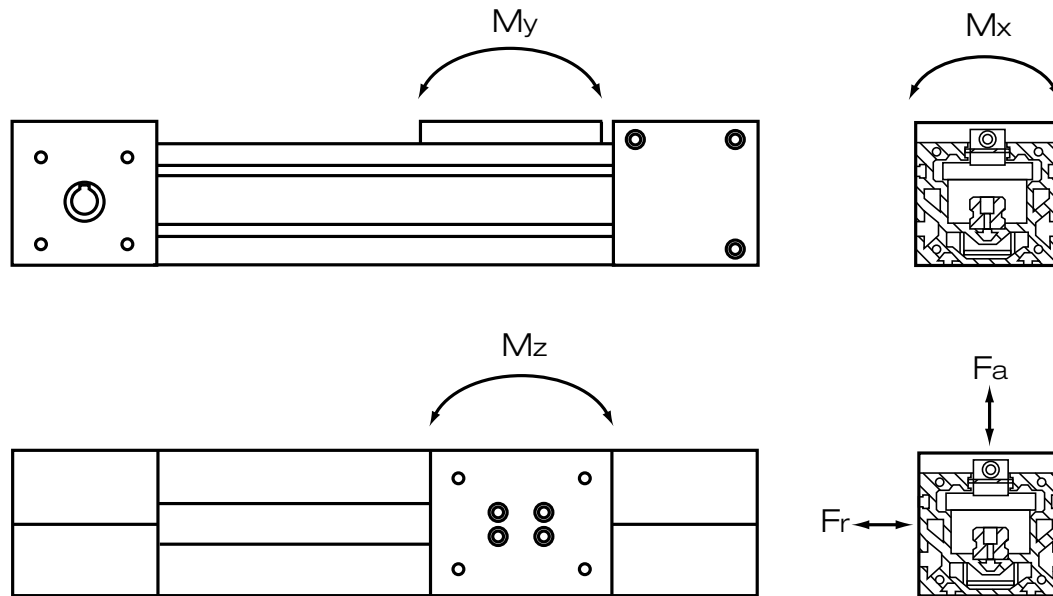
Slider V200 for RHL110



Slider V500 for RHL110



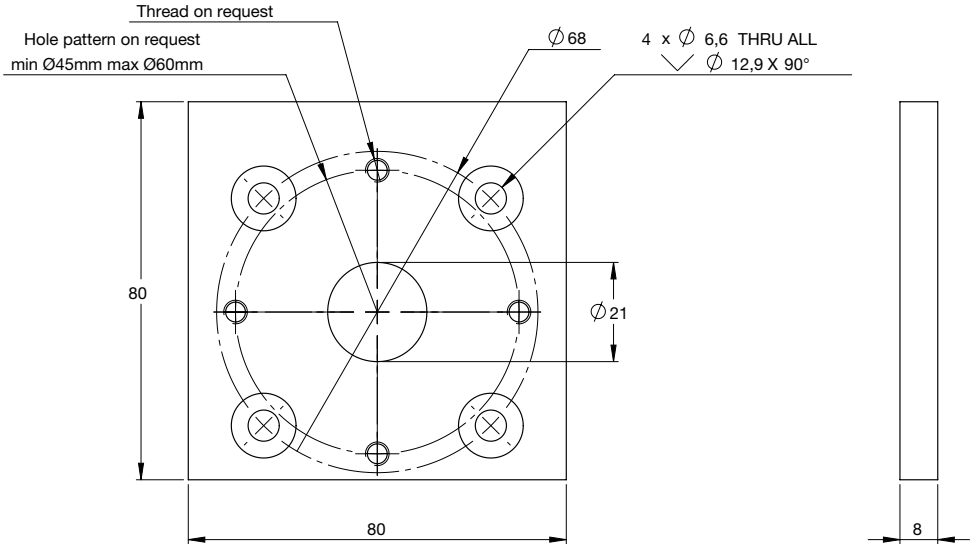
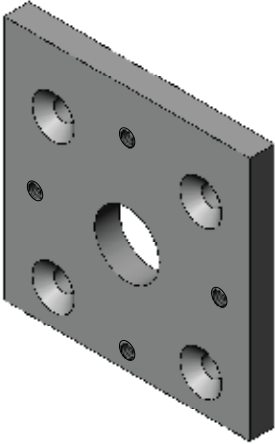
TECHNICAL DATA



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
RHL80-V100	100	0,8	5,2	0,80	1000	500	50	50	50
RHL80-V250	250	1,7	7,4	0,80	2000	1000	100	200	200
RHL80-V500	500	2,6	10,1	0,80	2000	1000	100	450	450
RHL110-V200	200	1,8	14,5	1,34	2000	1000	150	150	150
RHL110-V500	500	3,8	20,4	1,34	4000	2000	250	900	900

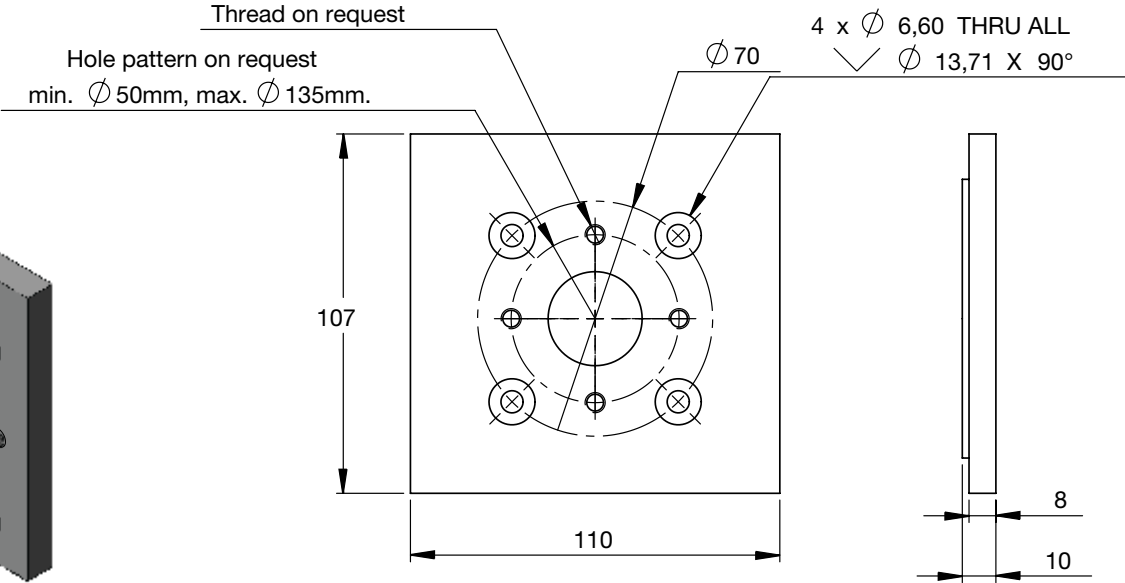
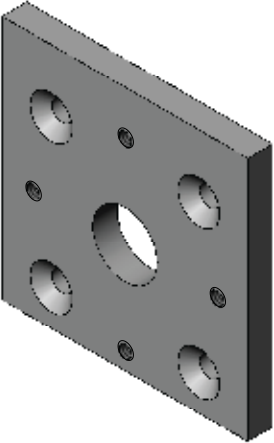
Mounting Plate for RHL80

RHL80-MP



Mounting Plate for RHL110

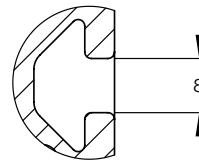
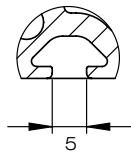
RHL110-MP



T-slot

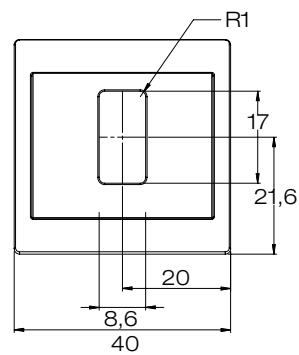
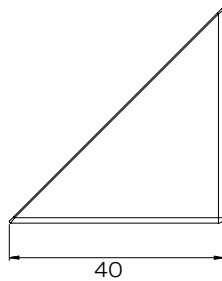
T-nuts available:

- RHL5-M5 (for RHL80)
- RHL8-M5 (for RHL80 & RHL110)
- RHL8-M6 (for RHL80 & RHL110)
- RHL8-M8 (for RHL80 & RHL110)



Angle Bracket

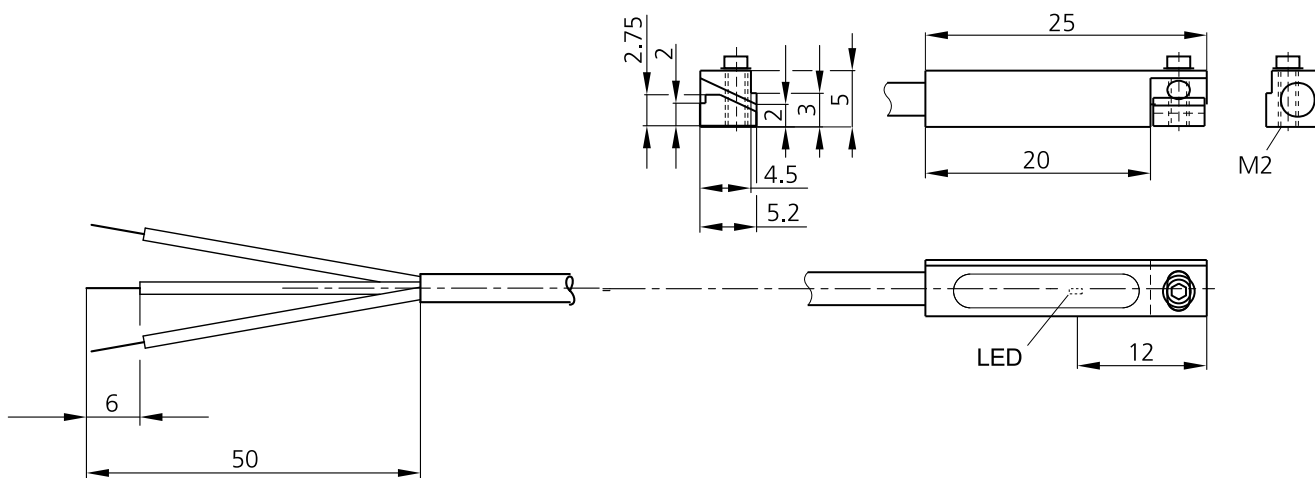
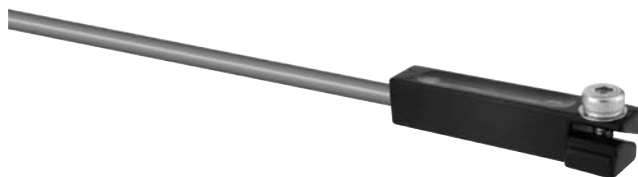
RHL6-4040 (for RHL80 & RHL110)



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

Type		RHL80	RHL110
Max. speed	(m/s)	2,5	2,5
Max. moment of rotation*	(Nm)	17	71
Pulley radius	(mm)	28,65	35,5
Belt type		AT 5	AT 10
Belt width	(mm)	25	49
Tooth pitch	(mm)	5	10
Max traction load*	(N)	600	2000
Belt breaking strength	(N)	6370	29780
Stroke for shaft revolution	(mm)	180	223

* For higher values please contact Rollco

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

	RHL80 -	1700 -	V500 -	H14
Unit type RHL80 RHL110				
Stroke				
Sliders for RHL80 V100 V250 V500				
Sliders for RHL110 V200 V500				
Drive Hollow Shaft with Keyway or Spline Pulley for RHL80 Ø 12 H7 Ø 14 H7 Ø 16 H7 Ø 11 spline pulley				
Drive Hollow Shaft with Keyway for RHL110 Ø 16 H7 Ø 19 H7				

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

Notes:

One Partner for Linear Components:



BALL SCREWS
Cylindrical and flange-nut.



BELT DRIVEN LINEAR UNIT
Complete unit -easy to mount



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



ACTUATORS
Ready-to-use or customized solutions.



LINEAR RAIL SYSTEM WITH ROLLERS
In stead of balls 4 raceways with rollers. Ideal for high load capacity.



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



MINIATURE LINEAR RAIL SYSTEM
Range from 3 mm up to 15 mm.



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



C-RAIL
A simple and cost effective linear bearing system



HEAVY LOAD SYSTEM
Range of many different shapes and sizes for heavy load.



BELLOWS
We produce and supply bellows according to your specific needs.



BALL BEARINGS
Linear ball bearings and hardened steel shaft.

Every care has been taken to ensure the accuracy of the information contained in this catalogue but no liability can be accepted for any errors or omissions. Even partial reproduction is allowed only by written permission by Rollco.

Rollco AB
Box 22234
Ekvändan 3
250 24 Helsingborg
Sweden
Tel. +46 42 150040
Fax +46 42 150045
www.rollco.se

Rollco A/S
Bramdrupskovvej 15
6000 Kolding
Denmark
Tel. +45 7552 2666
Fax +45 7552 0708
www.rollco.dk

Rollco OY
Kuohuntie 2
36200 Kangasala
Finland
Tel. +358 207 57 97 90
Fax +358 207 57 97 99
www.rollco.fi

Rollco Norge AS
Bergliveien 2
3400 Lier
Norway
Tel. +47 32 84 00 34
Fax +47 32 84 00 91
www.rollco.no

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



ROLLCO
SPECIALIZED
ON LINEAR MOTION