

# LINEAR UNIT RHL



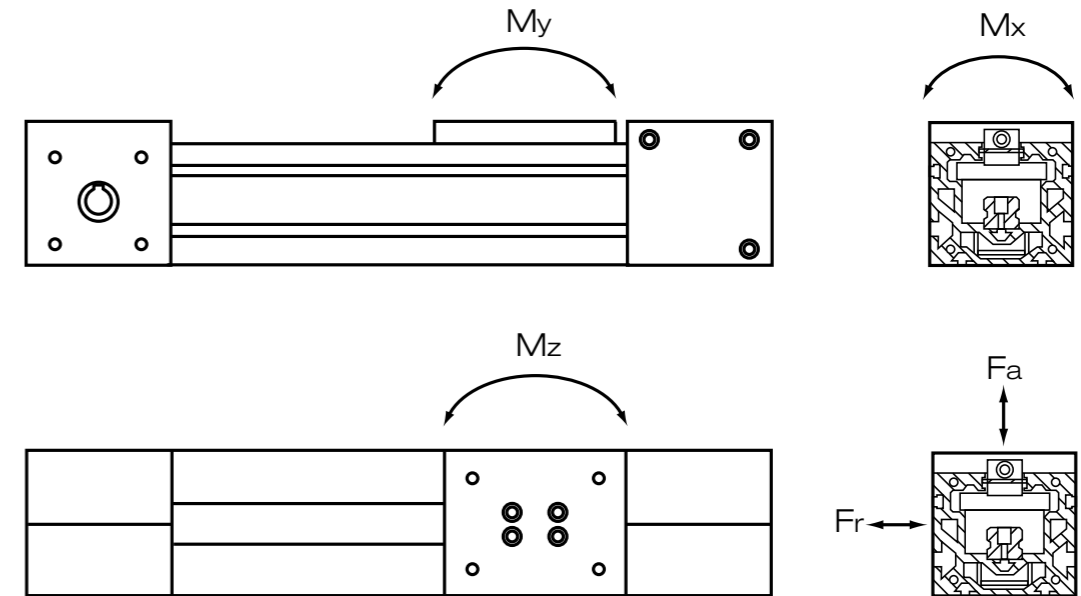
**ROLLCO**  
SPECIALIZED  
ON LINEAR MOTION

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# Linear Unit RHL



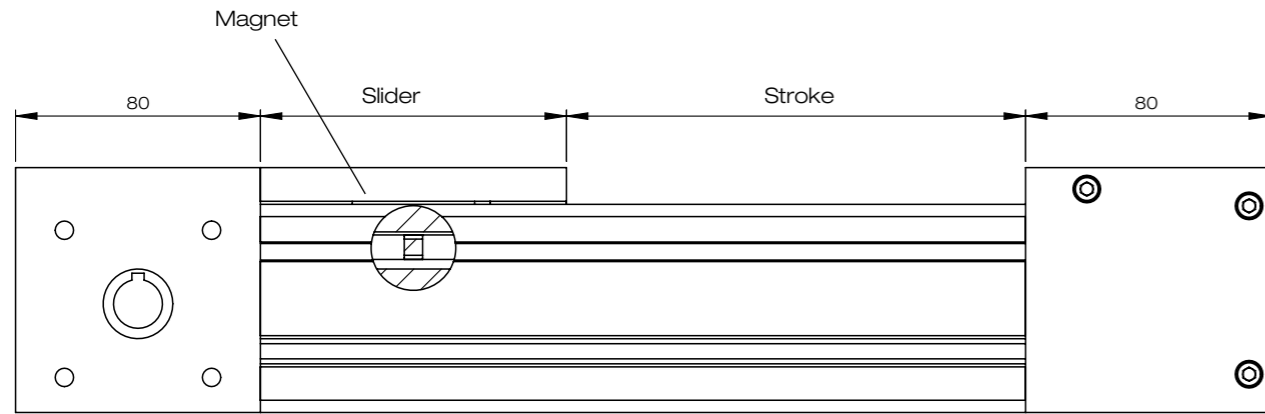
The belt driven linear units type RHL80 and RHL110 are ready to mount, complete units which saves both cost and time in the construction phase. The units are based on aluminium profile and equipped with monorail, belt and pulleys

The units are stocked in semi-finished components and can be assembled and shipped within a few days.

Customized versions can be made - please contact Rollco.

Article No.	Slider length mm	Weight/kg			Permissible load (N)		Permissible moment (Nm)		
		Mass of slider	Stroke 0 mm	Pr. 100 mm	Fa	Fr	Mx	My	Mz
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	100	100	100
RHL110-V500	500	3,8	20,4	1,34	4000	2000	200	900	900

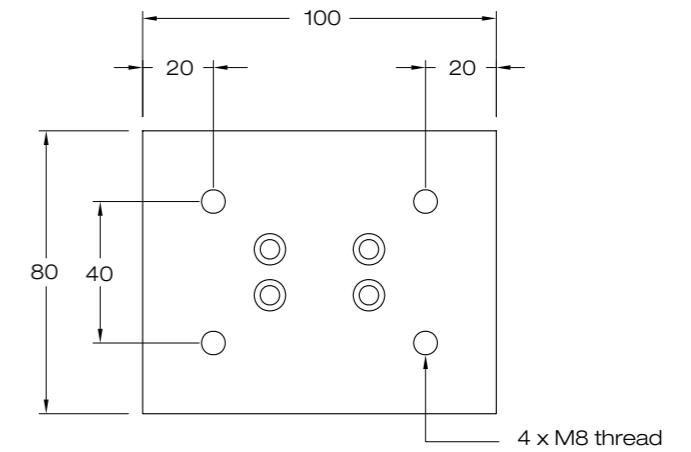
### RHL80



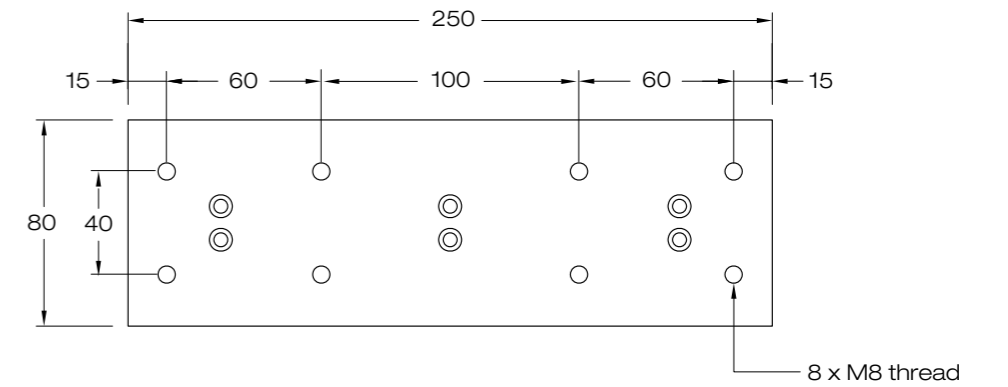
**Total length** = Stroke + slider + 160

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

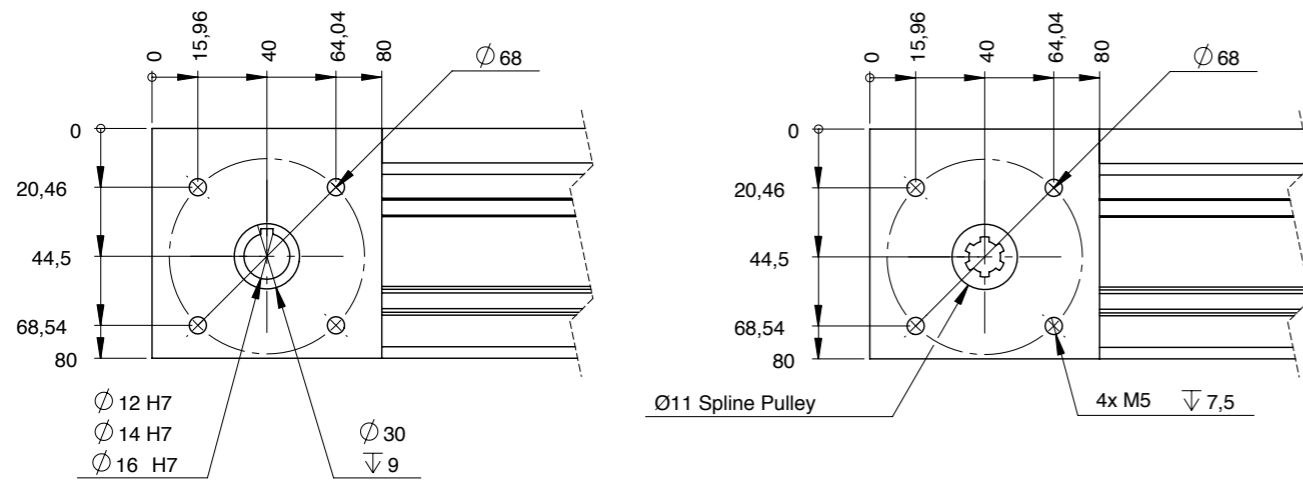
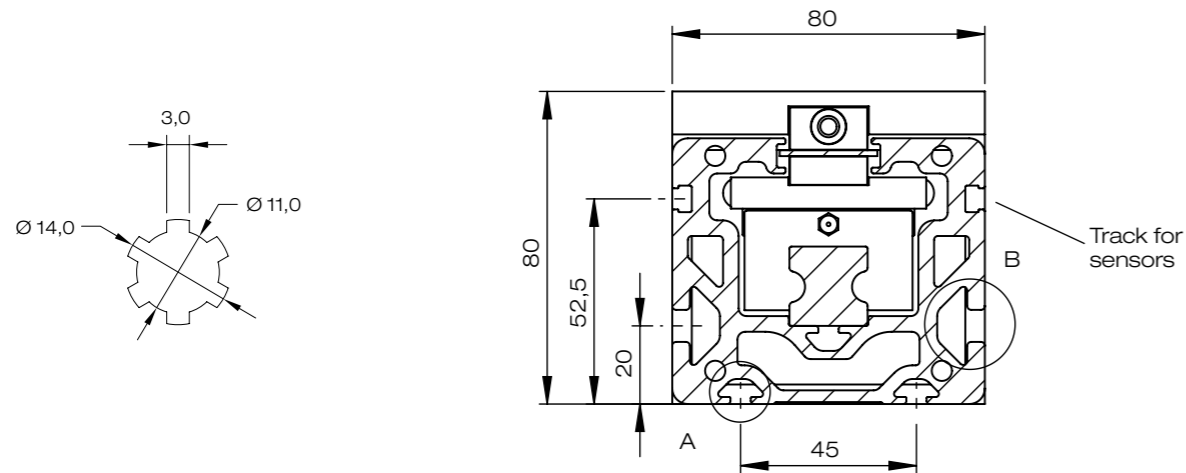
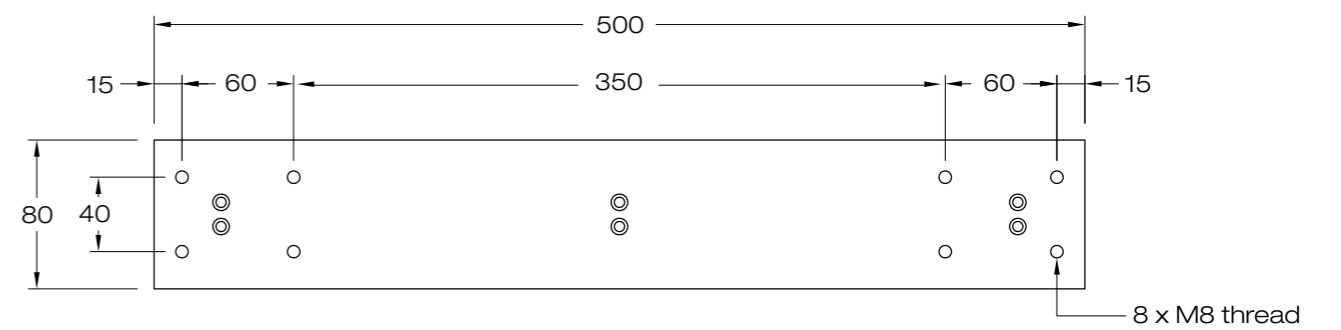
### Slider V100 for RHL80



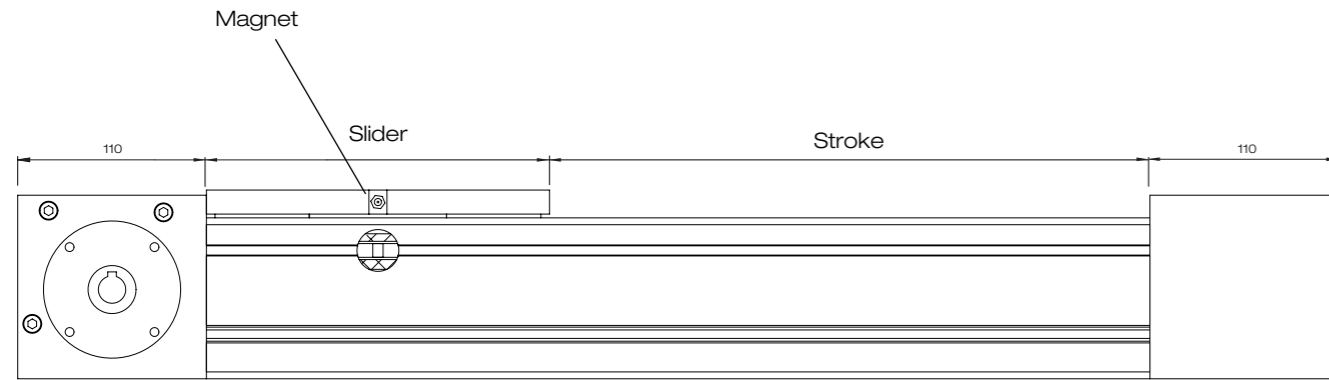
### Slider V250 for RHL80



### Slider V500 for RHL80

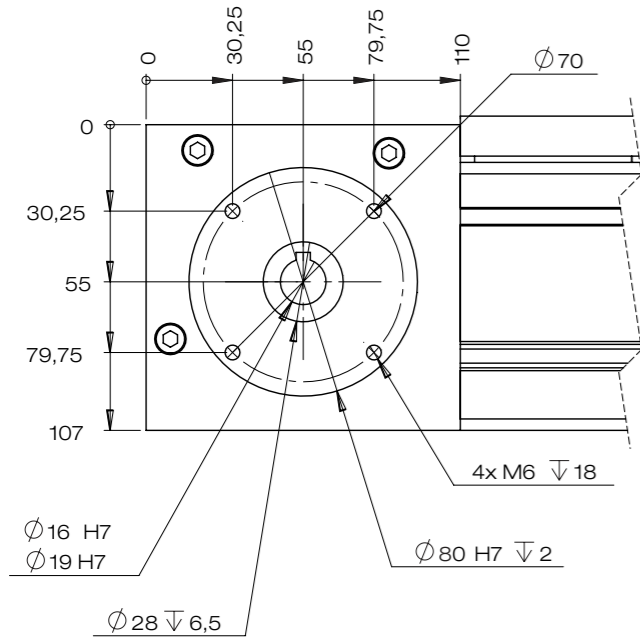
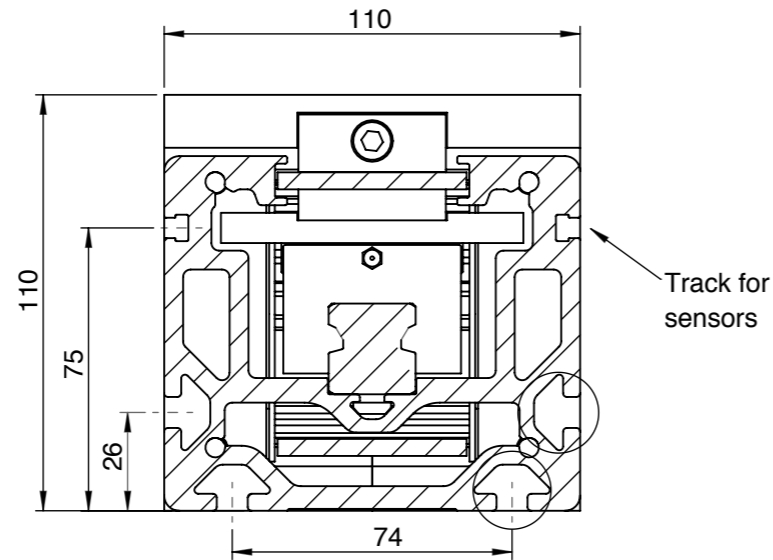


# RHL110

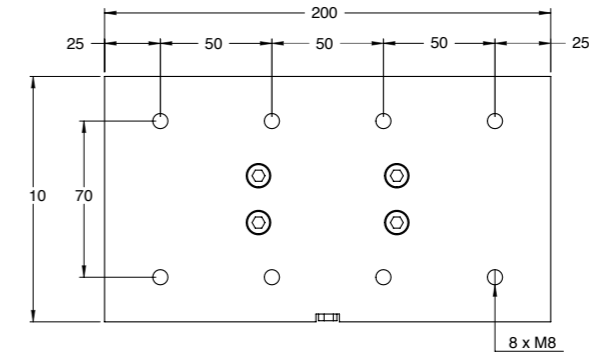


**Total length** = Stroke + slider + 220

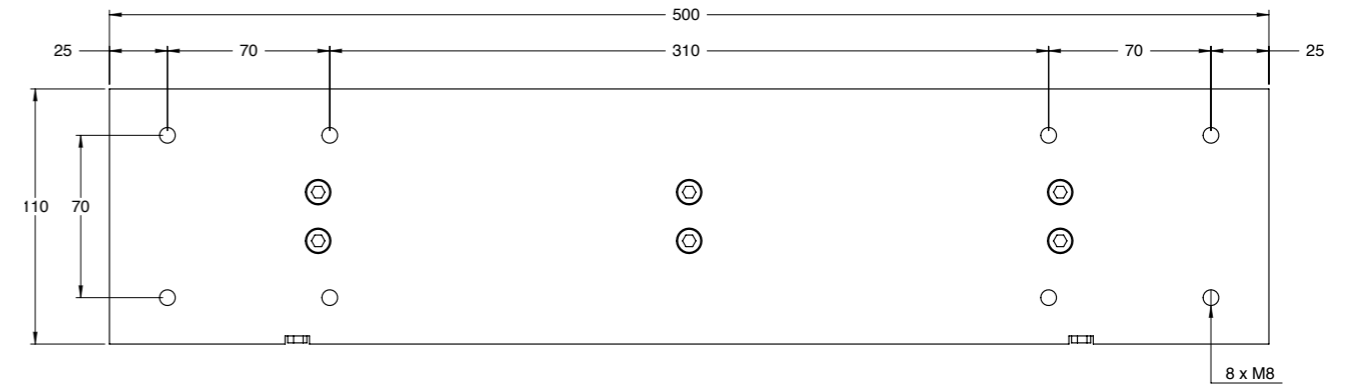
**Stroke:** We recommend to add min. 50 mm to the nominal stroke (stroke = nominal stroke + 50 mm)



# Slider V200 for RHL110

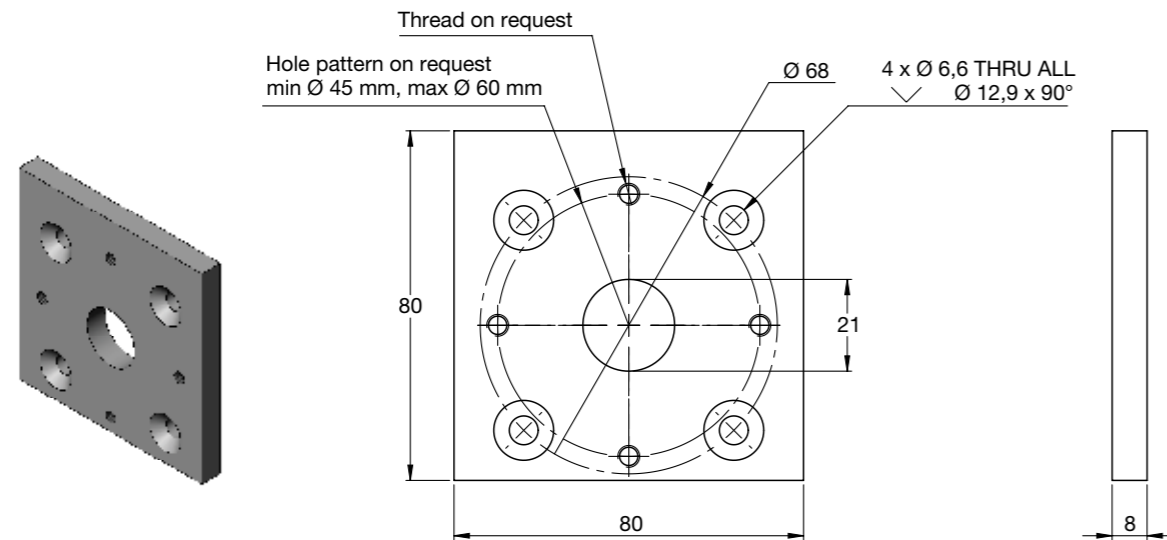


# Slider V500 for RHL110



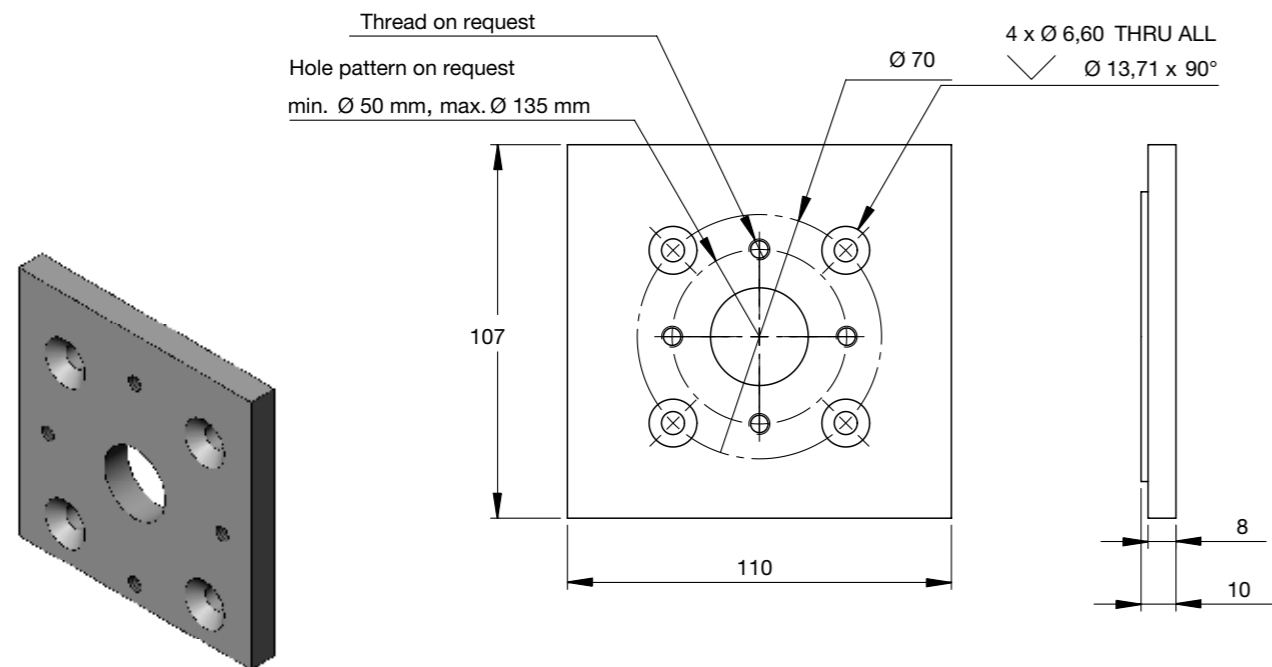
## Mounting Plate for RHL80

RHL80-MP



## Mounting Plate for RHL110

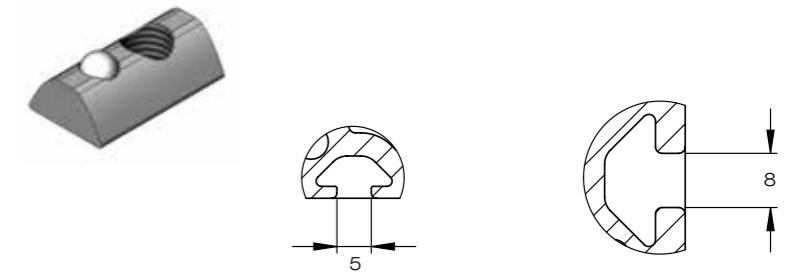
RHL110-MP



## T-slot

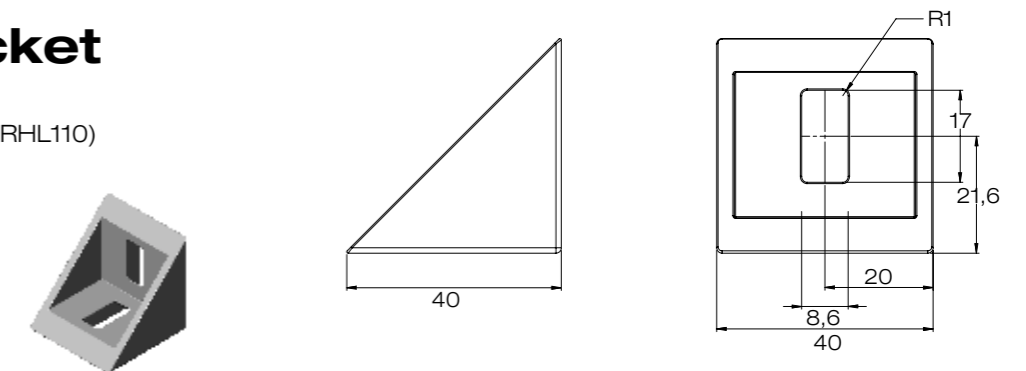
T-nuts available:

- PN4025 (RHL5-M3) (for RHL80)
- PN4030 (RHL5-M4) (for RHL80)
- PN4035 (RHL5-M5) (for RHL80)
- PN1035 (RHL8-M5) (for RHL80 & RHL110)
- PN1040 (RHL8-M6) (for RHL80 & RHL110)
- PN1045 (RHL8-M8) (for RHL80 & RHL110)

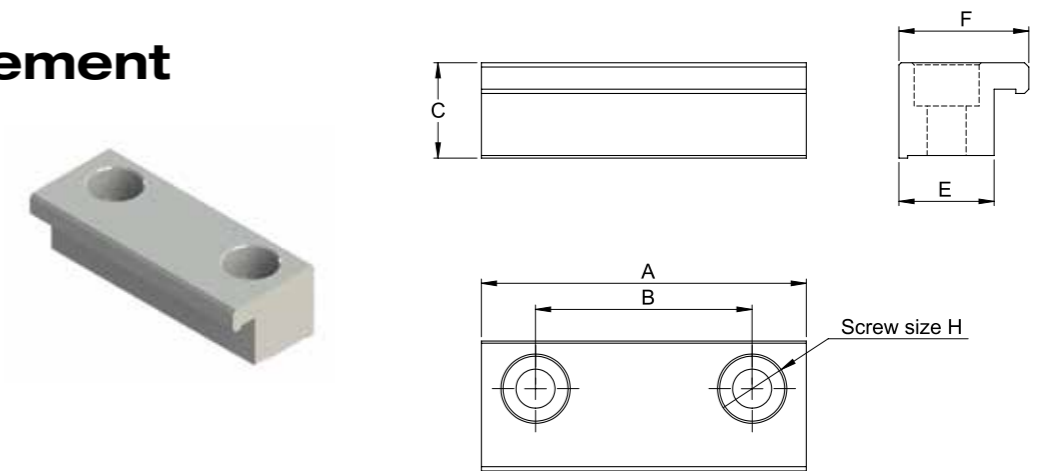


## Angle Bracket

RHL6-4040 (for RHL80 & RHL110)



## Fixing Element

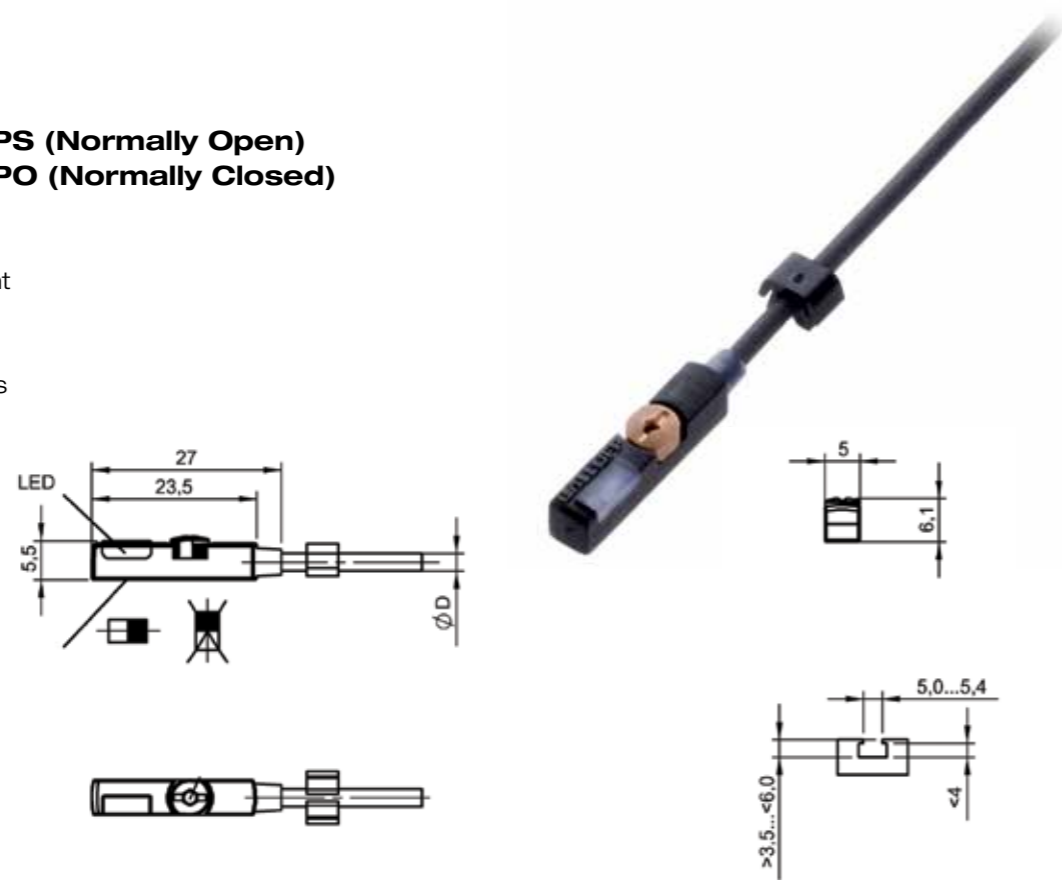


Article No.	A	B	C	E	F	H
RHL80-FE8S (side)	75	50	22	22	30	M8
RHL80-FE5B (bottom)	75	50	18,5	25	30	M8
RHL110-FE8S (side)	75	50	28	22	30	M8
RHL110-FE8B (bottom)	75	50	20	22	30	M8

## Sensor

**RHL-BMF235K-PS (Normally Open)**  
**RHL-BMF235K-PO (Normally Closed)**

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



### Technical details:

	RHL-BMF235K-PS (NO)	RHL-BMF235K-PO (NC)
Service voltage	10 ... 30 V DC	
Output	PNP, NO	PNP, NC
Maximum rating	200 mA	
Contact rating	6 W max. (30 V, 200 mA)	
Internal power consumption	6 mA	
Voltage drop, static	2,5 V max	
Operating frequency	5000 Hz	
Reproducibility	<0,1 mm	
Ambient temperature	-25 ... +85 °C	
Insulation voltage endurance	75 V DC	
Protection class	IP 67	
Indicators	LED: yellow output signal	
Mounting	Hex key size 2,0 mm. Max. tightening torque 0,4 Nm	
Casing material	PA12	
Connection	Cable PUR, 2,0 m as standard	
Approval	CE	
Short circuit protected	Yes	

## Transmission

Type		RHL80	RHL110
Max. speed	(m/s)	2,5	2,5
Max. moment of rotation*	(Nm)	17	71
Pulley radius	(mm)	28,65	36,6
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	230

\* 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
<b>Unit type</b> RHL80 RHL110				
<b>Stroke</b>				
<b>Sliders for RHL80</b> V100 V250 V500				
<b>Sliders for RHL110</b> V200 V500				
<b>Drive Hollow Shaft with Keyway or Spline Pulley for RHL80</b> Ø 12 H7 Ø 14 H7 Ø 16 H7 Ø 11 spline pulley				
<b>Drive Hollow Shaft with Keyway for RHL110</b> Ø 16 H7 Ø 19 H7				

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

## Product Overview



**BALL SCREWS**  
High efficiency ball screws and nuts.



**LINEAR UNIT QME**  
Complete linear drive unit with ball bushings and ball screws.



**LINEAR UNIT RHL**  
Complete unit with tooth belt.



**LINEAR UNITS**  
Complete unit with ball screw or tooth belt.



**ALUMINIUM PROFILES**  
A full program of aluminium profiles and accessories.



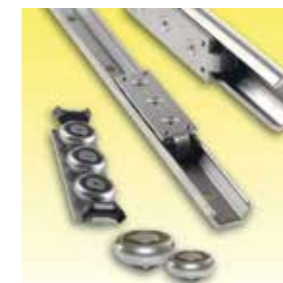
**BELT CONVEYOR**  
Transportation system with different drive options



**U-RAIL**  
Rollers in steel or polyamide. For light, standard or heavy load. Mounted in U-rails.



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



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



**LINEAR RAIL SYSTEM**  
The most standardized linear rail system.



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



**EASYSLIDE**  
A strong solution for short strokes.



**ROLLER GUIDES**  
Four raceways with rollers. High load capacity.



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



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



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

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