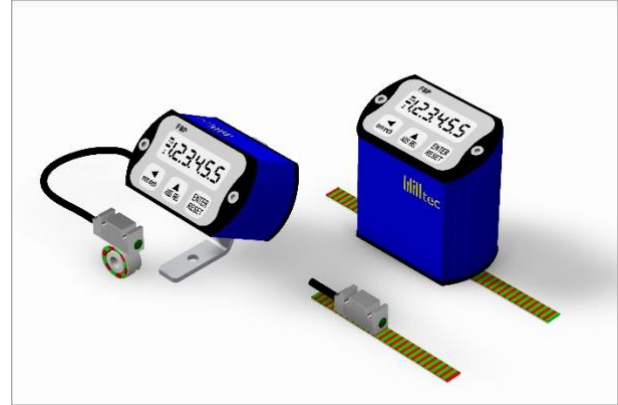


Datasheet

General features

- Magnetic distance and angle measuring system in compact design; with programmable measuring display and integrated magnetic sensor.
- Sensor and electronics are protected by a robust aluminium housing.
- Simple mounting; directly (bracket) or with mounting bracket.
- In combination with an incremental magnetic tape (PM5) or a magnetic ring (MRI), a cost-effective and flexible solution to detect linear and rotational movements.
- The measuring system is powered by a ½AA 3.6V battery uninterrupted for approx. 4 years.



Mechanical characteristics

Display	LCD; 6-stellig
Digit high	10 mm
Display Range	-999999; 999999
Sensor	
Housing	Aluminium; black anodized
Cable	Cable length: 0,3 - 0,5 - 1,0 - 3,0 - 5,0 m (supplied pre-wired and not detachable from the display)
Mounting frame	Aluminium; blue powder-coated
Resolution	0,1 (Standard); 0,01 freely programmable
Accuracy	± 0,1 mm
Speed	< 2,5 m/s
Available functions, Activatable tracer	Setting of counting direction; measurement units (mm, inches, degrees); decimal point and multiplication facto; absolute/relative; reset/ preset mode
Keyboard	3 programming and functions buttons
Accessories	
Measuring body	Magnetic ring (MRI) Magnetic tape (PM5)
Rail	Profiled rail (SB)
Distance: Sensor/Scale	< 1 mm
Operating temperature	0 - 50 °C
Relative humidity	35 - 85 %
Electromagnetic compatibility	2004/108/EC
IP-Rating	Display IP54, Sensor IP67



For more information on our accessories, please refer to the corresponding data sheets.

Electrical characteristics

Power supply	½ AA 3,6 V battery (Lithium-thionyl chloride)
Battery life	4 years

Datasheet

Variants and mounting position

F8P Installation housing with sensor



F8P in mounting housing TowerLine **TL**



F8P in mounting housing TowerLine **TL**, on the bracket



F8P in mounting housing TowerLine/Short **TL/S**



F8P in mounting housing TowerLine **TL-IF**, directly on the bracket, integrated sensor, installation position: frontal



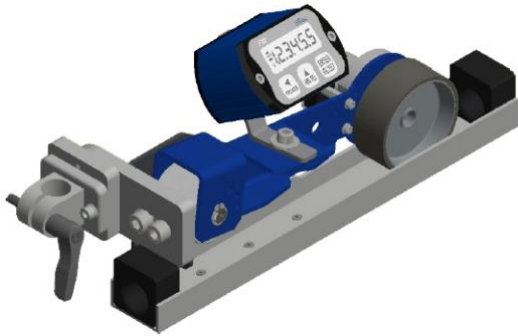
F8P in mounting housing TowerLine **TL-IL**, directly on the bracket, integrated sensor, installation position: lengthwise



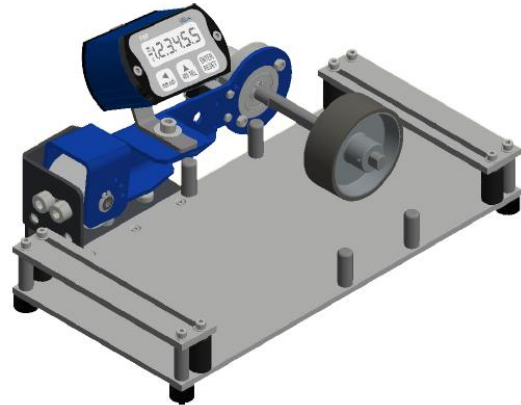
Datasheet

Application examples

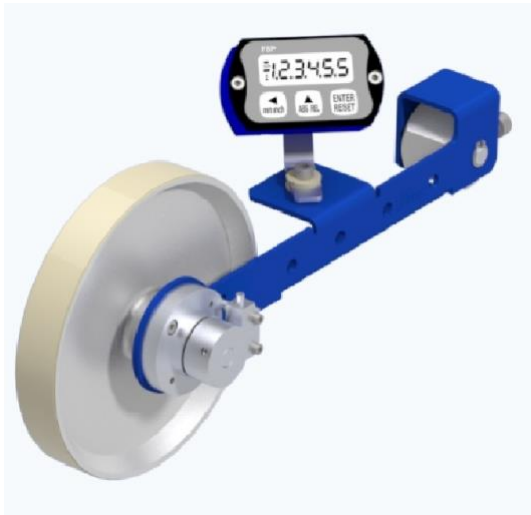
Electronic meter counter MZ-E-Light Short with integrated measuring system **F8P** with profiled rail (U-profile), incl. pass-through guiding (guide sleeve) and flange clamp connector for round tube.



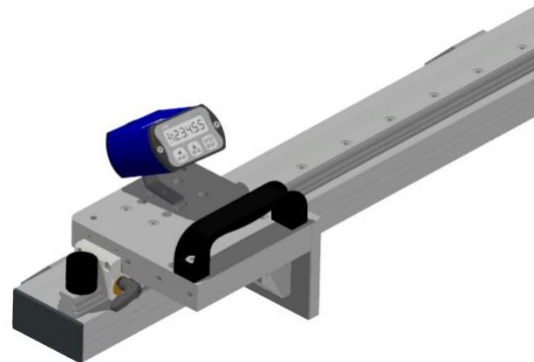
Electronic meter counter MZ-E-Light Short with integrated measuring system **F8P** with profiled rail (flat), incl. adjusting module for the width of the pass-through.



Electronic meter counter MZ-E-Light Short with integrated measuring system **F8P** and measuring wheel on supporting arm.

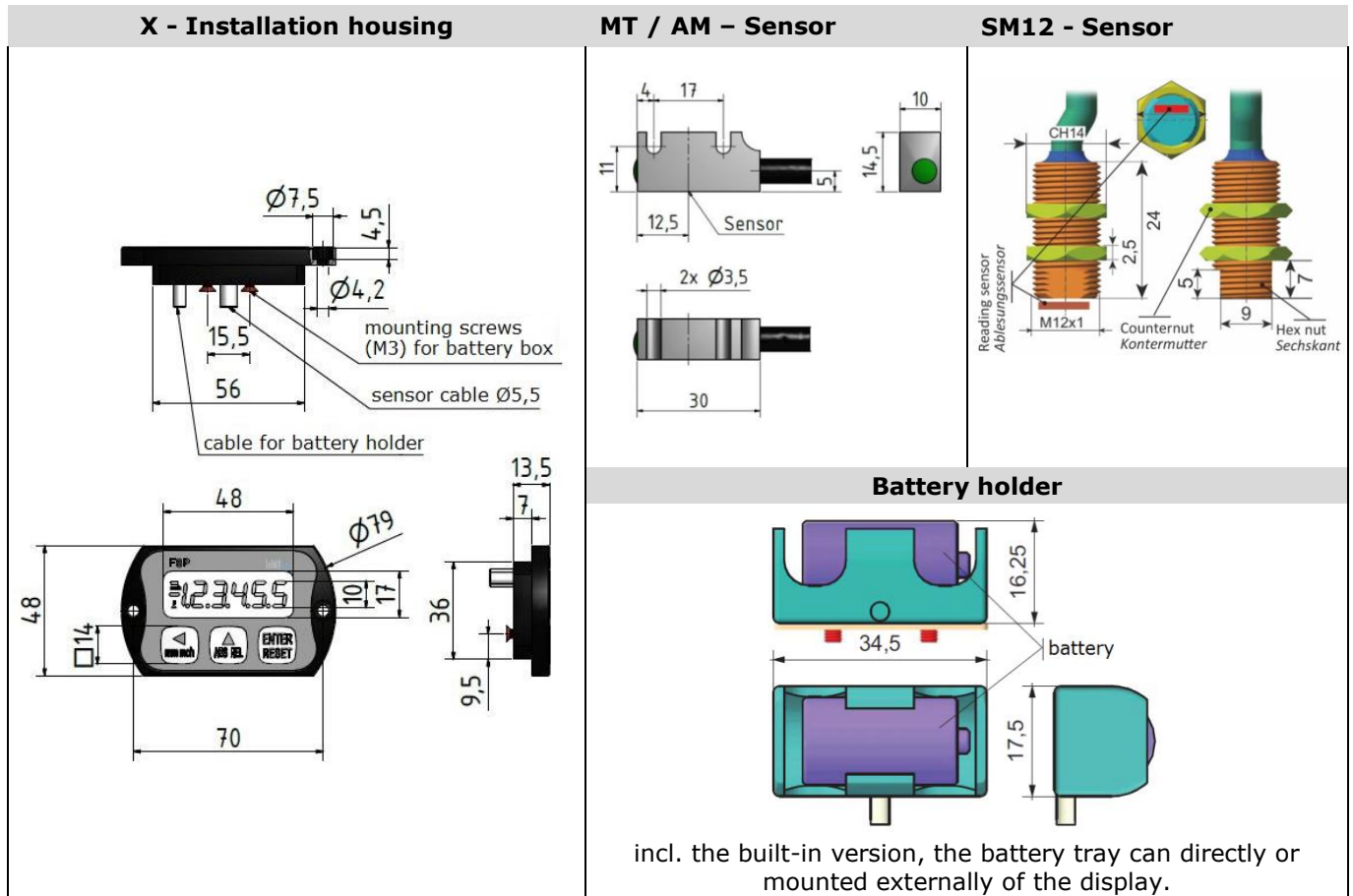


Length measuring stop LIN-KIT-Compact with integrated measuring system **F8P**.

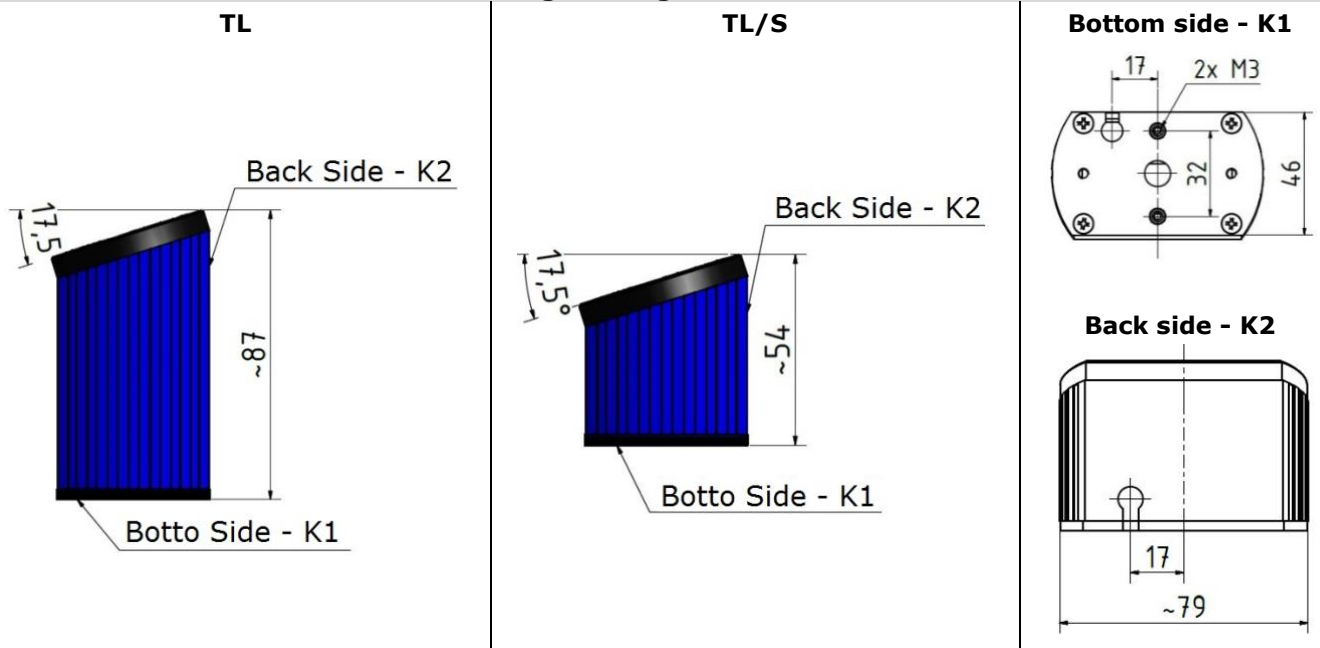


Datasheet

Dimensions

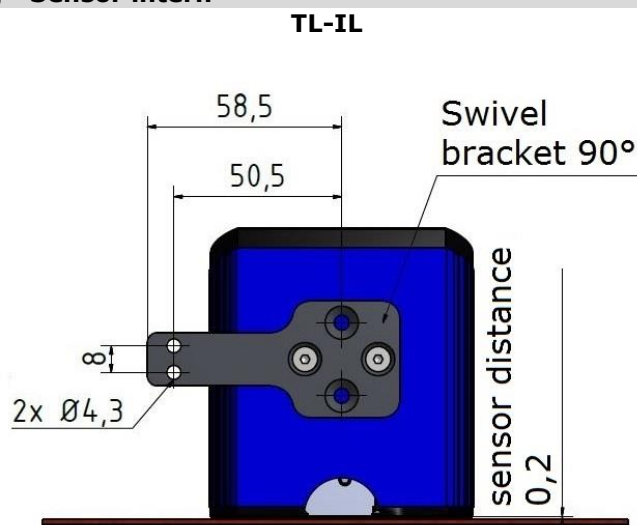
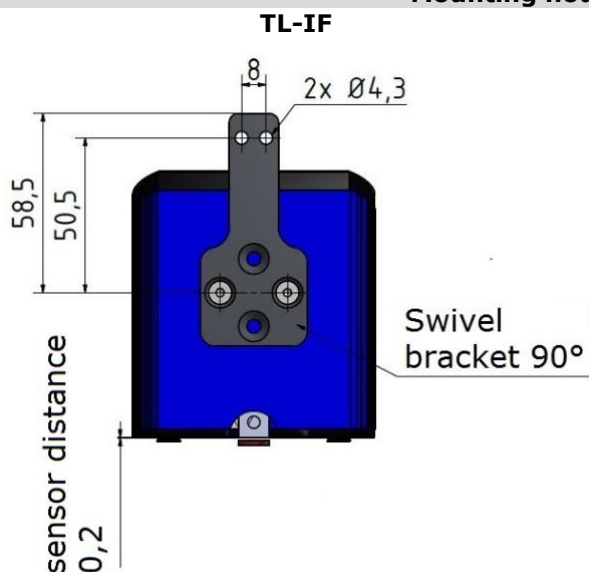


Mounting housing - Sensor extern



Datasheet

Mounting housing - Sensor intern



Accessories

Angle holder 17339



incl. every standard ordering

Angle holder 17337



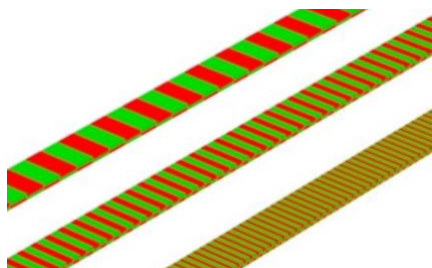
on request

Angle holder 17338



on request

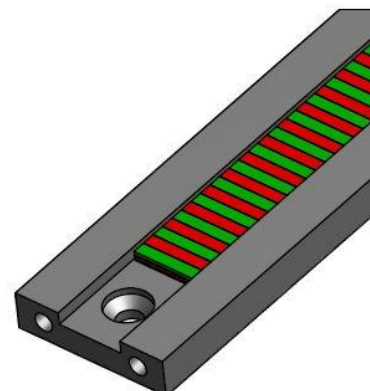
Magnetic tape (PM5)



Magnetic ring (MRI)



Profiled rail (SB)



Datasheet

Ordering example Measuring system

Type **F8P** - **0,5** - **MT** - **TL-K2**

Cable length

0.3 = 0,3 m
0.5 = 0,5 m
 1.0 = 1,0 m
 3.0 = 3,0 m
 5.0 = 5,0 m
 X = TL-IF/ TL-IL (= sensor integrated in the mounting housing)

Magnetic sensor

MT = Magnetic sensor
 SM12 = Magnetic sensor round, M12
 AM = Magnetic sensor for magnetic ring

Mounting position

X = Installation housing, not specified
 TL-K1 = TowerLine; mounting housing – Cable outlet bottom side
TL-K2 = TowerLine; mounting housing – Cable outlet back side
 TL/S-K1 = TowerLine/Short; mounting housing – Cable outlet bottom side
 TL/S-K2 = TowerLine/Short; mounting housing – Cable outlet back side
 TL-IF = TowerLine; sensor integrated in the mounting housing, frontal
 TL-IL = TowerLine; sensor integrated in the mounting housing, lengthwise

Ordering example Magnetic tape

Type **PM5** - **36** - **1** - **0** - **DB50**

Pole pitch

5 = 5 mm

Accuracy (refers to 1m length)

36 = 36 µm
 18 = 18 µm

Measuring length [m]

1 = 1 m
 Length for magnetic tape (PM5) in meters.
 The length ordered should be on each side 40 mm longer than the desired measuring length.

Reference point [mm]

0 = without

Covering tape

DB50 = with covering tape
 0 = without

Datasheet

Ordering example Magnetic ring

Type	MRI	-	31	-	20	-	5	-	20
MRI-A									
MRI									
Outer diameter									
31	= 31 mm *								
Pole number									
20	*								
Pole pitch / single signal									
5	= 5 mm								
E	= single signal								
Inner diameter									
20	= 20 mm *								

* Others, see table: Magnetic ring **versions**

Versions Magnetic ring

Type	Outer diameter	Magnet width	Pole number	Inner diameter	
				Standard	On request
MRI	31	5	20	8, 14, 20	6 - 20
MRI	38	5	24	8, 14, 20	6 - 25
MRI	50	8	32	20, 40	10 - 40
MRI	72	7	46	20, 50	10 - 50
MRI	80	10	50	20, 50	10 - 50
MRI-A	32	5	20	8, 14, 20	6 - 20
MRI-A	39	5	24	8, 14, 20	6 - 25
MRI-A	51	8	32	20, 40	10 - 40
MRI-A	73	7	46	20, 50	10 - 50

Basis: Pole pitch 5 mm (other pole pitches on request) or single signal.



Please order the magnetic tape (PM5) and the magnetic ring (MRI) separately. To do so, use the ordering code on the corresponding datasheets.

Without prior notice, the products may be subject to modifications that the Manufacturer reserves to introduce as deemed necessary for their improvement. Mistakes excepted.