

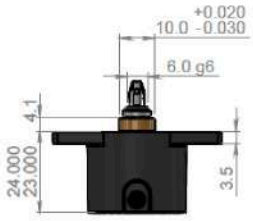
- **Non-contacting, magnetic**
- **Long life**
- **Electrical angle 720° up to 5760° in 360°-steps available (equates to 2 ... 16 turns)**
- **True-Power-On system (absolute)**
- **High shock and vibration resistance**

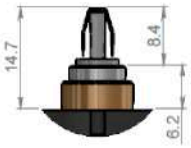
By combining separate single-turn angle detection and multi rotation detection, this compact sensor is able to measure angles across multiple turns providing high resolution and accuracy. As the sensor can detect turns in an unpowered state and stores its position in non volatile memory, it is a real true power on angle sensor in a very compact size.

Specifications	
Mechanical	
Typical Life Cycle	> 50 x 10^6 (mechanical)
Torque	0.5 Ncm (IP65), 1.0 Ncm (IP67)
Measuring range	720° up to 5760° in 360°-steps available (equates 2 ... 16 turns)
Max. operating speed	800 RPM
Housing	High grade temperature resistant plastic
Bearing	Bronze sleeve
Shaft	Stainless Steel - push-on coupling or marked shaft
Environmental	
Operating temperature	-40°C to +85°C
Vibration	5...2000 Hz, A_{max} = 0.75 mm, a_{max} = 20 g
IP rating	IP65 (IP67 on request)
Electrical	
Supply Voltage	5 VDC +/- 0,5V
Output signal	Ratiometric load > 10 kΩ; 0.1...10 V load > 10 kΩ; 4...20 mA, burden < 500Ω
Independant linearity	0.25...0.05 (see table below)
Resolution	16 bit total
Repeatability	+/- 0.1%
Response time	max. 2 ms
Isolation resistance	≥ 10 MΩ (500 VDC)
Electrical connection	See ordering code

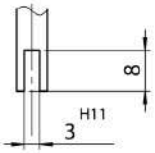
Linearity					
Measuring range	3	6	10	16	turns
Linearity typ.	0.167	0.083	0.050	0.031	%
Linearity max.	0.267	0.183	0.150	0.131	%

Dimensions in mm - Euro MT

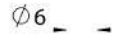


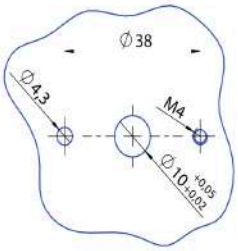


Dimensions of driving shaft for Euro MT 2841 parallel displacement < 0.05mm



When the shaft marking points to the cable outlet, the sensor is in a full turn position.





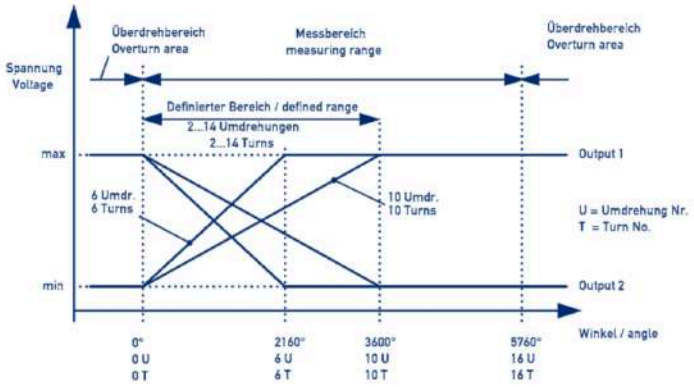
Recommended hole pattern
2x Ø 4,3 or 2x M4



Wiring
According to Spec 55 from Raychem
(55A 0111-22 ...)
Insulation: XLETFE
Outer Ø of insulation: 1.09mm
Cross-section: 0.38mm²
Wire diameter: 19 x 0.16mm
Operating temperature: -65 ... + 150 ° C

Red-Supply
White-Single
Black-Ground

Output Signal



Ordering information

(Please use the characters in the chart below to construct your product code)

Sample Code Euro-MT - 2841 - 003 - 2 2 1 - 910

Mechanical version

2841 push-on-coupling, IP65

Supply Voltage

2 5 VDC (4.5 ... 5.5)

Output signal

2 0.5 ... 4.5 V ratiometric to Ub

Output configuration

1 rising curve CW

Electrical connection

910 3 x 480 mm Raychem cable

Red - Supply
White - Single
Black - Ground

Stock model : Euro-MT 2841-003-221-910

Custom options available upon request for 25+ pieces

If you require a customized solution for your program contact our sales team.