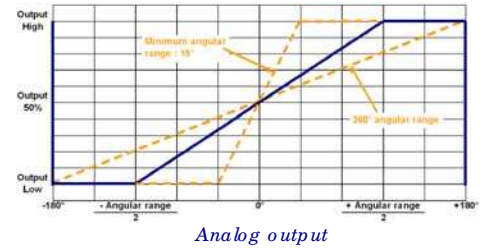
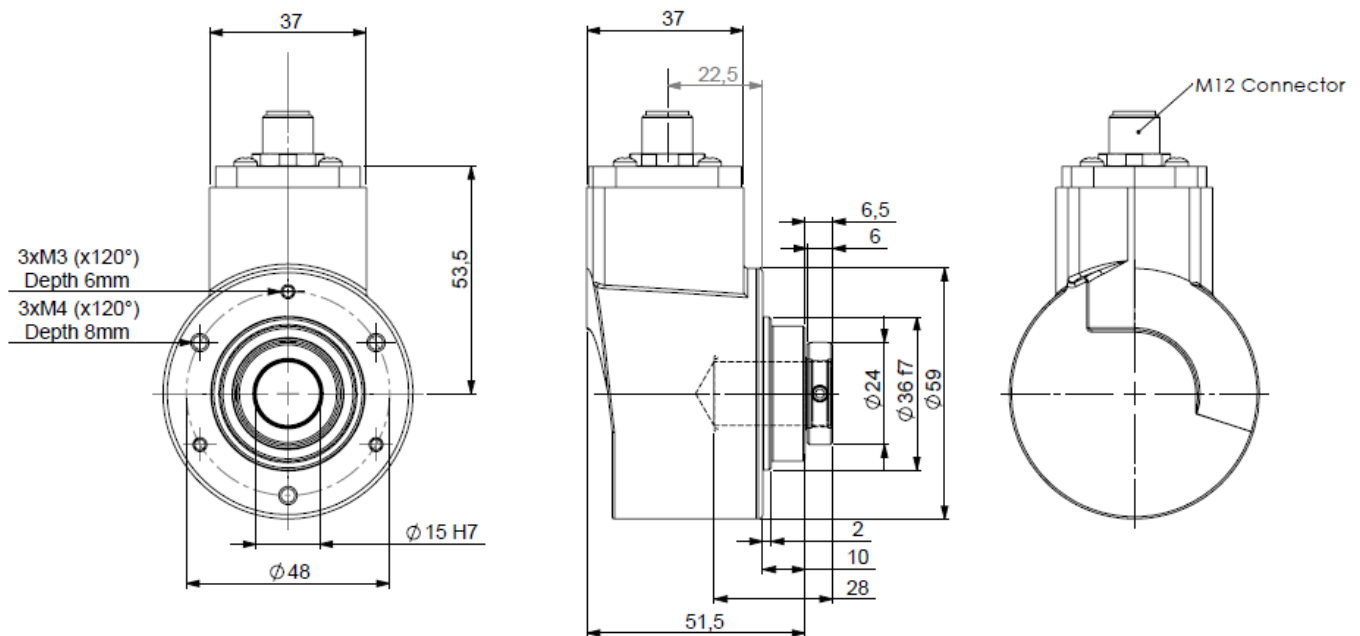


PRELIMINARY - MAGNETIC ANALOG ABSOLUTE MULTI TURN ENCODERS, THK5 RANGE

- Extra-flat encoder, blind shaft \varnothing 14 mm or 15mm, reduction hubs available: 6, 8, 10, 12mm
- Application fields: agriculture, construction, forestry vehicles, medical, solar panels...
- Robustness and excellent resistance to shocks / vibrations.
- Standard IP 65 protection (IP69K option).
- Operating temperature range: -20°C to 85°C .
- Magnetic technology.
- Universal supply 5 to 30Vdc.
- Available resolution up to 12 bits per revolution.
- Turn counting up to 16 bits.
- Also available: PWM, SSI and CANopen outputs.
- Standard M12 or cable output.



STANDARD THK5 DIMENSION



MECHANICAL DATA

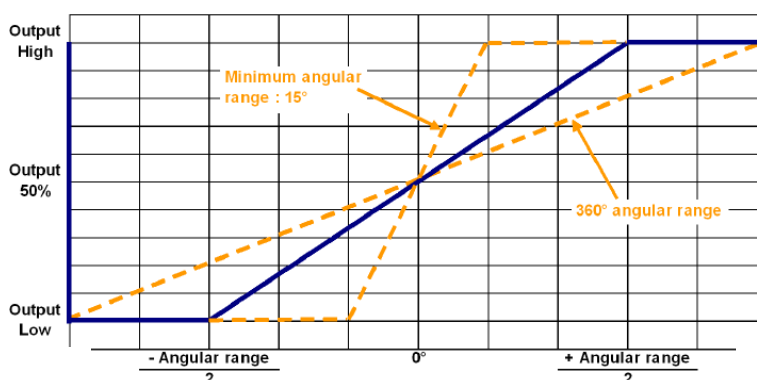
Material	Cover: steel	Vibration (EN60068-2-6)	$\leq 200\text{m.s}^{-2}$ (10 ... 2 000 Hz)
	Body: aluminium	EMC	EN 61000-6-4, EN 61000-6-2
	Shaft: stainless steel	Isolation	100V (1 min)
Bearings	6 803 serie	Weight	0,500 kg
Maximum load	Axial: 20 N	Operating temperature	$-20 \dots +85^{\circ}\text{C}$ (encoder ^{TP})
	Radial: 50 N	Storage temperature	$-20 \dots +85^{\circ}\text{C}$
Shaft inertia	$\leq 2,2 \cdot 10^{-6} \text{ kg.m}^2$	Protection (EN 60529)	IP 65
Torque	$\leq 6 \cdot 10^{-3} \text{ N.m}$	Torque (ring pressure screw)	nominal: 1.5N.m, break: 2.0N.m
Permissible max. speed	$6\,000 \text{ min}^{-1}$	Theoretical mechanical life time 10^9 turns ($F_{\text{axial}} / F_{\text{radial}}$)	
Continuous max. speed	$6\,000 \text{ min}^{-1}$	10 N / 25 N	185
Shock (EN60068-2-27)	$\leq 2000\text{m.s}^{-2}$ (during 6 ms)	20 N / 50N	24

PRELIMINARY - MAGNETIC ANALOG ABSOLUTE MULTI TURN ENCODERS, THK5 RANGE

ELECTRICAL DATA

Power supply	5V or 10-30Vdc or 15-30Vdc	Introduction	< 1 s
Consumption without load	< 40mA (at 24Vdc)	Response time	< 10 ms (5I2 & 3I1 electronic)
Resolution	12 bits		< 1ms (other electronics)
Accuracy	± 0.3 %	Advised load	>10kOhms (Voltage output)
Repeatability	± 0.1 %		5000hms (current output)

ANALOG OUTPUT



CONNECTION

	+Vcc	0V	Analog output	Ground
L7 - cable	Brown BN	White WH	Green GN	General shielding
I4 - M12 4 pin outs	2	1	3	Connector body

ORDERING REFERENCE (Contact the factory for special versions, ex : stainless steel version, connections...)

	Mechanics	Supply Output stage	Direction	Resolution	Connection	Connection orientation
THK5 : Absolute multi turn encoder	14 : 14mm blind shaft 15 : 15mm blind shaft option	3I1 : 15 to 30Vdc 0..10V output 5I2 : 10 to 30Vdc 0.5..4.5V output 3I3 : 15 to 30Vdc 4..20mA output 3I4 : 15 to 30Vdc 0..20mA output 2IR : 5V +/- 5% Ratio 10...90% voltage supply	1 : CW Clockwise 2 : CCW Counter clockwise	xxxxx : Calibrated angle in degree Ex : 03600 3600°	I4 : M12 - 4 pin outs I7 : cable output	R : Radial connector R020 : Radial Cable 2m
Ex: THK5 _	14 //	3 I1	1 //	03600 //	I3	R020

Made in France