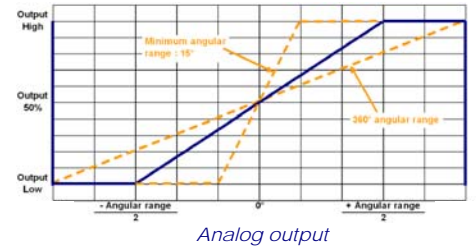
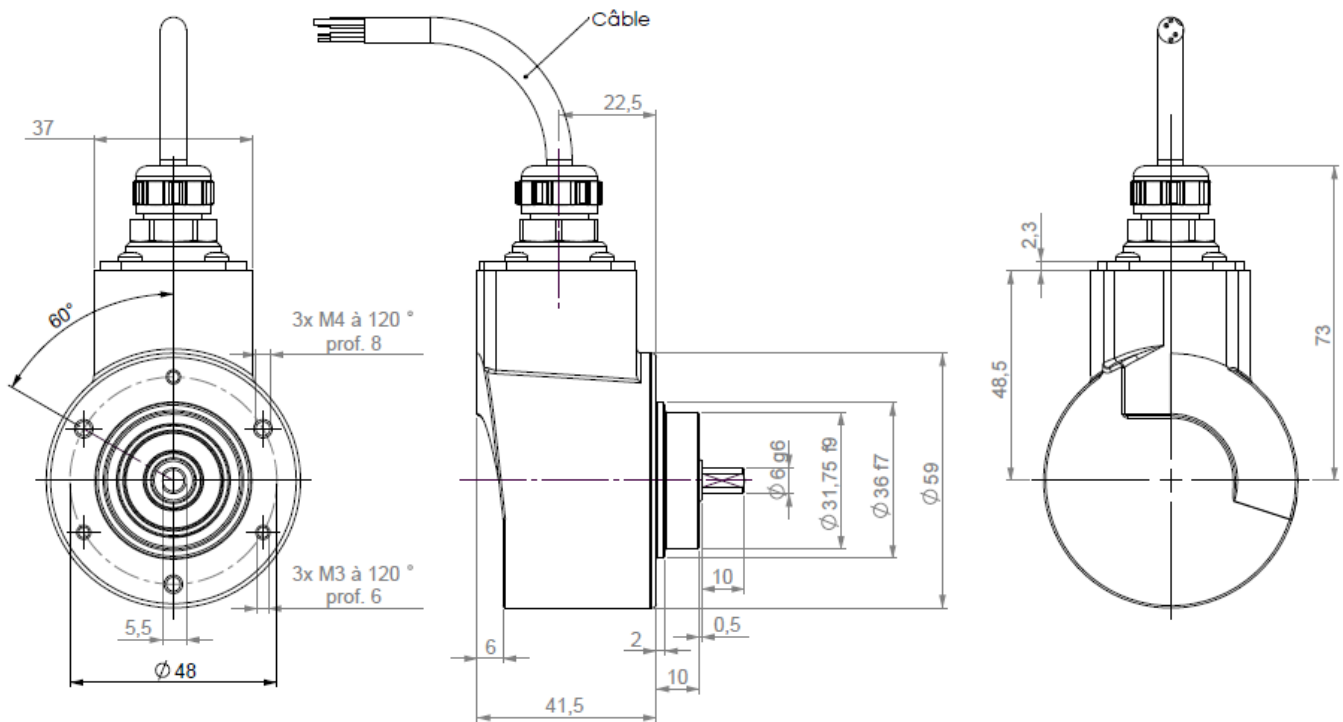


MAGNETIC ANALOG ABSOLUTE MULTI TURN ENCODERS, THM5 RANGE

- Extra-flat encoder, solid shaft 10mm or 6mm,
- 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 THM5 DIMENSION



MECHANICAL DATA

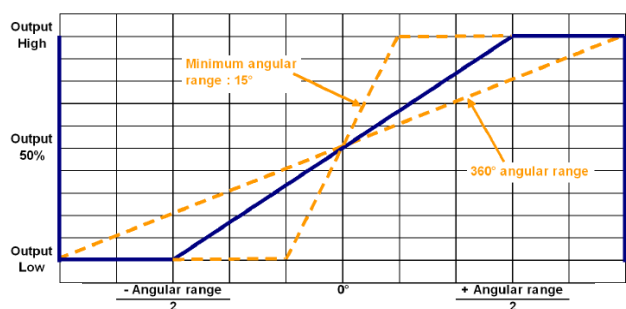
Material	Cover : steel	Shock (EN60068-2-27)	$\leq 2000 \text{ m.s}^{-2}$ (during 6 ms)
	Body: aluminium	Vibration (EN60068-2-6)	$\leq 200 \text{ m.s}^{-2}$ (10... 2 000 Hz)
	Shaft : stainless steel	EMC	EN 61000-6-4, EN 61000-6-2
Bearings	6 000 serie	Isolation	100V (1 min.)
Maximum load	Axial : 50 N	Weight (connector)	0,520 kg
	Radial : 100 N	Operating temperature	- 20 ... + 85 °C (encoder T°)
Shaft inertia	$\leq 1.10^{-6} \text{ kg.m}^2$	Storage temperature	- 20 ... + 85 °C
Torque	$\leq 4.10^{-3} \text{ N.m}$	Protection(EN 60529)	IP 65 (IP67 with flange option)
Permissible max. speed	6 000 min ⁻¹	Theoretical mechanical lifetime 10 ⁹ turns (F_{axial} / F_{radial})	
Continuous max. speed	6 000 min ⁻¹	25 N / 50 N : 99	50 N / 100 N : 12

MAGNETIC ANALOG ABSOLUTE MULTI TURN ENCODERS, THM5 RANGE

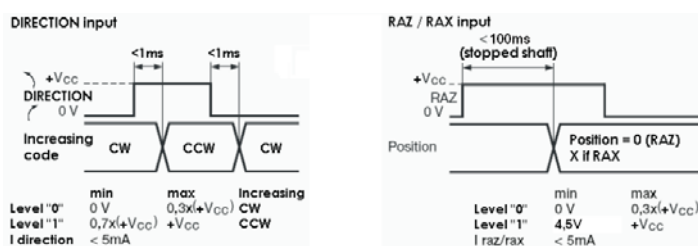
ELECTRICAL DATA

Power supply	5V or 10–30Vdc or 15–30Vdc	Introduction	< 1 s
Consumption without load	< 40mA (at 24Vdc)	Response time	< 10 ms (5L2 & 3L1 electronic) < 1ms (other electronics)
Resolution	12 bits	Advised load	>10kOhms (Voltage output) 500Ohms (current output)
Accuracy	± 0.3 %		
Repeatability	± 0.1 %		

ANALOG OUTPUT



INPUTS



Nota : Do not connect other pinouts, connect DIRECTION and RAZ to a potential (RAZ at 0V if not used)

CONNECTION

	+Vcc	0V	Analog output	RAZ - Reset	Direction	Ground
L5 Cable	Brown BN	White WH	Green GN	Blue BU	Red RD	General shielding
L6 M12 5 pinouts	2	1	3	4	5	Connector body

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

	Mechanics	Supply Output stage	Direction	Resolution	Connection	Connection orientation
THM5 : Absolute multi turn encoder	10 : 10mm solid shaft 06 : 06mm solid shaft	3L1 : 15 to 30Vdc 0..10V output 5L2 : 10 to 30Vdc 0.5..4.5V output 3L3 : 15 to 30Vdc 4..20mA output 3L4 : 15 to 30Vdc 0..20mA output 2LR : 5V +/- 5% Ratio 10...90% voltage supply	3 : Analog output with Direction input	xxxxx : Calibrated angle in degree Ex : 03600 3600°	L4 : M12 – 4 pinouts L7 : cable output	R : Radial connector R020 : Radial Cable 2m

Ex: THM5 _ 10 // 3 L1 3 // 03600 // L7 R020

Made in France