

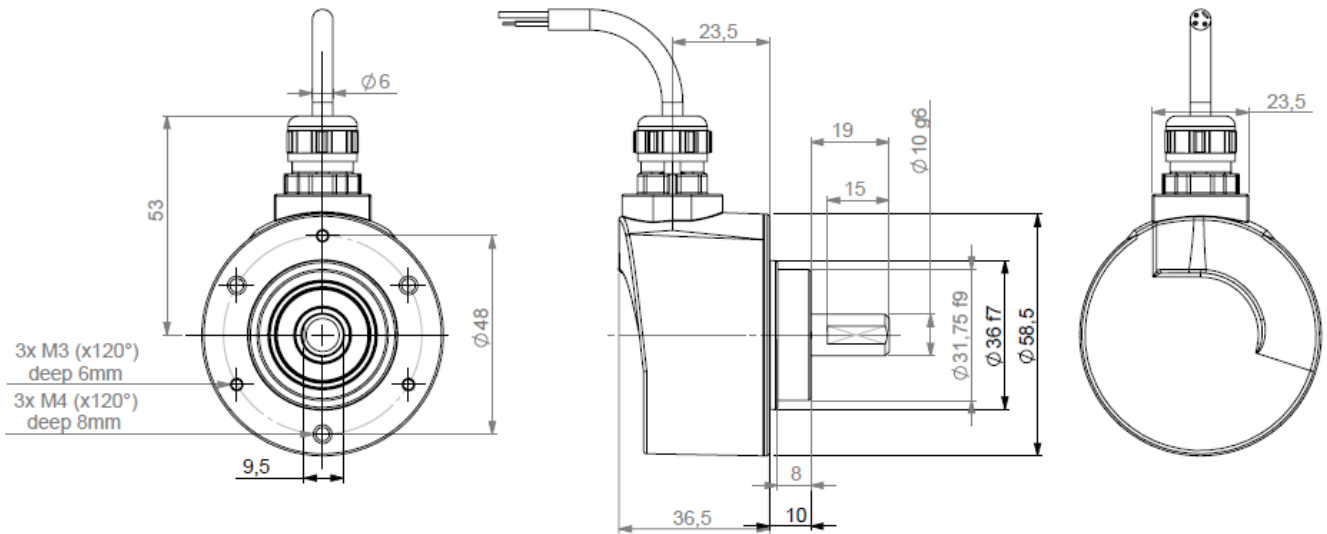
MAGNETIC ANALOG ABSOLUTE SINGLE TURN ENCODERS, AHM5 RANGE

AHM5 is a new magnetic absolute single turn encoders generation. It characterizes itself by its strong robustness of the mechanical and electro-magnetic parts:

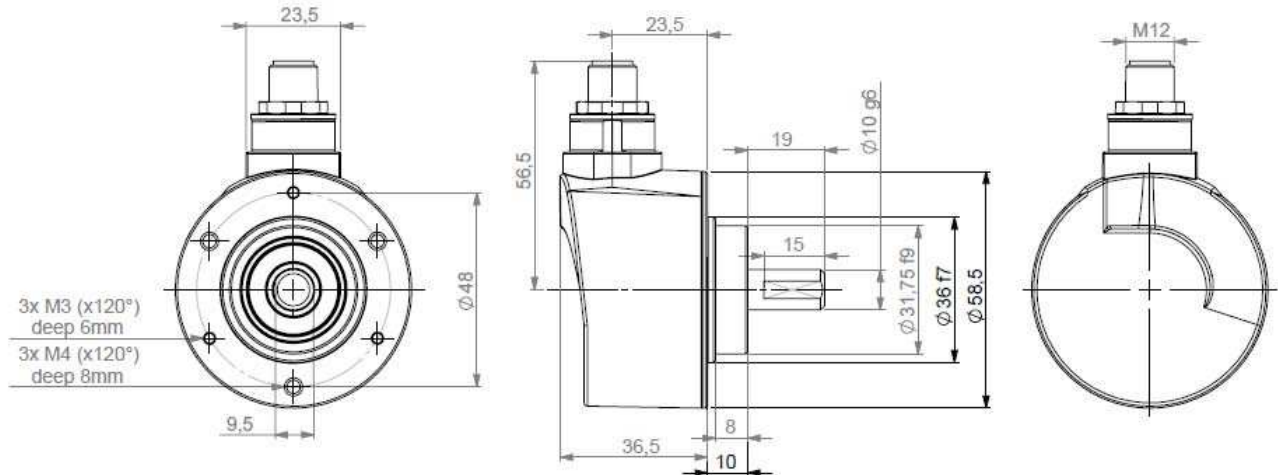
- Application fields: agriculture, construction, forestry vehicles, medical applications, solar panels...
- Magnetic technology, contactless.
- Strong robustness with its reinforced bearing block and its stopped bearings.
- Available resolution up to 12 bits per revolution.
- Power supply from 10 to 30Vdc.
- Available output interfaces: 0..10V, 0.5..4.5V, 4..20mA.
- Available in option: Extended temperature range (up to -40..+125°C), IP67/IP69K..
- Also available: PWM, SSI and CANopen outputs.



AHM5_10 I3Rconnection (radial cable)



AHM5_10 I4Rconnection (radial M12)



MECHANICAL DATA

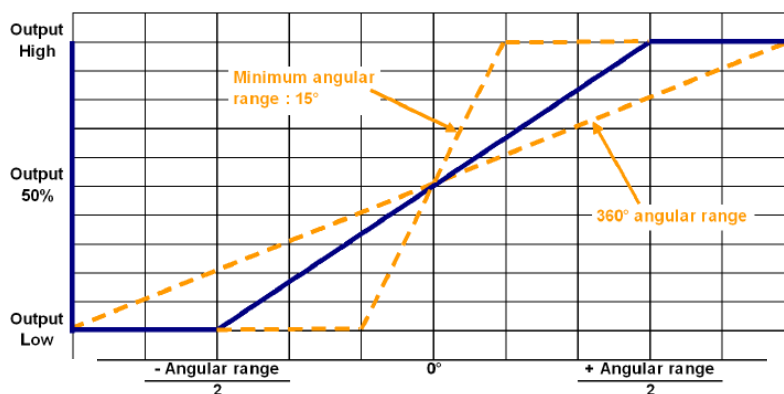
Material	Shaft: Stainless steel	Isolation	500 Veff
	Cover: Zinc alloy	EMC	EN 61000-6-4
	Body: aluminium		EN 61000-6-2
Bearings	6 000 series	Operating temperature	- 40... + 85 °C (T° encoder)
Maximal loads	Axial: 100 N	Storage temperature	- 40... + 85 °C
	Radial: 200 N	Protection	IP 65
Shaft inertia	$\leq 0,4 \cdot 10^{-6} \text{ kg} \cdot \text{m}^2$	Shocks (EN60068-2-27)	$\leq 2000 \text{ m} \cdot \text{s}^{-2}$ (during 6 ms)
Torque	$\leq 7 \cdot 10^{-3} \text{ N} \cdot \text{m}$	Vibrations (EN60068-2-6)	$\leq 200 \text{ m} \cdot \text{s}^{-2}$ (55 ... 2 000 Hz)
Nominal max. speed	6 000 min ⁻¹	Theoretical mechanical life time 10 ⁹ turns (F _{axial} / F _{radial})	
Encoder weight (approx.)	0,300 kg	100 N / 200 N	3

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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 %		500Ohms (current output)

ANALOG OUTPUT



CONNECTION

		0V	+Vcc	Analog output	Ground
I3	3 wire cable PVC 8230/022	White WH	Brown BN	Green GN	General shielding
I4	M12 connector 4 pinouts	1	2	3	Connector body

* Nota : pinout number 4 is not connected - If extension cable is used: please refer to its wiring arrangement / wire colors

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

	Shaft Ø	Supply Output stage	Direction	Resolution	Connection	Connection orientation
AHM5	06 : Shaft 6mm 10 : Shaft 10mm	3I1 : 15 to 30Vdc 0..10V output	1 : CW Clockwise 2 : CCW Counterclockwise	00360 : Analog output calibrated on 360° Other: Consult us	I3 : 3 wire cable PVC	A020 : Axial Cable 2m
		5I2 : 10 to 30Vdc 0.5..4.5V output				R020 : Radial Cable 2m
		3I3 : 15 to 30Vdc 4..20mA output 2IR : 5V +/- 5% Ratio 10...90% voltage supply			I4 : M12 Connector 4 pinouts	A : Axial R : Radial
Ex: AHM5 _	10 //	3 I1	1	// 00360 //	I3	R020

Made in France