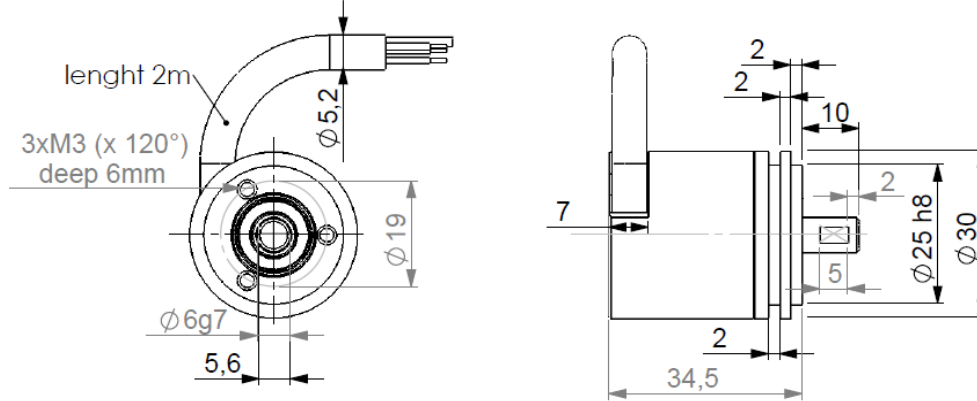


MAGNETIC ANALOG ABSOLUTE SINGLE TURN ENCODERS, AHM3 RANGE

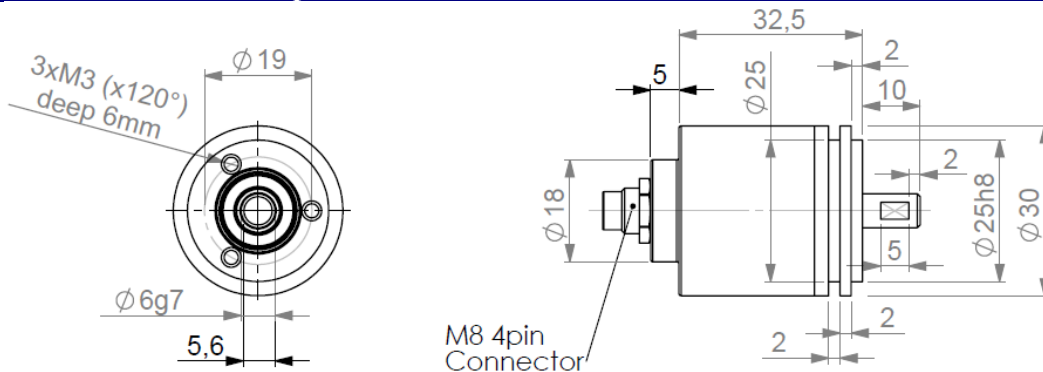
- With its 30mm size and a 6mm solid shaft, AHM3 encoder characterizes itself by its strong robustness of the mechanical and electro-magnetic parts, it's the most compact really industrial encoder with a solid shaft.
- Application fields: agriculture, construction, forestry vehicles, medical applications, solar panels...
- Magnetic technology, contactless.
- 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.
Also available: PWM, SSI and CANopen outputs.
- Available in option: Extended temperature range (up to -40..+125°C), IP67, angular ranges and output levels, redundancy...



AHM3 I3D connection (diagonal cable output)



AHM3 I2A connection (axial M8 output)



MECHANICAL DATA

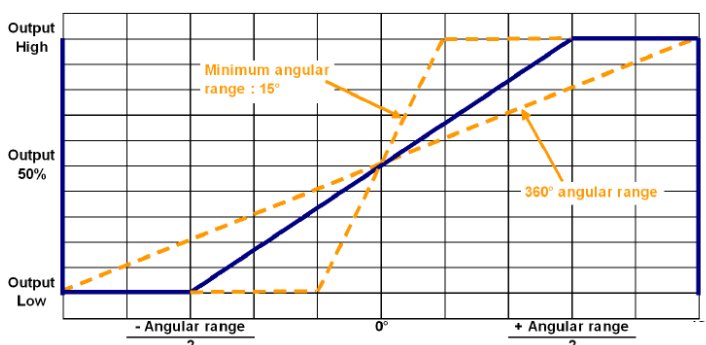
Material	Shaft: stainless steel	Isolation	500Veff
	Cover: aluminium	EMC	EN 61000-6-4
	Body: aluminium		EN 61000-6-2
Bearings	696 series	Operating temperature	- 40... + 85 °C (encoder T ^o)
Maximal loads	Axial: 20 N	Storage temperature	- 40... + 85 °C
	Radial: 50 N	Protection	IP 65
Shaft inertia	$\leq 0,1 \cdot 10^{-6} \text{ kg} \cdot \text{m}^2$	Shocks (EN60068-2-27)	$\leq 2000 \text{ m} \cdot \text{s}^{-2}$ (during 6 ms)
Torque	$\leq 1 \cdot 10^{-3} \text{ N} \cdot \text{m}$	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.)	0,150 kg	20 N / 50 N	15

MAGNETIC ANALOG ABSOLUTE SINGLE TURN ENCODERS, AHM3 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 electronic)
Accuracy	± 0.3 %	Advised load	>10kOhms (Voltage output)
Repeatability	± 0.1 %		5000hms (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
I2	M8 connector 4 pins *	1	2	3	Connector body

* Note: 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
AHM3	06 : 6mm	3I1 : 15 to 30Vdc 0..10V output	1 : CW Clockwise	00360 : Analog output calibrated on 360°	I2 : 4 pins M8	A : Axial
		5I2 : 10 to 30Vdc 0.5..4.5V output				2 : CCW Counterclockwise
		3I3 : 15 to 30Vdc 4..20mA output				
		2IR : 5V +/- 5% Ratio 10...90% voltage supply				
Ex: AHM3 _	06 //	3 I1	1	// 00360 //	I3	D020

Made in France