



AHM3

ANALOG ABSOLUTE SINGLE TURN ENCODERS



Features

- 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 resolutions 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 Options: Extended temperature range (up to -40..+125°C), IP67, angular ranges and output levels, redundancy...



SPECIFICATIONS

Mechanical Data

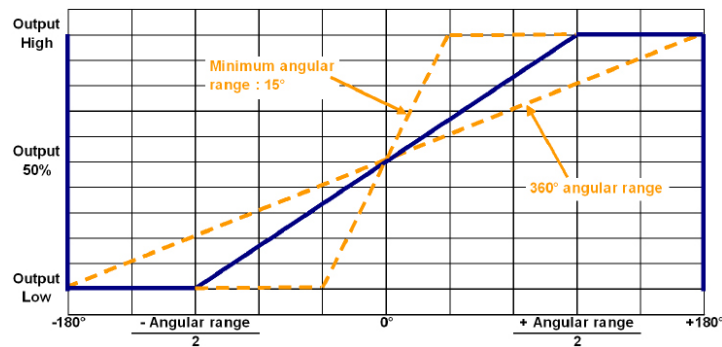
Material	Shaft: Stainless Steel, Cover: Aluminium, Body: Aluminium
Bearings	696 Series
Maximal Loads	Axial : 20 N, Radial : 50 N
Shaft Inertia	≤ 0,1.10 ⁻⁶ kg.m ²
Torque	≤ 1.10 ⁻³ N.m
Nominal Max. Speed	6 000 min ⁻¹
Encoder Weight (Approx.)	0,150 kg
Isolation	500Veff
EMC	EN 61000-6-4, EN 61000-6-2
Operating Temperature	- 40... + 85 °C (Encoder T°)
Storage Temperature	- 40... + 85 °C
Protection	IP 65
Shocks (EN60068-2-27)	≤ 2000m.s ⁻² (during 6 ms)
Vibrations (EN60068-2-6)	≤ 200m.s ⁻² (55 ... 2 000 Hz)
Theoretical Mechanical Lifetime	10 ⁹ turns (F _{axial} / F _{radial})
20 N / 50 N	15.10 ⁹ turns

Electrical Data

Power Supply	5V or 10–30Vdc or 15-30Vdc
Consumption without Load	< 40mA (at 24Vdc)
Resolution	12 bits
Accuracy	± 0.3% (on 360°)
Repeatability	± 0.1% (on 360°)
Introduction	<1s
Response Time	< 10 ms (5L2 & 3L1 electronic), < 1ms (other electronics)
Advised Load	>10kOhms (Voltage output), < 5000hms (current output)

TECHNICAL SPECIFICATIONS

Analog Output



Connection

		0V	+Vcc	Analog Output	Ground
L3	3 Wires Cable PVC 8230/022	White WH	Brown BN	Green GN	General Shielding
L2	M8 Connector 4 Pinouts *	1	2	3	Connector Body

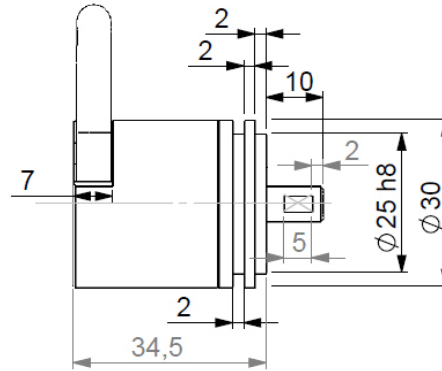
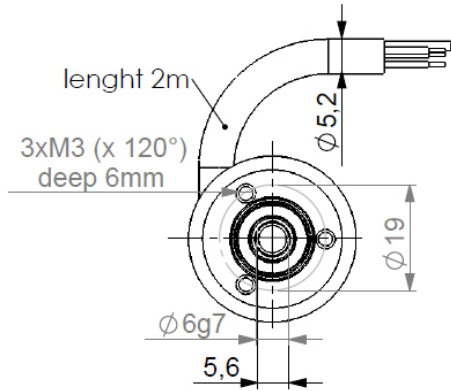
* Nota : Pinout Number 4 is not connected - If extension cable is used: please refer to its wiring arrangement / wire colors.



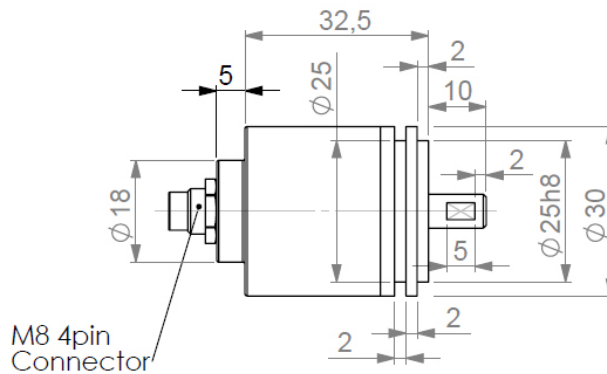
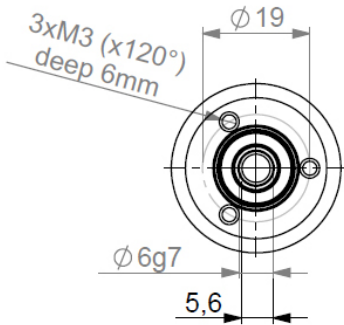
DIMENSIONS

All dimensions are in Millimeters.

AHM3 L3D connection (diagonal cable output)



AHM3 L2A connection (axial M8 output)



ORDERING OPTIONS

Example : AHM3_06//3L11//00360//L3D020

(Contact the factory for special versions , ex : dimensions, connections...)

Family	AHM3	06	//	3L1	1	00360	//	L3	//	D020
AHM3										
Shaft Ø										
06:	6mm									
Supply Output Stage										
3L1:	15 to 30Vdc 0..10V Output									
5L2:	10 to 30Vdc 0.5..4.5V Output									
3L3:	15 to 30Vdc 4..20mA Output									
2LM:	5V +/- 5% Ratio 10...90% Voltage Supply									
Direction										
1:	CW Clockwise									
2:	CCW Counter-clockwise									
Resolution										
00360:	Analog Output Calibrated on 360°									
Other:	Consult Us									
Connection										
L2:	4 Pinouts M8									
L3:	3 Wires Cable PVC									
Connection Orientation										
A:	Axial									
A020:	Axial Cable 2m									
D020:	Diagonal Cable 2m									



Made in France

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