

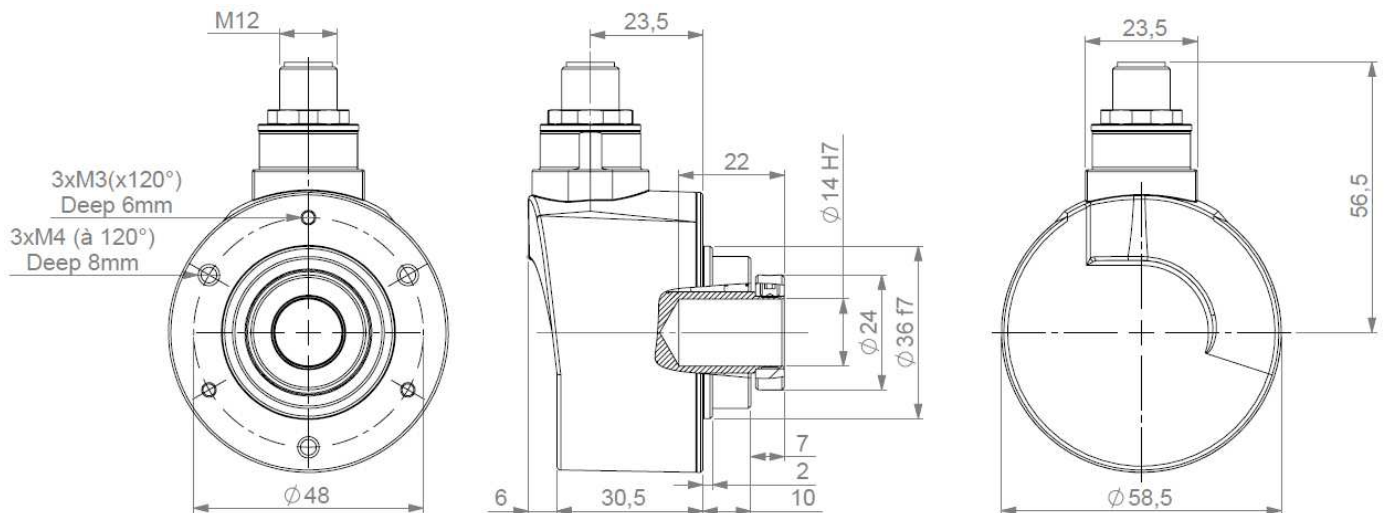
MAGNETIC ANALOG ABSOLUTE SINGLE TURN ENCODERS, AHK5 RANGE

AHK5 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.
- 58mm encoder – blind shat 14 mm – 15mm option – reduction hub available.
- Power supply from 10 to 30Vdc.
- Available output interfaces : 0..10V, 0.5..4.5V, 4..20mA.
- Available resolution up to 12 bits per revolution.
- Standard M12 or cable output – radial or axial.
- Available in option: Extended temperature range (up to -40..+125°C), IP67/IP69K...
- Also available : PWM, SSI and CANopen outputs.



AHK5_14 L4R connection (radial M12)



MECHANICAL CHARACTERISTICS

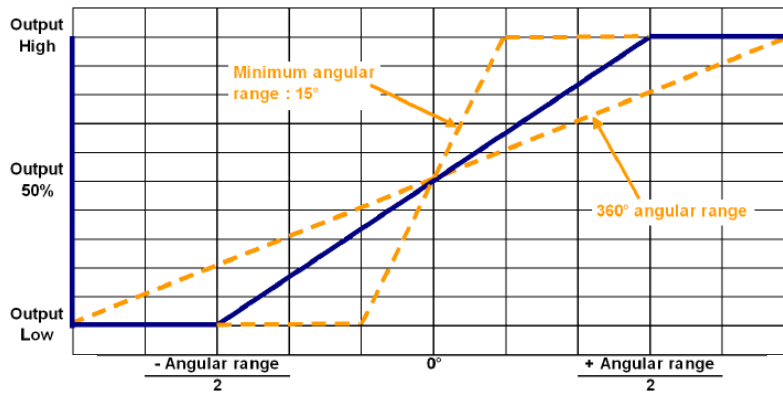
Material	Cover : zinc alloy	Vibrations (EN60068-2-6)	$\leq 100 \text{ m.s}^{-2}$ (55 ... 2 000 Hz)
	Body : aluminium	EMC	EN 61000-6-4, EN 61000-6-2
	Shaft : stainless steel	Isolation	500 V eff
Bearings	6 803 serie	Encoder weight (approx.)	0,300 kg
Maximal loads	Axial : 20 N	Operating temperature	- 20 ... + 85°C (encoder T°)
	Radial : 50 N	Storage temperature	- 40 ... + 85°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: 1.5 N.m, break: 2.0 N.m
Permissible max. speed	9 000 min ⁻¹	Theoretical mechanical lifetime 10 ⁹ turns (F _{axial} / F _{radial})	
Continuous max. speed	6 000 min ⁻¹	10N / 25N	230
Shocks (EN60068-2-27)	$\leq 500 \text{ m.s}^{-2}$ (during 6 ms)	20N / 50N	29

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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 (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



CONNECTION

		0V	+Vcc	Analog output	Ground
L3	3 wire cable PVC 8230/022	White WH	Brown BN	Green GN	General shielding
L4	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
AHK5	14 : 14mm reduction hubs available	3L1 : 15 to 30Vdc 0..10V output 5L2 : 10 to 30Vdc 0.5..4.5V output 3L3 : 15 to 30Vdc 4..20mA output 2LR : 5V +/- 5% Ratio 10...90% voltage supply	1 : CW Clockwise 2 : CCW Counter-clockwise	00360 : Analog output calibrated on 360° Other : Consult us	L3 : 3 wires cable PVC L4 : M12 Connector 4 pinouts	A020 : Axial Cable 2m R020 : Radial Cable 2m A : Axial R : Radial
	Ex: AHK5 _	14 //	3 L1	1 //	00360 //	L3

Made in France