# YANKEE Absolute encoder



Single-turn electronic sensor that interfaces rotation elements and returns a signal according to the angular position.

### **FEATURES**

- Used in a variety of industrial sectors, from lifting to automation, to meet any need in terms of registration and identification of modern production machines, wherever controls are needed, regardless of the nature of the mechanic system and of its complexity, and whenever reducing and unifying the system of angular positioning sensors is necessary.
- Designed for easy assembly and wiring in combination with standard sets of cams.
- Measuring accuracy guaranteed by 1024 points per revolution
- IP protection degree: Yankee is classified IP 20.
- Extreme temperature resistance: from -40°C to +80°C.
- High quality materials and components guarantee maximum mechanical life, precision and repeatability even in extreme conditions.

### **OPTIONS**

- Suitable for assembly on Fox, Oscar, Top and GF4C rotary limit switches\* to control multi-revolution rotors.
- Every position of the shaft is associated with an analog signal in voltage, in current or PWM.

### **CERTIFICATIONS**

• CE marking and cULus marking.

# **CERTIFICATIONS**

Conformity to Community Directives	2014/30/UE Electromagnetic Compatibility (EMC) Directive 2006/42/CE Machinery Directive
	2014/35/UE Low Voltage Directive (LVD)
Conformity to CE Standards	EN 61326-1 Electrical equipment for measurement, control and laboratory use - EMC requirements
	EN 60529 Degrees of protection provided by enclosures
Conformity to cULus Standards	CSA-C22.2 No 14-13 Industrial Control Equipment
	UL 508 Industrial Control Equipment
Markings and homologations	<b>( €</b> c• vus

# **GENERAL TECHNICAL SPECIFICATIONS**

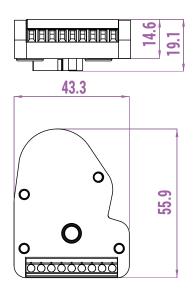
Ambient temperature	Storage -40°C/+80°C
	Operational -40°C/+80°C
IP protection degree	IP 20
Free rotation	360°
Max. rotation speed	800 rpm

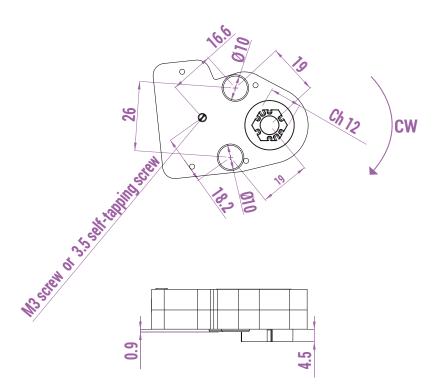
# **ELECTRICAL SPECIFICATIONS**

Code	PA01AA01 / PA02AA01	PA01AB01	PA01AC01
Analogue	Current 4 ÷ 20 mA	Voltage 0 ÷ 10 V	PWM 0 ÷ 100 %
Power supply	12 ÷ 48 Vdc/12 ÷ 48 Vac		
Protection against reverse polarity	Yes		
Consumption	50 mA		
Resolution	10 bit (1024 points per revolution)		
Linearity	±0.5°		
Max. hysteresis	0.1°		
Zero Point setting	Through button/wire		
Signal increment direction	CW (standard)/CCW (on request)		
Connections	Terminal board		
Terminal wires	0.14 mm² - 1.5 mm²		
Terminal tightening torque	0.22 Nm - 0.25 Nm		



# **OVERALL DIMENSIONS (mm)**





# **STANDARD ENCODERS**

Description	Code
Yankee with current output	PA01AA01 / PA02AA01
Yankee with voltage output	PA01AB01
Yankee with PWM output	PA01AC01
Yankee with current output featuring ramp reversal via external command	PA01AA02
Yankee with current output and reverse ramp	PA01AA03
Yankee with voltage output featuring ramp reversal via external command	PA01AB02
Yankee with voltage output and reverse ramp	PA01AB04

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