

# Artos™

## Absolute Magnetic Encoder System

Artos™ is an absolute magnetic encoder system designed for motion control applications as a feedback element for angle and velocity control loops.

A highly reliable measurement principle and processing provide low position latency, high resolution and high angular velocity. The robust design protects the readhead and magnetic ring from liquid ingress and high temperatures, so they remain undamaged even in extremely contaminated and hot environments.



### Why choose Artos?

#### FEATURES:

- ✓ Operating temperature from -40 °C to +100 °C
- ✓ Resolution up to 23 bits (100 nm)
- ✓ Maximum speed up to 30,000 rpm
- ✓ Compatible with rings, partial-arc and FlexAB system

#### BENEFITS:

- ✓ Harsh environments
- ✓ Easy installation
- ✓ Compatible with different controllers
- ✓ Easy diagnostics
- ✓ High accuracy due to self-calibration option



MACHINE  
TOOL



ASSEMBLY  
LINES



INDUSTRIAL  
AUTOMATION



GIMBALS



HARSH  
ENVIRONMENT

**RLS d. o. o.**  
Poslovna cona Žeje pri Komendi  
Pod vrbami 2  
SI-1218 Komenda  
Slovenia

**T:** +386 1 5272100  
**E:** [mail@rls.si](mailto:mail@rls.si)

**[www.rls.si](http://www.rls.si)**

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# Artos™ technical specifications



Encoder readhead type	Enclosed	PCB module
<b>Supply voltage</b>	4.5 V to 30 V	4.5 V to 30 V
<b>Output communication protocols</b>	BiSS C or SSI	BiSS C or SSI + parallel quadrature ABZ
<b>Computational latency</b>	11 µs	11 µs
<b>Operating temperature</b>	-40 °C to 85 °C	-40 °C to 85 °C
<b>Ingress protection</b>	IP67	Humidity - up to 70 % non-condensing
<b>Housing material</b>	Aluminium (Eloxal - anodised)	-
<b>Connection</b>	M12 - 8 way; Flying leads; D SUB 9;	Molex locking 12 way (vertical or horizontal)

## Artos™ compatibility

	Ring sizes and scale lengths	Ingress protection and robustness							Operating temperature
		Dirt	Dust	Humidity	Oils	Coolants	Grease	High speed	
	Ring	Minimum: 57 mm Maximum: 478 mm outer diameter	✓	✓	✓				
	Ring with cover foil	Minimum: 229 mm Maximum: 325 mm outer diameter	✓	✓	✓			✓	-40 °C to +85 °C
	Ring with welded cover foil	Minimum: 57 mm Maximum: 162 mm outer diameter	✓	✓	✓	✓	✓	✓	
	DS19 partial arc scale	From 200 mm outer diameter	✓	✓	✓				
	DS19 linear scale	Up to 32 m	✓	✓	✓			✓	
	SAS19 solid scale	Up to 2.46 m	✓	✓	✓			✓	-40 °C to +100 °C
	SAS19 solid scale with welded cover foil	Up to 2.46 m	✓	✓	✓	✓	✓	✓	
	FlexAB™	From 0.5 m to 2.5 m diameter	✓	✓	✓				-20 °C to +85 °C

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