

FlexAB™

Absolute Magnetic Scale System for Large Diameters

WIDE
INSTALLATION
TOLERANCES

WIDE
TEMPERATURE
RANGE

FLEXIBLE SHAFT
DIAMETERS

FlexAB is a rubber-supported magnetic scale system with a built-in tensioning mechanism, compatible with Artos absolute rotary readheads.

It is designed for installation on large shafts as an element of the position and speed control loop. The compact readhead has wide installation tolerances and offers industry-standard output types (SSI or BiSS) as well as parallel ABZ incremental signals for highly dynamic applications. The non-contact measuring principle ensures high reliability in demanding environments.

NEW

Why choose FlexAB?

FEATURES:

- ✓ Rubber spring profile supported scale with built-in tensioning mechanism
- ✓ For external diameter installation
- ✓ For diameters from 500 mm to 2,500 mm
- ✓ Maximum rotational speed 210 rpm at 1 m

BENEFITS:

- ✓ Full circle measurement
- ✓ Large allowable shaft diameter tolerance ± 0.2 mm
- ✓ Wide operating temperatures
- ✓ Substrate thermal expansion compensation



WIND
TURBINES



RADIO
TELESCOPE



SOLAR
PANELS



CT
SCANNING



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
www.rls.si

A RENISHAW  **associate company**

FlexAB technical specifications

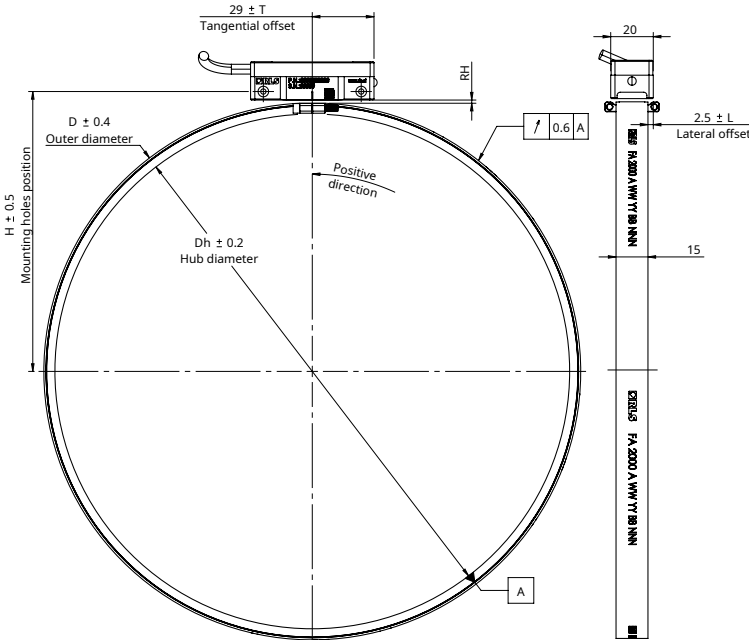
READHEAD		ARTOS DHF AND DBF
Substrate diameter		500 mm to 2,500 mm
Number of magnetic poles		784 – 3,940
Accuracy at 1 m diameter		< ±0.05°
Resolution		0.1 µm
Hysteresis		< 3.5 µm
Maximum permissible speed (mechanical limit)**	D < 900 mm	rpm = 210/D* [m]
	D > 900 mm	rpm = 325/D* [m]
Operating temperature		-40 °C to +85 °C

* D stands for the outside diameter of the mounted scale.
 ** The electrical limit values are determined by the selected readhead configuration. Please check the FlexAB calculator for the maximum speed on the RLS website.

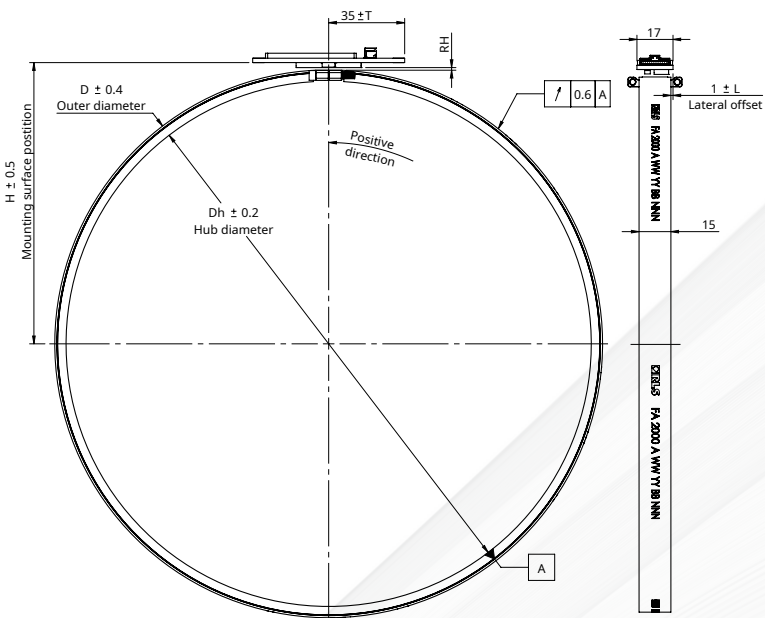
FlexAB with DHF/DBF readhead dimensions

Dimensions and tolerances in mm.

DHF readhead



DBF readhead



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