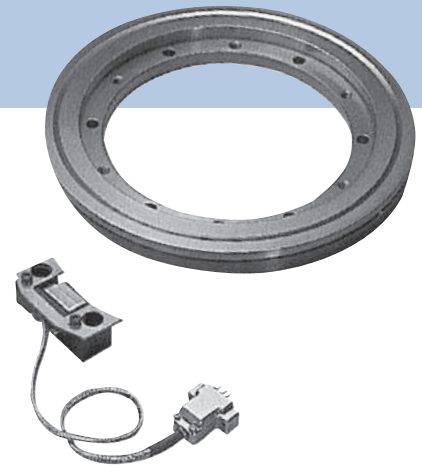


Rotary scale for feedback applications

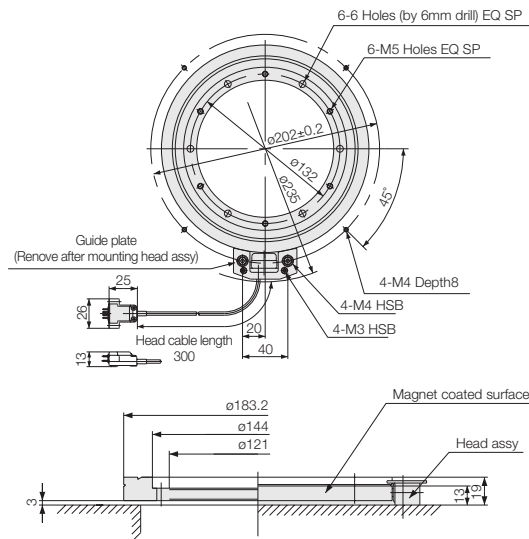
- Magnetic principle
- Excellent resistance to workshop conditions.
Resistant to oil, dirt and vibrations.
- Thin design
- Directly mountable onto a machine's rotary shaft. Large-diameter scale drum that can be used for large-sized machines such as turning centers.
- Easy installation
- Noncontact. Clearance: 0.1 mm/ 0.004"



Example for connection

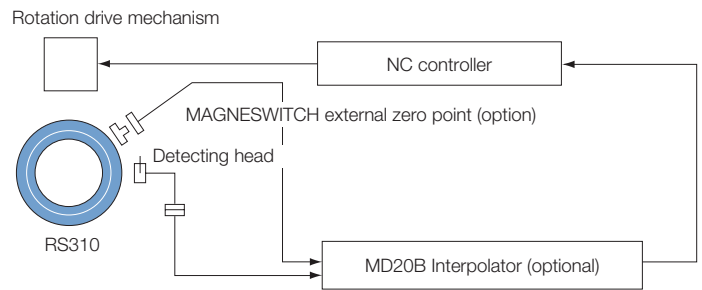
Scale	Cable	Interpolator
RS310	AK2-C	MD20B

Dimensions



Unit : mm

System configuration



Specifications

Model		RS310-1800A
No. of reader heads		1
No. of recorded waves		1800 λ / revolution
Recorded wave length		0.32 mm
Resolution		0.001°
Clearance		100 to 110 μ m (recommended)
Cumulative pitch accuracy *1		7.2**
Interpolation accuracy		3.6***2
Allowable scale drum runout		Keep to min. at installation*1
Allowable head mounting face flatness		5 μ m or less (No burs or unevennesses)
Allowable residual machine magnetism		0.25 mT
Max. mechanical revolutions		7000 min ⁻¹
Scale drum	Dimensions	ϕ 183.4 x ϕ 121 x 16 mm (ϕ 7.23" x ϕ 4.77" x 0.63") (Outer dia. x inner dia. x thickness)
	Mounting pitch dia	ϕ 132 mm/ 5.20"
	Mass	Approx. 1.6 kg/ 3.53 lbs
	Moment of inertia	1.12 x 10 ⁻² kg m ²
Diameter excl. cable guide		Max. approx. ϕ 235 mm/ 9.26"
Operating temperature		0 °C to 40 °C/ 32 °F to 104 °F
Storage temperature		-10 °C to 50 °C/ 14 °F to 122 °F
Reader heads	Mass	Approx. 0.12 kg/ 0.26 lbs
	Cable length	300 mm/ 11.8"

*1 RS310-1800A Cumulative pitch error will be less than 7.2" with circumference eccentricity of 3 μ m More eccentricity, Add 2.3"/1 μ m

RS310-1800B Cumulative pitch error will be less than 7.2" with circumference eccentricity of 30 μ m. Total accuracy is sum of cumulative pitch error and interpolation error

**2 3.6" interpolation error for 1.5% of PM signal ripple