RS

RS310

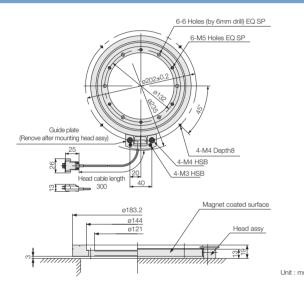
Rotary scale for feedback applications

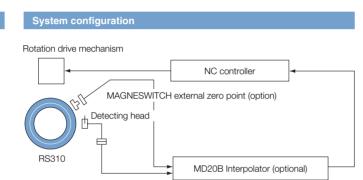
- Magnetic principle
- Excellent resistance to workshop conditions. Resistant to oil, dirt and vibrations.
- Thin design
- Directly mountable onto a machine's rotary shaft. Large-diameter scale drum that can be used for large-sized machines such as turning centers.
- Easy installation
- Noncontact. Clearance: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

Example for connection

Scale		Interpolator
RS310	AK2-C	MD20B

Dimensions





Specifica	itions				
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 to110 μm (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 μm or less (No burs or unevennesses)			
Allowable residual machine magnetism		0.25 mT			
Max. mechanical revolutions		7000 min ⁻¹			
Scale drum	Dimensions	ø 183.4 x ø 121 x 16 mm (ø 7.23'' x ø 4.77'' x 0.63'') (Outer dia . x inner dia. x thickness)			
	Mounting pitch dia	ø 132 mm/ 5.20*			
	Mass	Approx. 1.6 kg/ 3.53 lbs			
	Moment of inertia	$1.12 \times 10^{-2} \mathrm{kg m^2}$			
Diameter excl. cable guide		Max. approx. ø 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			
i loadei Heads	Cable length	300 mm/ 11.8"			

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

Interpolators

MJ100/110 MJ620 MJ820/821

MJ830/831

PS310-1800B Cumulative pitch error will be less than 7.2" with circumference eccentricity of 30 μm. Total accuracy is sum of cumulative pitch error and interpolation error 2 3.6" interpolation error for 1.5% of PM signal ripple