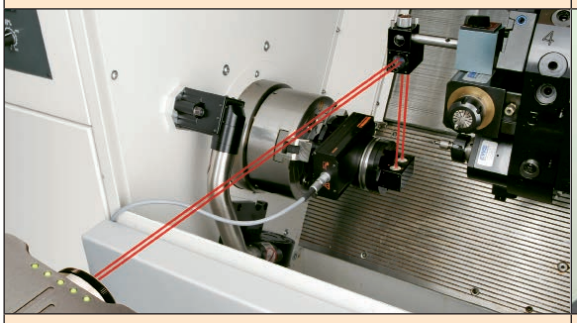
RENISHAW
apply innovation™

System comparison RX10 vs XR20-W

Overview

This application note compares the weight, dimensions, performance, features and compatibililty of the RX10 and XR20-W rotary axis calibrators when used with an XL-80 laser system.

System comparison

RX10	XR20-W
	
Weight and dimensions	**Weight and dimensions**
Height 146 mm	Height 130 mm
Diameter (excluding motor) 100 mm	Diameter 100 mm
Diameter of mounting plate 150 mm	Diameter of mounting ring 150 mm
Weight (RX10) 4.75 kg (Kit) 10 kg	Weight (XR20-W) 1.2 kg (Kit) 6.5 kg
Performance	**Performance**
Indexer accuracy (from mean value) ±1 arc sec	Measurement accuracy (zero at 0°) ±1 arc sec
Angular target range 1 revolution	Angular target range up to 25 revolutions
Max axis rotation speed (<5° axis rotation) Unlimited	Max axis rotation speed (<5° axis rotation) Unlimited
Max axis rotation speed (>5° axis rotation) 3 rpm	Max axis rotation speed (>5° axis rotation) 10 rpm
Required centration ±0.5 mm	Required centration ±1 mm
Cable length 5 metres	*Bluetooth* range Typically 5 to 10 metres
Features	**Additional features**
• Class leading accuracy and repeatability • Fully automatic operation of test data capture • System auto calibration cycle minimises set-up and optical alignment errors • Hirth coupling for calibrator indexing	• Separate mounting plate with modular mounting options and visual centration • Integrated retroreflector targets • Integrated alignment aids • Same mounting for all orientations • *Bluetooth* wireless technology • Battery operated • Motor and encoder controlled rotation (in place of Hirth coupling)

For more information please visit www.renishaw.com/lasercalsupport

Application note

Renishaw plc

New Mills, Wotton-under-Edge
Gloucestershire, GL12 8JR
United Kingdom

T +44 (0) 1453 524524
F +44 (0) 1453 524901
E uk@renishaw.com

www.renishaw.com

RENISHAW
apply innovation™

About Renishaw

Renishaw is an established world leader in engineering technologies, with a strong history of innovation in product development and manufacturing. Since its formation in 1973, the company has supplied leading-edge products that increase process productivity, improve product quality and deliver cost-effective automation solutions.

A worldwide network of subsidiary companies and distributors provides exceptional service and support for its customers.

Products include:

- Additive manufacturing and vacuum casting technologies for design, prototyping, and production applications
- Dental CAD/CAM scanning systems and supply of dental structures
- Encoder systems for high-accuracy linear, angle and rotary position feedback
- Fixturing for CMMs (co-ordinate measuring machines) and gauging systems
- Gauging systems for comparative measurement of machined parts
- High-speed laser measurement and surveying systems for use in extreme environments
- Laser and ballbar systems for performance measurement and calibration of machines
- Medical devices for neurosurgical applications
- Probe systems and software for job set-up, tool setting and inspection on CNC machine tools
- Raman spectroscopy systems for non-destructive material analysis
- Sensor systems and software for measurement on CMMs
- Styli for CMM and machine tool probe applications

For worldwide contact details, visit www.renishaw.com/contact

H-9920-0428-02

Part no.: H-9920-0428-02-A
Issued: 05.2018