

Renishaw multi-axis periscope (3-axis) RMAP-3A

For the fibre optic laser encoder

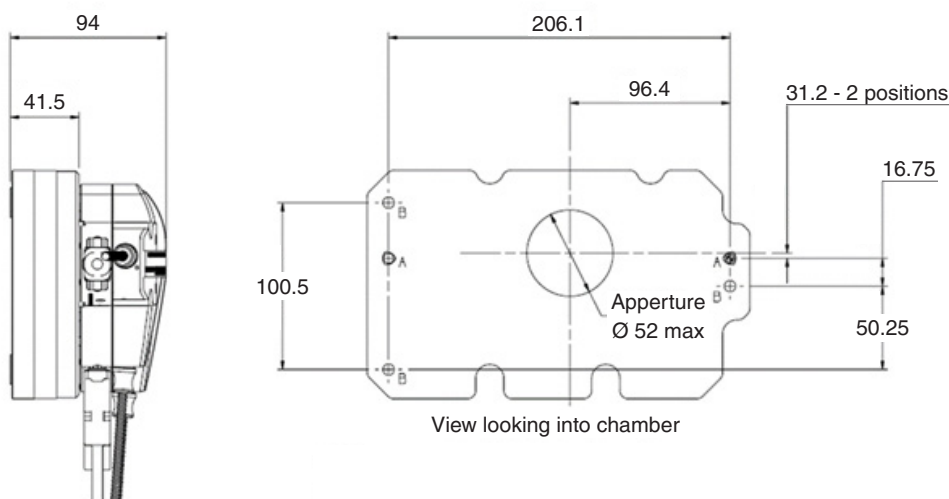
The multi-axis periscope has been designed to enable three RLD10-X3-DI detector heads to measure the linear position, pitch and yaw along a single axis. To achieve this, the multi-axis periscope uses a series of mirrors to minimise the beam foot print from the three detector heads to reduce the size of the target mirror required for these applications. This compact periscope, which can be mounted directly onto the exterior of the vacuum chamber, increases the measurement flexibility of the RLD10-X3-DI detector head.



General outline and dimensions

Dimensions in mm

Overall dimensions	
Length	231
Width	41.5
Height	137.6



System specification

Linear range	With RLD10-X3-DI	0 m to 0.65 m
Angular range	Pitch	± 30 arcsec
	Yaw	± 30 arcsec
Analogue signal period	Linear	Same as standard RLD10-X3-DI
	Pitch	2.3 arcsec
	Yaw	2.3 arcsec
Thermal drift coefficient	Linear	Same as standard RLD10-X3-DI
	Pitch	1.8 arcsec/°C
	Yaw	1.8 arcsec/°C
Beam steerer adjustment range	With RLD10-X3-DI	Reduced to ± 0.5°
Change in signal strength though periscope (relative to linear)	Linear	No change
	Pitch	< 10%
	Yaw	< 10%

Operating environment

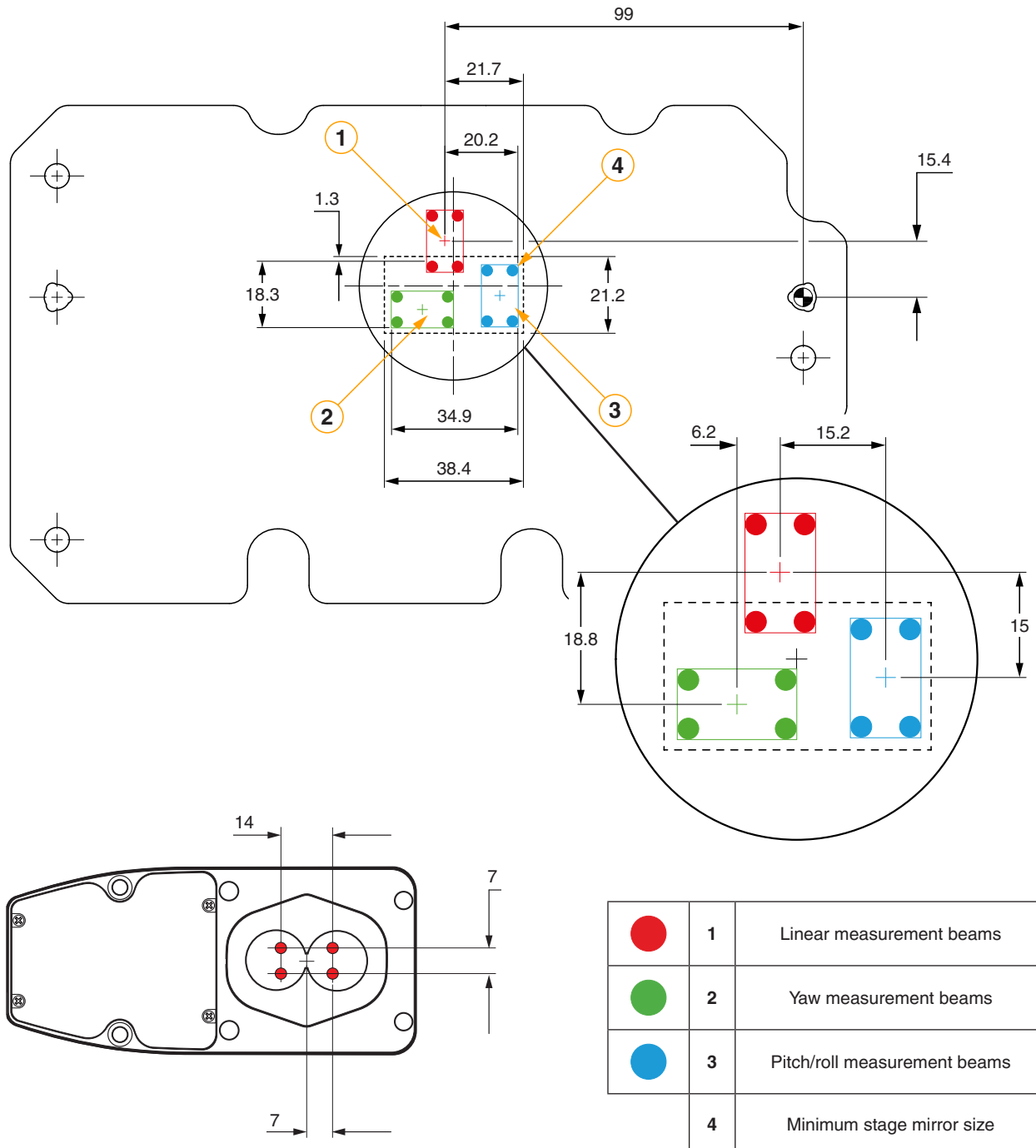
Pressure	Normal atmospheric	650 – 1150 mbar
Humidity	Non-condensing	0 – 95% relative humidity
Temperature	Storage	–20 °C to 70 °C
	Operating	10 °C to 40 °C

For more information on the Multi-axis periscope see www.renishaw.com/rmap.

Dimensions and beam foot prints

Beam foot print dimensions

Dimensions in mm



www.renishaw.com/contact



#renishaw



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