

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.

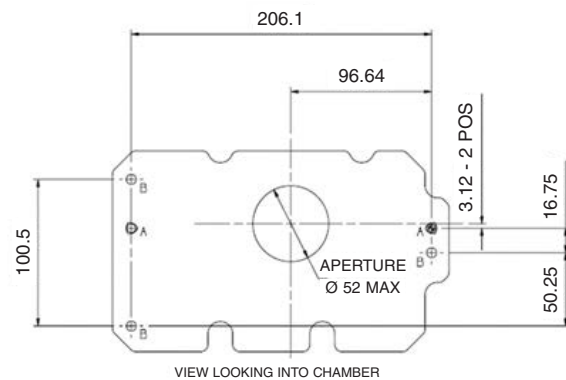
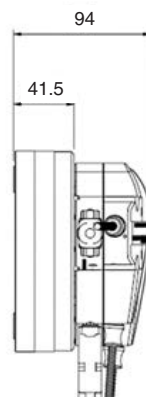


General outline and dimensions

Dimensions in mm

Overall dimensions:

Length: 231
Width: 41.5
Height: 137.6



System specification

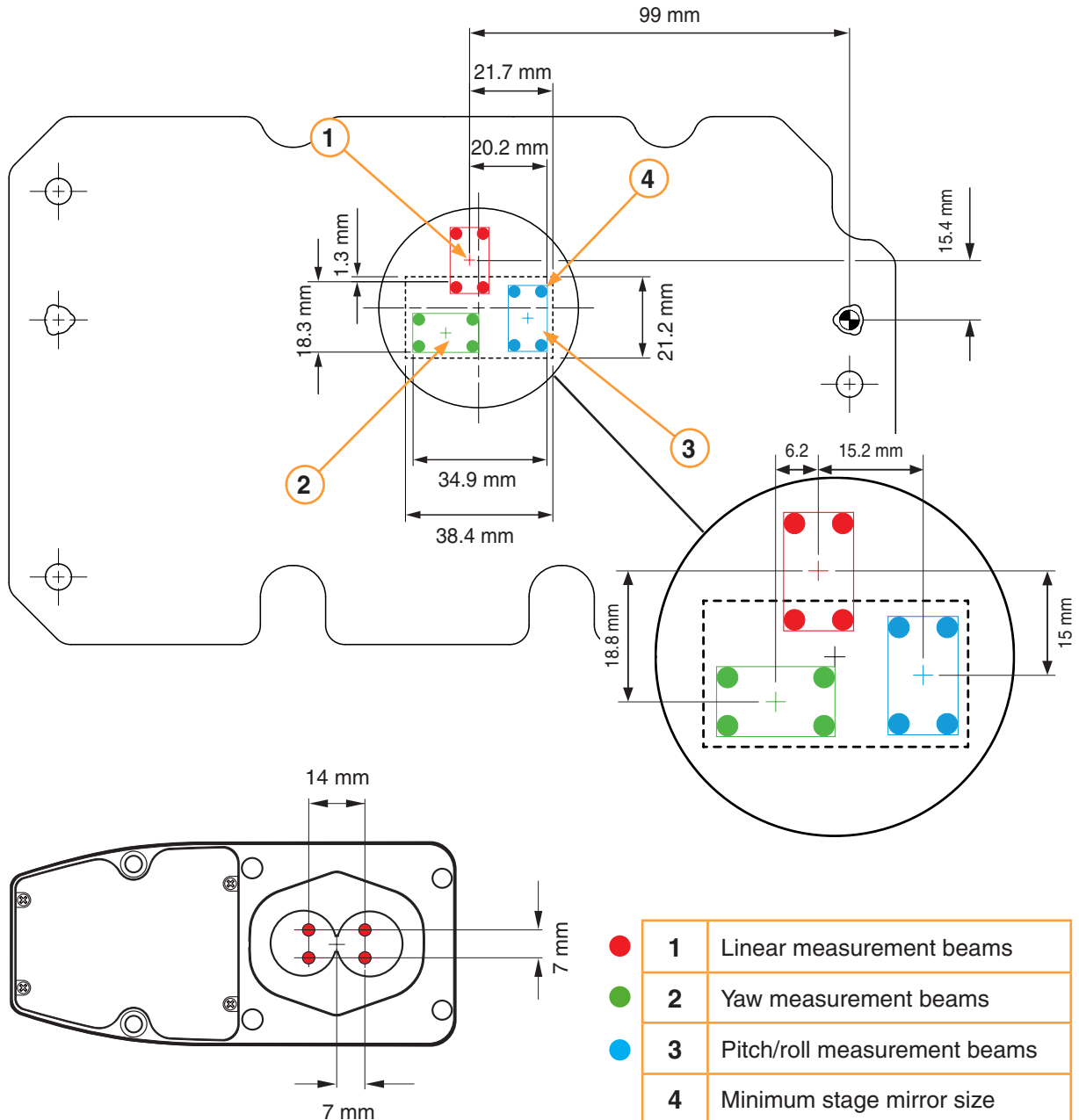
Linear range	With RLD10-X3-DI	0 m to 0.65 m
Angular range	Pitch	± 30 arcsec
	Yaw	± 30 arcsec
Analogue signal period	Linear	Same as standard RLD10-X3-DI
	Pitch	2.3 arcsec
	Yaw	2.3 arcsec
Thermal drift coefficient	Linear	Same as standard RLD10-X3-DI
	Pitch	1.8 arcsec/°C
	Yaw	1.8 arcsec/°C
Beam steerer 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	0 – 95% RH (non-condensing)	
Temperature	Storage	-20 °C to 70 °C
	Operating	10 °C to 40 °C

Dimensions and beam foot prints

Beam foot print dimensions



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

