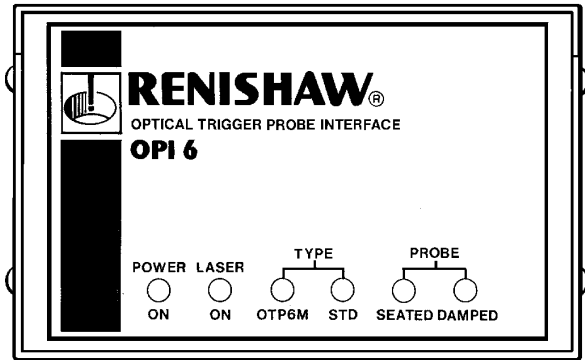
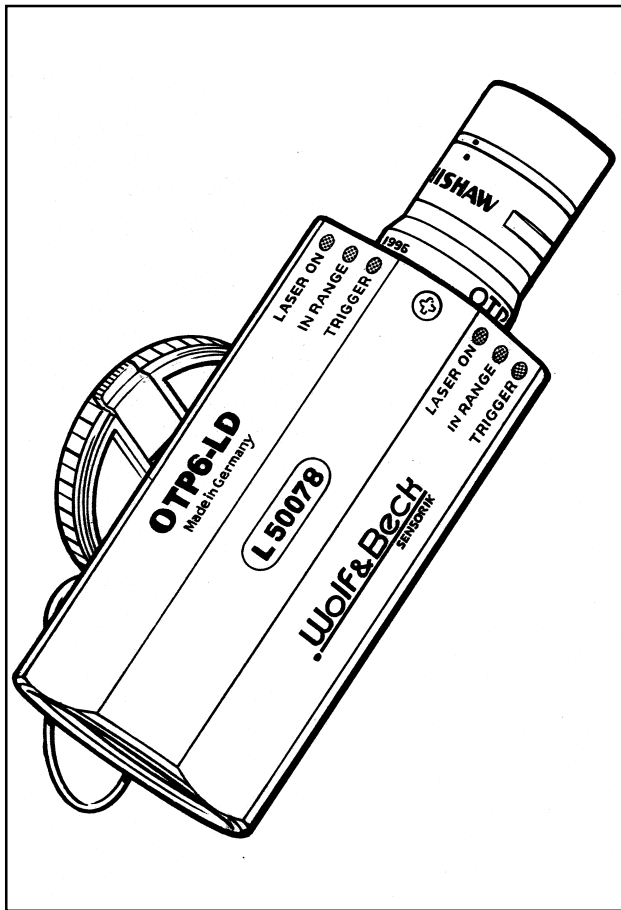


# OTP6M Optical Trigger Probe System



The **OTP6M Optical Trigger Probe System** utilises a visible laser spot (Class 2) to provide a non-contact inspection solution for use on Co-ordinate Measuring Machines (CMMs).

The System comprises a Wolf & Beck Laser Probe (OTP6M), which operates using the optical triangulation principle, and a Renishaw interface (OPI 6).

The System can be used to measure pliable or delicate materials as the sensing beam causes no distortion of the surface. It is easily retrofittable to standard touch trigger probe applications.

It provides repeatable Z-axis measurements and has edge-triggering capability.

The **OTP6M Probe** is supplied with a Renishaw Autojoint which enables autochanging using the PEM1 Extension Bar and the Autochange Rack (ACR1). It is compatible with PH6M and PH10M Probe Heads.

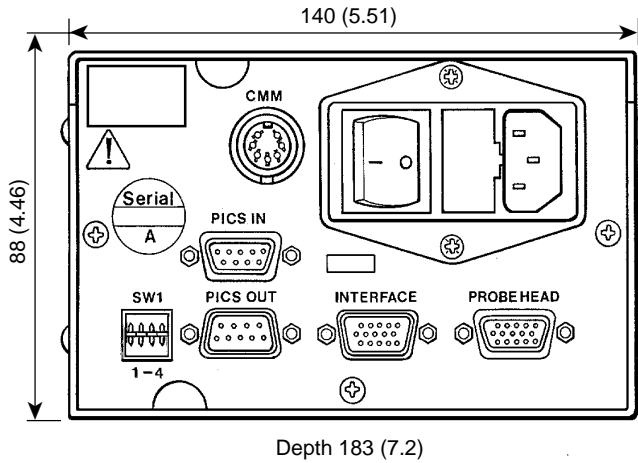
The **OPI 6 Interface** enables straightforward integration of the System onto a CMM. It can be used alone to control standard touch trigger probes and the OTP6M Probe, or in conjunction with the appropriate interface for another multi-wired probe.

# RENISHAW

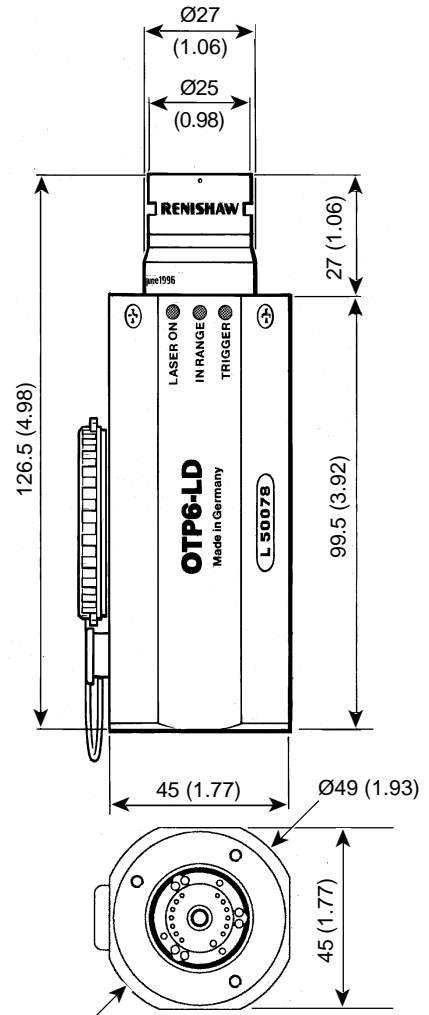
## Data Sheet

Part No. H-1000-2086-02-A

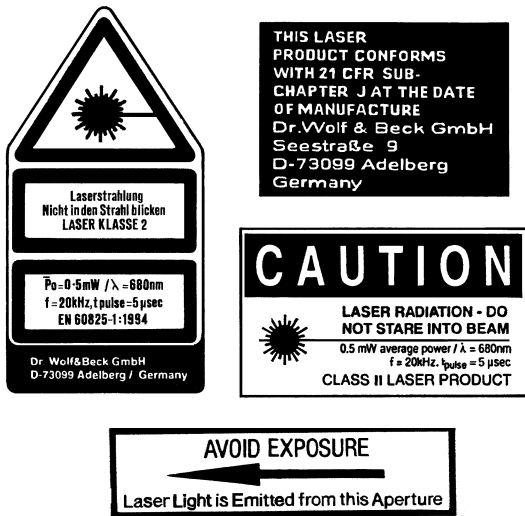
### OPI 6 DIMENSIONS mm (in)



### OTP6M DIMENSIONS mm (in)



### LASER SAFETY LABELS



### OTP6M PARAMETERS

Z-axis repeatability ( $2\sigma$ )	2 $\mu\text{m}^*$
1D Measurement accuracy (band width)	$\pm 25\mu\text{m}^{**}$
Stand-off distance	36mm
Inclined angles	60 $^\circ$ *
Operating range (nominal value depending on target reflectivity)	$\pm 4\text{mm}$
Spot diameter (full width, half maximum)	50 $\mu\text{m}$ x 70 $\mu\text{m}$
Power supply	Universal: 85-264V; 47-66Hz
Power connector	IEC 320
Measuring frequency	20kHz
Probing speed	0.5 to 50mm/s
Wavelength	680nm visible red
Average power	0.5mW
Trigger output	SSR/PICS

\* Figure recorded from a lapped steel target ( $R_a = 0.34\mu\text{m}$ ) \*\* Figure recorded from a diffusing Datum Sphere (supplied)

Renishaw reserves the right to change specifications without notice

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