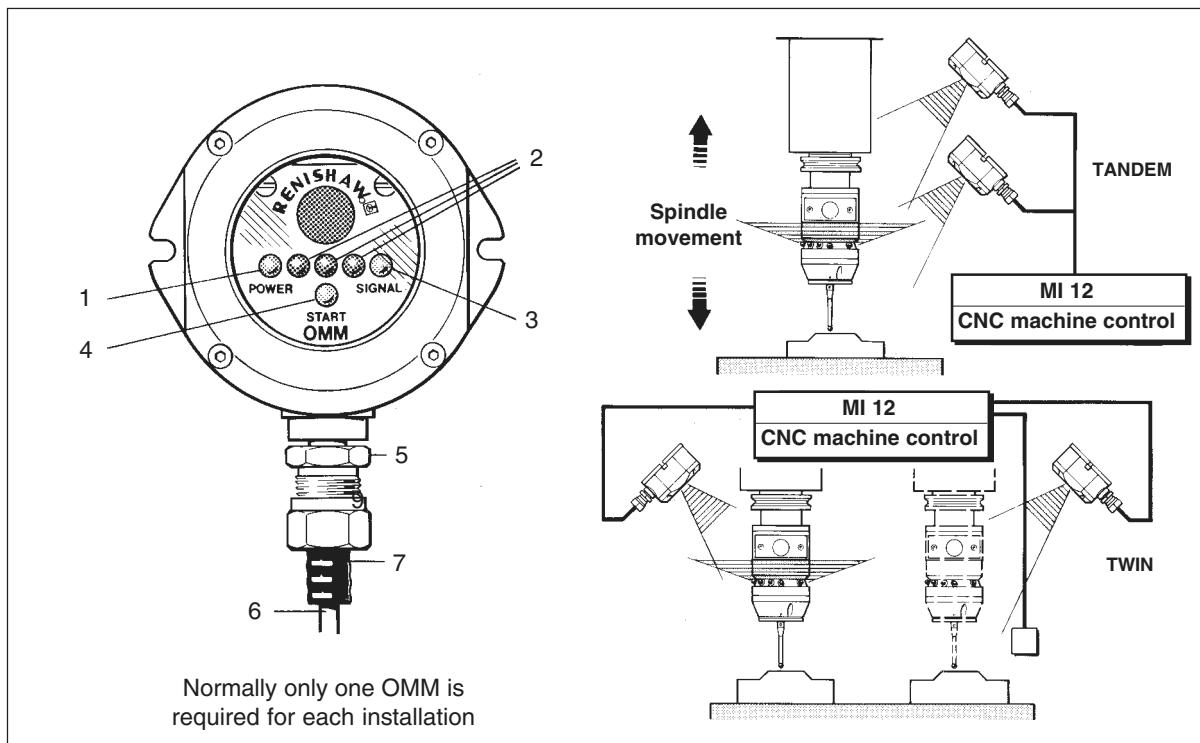


OMM - optical module machine

The OMM is an optical transmitter/receiver, which conveys signals between an inspection probe and MI 12 interface unit.



OMM STATUS LED's

Visual indication of system status is provided by LED's (Light Emitting Diodes).

1. **LED (red)** Lit when power is on.
2. **LED (x 3)**
Transmit infra-red control signals to the probe.
3. **LED (green)**
Lit when signal is received from the probe.
4. **LED (yellow)**
Lit when the MI 12 sends a start signal to the probe.
5. **Sealing gland**
6. **Cable**
7. **Conduit**

FEATURES

- Toughened glass window**
- Sealed to IP68 for machine tool environment.**
- Internal range selection switch**
Reception (Rx)
25%, 50% or 100%.
Transmission (Tx)
50% or 100%.
Factory set to longest ranges.

OMM OPTIMUM POSITION SETTING

To assist finding the optimum position for the OMM during system installation, a signal strength voltage output is available on the MI 12 interface.

OMM TANDEM MOUNTING

Installations with exceptionally long spindle movement, may require a second OMM to provide signal reception over the probe's full working envelope. The reception cones of OMM 1 and OMM 2 overlap, so they act as one receiver.

OMM TWIN MOUNTING

Each spindle of a twin spindle machine can accept a probe. Although both OMM 1 and OMM 2 are switched on, only one probe may be used at any one time.

WARNING

When two optical probe systems are operating in close proximity to each other, take care to ensure that signals transmitted from the probe on one machine, are not received by the OMM on the other machine, and vice versa.

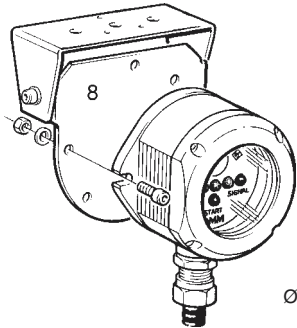
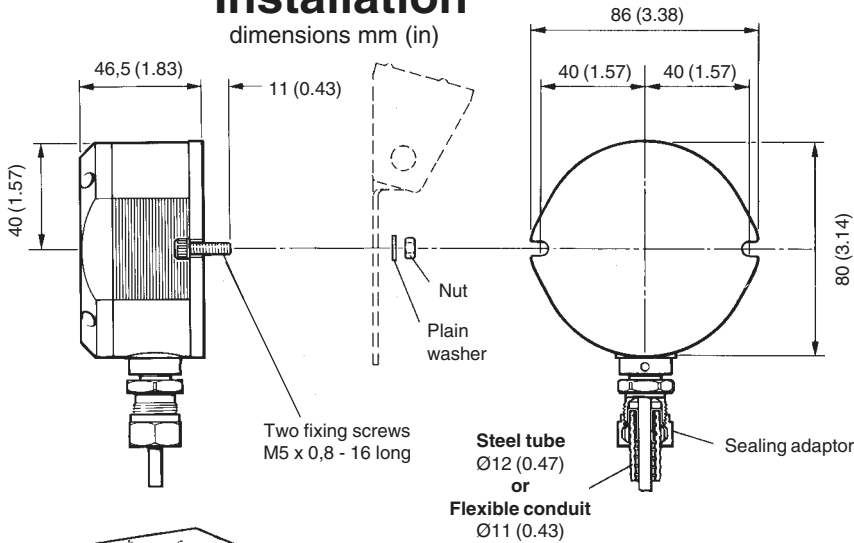
The OMM may have to be shielded from direct light sources.

RENISHAW

DATA SHEET

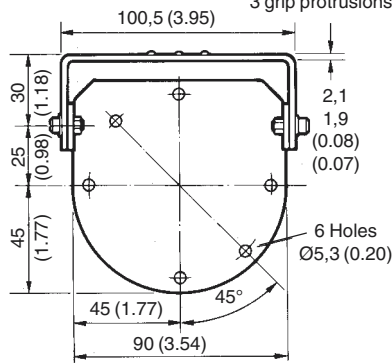
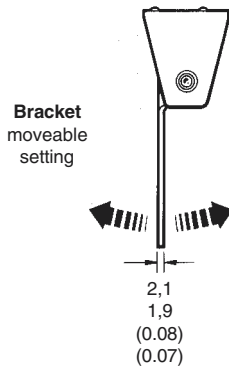
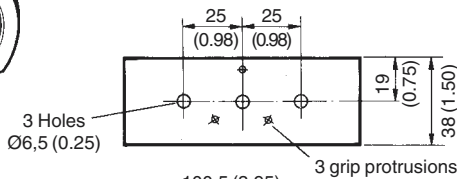
Installation

dimensions mm (in)



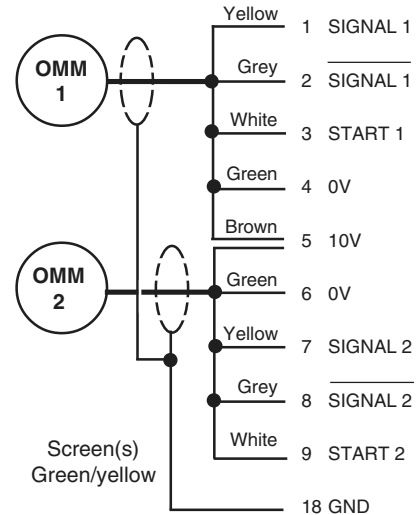
OMM MOUNTING BRACKET

Allows OMM directional setting



Paired holes permit OMM mounting in alternative orientation

MI 12 INTERFACE TERMINAL CONNECTIONS



OMM CABLE

Standard cable - 25m long

Screened, 5 core, 18/0.1
Ø5.1mm x 25 metres long
(Ø0.2in x 82ft long)

Extension cable - 25m long (Not supplied by Renishaw)

Standard cable + Extension cable

25m Screened, 5 core, 18/0.1 + 25m Screened, 5 core, 18/0.1

- Install OMM with cable exiting from lower side for good coolant run off.
- Cable entry to the OMM is sealed with a gland.
- Cable protection against physical damage should be provided by either steel tube or flexible conduit.
- The conduit adaptor supplied by Renishaw is designed to accept either steel tube or flexible conduit.
- Route the cable away from other cables carrying high currents.
- Maintain screens through cable joins.

Parts List

Please quote the Part No. when ordering equipment

Type	Part No.	Description
OMM	A-2033-0576	OMM complete with cable Ø5,1mm (Ø0.2in) x 25m (82ft) long.
Mtg bracket	A-2033-0830	OMM mounting bracket complete with fixing screws, washers and nuts.
Window kit	A-2115-0002	Window replacement kit for OMM.
PCB	A-2031-0043	Printed circuit board kit (PCB) for OMM.
PG9 adaptor	M-2008-0189	PG9 cable gland adaptor.
MI 12 interface	—	See Data Sheet H-2000-2195 MI 12 interface unit.

Renishaw plc

New Mills, Wotton-under-Edge,
Gloucestershire,
GL12 8JR, UK

Tel +44 (0)1453 524524
[07000 RENISHAW]

Fax +44 (0)1453 524901

Telex 437120 RENMET G

email uk@renishaw.com

RENISHAW
www.renishaw.com

Australia - Renishaw Oceania Pty., Ltd.
Tel +61 3 9553 8267
Fax +61 3 9592 6738
email australia@renishaw.com

Brazil - Renishaw Latino Americana Ltda.
Tel +55 11 4195 2866
Fax +55 11 4195 1641
email brazil@renishaw.com

The People's Republic of China Renishaw Representative Office
Tel +86 10 6410 7993
Fax +86 10 6410 7992
email china@renishaw.com

France - Renishaw S.A.
Tel +33 1 64 61 84 84
Fax +33 1 64 61 65 26
email france@renishaw.com

Germany - Renishaw GmbH
Tel +49 7127 9810
Fax +49 7127 88237
email germany@renishaw.com

Hong Kong - Renishaw (Hong Kong) Ltd.
Tel +852 2753 0638
Fax +852 2756 8786
email hongkong@renishaw.com

India - Renishaw Metrology Systems Private Ltd.
Tel +91 80 5320 144
Fax +91 80 5320 140
email india@renishaw.com

Indonesia Renishaw Representative Office
Tel +62 21 428 70153
Fax +62 21 424 3934
email indonesia@renishaw.com

Italy - Renishaw S.p.A.
Tel +39 011 966 10 52
Fax +39 011 966 40 83
email italy@renishaw.com

Japan - Renishaw K.K.
Tel +81 3 5332 6021
Fax +81 3 5332 6025
email japan@renishaw.com

The Netherlands - Renishaw International BV
Tel +31 76 543 11 00
Fax +31 76 543 11 00
email japan@renishaw.com

Singapore Renishaw Representative Office
Tel +65 897 5466
Fax +65 897 5467
email singapore@renishaw.com

South Korea - Renishaw Liaison Office
Tel +82 2 565 6878
Fax +82 2 565 6879
email southkorea@renishaw.com

Spain - Renishaw Iberica S.A.
Tel +34 93 478 21 31
Fax +34 93 478 16 08
email spain@renishaw.com

Switzerland - Renishaw A.G.
Tel +41 55 410 66 66
Fax +41 55 410 66 69
email switzerland@renishaw.com

Taiwan - Renishaw Representative Office
Tel +886 4 251 3665
Fax +886 4 251 3621
email taiwan@renishaw.com

USA - Renishaw Inc.
Tel +1 847 286 9953
Fax +1 847 286 9974
email usa@renishaw.com