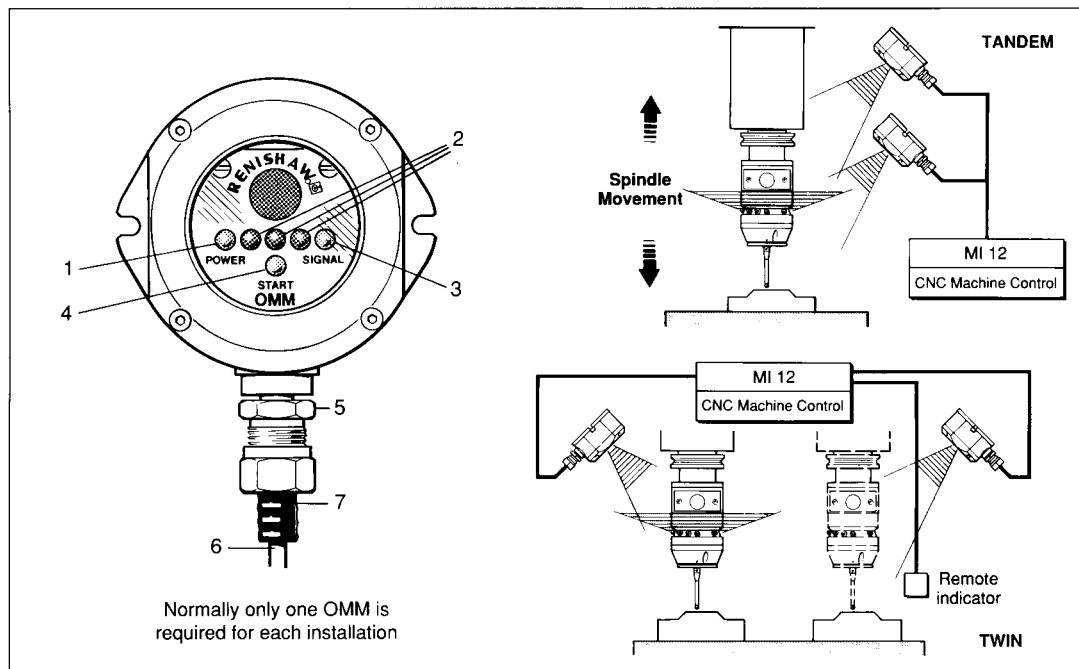


OMM - Optical Module Machine

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.

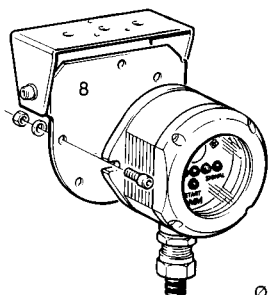
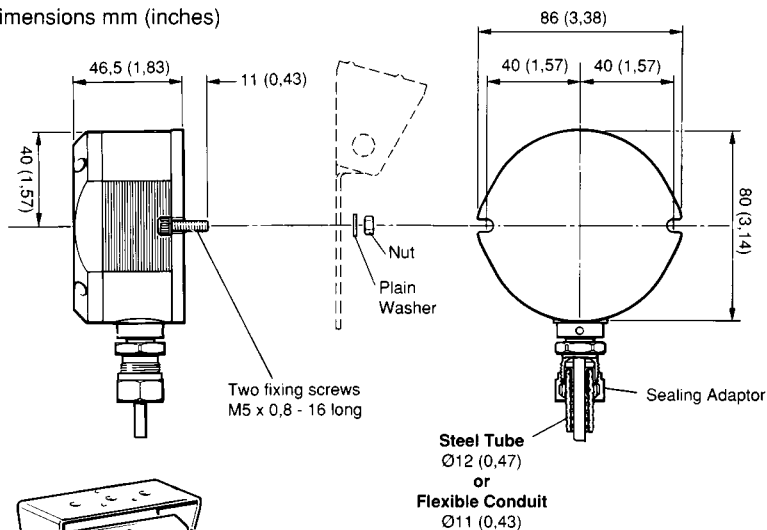
WARNING

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.

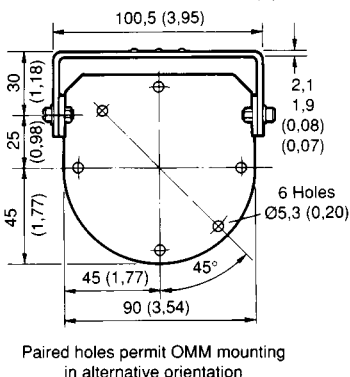
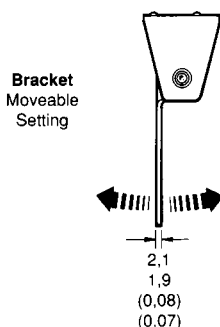
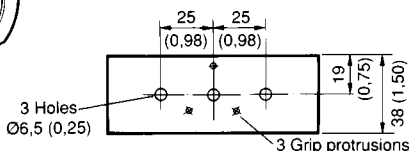
Installation

dimensions mm (inches)



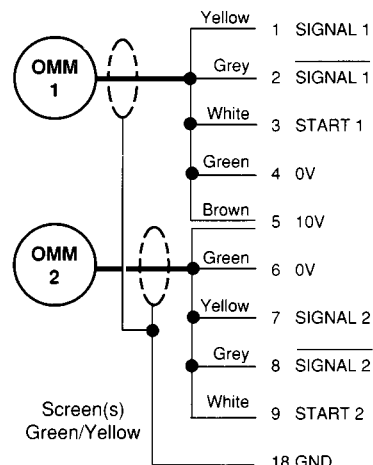
OMM MOUNTING BRACKET

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	A-2031-0002	Window 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 reserves the right to change specifications without notice.

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