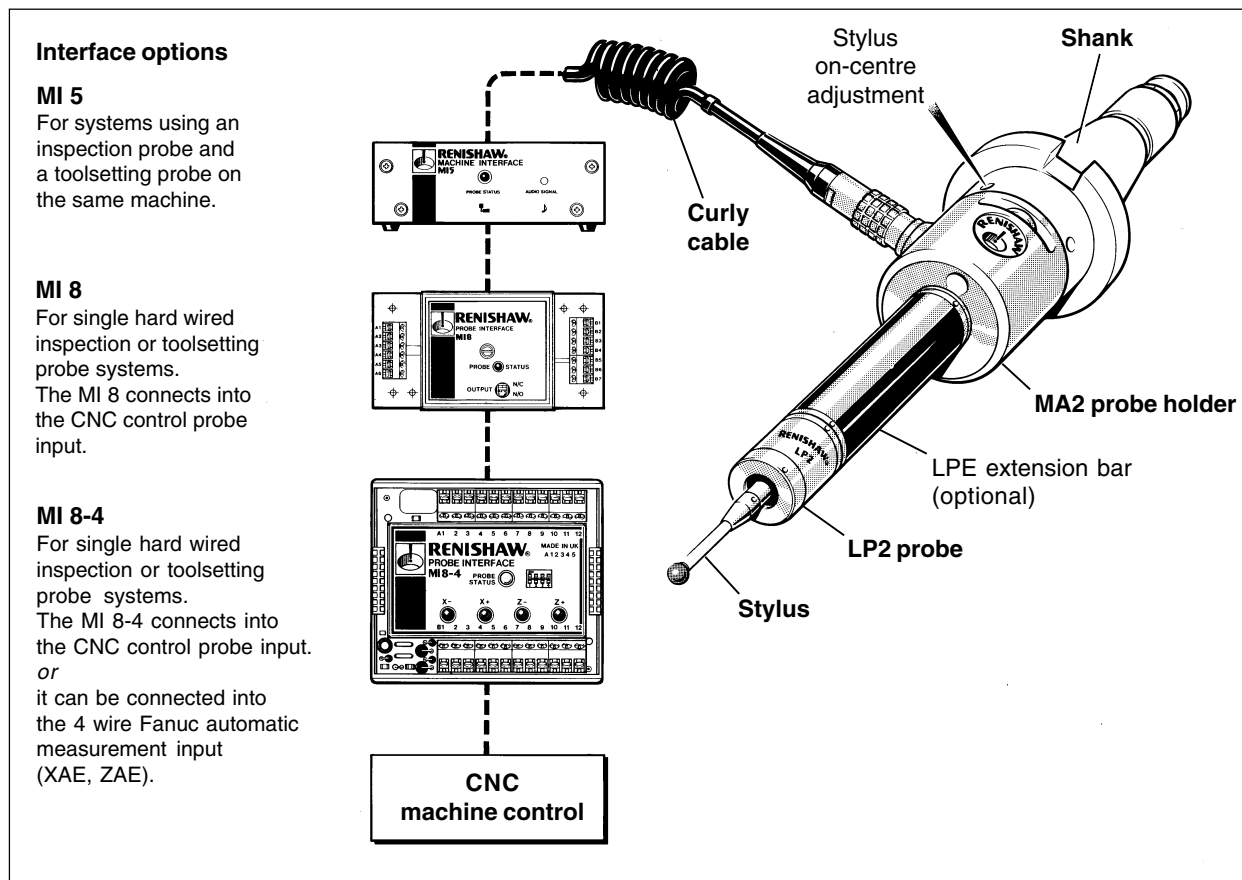


LP2 probe with hard wired signal transmission

Workpiece set-up and inspection system for machining centres
with manual tool change



LP2 probe

The compact LP2 probe is fully sealed for working in the hostile machine tool environment.

MA2 probe holder

The MA2 probe holder attaches to a custom shank, incorporating stylus on-centre adjustment - *custom shanks are available from Renishaw.*

Shank adjusting screws enable the stylus to be set on the spindle centre line. When the correct setting is achieved clamping screws are tightened to lock the MA2 in position on the shank.

Shank adaptor for 20mm tool holding shanks

The optional shank adaptor attaches to the MA2 probe holder, and is used with existing 20mm tool-holding shanks - *these shanks are not supplied by Renishaw.* The shank adaptor incorporates stylus on-centre adjustment.

Cable connection to Renishaw interface

After the probe is mounted in the machine spindle, the operator plugs the curly cable into the high quality MA2 socket.

The cable establishes a link to the interface unit. The interface unit processes signals between the probe and CNC machine control.

HOW IT WORKS

When the probe system is ready for operation, the probe stylus is driven against a workpiece feature. When the stylus contacts a surface, a trigger signal is generated which records the contact position in the machine control X, Y and Z registers. Two or more contacts positions provide measurement data.

Software instructs machine motion to stop within the limits of stylus deflection (overtravel), for safe and rapid operation.

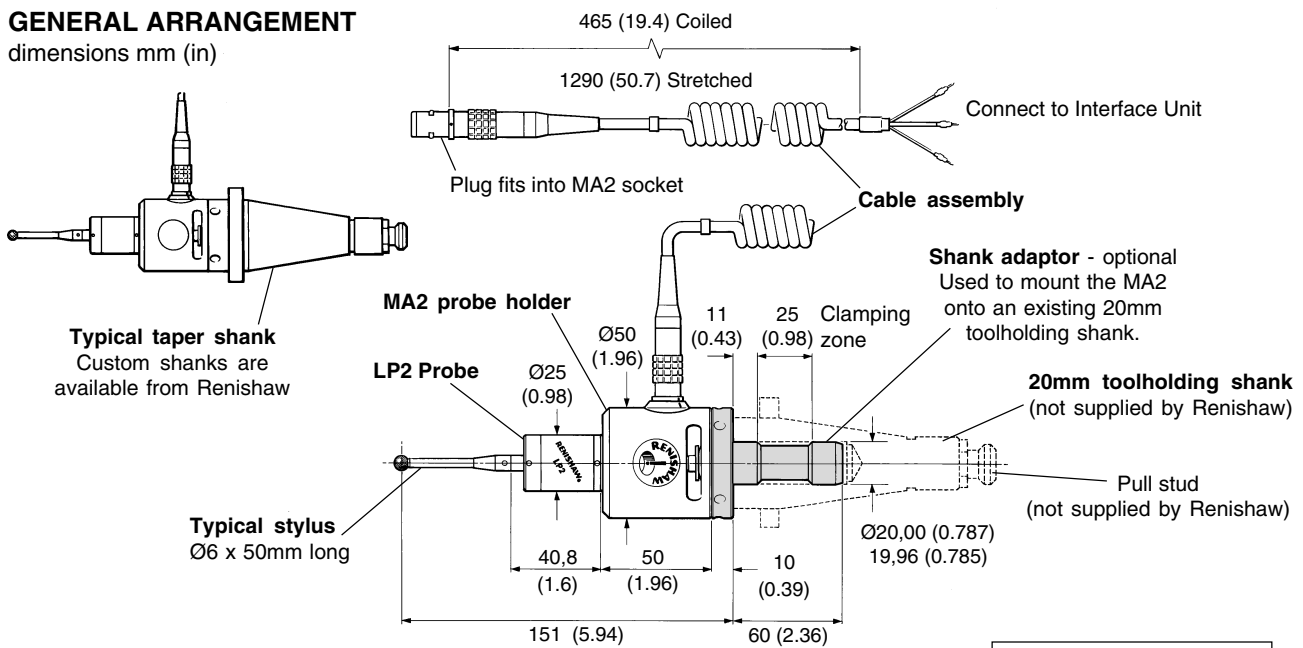
RENISHAW



DATA SHEET

GENERAL ARRANGEMENT

dimensions mm (in)



OPERATOR SAFETY

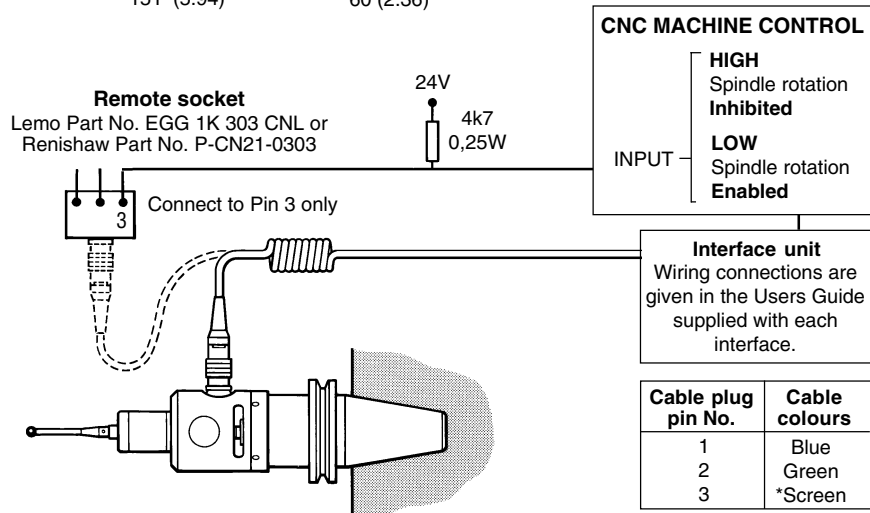
The probe must not be spun in the machine spindle, with the cable connected - except by hand.

TO ENSURE OPERATOR SAFETY

It is recommended that a fail safe SPINDLE ROTATION INHIBIT is built into the machine installation.

The example shows the probe cable plugged into the probe socket, preventing spindle rotation.

When the probe cable (dotted lines) is plugged into the remote socket, spindle rotation is enabled.



Parts List - Please quote the Part No. when ordering equipment

Type	Part No.	Description
MA2	A-2063-7868	MA2 probe holder.
Cable	A-1016-6451	Curly cable assembly.
Shank adaptor	M-2063-7865	Shank adaptor - optional.
Styli	—	See Brochure H-1000-3200 Styli and accessories.
LP2 probe	—	See Data Sheet H-2000-2100 LP2 and LP2H probes.
Extensions	—	See Data Sheet H-2000-2120 Adaptors extensions and holders for probes.
Shanks	—	See Data Sheet H-2000-2011 Taper shanks for machine tool probes.
MI 5	—	See Data Sheet H-2000-2180 MI 5 interface unit.
MI 8	—	See Data Sheet H-2000-2191 MI 8 interface unit.
MI 8-4	—	See Data Sheet H-2000-2185 MI 8-4 interface unit.
PSU3	—	See Data Sheet H-2000-2200 PSU3 power supply unit (optional).
Software	—	See Data Sheet H-2000-2289 Probe software for machine tools.

Cable plug pin No.	Cable colours
1	Blue
2	Green
3	*Screen

*Screen must be connected to the machine star point.

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