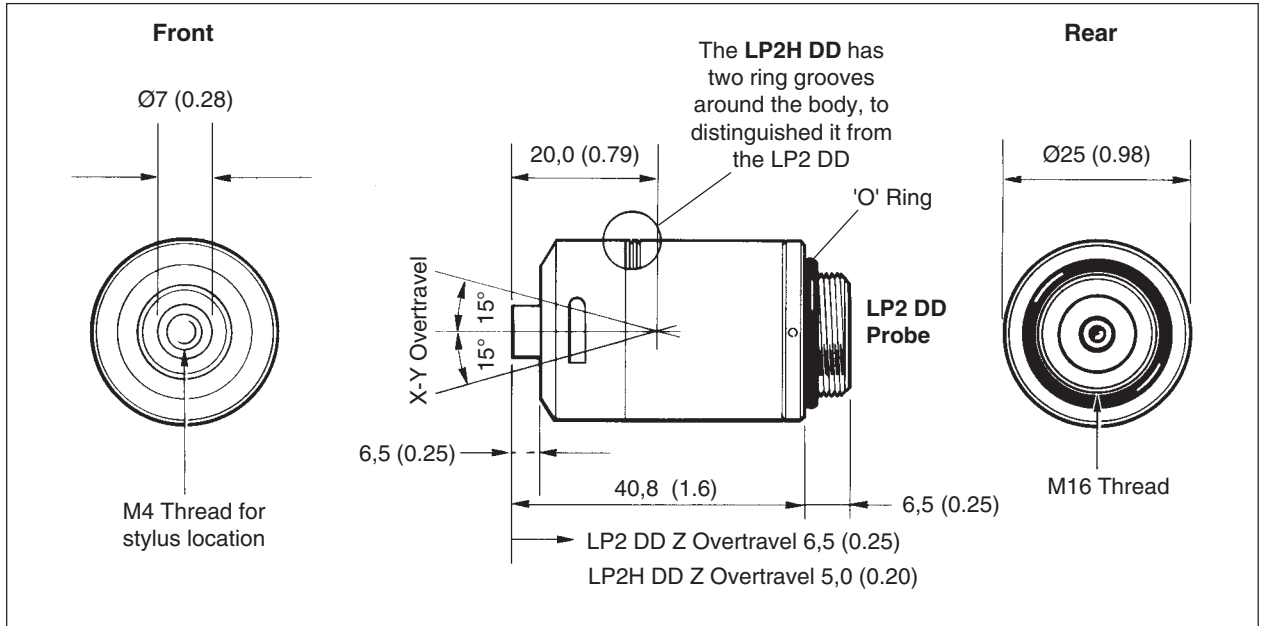


LP2 DD and LP2H DD Probes

For use on grinding machines and other applications subject to particle laden coolant



LP2 DD and LP2H DD probes are a variants of LP2 and LP2H probes. They are similar in all respects to the LP2 range except the front end is protected by a double diaphragm arrangement in place of the diaphragm and metal eyelid seal used on the LP2. LP2 DD and LP2H DD probes are specified for use with applications subject to particle laden coolant.

Double diaphragm probes require minimal maintenance and are suitable for use in a high volume production environment.

The diaphragm material is resistant to coolants and elevated temperatures. However if the probe is subjected to continual exposure to hot chips, use of the swarf deflector is recommended.

Note: When the swarf deflector is used, Z axis over-travel is restricted to 4,75mm (0.19in) for both LP2 DD and LP2H DD probes. The swarf deflector does not restrict the use of Renishaw styli.

The LP2 DD and LP2H DD are both mechanically and electrically compatible with all accessories available for the LP2 and LP2H.

A conversion kit is available to convert existing LP2 and LP2H probes to the DD standard.

An outer diaphragm replacement kit is available for LP2 DD and LP2H DD probes (see overleaf).

LP2DD PROBE

Sense Directions	$\pm X, \pm Y, +Z$
Stylus overtravel	15° X and Y directions 6,5mm (0.25in) Z direction.
Uni-directional Repeatability Max 2 Sigma (2σ) value	Repeatability of $1,0\mu\text{m}$ ($40\mu\text{in}$) is valid for test velocity of 480mm/min (1.5ft/min) at stylus tip. Using a stylus 35mm (1.37in) long.
Stylus trigger force X and Y direction	Set at 0,5N / 50gf (1.76ozf) giving 0,9N / 90gf (3.17ozf) max.
Z direction	5,85N / 585gf (20.6ozf).

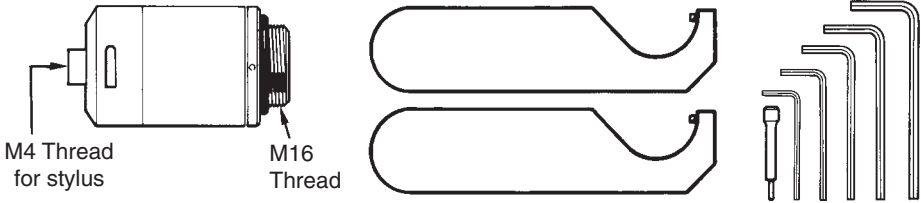
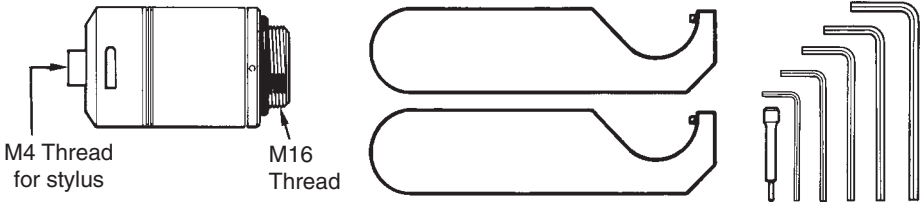
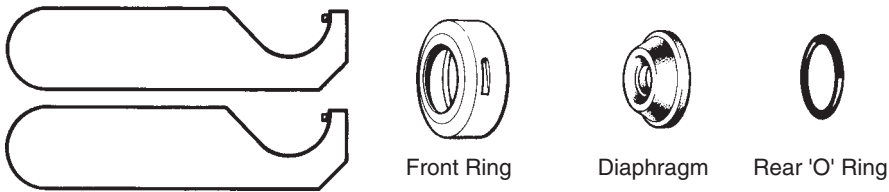

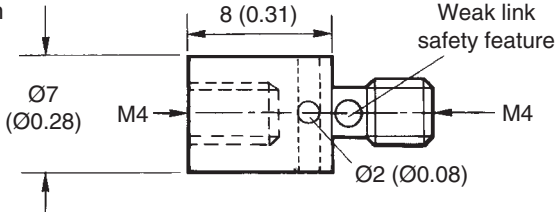
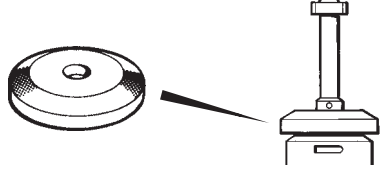
LP2H DD PROBE

Sense directions	$\pm X, \pm Y, +Z$
Stylus overtravel	15° X and Y directions 5,0mm (0.20in) Z direction
Uni-directional Repeatability Max 2 Sigma (2σ) value	Repeatability of $2,0\mu\text{m}$ ($80\mu\text{in}$) is valid for test velocity of 480mm/min (1.5ft/min) at stylus tip. Using a stylus 35mm (1.37in) long.
Stylus Trigger Force X and Y direction	Set at 2,0N / 200gf (7.05ozf) giving 4,0N / 400gf (14.10ozf) max.
Z direction	30N / 3,0kgf (6.6lbf).



DATA SHEET

Parts List Please quote the Part No. when ordering equipment

Type	Part No.	Description
LP2 DD	A-2063-8020	LP2 DD Probe complete with Two C Spanners and TK1 Probe Head Tool Kit 
LP2H DD	A-2064-0032	LP2H DD Probe complete with Two C Spanners and TK1 Probe Head Tool Kit 
DDCK	A-2063-8023	Conversion Kit comprising Two C Spanners, Front Ring, Outer Diaphragm and 'O' Ring 
DDRK	A-2063-8030	Replacement Kit comprising Outer Diaphragm and 'O' Ring 
SA8	M-5000-7582	Stylus Adaptor with Break Protection In the event of a collision the adaptor is designed to break and protect the probe from damage 
SD1	M-2063-8003	Swarf Deflector When fitted with the swarf deflector Z overtravel is limited to 4,75mm (0.19in). 

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

Renishaw Inc., USA
Tel +1 847 286 9953
Fax +1 847 286 9974
email usa@renishaw.com
Renishaw K.K., Japan
Tel +81 3 5332 6021
Fax +81 3 5332 6025
email japan@renishaw.com
Renishaw GmbH, Germany
Tel +49 7127 9810
Fax +49 7127 88237
email germany@renishaw.com
Renishaw S.A., France
Tel +33 1 64 61 84 84
Fax +33 1 64 61 65 26
email france@renishaw.com

Renishaw S.p.A., Italy
Tel +39 011 9 66 10 52
Fax +39 011 9 66 40 83
email italy@renishaw.com
Renishaw Iberica S.A., Spain
Tel +34 93 478 21 31
Fax +34 93 478 16 08
email spain@renishaw.com
Renishaw A.G., Switzerland
Tel +41 55 410 66 66
Fax +41 55 410 66 69
email switzerland@renishaw.com
Renishaw Latino Americana Ltda., Brazil
Tel +55 11 7295 2866
Fax +55 11 7295 1641
email brazil@renishaw.com

Renishaw (Hong Kong) Ltd., Hong Kong, The People's Republic of China
Tel +852 2753 0638
Fax +852 2756 8786
email hongkong@renishaw.com
Renishaw Metrology Systems Private Limited, India
Tel +91 80 5320 144
Fax +91 80 5320 140
email india@renishaw.com
Renishaw Oceania Pty Ltd., Australia
Tel +61 3 9553 8267
Fax +61 3 9592 6738
email australia@renishaw.com

Renishaw's Representative Offices
Indonesia **Tel** +62 21 428 70153
Fax +62 21 424 3934
email indonesia@renishaw.com
Singapore **Tel** +65 897 5466
Fax +65 897 5467
email singapore@renishaw.com
Taiwan **Tel** +886 4 2513665
Fax +886 4 2513621
email taiwan@renishaw.com
The People's Republic of China
Tel +86 10 641 07993
Fax +86 10 641 07992
email china@renishaw.com
Renishaw's Liaison Office, South Korea
Tel +82 2 565 6878
Fax +82 2 565 6879
email southkorea@renishaw.com