

# Millimar P2001 Series Inductive Probe Owner's Manual

Millimar P2001 M / P2001 T / P2001 F

Inductive Probe

## FEATURES

- Compact design
- Plain bearing guide
- High linearity over the entire measuring range
- Excellent electromagnetic shielding (EMC)
- Chemical resistance data: resistant to oil, gasoline, water and aliphatics. Moderately resistant to acids, bases, solvents and ozone

## TECHNICAL DATA

Order no.		5323040
Product type		P2001 M
Measuring range	mm	± 0.5
Measuring range	inch	± .020"
Measuring force	N	0.75 N +/-0.15 N
Increase in measuring force	N/mm	0.1 N/mm
Sensitivity deviation	%	0.3
Repeatability f <sub>w</sub>	µm	0.15

Repeatability $f_w$	inch	6 $\mu$ "
Hysteresis $f_u$	$\mu$ m	0.2
Hysteresis $f_u$	inch	8 $\mu$ "
Linearity deviation within +/-0.1 mm	$\mu$ m	0.6
Linearity deviation within +/-0.0039"	inch	24 $\mu$ "
Linearity deviation within +/-0.5 mm	$\mu$ m	1.5
Linearity deviation within +/-0.020"	inch	60 $\mu$ "
IP protection category:		IP 40
Cable length	m	2.5
Temperature coefficient	$\mu$ m/°C	0.15
Compatibility		Mahr VLDT

## ACCESSORIES

Order no.	Product description	Product name	Compatibility	Product type
5323130	Extension cable 2.5 m	Extension cable 2.5 m (Mahr VLDT)	Mahr VLDT	C2025 M
5323140	Extension cable 5 m	Extension cable 5 m (Mahr VLDT)	Mahr VLDT	C2050 M
5323150	Extension cable 7.5 m	Extension cable 7.5 m (Mahr VLDT)	Mahr VLDT	C2075 M
5323160	Extension cable 10 m	Extension cable 10 m (Mahr VLDT)	Mahr VLDT	C2100 M

Millimar P2004 M / P2004 T / P2004 U / P2004 F

Inductive Probe

## FFEATURES

- Models with or without compressed-air (pneumatic) lifter or vacuum retraction
- Measuring pin mounted in ball bearing guide
- High linearity over the entire measuring range
- Excellent electromagnetic shielding (EMC)
- All probes can be easily converted from axial to radial by mounting a slip-on cap (included)
- Chemical resistance data: resistant to oil, gasoline, water and aliphatics. Moderately resistant to acids, bases, solvents and ozone
- **Package contains:** instruction manual, cap for radial cable output, spanner for preliminary stroke setting

## TECHNICAL DATA

Order no.		5323010	5323011	5323013	5323014
Product type		P2004 M	P2004 T	P2004 U	P2004 F
Measuring range	mm	$\pm 2$			
Measuring range	inch	$\pm .079''$			
Distance to upper stop	mm...mm	+2.2 . . . 4.4			
Distance to upper stop	inch...inch	+ .09 ... .173''			
Distance to lower stop	mm...mm	-2.2 . . . 0			
Distance to lower stop	inch...inch	-.09 ... 0''			
Lifter / retraction		Standard model			
Measuring force	N	0.75 N +/-0.15 N			
Increase in measuring force	N/mm	0.2 N/mm			
Sensitivity deviation	%	0.3			

Repeatability $f_w$	$\mu\text{m}$	0.1			
Repeatability $f_w$	inch	4 $\mu$ "			
Hysteresis $f_u$	$\mu\text{m}$	0.5			
Hysteresis $f_u$	inch	20 $\mu$ "			
Linearity deviation within +/-0.5 mm	$\mu\text{m}$	0.4			
Linearity deviation within +/-0.020"	inch	16 $\mu$ "			
Linearity deviation within +/-1.0 mm	$\mu\text{m}$	1.5			
Linearity deviation within +/-0.039"	inch	60 $\mu$ "			
Linearity deviation within +/-2.0 mm	$\mu\text{m}$	3			
Linearity deviation within +/-0.079"	inch	120 $\mu$ "			
IP protection category		IP 64			
Cable length	m	2.5			
Temperature coefficient	$\mu\text{m}/^\circ\text{C}$	0.15			
Compatibility		Mahr VLDT	Tesa	Marposs	Federa

Order no.	g	Dimension f	a	b	c	d	e	f	h
		inch	mm	mm	mm	mm	mm	mm	mm
<b>5323010</b>	M 2.5		88.7	28	21.3	6	9.2	8	14
<b>5323011</b>	M 2.5		88.7	28	21.3	6	9.2	8	14
<b>5323013</b>	M 2.5		88.7	28	21.3	6	9.2	8	14
<b>5323014</b>	4/48 UNF	0.375	88.7	28	21.3	6	9.2		14

Millimar P2004 MA / P2004 TA / P2004 UA / P2004 FA

Inductive Probe

## FEATURES

- Models with or without compressed-air (pneumatic) lifter or vacuum retraction
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## TECHNICAL DATA

Order no.		5323020	5323021	5323023	5323024
Product type		P2004 MA	P2004 TA	P2004 UA	P2004 FA
Measuring range	mm	± 2			

Measuring range	inch	$\pm .079''$
Distance to upper stop	mm...mm	+2.2 . . . 4.4
Distance to upper stop	inch...inch	+ .09 ... .173''
Distance to lower stop	mm...mm	-2.2 . . . 0
Distance to lower stop	inch...inch	-.09 ... 0''
Lifter / retraction		Vacuum lifter
Measuring force	N	0.75 N +/-0.15 N
Increase in measuring force	N/mm	0.2 N/mm
Sensitivity deviation	%	0.3
Repeatability $f_w$	$\mu\text{m}$	0.1
Repeatability $f_w$	inch	4 $\mu''$
Hysteresis $f_u$	$\mu\text{m}$	0.5
Hysteresis $f_u$	inch	20 $\mu''$
Linearity deviation within +/-0.5 mm	$\mu\text{m}$	0.4
Linearity deviation within +/- .020''	inch	16 $\mu''$
Linearity deviation within +/-1.0 mm	$\mu\text{m}$	1.5
Linearity deviation within +/- .039''	inch	60 $\mu''$

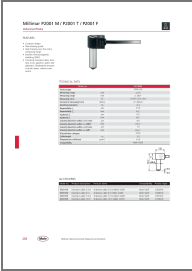
Linearity deviation within +/-2.0 mm	μm	3			
Linearity deviation within +/-0.079"	inch	120 μ"			
IP protection category		IP 64			
Cable length	m	2.5			
Temperature coefficient	μm/°C	0.15			
Compatibility		Mahr VLDT	Tesa	Marposs	Federa

Order no	g	Dimension f	j	k	l	m	a	b	c	d	e	f	h	i
		inch	m m	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
<b>5323020</b>	M 2.5		3.6	9	8.3	12.5	88.7	28	21.3	6	9.2	8	14	26.5
<b>5323021</b>	M 2.5		3.6	9	8.3	12.5	88.7	28	21.3	6	9.2	8	14	26.5
<b>5323023</b>	M 2.5		3.6	9	8.3	12.5	88.7	28	21.3	6	9.2	8	14	26.5
<b>5323024</b>	4/48 UNF	0.375	3.6	9	8.3	12.5	88.7	28	21.3	6	9.2		14	26.5

Contents

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Documents / Resources



[Millimar P2001 Series Inductive Probe](#) [pdf] Owner's Manual  
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References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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