

DME 5000

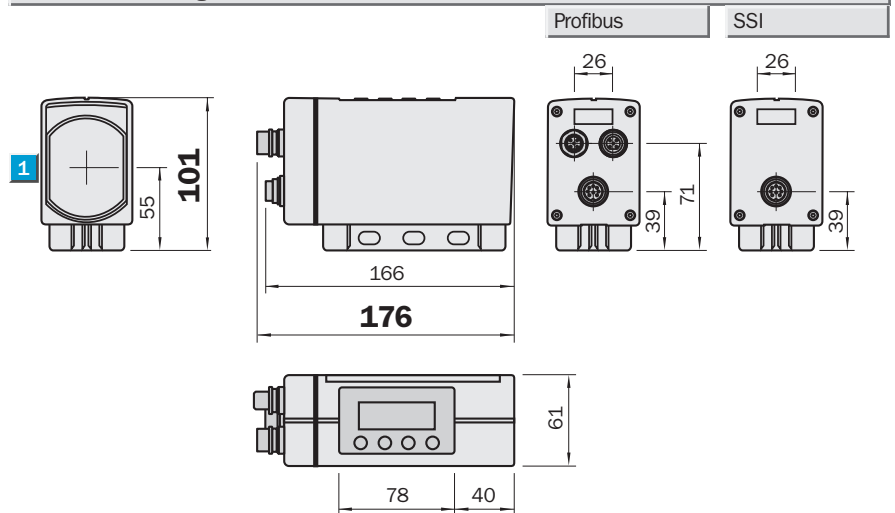
Distance measuring device



- Measurement on reflective tape Diamond Grade
- Convenient operation startup: Illuminated LCD display
- Easy assembly and alignment concept: Alignment bracket with spring/visible red light
- Only little work at operation startup: status/diagnose information on display
- High degree of system availability: highest accuracy and reproducibility
- Short positioning processes: very fast measuring time/cycle time

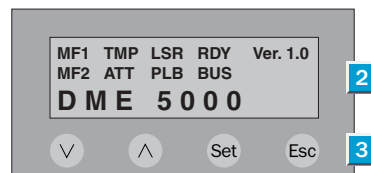


Dimensional drawing



Adjustments possible

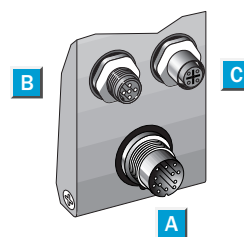
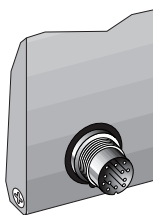
All types



- 1 Centre of optical axis
- 2 LC-display
- 3 Entry range

Connection type

DME 5000-111	DME 5000-121	DME 5000-112	DME 5000-122
DME 5000-211	DME 5000-221	DME 5000-212	DME 5000-222



8 pin, M 16

pnk	1	Data+
wht	2	(TX+)
brn	3	MF 1
gra	4	Data-
blk	5	(TX-)
vio	6	MF 2
blu	7	CLK+
red	8	(RX+)

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5 pin, M 12

Bus in

1	NC
2	A
3	NC
4	B
5	NC

5 pin, M 12

Bus out

1	+ 5 V
2	A
3	GND
4	B
5	NC

Technical data		DME 5000-		111	112	211	212	121	122	221	222		
Measurement range	0.15 ... 70 m												
	0.15 ... 150 m												
Accuracy	±2 mm												
	±3 mm												
Reproducibility ¹⁾	0.5 mm												
	1 mm												
Light spot diameter	Approx. 130 mm at 70 m												
	Approx. 270 mm at 150 m												
Resolution (adjustable)	0.05 ... 5 mm												
Light source ²⁾, light type	Laser diode, red light												
Laser category	2 (IEC 60825-1/C.D.R.H.)												
Supply voltage V_s ³⁾	18 ... 30 V DC												
Ripple ⁴⁾	5 V _{PP}												
Current consumption	< 250 mA at DC 24 V												
	with heating < 1000 mA												
Switching outputs MF1, MF2	B (push/pull)												
Output (MF1/MF2)	HIGH: $V_s < 3$ V; LOW < 2 V												
Input (MF1)	HIGH: > 12 V; LOW < 3 V												
Output current I _A max.	100 mA (short-circuit/overload protected)												
Connection type	Plug												
VDE protection class ⁵⁾	□												
Enclosure rating	IP 65												
Ambient temperature	Operation	-10 °C ... +55 °C											
	with heating	Operation	-40 °C ... +55 °C										
	Storage	-25 °C ... +75 °C											
Weight	Approx. 1650 g												
Interfaces	SSI												
	Profibus 12 MBd												
Effect of air pressure	0.3 ppm/hPa												
Effect of temperature	1 ppm/K												
Temperature drift	Typ. 0.1 mm/K												
Measurement value output													
SSI	1 ms												
Profibus 12 MBd	2 ms												
Initialisation period	500 ms												
Max. running speed	10 m/s												
EMC	EN 61000-6-2, EN 55011: class B												
Mechanical load	Shock: EC 68-2-27, IEC 68-2-29												
	Sine: IEC 68-2-6												
	Noise: IEC 68-2-64												

¹⁾ Statistical error 1 σ , environmental conditions constant

²⁾ Average service life 50,000 h at $T_A = +25$ °C

³⁾ Limit values

⁴⁾ May not exceed or fall short of V_s tolerances

⁵⁾ Reference voltage 32 V DC

Order information

Type	Part no.	Type	Part no.
DME 5000-111	1 022 949	DME 5000-121	1 024 083
DME 5000-112	1 023 668	DME 5000-122	1 024 084
DME 5000-211	1 024 081	DME 5000-221	1 024 085
DME 5000-212	1 024 082	DME 5000-222	1 024 086

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