



Long range distance sensors DME5000

DME5000-112



Model Name > **DME5000-112**
Part No. > **1023668**



At a glance

- Measurement range from 0.15 m to 300 m
- Very fast measurement cycles
- Highest accuracy, repeatability and system availability
- Illuminated LC display with diagnostic information
- Visible red light and bracket with springs for alignment
- Variety of interfaces: SSI, RS-422, PROFIBUS, HIPERFACE, DeviceNet

Your benefits

- Fastest measurement rate offers optimized integration into control loops for increased productivity
- Red laser light as well as adjustable mounting brackets (optional accessory) enable fast and easy alignment, ensuring on-time and cost-effective installation
- Multi-point self checks provide maintenance and replacement warnings increasing overall machine availability
- A tough, metal housing as well as heating and cooling accessories ensure reliability in rough ambient conditions
- User-friendly display with easy-to-use menu along with external PC/PLC programming offers fast and cost-efficient setup
- Multiple serial interfaces provide high-speed position output to the controller and high flexibility in application integration
- Integrated speed monitoring offers additional information for increased process reliability
- Highest degree of accuracy and repeatability ensures high machine availability



Performance

Measuring range (on diamond grade):	0.15 m ... 70 m
Repeatability ¹⁾ , ²⁾ :	0.5 mm
Accuracy:	± 2 mm
Output rate:	2 ms
Light source ³⁾ :	Laser, red
Laser protection class:	2 (EN 60825-1/CDRH)
Typ. light spot size (distance):	At 70 m at 150 m at 220 m
Speed (max.):	10 m/s

¹⁾ On Diamond Grade ²⁾ Statistical error 1 σ , environmental conditions constant, min. warm-up time 10 min ³⁾ Average service life of 50,000 h at T_A = +25 °C

Interfaces

Data interfaces: PROFIBUS
Multifunctional input ¹⁾; ²⁾: 1 x MF

¹⁾ HIGH > 12 V / LOW < 3 V ²⁾ Not reverse polarity protected

Mechanics/electronics

Supply voltage V_s : DC 18 V ... 30 V , limit values
Residual ripple ¹⁾: < 5 Vpp
Power consumption: At 24 V DC < 250 mA
Initialization time ²⁾: 1.5 s
Output current I_a ³⁾: ≤ 100 mA
Connection type: Connector 2 x M12, 5-pin, B-coded, 1 x M16, 8-pin, B-coded
Indication: Display
Weight: Ca. 1,650 g

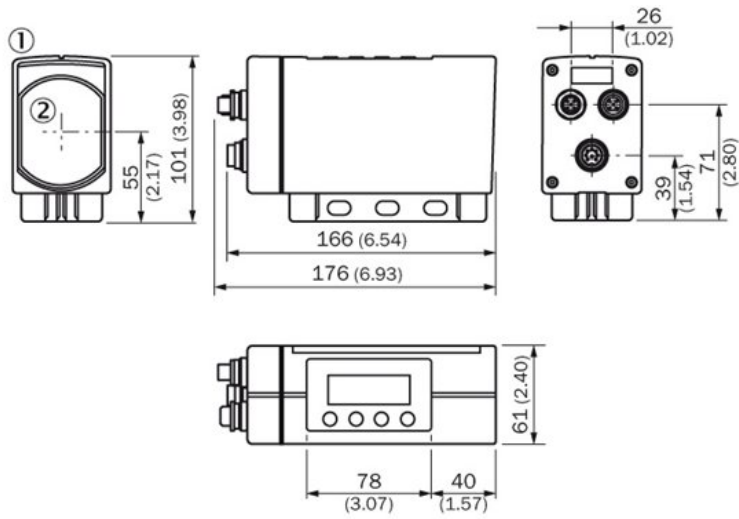
¹⁾ May not fall short of or exceed V_s tolerances ²⁾ After loss of reflector < 1 s at max. speed $V_{max} < 1 \text{ m/s}$ ³⁾ Short circuit/overload protected. Max. 100 nF/20 mH

Ambient data

Enclosure rating: IP 65
Protection class ¹⁾: II
EMC: EN 61000-6-2, EN 55011
Ambient temperature: Operation: -10 ... 55 °C
Storage: -25 ... 75 °C
Effect of air pressure: 0.3 ppm/hPa
Effect of air temperature: 1 ppm/K
Temperature drift: Typ. 0.1:
Mechanical load: Shock
Sine
Noise EN 600 68-2-27 / -2-29
EN 600 68-2-6
EN 600 68-2-64

¹⁾ Reference voltage DC 32 V

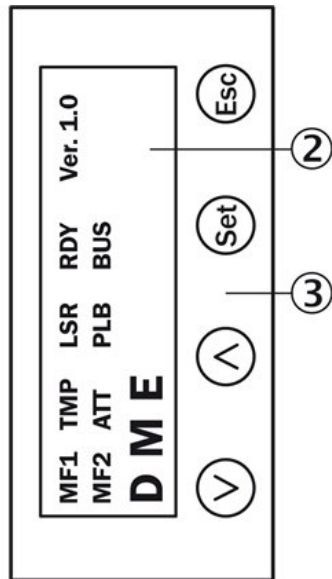
Dimensional drawing



- |1| Liquid crystal display
- |2| Center of optical axis

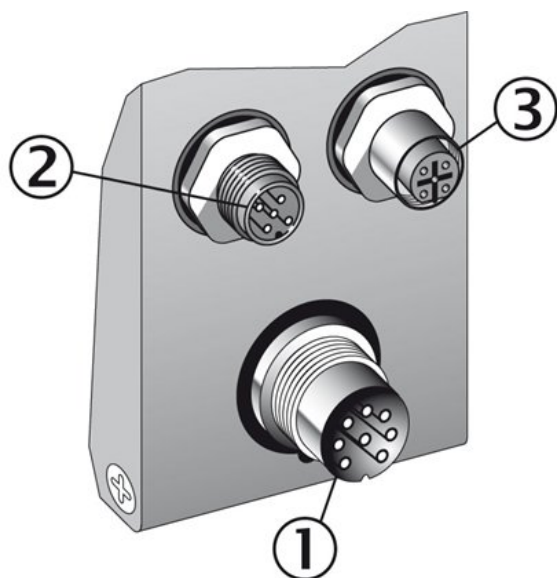
All dimensions in mm (inch)

Adjustment possible



- |2| Liquid crystal display
- |3| Keypad

Connection type



- |1| Connector M16, 8-pin
- |2| Connector M12, 5-pin, B-coded, BUS IN
- |3| Connector M12, 5-pin, B-coded, BUS OUT

Australia

Phone +61 3 9497 4100
1800 334 802 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail sac@sick.com.br

Canada

Phone +1(952) 941-6780
1 800-325-7425 – tollfree
E-Mail info@sickusa.com

Ceská Republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +852-2763 6966
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail kundenservice@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-999-0590
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederlands

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail austefjord@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7 495 775 05 30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail admin@sicksgp.com.sg

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82-2 786 6321/4
E-Mail info@sickkorea.net

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886 2 2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 216 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 4 8865 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 800-325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com