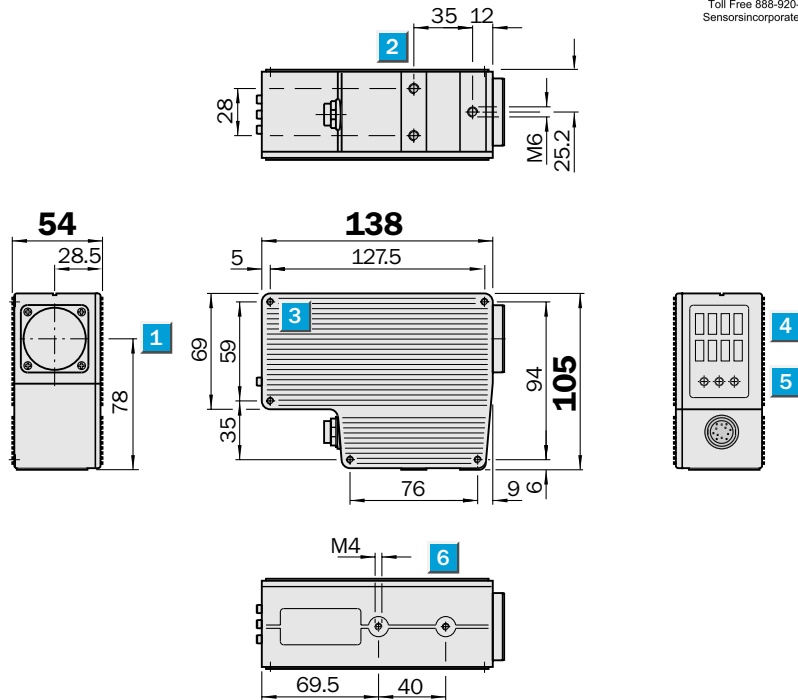


	<b>Measurement range</b> <b>100...2047 mm</b>
	<b>Measurement range</b> <b>0,1...130 m</b>
<b>Distance measuring devices</b>	

- Excellent measurement accuracy and reproducibility thanks to time-of-flight measurement
- Simple adjustment using visible red light
- Freely programmable parameters
  - 2 switching outputs
  - pre-failure signalling output
  - plausibility control
- RS 232 serial interface
- Analogue output

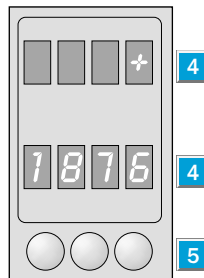
**Dimensional drawing**



**Adjustments possible**

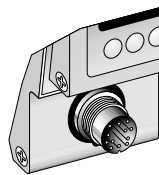
DME 2000-000

- 1 Centre of optical axis
- 2 M6 threaded mounting hole, 10 mm deep
- 3 M4 threaded mounting hole, 14 mm deep (this side only)
- 4 8-digit alphanumeric indicator
- 5 Programming switches
- 6 M4 threaded mounting hole, 6 mm deep



**Connection type**

DME 2000-000



12-pin, M 16

wht	A	DTR	Data terminal ready (RS 232 output)
brn	B	Q <sub>1</sub>	Q <sub>1</sub> switching output
grn	C	CTS	Clear to send (RS 232 input)
yel	D	Q <sub>A</sub>	Q <sub>A</sub> analogue output
gra	E	Q <sub>S</sub>	Q <sub>S</sub> service output
pnk	F	Q <sub>P</sub>	Q <sub>P</sub> plausibility output
red	G	L+	+ 18...30 V DC V <sub>S</sub>
blk	H	RxD	R x D (receive data, RS 232 input)
vio	I	S&H	Blanking input
gra/pnk	K	TxD	T x D (send data, RS 232 output)
red/blu	L	Q <sub>2</sub>	Q <sub>2</sub> switching output
blu	M	M	0 V (earth)



Accessories	page
Cable receptacles	496
Mounting brackets	510
Link mountings	510
Reflectors	520
<b>Special accessories</b>	<b>556</b>
Dust covers	
Cooling plates	
Remote positioning tubes	

Technical Data		DME 2000-	000								
<b>Light source<sup>1)</sup>, light type</b>	Laser diode, red light										
Laser category	2 (IEC 825-1/EN 60825-1)										
<b>Supply voltage V<sub>S</sub></b>	18...30 V DC <sup>2)</sup>										
Ripple	< 5 V <sub>SS</sub> <sup>3)</sup>										
Power consumption	< 6 W <sup>4)</sup>										
<b>Switching outputs</b>											
Q <sub>1</sub> , Q <sub>2</sub> , Q <sub>P</sub> , Q <sub>S</sub>	PNP										
Output voltage	HIGH = V <sub>S</sub> - ≤ 2 V/LOW = 2 V										
Output current I <sub>A</sub>	100 mA										
Q <sub>1</sub> and Q <sub>2</sub> switching outputs	Reversible										
Switching limit	Adjustable in 1 mm increments										
Switching hysteresis	Adjustable in 2mm increments, 0...254 mm										
Q <sub>P</sub> plausibility output	HIGH: measurement correct/ LOW: measurement error										
Q <sub>S</sub> service output	HIGH: device has no faults/ LOW: pre-failure signalling output										
Blanking input S/H	HIGH: ≥ 10 V; ≤ V <sub>S</sub> / LOW: ≤ 2 V or unswitched;										
	HIGH: Measured value stored/ LOW: free-running										
<b>Analogue output</b>	0...20 mA or 4...20 mA										
<b>Connection type</b>	Plug										
<b>VDE protection class<sup>5)</sup></b>	□										
<b>Circuit protection<sup>6)</sup></b>	A, B, C										
<b>Enclosure rating</b>	IP 65 (IEC 529)										
<b>Ambient temperature T<sub>A</sub></b>	Operation - 10 °C...+ 45 °C Storage - 25 °C...+ 75 °C										
<b>Weight</b>	Approx. 980 g										
<b>Shock load</b>	To IEC 68										
<b>Serial interface</b>	RS 232 (4.8/9.6, 19.2 kBaud)										
<b>Temperature drift</b>	Type 0.4 mm/K										

1) Average service life 50,000 h  
at T<sub>A</sub> = +25 °C

2) Limit values  
3) May not exceed or fall short of  
V<sub>S</sub> tolerances

4) Without load  
5) Reference voltage 50 V DC

6) A = V<sub>S</sub> connections reverse-polarity  
protected  
B = Output Q reverse-polarity protected  
C = Interference pulse suppression

	Mode 1.1: Proximity mode	Mode 2.1: Reflector mode	Order information	
			Standard type	Part no.
<b>Measurement range<sup>7)</sup></b>	100...2047 mm	0.1...130 m	DME 2000-000	1 010 578
Resolution	1 mm	1 mm		
Light spot dimensions	Approx. 3 mm/2 m	Approx. 250 mm/130 m		
Effect of compressed air		0.3 ppm/mbar		
Effect of air temperature		1 ppm/K		
Measured value output cycle	29 ms	100 ms		
Target remission	> 6...< 36000 %	Reflective tape		
Max. running speed		3 m/s		
<b>Reproducibility<sup>8)</sup></b>	1 mm (= 90 % remission)	2 mm		
Statistical error 1 σ	3 mm (> 18 % remission)	3...130 m APM reflective tape		
	25 mm (> 6 % remission)	3...100 m Diamond Grade		
Statistical error 3 σ <sup>9)</sup>	Typical 1 mm; max. 2 mm	0.1...90 m reflective tape 7610 0.1...40 m reflective tape 3290		
<b>Accuracy<sup>10)</sup></b>	± 5 mm (= 90 % remission)	+ 5/- 20 mm		
	± 11 mm (> 18 % remission)	In range as below		
	± 65 mm (> 6 % remission)	reproducibility stated		

7) Relative to front edge of object  
8) Environmental conditions constant at  
30 min. minimum switching period  
9) Measurement distance 1 m,  
90 % remission

10) 20 °C ambient temperature,  
1013 mbar, 30 min. switching period,  
re-calibration recommended after  
25,000 h