

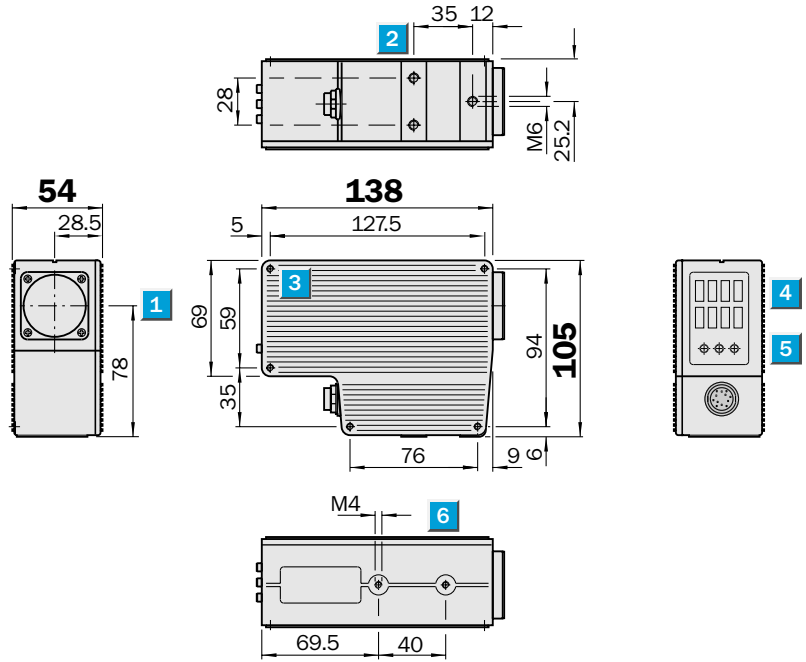


**Measurement range up to 10 m**

Distance measuring devices

- Excellent measurement accuracy and reproducibility thanks to time-of-flight measurement
- Simple adjustment using visible red light
- Easy handling due to programmable parameters
  - 2 switching outputs
  - pre-failure signalling output
  - plausibility control
- RS 422 serial interface and SSI interface
- Profibus
- Gateway to Interbus, DeviceNet

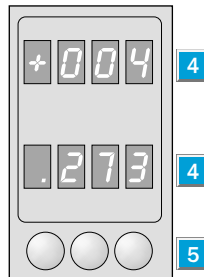
## Dimensional drawing



## Adjustments possible

DME 3000-211	DME 3000-232
DME 3000-212	DME 3000-211P

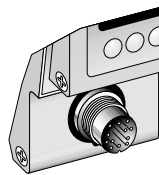
- 1 Centre of optical axis
- 2 M6 threaded mounting hole, 10 mm deep
- 3 M4 threaded mounting hole, 14 mm deep (this side only)
- 4 8-digit alphanumeric indicator
- 5 Programming switches
- 6 M4 threaded mounting hole, 6 mm deep



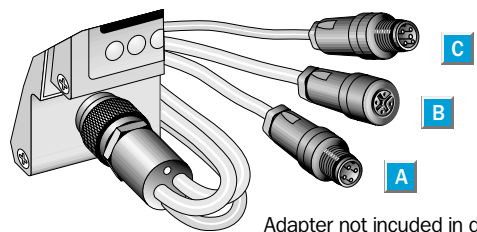
## Connection types

DME 3000-211
DME 3000-212
DME 3000-232

## DME 3000-211P



12-pin, M 16

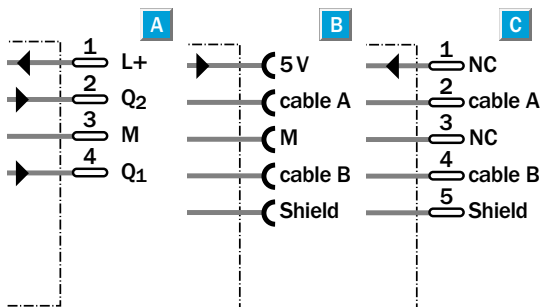
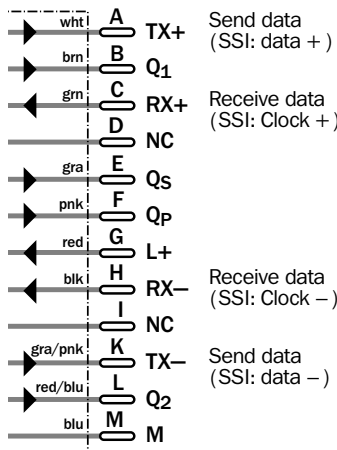


Adapter not included in delivery

4-pin, M 12

5-pin, M 12

5-pin, M 12



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

Technical Data		DME 3000-		211	212	232	211P						
<b>Measurement range</b>	100...8,000 mm												
	100...10,000 mm												
Light spot diameter	5 mm (measurement distance 8 m)												
Resolution	0.125 mm												
<b>Light source<sup>2)</sup>, light type</b>	Diode laser, red light												
Laser category	2 (IEC 825-1/EN 60825-1)												
Laser category	3 B (IEC 825-1/EN 60825-1)												
Service life (at 25 °C)	MTTF 50,000 h												
NIR blocking filter													
<b>Supply voltage V<sub>S</sub></b>	18...30 V DC <sup>3)</sup>												
Ripple	< 5 V <sub>SS</sub> <sup>4)</sup>												
Power consumption	≤ 6 W <sup>5)</sup>												
<b>Switching outputs</b>	PNP/NPN												
Q <sub>1</sub> , Q <sub>2</sub> , Q <sub>P</sub> , Q <sub>S</sub>	HIGH = V <sub>S</sub> - < 2 V/LOW = < 2 V												
Output current I <sub>A</sub> max.	100 mA												
Q <sub>1</sub> and Q <sub>2</sub> switching outputs	Reversible Q/ $\bar{Q}$												
Switching limit/switching hysteresis	Adjustable												
Q <sub>P</sub> plausibility output	HIGH: measurement correct/ LOW: measurement error												
Q <sub>S</sub> service output	HIGH: OK/ LOW: pre-failure signalling output												
<b>Connection type</b>	Plug												
<b>VDE protection class<sup>6)</sup></b>	□												
<b>Circuit protection<sup>7)</sup></b>	A, B, C												
<b>Enclosure rating</b>	IP 65												
<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>Interfaces</b>	SSI: GRIS/BINARY adjust., 24 or 25 bits												
<b>Serial interface</b>	RS 422: 4.8/9.6/19.2/38.4 kBaud												
<b>Profibus</b>	Max. 12 MBaud												
<b>Temperature drift</b>	Typical 0.4 mm/K												
	(compensation on request)												
<b>Measured value output</b>													
SSI/Profibus	21 ms												
RS 422, 38.4 kBaud	21 ms												
<b>Initialisation period</b>	6 s												

- 1) Relative to front edge of object  
2) Average service life 50,000 h  
at T<sub>A</sub> = + 25 °C  
3) Limit values

- 4) May not exceed or fall short of  
V<sub>S</sub> tolerances  
5) Without load  
6) Reference voltage 50 V DC

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

- 8) Environmental conditions constant,  
min. switching period 30 min.  
9) 23 °C air temp, 977 hPa,  
min. switching period 30 min.  
10) Re-calibration recommended after  
25,000 h.

Reproducibility and accuracy as a function of measurement distance											
	DME 3000-										
	21..	232	21..	232	21..	232	21..	232	21..	232	
Measurement distance	1 m		2 m		4 m		6 m		8 m		10 m
<b>Reproducibility<sup>8)</sup></b>											
White, 90 % remission	1 mm	0.5 mm	2 mm	1 mm	5 mm	2 mm	10 mm	5 mm	25 mm	20 mm	
Grey, 18 % remission	2 mm	1 mm	5 mm	2.5 mm	25 mm	5 mm	-	25 mm	-	-	
Black, 6 % remission	5 mm	2 mm	25 mm	8 mm	-	25 mm	-	-	-	-	
<b>Accuracy<sup>9)10)</sup></b>											
White, 90 % remission	±5 mm	±5 mm	±5 mm	±5 mm	±10 mm	±5 mm	±20 mm	±5 mm	±30 mm	±20 mm	
Grey, 18 % remission	±5 mm	±5 mm	±10 mm	±5 mm	±30 mm	±10 mm	-	±25 mm	-	-	
Black, 6 % remission	±10 mm	±5 mm	±20 mm	±10 mm	-	±10 mm	-	-	-	-	

Order information	
Type	Part no.
DME 3000-211	1 013 782
DME 3000-212	1 015 906
DME 3000-232	1 015 794
DME 3000-211P	1 018 064