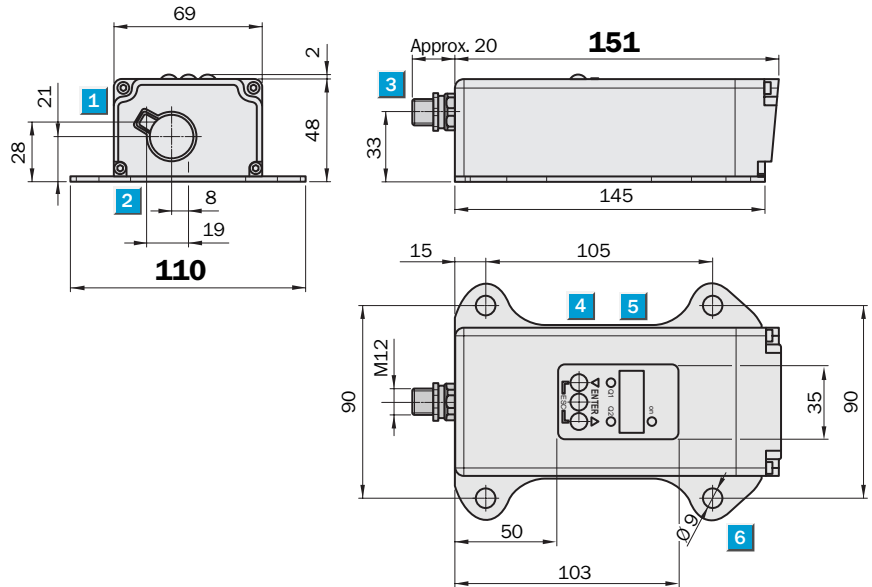


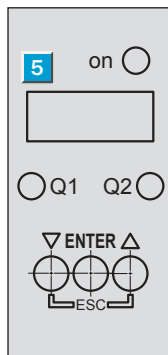
- High measurement accuracy thanks to time of flight measurement
- Simple alignment using red laser light
- Two distance switching outputs
- Heatable metal housing
- Weather protection housing optional
- Alignment bracket optional

Dimensional drawing



Adjustments possible

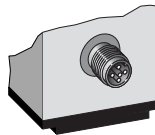
All types



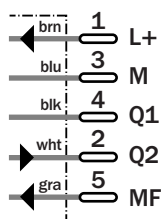
- 1 Optical axis – sender
- 2 Optical axis – receiver
- 3 M12 plug, 5-pin
- 4 Operating components
- 5 Indicator
- 6 Mounting hole

Connection type

All types



5-pin, M12



Accessories

- Cables and connectors
- Mounting systems
- Special accessories

Teach-in	MF active	Model
Q1	100 ms	Current measurement value is used as switching threshold
Q1	200 ms	
Q2	300 ms	
Q2	400 ms	

Technical Data		DS500-	P111	P211	N111	N211						
Scanning distance	0.2 ... 18 m (black), 6 % remission											
	0.2 ... 30 m (white), 90 % remission											
Light spot diameter	30 mm at 20 m											
Light source ¹⁾, light type	Laser diode, red light											
Laser class	2 (EN 60825/21 CFR 1040)											
Supply voltage V_s ²⁾	10 ... 30 V DC											
Ripple ³⁾	5 V _{pp}											
Power consumption typ. without heating	2 W											
	with heating	22 W										
Response time	250 ms											
Switching accuracy	± 3 mm											
Temperature drift	Typ. 0.05 mm/K											
Switching outputs Q1, Q2	PNP											
	NPN											
External Teach ET	Teach: > 12 V < V _S											
	Teach: < 2 V											
	Free-running < 2 V or unswitched											
	Free-running > 12 V < V _S											
VDE protection class ⁴⁾	□											
Enclosure rating	IP 65											
Ambient temperature	without heating	Operation	-10 °C ... +50 °C									
	with heating	Operation	-40 °C ... +50 °C									
		Storage	-25 °C ... +75 °C									
Weight	Approx. 1000 g											
Initialisation period	Typ. 500 ms											
EMC	EN 61000-6-2, EN 55011											
Mechanical load	Shock: EN 600 86-2-27/-2-29											
	Sine: EN 600 68-2-6											
	Noise: EN 600 68-2-64											

¹⁾ Average service life 50,000 h
at T_A = +25 °C

²⁾ Reverse-polarity protected

³⁾ May not exceed or fall short of
V_S tolerances

⁴⁾ Reference voltage 32 V DC

Error performance or no object in visibility field		Order information	
Error:	Measurement value output display: 0.000	Type	Part no.
	Switching outputs: Switching stage $\hat{=}$ measurement value 0 m	DS500-P111	1 026 519
No object in visibility field:		DS500-P211	1 026 520
		DS500-N111	1 026 512
		DS500-N211	1 026 522
	Measurement value output display: 99.99		
	Switching outputs: Switching stage $\hat{=}$ measurement value 99.99 m		