

Distance Sensor DS40

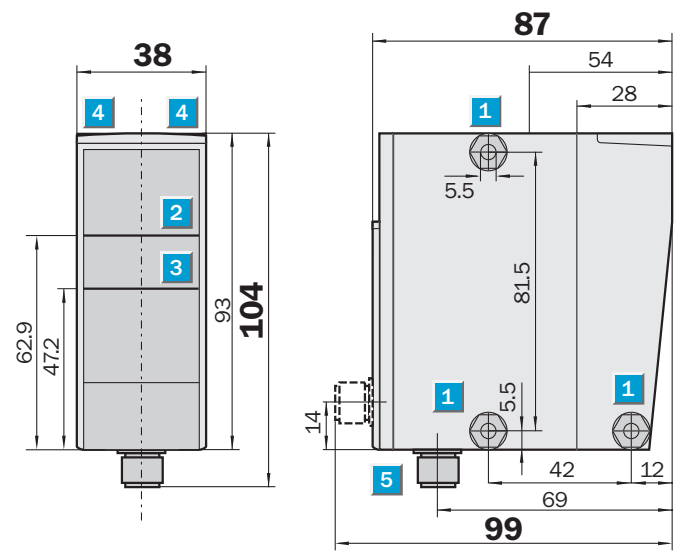


Scanning Distance
 200 ... 5000 mm
 Distance Sensor

- Background suppression up to 100 m (also shiny objects)
- High target dynamic:
black ... extremely shiny
- Precise alignment by red laser light
- Teach-in
- 1 Switching output for basic application demands



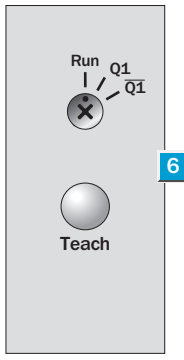
Dimensional drawing



Adjustments possible

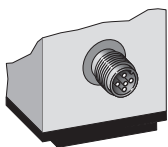
- DS40-P/-N21211
- DS40-P/-N41211

- 1** Mounting hole \varnothing 5,2 mm
- 2** Optical axis – sender
- 3** Optical axis – receiver
- 4** Status indicator
- 5** M12 plug, 5-pin
- 6** Control panel

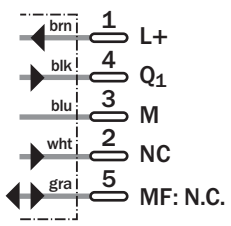


Connecting types

- DS40-P/-N21211
- DS40-P/-N41211



5-pin, M12



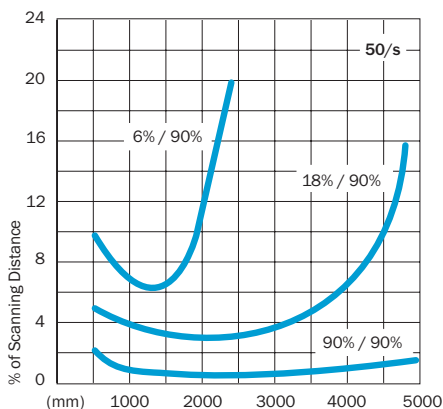
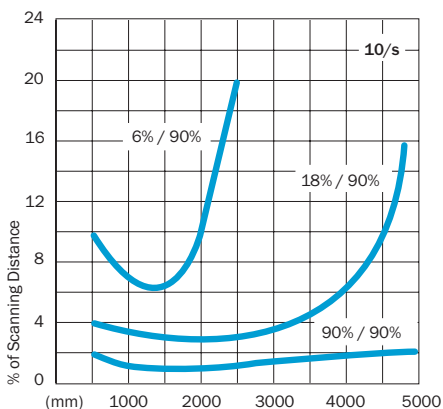
Technical data		DS40									
		-P 21211	-N 21211	-P 41211	-N 41211						
Type of connection	M12 plug, 5-pin										
Scanning distance, adjustable	200 mm ... 5000 mm										
Object with 6% remission	80 mm ... 2000 mm										
Object with 18% remission	80 mm ... 4000 mm										
Object with 90% remission ¹⁾	80 mm ... 5000 mm										
Light source ²⁾	Laser diode, red										
Light spot at 4.5 m distance	Ø 9 mm										
Supply voltage V _s ³⁾	11 to 30 V DC										
Power consumption ⁴⁾	< 3 W										
Residual ripple ⁵⁾	≤ 5 V _{pp}										
Switching output (invertable)	Q ₁										
DS40-P: PNP	HIGH = V _s - (< 2 V)/LOW = 0 V										
DS40-N: NPN	HIGH = V _s /LOW ≤ 2 V										
Output current ⁶⁾	100 mA										
Switching frequency	50/s										
	10/s										
Switching limit Q ₁	Adjustable (Teach-in)										
Time delay	On request										
Multifunction MF	N.C./External Teach on request										
VDE protection class ⁷⁾	II										
Laser protection class	2 (EN 60 825-1)										
Enclosure rating	IP 67										
Ambient temperature ⁸⁾	Operation -25 ... +50 °C										
	Storage -25 ... +75 °C										
Weight	202 g										

¹⁾ Also shiny
²⁾ Average service life 50 000 h, at room temperature = +25 °C
³⁾ Limit values, reverse polarity protected

⁴⁾ Without load
⁵⁾ Must be within V_s tolerances
⁶⁾ Outputs Q₁ short-circuit protected

⁷⁾ Withstand voltage 50 V DC
⁸⁾ Do not disband cable below 0 °C

Scanning distance



Order information

Type	Order no.
DS40-P21211	1029819
DS40-N21211	1029820
DS40-P41211	1029821
DS40-N41211	1029822

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