




DT 60

Distance Sensor "Fast"

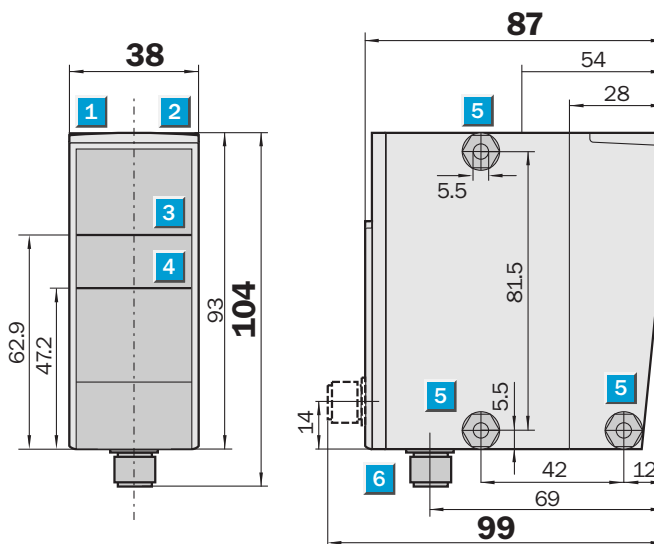


 **Measurement range**
200 ... 5300 mm

Distance Sensor

- Analogue output 4 ... 20 mA
- Teach-in and Plug & Play version
- High measuring accuracy
- Visible red light laser
- Power-On LED
- Acknowledgement after Teach-in

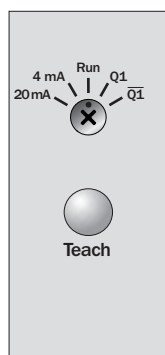
Dimensional drawing



Adjustments possible

DT 60-P211B

DT 60-N211B

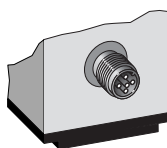


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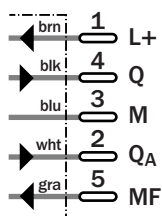
- 1 Power
- 2 Function indicator
- 3 Optical axis, sender
- 4 Optical axis, receiver
- 5 Mounting hole
- 6 M12 plug, 5-pin
- 7 Operating panel Teach-in version

Connection type

All types



5-pin, M12



Technical data	DT 60-	P211B	N211B	P211B bbee	N211B bbee						
Teach-in version											
Plug & Play version	Measuring range freely selectable										
Measuring range											
(min. ... measuring distance)	200 mm ... 5300 mm										
Object with 3% remission	200 mm ... 1000 mm (A)/1400 mm (B)										
Object with 6% remission	200 mm ... 1400 mm (A)/2000 mm (B)										
Object with 18% remission	200 mm ... 2400 mm (A)/3600 mm (B)										
Object with 90% remission	200 mm ... 5000 mm (A)/5300 mm (B)										
Light source ¹⁾	Laser diode, red light										
Light spot at 2 m distance	Ø 10 mm										
Supply voltage V_S ²⁾	11 ... 30 V DC										
Power consumption ³⁾	< 3 W										
Ripple ⁴⁾	≤ 5 V _{SS}										
Analogue output (invertable)	4 ... 20 mA										
Accuracy ⁵⁾	± 13 mm										
Reproducibility	± 10 mm										
Resolution	1.5 mm										
Response time	A = 30 ms/B = 50 ms										
Cycle time	5 ms (A)/15 ms (B)										
Output rate	1.2 ms (A)/3.6 ms (B)										
Temperature drift	0.5 mm/K (0.4 mm/K typ.)										
Switching outputs (invertable)	Q										
	\bar{Q}										
DL 60-P: PNP	HIGH = U _V - (< 2 V)/LOW = 0 V										
DL 60-N: NPN	HIGH = U _V /LOW ≤ 2 V										
Output current I_A ⁶⁾	100 mA										
Multifunction MF	Laser off										
Connection type	M12 plug, 5-pin										
VDE protection class ⁷⁾	II										
Laser protection class	2 (EN 60 825-1)										
Enclosure rating	IP 67										
Ambient temperature	Operation -25 ... +55 °C										
	Storage -25 ... +75 °C										
Weight	202 g										

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

²⁾ Limit values, reverse-polarity protected

³⁾ Without load

⁴⁾ May not exceed or fall short of V_S tolerances

⁵⁾ After 30 minutes on-time

⁶⁾ Output Q short-circuit protected

⁷⁾ Reference voltage DC 50 V

Plug & Play version: measuring range freely selectable, measuring range bb to ee ± 4 mA ... 20 mA

DT 60-P/N111Bbbee	
bb: min. measuring distance ⁸⁾	ee: max. measuring distance ⁸⁾
Q2 ⁹⁾	53 ¹⁰⁾

⁸⁾ Minimum distance between bb and ee must be 0.3 units (0.3 ± 300 mm)

⁹⁾ 02 ± 200 mm; 53 ± 5300 mm

¹⁰⁾ 90% remission

1st example: measuring range 1200 mm ... 3400 mm

DT 60-P/N111B1234	
4 mA ± 1200 mm	20 mA ± 3400 mm

2nd example: measuring range 4200 mm ... 3800 mm (Inverted characteristic curve)

DT 60-P/N111B4238	
4 mA ± 4200 mm	20 mA ± 3800 mm

Order information

Type	Part no.	Type	Part no.
DT 60-P211B	1 025 845	DT 60-N211B0253	1 026 446
DT 60-N211B	1 025 846	DT 60-P211Bbbee ⁹⁾	X XXX XXX
DT 60-P211B0520	1 026 444	DT 60-N211Bbbee ⁹⁾	X XXX XXX
DT 60-P211B0253	1 026 445		

⁹⁾ Measuring range freely selectable

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