

DT 60

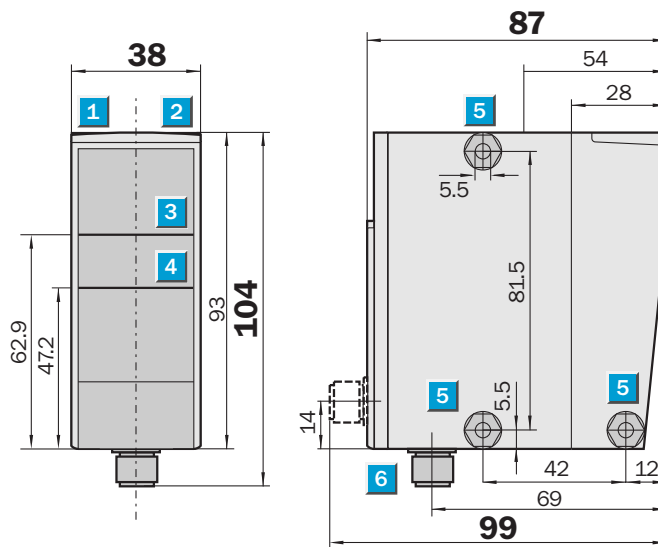
Distance Sensor



	Measurement range 200 ... 5300 mm
Distance Sensor	

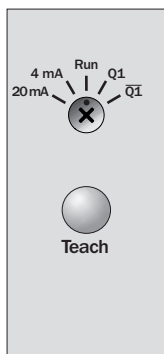
- Analogue output 4 ... 20 mA
- Teach-in and Plug & Play version
- High measuring accuracy
- Visible red light laser
- Power-On LED
- Acknowledgement after Teach-in

Dimensional drawing



Adjustments possible

DT 60-P111B	DT 60-P111Bbbee
DT 60-N111B	DT 60-N111Bbbee

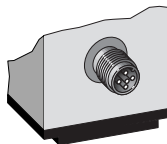


7

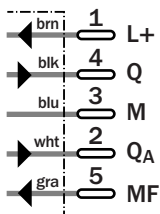
- 1 Power
- 2 Function indicator
- 3 Optical axis, sender
- 4 Optical axis, receiver
- 5 Mounting hole
- 6 M12 plug, 5-pin
- 7 Operating panel Teach-in version

Connection type

DT 60-P111B	DT 60-P111Bbbee
DT 60-N111B	DT 60-N111Bbbee



5-pin, M12



Stocked, Distributed, and Supported by

SENSORS

INCORPORATED

507 Kelsey Street • Delano, MN 55328
 Phone 763-972-1040 Fax 763-972-1041
 Toll Free 888-920-0939
 Sensorsincorporated.com

Technical data		DT 60-	P111B	N111B	P111B bbee	N111B bbee						
Teach-in version												
Plug & Play version												
(max. measuring distance)	Measuring range freely selectable											
Measuring range ⁴⁾												
(min. measuring distance)	200 mm ... 5300 mm											
Object with 3% remission	200 mm ... 2000 mm											
Object with 6% remission	200 mm ... 2800 mm											
Object with 18% remission	200 mm ... 5000 mm											
Object with 90% remission	200 mm ... 5300 mm											
Light source ²⁾												
	Laser diode, red light											
Light spot at 2 m distance	Ø 10 mm											
Supply voltage V_s ³⁾												
	11 ... 30 V DC											
Power consumption ⁴⁾												
	< 3 W											
Ripple ⁵⁾												
	≤ 5 V_{SS}											
Analogue output (invertable)												
	4 ... 20 mA											
Accuracy ⁶⁾	± 10 mm											
Reproducibility	± 8 mm typ.											
Resolution	1.5 mm											
Response time	20 ms ... 150 ms ⁷⁾											
Temperatur drift	0.5 mm/K (0.4 mm/K typ.)											
Switching outputs (invertable)												
	Q											
	\bar{Q}											
DT 60-P: PNP	HIGH = $U_V - (< 2 V)$ /LOW = 0 V											
DT 60-N: NPN	HIGH = U_V /LOW ≤ 2 V											
Output current I_A ⁸⁾												
	100 mA											
Multifunction MF												
	Laser off											
Connection type												
	M12 plug, 5-pin											
VDE protection class ⁹⁾												
	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⁾ 15 % Functions reserve
- ²⁾ Average service life 50,000 h at $T_A = +25 °C$
- ³⁾ Limit values, reverse-polarity protected
- ⁴⁾ Without load
- ⁵⁾ May not exceed or fall short of V_s tolerances
- ⁶⁾ After 30 minutes on-time
- ⁷⁾ Adaptive, depending on degree of reflectance
- ⁸⁾ Output Q short-circuit protected
- ⁹⁾ 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 ¹⁰⁾	ee: max. measuring distance ¹⁰⁾
Q2 ¹¹⁾	53 ¹²⁾

- ¹⁰⁾ Minimum distance between bb and ee must be 03 units (03 ≙ 300 mm)
- ¹¹⁾ 02 ≙ 200 mm; 53 ≙ 5300 mm
- ¹²⁾ 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)

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

Order information

Type	Part no.
DT 60-P111B	1 025 843
DT 60-N111B	1 025 844
DT 60-P111B0520	1 025 847
DT 60-P111B0253	1 026 063
DT 60-N111B0253	1 026 160
DT 60-P111Bbbee ^{*)}	X XXX XXX

^{*)} Measuring range freely selectable



Great Britain
 Erwin Sick Ltd.
 Waldkirch House
 39 Hedley Road, St. Albans
 Hertfordshire AL 1 5BN
 ☎ +44 17 27-83 11 21
 Fax +44 17 27-85 67 67
 info@sick.co.uk

USA
 SICK, Inc.
 6900 West 110th Street
 Bloomington, MN 55438
 ☎ +1 (952) 9 41-67 80
 Fax +1 (952) 9 41-92 87
 WATS: 1-800-325-7425
 info@sickusa.com

Australia
 SICK PTY LTD
 P.O. Box 214
 899 Heidelberg Road
 Ivanhoe, Vic. 3079, Australia
 ☎ +61 39 49 74 10 0
 1800 33 48 02 - toll free
 Fax +61 39 49 71 18 7
 sales@sick.com.au