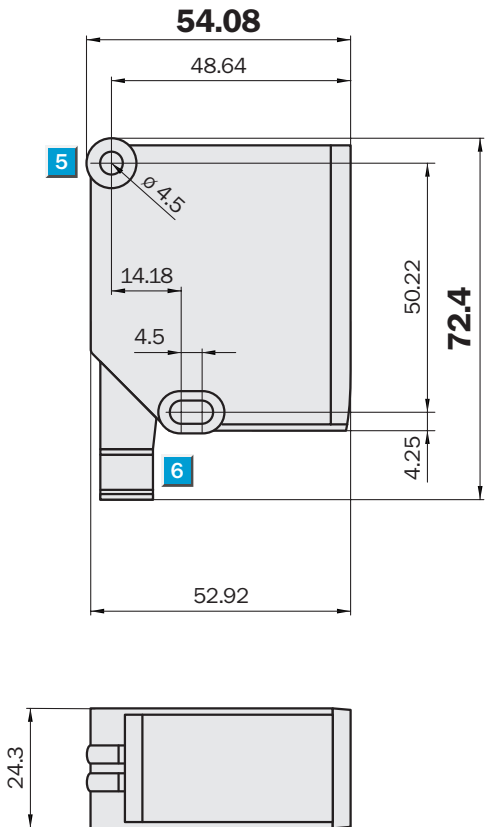
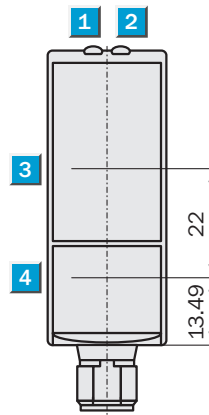


Distance Sensor DT20



	Measurement range
	90 ... 600 mm 100 ... 1000 mm
Distance sensor, scanner mode	

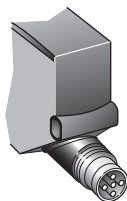
- Analogue output 4 ... 20 mA
- High measuring accuracy
- Power-On LED
- Plug & Play sensor
- Insensitive to external light sources



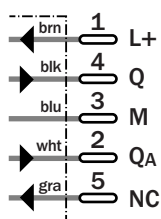
- 1 Power
- 2 Status indicator
- 3 Optical axis, receiver
- 4 Optical axis, sender
- 5 Fixing hole
- 6 Plug, M12, 5-pin

Connection type

DT20



5-pin, M12



Technical data		DT20											
Measurement range¹⁾													
Object with 6% remission	90 ... 600 mm												
	100 ... 820 mm												
Object with 18% remission	90 ... 600 mm												
	100 ... 1,000 mm												
Object with 90% remission	90 ... 600 mm												
	100 ... 1,000 mm												
Light source²⁾	LED, infrared light												
Light spot diameter	35 mm at 1 m												
Supply voltage V_s³⁾	10 ... 30 V DC												
Current consumption⁴⁾	1.5 W												
Residual ripple⁵⁾	≤ 5 V _{pp}												
Analogue output	4 ... 20 mA												
Reproducibility	± 1.5 mm												
	± 3 mm												
Resolution	1 mm												
	2 mm												
Response time	10 ms												
	15 ms												
Output rate	1 ms												
Temperature drift	0.25 mm/K												
Switching outputs	PNP o. NPN, Q												
Signal voltage PNP	HIGH = V _s - (< 2 V)/LOW = 0 V												
Signal voltage NPN	HIGH = V _s /LOW ≤ 2 V												
Connection type	M12 plug, 5-pin												
VDE protection class	<input type="checkbox"/>												
Enclosure rating	IP 66/IP 67												
Ambient temperature T_A	Operation -25 ... +55 °C												
	Storage -40 ... +75 °C												
Weight	135 g												
Housing material	Metal												

¹⁾ For types with max. measurement range: > 600 mm for min. measurement range = 100 mm
≤ 600 mm for min. measurement range = 90 mm

Various measurement ranges are possible (see type-based ordering information below)

²⁾ Average service life 100,000 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

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

DT20-P/N130Bbbe	
bb: min. measurement range ⁶⁾	ee: max. measurement range ⁶⁾
09 ⁷⁾	00 ⁷⁾

⁶⁾ Minimum range between bb and ee must be 10 units (05 ± 5 cm; 10 ± 10 cm)

⁷⁾ 09 ± 9 cm; 00 ± 100 cm

1st example: measurement range 100 mm ... 1000 mm

DT20-P130B1000	
4 mA ± 10 cm	20 mA ± 100 cm

2nd example: measurement range 600 mm ... 90 mm (Inverse diagram)

DT20-P130B6009	
4 mA ± 60 cm	20 mA ± 9 cm

Basic types:

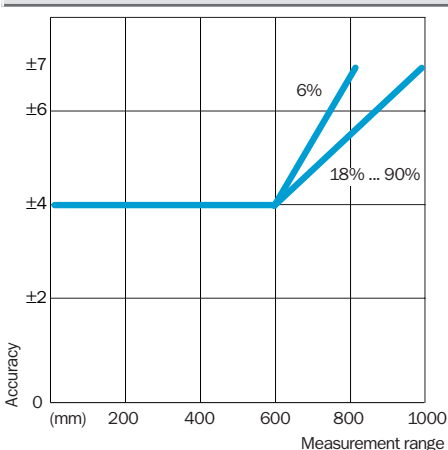
Ordering information

Type	Order no.
DT20-P130B0960	1029273
DT20-P130B1000	1028800
DT20-P130B1050	1027831
DT20-P130B1080	1028720
DT20-P130B2535	1028721
DT20-P130B2545	1028724
DT20-P130B2560	1028723
DT20-P130B4000	1028722
DT20-N130B0960	1029274
DT20-N130B1000	1029275

Measurement range

90 ... 600 mm
100 ... 1000 mm
100 ... 500 mm
100 ... 800 mm
250 ... 350 mm
250 ... 450 mm
250 ... 600 mm
400 ... 1000 mm
90 ... 600 mm
100 ... 1000 mm

Accuracy



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