



DT50 Laser class 1

Laser distance sensor

Stocked, Distributed, and Supported by

SENSORS
INCORPORATED

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SICK
Sensor Intelligence.

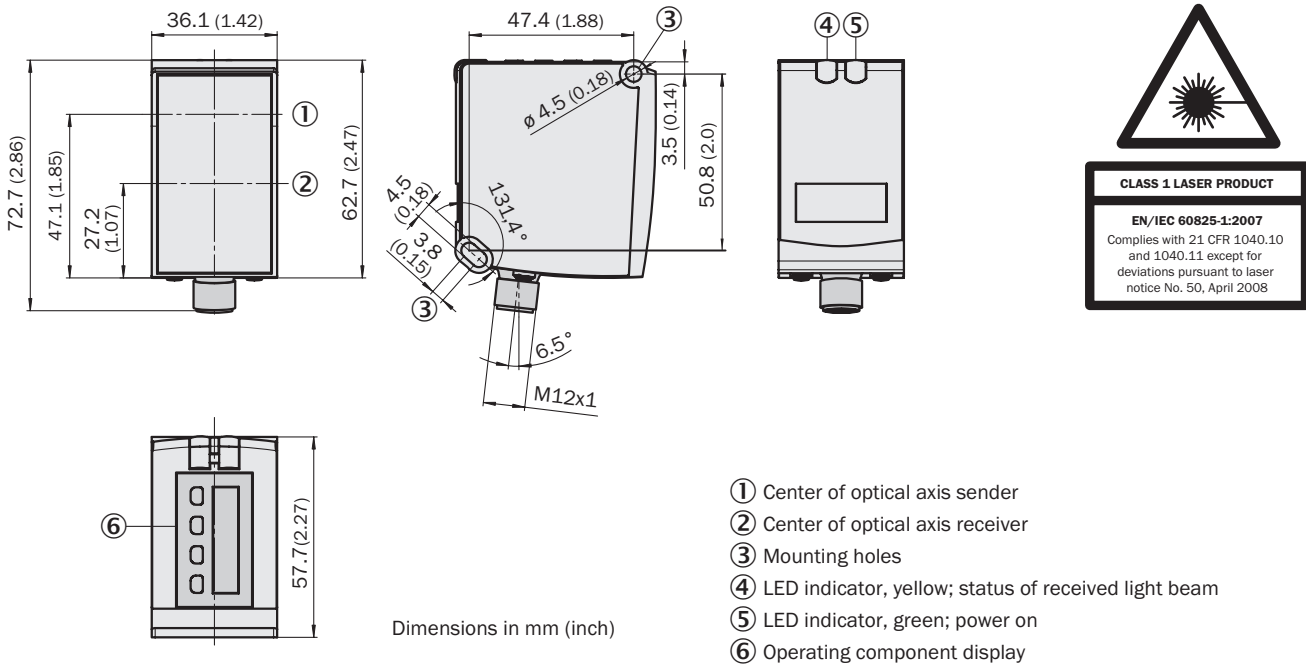


- State-of-the-art time of flight technology for fast and accurate measurement results (range up to 10 m)
- Quick and easy set-up thanks to the display and the intuitive operating concept
- Red light laser in laser class 1.
Guaranteed eye-safe!
- Wide temperature range from -30 °C to +65 °C

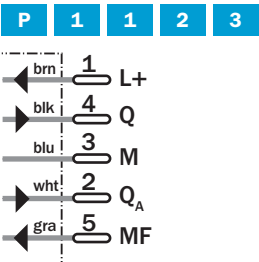



 Laser class 1 **CDRH**

Dimensional drawing



Connection type, M12, 5-pin DT50-



General technical data	
Measurement range 90%	200 ... 10,000 mm
Measurement range 18%	200 ... 5,000 mm
Measurement range 6%	200 ... 2,500 mm
Resolution	1 mm
Resolution analogue output	16 bit
Repeatability ¹⁾ /Response time	5 mm/20 ms 2.5 mm/30 ms
Accuracy	± 10 mm
Output rate	4 ms
Teach-in	Display/MF
Inputs	MF: external Teach-in/Laser Off/MF Off
Light source	Laser red, class 1 (EN 60 825-1-2007)
Light spot diameter	typ. Ø 15 mm at 10 m distance
Supply voltage V_s ²⁾	10 ... 30 V
Residual ripple ³⁾	≤ 5 V_{pp}
Power consumption ⁴⁾	< 2.1 W
Output current ⁵⁾	100 mA
Time delay before availability	250 ms
Enclosure rating	IP 65 (EN 60 529)
VDE protection class	⊓
Ambient temperature ⁶⁾	Operation -30 °C ... +65 °C Storage -40 °C ... +75 °C
Ambient light	40,000 lux
Weight	200 g

¹⁾ Repeatability 1σ on white, adjustable with averaging function, warm up time 10 min

²⁾ Limit values, reverse-polarity protected, for DT50-_1114 $V_s > 15V$ and $R_L > 5k\Omega$

³⁾ May not exceed or fall short of V_s tolerances

⁴⁾ Without load

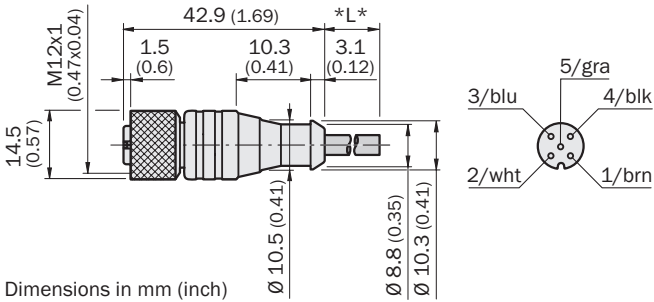
⁵⁾ Output Q short-circuit protected: PNP $H_i = V_s - 2,5V$, $L_o = 0V$ / NPN $H_i = V_s$, $L_o < 2,5V$

⁶⁾ Startup temperature $> -25^\circ C$, no condensation

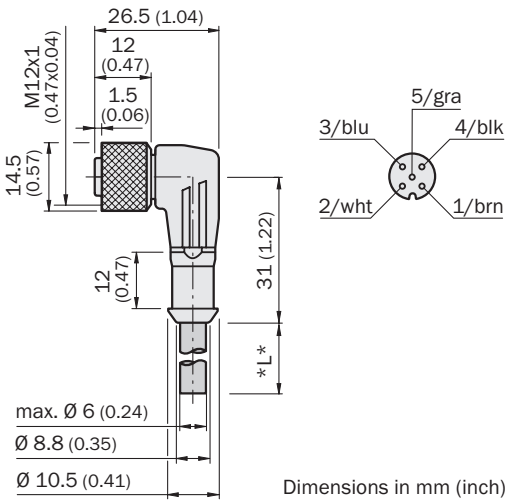
Type	Order no.	Interface	Switching output	Connection type	Display
DT50-P1123	1047118	4 ... 20 mA	PNP	M12, 5-pin	Display, LED
DT50-N1123	1047397	4 ... 20 mA	NPN	M12, 5-pin	Display, LED
DT50-P1124	1047616	0 ... 10 V	PNP	M12, 5-pin	Display, LED
DT50-N1124	1047617	0 ... 10 V	NPN	M12, 5-pin	Display, LED

Cables and connectors

Type	Order no.	Description
DOL-1205-G02M	6008899	Female connector, M12, 5-pin, straight, 2 m, PVC
DOL-1205-G05M	6009868	Female connector, M12, 5-pin, straight, 5 m, PVC
DOL-1205-G10M	6010544	Female connector, M12, 5-pin, straight, 10 m, PVC
DOL-1205-G02MC	6025906	Female connector, M12, 5-pin, straight, 2 m, PUR, halogen free
DOL-1205-G05MC	6025907	Female connector, M12, 5-pin, straight, 5 m, PUR, halogen free
DOL-1205-G10MC	6025908	Female connector, M12, 5-pin, straight, 10 m, PUR, halogen free

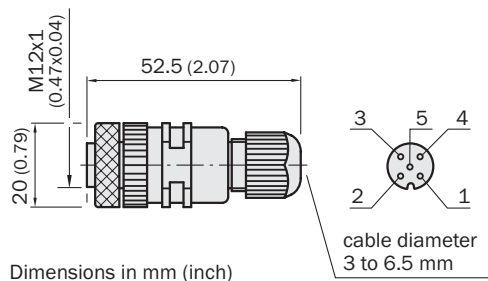


Type	Order no.	Description
DOL-1205-W02M	6008900	Female connector, M12, 5-pin, angled, 2 m, PVC
DOL-1205-W05M	6009869	Female connector, M12, 5-pin, angled, 5 m, PVC
DOL-1205-W10M	6010542	Female connector, M12, 5-pin, angled, 10 m, PVC
DOL-1205-W02MC	6025909	Female connector, M12, 5-pin, angled, 2 m, PUR, halogen free
DOL-1205-W05MC	6025910	Female connector, M12, 5-pin, angled, 5 m, PUR, halogen free
DOL-1205-W10MC	6025911	Female connector, M12, 5-pin, angled, 10 m, PUR, halogen free

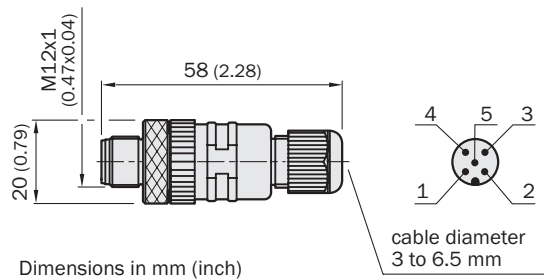


Cables and connectors

Type	Order no.	Description
DOS-1205-G	6009719	Female connector, M12, 5-pin, straight
DOS-1205-W	6009720	Female connector, M12, 5-pin, angled

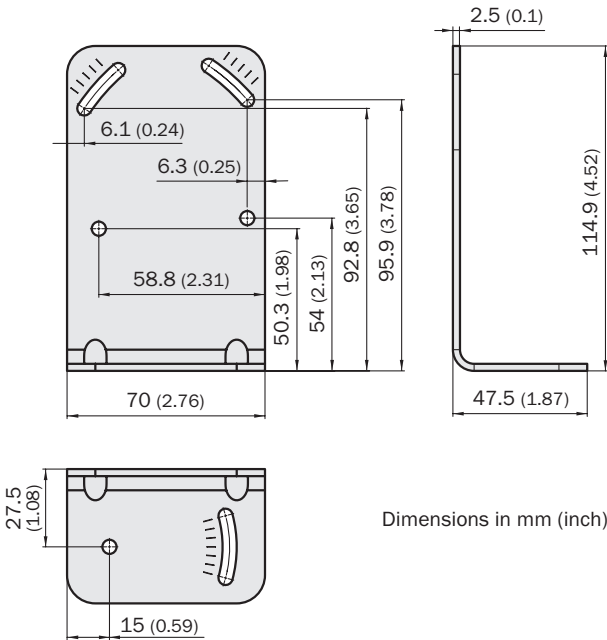


Type	Order no.	Description
STE-1205-G	6022083	Male connector, M12, 5-pin, straight
STE-1205-W	6022082	Male connector, M12, 5-pin, angled

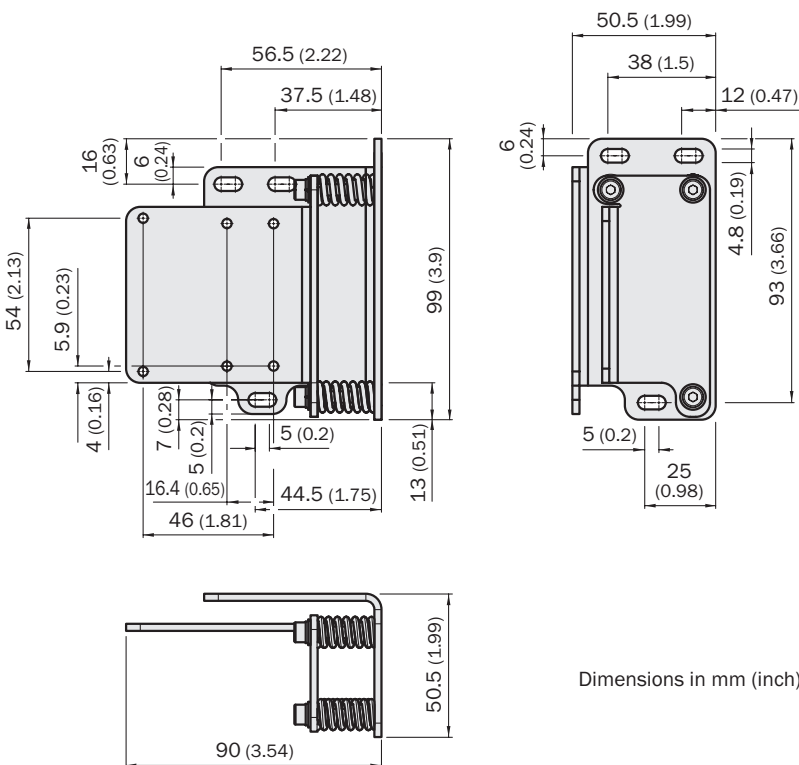


Mounting systems

Type	Order no.	Description
BEF-WN-DX50	2048370	Mounting bracket set (incl. screws)

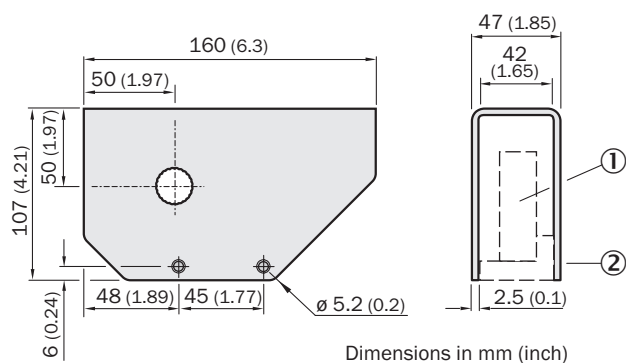


Type	Order no.	Description
BEF-AH-DX50	2048397	Adjustment bracket



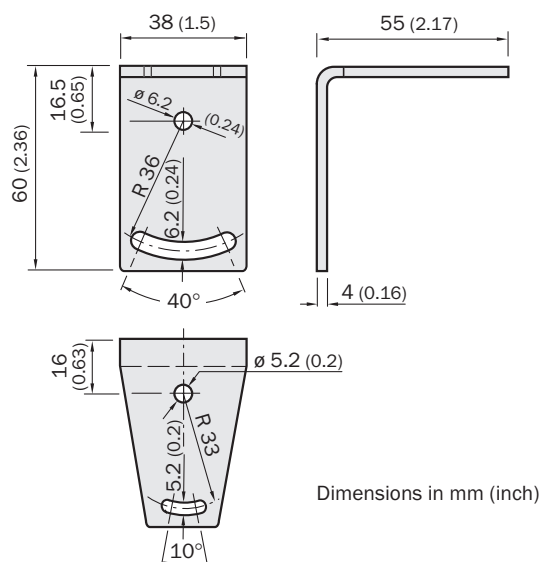
Mounting systems

Type	Order no.	Description
OBW-KHS-M02	2050205	Weather protection hood



- ① Sensor
- ② Base plate with clamp supplied with unit

Type	Order no.	Description
BEF-WN-OBW	2023251	Mounting bracket for weather protection hood



Type	Order no.	Description
BEF-KHS-KH1	2022726	Clamp without mounting plate



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