

THE SMALLEST ON THE MARKET

CYLINDRICAL SUBMINIATURE

PHOTOELECTRIC SENSORS

KEY ADVANTAGES

- ✓ Ø 4 and M5 housings for target detection in limited spaces
- ✓ Rugged metal housing
- ✓ Accurate target detection due to cylindrical light beam
- ✓ Rugged sapphire glass or glass sensing face, scratch and chemically resistant
- ✓ Shock and vibration resistant due to fully vacuum potted electronics
- ✓ High system reserves (excess gain)

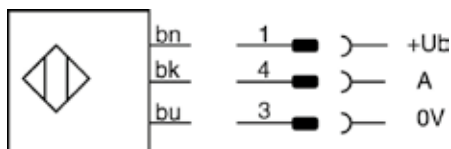
RANGE OVERVIEW	Distance mm	Diffuse	Through-beam
CYLINDRICAL SUB- MINIATURE	10	p. 181, 183-184	
	20	p. 182, 184-185	
	50	p. 182-183, 185-186	
	250		p. 186

OVERVIEW

Housing material	Stainless steel V2A
Emitter	IR LED 880 nm
Hysteresis	10 % typ.
Degree of protection	IP 67
Supply voltage range	10 ... 30 VDC
Ambient temperature range	0 ... +55 °C / 32 ... +131 °F
Output current	≤ 100 mA
Output voltage drop	≤ 2 V
Switching frequency	≤ 250 Hz
Switching time	2 msec
Max. ambient light halogen	5000 Lux
Max. ambient light sun	10,000 Lux

WIRING DIAGRAM

PNP/NPN Light-ON / Dark-ON



HOUSING SIZE MM

OPERATING PRINCIPLE

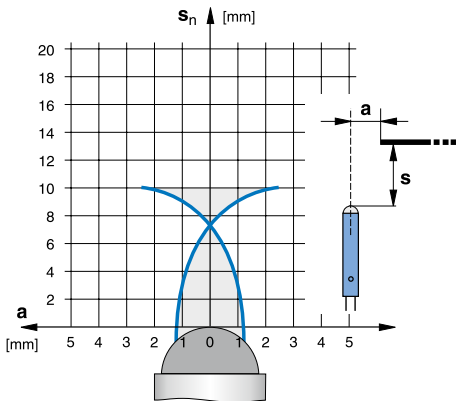
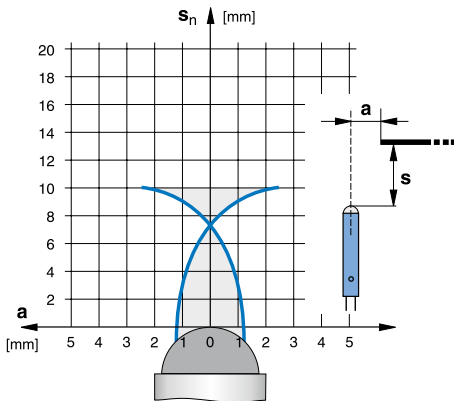
SENSING RANGE MM

PHOTOELECTRIC

DATA

Standard target
No-load supply current
Lens material
PNP Light-ON
NPN Light-ON
Other types available

CYLINDRICAL SUBMINIATURE

Ø 4		Ø 4		Inductive	
DIFFUSE SENSOR		DIFFUSE SENSOR			Photoelectric
10		10			
				Capacitive	
					Safety
				Connectivity	
					Accessories
100 x 100 mm white		100 x 100 mm white		Index	
≤ 15 mA		≤ 15 mA			
Sapphire glass		Sapphire glass			
LTK-1040-303-505		LTS-1040-303-505			
LTK-1040-301-505		LTS-1040-301-505			

CYLINDRICAL SUBMINIATURE

HOUSING SIZE MM

Ø 4

Ø 4

OPERATING PRINCIPLE

DIFFUSE SENSOR

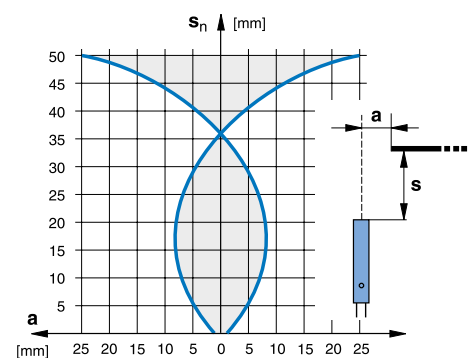
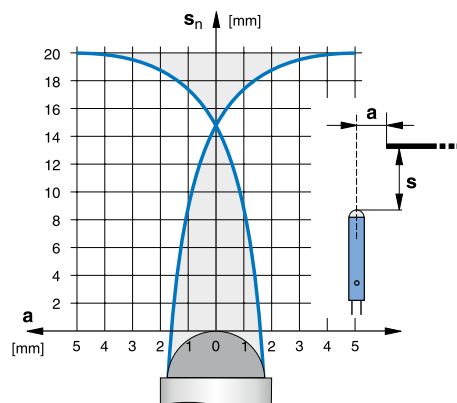
DIFFUSE SENSOR

SENSING RANGE MM

20

50

PHOTOELECTRIC



DATA

Standard target

100 x 100 mm white

100 x 100 mm white

No-load supply current

≤ 15 mA

≤ 15 mA

Lens material

Sapphire glass

Glass

PNP Light-ON

LTK-1040-303-506

LTK-1040-303

NPN Light-ON

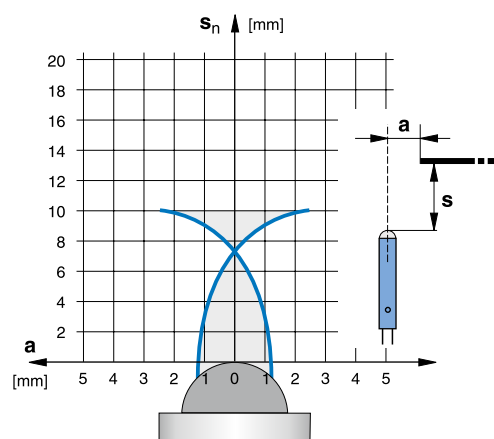
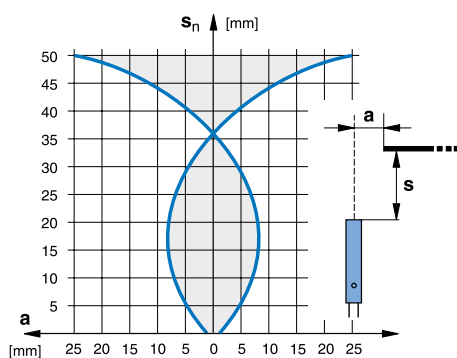
LTK-1040-301-506

LTK-1040-301

Other types available

CYLINDRICAL SUBMINIATURE

Ø 4	M5
DIFFUSE SENSOR	DIFFUSE SENSOR
50	10



100 x 100 mm white	100 x 100 mm white
≤ 15 mA	≤ 15 mA
Glass	Sapphire glass
LTS-1040-303	LTK-1050-303-505
LTS-1040-301	LTK-1050-301-505
	PNP Dark-ON

CYLINDRICAL SUBMINIATURE

HOUSING SIZE

M5

M5

OPERATING PRINCIPLE

DIFFUSE SENSOR

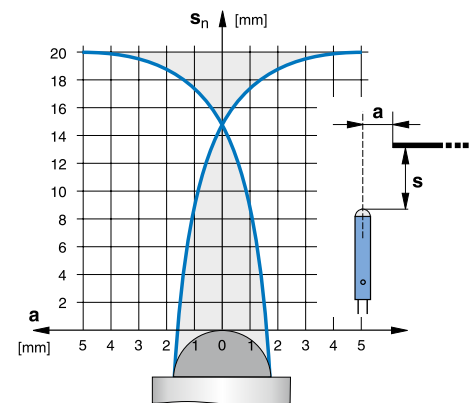
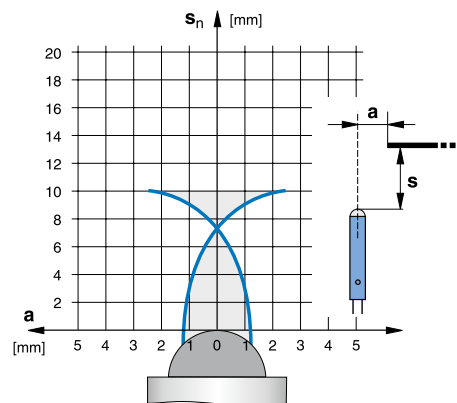
DIFFUSE SENSOR

SENSING RANGE MM

10

20

PHOTOELECTRIC



DATA

Standard target

100 x 100 mm white

100 x 100 mm white

No-load supply current

≤ 15 mA

≤ 15 mA

Lens material

Sapphire glass

Sapphire glass

PNP Light-ON

LTS-1050-303-505

LTK-1050-303-506

NPN Light-ON

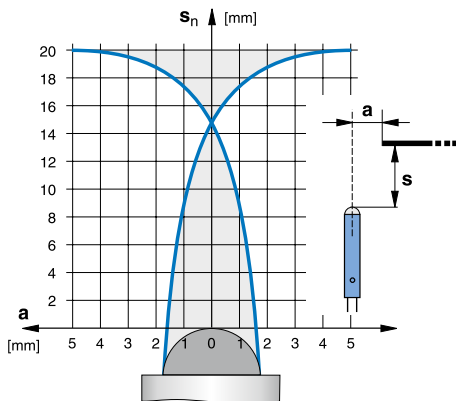
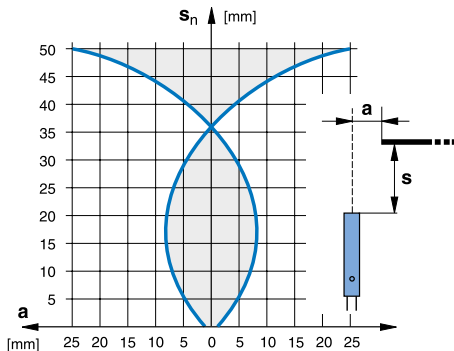
LTS-1050-301-505

LTK-1050-301-506

Other types available

PNP Dark-ON

CYLINDRICAL SUBMINIATURE

M5	M5	Inductive		
DIFFUSE SENSOR	DIFFUSE SENSOR			
20	50			
		Photoelectric		
			Ultrasonic	
				Capacitive
		RFID		
			Connectivity	
				Accessories
100 x 100 mm white ≤ 15 mA Sapphire glass LTS-1050-303-506 LTS-1050-301-506	100 x 100 mm white ≤ 15 mA Glass LTK-1050-303 LTK-1050-301	Glossary		
			Index	

CYLINDRICAL SUBMINIATURE

HOUSING SIZE

M5

M5

OPERATING PRINCIPLE

DIFFUSE SENSOR

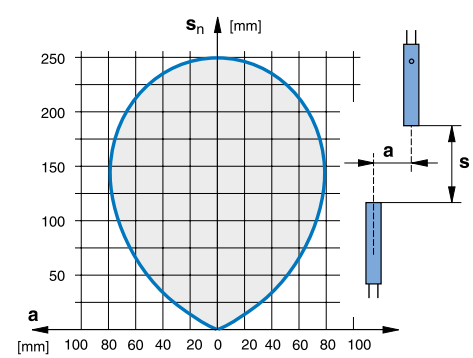
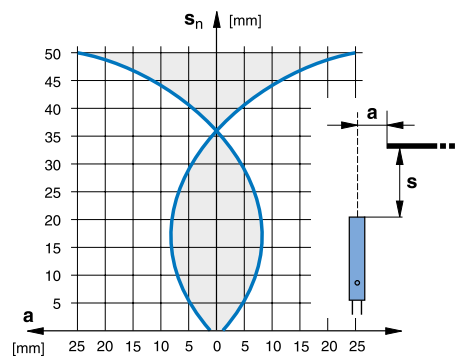
THROUGH-BEAM SENSOR

SENSING RANGE MM

50

250

PHOTOELECTRIC



DATA

Standard target

100 x 100 mm white

-

No-load supply current

≤ 15 mA

≤ 5 mA (receiver) / ≤ 10 mA (emitter)

Lens material

Glass

Glass

PNP Light-ON / Emitter

LTS-1050-303

LLS-1050-200 (emitter)

PNP Dark-ON

LLS-1050-204 (receiver)

Other types available

NPN Light-ON

NPN Dark-ON