

# 0507 AND C12 SERIES



## HIGHLIGHTS

### 0507 SERIES

- ✓ Rugged diffuse sensor in stainless-steel housing, 5 x 7 x 40 mm
- ✓ Sapphire-glass sensing face, scratch and chemically resistant
- ✓ Accurate target detection due to focused red light beam

### C12 SERIES

- ✓ Plastic housing, 13 x 21/27 x 7 mm
- ✓ Red pinpoint LED, small visible light spot
- ✓ Long sensing ranges
- ✓ Excellent background suppression up to 120 mm with 3-turn potentiometer

## INDUSTRIES

Packaging, logistics, materials handling, assembly, automation, robotics, precision engineering, semi-conductors, electronics, vending machines, miniature conveyors, grippers

## SELECTION OF PRODUCTS

	PART REFERENCE	ART. NO.	HOUSING SIZE	SENSING RANGE	OUTPUT*	CONNECTION	
DIFFUSE	0507	LTK-0507-303-501	620-200-826	5x7x40 mm	20 mm	PNP Light-ON	3-wire PVC 2 m
		LTK-0507-303	620-200-823	5x7x40 mm	50 mm	PNP Light-ON	3-wire PVC 2 m
		LTK-0507-303-502	620-200-828	5x7x40 mm	90 mm	PNP Light-ON	3-wire PVC 2 m

	PART REFERENCE	ART. NO.	HOUSING SIZE	SENSING RANGE	ADJUSTMENT	OUTPUT*	CONNECTION**	
BACKGROUND SUPPRESSION	C12	LHR-C12PA-PLK-303	628-000-679	13x27x7 mm	120 mm	3-turn potentiometer	PNP Light-ON	3-wire PVC 2 m
		LHR-C12PA-NSK-303	628-000-671	13x21x7 mm	15 mm	No	PNP Light-ON	3-wire PVC 2 m
		LHR-C12PA-NMK-303	628-000-675	13x21x7 mm	30 mm	No	PNP Light-ON	3-wire PVC 2 m
REFLEX	C12	LRR-C12PA-NMK-304	628-000-683	13x21x7 mm	3000 mm	No	PNP Dark-ON	3-wire PVC 2 m
THROUGH-BEAM	C12	LLR-C12PA-NMK-304 (receiver)	628-000-689	13x21x7 mm	2000 mm	No	PNP Dark-ON	3-wire PVC 2 m

\*NPN versions also available \*\*M8 pigtail types also available

## ACCESSORIES

### CONNECTING CABLES PVC WITH OPEN ENDED WIRES\*

PART REFERENCE	SOCKET			CABLE	
	Size	Pins	Config.	Material	Length
S08-3FVG-020	M8	3-pole	straight	PVC	2 m
S08-3FVW-020	M8	3-pole	right angle	PVC	2 m
S08-4FVG-020	M8	4-pole	straight	PVC	2 m
S08-4FVW-020	M8	4-pole	right angle	PVC	2 m

### CONNECTING CABLES PUR WITH OPEN ENDED WIRES\*

PART REFERENCE	SOCKET			CABLE	
	Size	Pins	Config.	Material	Length
S08-3FUG-020	M8	3-pole	straight	PUR	2 m
S08-3FUW-020	M8	3-pole	right angle	PUR	2 m
S08-4FUG-020	M8	4-pole	straight	PUR	2 m
S08-4FUW-020	M8	4-pole	right angle	PUR	2 m

### CONNECTING CABLES PVC

PART REFERENCE	SOCKET			CABLE		PLUG	
	Size	Pins	Config.	Material	Length	Size	Config.
S08-3FVG-020-08MG	M8	3-pole	straight	PVC	2 m	M8	straight
S08-3FVG-050-08MG	M8	3-pole	straight	PVC	5 m	M8	straight

### CONNECTING CABLES PUR

PART REFERENCE	SOCKET			CABLE		PLUG	
	Size	Pins	Config.	Material	Length	Size	Config.
S08-3FUG-020-08MG	M8	3-pole	straight	PUR	2 m	M8	straight
S08-3FUG-050-08MG	M8	3-pole	straight	PUR	5 m	M8	straight

### SENSOR MOUNTING CLAMPS

TECHNICAL DATA				
Part reference	Type	For sensor housing	Fixing	Material
ASU-0001-040	without limit stop	∅ 4 mm	M3	Plastic PA6 black
ASU-0001-050	without limit stop	∅ 5 mm	M3	Plastic PA6 black

Screw: DIN 912, M3 zinc-plated Nut: DIN 934, M3 zinc-plated

\*More references available

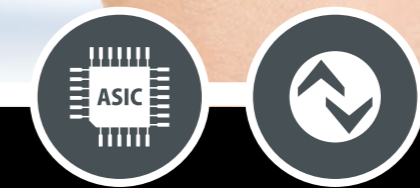
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### HEADQUARTERS

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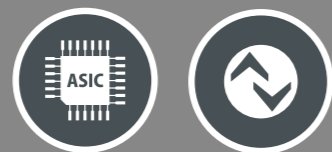
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## PHOTOELECTRIC SENSORS

# MINIATURE SMALLEST ON THE MARKET





## D04 AND M05 SERIES



### HIGHLIGHTS

- ✓ Calibrated sensing ranges
- ✓ Teach available with extended type
- ✓ High switching frequency
- ✓ Connection by cable, M8 connector or M8 pigtail
- ✓ IO-Link interface available on PNP types
- ✓ Diffuse or through-beam operating principle
- ✓ Mutual interference immunity for through-beam types by setting emitter/receiver pairs with IO-Link
- ✓ Enclosure rating IP67

### D04 SERIES

Embeddable housing in stainless steel V2A,  
Ø 4 mm



### M05 SERIES

Embeddable housing in stainless steel V2A,  
threaded M5



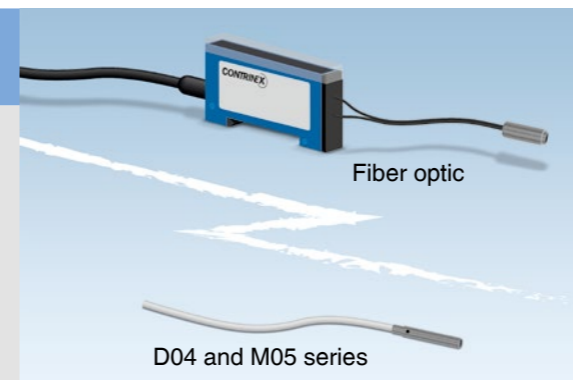
### INDUSTRIES

Packaging, logistics, materials handling, assembly, automation, robotics, precision engineering, semi-conductors, electronics, vending machines, miniature conveyors, grippers

## ADVANTAGES

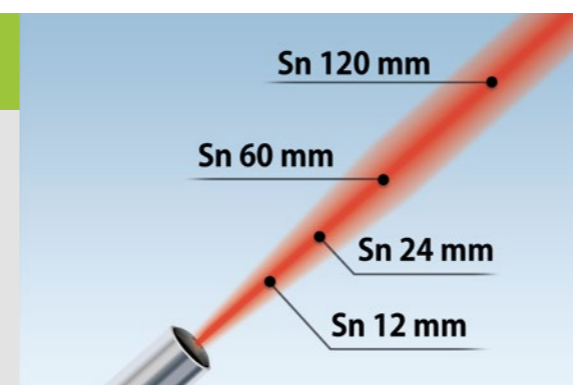
### SIMPLE AND ECONOMIC ALTERNATIVE TO FIBER OPTICS

- Similar space requirement to an optical fiber, without the need for a separate amplifier
- Reduced costs for mounting and wiring
- Visible red light source for ease of installation
- Types with infrared light source available on demand



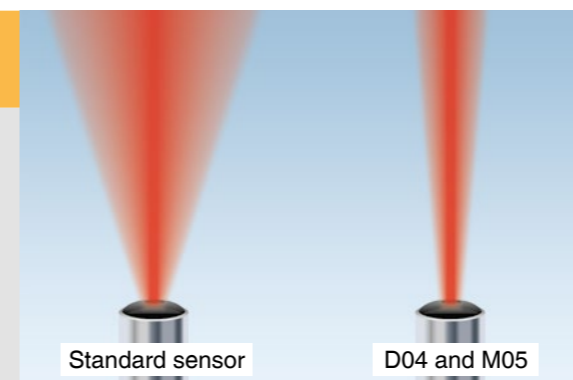
### ADAPTABLE TO ALL CONDITIONS CALIBRATED SENSING RANGES

- Factory calibrated diffuse types with precise sensing ranges: 12 mm, 24 mm, 60 mm and 120 mm
- Extended types with sensitivity adjustment by IO-Link or teach wire (4th wire)
- A single extended sensor type adapts to many applications
- Through-beam types with sensing range up to 600 mm



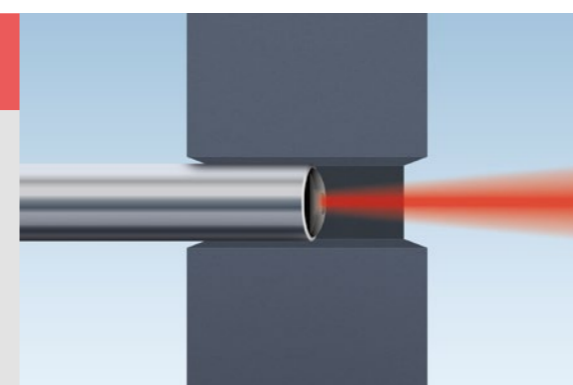
### PRECISE TARGET DETECTION FOCUSED, NARROW LIGHT BEAM

- Special optics with narrow beam and small light spot: 6 mm diameter at range of 50 mm
- Reliable detection of small, thin targets
- Reliable at high speed: switching frequency up to 2.5 kHz, adjustable via IO-Link



### FULLY EMBEDDABLE RECESSED MOUNTING POSSIBLE

- Easy to mount using brackets, drill holes or existing gaps
- Embeddable, including recessed mounting
- Target detection possible through a narrow gap



## SELECTION OF PRODUCTS

	PART REFERENCE	ART. NO.	HOUSING SIZE	SENSING RANGE	ADJUSTMENT	OUTPUT*	CONNECTION**
DIFFUSE	D04	LTR-D04MA-NSK-403	620-600-362	Ø4	12 mm	No	PNP Light-ON 3-wire PUR 2 m
		LTR-D04MA-NMK-403	620-600-363	Ø4	24 mm	No	PNP Light-ON 3-wire PUR 2 m
		LTR-D04MA-NLK-403	620-600-361	Ø4	60 mm	IO-Link	PNP Light-ON 3-wire PUR 2 m
		LTR-D04MA-WXK-403	620-600-365	Ø4	120 mm	Teach or IO-Link	PNP Light-ON 4-wire PUR 2 m
DIFFUSE	M05	LTR-M05MA-NSK-403	620-600-340	M5	12 mm	No	PNP Light-ON 3-wire PUR 2 m
		LTR-M05MA-NMK-403	620-600-341	M5	24 mm	No	PNP Light-ON 3-wire PUR 2 m
		LTR-M05MA-NLK-403	620-600-339	M5	60 mm	IO-Link	PNP Light-ON 3-wire PUR 2 m
		LTR-M05MA-WXK-403	620-600-343	M5	120 mm	Teach or IO-Link	PNP Light-ON 4-wire PUR 2 m
THROUGH-BEAM	D04	LLR-D04MA-NMK-404 (receiver)	620-600-356	Ø4	600 mm	IO-Link	PNP Dark-ON 3-wire PUR 2 m
		LLR-M05MA-NMK-404 (receiver)	620-600-334	M5	600 mm	IO-Link	PNP Dark-ON 3-wire PUR 2 m

\*Other output types available \*\*M8 connector and M8 pigtail types also available

## LIVE SENSOR DATA FOR IOT

### CLOUD ANALYTICS

### SMART COMMUNICATION WITH CONTRINEX SENSORS

- Continuous monitoring of process data
- Continuous diagnosis of sensor status
- Plug & play solution compatible with green-field and brownfield applications

IO-LINK SENSORS

IO-LINK FUNCTIONALITY WITH PHOTOELECTRIC SENSORS (PNP TYPES)

DATA INTEGRITY
 DIAGNOSTICS
 SENSITIVITY
 TEACH
 LIGHT COLOR SELECTION
 SENSOR MODE
 DELAY
 STRETCH
 DETECTION COUNTER
 TEMPERATURE