



SENSEABLETM

The New Family of General Purpose Economical Sensors from TR Electronic

M18 Photoelectric Sensors

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Thanks for choosing TR Electronic. Did you know TR Electronic is a major manufacturer and distributor of automation components, sensors and Industrial Ethernet solutions. This catalogue represents only a selection of the presence detections options available to you, under our SENSEable brand. SENSEable is our brand of economical, general purpose sensors with the quality guarantee you've come to expect from TR Electronic.

TR Electronic also has solutions for:



Rotary and Angular Feedback



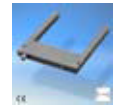
Linear Displacement Transducers



Laser Distance



Intelligent Drives



Photoelectrics



Motion Sensors



Color Detection



Cables, Mounting Hardware and Accessories



IP69K Wash-down Sensors

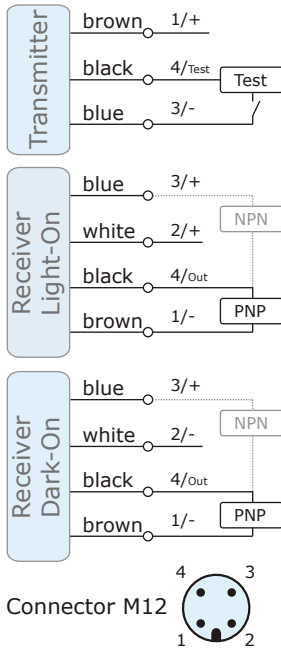


Safety Light Curtains

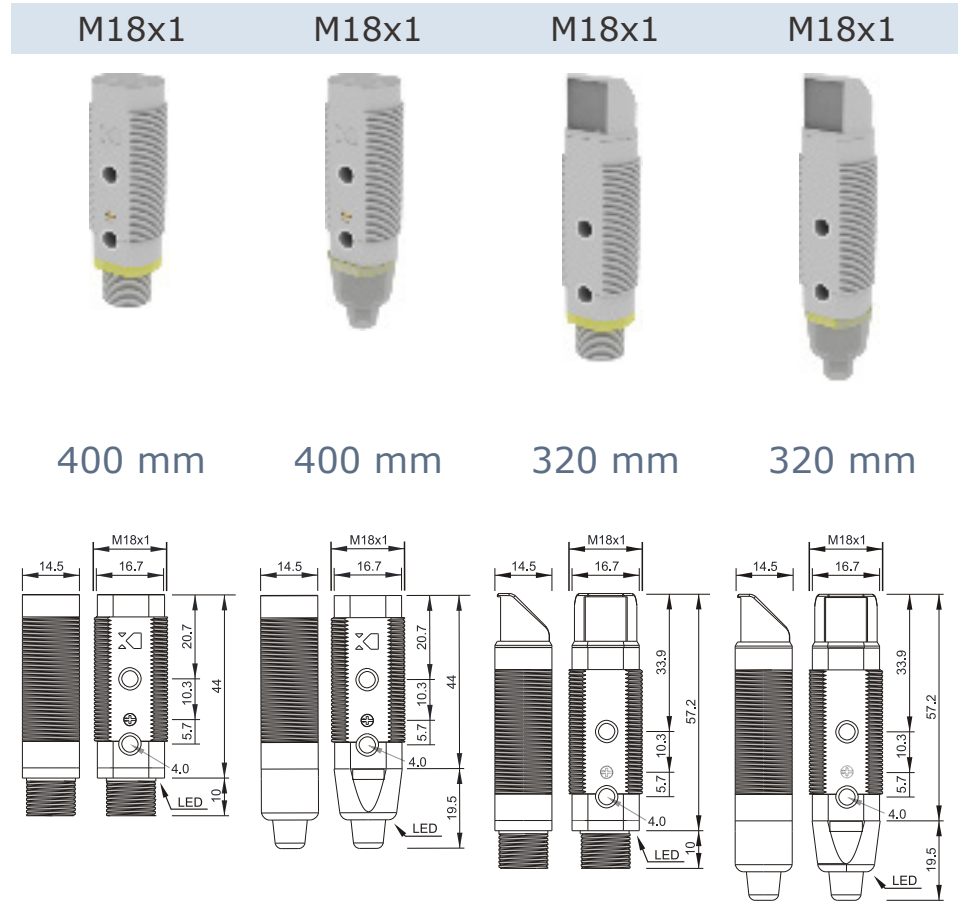
SENSEABLE™

Since 1989, TR Electronic North America has become an industry leader in manufacturing and supporting position feedback, drive technology and sensor solutions world-wide. Through its complete line of absolute encoders, linear measurement systems and industrial sensors, TR Electronic is able to deliver exceptional results every time.

Output Schematics



Not to be used for Safety Applications



SPECIFICATIONS

Operating Distance	0... 400 mm	0... 400 mm	0... 320 mm	0... 320 mm
Output Function	NO NC	NO NC	NO NC	NO NC
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 30 mA	< 30 mA	< 30 mA	< 30 mA
Output Current	100 mA, self-resetting	100 mA, self-resetting	100 mA, self-resetting	100 mA, self-resetting
Voltage Drop	< 2 V @ 100 mA	< 2 V @ 100 mA	< 2 V @ 100 mA	< 2 V @ 100 mA
Switching Frequency	1000 Hz	1000 Hz	1000 Hz	1000 Hz
Response Time	< 1 ms	< 1 ms	< 1 ms	< 1 ms
Hysteresis	~13%	~13%	~13%	~13%
Operating Temperature	-25... 55 °C	-25... 55 °C	-25... 55 °C	-25... 55 °C
Ambient Light Immunity	10.000 lux	10.000 lux	10.000 lux	10.000 lux
Protection Class	IP67	IP67	IP67	IP67
Housing Material	Chromed Brass	Chromed Brass	Chromed Brass	Chromed Brass
Connected	M12, 4-pole	2m, PVC	M12, 4-pole	2m, PVC

Article Code

4-wire, PNP, NO + NC	OD18FA D04PSB/M12	OD18FA D04PSB/A2P	OD18FR D03PSB/M12	OD18FR D03PSB/A2P
4-wire, NPN, NO + NC	OD18FA D04NSB/M12	OD18FA D04NSB/A2P	OD18FR D03NSB/M12	OD18FR D03NSB/A2P

Transmitter

Mouting Bracket

Recommended Connecting Cable

on request

M12/4...

on request

-

on request

M12/4...

on request

-

OPTICAL

M18x1 M18x1 M18x1 M18x1 M18x1 M18x1



2000 mm

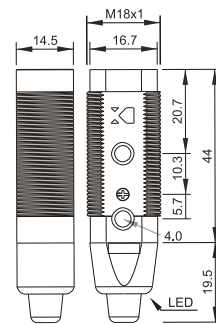
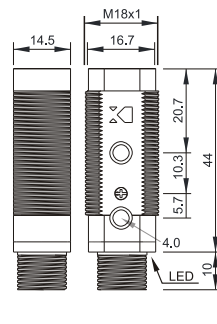
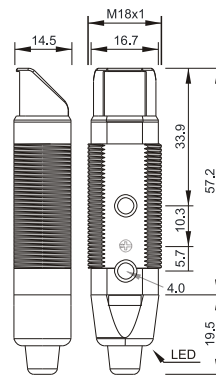
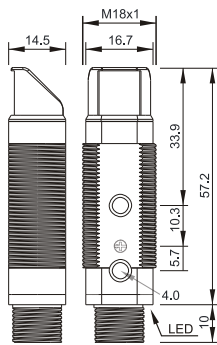
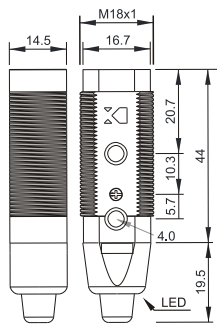
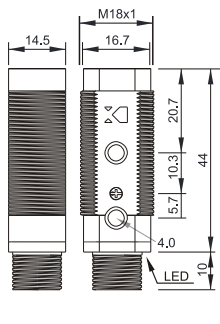
2000 mm

1600 mm

1600 mm

1400 mm

1400 mm



Retro Reflective

Retro Reflective

Retro Reflective

Retro Reflective

Polarized Reflective

Polarized Reflective

0... 2000 mm

0... 2000 mm

0... 1600 mm

0... 1600 mm

0... 1400 mm

0... 1400 mm

NO | NC

NO | NC

NO | NC

NO | NC

NO | NC

NO | NC

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

10... 30 VDC

< 30 mA

< 30 mA

< 30 mA

< 30 mA

< 30 mA

< 30 mA

100 mA, self-resetting

100 mA, self-resetting

100 mA, self-resetting

100 mA, self-resetting

100 mA, self-resetting

100 mA, self-resetting

< 2 V @ 100 mA

< 2 V @ 100 mA

< 2 V @ 100 mA

< 2 V @ 100 mA

< 2 V @ 100 mA

< 2 V @ 100 mA

1000 Hz

1000 Hz

1000 Hz

1000 Hz

1000 Hz

1000 Hz

< 1 ms

< 1 ms

< 1 ms

< 1 ms

< 1 ms

< 1 ms

~13%

~13%

~13%

~13%

~13%

~13%

-25... 55 °C

-25... 55 °C

-25... 55 °C

-25... 55 °C

-25... 55 °C

-25... 55 °C

10.000 lux

10.000 lux

10.000 lux

10.000 lux

10.000 lux

10.000 lux

IP67

IP67

IP67

IP67

IP67

IP67

Chromed Brass

Chromed Brass

Chromed Brass

Chromed Brass

Chromed Brass

Chromed Brass

M12, 4-pole

2m, PVC

M12, 4-pole

2m, PVC

M12, 4-pole

2m, PVC

OD18FA N2PSB/M12
OD18FA P20NSB/M12

OD18FA N2PSB/A2P
OD18FA P20NSB/A2P

OD18FR N016PSB/M12
OD18FR P2NSB/M12

OD18FR N016PSB/A2P
OD18FR P2NSB/A2P

OD18FA P014PSB/M12
OD18FA P20NSB/M12

OD18FA P014PSB/A2P
OD18FA P20NSB/A2P

on request
M12/4...

on request
-

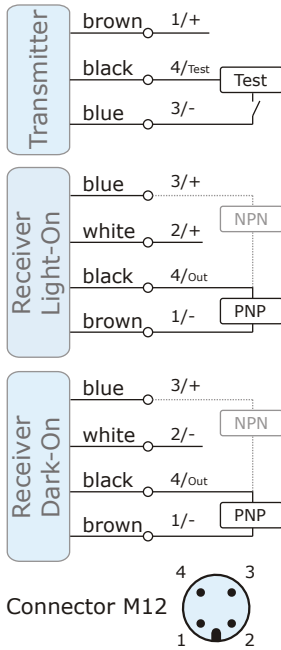
on request
M12/4...

on request
-

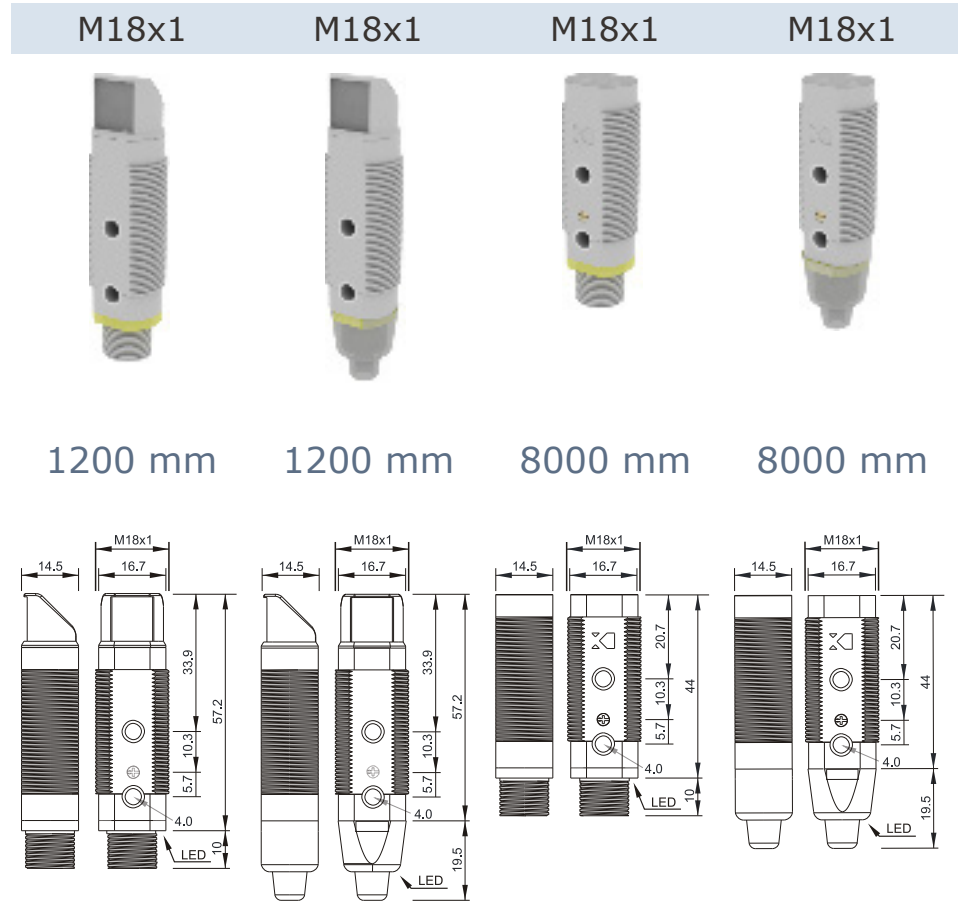
on request
M12/4...

on request
-

Output Schematics



Not to be used for Safety Applications



SPECIFICATIONS

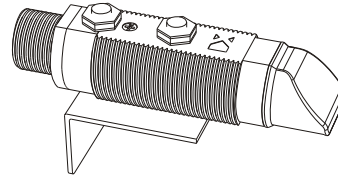
	Polarized Reflective	Polarized Reflective	Through Beam	Through Beam
Operating Distance	0... 1200 mm	0... 1200 mm	0... 8000 mm	0... 8000 mm
Output Function	NO NC	NO NC	NO NC	NO NC
Operating Voltage	10... 30 VDC	10... 30 VDC	10... 30 VDC	10... 30 VDC
Current Consumption	< 30 mA	< 30 mA	< 30 mA	< 30 mA
Output Current	100 mA, self-resetting	100 mA, self-resetting	100 mA, self-resetting	100 mA, self-resetting
Voltage Drop	< 2 V @ 100 mA	< 2 V @ 100 mA	< 2 V @ 100 mA	< 2 V @ 100 mA
Switching Frequency	1000 Hz	1000 Hz	1000 Hz	1000 Hz
Response Time	< 1 ms	< 1 ms	< 1 ms	< 1 ms
Hysteresis	~13%	~13%	~13%	~13%
Operating Temperature	-25... 55 °C	-25... 55 °C	-25... 55 °C	-25... 55 °C
Ambient Light Immunity	10.000 lux	10.000 lux	10.000 lux	10.000 lux
Protection Class	IP67	IP67	IP67	IP67
Housing Material	Chromed Brass	Chromed Brass	Chromed Brass	Chromed Brass
Connected	M12, 4-pole	2m, PVC	M12, 4-pole	2m, PVC
Operating-LED				

Article Code

PNP, NO + NC	OD18FR P012PSB/M12	OD18FR P012PSB/A2P	OD18FA R8PSB/M12	OD18FA R8PSB/A2P
NPN, NO + NC	OD18FR P2NSB/M12	OD18FR P2NSB/A2P	OD18FA R8NSB/M12	OD18FA R8NSB/A2P
Transmitter			OD18FA T8DB/M12	OD18FA T8DB/A2P

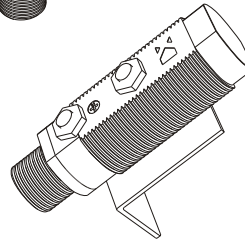
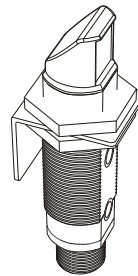
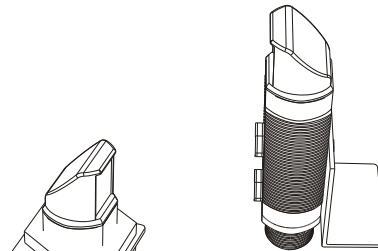
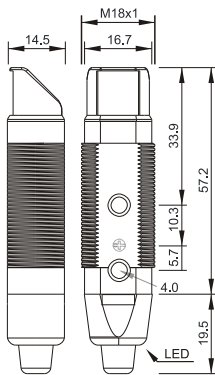
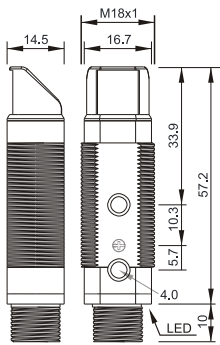
Mouting Bracket	on request	on request	on request	on request
Recommended Connecting Cable	M12/4...	-	M12/4...	-

M18x1 M18x1 Flexible Mountings



5500 mm

5500 mm



Through Beam

- 0... 5500 mm
- NO | NC
- 10... 30 VDC
- < 30 mA
- 100 mA, self-resetting
- < 2 V @ 100 mA
- 1000 Hz
- < 1 ms
- ~13%
- 25... 55 °C
- 10.000 lux
- IP67
- Chromed Brass
- M12, 4-pole

Through Beam

- 0... 5500 mm
- NO | NC
- 10... 30 VDC
- < 30 mA
- 100 mA, self-resetting
- < 2 V @ 100 mA
- 1000 Hz
- < 1 ms
- ~13%
- 25... 55 °C
- 10.000 lux
- IP67
- Chromed Brass
- 2m, PVC

OD18FR R055PSB/M12
 OD18FR R055NSB/M12
 OD18FR T055DB/M12

OD18FR R055PSB/A2P
 OD18FR R055NSB/A2P
 OD18FR T055DB/A2P

on request
 M12/4...

on request
 -

SENSEABLE™ Cabling

TR Electronic is your source for cables, accessories, and hardware for any sensor.

Build your cable part number:

		M				
	M8 3 wire	83				
	M8 4 wire	84				
	M12 3 wire	123				
	M12 4 wire	124				
	M12 5 wire	125				
	Female	F				
	Male	M				
	Female - straight	A				
	Radial - 90 degree	R				
Options	LED Output	Y				
	No LED	N				
Cable Length	2 Meter	2				
	5 Meter	5				
	10 Meter	10				

Example:

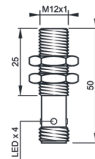
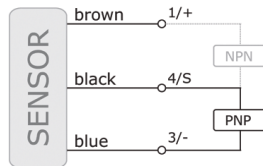
M83FAN5 = 5 Meter Cable, M8 with 3 Poles/Pins, Female, Axial Connection, with NO LED

For cable quotes and datasheets, email us at customercare@trelectronic.com
 Custom lengths and configurations are available on request.

SENSEABLE™

Value Prox

Output Schematics



**\$15
each**

SPECIFICATIONS:

Sensing Distance	4mm - Shielded
Operating Voltage	10...30 VDC, 3-wire
Current Consumption	<8 mA
Output Current	200 mA
Voltage Drop	< 1.5 V @ 200 mA
Switching Frequency	1000 Hz NPN / 500 Hz PNP
Repeatability	< 1 % (Sn)
Hysteresis	3...15%
Opening Temperature	-25...75 °C
Protection Class	IP67
Sensing Face Material	POM
Housing Material	Nickel Plated Brass
Connected	M12, 3-pole
Operating-LED	Incorporated

Article Code:

3-wire NO, PNP	IPS12 S4PO50 / M12
3-wire NO, NPN	IPS12 S4NO50 / M12

Pricing and availability subject to change
Minimum order quantities may apply

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SENSEABLE™ about the environment 