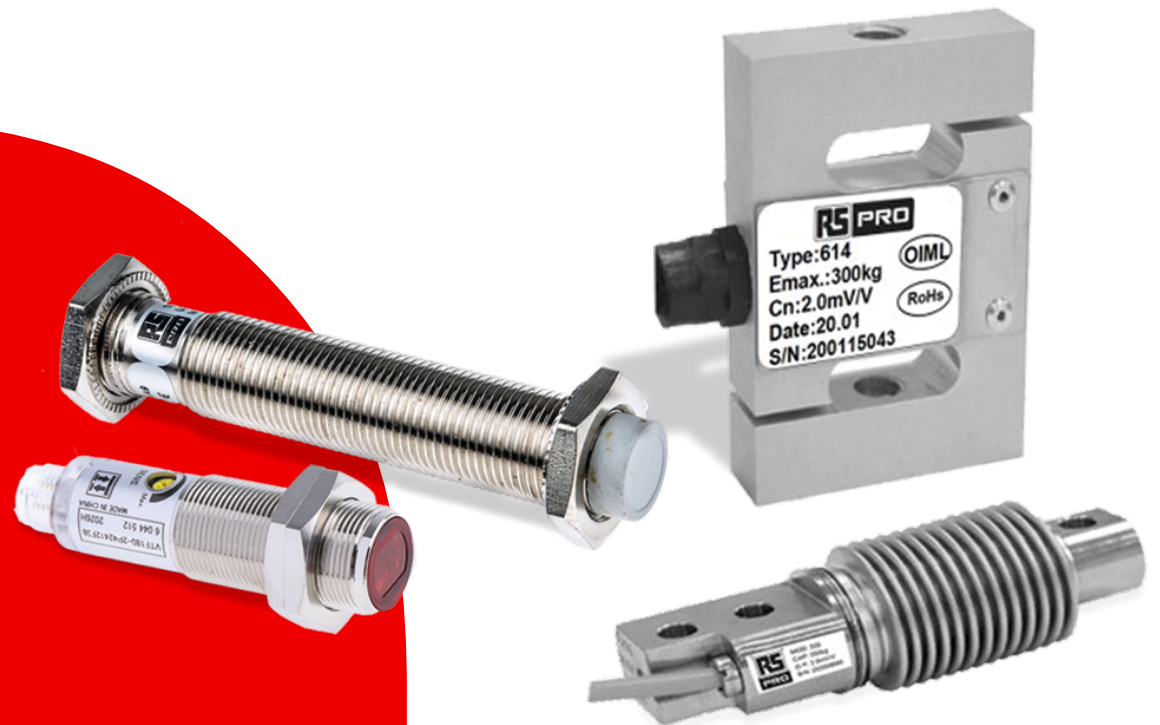




FACTORY AUTOMATION SENSORS

SELECTION GUIDE



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Photoelectric Sensors



Proximity Inductive Sensors



Proximity Capacitive Sensors



Fibre Optic Sensors



Load Cells



Accessories



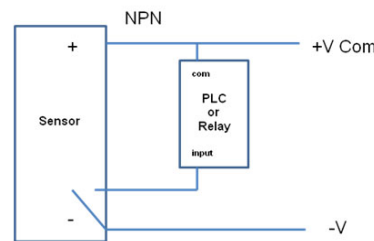
INDUCTIVE SENSOR: NPN OR PNP?

If your application requires an inductive sensor, you will need to decide what output type you require, NPN or PNP?

NPN Output:

NPN are sinking sensors, these allow current to flow into the sensor and to V-.

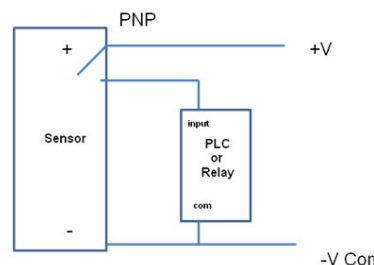
With an NPN sensor the switching occurs on the -V rail. The +V rail forms the common between the device and the sensor. A permanent +V supply will be connected to the device that is to be activated, for instance a PLC or relay. When the sensor turns on, it switches the -V rail and completes the circuit. Current travels through the sensor transistor into the device, thus turning it on or changing its state.



PNP Output:

PNP are sourcing sensors and allow current to flow out from the sensor, from V+.

With a PNP sensor the switching occurs on the +V rail. The -V rail forms the common between the device and the sensor. A permanent -V supply will be connected to the device that is to be activated, for instance a PLC or relay. When the sensor turns on, it switches the +V rail and completes the circuit. Current travels through the sensor transistor into the device, thus turning it on or changing its state.



INDUCTIVE SENSOR: NPN OR PNP?

Remember

- If the DC voltage has a V+ common, an NPN output sensor is needed. If the DC voltage has a V- common, a PNP output sensor is needed.
- NPN or PNP output does not have correlation to whether the sensor is NO (normally open) or NC (normally closed) as both NPN and PNP can be either NO or NC.

CHOOSING THE RIGHT CONNECTOR

Sensor Connector (M8/M12)

Used universally within many industrial control systems, M8 and M12 sensor connectors are an ideal choice for handling the rugged demands found within industrial applications such as food and beverage, research and development and machine and building.

Utilised in conjunction with sensor and switch cables, M8 and M12 sensor connectors are designed to work seamlessly with control systems and are available in right-angle and straight body orientations, as well as 3-, 4-, 5-, 6-, 8- and 12-pin variants.





Data availability down to the field level

Using IO-Link, the sensors can deliver their data directly into the control system very efficiently.

Device identification

Each IO-Link sensor has an IODD (IO Device Description), which describes the sensor, its capabilities and parameters, process data, diagnosis data and user interface configuration. Furthermore, each sensor is equipped with an internal ID.

Automatic parameter settings

Initial setup of a new sensor is smooth and easy using previously stored parameters. Once a sensor has been replaced, the IO-link master simply transmits parameters stored from the old sensor.

UNIVERSAL, SMART AND EASY

Centralised configuration and data management

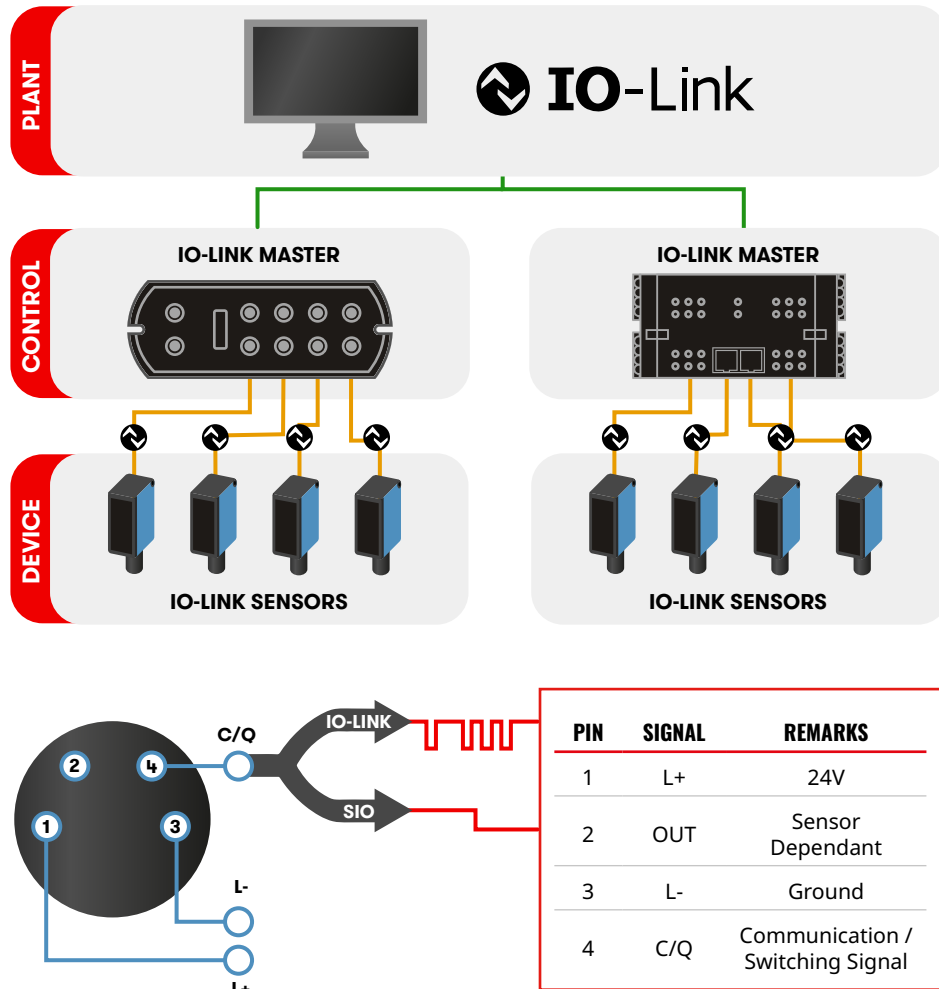
IO-Link enables fast configuration and dynamic change of the sensor parameters on the fly, which considerably reduces downtime in case of product changeover and increases flexibility and diversity of the installation.

Simplified installation

An IO-Link system requires just standard, unshielded 3-wire cables, and a standardised uniform interface for sensors and actuators drastically reduce the complexity of the installation process. In addition, the automated parameter reassignment simplifies sensor replacement in case of defects and prevents incorrect settings. The IO-Link-enabled sensor acts as a standard sensor when installed in a non-IO-Link system, so the same sensor can be stocked for both standard I/O (SIO) applications and IO-Link applications.

WHAT IS IO-LINK?

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What is IO-Link?

IO-Link is a universal, open communication standard protocol that allows IO-Link-enabled devices to exchange, collect and analyse data and convert it into actionable information.

IO-Link is recognised worldwide as an international standard (IEC 6113 1-9), and it is today considered as the “USB interface” for sensors and actuators in the industrial automation environment.

Plug and play:

When the IO-Link sensor is connected to an IO-Link port, the IO-Link master sends a wake-up request to the sensor, which automatically switches to IO-Link mode, and a point-to-point bidirectional communication automatically starts between the master and the sensor.

Operating modes:

The IO-Link-capable sensor can operate in two different modes; SIO mode (standard I/O) or IO-Link mode.

- SIO mode: the sensor works as a traditional sensor, and pin 4 acts as a traditional sensor, and pin 4 acts as an ordinary digital output. SIO mode ensures backwards compatibility with standard sensor systems.
- IO-Link mode: exchange of data between sensor and IO-Link master takes place, and pin 4 is used for the transmission of IO-Link-related data.

PROXIMITY PHOTOELECTRIC SENSORS

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Photoelectric sensors detect and measure physical objects or quantities by emitting a field or beam of electromagnetic radiation. An object is detected by measuring alterations in the return signal.

Through-beam sensors rely on two separate housings, one for the transmitter and one for the receiver. Retro-reflective photoelectric sensors have both the transmitter and receiver contained within the same housing but require a reflector opposite to the sensor. Diffuse sensors are easier to install as only one device has to be mounted. This is because the transmitter and receiver are contained within one housing.



DETECTION TYPES

Diffuse Reflection	Retro Reflection	Through Beam
Diffuser Reflection sensors use reflection to detect the presence of objects. The sensor emits a light that is reflected by the object. The reflected light is detected by the sensor and the sensor switches.	Retro Reflection sensors contain the transmitter and receiver in one housing and are combined with a prismatic reflector. This reflector reflects the emitted light beam and if the light is interrupted by an object, the sensor switches. A polarisation filter prevents faulty switching caused by reflective surfaces in the environment.	With Through Beam sensors, the transmitter and receiver are in two separate devices positioned directly opposite each other. The transmitter continuously sends light to the receiver. The receiver switches as soon as the light beam is disconnected by an object. Through beam sensors are more resistant to malfunctioning and offer very high sensing ranges.
Diffuse Reflection with background suppression Many diffuse reflection sensors come with background suppression that prevents faulty triggering caused by reflections in the environment.	Retro Reflection with polarisation filter Retro-reflection sensors with a polarisation filter prevent faulty switching caused by reflective surfaces in the environment. Dedicated reflectors are needed to turn the light beam, so it can be detected by the sensor.	

WHERE

Where would it be used?

- Industrial Factories
- Distribution Warehouses
- Food and Beverage
- Automation
- Building Maintenance

WHY

Why would you use this product?

The basic function is to detect the presence or absence of objects or measure the distance to the object, there are 3 main types of photoelectric sensors which provide reliable detection, these are through-beam, retro-reflective and diffuse.

WHO

Who would use it?

- Electrical Engineer
- Maintenance Engineer
- Test Engineer
- Research & Development

Background Suppression



Image for illustrative purposes only

DETECTION TYPE	DETECTION RANGE (MM)	OUTPUT TYPE	TERMINAL TYPE	STOCK NO
Diffuse Reflection with Background Suppression	100	NPN NO/NC	2m Cable	202-4467
Diffuse Reflection with Background Suppression	100	NPN NO/NC	M12	202-4469
Diffuse Reflection with Background Suppression	100	PNP NO/NC	2m Cable	202-4470
Diffuse Reflection with Background Suppression	100	PNP NO/NC	M12	202-4471
Diffuse Reflection with Background Suppression	350	NPN NO/NC	2m Cable	202-4448
Diffuse Reflection with Background Suppression	350	NPN NO/NC	M8	202-4449
Diffuse Reflection with Background Suppression	350	PNP NO/NC	2m Cable	202-4450
Diffuse Reflection with Background Suppression	350	PNP NO/NC	M8	202-4451
Diffuse Reflection with Background Suppression	2000	PNP+NPN	2m Cable	202-5446
Diffuse Reflection with Background Suppression	2000	PNP+NPN	M12	202-5447

Diffuse with Terminal Chamber



Image for illustrative purposes only

DETECTION TYPE	DETECTION RANGE (MM)	OUTPUT TYPE	STOCK NO
Diffuse Reflection	800	Relay	202-5452
Diffuse Reflection	2000	NO+NC, NPN	202-5448
Diffuse Reflection	2000	NO+NC, PNP	202-5450
Diffuse Reflection	2000	Relay	202-5451

Diffuse Reflection



Image for illustrative purposes only

DETECTION TYPE	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	THREAD SIZE	STOCK NO
Diffuse Reflection	100	2m Cable	NPN	-	202-4428
Diffuse Reflection	100	M8	NPN	-	202-4429
Diffuse Reflection	100	2m Cable	PNP	-	202-4431
Diffuse Reflection	100	M8	PNP	-	202-4432
Diffuse Reflection	300	2m Cable	NPN NO/NC	-	202-4433
Diffuse Reflection	300	M8	NPN NO/NC	-	202-4434
Diffuse Reflection	300	2m Cable	PNP NO/NC	-	202-4435
Diffuse Reflection	300	M8	PNP NO/NC	-	202-4436
Diffuse Reflection	300	2m Cable	NPN NO/NC	M18x1	202-4453
Diffuse Reflection	300	M12	NPN NO/NC	M18x1	202-4454
Diffuse Reflection	300	2m Cable	PNP NO/NC	M18x1	202-4455
Diffuse Reflection	300	M12	PNP NO/NC	M18x1	202-4456
Diffuse Reflection	300	2m Cable	Relay NO/NC	-	202-4476
Diffuse Reflection	1000	2m Cable	NPN	-	202-4424
Diffuse Reflection	1000	M8	NPN	-	202-4425
Diffuse Reflection	1000	2m Cable	PNP	-	202-4426
Diffuse Reflection	1000	M8	PNP	-	202-4427
Diffuse Reflection	2000	2m Cable	PNP+NPN	-	202-4472
Diffuse Reflection	2000	M12	PNP+NPN	-	202-4473
Diffuse Reflection	2000	2m Cable	Relay NO/NC	-	202-4475

Polarised Reflection



Image for illustrative purposes only

DETECTION TYPE	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	STOCK NO
Retro Reflection with Polarisation Filter	3000	2m Cable	NPN NO/NC	201-8160
Retro Reflection with Polarisation Filter	3000	M8	NPN NO/NC	201-8161
Retro Reflection with Polarisation Filter	3000	2m Cable	PNP NO/NC	201-8162
Retro Reflection with Polarisation Filter	3000	M8	PNP NO/NC	201-8163

Polarised Reflection



Image for illustrative purposes only

DETECTION TYPE	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	STOCK NO
Retro Reflection with Polarisation Filter	3000	2m Cable	NPN NO/NC	202-4457
Retro Reflection with Polarisation Filter	3000	M12	NPN NO/NC	202-4458
Retro Reflection with Polarisation Filter	3000	2m Cable	PNP NO/NC	202-4459
Retro Reflection with Polarisation Filter	3000	M12	PNP NO/NC	202-4460
Retro Reflection with Polarisation Filter	4000	M8	NPN NO/NC	202-4437
Retro Reflection with Polarisation Filter	4000	2m Cable	NPN NO/NC	202-4438
Retro Reflection with Polarisation Filter	4000	2m Cable	PNP NO/NC	202-4439
Retro Reflection with Polarisation Filter	5000	M12	PNP+NPN	202-4478
Retro Reflection with Polarisation Filter	5000	M12	Relay NO/NC	202-4481
Retro Reflection with Polarisation Filter	12000	Terminal	NPN NO/NC	202-5457
Retro Reflection with Polarisation Filter	12000	Terminal	PNP NO/NC	202-5458
Retro Reflection with Polarisation Filter	12000	Terminal	Relay NO/NC	202-5459

Polarised Reflection Continued



Image for illustrative purposes only

DETECTION TYPE	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	STOCK NO
Retro Reflection with Polarisation Filter	4000	M8	PNP NO/NC	202-4440
Retro Reflection with Polarisation Filter	5000	2m Cable	PNP+NPN	202-4477
Retro Reflection with Polarisation Filter	5000	2m Cable	Relay NO/NC	202-4479

Retro-reflection



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DETECTION TYPE	DETECTION RANGE (MM)	OUTPUT TYPE	STOCK NO
Retro Reflection	5000	NC, NPN	202-5453
Retro Reflection	5000	NC, PNP	202-5454
Retro Reflection	5000	Relay	202-5456

Through Beam with Terminal Chamber



Image for illustrative purposes only

DETECTION TYPE	DETECTION RANGE (MM)	OUTPUT TYPE	STOCK NO
Through Beam (Emitter)	30000	Relay	202-5460
Through Beam (Receiver)	30000	Relay	202-5462

Through Beam



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DETECTION TYPE	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	STOCK NO
Through Beam (Receiver)	10000	2m Cable	NPN NO/NC	202-4441
Through Beam (Receiver)	10000	M8	NPN NO/NC	202-4442
Through Beam (Receiver)	10000	2m Cable	PNP NO/NC	202-4443
Through Beam (Receiver)	10000	M8	PNP NO/NC	202-4444
Through Beam (Emitter)	10000	2m Cable	-	202-4445
Through Beam (Emitter)	10000	M8	-	202-4447
Through Beam (Emitter)	20000	2m Cable	-	202-4461
Through Beam (Receiver)	20000	2m Cable	NPN NO/NC	202-4463
Through Beam (Receiver)	20000	2m Cable	PNP NO/NC	202-4465
Through Beam (Emitter)	20000	M12	-	202-4462
Through Beam (Receiver)	20000	M12	NPN NO/NC	202-4464
Through Beam (Receiver)	20000	M12	PNP NO/NC	202-4466
Through Beam (Emitter)	60000	2m Cable	-	202-4482
Through Beam (Receiver)	60000	2m Cable	Relay NO/NC	202-4483

Background Suppression M18x1



Image for illustrative purposes only

DETECTION TYPE	HOUSING MATERIAL	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	STOCK NO
Diffuse Reflection with Background Suppression	Brass Nickel Plated	100	2m Cable	PNP NO/NC	204-4013
Diffuse Reflection with Background Suppression	Brass Nickel Plated	100	2m Cable	NPN NO/NC	204-4014
Diffuse Reflection with Background Suppression	Brass Nickel Plated	100	M12	PNP NO/NC	204-4015
Diffuse Reflection with Background Suppression	Brass Nickel Plated	100	M12	NPN NO/NC	204-4016

Diffuse



Image for illustrative purposes only

DETECTION TYPE	HOUSING MATERIAL	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	THREAD SIZE	STOCK NO
Diffuse Reflection	Brass Nickel Plated	150	2m Cable	NPN NO	M12x1	204-3961
Diffuse Reflection	Brass Nickel Plated	150	2m Cable	PNP NO	M12x1	204-3962
Diffuse Reflection	Brass Nickel Plated	150	M12	NPN NO	M12x1	204-3963
Diffuse Reflection	Brass Nickel Plated	150	M12	PNP NO	M12x1	204-3965
Diffuse Reflection	PBT	150	2m Cable	NPN NO	M12x1	204-3966
Diffuse Reflection	PBT	150	2m Cable	PNP NO	M12x1	204-3967
Diffuse Reflection	Brass Nickel Plated	400	2m Cable	NPN NO/NC	M18x1	204-3968
Diffuse Reflection	Brass Nickel Plated	400	M12	NPN NO/NC	M18x1	204-3970
Diffuse Reflection	Brass Nickel Plated	400	2m Cable	PNP NO/NC	M18x1	204-3969
Diffuse Reflection	Brass Nickel Plated	400	M12	PNP NO/NC	M18x1	204-3971
Diffuse Reflection	PBT	400	2m Cable	NPN NO/NC	M18x1	204-3972
Diffuse Reflection	PBT	400	2m Cable	PNP NO/NC	M18x1	204-3973
Diffuse Reflection	PBT	400	M12	NPN NO/NC	M18x1	204-3974
Diffuse Reflection	PBT	400	M12	PNP NO/NC	M18x1	204-3975
Diffuse Reflection	Brass Nickel Plated	1000	2m Cable	NPN NO/NC	M30x1.5	204-3976
Diffuse Reflection	Brass Nickel Plated	1000	2m Cable	PNP NO/NC	M30x1.5	204-3977
Diffuse Reflection	PBT	1000	2m Cable	NPN NO/NC	M30x1.5	204-3978
Diffuse Reflection	PBT	1000	2m Cable	PNP NO/NC	M30x1.5	204-3979

Diffuse Continued



Image for illustrative purposes only

DETECTION TYPE	HOUSING MATERIAL	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	THREAD SIZE	STOCK NO
Diffuse Reflection	PBT	400	2m Cable	NPN NO/NC	M18x1	204-3972
Diffuse Reflection	PBT	400	2m Cable	PNP NO/NC	M18x1	204-3973
Diffuse Reflection	PBT	400	M12	NPN NO/NC	M18x1	204-3974
Diffuse Reflection	PBT	400	M12	PNP NO/NC	M18x1	204-3975
Diffuse Reflection	Brass Nickel Plated	1000	2m Cable	NPN NO/NC	M30x1.5	204-3976
Diffuse Reflection	Brass Nickel Plated	1000	2m Cable	PNP NO/NC	M30x1.5	204-3977
Diffuse Reflection	PBT	1000	2m Cable	NPN NO/NC	M30x1.5	204-3978
Diffuse Reflection	PBT	1000	2m Cable	PNP NO/NC	M30x1.5	204-3979

Polarised Reflection M18x1



Image for illustrative purposes only

DETECTION TYPE	DETECTION RANGE (MM)	OUTPUT TYPE	TERMINAL TYPE	STOCK NO
Retro Reflection with Polarisation Filter	3000	NPN NO/NC	2m Cable	204-4017
Retro Reflection with Polarisation Filter	3000	PNP NO/NC	2m Cable	204-4019
Retro Reflection with Polarisation Filter	3000	NPN NO/NC	M12	204-4020
Retro Reflection with Polarisation Filter	3000	PNP NO/NC	M12	204-4021

PROXIMITY PHOTOELECTRIC SENSORS BARREL

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Retro-reflective M18x1



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DETECTION TYPE	HOUSING MATERIAL	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT	STOCK NO
Retro Reflection	Brass Nickel Plated	3000	2m Cable	NPN NO/NC	204-3980
Retro Reflection	Brass Nickel Plated	3000	2m Cable	PNP NO/NC	204-3981
Retro Reflection	Brass Nickel Plated	3000	M12	PNP NO/NC	204-3982
Retro Reflection	Brass Nickel Plated	3000	M12	PNP NO	204-3983
Retro Reflection	PBT	3000	2m Cable	NPN NO/NC	204-3984
Retro Reflection	PBT	3000	2m Cable	PNP NO/NC	204-3985
Retro Reflection	PBT	3000	M12	PNP NO/NC	204-3987
Retro Reflection	PBT	3000	M12	PNP NO	204-3988
Retro Reflection	PBT	3000	M12	NPN NO/NC	204-3989

Through Beam Emitter / Receiver



Image for illustrative purposes only

DETECTION TYPE	HOUSING MATERIAL	DETECTION RANGE (MM)	OUTPUT TYPE	TERMINAL TYPE	THREAD SIZE	STOCK NO
Through Beam (Emitter)	Brass Nickel Plated	5000	-	2m Cable	M12x1	204-3990
Through Beam (Receiver)	Brass Nickel Plated	5000	NPN NO	2m Cable	M12x1	204-3991
Through Beam (Receiver)	Brass Nickel Plated	5000	PNP NO	2m Cable	M12x1	204-3993
Through Beam (Emitter)	Brass Nickel Plated	10000	-	2m Cable	M18x1	204-3994
Through Beam (Receiver)	Brass Nickel Plated	10000	NPN NO/NC	2m Cable	M18x1	204-3995
Through Beam (Emitter)	PBT	10000	-	2m Cable	M18x1	204-4000
Through Beam (Receiver)	PBT	10000	NPN NO/NC	2m Cable	M18x1	204-4001

Through Beam Continued



Image for illustrative purposes only

DETECTION TYPE	HOUSING MATERIAL	DETECTION RANGE (MM)	OUTPUT TYPE	TERMINAL TYPE	THREAD SIZE	STOCK NO
Through Beam (Receiver)	Brass Nickel Plated	10000	PNP NO/NC	2m Cable	M18x1	204-3996
Through Beam (Emitter)	Brass Nickel Plated	20000	-	2m Cable	M18x1	204-3997
Through Beam (Receiver)	Brass Nickel Plated	20000	NPN NO/NC	2m Cable	M18x1	204-3998
Through Beam (Receiver)	Brass Nickel Plated	20000	PNP NO/NC	2m Cable	M18x1	204-3999
Through Beam (Receiver)	PBT	10000	PNP NO/NC	2m Cable	M18x1	204-4003
Through Beam (Emitter)	PBT	20000	-	2m Cable	M18x1	204-4004
Through Beam (Receiver)	PBT	20000	NPN NO/NC	2m Cable	M18x1	204-4005
Through Beam (Receiver)	PBT	20000	PNP NO/NC	2m Cable	M18x1	204-4006
Through Beam (Emitter)	Brass Nickel Plated	20000	-	2m Cable	M30x1.5	204-4007
Through Beam (Receiver)	Brass Nickel Plated	20000	NPN NO/NC	2m Cable	M30x1.5	204-4008
Through Beam (Receiver)	Brass Nickel Plated	20000	PNP NO/NC	2m Cable	M30x1.5	204-4009
Through Beam (Emitter)	PBT	20000	-	2m Cable	M30x1.5	204-4010
Through Beam (Receiver)	PBT	20000	NPN NO/NC	2m Cable	M30x1.5	204-4011
Through Beam (Receiver)	PBT	20000	PNP NO/NC	2m Cable	M30x1.5	204-4012

PROXIMITY INDUCTIVE SENSORS

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An inductive sensor provides non-contact detection of metallic objects, with some sensors being able to target both ferrous and non-ferrous metals, while others specialise in sensing only one type. Inductive proximity sensors are suitable for use in virtually any industry with some types also able to be used in hazardous environments.

Inductive sensors can also be affected by interaction with other sensors and ambient environmental influences. Careful installation will be required to ensure the sensor is effective and is not adversely affected by any surrounding sensors or metallic objects.



WHERE

Where would it be used?

Inductive proximity sensors are suitable for use in virtually any industry. Common applications include the food and beverage industry, robotics, machine tools, packaging and materials handling livestock breeding etc. Any close range detection of ferrous (iron) material.

WHY

Why would you use this product?

An advantage with these sensors is that they are capable of detecting both metallic and non-metallic targets, inductive are non contact sensors- capable of withstanding build-up of contaminants as they have no moving parts to wear proper set up produces long life.

WHO

Who would use it?

- Test Engineer
- Research & Development
- Design Engineer
- Electrical Engineer
- Maintenance Engineer
- Mechanic

Inductive Sensors for Flush Mount



Image for illustrative purposes only

DETECTION RANGE (MM)	OUTPUT TYPE	HOUSING MATERIAL	TERMINAL TYPE	THREAD SIZE	STOCK NO
0.6	PNP NO	Stainless Steel	2m Cable	M4x0.5	206-6124
0.8	PNP NO	Stainless Steel	M8	M5x0.5	206-6126
0.8	PNP NO	Stainless Steel	2m Cable	M5x0.5	206-6127
1.5	PNP NO	Stainless Steel	M8	M5x0.5	206-6128
1.5	PNP NO	Stainless Steel	2m Cable	M5x0.5	206-6129
2	PNP NO	Stainless Steel	M12	M8x1	206-6130
2	PNP NO	Stainless Steel	M8	M8x1	206-6132
2	PNP NO	Stainless Steel	M8	M8x1	206-6133
2	PNP NO	Stainless Steel	2m Cable	M8x1	206-6134
2	PNP NO	Stainless Steel	2m Cable	M8x1	206-6135
4	PNP NO	Stainless Steel	2m Cable	M8x1	206-6136
4	PNP NO	Stainless Steel	M12	M12x1	206-6137
4	PNP NO	Stainless Steel	M12	M12x1	206-6138
4	PNP NO	Stainless Steel	2m Cable	M12x1	206-6139
4	PNP NO	Stainless Steel	2m Cable	M12x1	206-6140
8	PNP NO	Stainless Steel	M12	M18x1	206-6141
8	PNP NO	Stainless Steel	M12	M18x1	206-6142
8	PNP NO	Stainless Steel	2m Cable	M18x1	206-6143
8	PNP NO	Stainless Steel	2m Cable	M18x1	206-6144

Inductive Sensors for Flush Mount - Continued



Image for illustrative purposes only

DETECTION RANGE (MM) FLUSH MOUNT	OUTPUT TYPE	HOUSING MATERIAL	TERMINAL TYPE	THREAD SIZE	STOCK NO
15	PNP NO	Stainless Steel	M12	M30x1.5	206-6145
15	PNP NO	Stainless Steel	M12	M30x1.5	206-6146
15	PNP NO	Stainless Steel	2m Cable	M30x1.5	206-6148
15	PNP NO	Stainless Steel	2m Cable	M30x1.5	206-6149
2	PNP NO	Brass Nickel Plated	M8	M8x1	206-6150
2	PNP NO	Brass Nickel Plated	M8	M8x1	206-6151
2	PNP NO	Brass Nickel Plated	2m Cable	M8x1	206-6152
2	PNP NO	Brass Nickel Plated	2m Cable	M8x1	206-6154
4	PNP NO	Brass Nickel Plated	M12	M12x1	206-6155
4	PNP NO	Brass Nickel Plated	M12	M12x1	206-6156
4	PNP NO	Brass Nickel Plated	2m Cable	M12x1	206-6157
8	PNP NO	Brass Nickel Plated	M12	M18x1	206-6162
8	NPN NO	Brass Nickel Plated	2m Cable	M12x1	206-6158
8	PNP NO	Brass Nickel Plated	M12	M12x1	206-6159
8	PNP NO	Brass Nickel Plated	2m Cable	M12x1	206-6160
8	PNP NO	Brass Nickel Plated	M12	M18x1	206-6161
8	PNP NO	Brass Nickel Plated	2m Cable	M18x1	206-6163
10	PNP NC	Brass Nickel Plated	2m Cable	M30x1.5	206-6165
20	PNP NO	Brass Nickel Plated	M12	M18x1	206-6164

Inductive Sensors for Flush Mount - Continued



Image for illustrative purposes only

DETECTION RANGE (MM) FLUSH MOUNT	OUTPUT TYPE	HOUSING MATERIAL	TERMINAL TYPE	HOUSING STYLE	STOCK NO
38	PNP NO	Brass Nickel Plated	M12	M30x1.5	206-6166
38	PNP NO	Brass Nickel Plated	2m Cable	M30x1.5	206-6167
2	PNP NO	Plastic Vistal®	M8	Block	206-6168
2	PNP NO	Plastic Vistal®	2m Cable	Block	206-6170
3	PNP NO	Plastic Vistal®	M8	Block	206-6171
3	PNP NO	Plastic Vistal®	2m Cable	Block	206-6172
4	PNP NO	Plastic Vistal®	M8	Block	206-6173
4	PNP NO	Plastic Vistal®	2m Cable	Block	206-6174
20	PNP NO/NC	Plastic PA 66	M12	Block	206-6176
20	PNP NO/NC	Plastic PA 66	Terminal	Block	206-6177
20	PNP NO	Plastic PA 66	M12	Block	206-6178
20	PNP NO	Plastic PA 66	Terminal	Block	206-6179
40	PNP NO/NC	Plastic PA 66	M12	Block	206-6180
40	PNP NO/NC	Plastic PA 66	Terminal	Block	206-6181
40	PNP NO	Plastic PA 66	M12	Block	206-6182
40	PNP NO	Plastic PA 66	Terminal	Block	206-6183

PROXIMITY CAPACITIVE SENSORS

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Capacitive proximity sensors feature a pair of parallel plates, similar to a standard capacitor. They work when an object produces changes in capacitance, triggering the sensor. Capacitive sensors are designed for use with non-ferrous materials and are ideal for close-range applications such as level detection and monitoring.

Capacitive sensors can be affected by their environment and possible interaction with other sensors. This could include anything from the ambient temperature to other objects in the vicinity. As a result of this, precautions should be taken when installing these sensors to avoid interference from other objects or sensors.



WHERE

Where would it be used?

Applications including flow control for detection of liquids, grains and powders. Common applications include the food and beverage industry, robotics, machine tools, packaging and materials handling.

WHY

Why would you use this product?

Proximity capacitive sensor can detect both metal and non-metal materials, especially suitable for detecting materials such as plastics, tank liquid level detection, hopper powders and particles. Ideal for sight glass monitoring.

WHO

Who would use it?

- Test Engineer
- Research & Development
- Design Engineer
- Electrical Engineer
- Maintenance Engineer
- Mechanics
- Laboratories

PROXIMITY CAPACITIVE SENSORS

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Flush Mount



Image for illustrative purposes only

HOUSING STYLE	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	IP RATING	STOCK NO
M12x1	2	2m Cable	NPN-NO	IP67	184-5578
M12x1	2	2m Cable	NPN-NO	IP67	184-5582
M12x1	2	2m Cable	PNP-NO	IP67	184-5584
M12x1	2	M12	NPN-NO	IP67	184-5579
M12x1	2	M12	NPN-NO	IP67	184-5583
M12x1	2	M12	PNP-NO	IP67	184-5585
Block	5	2m Cable	NPN-NO	IP67	184-5569
Block	5	2m Cable	PNP-NO	IP67	184-5570
M18x1	5	2m Cable	NPN-NO/NC	IP67	184-5593
M18x1	5	2m Cable	NPN-NO/NC	IP67	184-5604
M18x1	5	2m Cable	PNP-NO/NC	IP67	184-5596
M18x1	5	2m Cable	PNP-NO/NC	IP67	184-5606
M18x1	5	2m Cable	NO	IP67	184-5591
M18x1	5	M12	NPN-NO/NC	IP67	184-5594
M18x1	5	M12	NPN-NO/NC	IP67	184-5605
M18x1	5	M12	PNP-NO/NC	IP67	184-5607
M18x1	5	M12	NO	IP67	184-5592
M18x1	5	M12	NO	IP67	184-5603
M30x1,5	10	2m Cable	NPN-NO/NC	IP67	184-5615

Flush Mount Continued



Image for illustrative purposes only

HOUSING STYLE	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	IP RATING	STOCK NO
M30x1,5	10	2m Cable	PNP-NO/NC	IP67	184-5617
M30x1,5	10	2m Cable	PNP-NO/NC	IP67	184-5632
M30x1,5	10	2m Cable	NO	IP67	184-5613
M30x1,5	10	2m Cable	NO	IP67	184-5627
M30x1,5	10	2m Cable	NO	IP67	184-5634
M30x1,5	10	M12	NPN-NO/NC	IP67	184-5616
M30x1,5	10	M12	NPN-NO/NC	IP67	184-5631
M30x1,5	10	M12	PNP-NO	IP67	184-5633
M30x1,5	10	M12	PNP-NO/NC	IP67	184-5619
M30x1,5	10	M12	NO	IP67	184-5614
M30x1,5	10	M12	NO	IP67	184-5628
M30x1,5	10	M12	NO	IP67	184-5635
M30x1,5	15	2m Cable	NPN-NO/NC	IP67	184-5629

Non-flush Mount



Image for illustrative purposes only

HOUSING STYLE	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	IP RATING	STOCK NO
M12x1	4	2m Cable	NPN-NO	IP67	184-5580
M12x1	4	2m Cable	NPN-NO	IP67	184-5586
M12x1	4	2m Cable	PNP-NO	IP67	184-5588
M12x1	4	M12	NPN-NO	IP67	184-5581
M12x1	4	M12	NPN-NO	IP67	184-5587
M12x1	4	M12	PNP-NO	IP67	184-5590
Block	8	M12	NPN-NO	IP67	184-5571
M18x1	8	2m Cable	NPN-NO/NC	IP67	184-5599
M18x1	8	2m Cable	NPN-NO/NC	IP67	184-5609
M18x1	8	2m Cable	PNP-NO/NC	IP67	184-5611
M18x1	8	2m Cable	NO	IP67	184-5597
M18x1	8	M12	NPN-NO/NC	IP67	184-5600
M18x1	8	M12	NPN-NO/NC	IP67	184-5610
M18x1	8	M12	PNP-NO/NC	IP67	184-5601
M18x1	8	M12	PNP-NO/NC	IP67	184-5612
M18x1	8	M12	NO	IP67	184-5598
M18x1	8	M12	NO	IP67	184-5608
Block	10	2m Cable	NPN-NO	IP67	184-5577
M30x1,5	15	2m Cable	NPN-NO/NC	IP67	184-5622

PROXIMITY CAPACITIVE SENSORS

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Non-flush Mount Continued



Image for illustrative purposes only

HOUSING STYLE	DETECTION RANGE (MM)	TERMINAL TYPE	OUTPUT TYPE	IP RATING	STOCK NO
M30x1,5	15	2m Cable	NPN-NO/NC	IP67	184-5638
M30x1,5	15	2m Cable	PNP-NO/NC	IP67	184-5625
M30x1,5	15	2m Cable	PNP-NO/NC	IP67	184-5640
M30x1,5	15	2m Cable	NO	IP67	184-5620
M30x1,5	15	2m Cable	NO	IP67	184-5636
M30x1,5	15	M12	NPN-NO/NC	IP67	184-5623
M30x1,5	15	M12	NPN-NO/NC	IP67	184-5639
M30x1,5	15	M12	PNP-NO/NC	IP67	184-5626
M30x1,5	15	M12	PNP-NO/NC	IP67	184-5641
M30x1,5	15	M12	NO	IP67	184-5621
M30x1,5	15	M12	NO	IP67	184-5637
M30x1,5	15	M12	NO	IP67	184-5642

Pipeline Mount



Image for illustrative purposes only

PIPE	OD / WALL THICKNESS	TERMINAL TYPE	OUTPUT TYPE	IP RATING	STOCK NO
Non Metal	12-26mm / <1mm	2m Cable	NPN-NO	IP67	184-5575
Non Metal	12-26mm / <1mm	2m Cable	PNP-NO	IP67	184-5576
Non Metal	8-11mm / ≤1mm	2m Cable	NPN-NO	IP67	184-5572
Non Metal	8-11mm / ≤1mm	2m Cable	PNP-NO	IP67	184-5574

PROXIMITY PHOTOELECTRIC SENSORS WITH IO-LINK

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- Operating Voltage: 10 to 30V DC
- Red or infrared sensors with IO-Link with a adjustable distance, either by trimmer or via IO-Link.
- Application functions: Pattern Recognition, Speed & Length, Divider function and Object & Gap Monitoring.
- The output can be operated either as a standard switching output or in IO-Link mode.
- Fully configurable via output IO-Link v 1.1. Electrical outputs can be configured as PNP / NPN / Push-Pull / External input, normally open or normally closed.
- Timer functions can be set, such as ON-delay, Offdelay, and one shots.
- Logging functions: Temperatures, detecting counter, power cycles and operating hours etc.
- Detection modes Single point, two point and windows mode.
- Logic functions: AND, OR, XOR and Gated SR-FF.
- Analogue output: In IO-Link mode the sensor will generate 16 bit analogue process data output representing various selectable process data such as received signal level.
- UL listed



Photoelectric Sensors with IO-Link



Image for illustrative purposes only

LIGHT TYPE	SENSING DISTANCE	TERMINAL TYPE	SENSOR TYPE	HOUSING	STOCK NO
Infrared	200mm	2m PVC Cable	Diffuse Reflection with Background Suppression	ABS Plastic, IP67 - 10 x 20 x 30mm	237-7276
Infrared	200mm	M8 Plug	Diffuse Reflection with Background Suppression	ABS Plastic, IP67 - 10 x 20 x 30mm	237-7277
Red	200mm	2m PVC Cable	Diffuse Reflection with Background Suppression	ABS Plastic, IP67 - 10 x 20 x 30mm	237-7280
Red	200mm	M8 Plug	Diffuse Reflection with Background Suppression	ABS Plastic, IP 67 - 10 x 20 x 30mm	237-7281
Red	1000mm	2m PVC Cable	Diffuse Reflection	ABS Plastic, IP67 - 10 x 20 x 30mm	237-7279
Infrared	1000mm	M8 Plug	Diffuse Reflection	ABS Plastic, IP67 - 10 x 20 x 30mm	237-7278
Infrared	1000mm	2m PVC Cable	Diffuse Reflection	ABS Plastic, IP67 - 10 x 20 x 30mm	237-7282
Red	6000mm	2m PVC Cable	Retro Reflection	Stainless Steel, IP69K - 11 x 21 x 32mm	237-7283
Red	6000mm	M8 Plug	Retro Reflection	Stainless Steel, IP69K - 11 x 21 x 32mm	237-7284

PROXIMITY PHOTOELECTRIC LASER SENSORS WITH IO-LINK

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- Operating Voltage: 10 to 30V DC
- Time of Flight laser sensors with IO-Link with a adjustable distance, either by trimmer or via IO-Link.
- The output can be operated either as a standard switching output or in IO-Link mode.
- Fully configurable via output IO-Link v 1.1. Electrical outputs can be configured as PNP / NPN / Push-Pull / External input, normally open or normally closed.
- Timer functions can be set, such as ON-delay, Offdelay, and

one shots.

- Logging functions: Temperatures, detecting counter, power cycles and operating hours etc.
- Detection modes: Single point, two point and windows mode.
- Logic functions: AND, OR, XOR and Gated SR-FF.
- Analogue output: In IO-Link mode the sensor will generate 16 bit analogue process data output representing various selectable process data such as received signal level.
- UL listed.



Photoelectric Laser Sensor with IO-Link



Image for illustrative purposes only

LIGHT TYPE	SENSING DISTANCE	TERMINAL TYPE	SENSOR TYPE	HOUSING	STOCK NO
Laser	1000mm	2m PVC Cable	Diffuse Reflection with Background Suppression	ABS Plastic, IP67 - 10 x 20 x 30mm	237-7271
Laser	1000mm	M8 Plug	Diffuse Reflection with Background Suppression	ABS Plastic, IP67 - 10 x 20 x 30mm	237-7272
Laser	1000mm	2m PVC Cable	Diffuse Reflection with Background Suppression	Stainless Steel, IP69K - 11 x 21 x 32mm	237-7274
Laser	1000mm	M8 Plug	Diffuse Reflection with Background Suppression	Stainless Steel, IP69K - 11 x 21 x 32mm	237-7275

PROXIMITY INDUCTIVE SENSORS WITH IO-LINK

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- Housing Material: Brass Nickel Plated, IP67
- Operating Voltage: 10 to 36V DC
- The output can be operated either as a switching output or in IO-Link mode.
- Fully configurable via IO-Link v1.1. Electrical outputs can be configured as PNP/NPN/Push-pull, normally open or normally closed.
- UL listed.

- Timer functions can be set, such as switch-on and switch-off delay.
- Adjustable sensing distance and hysteresis: sensing distance can be set to 33%, 50%, 75% or 100% of the maximum sensing distance (M5 and M8 types can be set to 62% or 100%).
- Temperature monitoring: over or under-run temperature alarms can be set.



Inductive Proximity Sensors with IO-Link



Image for illustrative purposes only

HOUSING TYPE	SENSING DISTANCE	TERMINAL TYPE	MOUNTING TYPE	HOUSING LENGTH	STOCK NO
M5	1.3mm	2m PVC Cable	Flush	23mm	237-7265
M8	2mm	2m PVC Cable	Flush	45mm	237-7266
M8	4mm	2m PVC Cable	Non-Flush	45mm	237-7268
M8	2mm	2m PVC Cable	Flush	30mm	237-7269
M8	4mm	2m PVC Cable	Non-Flush	30mm	237-7270
M12	4mm	2m PVC Cable	Flush	50mm	237-7246
M12	4mm	M12 Plug	Flush	50mm	237-7247
M12	8mm	2m PVC Cable	Non-Flush	50mm	237-7248
M12	8mm	M12 Plug	Non-Flush	50mm	237-7249
M12	4mm	2m PVC Cable	Flush	30mm	237-7250
M12	4mm	M12 Plug	Flush	30mm	237-7252
M12	8mm	2m PVC Cable	Non-Flush	30mm	237-7253
M12	8mm	M12 Plug	Non-Flush	30mm	237-7254

Inductive Proximity Sensors with IO-Link Continued



Image for illustrative purposes only

HOUSING TYPE	SENSING DISTANCE	TERMINAL TYPE	MOUNTING TYPE	HOUSING LENGTH	STOCK NO
M18	8mm	2m PVC cable	Flush	50mm	237-7255
M18	8mm	M12 Plug	Flush	50mm	237-7256
M18	8mm	2m PVC Cable	Flush	30mm	237-7257
M18	8mm	M12 Plug	Flush	30mm	237-7258
M18	14mm	2m PVC Cable	Non-Flush	30mm	237-7259
M18	14mm	M12 Plug	Non-Flush	30mm	237-7260
M30	22mm	2m PVC Cable	Non-Flush	50mm	237-7261
M30	22mm	M12 Plug	Non-Flush	50mm	237-7262
M30	15mm	2m PVC Cable	Flush	30mm	237-7263
M30	15mm	M12 Plug	Flush	30mm	237-7264

PROXIMITY CAPACITIVE SENSORS WITH IO-LINK

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- Housing Material: 30% glass reinforced PBT, IP69K.
- Enhanced EMC performance.
- Operating Voltage: 10 to 40V DC.
- The output can be operated either as a switching output or in IO-Link mode.
- Fully configurable via IO-Link v1.1. Electrical outputs can be configured as PNP/NPN/Push-pull, external input, normally open or normally closed.

- Timer functions can be set, such as ON-delay, OFF-delay, and one shots.
- Logging functions: Temperatures, detecting counter, power cycles and operating hours etc.
- Adjustable sensing distance and hysteresis.
- Temperature monitoring: over or under-run temperature alarms can be set.
- UL listed.



Capacitive Proximity Sensors with IO-Link



Image for illustrative purposes only

HOUSING TYPE	SENSING DISTANCE	TERMINAL TYPE	MOUNTING TYPE	HOUSING LENGTH	STOCK NO
M18	8mm	2m PVC Cable	Flush	70mm	237-7236
M18	8mm	M12 Plug	Flush	70mm	237-7237
M18	12mm	2m PVC Cable	Non-Flush	70mm	237-7238
M18	12mm	M12 Plug	Non-Flush	70mm	237-7240
M30	16mm	2m PVC Cable	Flush	61mm	237-7241
M30	16mm	M12 Plug	Flush	61mm	237-7242
M30	25mm	2m PVC Cable	Non-Flush	61mm	237-7243
M30	25mm	M12 Plug	Non-Flush	61mm	237-7244

What is a factor 1 inductive sensor?

Due to different metals inducing different responses, sensing different metal types with standard inductive proximity sensors can be difficult without physically moving the sensor, especially in applications where more than one metal type needs to be detected.

A solution is the use of a factor 1 sensor which can sense ferrous and non-ferrous metals alike – from aluminium and copper to stainless steel and brass, all at the same rated distance. These sensors replace the single coil in ferrite core proximity sensors with separate, independent sender and receiver coils on a printed circuit board.

This design ensures various metals can be detected with no sensor adjustments required, reducing downtime during product changeover, and saving installation costs.

- **Housing Material: Stainless Steel.**
- **Operating Voltage: 10 to 30V DC.**
- **Factor 1 for all metals.**
- **Protection class IP68.**
- **Resistant to magnetic fields.**
- **Extended temperature range of -30 - 85°C.**
- **All M12 plug variants are supplied with a 2m long open end PVC lead.**

Barrel Type Factor 1 Inductive Proximity Sensors



Image for illustrative purposes only

HOUSING TYPE	SENSING DISTANCE	TERMINAL TYPE	MOUNTING TYPE	HOUSING LENGTH	OUTPUT TYPE	STOCK NO
M8	1.5mm	2m PVC cable	Flush	42mm	PNP-NO	208-320
M8	1.5mm	M12 Plug	Flush	57mm	PNP-NO	208-099
M8	4mm	2m PVC cable	Non-Flush	42mm	PNP-NO	208-178
M8	4mm	M12 Plug	Non-Flush	57mm	PNP-NO	208-083
M12	3mm	2m PVC cable	Flush	54mm	PNP-NO	208-184
M12	3mm	M12 Plug	Flush	52mm	PNP-NO	208-162
M12	8mm	2m PVC cable	Non-Flush	54mm	PNP-NO	208-156
M12	8mm	M12 Plug	Non-Flush	52mm	PNP-NO	208-257

Barrel Type Factor 1 Inductive Proximity Sensors Continued



Image for illustrative purposes only

HOUSING TYPE	SENSING DISTANCE	TERMINAL TYPE	MOUNTING TYPE	HOUSING LENGTH	OUTPUT TYPE	STOCK NO
M18	5mm	2m PVC cable	Flush	54mm	PNP-NO	208-241
M18	5mm	M12 Plug	Flush	52mm	PNP-NO	208-213
M18	12mm	2m PVC cable	Non-Flush	54mm	PNP-NO	208-207
M18	12mm	M12 Plug	Non-Flush	52mm	PNP-NO	208-235
M30	10mm	2m PVC cable	Flush	60mm	PNP-NO	208-314
M30	10mm	M12 Plug	Flush	62mm	PNP-NO	208-229
M30	20mm	2m PVC cable	Non-Flush	60mm	PNP-NO	208-285
M30	20mm	M12 Plug	Non-Flush	62mm	PNP-NO	208-308

PROXIMITY INDUCTIVE SENSORS FACTOR 1

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- Housing Material: Plastic, PBT-GF20-V0, Black.
- Operating Voltage: 10 to 30V DC.
- Factor 1 for all metals.
- Protection class IP68.
- Resistant to magnetic fields.
- Extended temperature range of -30 - 85°C.
- All M12 plug variants are supplied with a 2m long open end PVC lead.

Block Type Factor 1 Inductive Proximity Sensors



Image for illustrative purposes only

HOUSING TYPE	SENSING DISTANCE	TERMINAL TYPE	MOUNTING TYPE	HOUSING LENGTH	OUTPUT TYPE	STOCK NO
Block 40x40mm	15mm	M12 Plug	Flush	65mm	PNP-NO	208-128
Block 40x40mm	25mm	M12 Plug	Non-Flush	65mm	PNP-NO	208-112
Block 40x40mm	25mm	Terminal Chamber	Non-Flush	114mm	PNP-NO	208-263
Block 40x40mm	35mm	M12 Plug	Non-Flush	65mm	PNP-NO	208-190
Block 40x40mm	40mm	Terminal Chamber	Non-Flush	114mm	PNP-NO	208-279
Block 80x80mm	75mm	Terminal Chamber	Non-Flush	41mm	PNP-NO	208-134

Fibre optic sensors are a type of proximity sensor that have an optical fibre connected to a light source to allow for detection in tight spaces or where a small profile is beneficial. The optical fibre is a transparent fibre made of glass (silica) or plastic with a diameter slightly thicker than a human hair, this fibre transmits light between the two ends to produce an electrical signal.



WHERE

Where would it be used?

Fibre optic sensors are used in a number of different applications such as semiconductor, electronic equipment, packaging and other industries.

WHY

Why would you use this product?

Fibre optic sensors allow for detection in tight spaces or where a small profile is beneficial. The optical fibre is a transparent fibre made of glass (silica) or plastic with a diameter slightly thicker than a human hair, perfect solution for areas where the direct mounting of sensors is not possible.

WHO

Who would use it?

- Test Engineer
- Research & Development
- Design Engineer
- Electrical Engineer
- Maintenance Engineer

FIBRE OPTIC SENSORS

Fibre Optic Sensors



Image for illustrative purposes only

FIBRE OPTIC TYPE	OUTPUT TYPE	SUPPLY VOLTAGE	IP RATING	POWER CONSUMPTION	DETECTION RANGE	STOCK NO
Plastic	NPN	24V DC	IP54	1.44W	with 896-7298 = 110-290mm	204-0681
Plastic	PNP	24V DC	IP54	1.44W	with 896-7285 = 300-800mm	204-0682

Suitable Probes

FIBRE OPTIC SENSORS



110mm

FIBRE OPTIC SENSORS



500mm

Note: Fibre optic probes are not exchangeable across brands!

Load cells, often called load cell transducers, are crucial components in most industrial weighing systems. They are available in many different configurations and standards, depending on the intended application and environment.

Among the various different types of load cells available, models and styles can be differentiated in two key ways:

1. By the specific method they use to detect weight (compression load cells, tension load cells and other measurement types).
2. By the type of output signal generated (hydraulic load cells, piezoelectric load cells and various other configurations).



WHERE

Where would it be used?

Electronic load cells are now broadly accepted as the modern standard in most of today's heavy industries, manufacturing plants, large-scale production floors and stringent quality control environments.

WHY

Why would you use this product?

Load cells are crucial components in most industrial weighing systems. The most basic definition of a load cell is that they measure weight - or, more accurately, directional force - usually via a combination of spring elements and strain gauges, converted into an electrical output.

WHO

Who would use it?

- Test Engineer
- Research & Development
- Design Engineer
- Electrical Engineer
- Maintenance Engineer
- Mechanics

LOAD CELLS

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Load Cell Sensors



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FORCE MEASURED	MEASUREMENT RANGE MIN/MAX (KG)	OUTPUT TYPE	IP RATING	MAX VOLTAGE	STOCK NO
Compression	0.3 - 3	PNP	IP67	15V	204-2767
Compression	5 - 20	PNP	IP66	10V	204-2772
Compression	5 - 500	PNP	IP68	15V	204-2765
Compression	10 - 100	PNP	IP67	15V	204-2770
Compression	50 - 1000	PNP	IP66	15V	204-2768
Compression	50 - 1000	PNP	IP68	10V	204-2764
Compression	60 - 1200	PNP	IP67	15V	204-2771
Compression	500 - 3000	PNP	IP68	15V	204-2766
Compression & Tension	1 - 500	PNP	IP66	10V	204-2773

Barcode Reader



Image for illustrative purposes only

TYPE	STOCK NO
Barcode Reader	206-7501

WHERE

Where would it be used?

Can be widely used in many kinds of application environments, whether it is a two-dimensional or one-dimensional bar code. Some typical locations include express logistics, retail, electronic ecommerce, office automation, and retail.

WHY

Why would you use this product?

Barcode scanner is a two-dimensional image scanner with excellent quality. It adopts the third generation image scanning technology to make scanning more sensitive and accurate. It can be used in many kinds of application environments, whether it is two-dimensional code or one-dimensional bar code, it can scan all directions, whether label bar code or screen display bar code can be sensitive to identify, even in scanning damaged or printing poor quality bar code.

WHO

Who would use it?

- Distribution Centres
- Logistic Handlers
- Supermarkets

ACCESSORIES & RELATED PRODUCTS

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Sensor Tester

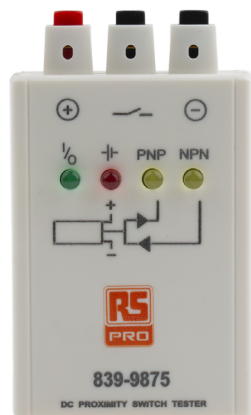


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ACCESSORY TYPE	APPLICATION	POWER SOURCE	STATUS INDICATION TYPE	STOCK NO
Sensor Tester	Proximity Switch	2 x 9V batteries	LED and Audio	839-9875

Sensor Mounting Brackets



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DIMENSIONS	SUITABLE FOR SENSORS	MATERIAL	STOCK NO
30 x 30 x 26.5mm	M8	Zinc Plated Steel	213-3661
30 x 30 x 26.5mm	M12	Zinc Plated Steel	213-3660
42 x 37 x 36.5mm	M18	Zinc Plated Steel	213-3659
60 x 42 x 55mm	M30	Zinc Plated Steel	213-3662

Adjustable Mounting Brackets



Panel Mount



Rail Mount

Image for illustrative purposes only

DIMENSIONS	SUITABLE FOR SENSORS	MATERIAL	STOCK NO
Panel Mount	M4, M5, M8, M12, M14, M18	Zinc Plated Steel Bar and Nylon Clamping Parts	256-001
Panel Mount	M30	Zinc Plated Steel Bar and Nylon Clamping Parts	256-017
Rail Mount (Ø 8 or 12mm)	M4, M5, M8, M12, M14, M18	Zinc Plated Steel Bar and Nylon Clamping Parts	714-1697

Open End Sensor Cables, A-Coded



Image for illustrative purposes only

CONNECTION A	BODY ORIENTATION	CONNECTION B	CORES	LENGTH	JACKET MATERIAL	SPECIAL FEATURES	STOCK NO
M12	Straight	Open	4	2m	PUR	-	877-1062
M12	Angled	Open	3	2m	PUR	-	877-1126
M12	Straight	Open	5	2m	PVC	With F&B Approvals	154-7726
M12	Angled	Open	5	2m	PVC	With F&B Approvals	154-7735
M12	Straight	Open	4	2m	PVC	-	208-0540
M12	Angled	Open	4	2m	PVC	-	208-0533
M12	Straight	Open	5	5m	PUR	-	208-0542

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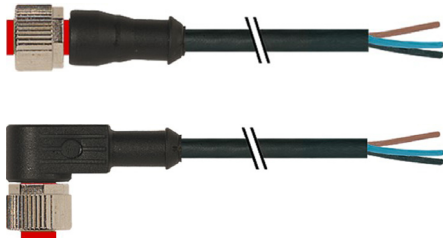
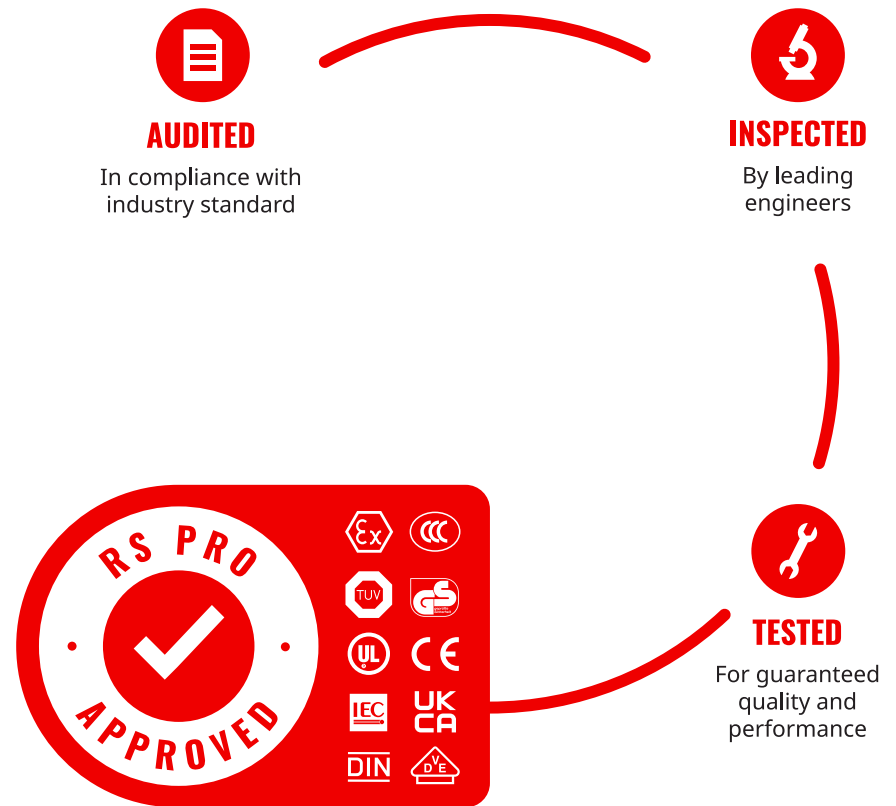


Image for illustrative purposes only

CONNECTION A	BODY ORIENTATION	CONNECTION B	CORES	LENGTH	JACKET MATERIAL	SPECIAL FEATURES	STOCK NO
M12	Angled	Open	5	5m	PUR	-	208-0538
M12	Straight	Open	5	5m	PVC	With F&B Approvals	154-7727
M12	Angled	Open	5	5m	PVC	With F&B Approvals	154-7736
M12	Angled	Open	4	2m	PVC	CANopen/DeviceNet	206-7618
M12	Angled	Open	4	5m	PVC	CANopen/DeviceNet	206-7619
M8	Straight	Open	3	10m	PVC	-	205-5987
M12	Straight	Open	4	10m	PUR	-	205-5992
M12	Angled	Open	4	15m	PUR	-	205-5980
M12	Angled	Open	4	20m	PUR	-	205-5993

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