

Table of Contents



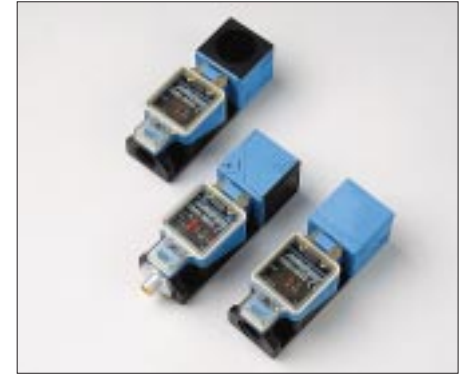
OVERVIEW – Inductive Proximity Sensors

Introduction	4
Operation	5



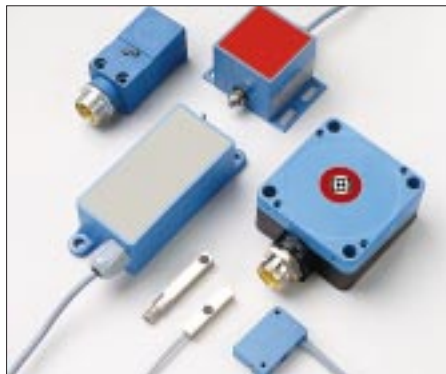
CYLINDRICAL Inductive Proximity Sensors

Introduction/Operation	8
Selection Guide, DC styles	12
Selection Guide, AC styles	14
Product Specifications.....	16



LIMIT STYLE Inductive Proximity Sensors

Introduction/Operation	68
Selection Guide.....	71
Product Specifications.....	72



BLOCK STYLE Inductive Proximity Sensors

Introduction/Operation	80
Selection Guide.....	82
Product Specifications.....	84



RING STYLE Inductive Proximity Sensors

Introduction/Operation	98
Selection Guide.....	100
Product Specifications.....	102

OTHER INFORMATION

APPENDIX:	
IP Codes	132
NEMA requirements	133
Cross Reference	134
Glossary.....	135
Conversion Charts	137
INDEX	138
TERMS & CONDITIONS	141
WARRANTY	143



ACCESSORIES for Inductive Proximity Sensors

Introduction.....	113
Mounting Brackets	114
Cable Assemblies.....	116
Switching Units.....	122
Motion Detectors	128

All specifications subject to change without notice or obligation

Accessories



GENERAL INFORMATION

Altech accessories are available as optional equipment to assist in the use of sensor products. Some sensor products require specific accessory units in order to perform satisfactory. Please consult the product specification to determine which accessories are essential.

The accessories include mounting brackets, cable assemblies, switching amplifier units, and motion detector systems.

MOUNTING BRACKETS

Several fixtures are available that provide the ability to mount cylindrical and limit style sensors.

CABLE ASSEMBLIES

Altech offers one of the largest Quick Disconnect selection of sensors in the industry and matching cable assemblies. Standard Sensors come with 2 meter fixed PVC cables, but to improve maintenance and mean time to repair (MTTR) quick disconnect sensors with matching cable assemblies are desirable.

For DC Sensors Altech offers a mini- style 4-pin cable assembly, a micro style 3- and 4-pin cable assembly, and a

pico style 3-pin cable assembly. Most are available in straight or 90° molded cable connection, and the micro and pico styles are also available with 2 LED's.

For AC Sensors Altech offers a mini- style 3-pin cable assembly, a micro style 3-pin and 4-pin cable assembly.

SWITCHING/AMPLIFIER UNITS

Altech offers a wide variety of products used in conjunction with Ring Sensors, Analog Sensors, Namur Sensors, testers and power supply modules for all sensor products.

MOTION DETECTOR SYSTEMS

Motion detectors accept impulses from proximity sensors when a repetitious event is occurring. These impulses are measured compared to a standard. The motion detector will "Time Out" between impulses and provide an output for over or under the set speed.

Altech offers completely contained motion detector systems, including built-in proximity sensors or as separate components.

Accessories

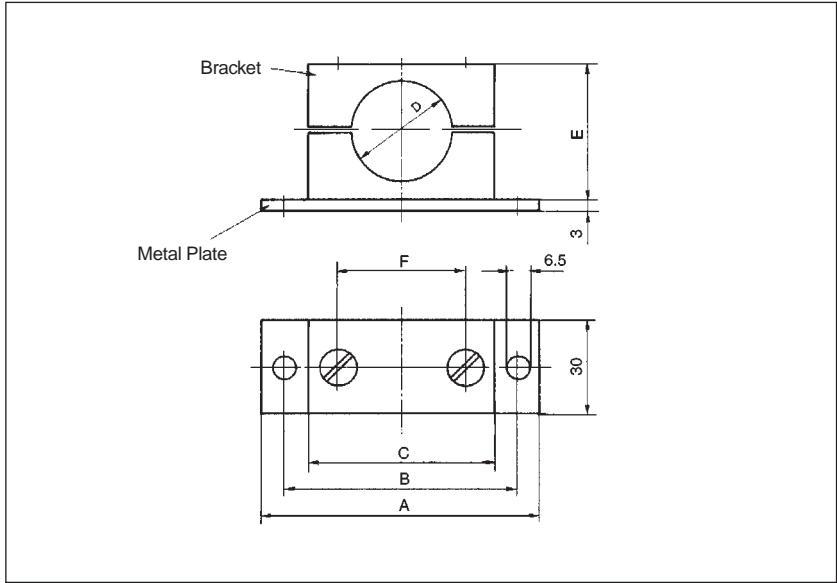
Mounting Brackets

9512-6100/9512-6200

9512-6400/9512-6600



Non-metallic mounting brackets are used for 8mm (.31 in.), 12mm (.47 in.), 18mm (.71 in.), and 30mm (1.18mm) cylindrical sensors.



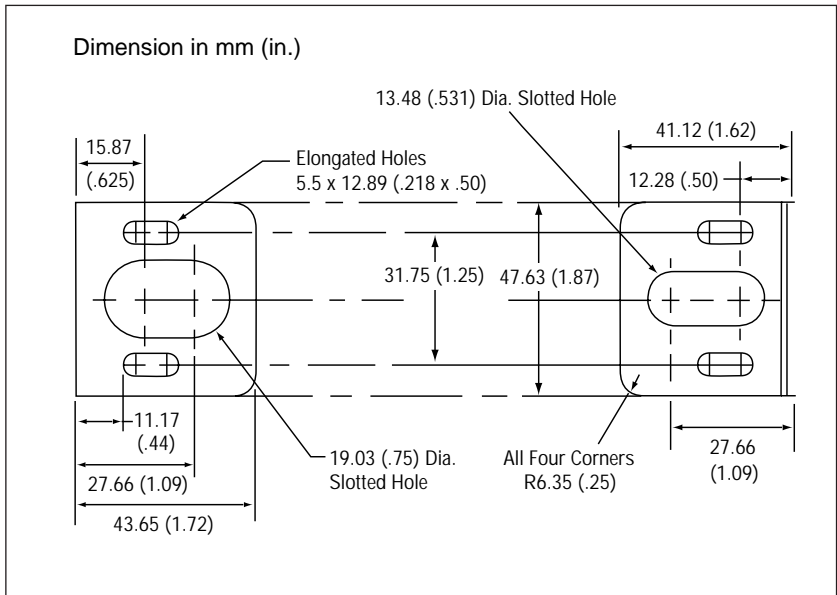
Dimensions in mm (in.)

D=SENSOR Ø	A	B	C	E	F	Model
8 (0.31)	64 (2.52)	50 (2.0)	37 (1.46)	27 (1.06)	20 (0.79)	9512-6100
12 (0.47in.)	64 (2.52)	50 (2.0)	37 (1.46)	27 (1.06)	20 (0.79)	9512-6200
18 (0.71in.)	70 (2.76)	56 (2.20)	42 (1.65)	33 (1.3)	26 (1.02)	9512-6400
30 (1.18in.)	87 (3.43)	73 (2.87)	58 (2.28)	42 (1.65)	40 (1.57)	9512-6600

Model No. MB 1

A Metallic Mounting Bracket is available for 12mm (.47 in.) and 18mm (.071 in.) cylindrical sensors. Bracket is finished in clear anodized Aluminum.

This bracket allows for adjustment forward, backward, and sensor height.



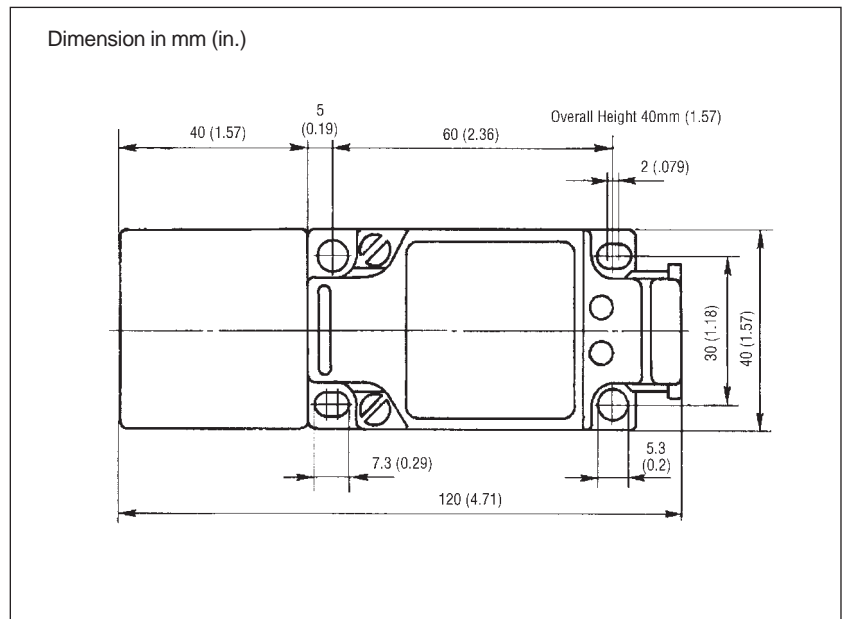
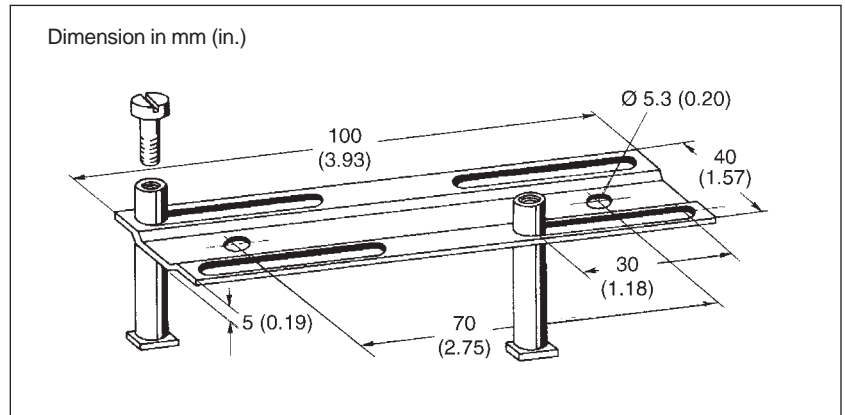
Accessories

9512-8200 Mounting Plate for Limit Style Sensors

Mounting dimensions: According to DIN 50 027/037
Material: VA 1.4301.

This mounting plate is used if the sensing device has to be adjusted after the installation.

This mounting plate is used only for Limit Style Sensors.



Accessories / Cable Assemblies

Model / Description

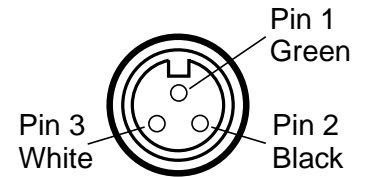
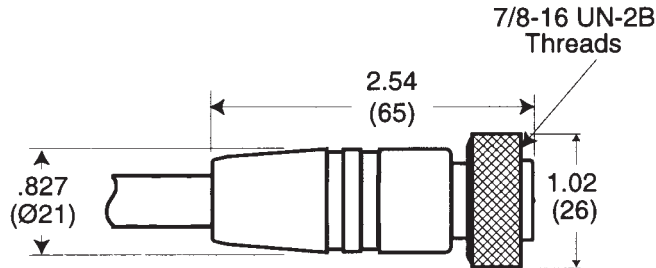
Dimensions

Wire Color Code

8000-5030

2m (6ft.) 3 pin plug & cable for AC sensors with connector 62

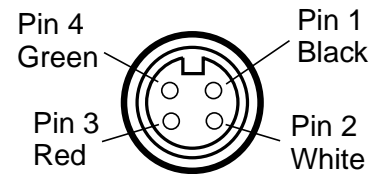
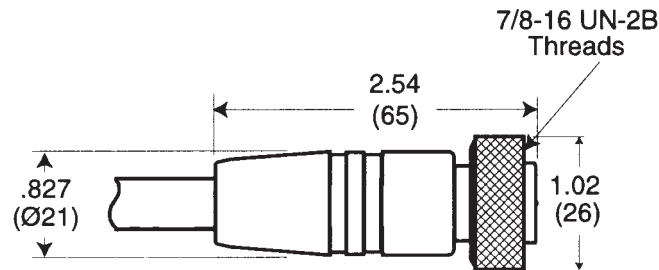
Use 8000-5035 for 5m lengths



8000-5040

2m (6ft.) 4 pin Cable for DC sensors with connector 62

Use 8000-5045 for 5m lengths



Technical Data / Connectors and Receptacles: 8000-5030, 8000-5040

Application Class: -40°C to +90°C

Materials:

Body: PUR, yellow

Contact: Solid-machined Brass, Gold over Silver Plating

Insert: PUR, yellow

Coupling Nut: Standard: aluminum (black anodized)
Options: nylon (glass reinforced black); stainless steel (passivated)

Receptacle shell: Aluminum, Clear Anodized
Options: Brass, Electroless Nickel Plated, Stainless Steel

Mechanical Data:

Protection: IP68, NEMA 6P (only in fully locked position)

Insertion Force: ≤ 3.0N .67 lbs.

Withdrawal Force: ≥ 1.0N .22 lbs.

Shock: IEC 68-2-27

Vibration: IEC 68-2-6

Electrical Data:

Contact Resistance: ≤ 5mΩ

Current Rating: 8000-5030 - 10A, 8000-5040 - 8A

Working Voltage: 16 AWG cable: 600 VAC-RMS

Dielectric Withstanding

Voltage: 2 & 3 pole _ 2 KVAC RMS/60sec
4 & 5 pole _ 1.5 KVAC RMS/60sec

Insulation Resistance: >10⁹Ω

Cable:

16 AWG: UL-STOW-A; Hi-Flex bare, 65 x 34 copper stranding, yellow jacket

18 AWG: UL-SOOW-A; AWM 2661; Hi-Flex bare 41 x 34 copper stranding, yellow jacket

Agency Approvals:

UL Recognition: E104696

CSA Certified: LR101546-1

Accessories / Cable Assemblies

Model / Description

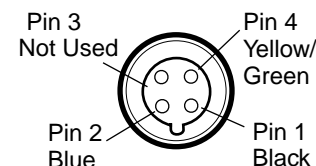
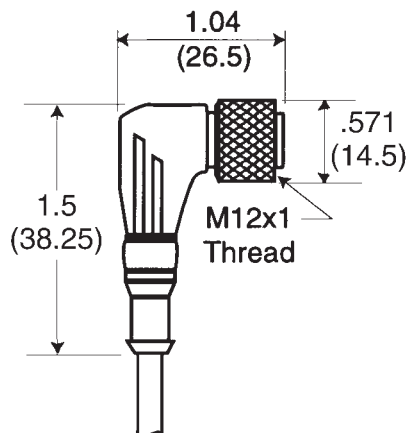
Dimensions

Wire Color Code

8000-5060

2m (6ft.) right angle
4 pin plug & cable
for AC sensors with
connectors 66 & 67

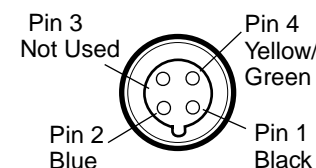
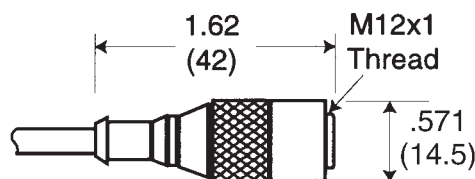
Use 8000-5065
for 5m lengths



8000-5070

2m (6ft.) straight
4 pin plug & cable for
AC sensors with con-
nectors 66 & 67

Use 8000-5075
for 5m lengths



Technical Data / Connectors and Receptacles: 8000-5060, 8000-5070

Application Class:	HNE acc. to DIN 40040 -40°C to +90°C
Materials:	
Molded Body:	PUR (polyurethane)
Contact:	Copper alloy, gold over nickel plating
Cable:	PVC, self extinguishing, orange
Coupling Nut:	Brass, nickel plated
Mechanical Data:	
Protection:	IP68, NEMA 6P (only in fully locked position)

Electrical Data:	
Contact Rating:	≤5mΩ
Current Rating:	3A
Working Voltage:	250V
Dielectric Withstanding Voltage:	2 KVAC RMS/60 seconds
Insulation Resistance:	>10 ⁹ Ω
Cable:	
22 AWG:	Hi-Flex bare copper stranding, yellow jacket
18 AWG:	Hi-Flex bare copper stranding, yellow jacket
Agency Approvals:	
UL recognition:	E104696
CSA Certified:	LR101546-1

Accessories / Cable Assemblies

Model / Description

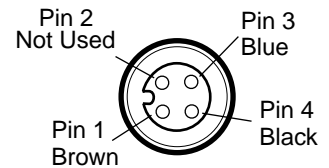
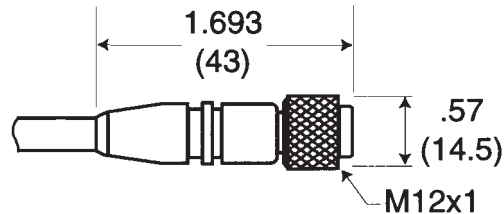
Dimensions

Wire Color Code

8000-5110

2m (6ft.) straight
4 pin plug & cable
for DC sensors
(sink or source) with
connectors 45,50,63 & 65

Use 8000-5115
for 5m lengths

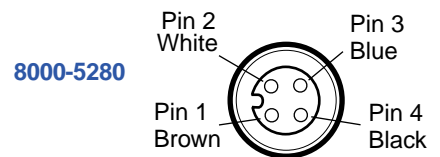
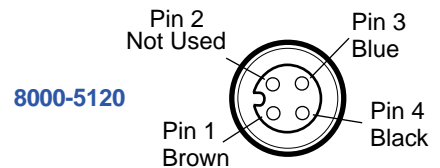
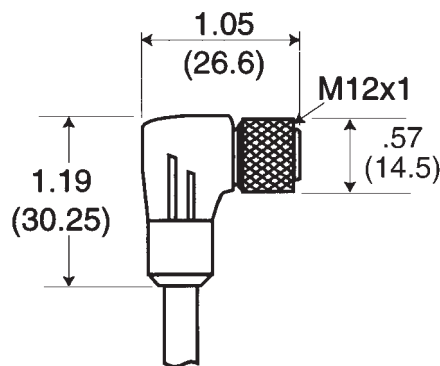


8000-5120 & 8000-5280

2m (6ft.) right angle
4 pin plug & cable
for DC sensors
(sink or source) with
connectors 45,50,63 & 65

8000-5120 – Use 8000-5125
for 5m lengths

8000-5280 – Use 8000-5285
for 5m lengths



Technical Data / Connectors and Receptacles: 8000-5110, 8000-5120, 8000-5280

Application Class: HNE acc. to DIN 40040
-40°C to +90°C

Materials:
Molded Body: PUR (Polyurethane)
Contact: Copper alloy, gold over
nickel plating
Cable: PVC, self extinguishing, yellow
Coupling Nut: Brass, nickel plated

Mechanical Data:
Protection: IP68, NEMA 6P
(only in fully locked position)

Electrical Data:

Contact Resistance: $\leq 5\text{m}\Omega$
Current Rating: 3A
Working Voltage: 250V
Dielectric Withstanding
Voltage: 2 KVAC RMS/60 seconds
Insulation Resistance: $>10^9\Omega$

Cable:

22 AWG: AWM 2661; Hi-Flex bare,
26 x 36 or 22 x 36 copper stranding,
yellow jacket

Agency Approvals:

UL Recognition: E104696
CSA Certified: LR101546-1

Accessories / Cable Assemblies

Model / Description

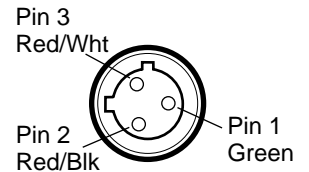
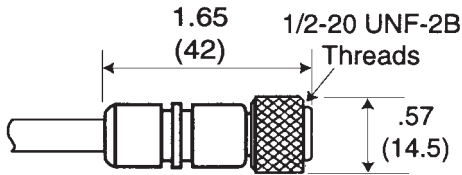
Dimensions

Wire Color Code

8000-5130

2m (6ft.) straight
3 pin plug & cable
for AC sensors with
connector 48,68

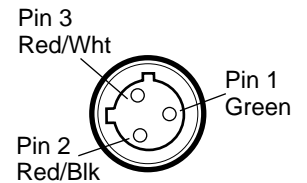
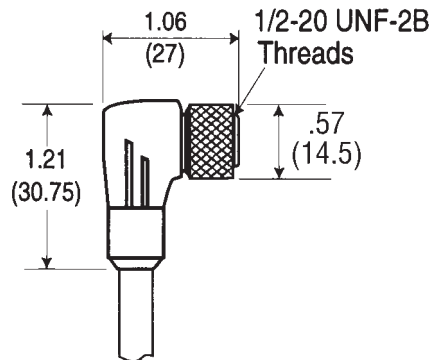
Use 8000-5135
for 5m lengths



8000-5140

2m (6ft.) right angle
3 pin plug & cable
for AC sensors with
conector 48,68

Use 8000-5145
for 5m lengths



Technical Data / Connectors and Receptacles: 8000-5130, 8000-5140

Application Class: HNE acc. to DIN 40040
-40°C to +90°C

Materials:

Molded Body: PUR (Polyurethane)
Contact: Copper alloy, gold over nickel plating
Receptacle: Brass, nickel plated
Cable: PVC, self-extinguishing, yellow
Coupling Nut: Brass, nickel plated

Mechanical Data:

Protection: IP68, NEMA 6P
(only in fully locked position)

Electrical Data:

Contact Resistance: $\leq 5\Omega$
Current Rating: 3A
Working Voltage: 250V
Dielectric Withstanding Voltage: 2 KVAC RSM/60 seconds
Insulation Resistance: $>10^9\Omega$

Cable:

22 AWG: AWM 2661; Hi-Flex bare, 26 x 36 copper stranding, yellow jacket

Agency Approvals:

UL Recognition: E104696
CSA Certified: LR101546-1

Accessories / Cable Assemblies

Model / Description

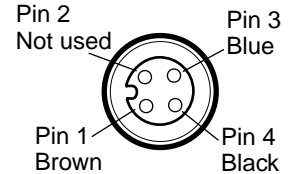
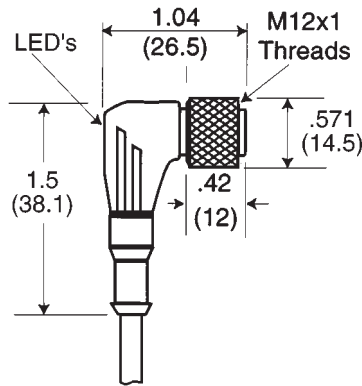
Dimensions

Wire Color Code

8000-5150 & 8000-5160

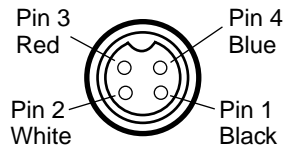
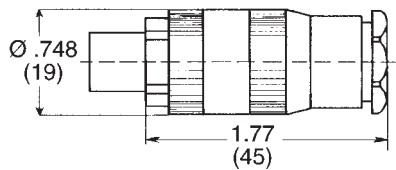
2m (6ft.) 4 pin plug & cable with 2 LED's for DC sensors with connectors 45,50,63 & 65. RP-515 for sink (NPN) output sensor. RP-516 for source (PNP) output sensor.

Use 8000-5155 & 8000-5165 for 5mm lengths



9512-0200

2m (6ft.) straight 4 pin metal plug & cable for connector 59



Technical Data / Connectors and Receptacles: 8000-5150, 8000-5160

Application Class: -40°C to +90°C

Materials:

Molded Body: PUR (Polyurethane)
 Contact: Copper Alloy, gold over nickel plating
 Insert: PUR (Plugs)
 Cable: PVC, self-extinguishing, yellow
 Coupling Nut: Brass, nickel plated

Mechanical Data:

Protection: IP68, NEMA 6P (only in fully locked position)
 Insertion Force (Contact): ≤ 2N .45 lbs.
 ≥ .5N .11 lbs.
 Shock: IEC 68-2-27
 Vibration: IEC 68-2-6

Electrical Data:

Contact Resistance: ≤ 5mΩ
 Current Rating: 3A
 Working Voltage: 10-30 VDC
 Dielectric Withstanding Voltage: 2 KVAC RMS/60 seconds
 Insulation Resistance: >10⁹Ω

Cable: .25mm²

Agency Approvals:

UL Recognition: E104696
 CSA Certified: LR101546-1

Accessories / Cable Assemblies

Model / Description

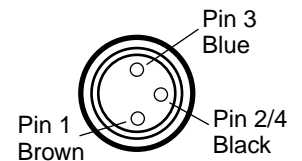
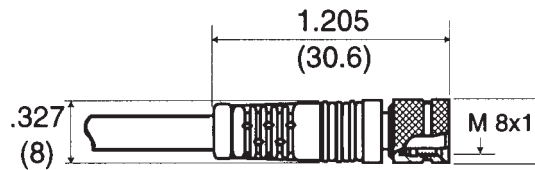
Dimensions

Wire Color Code

8000-5220

2m (6ft.) straight
3 pin plug & cable for DC sensors
with 64 connector

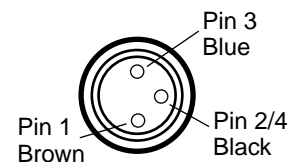
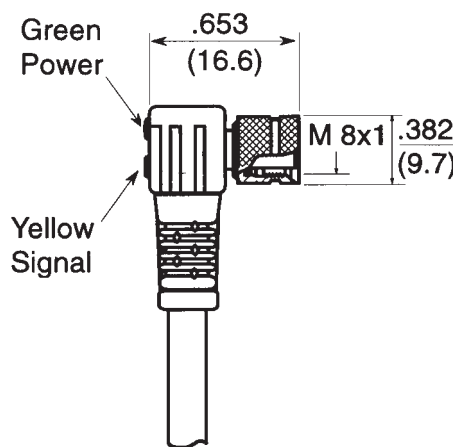
Use 8000-5225 for 5m lengths



8000-5230

2m (6ft.) right angle 3 pin plug &
cable with 2 LED's for DC, PNP
(source) sensors with 64 connector

Use 8000-5235 for 5m lengths



8000-5240

2m (6ft.) right angle 3 pin plug & cable
with 2 LED's for DC, NPN
(sink) sensors with 64 connector

Use 8000-5245 for 5m lengths

Technical Data / Connectors and Receptacles: 8000-5220, 8000-5230, 8000-5240

Application Class: HNE acc. to DIN 40040
-25°C to +90°C ≤75%rF

Materials:

Molded Body: TPU, self-extinguishing (RMS only –
PA 6.6, self extinguishing)
Contact: Solid machined brass, gold
over nickel plating
Receptacle: Brass, nickel plated
O-Ring for Receptacle: Viton
Cable: PVC, self extinguishing, orange
Coupling Nut: Brass, nickel plated

Mechanical Data:

Protection: Snap-In – IP65, NEMA 4
Locking – IP 68 NEMA 6P
(only in fully locked position)

Electrical Data:

Contact Resistance: ≤ 5mΩ
Current Rating: 4A
60 VAC / RMS/75VDC (solder
contacts potted with epoxy for
receptacles)
Working Voltage: 250V
Dielectric Withstanding
Voltage: 2 K VAC RMS/60 seconds
Insulation Resistance: >10⁹Ω

Accessories

8300-0100/0500

Power and Switching Units for NPN and PNP sensors

- **Short circuit protection**
- **Temperature range:**
-10 to 50°C (14 - 122°F)
- **Type 8300-0100: 230V**
- **Type 8300-0500: 110V**
- **LED for Output Energized**

The Universal Power and Switching Unit is used to supply power for sensors and provide a relay output of the sensor status.

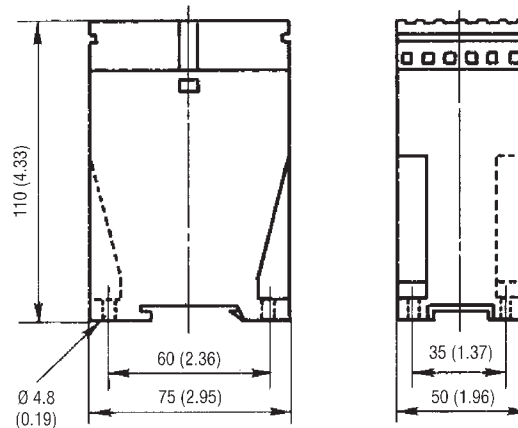
The unit is DIN rail mountable and can supply power for one NPN or PNP sensor.



Standard Data

Cat. No.	8300-0100	8300/0500
Supply Voltage:	230V AC	110V AC
Operating Frequency:	50/60Hz	50/60Hz
Temperature Range:	-10°C up to +50°C	-10°C up to +50°C
Output Voltage: (for sensor supply)	24V, stabilized and short circuit-proof	24V, stabilized and short circuit-proof
Max. Load Current:	120mA	120mA
Relay Output:	SPDT	SPDT
Max. Switching Voltage:	250V AC	250V AC
Max. Switching Current:	5A (ohmic load)	5A (ohmic load)
Max. Switching Capacity:	1100VA	1100VA

Dimensions in mm (in.)



Accessories

8100-2200

Power and Switching Units for Namur sensors

- Power supply unit
- Temperature range: -10 to 70°C (14 - 158°F)
- Amplifier
- Relay Output
- Drives one Namur sensor

Namur sensors operate with a supply voltage of 8.2V. Therefore, Namur sensors are mostly operated with switching units (with a current interface according to DIN 19234). The 8100-2200 Namur Switching Unit is equipped with such an interface.

The Namur sensor has a low impedance with no metal target detected. When a metal target is detected the impedance is higher. This change in impedance causes current change which is detected by the switching unit.

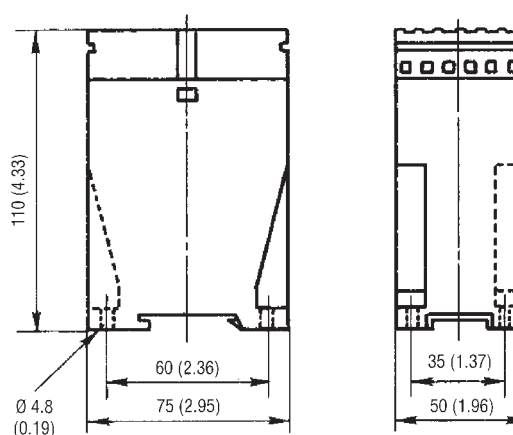
The 8100-2200 switching unit opens up application areas such as standard proximity switches to Namur sensors. This is supported by the small overall dimensions of the Namur sensors.



Standard Data

Cat. No.	8100-2200
Supply Voltage:	220V/110V AC
Operating Frequency:	50/60Hz
Temperature Range:	-10°C up to +70°C (14 to 158°F)
Output Voltage: (for sensor supply)	8.2V
Relay Output:	SPDT
Switching Voltage:	250V AC
Switching Current:	5A (resistive)
Max. Switching Capacity:	1100VA

Dimensions in mm (in.)



Accessories

8102-0900/0930 Power and Switching Units for High Sensitive Ring Sensors

This switching amplifier is used with ALTECH Dynamic Ring Sensors. It can also be used as a time delay for NPN sensors since it contains a delay function. Both a transistor output and relay contact output are available.

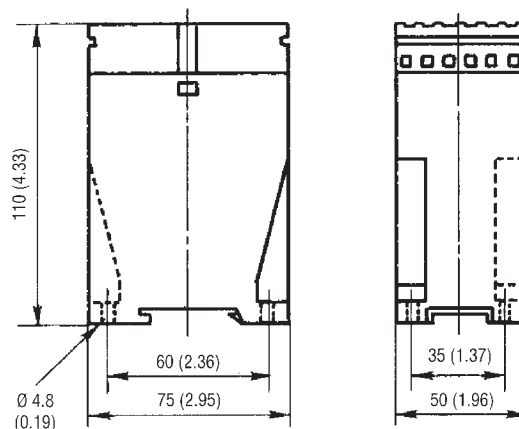


- Adjustable Pulse Duration of the output signal
- Short circuit protection
- Transistor Output and a relay output
- LED for Output Energized
- Type 8102-0900: 220V
- Type 8100-0930: 110V
- Temperature range: -10 to 50°C (14 - 122°F)
- Adjustable Output timing delay of 10 msec to 18 seconds

Standard Data

Cat. No.	8102-0930	8102-0900
Supply Voltage:	220V AC	110V AC
Operating Frequency:	50/60Hz	50/60Hz
Temperature Range:	-10°C up to +50°C	-10°C up to +50°C
Output Voltage: (for sensor supply)	24V, stabilized and short circuit-proof	24V, stabilized and short circuit-proof
Transistor Output:		
Max. Load Current	80mA	80mA
Voltage Drop	0.5V	0.5V
Leakage Current	≤10μA	≤10μA
Relay Output:	SPDT	SPDT
Max. Switching Voltage:	250V AC	250V AC
Max. Switching Current:	5A (ohmic load)	5A (ohmic load)
Max. Switching Capacity:	1100VA	1100VA

Dimensions in mm (in.)



Accessories

8100-2100/2130 Power and Switching Units for Analog Sensors

- Provides 24V DC for Sensors
- Choice of 4 Outputs
 - Analog Voltage
 - Analog Current
 - 4 Bit Digital
 - Relays (3) with LED indicators
- Compatible with all Altech Analog Sensors

The multi-function amplifier Type 8100-2100/2130 operates in conjunction with either one of the analog sensors 9914-0800, 9414-0800, 9414-0900, 9914-1000, 9814-1133, 9814-2133, 9714-2000 or 9714-4300. It contains a power supply for the sensor voltage (24V DC) and converts the analog signal of the sensors to four different outputs.

1. Analog voltage output:
0-10V DC, max 5mA.
2. Analog current output:
0-20mA, max. load resistance 500Ω.
3. Digital Output:
four bit, open collector, npn, "active low".
4. Relay Output:
3 relays for triggering point are built in (change over contact, SPDT).
Load voltage: 220V AC
Load current: 5A (resistive)
Switching capacity: 1100VA
The switching point of each relay can be adjusted by a potentiometer and is indicated by individual LED's.
Settings:
Three Relays with switching thresholds can be chosen by means of three integrated potentiometers. When reaching the switching threshold, the corresponding LED will light up.

In addition to Units 8100-2100 and 8100-2130, there are two Analog Modules available to be mounted onto DIN/EN mounting rails.

- Module 8100-2400 with:
 - Analog voltage output
 - Analog current output
 - 4-bit digital output
- Module 8100-2500 with:
 - 8-bit digital output

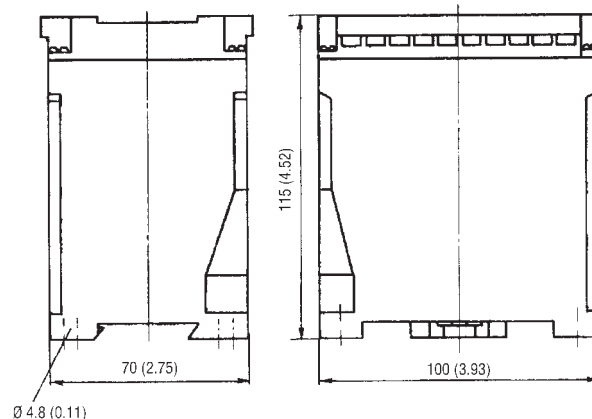
Modules 8100-2400 and 8100-2500 are described on page 126.

Standard Data

Cat. No.	8100-2100	8100/2130
Supply Voltage:	220V AC	110V AC
Operating Frequency:	50/60Hz	50/60Hz
Temperature Range:	-10°C up to +60°C (32 - 140°F)	-10°C up to +60°C (32 - 140°F)
Supply Voltage for Analog Sensor	24V	24V



Dimensions in mm (in.)



Accessories

8100-2400/8100-2500

Analog Input Multi-Function Switching Unit

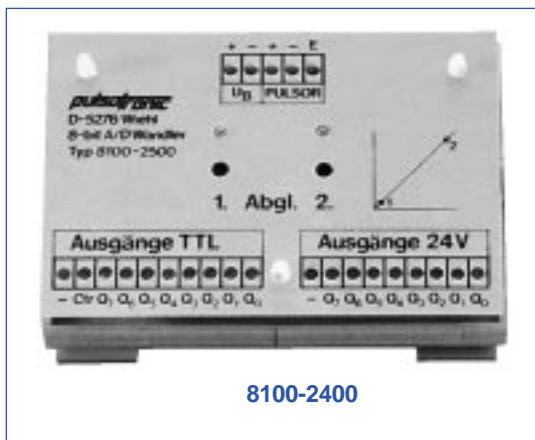
- 8100-2400 has choice of 3 outputs
 - Analog Voltage
 - Analog Current
 - 4 Bit Digital
- 8100-2500 has an 8 bit digital output
- Output protected against short circuits and polarity reversal

The Multifunction Amplifiers Type 8100-2400 and 8100-2500 operate in conjunction with either one of the Analog sensors 9914-0800, 9914-1000, 9914-1133, 9814-2133, 9714-2000 or 9714-4300. It operates with customer supplied DC voltage, 18-30V DC, and converts the analog signal to three (3) different outputs for the 8100-2400. The 8100-2500 has one output, an 8 bit digital output.

The 8100-2500, 8-bit digital output divides the analog voltage into 256 individual increments which results in a resolution of 10µm/bit (.0004 in./bit). All outputs are protected against short circuits, and the unit is protected from Polarity reversal.

Standard Data

Cat. No.	8100-2400	8100-2500
Supply Voltage:	18-30V DC	18-30V DC
Temperature Range:	0 to 60°C (32 to 140°F)	0 to 60°C (32 to 140°F)
Analog Voltage Output:	0 to 10V	–
Analog Current Output:	0 to 20mA or 4 to 20mA (jumper)	–
Digital Output 1:	4 bit open collector, PNP	8 bit open collector, PNP
Max. load current:	20mA	20mA
Voltage drop:	≤3.5V at 20mA	≤3.5V at 20mA
Max. Switching Voltage:	30V	30V
Digital Output 2:	–	8 bit TTL output
VQH	–	≤4.5V
IQH	–	≤2mAV
VQL	–	≤0.3V
IQL	–	≤6mA



8100-2400



8100-2500

Accessories

8309-0130/8309-0230

Testers for DC and
AC Sensors

- Tests an inductive sensors field in place, without removing the sensor
- Tests the output circuit
- Identifies the sensor output as either sink (NPN) or source (PNP) for DC sensors

These testers can greatly reduce down-time and maintenance costs by quickly checking the proper function of all kinds of inductive capacitive, or photoelectric sensors.



8309-0130
For DC Sensors



8309-0230
For AC Sensors

Accessories

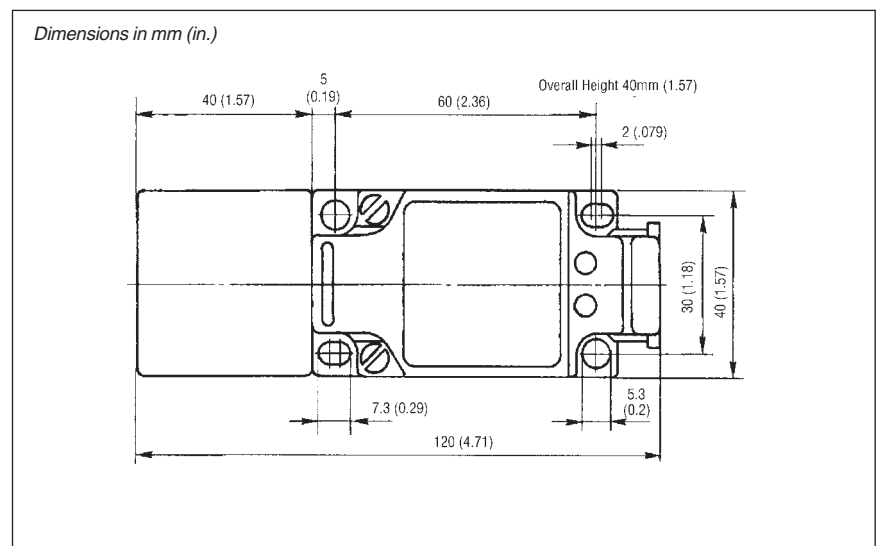
9863-4300/4400/4600 Motion Detector Systems

- **9 position sensor head adjustment simplifies adaptation to conditions**
- **Programmable NO/NC outputs**
- **Speed range of 100 - 3000 pulses per minute**
- **Startup delay 0.5 - 6.0 seconds, adjustable**
- **2 LED's for Output Energized & Operating Voltage**
- **IP67 Protection (NEMA 1,3,4,6,12,13) Protection**

These Motion Detecting Systems in Limit Style housing are used to control the rotational speed of motors, pumps, and conveyor drives. They are completely self-contained, with an integral proximity switch and timing functions to perform over and under speed detection. Typical targets are cam lobes, sprocket teeth, or small tabs.

Standard Data

Cat. No.	9863-4300	9863-4400	9863-4600
Mounting:	Flush	Semi-Flush	Flush
Sensing Distance:	15mm (0.59 in.)	25mm (0.98 in.)	15mm (0.59 in.)
Switching Mode:	PNP	PNP	PNP
Type Sensor:	Overspeed	Overspeed	Underspeed
Speed Range:	100 - 3000 ppm	100 - 3000 ppm	100 - 3000 ppm
Startup Delay:	0.5 - 6 sec	0.5 - 6 sec	0.5 - 6 sec
Voltage Range:	10 - 30V DC	10 - 30V DC	10 - 30V DC
Ripple Voltage:	≤10%	≤10%	≤10%
Voltage Drop Across Sensor:	≤2.4V	≤2.4V	≤2.4V
Max. Load Current:	400mA	400mA	400mA
Supply Current:	≤34mA	≤34mA	≤34mA
Leakage Current:	≤10μA	≤10μA	≤10μA
Repeat Accuracy:	.75mm (0.3 in.)	1.25mm (.049 in.)	.75mm (.03 in.)
Temperature Range:	-25 to +70°C	-25 to +70°C	-25 to +70°C
Housing Material:	Trogamid T	Trogamid T	Trogamid T
Output, all models: If speed is above limit, the output is switched on. If speed is below limit, the output is switched off.			



Accessories

8303-0430

Motion Detector in Universal Housing

- Operates on DC supply voltage
- 3 Speed Ranges
- System start-up delay adjustable

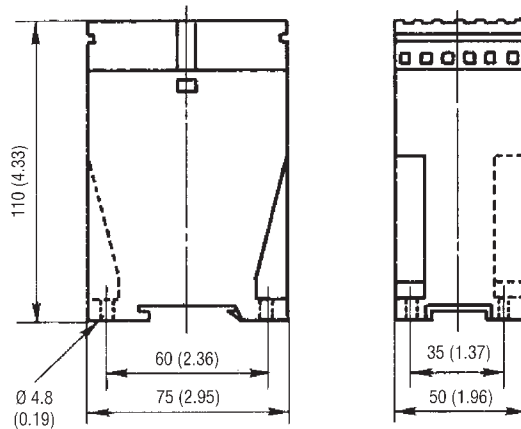
This motion detector detects the rotational speed of actuation, rotating shafts or other movements such as lifting or pushing. The impulse can be given by any PNP or NPN DC-sensor. The impulse is effected by control cams, gears, wheels or other signals. The housing can be mounted on a DIN/EN rail or on a mounting plate.



Standard Data

Cat. No.	8303-0430
Supply Voltage:	18V - 30V
Temperature Range:	-10°C up to +60°C
5 speed range:	6 - 60 rpm 60 - 600 rpm 600 - 6000 rpm
Start-up Delay:	0.5 - 10 sec
Hysteresis	0.5 - 10% adjustable
Relay Output:	SPDT 250V/5A
Function Switch:	Position S — Relay activated for overspeed Position 0 — Relay activated for underspeed
LED - Switching state indication:	Same time as relay contact

Dimensions in mm (in.)



Accessories

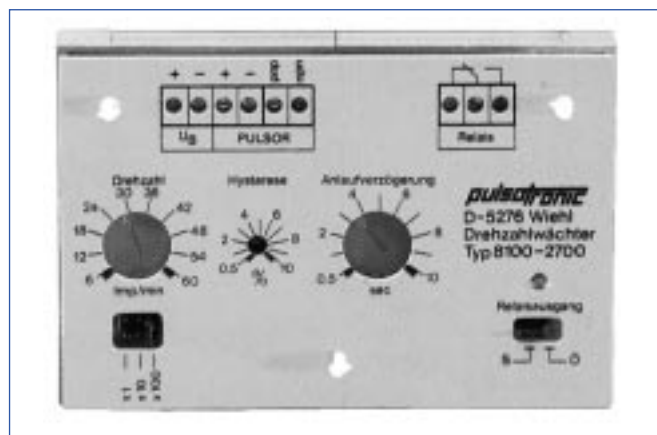
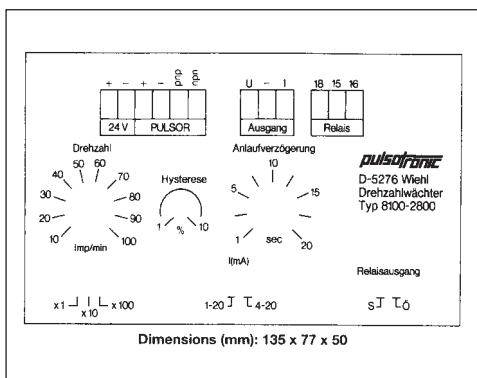
8100-2700/2800 Motion Detector in Universal Snap-on Housing

- **System start-up delay adjustment**
- **3 Speed ranges with adjustment to set speed**
- **DC Supply Voltage**
- **Relay Output**

These units monitor/control electronically the speed of drives, rotating shafts or other motions. Both inductive and other three-wire DC voltage proximity switches can be used as pulse generator input to this motion detector. Pulse generation is effected e.g. by rotating control cams, gear-wheels or other signal targets. The housing can be snapped on to DIN/EN mounting rails or threaded to mounting plates.

Standard Data

Cat. No.	8100-2700	8100-2800
Supply voltage (polarity reversal)	18V - 30V DC	18V - 30V DC
Supply Current:	≤50mA at 24V	–
Inputs:	NPN or PNP sensor signal	NPN or PNP sensor signal
Analog Output Voltage:	–	1V - 10V load resistance min 2KΩ
Analog Current Output:	–	adjustable 4-20mA load resistance 0-500Ω
Relay Output:		
Current Carrying Capacity:	250V/5A	250V/5A
Normally Open/Closed Selectable via Plug::	In NO position, the relay will be activated, if the set speed is exceeded. In NC position, the relay will be activated if the speed falls below the set	In NO position the relay will be activated, if the set speed is exceeded
Speed Ranges:	6 - 60 rpm 60 - 600 rpm 600 - 6000 rpm	10 - 100 rpm 100 - 1000 rpm 1000 - 10000 rpm
Starting Delay Adjustable:	0.5 - 10 sec.	1 - 10 sec
Hysteresis Adjustable:	5 - 10%	1 - 10%
LED Switching State Indication:	activated same time as relay	activated same time as relay
Temperature Range:	-0°C to +60°C (32-140°F)	-0°C to +60°C (32-140°F)



THE NEWEST ADDITION TO ALTECH'S SENSOR PRODUCTS...

Pulsotronic Capacitive, Photo-electric, and Ultrasonic Sensors.

ALTECH now offers a comprehensive line of Capacitive, Photo-electric, and Ultrasonic Sensors to satisfy the expanding Automation Industry.

These new Sensors are available in DC (PNP & NPN), and AC models. Housing styles are Cylindrical, Limit Style, and Block.

Features:

- ***Capacitive – Detects Metals, Non-Metals, and Liquids.***
 - ***Photo-electric – Available in Diffuse Reflection, Retro-Reflection, and Through Beam models.***
 - ***Ultrasonic – Digital and Analog models available, using sound to detect targets and target distances.***



...Contact Altech for more information