



Reflection sensor with background suppression

Series PS 989 S_

- Sensing range adjustable 15 - 80 mm
- Supply 10-30 VDC
- Output PNP or NPN

Principal features:

- Sensing range adjustable **15-80 mm**
- Background suppression
- Supply **10-30 VDC**
- Switching output indicator via LED
- Short-circuit indicator via flashing LED
- Integrated amplifier
- Light/dark switching
- PNP or NPN output
- Modulated, visible lightbeam
- Lateral lightbeam
- Connection with M8 plug or 2m cable
- Solid housing
- CE

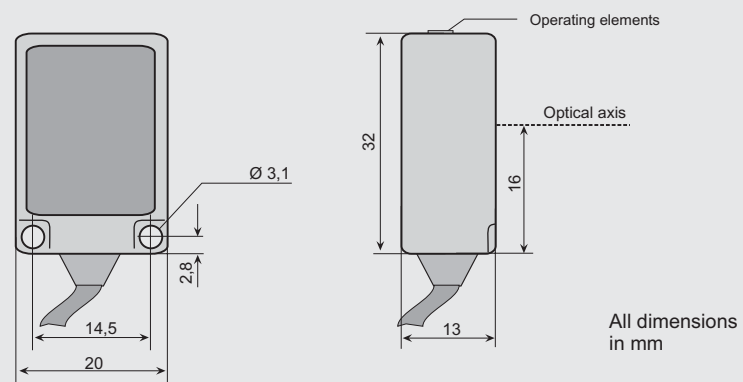
Typical applications:

- Thickness control of objects
- Positioning or presence control with background suppression
- Level control of loose materials

Advantages:

- Because of little dimensions, only a small mounting area will be needed
- Inexpensive product

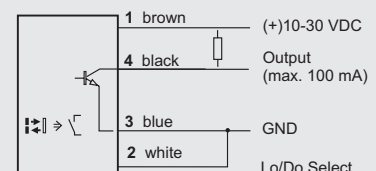
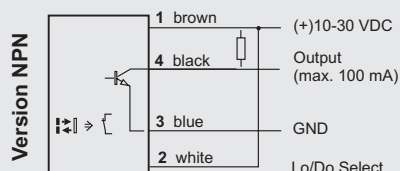
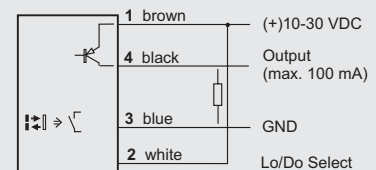
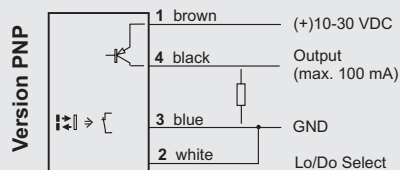
Dimensions



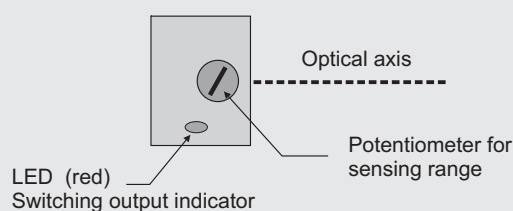
Wiring connections

Lo= Light switching

Do= Dark switching



Operating and display elements



Technical data

Supply	voltage	10 - 30 VDC
	max. residual ripple	≤ 10% (within specified limits)
	current consumption	~ 25 mA
Response time	t _{on} or. t _{off}	≤ 1 ms
	switching frequency	≤ 500 Hz
Output	output current	max. 100 mA
	switching output	PNP or NPN, light or dark switching (depending on type and wiring)
Residual voltage	at 100 mA output current	≤ 2 V
	at 10 mA output current	≤ 1 V
Emitter	LED (modulated)	red
	modulation frequency	4 kHz
Temperature	operating	0 to 50 °C
	storage	-20 to 80 °C
External light immunity	artificial light	≤ 5000 Lux
	daylight	≤ 10.000 Lux
Protection	supply	inverse polarity
	output	permanent short-circuit and overload
	degree of protection	IP 65 and IP 67
Sensing range	adjustable	15-80 mm
	difference black/white	20 mm within sensing range

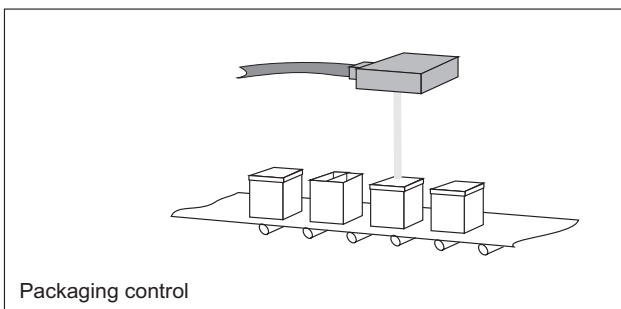
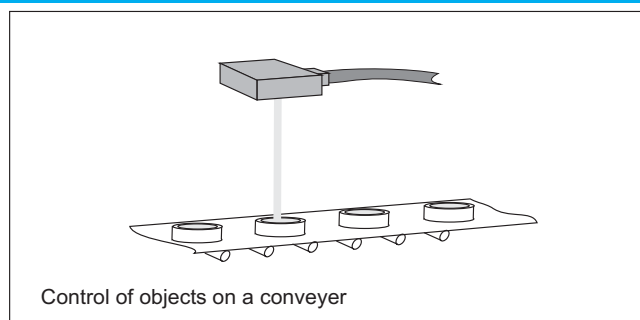
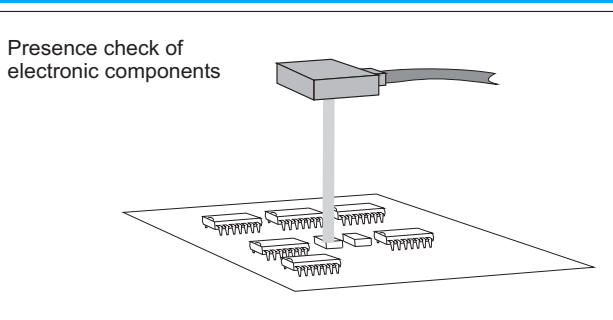
Ordering information

Sensor			Part No.
PS 989 SN	NPN	with cable length 2 m	10401446
PS 989 SP	PNP		10401447
PS (C0) 989 SN	NPN	with M8 plug on pigtail	10401448
PS (C0) 989 SP	PNP		10401449

Cable (separately)

Type (C2)	length 2 m	11261135
Type (C5)	length 5 m	11261136

Applications



Presented by:

Contika Aps
Hindhøjen 82
8382 Hinnerup
Tel 8624 5066



Miniature Through-beam light barrier

Series E/R 989 S_

- Sensing distance max. 4 mt
- Supply 10-30 VDC
- Output PNP or NPN
- Sensibility adjustable

Principal features:

- Sensing distance max. **4 m**
- Supply **10-30 VDC**
- Switching output indicator via LED
- Integrated amplifier
- Adjustable sensitivity
- Light/dark switching
- PNP or NPN output
- Lateral lightbeam
- Modulated, visible lightbeam
- Connection with M8 plug or 2 m cable (6.5 ft)
- Strong housing
- CE

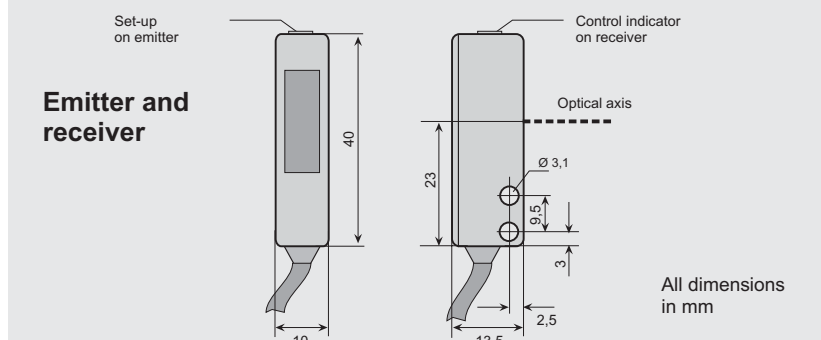
Applications:

- Detection of opaque parts on a conveyor
- Detection of opaque parts from a far distance
- Position control of parts in assembly machines

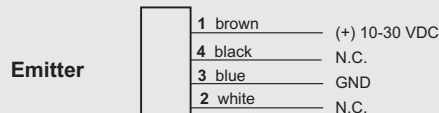
Advantages:

- High sensing range
- Because of little dimensions, only a small mounting area will be needed
- Inexpensive product

Dimensions

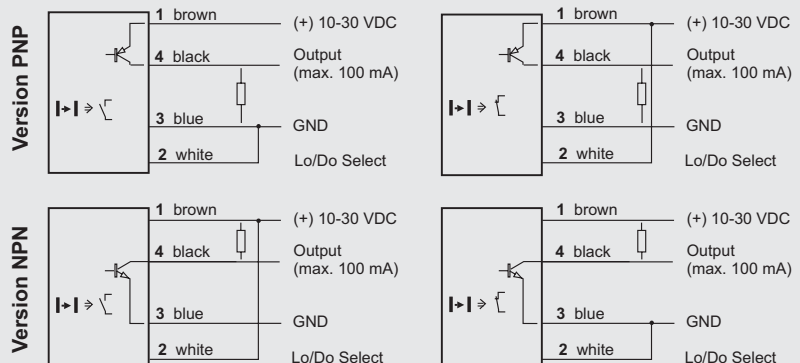


Wiring connections

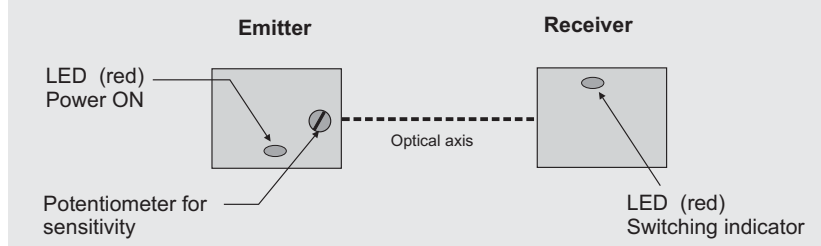


Lo= Light switching

Do= Dark switching



Operating and display elements



Technical data

Supply	voltage	10 - 30 VDC
	max. residual ripple	≤ 10% (within specified limits)
	current consumption	~ 25 mA
Response time	t _{on} or t _{off}	≤ 1 ms
	switching frequency	≤ 500 Hz
Output	output current	max. 100 mA
	switching output	PNP or NPN, light or dark switching (depending on type and wiring)
Residual voltage	at 100 mA output current	≤ 2 V
	at 10 mA output current	≤ 1 V
Emitter	LED (modulated)	red
Temperature	operating	0 to 50 °C
	storage	-20 to 80 °C
External light immunity	artificial light	≤ 5000 Lux
	daylight	≤ 10.000 Lux
Protection	supply	inverse polarity
	output	permanent short-circuit and overload
	degree of protection	IP 65 and IP 67
Sensing range		max. 4 m

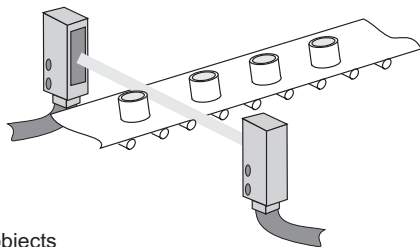
Ordering information

Emitter		Part No.
E 989	with cable 2 m	10401450
E (C0) 989	with M8 plug on pigtail	10401451
Receiver		
R 989 SN	NPN	with cable
R 989 SP	PNP	length: 2 m
R (C0) 989 SN	NPN	with M8 plug
R (C0) 989 SP	PNP	on pigtail

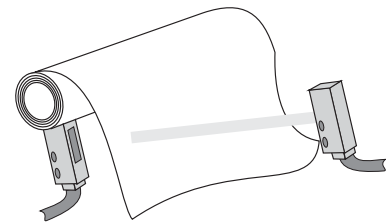
Cable (separately)

Type (C2)	length 2 m	11261135
Type (C5)	length 5 m	11261136

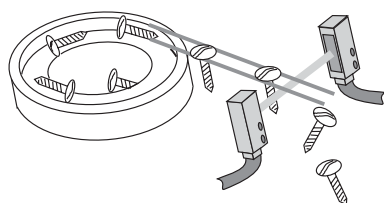
Applications



Detection of objects



Paper-end control



Counting tasks on a screw conveyor

Presented by:

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Miniature diffuse reflection sensor

Series P 989 S_

- **Adjustable sensing range** 30-250 mm
- **Supply** 10-30 VDC
- **Output** PNP or NPN

Principal features:

- Adjustable sensing range
30- 250 mm
* on white-standard 92% 10x10 cm
- Supply **10-30 VDC**
- Switching output indicator via LED
- Integrated amplifier
- Light/dark switching
- PNP or NPN output
- Lateral lightbeam
- Modulated, visible lightbeam
- Connection with M8 plug or 2 m cable (6.5 ft)
- Solid housing
- CE

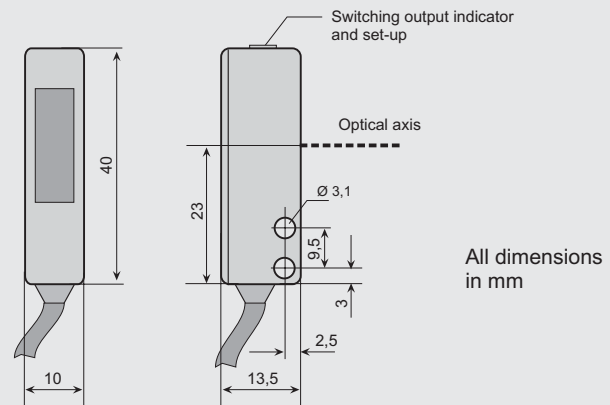
Typical Applications:

- Positioning or presence control in assembly machines
- Detection of opaque or transparent objects

Advantages:

- Because of little dimensions, only a small mounting area will be needed
- Inexpensive product

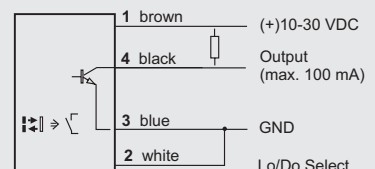
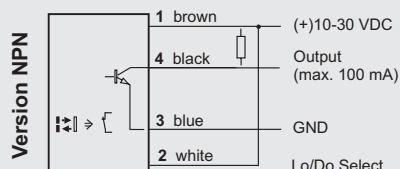
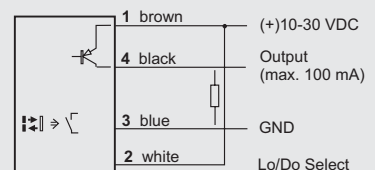
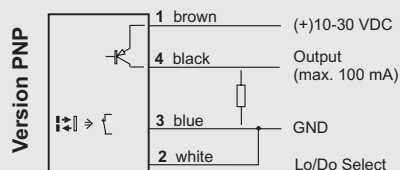
Dimensions



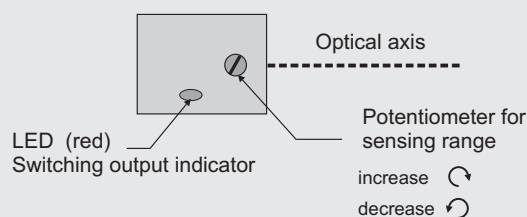
Wiring connections

Lo= Light switching

Do= Dark switching



Operating and display elements



Technical data

Supply	voltage	10 - 30 VDC
	max. residual ripple	≤ 10% (within specified limits)
	current consumption	~ 25 mA
Response time	ton or toff	≤ 1 ms
	switching frequency	≤ 500 Hz
Output	output current	max. 100 mA
	switching output	PNP or NPN, light or dark switching (depending on type and wiring)
Residual voltage	at 100 mA output current	≤ 2 V
	at 10 mA output current	≤ 1 V
Emitter	LED (modulated)	red
	modulation frequency	6 kHz
Temperature	operating	0 to 50 °C
	storage	-20 to 80 °C
External light immunity	artificial light	≤ 5000 Lux
	daylight	≤ 10.000 Lux
Protection	supply	inverse polarity
	output	permanent short-circuit and overload
	degree of protection	IP 65 and IP 67
Sensing range	adjustable	30 - 250 mm (Reference: 92% white, 10x10 cm)

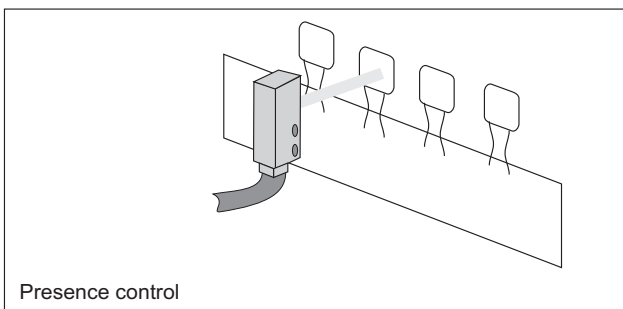
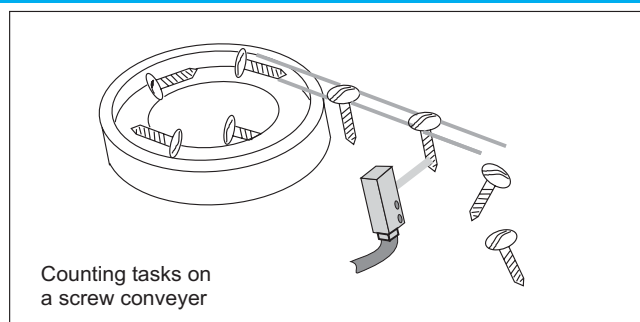
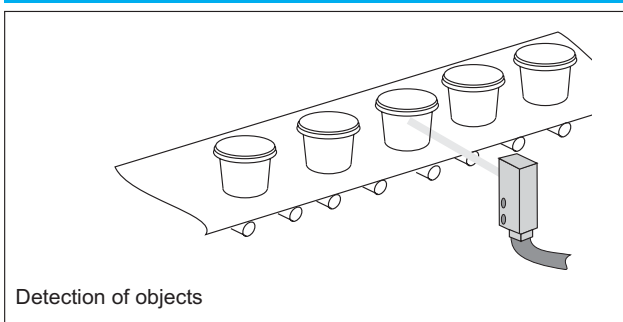
Ordering information

Sensor			Part No.
P 989 SN	NPN	with cable	10401442
P 989 SP	PNP	length 2 m	10401443
P (C0) 989 SN	NPN	with M8 plug	10401444
P (C0) 989 SP	PNP	on pigtail	10401445

Cable (separately)

Type (C2)	length 2 m	11261135
Type (C5)	length 5 m	11261136

Applications



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Polarised Reflection sensor

Series B 989 S_

- **Sensing range** with reflector 50x50mm: 1 m
with reflector Ø 84 mm: 1.5 m
- **Supply** 10-30 VDC
- **Output** PNP or NPN

Principal features:

- Sensing range with reflector
50 x50 mm **1 m**
Ø 84 mm **1.5 m**
- Supply **10-30 VDC**
- Switching output indicator via LED
- Integrated amplifier
- Adjustable sensing range
- Light/dark switching
- PNP or NPN output
- Lateral lightbeam
- Polarised, modulated and visible lightbeam
- Connection with M8 plug or 2m cable
- Solid housing
- CE

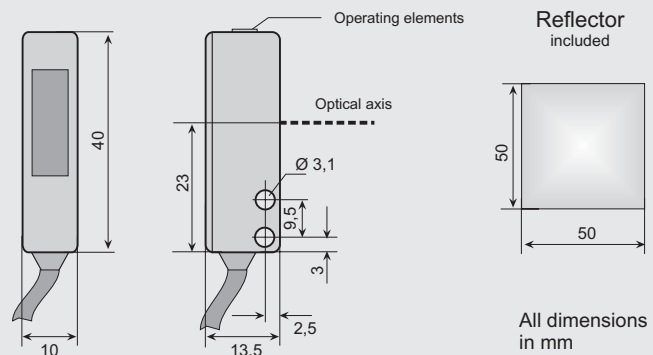
Applications:

- Detection of small parts, even with shiny surfaces
- Positioning or presence control of objects in assembly machines

Advantages:

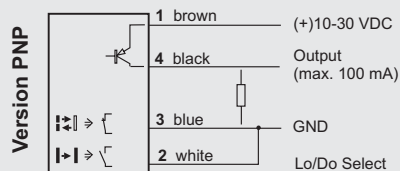
- Because of little dimensions, only small mounting area will be needed
- Inexpensive product

Dimensions

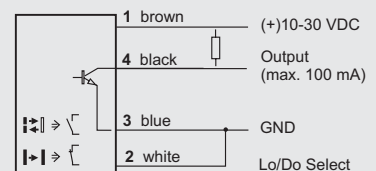
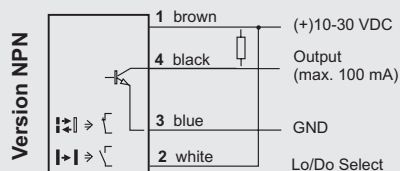
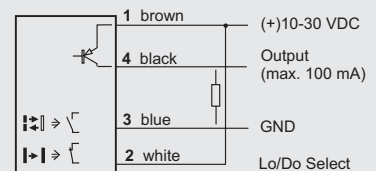


Wiring connections

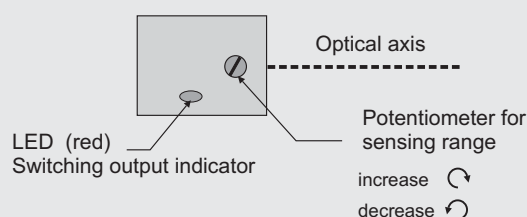
Lo= Light switching



Do= dark switching



Operating and display elements



Technical data

Supply	voltage	10 - 30 VDC
	max. residual ripple	≤ 10% (within specified limits)
	current consumption	~ 25 mA
Response time	ton or toff	≤ 1 ms
	switching frequency	≤ 500 Hz
Output	output current	max. 100 mA
	switching output	PNP or NPN, light or dark switching (depending on type and wiring)
Residual voltage	at 100 mA output current	≤ 2 V
	at 10 mA output current	≤ 1 V
Emitter	LED (modulated)	red
	modulation frequency	6 kHz
Temperature	operating	0 to 50 °C
	storage	-20 to 80 °C
External light immunity	artificial light	≤ 5000 Lux
	daylight	≤ 10.000 Lux
Protection	supply	inverse polarity
	output	permanent short-circuit and overload
	degree of protection	IP 65 and IP 67
Sensing range	with reflector 50 x 50 mm	~1 m
	with reflector Ø 84 mm	~1.5 m

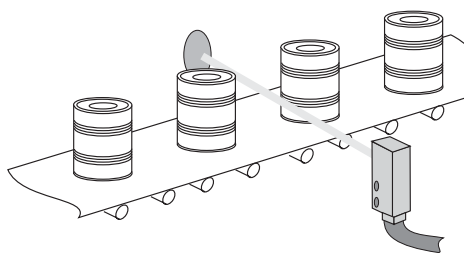
Ordering information

Sensor			Part No.
B 989 SN	NPN	with cable length 2 m	10401438
B 989 SP	PNP		10401439
B (C0) 989 SN	NPN	with M8 plug on pigtail	10401440
B (C0) 989 SP	PNP		10401441

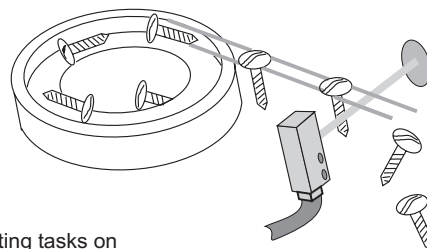
Cable (separately)

Type (C2)	length 2 m	11261135
Type (C5)	length 5 m	11261136

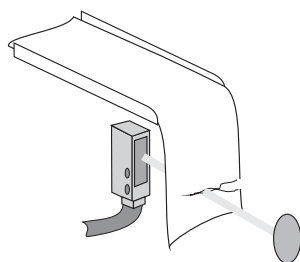
Applications



Detection of shiny objects on a conveyer



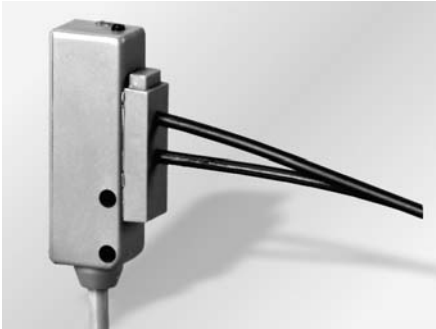
Counting tasks on a screw conveyer



Detection of break in a metallic strip

Presented by:

Contika Aps
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8382 Hinnerup
Tel 8624 5066



Miniature lightbarrier with fibre optic connection

Series AFP 989 S_

- Lightbarrier for flexible usage
- Supply 10-30 VDC
- Output PNP or NPN
- Adjustable sensibility

Principal features:

- Supply 10-30 VDC
- Switching output indicator via LED
- Integrated amplifier
- Adjustable sensibility
- Light/dark switching
- PNP or NPN output
- Modulated, visible Lightbeam
- Connection with M8 plug or 2 m cable
- Strong housing
- CE

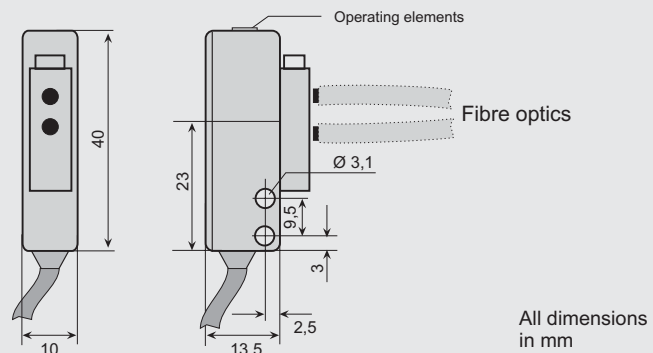
Applications:

- Detection of parts in a difficult acces
- Positioning or presence control

Advantages:

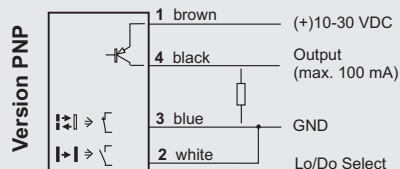
- Because of little dimensions, only a small mounting area will be needed
- Flexible application by using fibre optics
- Plastic fibre use in vibrating surroundings
- Inexpensive product
- Through beam or reflection usage

Dimensions

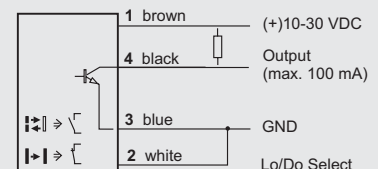
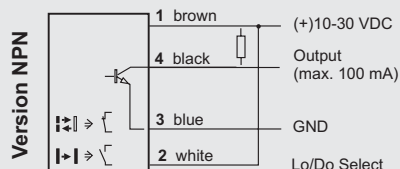
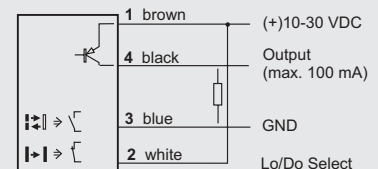


Wiring connections

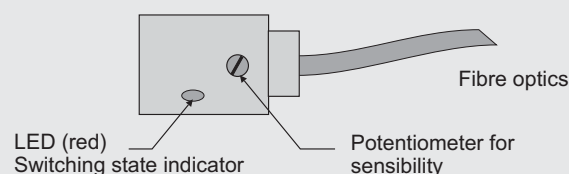
Lo= Light switching



Do= Dark switching



Operating and display elements



Technical data

Supply	voltage	10 - 30 VDC
	max. residual ripple	≤ 10% (within specified limits)
	current consumption	~ 25 mA
Response time	ton or toff	≤ 1 ms
	switching frequency	≤ 500 Hz
Output	output current	max. 100 mA
	switching output	PNP or NPN, light or dark switching (depending on type and wiring)
Residual voltage	at 100 mA output current	≤ 2 V
	at 10 mA output current	≤ 1 V
Emitter	LED (modulated)	red
	modulation frequency	6 kHz
Temperature	operating	0 to 50 °C
	storage	-20 to 80 °C)
External light immunity	artificial light	≤ 5000 Lux
	daylight	≤ 10.000 Lux
Protection	supply	inverse polarity
	output	permanent short-circuit and overload
	degree of protection	IP 65

Ordering information

Sensor			Part No.
AFP 989 SN	NPN	with cable	10401456
AFP 989 SP	PNP	length 2m	10401457
AFP (C0) 989 SN	NPN	with M8 plug	10401458
AFP (C0) 989 SP	PNP	on pigtail	10401459

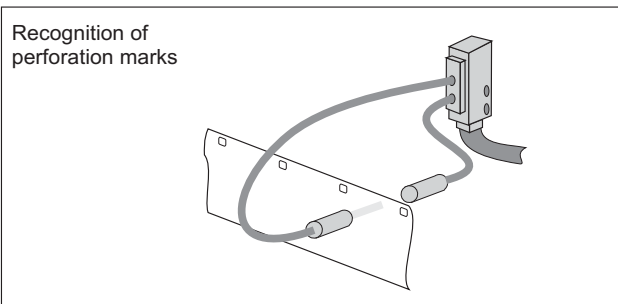
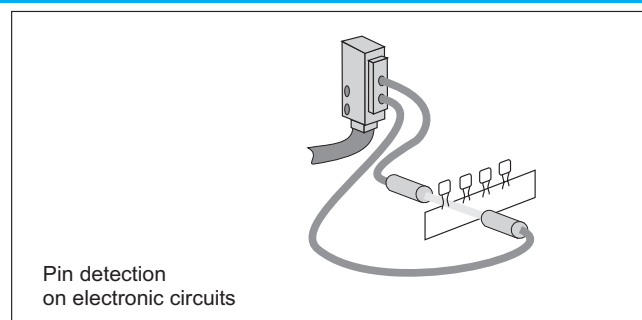
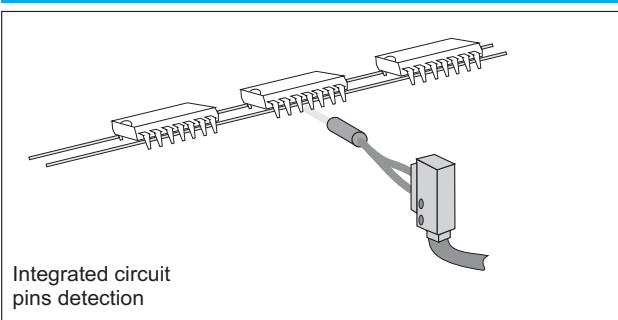
Cable (separately)

Type (C2)	length 2 m	11261135
Type (C5)	length 5 m	11261136

Fibre optics

See datasheet "Fibre optic cable for series AFV / AFP"

Applications



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