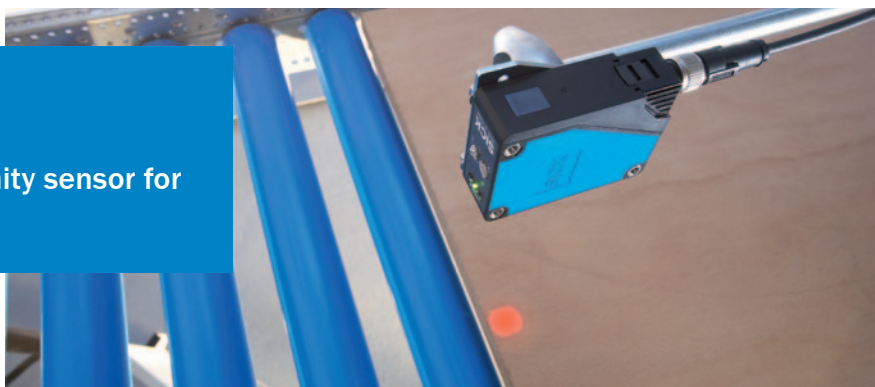




## W280-2 Photoelectric sensors

Sensor kit with mounting bracket and reflector

Energetic photoelectric proximity sensor for basic applications









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**Product description**

The WT280 energetic proximity sensor is available with a rotatable connector, cable connector or terminal connector. Versions with the rotatable connector are ideal for applications with limited mounting space. These easy-to-operate sensors feature a potentiometer and light/dark switching. The highly-visible

red light of the BrightLight LED simplifies adjustment to the object and reduces commissioning time.

**At a glance**

- Highly visible red light spot thanks to the BrightLight LED
- Potentiometer for adjusting sensing range
- Light/dark switching (DC devices only)
- Rotatable connector, cable connection or terminal chamber
- Versions for 10 – 30 V DC or 24 – 240 V DC/AC voltage supply
- Stainless steel mounting bracket included in delivery

**Your benefits**

- Simple and fast commissioning with the highly visible light spot of the BrightLight LED
- Simple operation via potentiometer
- Light/dark switching provides application flexibility
- All necessary mounting and operating accessories are included in delivery, enabling quick and easy setup: since mounting bracket (stainless steel 1.4301) is included in delivery scope
- DC devices and AC/DC devices available in the same housing, allowing electrical flexibility

→ [www.mysick.com/en/WTE280-2](http://www.mysick.com/en/WTE280-2)  
For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.



## Detailed technical data

### Features

Sensor principle	Photoelectric proximity sensor
Detection principle	Energetic
Dimensions (W x H x D)	23.5 mm x 74.5 mm x 63 mm
Housing design (light emission)	Rectangular
Sensing range max. <sup>1)</sup>	10 mm ... 2,000 mm
Sensing range	10 mm ... 1,700 mm
Type of light	Visible red light
Light source <sup>2)</sup>	BrightLight LED
Light spot (distance)	Ø 45 mm (1,500 mm)
Sensing distance adjustment	Potentiometer

<sup>1)</sup> Object with 90 % reflectance (referred to standard white DIN 5033).

<sup>2)</sup> Average service life 100,000 h at Ta = +25 °C.

### Mechanics/electronics

	DC	AC
Supply voltage	10 V DC ... 30 V DC <sup>1)</sup>	24 V DC ... 240 V DC <sup>2)</sup> 24 V AC ... 240 V AC <sup>2)</sup>
Residual ripple <sup>3)</sup>	≤ 5 V <sub>pp</sub>	–
Power consumption	≤ 20 mA <sup>4)</sup>	≤ 5 VA
Switching output	PNP, light/dark-switching, selectable via light/dark rotary switch, open collector NPN, light/dark-switching, selectable via light/dark rotary switch, open collector (depending on type)	Relay, light switching, change-over contacts, electrically isolated <sup>5)</sup>
Output current I <sub>max.</sub>	100 mA	–
Switching current (switching voltage)	–	3 A (240 V AC) 3 A (30 V DC)
Response time	≤ 0.5 ms <sup>6)</sup>	≤ 15 ms
Switching frequency <sup>7)</sup>	1,000 Hz	33 Hz
Connection type	Cable, 2 m, 0.18 mm <sup>2</sup> <sup>8)</sup> Connector Cable gland (depending on type)	Cable, 2 m, 0.76 mm <sup>2</sup> <sup>8)</sup> Cable gland (depending on type)
Circuit protection	A <sup>9)</sup> B <sup>10)</sup> C <sup>11)</sup> D <sup>12)</sup>	A <sup>9)</sup> C <sup>11)</sup>
Protection class	⚡	□ <sup>13)</sup>
Weight	Cable, 3-wire, 2 m 200 g Cable, 5-wire, 2 m – Connector M12, 4-pin 150 g Cable gland 190 g	– 310 g – 200 g
Overvoltage category	–	-2Hxxx: 2 -2Rxxx: 3

	DC	AC
Housing material	ABS Plastic	
Optics material	PMMA	
Enclosure rating	IP 66, IP 67	
Items supplied	Mounting bracket BEF-W280	
Usage category	-	AC-15, DC-13, according to EN 60947-1
Interference emission	-	EN 61000-6-3 (only -2Hxxxx) <sup>14)</sup>
EMC <sup>15)</sup>	EN 60947-5-2	
Ambient operating temperature	-25 °C ... +55 °C	
Ambient storage temperature	-40 °C ... +70 °C	

<sup>1)</sup> Limit values, operation in short-circuit protected network max. 8 A.

<sup>2)</sup> ± 10 %.

<sup>3)</sup> May not exceed or fall short of  $V_S$ .

<sup>4)</sup> Without load.

<sup>5)</sup> Provide suitable spark suppression for inductive or capacitive loads.

<sup>6)</sup> Signal transit time with resistive load.

<sup>7)</sup> With light/dark ratio 1:1.

<sup>8)</sup> Do not bend below 0 °C.

<sup>9)</sup> A =  $V_S$  connections reverse-polarity protected.

<sup>10)</sup> B = inputs and output reverse-polarity protected.

<sup>11)</sup> C = interference suppression.

<sup>12)</sup> D = outputs overcurrent and short-circuit protected.

<sup>13)</sup> Rated voltage 250 V AC/DC.

<sup>14)</sup> In the case of a DC supply (relating to EN 61000-6-3) the length of cable between the supply source and the sensor must be < 30 m

<sup>15)</sup> The AC/DC devices (only -2Rxxxx) meet the interference suppression requirements for industrial use (interference suppression class A). When used in residential areas it can cause interference.

## Ordering information

### DC

Sensing range max. <sup>1)</sup>	Output type	Switching mode	Connection	Model name	Part no.
10 mm ... 2,000 mm	PNP	Light/dark-switching	Cable, 3-wire, 2 m	WTE280-2P1131	6044726
			Connector M12, 4-pin	WTE280-2P2431	6044728
			Cable gland	WTE280-2P4331	6044724
	NPN	Light/dark-switching	Cable, 3-wire, 2 m	WTE280-2N1131	6044727
			Connector M12, 4-pin	WTE280-2N2431	6044729
			Cable gland	WTE280-2N4331	6044725

<sup>1)</sup> Object with 90 % reflectance (referred to standard white DIN 5033).

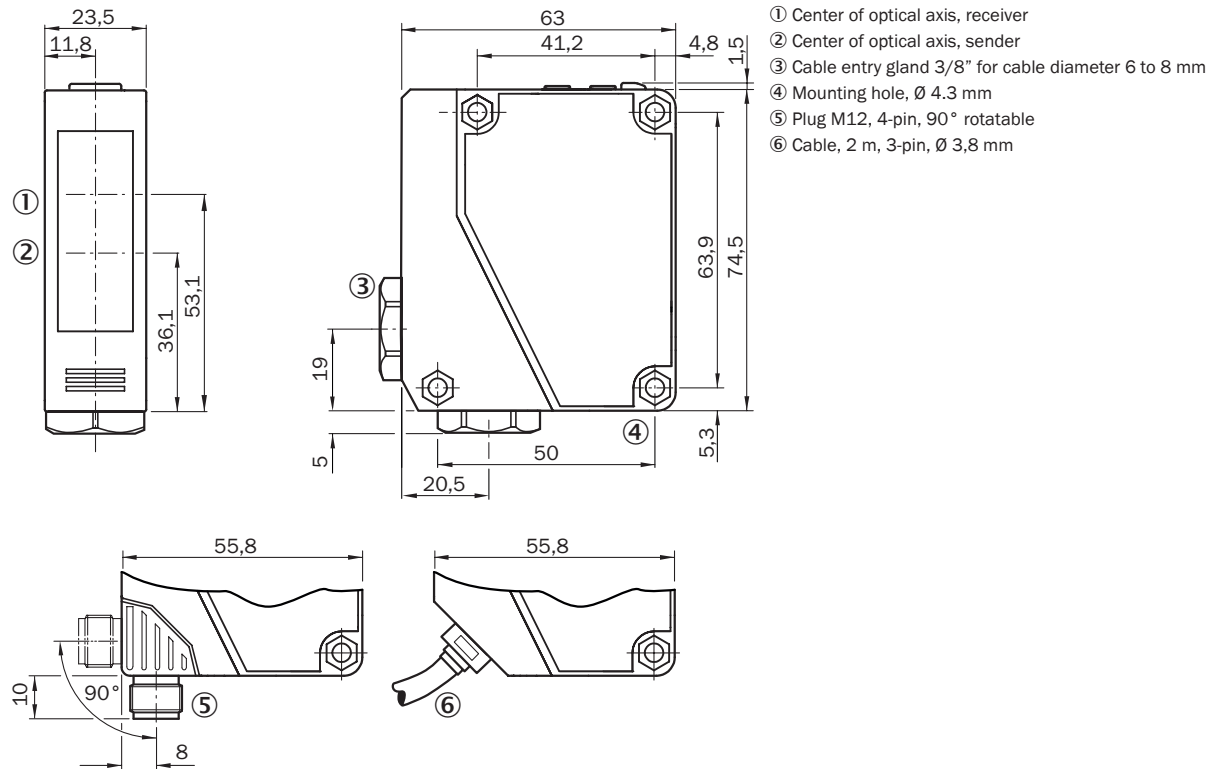
### AC/DC

Sensing range max. <sup>1)</sup>	Output type	Switching mode	Connection	Model name	Part no.
10 mm ... 2,000 mm	Relay	Light switching	Cable, 5-wire, 2 m	WTE280-2H1531	6044731
				WTE280-2R1531	6044759
			Cable gland	WTE280-2H4331	6044730
				WTE280-2R4331	6044758

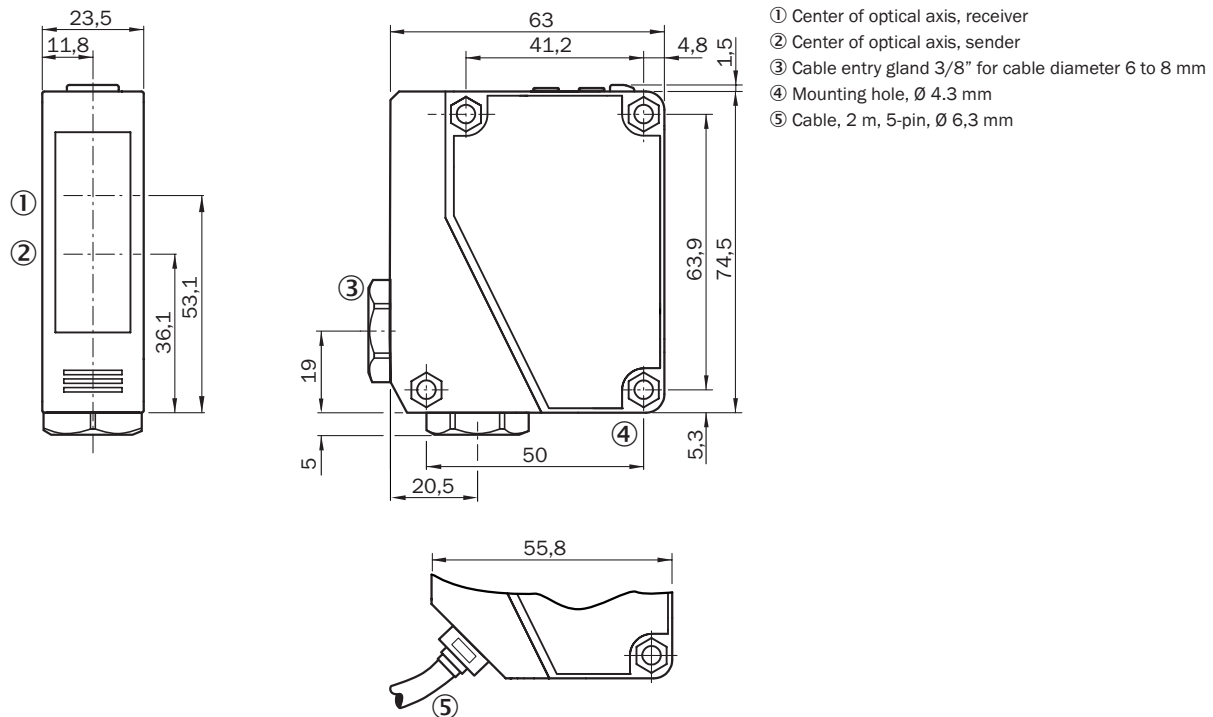
<sup>1)</sup> Object with 90 % reflectance (referred to standard white DIN 5033).

## Dimensional drawings

### WTE280-2P/-2N, DC

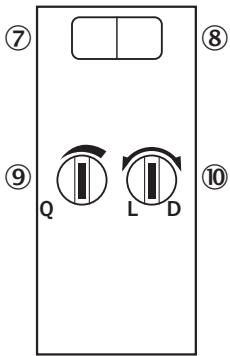


### WTE280-2H/-2R, AC/DC



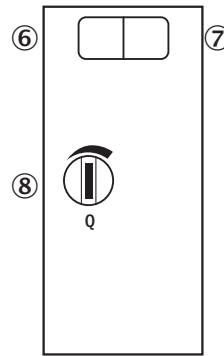
### Adjustments

#### WTE280-2P/-2N, DC



- ⑦ Status indicator LED green: Stability indicator
- ⑧ Status indicator LED, yellow: Status of received light beam
- ⑨ Sensing distance adjustment: Potentiometer
- ⑩ Light/dark selector

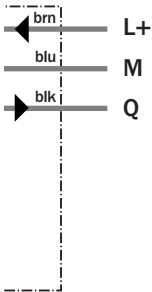
#### WTE280-2H/-2R, AC/DC



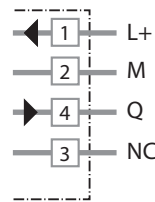
- ⑥ Status indicator LED green: Stability indicator
- ⑦ Status indicator LED, yellow: Status of received light beam
- ⑧ Sensing distance adjustment: Potentiometer

### Connection diagram

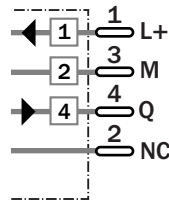
#### WTE280-2x1131, DC, Cable



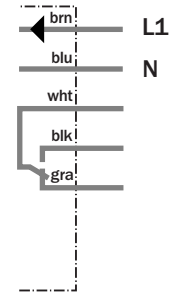
#### WTE280-2x4331, DC, Cable gland



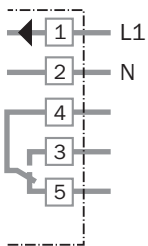
#### WTE280-2x2431, DC, Connector M12, 4-pin



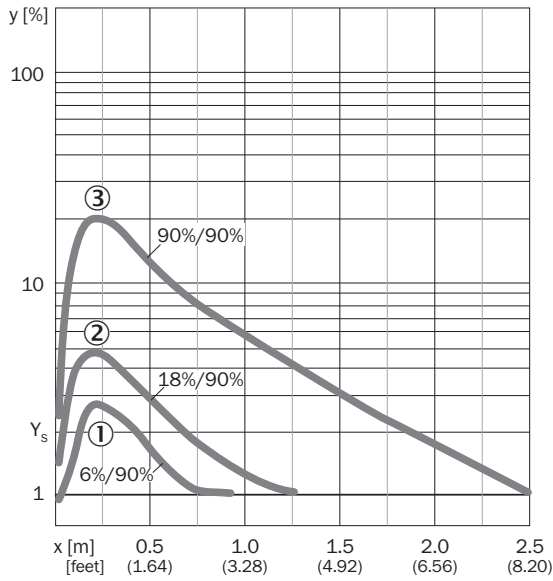
#### WTE280-2x1531, AC/DC, Cable



#### WTE280-2x4331, AC/DC, Cable gland

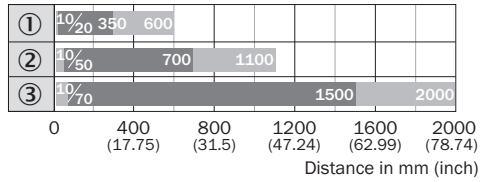


### Operating reserve



- ① Sensing range on black, 6 % remission
- ② Sensing range on gray, 18 % remission
- ③ Sensing range on white, 90 % remission

### Sensing range



■ Operating distance    ■ Sensing distance typ.max.

- ① Sensing range on black, 6 % remission
- ② Sensing range on gray, 18 % remission
- ③ Sensing range on white, 90 % remission

Photoelectric retro-reflective sensor that provides easy installation due to installation kit









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**Product description**

The WL280-2 retro-reflective sensors feature a ready-to-mount installation kit that includes a cable pre-connected to a sensor, a mounting bracket and a reflector. This is particularly useful for quick and easy installation in doorways and gates. These sensors feature a variant with a rotatable connector, which is ideal

for applications with limited mounting space. A variant with a terminal chamber is also available for individual wiring. A large sensing range and a high operating reserve ensure detection reliability during use. In addition, DC and AC/DC devices are available in the same housing, which allows electrical flexibility.

**At a glance**

- Highly visible red light spot thanks to the BrightLight LED
- Potentiometer for sensitivity control
- Light/dark switching (DC devices)
- Rotatable connector, cable connector or terminal chamber
- Versions for 10 – 30 V DC or 24 – 240 V DC/AC voltage supply
- Stainless steel mounting bracket and P250 reflector are included in delivery
- AC/DC devices (-2Hxxxx) are compliant with EN 61000-6-3 (electromagnetic interference for “residential, commercial and light-industrial environments”)

**Your benefits**

- Less contamination due to high operating reserves, reducing downtime
- Simple and fast commissioning with the highly visible light spot of the BrightLight LED
- DC and AC/DC devices available in the same housing, allowing electrical flexibility
- Potentiometer adjustment for application-specific operation
- Light/dark switching provides application flexibility
- All necessary mounting and operating accessories are included in delivery, enabling quick and easy setup: since mounting bracket (stainless steel 1.4301) and reflector are included in delivery scope
- Polarizing filter ensures reliable detection, even with shiny targets

→ [www.mysick.com/en/WL280-2](http://www.mysick.com/en/WL280-2)  
 For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.





## Detailed technical data

### Features

	DC	AC
Sensor principle	Photoelectric retro-reflective sensor	
Dimensions (W x H x D)	23.5 mm x 74.5 mm x 63 mm	
Housing design (light emission)	Rectangular	
Sensing range max.	0.01 m ... 15 m <sup>1)</sup> 0.01 m ... 12 m <sup>2)</sup>	
Sensing range	0.01 m ... 13 m <sup>1)</sup> 0.01 m ... 11 m <sup>2)</sup>	
Type of light	Visible red light	
Light source <sup>3)</sup>	BrightLight LED	
Light spot (distance)	Ø 260 mm (8 m)	
Sensitivity adjustment	Potentiometer	

<sup>1)</sup> PL80A.

<sup>2)</sup> P250.

<sup>3)</sup> Average service life 100,000 h at Ta = +25 °C.

### Mechanics/electronics

	DC	AC
Supply voltage	10 V DC ... 30 V DC <sup>1)</sup>	24 V DC ... 240 V DC <sup>2)</sup> 24 V AC ... 240 V AC <sup>2)</sup>
Residual ripple <sup>3)</sup>	≤ 5 V <sub>pp</sub>	–
Power consumption	≤ 20 mA <sup>4)</sup>	≤ 5 VA
Switching output	PNP, light/dark-switching, selectable via light/dark rotary switch, open collector NPN, light/dark-switching, selectable via light/dark rotary switch, open collector (depending on type)	Relay, light switching, change-over contacts, electrically isolated <sup>5)</sup>
Output current I <sub>max.</sub>	100 mA	–
Switching current (switching voltage)	–	3 A (240 V AC) 3 A (30 V DC)
Response time	≤ 0.5 ms <sup>6)</sup>	≤ 15 ms
Switching frequency <sup>7)</sup>	1,000 Hz	33 Hz
Connection type	Cable, 2 m, 0.18 mm <sup>2</sup> <sup>8)</sup> Connector Cable gland (depending on type)	Cable, 5 m, 0.76 mm <sup>2</sup> <sup>8)</sup> Cable, 2 m, 0.76 mm <sup>2</sup> <sup>8)</sup> Cable gland (depending on type)
Circuit protection	A <sup>9)</sup> B <sup>10)</sup> C <sup>11)</sup> D <sup>12)</sup>	A <sup>9)</sup> C <sup>11)</sup>
Protection class	⊕	□ <sup>13)</sup>
Weight	Cable, 3-wire, 2 m 200 g Cable, 5-wire, 2 m – Cable, 5-wire, 5 m – Connector M12, 4-pin 150 g Cable gland 190 g	– 310 g 450 g – 200 g
Polarisation filter	✓	

	DC	AC
Overvoltage category	-	-2Hxxxx: 2 -2Rxxxx: 3
Housing material	ABS Plastic	
Optics material	PMMA	
Enclosure rating	IP 66, IP 67	
Items supplied	Mounting bracket BEF-W280, Reflector P250	Mounting bracket BEF-W280, Reflector P250, Mounting bracket BEF-W280, Reflector C110A (only for WL280-H4331P01)
Usage category	-	AC-15, DC-13, according to EN 60947-1
Interference emission	-	EN 61000-6-3 (only -2Hxxxx) <sup>14)</sup>
EMC <sup>15)</sup>	EN 60947-5-2	
Ambient operating temperature	-25 °C ... +55 °C	
Ambient storage temperature	-40 °C ... +70 °C	

<sup>1)</sup> Limit values, operation in short-circuit protected network max. 8 A.

<sup>2)</sup> ± 10 %.

<sup>3)</sup> May not exceed or fall short of  $V_S$ .

<sup>4)</sup> Without load.

<sup>5)</sup> Provide suitable spark suppression for inductive or capacitive loads.

<sup>6)</sup> Signal transit time with resistive load.

<sup>7)</sup> With light/dark ratio 1:1.

<sup>8)</sup> Do not bend below 0 °C.

<sup>9)</sup> A =  $V_S$  connections reverse-polarity protected.

<sup>10)</sup> B = inputs and output reverse-polarity protected.

<sup>11)</sup> C = interference suppression.

<sup>12)</sup> D = outputs overcurrent and short-circuit protected.

<sup>13)</sup> Rated voltage 250 V AC/DC.

<sup>14)</sup> In the case of a DC supply (relating to EN 61000-6-3) the length of cable between the supply source and the sensor must be < 30 m

<sup>15)</sup> The AC/DC (only -2Rxxxx) devices meet the interference suppression requirements for industrial use (interference suppression class A). When used in residential areas it can cause interference.

## Ordering information

### DC

Sensing range max.	Output type	Switching mode	Connection	Model name	Part no.
0.01 m ... 15 m <sup>1)</sup> 0.01 m ... 12 m <sup>2)</sup>	PNP	Light/dark-switching	Cable, 3-wire, 2 m	WL280-2P1131	6044734
			Connector M12, 4-pin	WL280-2P2431	6044736
			Cable gland	WL280-2P4331	6044732
	NPN	Light/dark-switching	Cable, 3-wire, 2 m	WL280-2N1131	6044735
			Connector M12, 4-pin	WL280-2N2431	6044737
			Cable gland	WL280-2N4331	6044733

<sup>1)</sup> PL80A, C110.

<sup>2)</sup> P250.

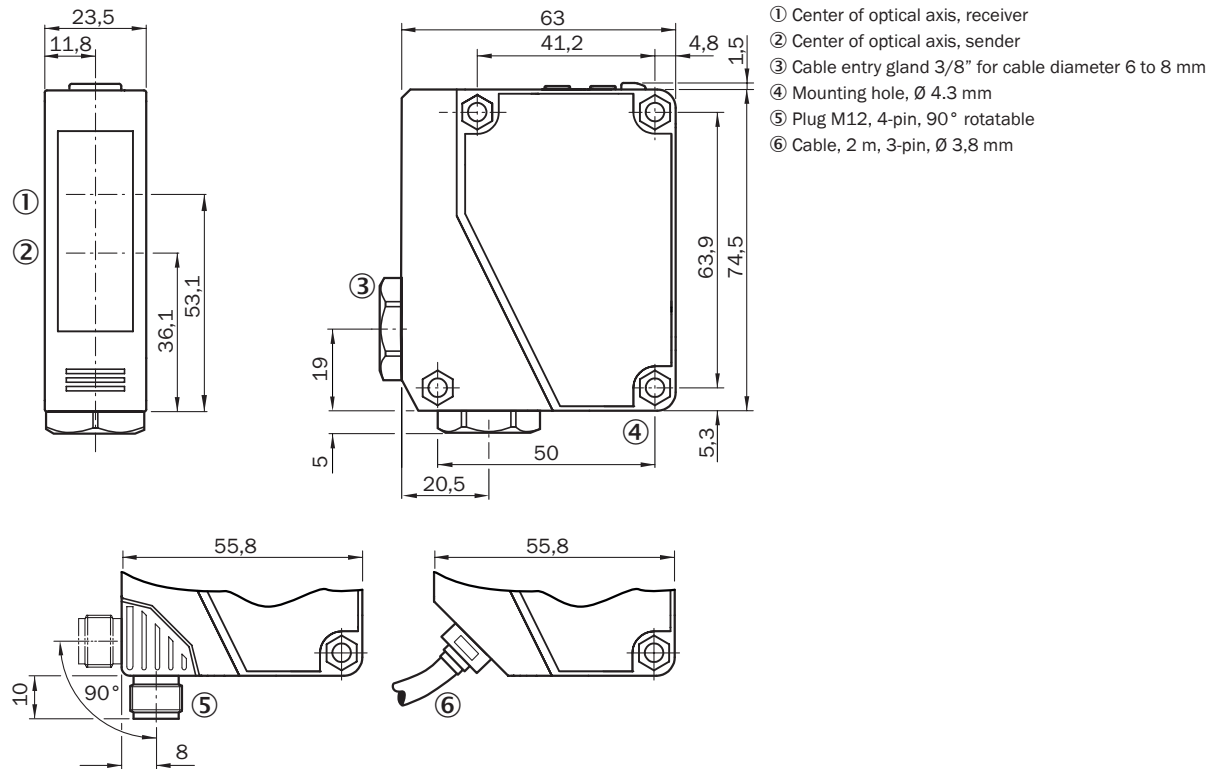
### AC/DC

Sensing range max. <sup>1)</sup>	Output type	Switching mode	Connection	Model name	Part no.
0.01 m ... 15 m	Relay	Light switching	Cable, 5-wire, 5 m	WL280-2H1631	6044740
			Cable, 5-wire, 2 m	WL280-2H1531	6044739
				WL280-2R1531	6044761
				WL280-2H4331	6044738
			Cable gland	WL280-2R4331	6044760
				WL280-2H4331P01	1054629

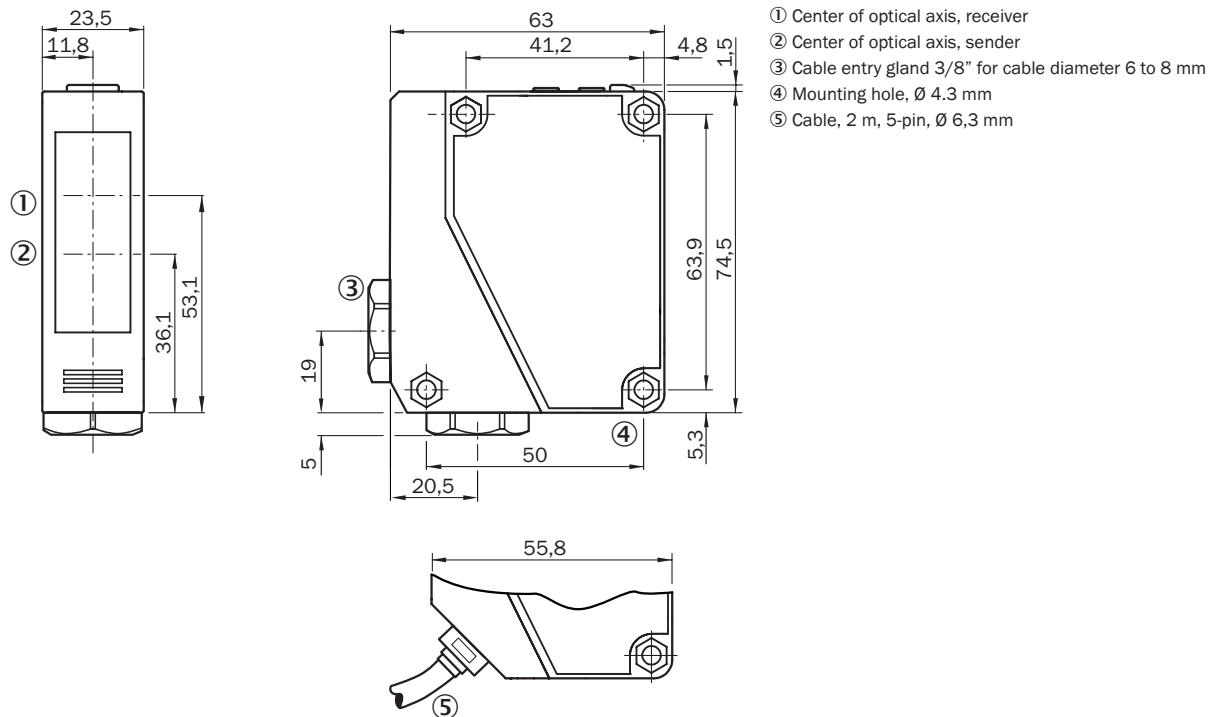
<sup>1)</sup> PL80A, C110.

## Dimensional drawings

### WL280-2P/-2N, DC

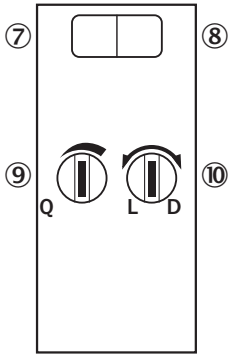


### WL280-2H/-2R, AC/DC



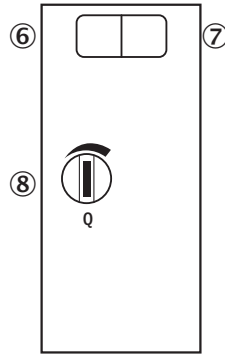
### Adjustments

#### WL280-2P/-2N, DC



- ⑦ Status indicator LED green: Stability indicator
- ⑧ Status indicator LED, yellow: Status of received light beam
- ⑨ Sensitivity adjustment: Potentiometer
- ⑩ Light/dark selector

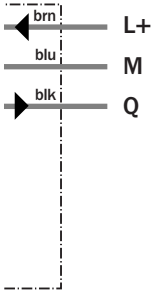
#### WL280-2H/-2R, AC/DC



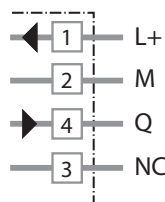
- ⑥ Status indicator LED green: Stability indicator
- ⑦ Status indicator LED, yellow: Status of received light beam
- ⑧ Sensitivity adjustment: Potentiometer

### Connection diagram

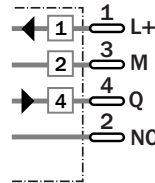
#### WL280-2x1131, DC, Cable



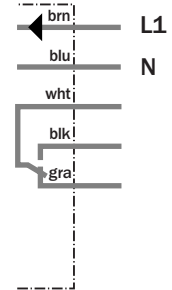
#### WL280-2x4331, DC, Cable gland



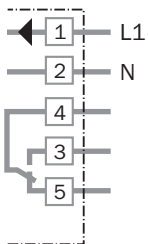
#### WL280-2x2431, DC, Connector M12, 4-pin



#### WL280-2x1x31, AC/DC, Cable

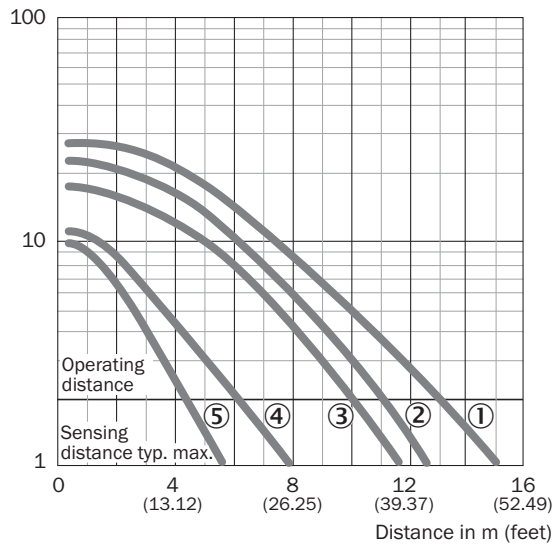


#### WL280-2x4331, AC/DC, Cable gland



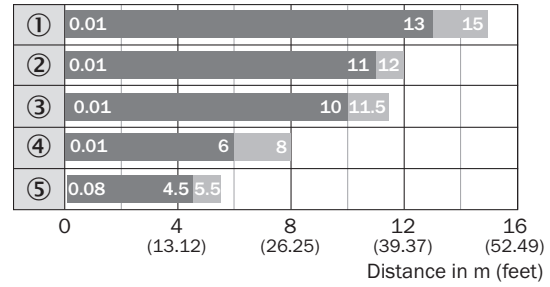
## Operating reserve

Function reserve



- ① Reflector type PL80A, C110A
- ② Reflector type P250
- ③ Reflector type PL50A, PL40A, PL30A, PL31A
- ④ Reflector type PL20A
- ⑤ Reflective tape Diamond Grade (100 mm x 100 mm/3.94 inch x 3.94 inch)

## Sensing range



- Operating distance      ■ Sensing range max. typ.
- ① Reflector type PL80A, C110A
- ② Reflector type P250
- ③ Reflector type PL50A, PL40A, PL30A, PL31A
- ④ Reflector type PL20A
- ⑤ Reflective tape Diamond Grade (100 mm x 100 mm/3.94 inch x 3.94 inch)

Through-beam photoelectric sensor with mounting brackets ensures quick and easy installation









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### Product description

The WSE280-2 through-beam sensors feature a ready-to-mount installation kit that includes a cable pre-connected to a sensor and a mounting bracket. This is particularly useful for quick and easy installation in doorways and gates. These sensors offer a variant with a rotatable connector, which is ideal for

applications with limited mounting space. A variant with a terminal chamber is also available for individual wiring. A large sensing range and a high operating reserve ensure reliable detection during use. In addition, DC and AC/DC devices are available in the same housing, which allows electrical flexibility.

### At a glance

- Highly visible red light spot thanks to the BrightLight LED
- Large sensing range and high operating reserve
- Light/dark switching (DC devices only)
- Rotatable connector, cable connection or terminal chamber
- Versions for 10 – 30 V DC or 24 – 240 V DC/AC voltage supply
- Stainless steel mounting bracket (1.4301) is included in delivery
- AC/DC devices (-2Hxxxx) are compliant with EN 61000-6-3 (electromagnetic interference for “residential, commercial and light-industrial environments”)

### Your benefits

- Less contamination due to high operating reserves, reducing downtime
- DC and AC/DC devices available in the same housing allow electrical flexibility
- Light/dark switching provides application flexibility and reduces the number of devices needed
- All necessary mounting and operating accessories are included in delivery, enabling quick and easy setup: since mounting bracket (stainless steel 1.4301) is included in delivery scope

→ [www.mysick.com/en/WSE280-2](http://www.mysick.com/en/WSE280-2)  
For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.



## Detailed technical data

### Features

Sensor principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	23.5 mm x 74.5 mm x 63 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 m ... 60 m
Sensing range	0 m ... 50 m
Type of light	Visible red light
Light source <sup>1)</sup>	BrightLight LED
Light spot (distance)	Ø 0.6 m (20 m)
Sensitivity adjustment	Potentiometer

<sup>1)</sup> Average service life 100,000 h at Ta = +25 °C.

### Mechanics/electronics

	DC	AC
Supply voltage	10 V DC ... 30 V DC <sup>1)</sup>	24 V DC ... 240 V DC <sup>2)</sup> 24 V AC ... 240 V AC <sup>2)</sup>
Residual ripple <sup>3)</sup>	≤ 5 V <sub>pp</sub>	–
Power consumption, sender	20 mA <sup>4)</sup>	≤ 3.5 VA
Power consumption, receiver	20 mA <sup>4)</sup>	≤ 3.5 VA
Switching output	PNP, light/dark-switching, selectable via light/dark rotary switch, open collector NPN, light/dark-switching, selectable via light/dark rotary switch, open collector (depending on type)	Relay, light switching, change-over contacts, electrically isolated <sup>5)</sup>
Output current I <sub>max.</sub>	100 mA	–
Switching current (switching voltage)	–	3 A (240 V AC) 3 A (30 V DC)
Response time	≤ 0.5 ms <sup>6)</sup>	≤ 15 ms
Switching frequency <sup>7)</sup>	1,000 Hz	33 Hz
Connection type	Cable, 2 m, 0.18 mm <sup>2</sup> <sup>8)</sup> Connector Cable gland (depending on type)	Cable, 5 m, 0.76 mm <sup>2</sup> <sup>8)</sup> Cable, 2 m, 0.76 mm <sup>2</sup> <sup>8)</sup> Cable gland (depending on type)
Circuit protection	A <sup>9)</sup> B <sup>10)</sup> C <sup>11)</sup> D <sup>12)</sup>	A <sup>9)</sup> C <sup>11)</sup>
Protection class	⚡	□ <sup>13)</sup>
Weight	Cable, 3-wire, 2 m 400 g Cable, 5-wire, 2 m – Cable, 5-wire, 5 m – Connector M12, 4-pin 300 g Cable gland 380 g	– 620 g 900 g – 400 g
Overvoltage category	–	-2Hxxx: 2 -2Rxxx: 3

	DC	AC
Housing material	ABS Plastic	
Optics material	PMMA	
Enclosure rating	IP 66, IP 67	
Items supplied	Mounting bracket BEF-W280	
Usage category	-	AC-15, DC-13, according to EN 60947-1
Interference emission	-	EN 61000-6-3 (only -2Hxxxx) <sup>14)</sup>
EMC <sup>15)</sup>	EN 60947-5-2	
Ambient operating temperature	-25 °C ... +55 °C	
Ambient storage temperature	-40 °C ... +70 °C	

<sup>1)</sup> Limit values, operation in short-circuit protected network max. 8 A.

<sup>2)</sup> ± 10 %.

<sup>3)</sup> May not exceed or fall short of  $V_S$ .

<sup>4)</sup> Without load.

<sup>5)</sup> Provide suitable spark suppression for inductive or capacitive loads.

<sup>6)</sup> Signal transit time with resistive load.

<sup>7)</sup> With light/dark ratio 1:1.

<sup>8)</sup> Do not bend below 0 °C.

<sup>9)</sup> A =  $V_S$  connections reverse-polarity protected.

<sup>10)</sup> B = inputs and output reverse-polarity protected.

<sup>11)</sup> C = interference suppression.

<sup>12)</sup> D = outputs overcurrent and short-circuit protected.

<sup>13)</sup> Rated voltage 250 V AC/DC.

<sup>14)</sup> In the case of a DC supply (relating to EN 61000-6-3) the length of cable between the supply source and the sensor must be < 30 m

<sup>15)</sup> The AC/DC (only -2Rxxxx) devices meet the interference suppression requirements for industrial use (interference suppression class A). When used in residential areas it can cause interference.

## Ordering information

### DC

Sensing range max.	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 60 m	PNP	Light/dark-switching	Cable, 3-wire, 2 m	WSE280-2P1131	6044743
			Connector M12, 4-pin	WSE280-2P2431	6044745
			Cable gland	WSE280-2P4331	6044741
	NPN	Light/dark-switching	Cable, 3-wire, 2 m	WSE280-2N1131	6044744
			Connector M12, 4-pin	WSE280-2N2431	6044746
			Cable gland	WSE280-2N4331	6044742

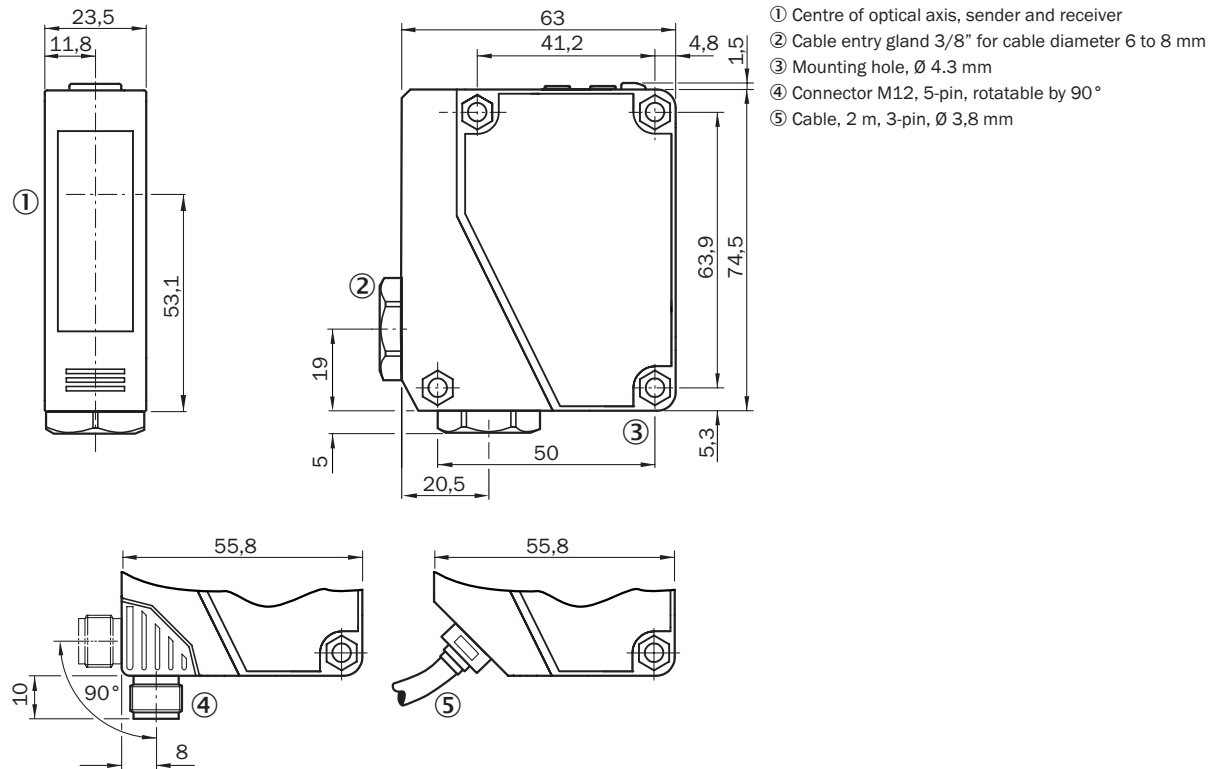
### AC/DC

Sensing range max.	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 60 m	Relay	Light switching	Cable, 5-wire, 5 m	WSE280-2H1631	6044749
			Cable, 5-wire, 2 m	WSE280-2H1531	6044748
				WSE280-2R1531	6044763
			Cable gland	WSE280-2H4331	6044747
				WSE280-2R4331	6044762

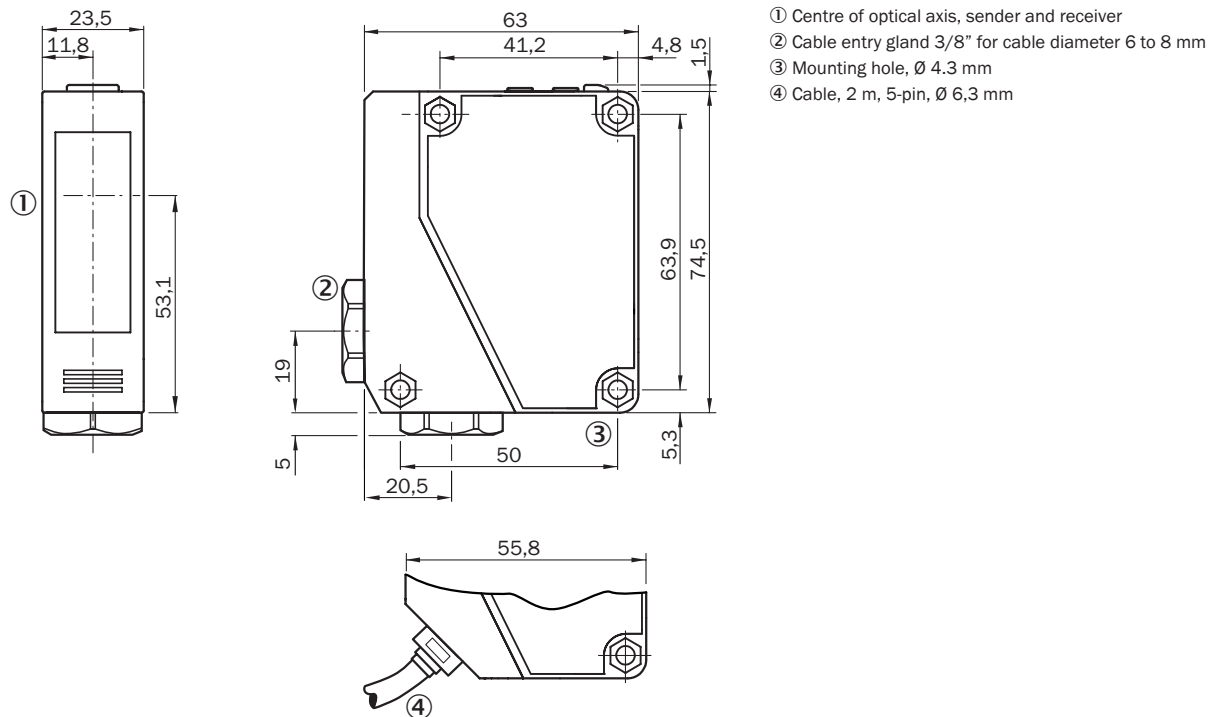


## Dimensional drawings

### WSE280-2P/-2N, DC

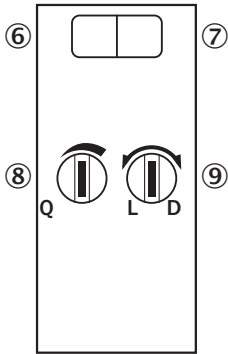


### WSE280-2H/-2R, AC/DC



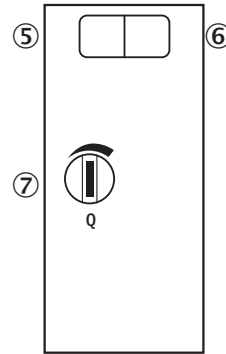
## Adjustments

### WSE280-2P/-2N, DC



- ⑥ LED indicator green: Stability indicator
- ⑦ Status indicator LED, yellow: Status of received light beam (only receiver WE)
- ⑧ Sensitivity adjustment: Potentiometer (only receiver WE)
- ⑨ Light/dark selector (only receiver WE)

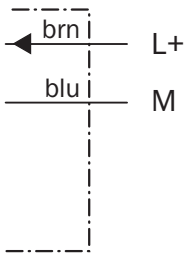
### WSE280-2H/-2R, AC/DC



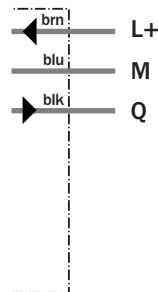
- ⑤ Status indicator LED green: Stability indicator
- ⑥ Status indicator LED, yellow: Status of received light beam (only receiver WE)
- ⑦ Sensitivity adjustment: Potentiometer (only receiver WE)

## Connection diagram

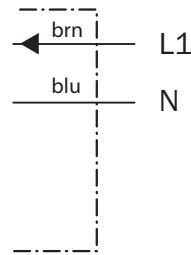
### WSE280-2x1131 Sender, DC Cable



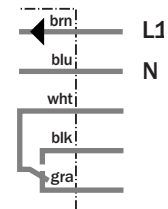
### WSE280-2x1131 Receiver, DC Cable



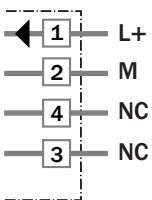
### WSE280-2x1x31 Sender, AC/DC Cable



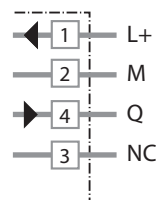
### WSE280-2x1x31 Receiver, AC/DC Cable



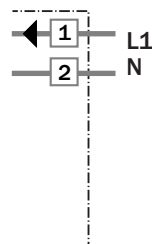
### WSE280-2x4331 Sender, DC Cable gland



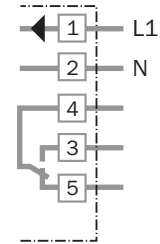
### WSE280-2x4331 Receiver, DC Cable gland



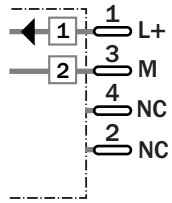
### WSE280-2x4331 Sender, AC/DC Cable gland



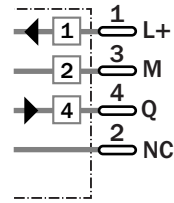
### WSE280-2x4331 Receiver, AC/DC Cable gland



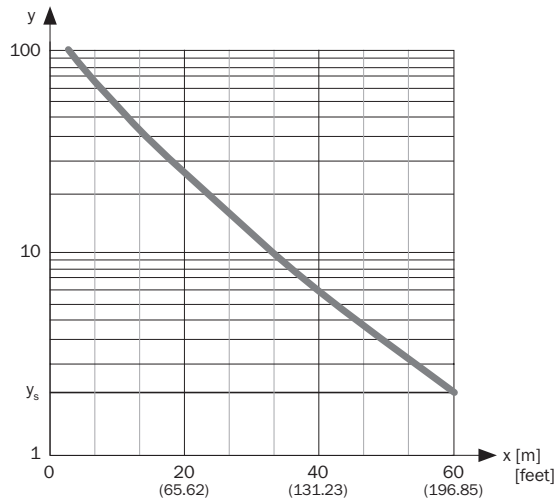
**WSE280-2x2431**  
Sender, DC  
Connector M12, 5-pin



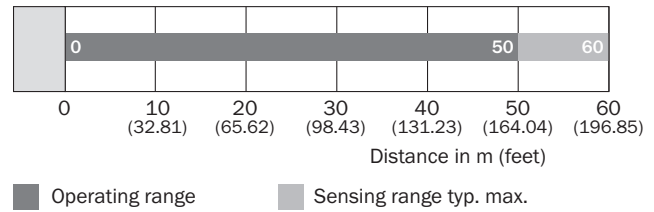
**WSE280-2x2431**  
Receiver, DC  
Connector M12, 5-pin



### Operating reserve



### Sensing range









W280-2

Mounting brackets/plates


Figure	Accessory type	Material	Model name	Part no.	WTE280-2	WL280-2	WSE280-2
	Mounting brackets	Stainless steel 1.4301	BEF-W280	5313885	●	●	●

Terminal and alignment brackets

- Accessory type: Universal terminal systems







Figure	Material	Model name	Part no.	WTE280-2	WL280-2	WSE280-2
	Steel, zinc coated	BEF-KHS-F01	2022463	●	●	●
	Zinc plated steel (sheet), Diecast zinc (clamp)	BEF-KHS-N04	2051610	●	●	●
	Steel, zinc coated	BEF-MS12G-A	4056054	●	●	●
		BEF-MS12G-B	4056055	●	●	●
		BEF-MS12L-A	4056052	●	●	●
		BEF-MS12L-B	4056053	●	●	●
		BEF-MS12Z-A	4056056	●	●	●
		BEF-MS12Z-B	4056057	●	●	●
	Aluminum	BEF-RMC-D12	5321878	●	●	●

Reflectors

Figure	Accessory type	Dimensions (L x W x H)	Material	Model name	Part no.	WTE280-2	WL280-2	WSE280-2
	Angular	47 mm x 47 mm	PMMA/ABS	P250	5304812	-	●	-
		15 mm x 38 mm	PMMA/ABS	PL20A	1012719	-	●	-
		28 mm x 56 mm	PMMA/ABS	PL30A	1002314	-	●	-
				PL31A	1002315	-	●	-
				37 mm x 56 mm	PMMA/ABS	PL40A	1012720	-
		-	PMMA/ABS	PL50A	1000132	-	●	-
		80 mm x 80 mm	PMMA/ABS	PL80A	1003865	-	●	-
		Round	Ø 80 mm	PMMA/ABS	C110A	5304549	●	●
	Reflective tape	91.4 cm x 74.9 cm	-	REF-DG-K	4019634	-	●	-

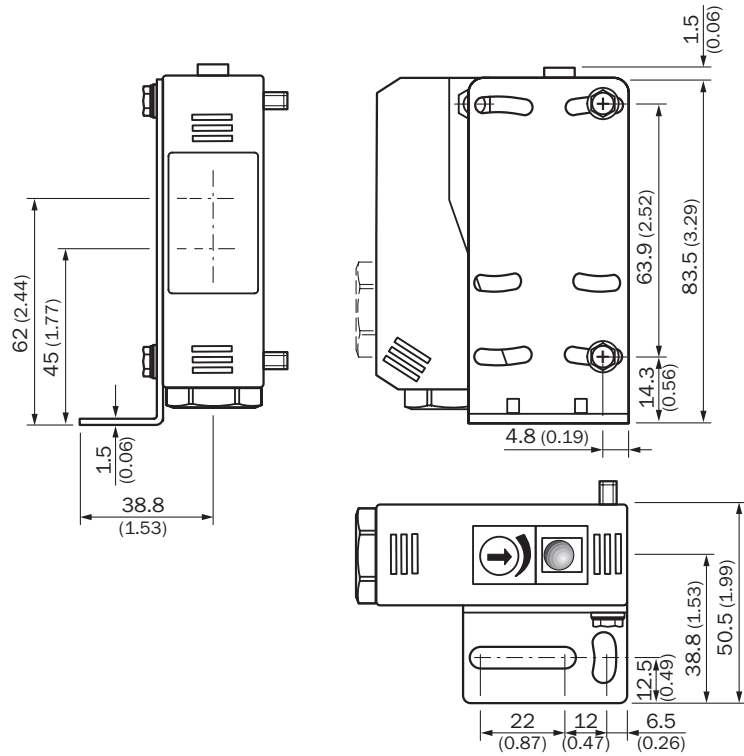
Plug connectors and cables

- Connector M12, 4-pin
- Connector type: Female connector

Figure	Flying leads	Enclosure rating	Sheath material	Cable length	Model name	Part no.	WTE280-2	WL280-2	WSE280-2
	Straight	IP 67	PVC	2 m	DOL-1204-G02M	6009382	●	●	●
				5 m	DOL-1204-G05M	6009866	●	●	●
				10 m	DOL-1204-G10M	6010543	●	●	●
				15 m	DOL-1204-G15M	6010753	●	●	●
		IP 68	PUR halogen free	2 m	DOL-1204-G02MC	6025900	●	●	●
				5 m	DOL-1204-G05MC	6025901	●	●	●
				10 m	DOL-1204-G10MC	6025902	●	●	●
				15 m	DOL-1204-G15MC	6034749	●	●	●
	Angled	IP 67	PVC	2 m	DOL-1204-W02M	6009383	●	●	●
				5 m	DOL-1204-W05M	6009867	●	●	●
				10 m	DOL-1204-W10M	6010541	●	●	●
					IP 68	PUR halogen free	2 m	DOL-1204-W02MC	6025903
5 m		DOL-1204-W05MC	6025904				●	●	●
10 m		DOL-1204-W10MC	6025905				●	●	●
		IP 67	PBT				-	DOS-1204-G	6007302
					PBT	-	DOS-1204-W	6007303	●

### Dimensional drawings Mounting brackets/plates

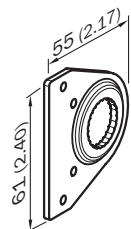
#### BEF-W280



All dimensions in mm (inch)

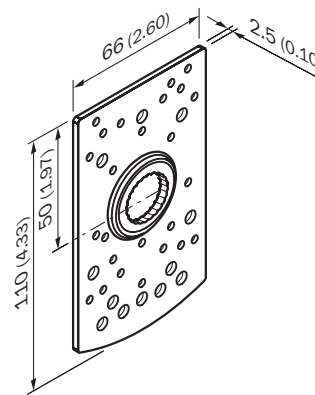
### Dimensional drawings Terminal and alignment brackets

#### BEF-KHS-F01



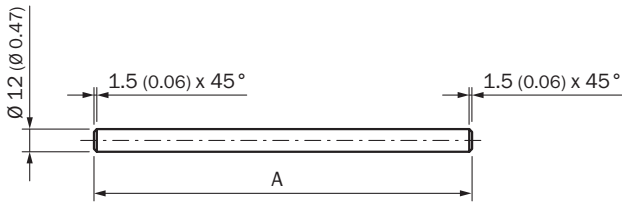
All dimensions in mm (inch)

#### BEF-KHS-N04



All dimensions in mm (inch)

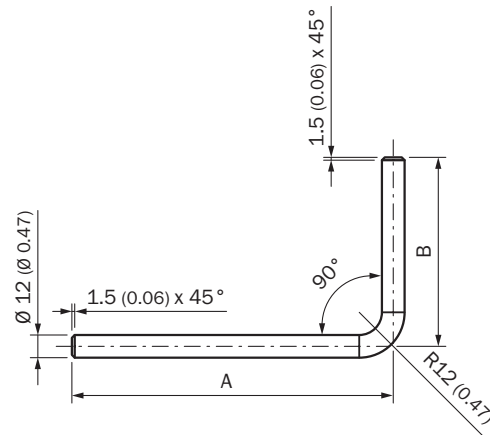
**BEF-MS12G-A**  
**BEF-MS12G-B**



All dimensions in mm (inch)

A = 200 mm (BEF-MS12G-A)  
A = 300 mm (BEF-MS12G-B)

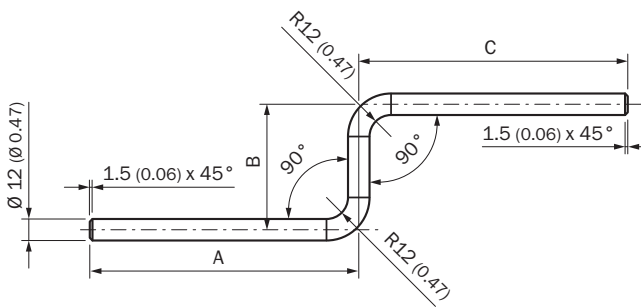
**BEF-MS12L-A**  
**BEF-MS12L-B**



All dimensions in mm (inch)

A = 150 mm, B = 150 mm (BEF-MS12L-A)  
A = 250 mm, B = 250 mm (BEF-MS12L-B)

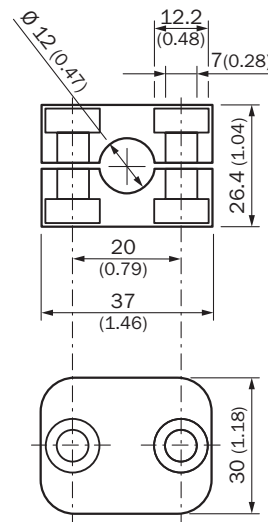
**BEF-MS12Z-A**  
**BEF-MS12Z-B**



All dimensions in mm (inch)

A = 150 mm, B = 70 mm, C = 150 mm (BEF-MS12Z-A)  
A = 150 mm, B = 70 mm, C = 250 mm (BEF-MS12Z-B)

**BEF-RMC-D12**

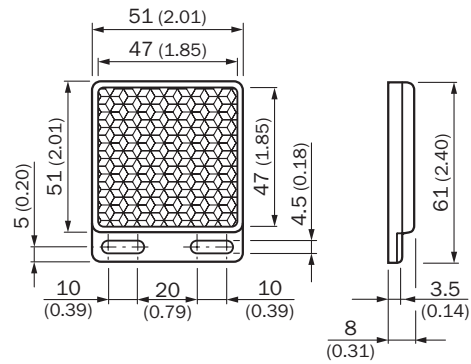


All dimensions in mm (inch)



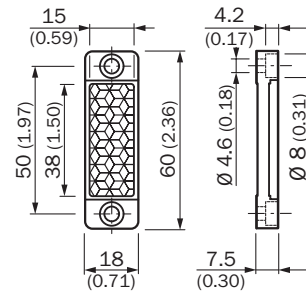
Dimensional drawings Reflectors

**P250**



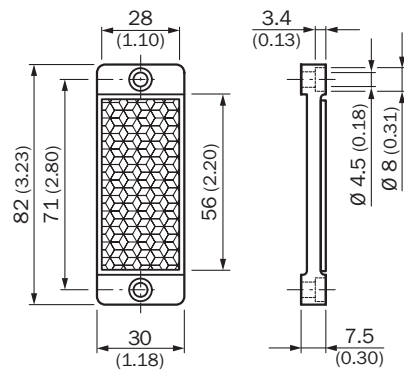
All dimensions in mm (inch)

**PL20A**



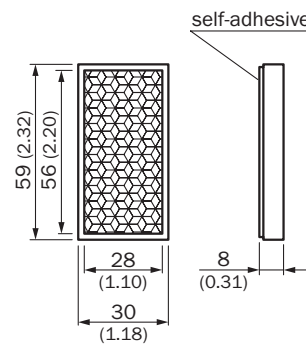
All dimensions in mm (inch)

**PL30A**



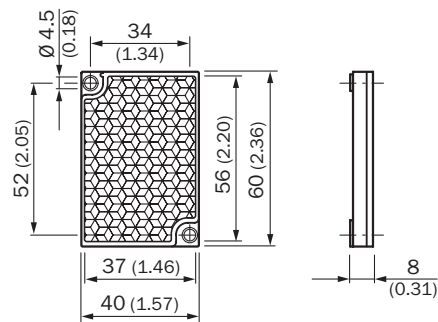
All dimensions in mm (inch)

**PL31A**



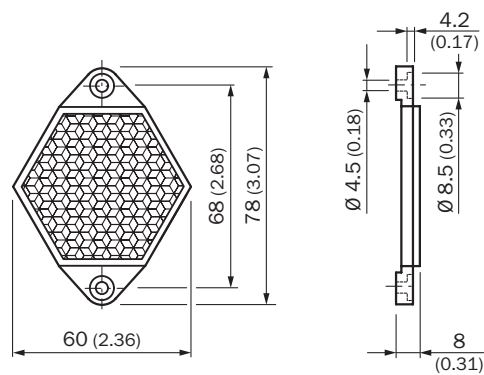
All dimensions in mm (inch)

**PL40A**



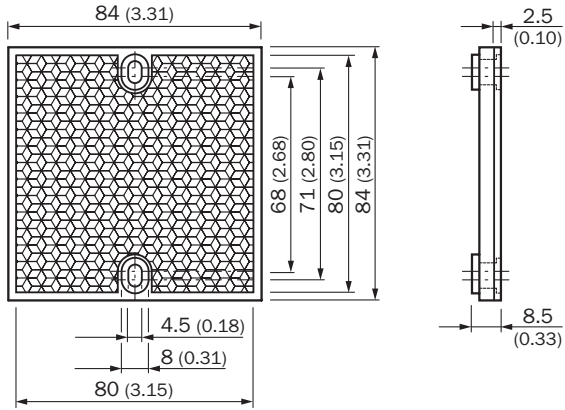
All dimensions in mm (inch)

**PL50A**



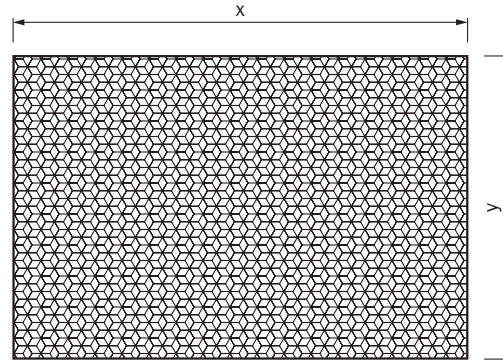
All dimensions in mm (inch)

**PL80A**



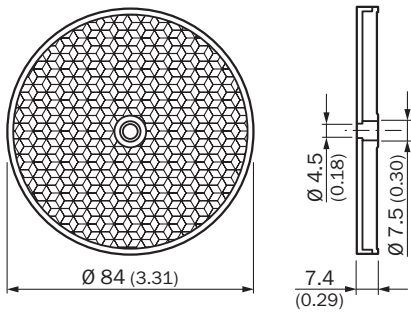
All dimensions in mm (inch)

**REF-DG-K**



x = 74.9 cm  
y = 91.4 cm

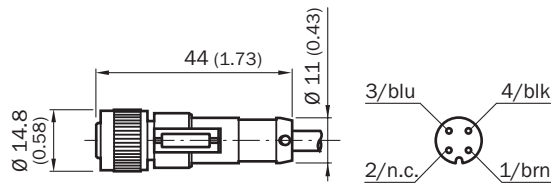
**C110A**



All dimensions in mm (inch)

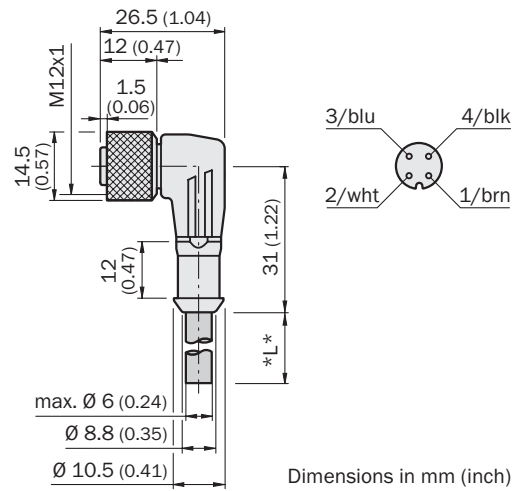
## Dimensional drawings Plug connectors and cables

### DOL-1204-GxxM, DOL-1204-GxxMC



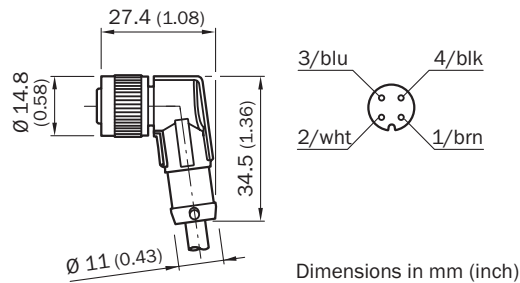
Dimensions in mm (inch)

### DOL-1204-WxxM



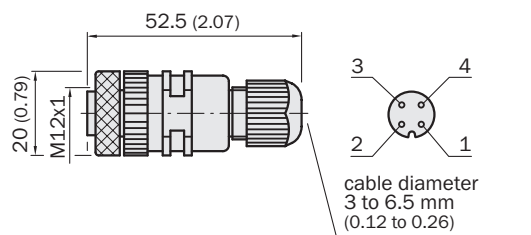
Dimensions in mm (inch)

### DOL-1204-WxxMC



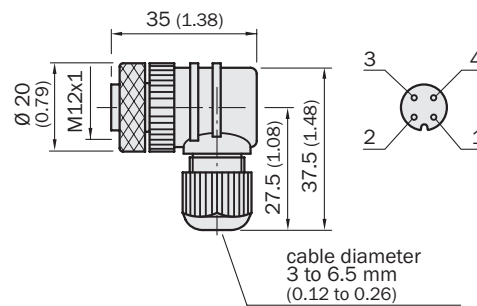
Dimensions in mm (inch)

### DOS-1204-G



Dimensions in mm (inch)

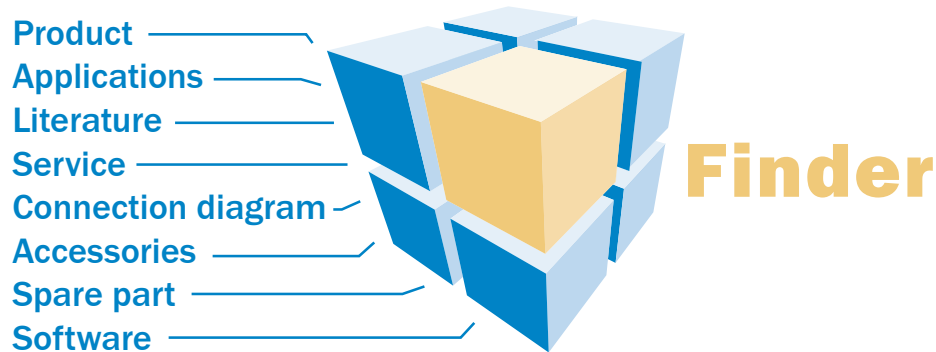
### DOS-1204-W



Dimensions in mm (inch)



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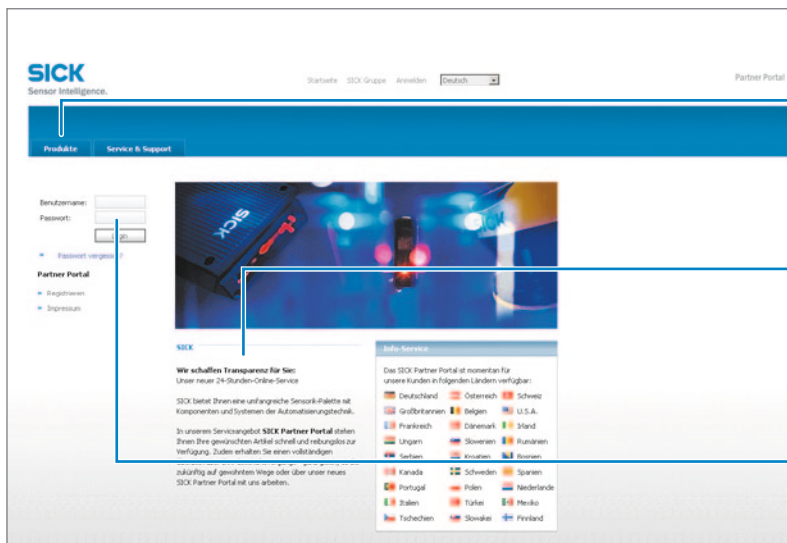
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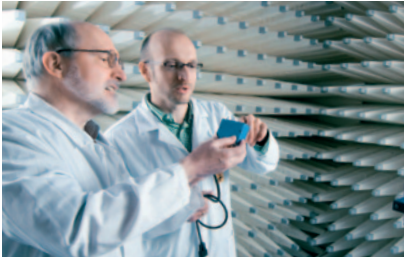
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