

W280-2 Photoelectric sensors

Sensor kit with mounting bracket and reflector









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

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→ 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. 1)	10 mm 2,000 mm
Sensing range	10 mm 1,700 mm
Type of light	Visible red light
Light source 2)	BrightLight LED
Light spot (distance)	Ø 45 mm (1,500 mm)
Sensing distance adjustment	Potentiometer

 $^{^{\}mbox{\tiny 1)}}$ Object with 90 % reflectance (referred to standard white DIN 5033).

Mechanics/electronics

	DC	AC
Supply voltage	10 V DC 30 V DC ¹⁾	24 V DC 240 V DC ²⁾ 24 V AC 240 V AC ²⁾
Residual ripple 3)	≤ 5 V _{pp}	-
Power consumption	≤ 20 mA ⁴⁾	≤ 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 $^{\rm 5)}$
Output current I _{max.}	100 mA	-
Switching current (switching voltage)	-	3 A (240 V AC) 3 A (30 V DC)
Response time	≤ 0.5 ms ⁶⁾	≤ 15 ms
Switching frequency 7)	1,000 Hz	33 Hz
Connection type	Cable, 2 m, 0.18 mm ^{2 8)} Connector Cable gland (depending on type)	Cable, 2 m, 0.76 mm ^{2 8)} Cable gland (depending on type)
Circuit protection	A ⁹⁾ B ¹⁰⁾ C ¹¹⁾ D ¹²⁾	A ⁹⁾ C ¹¹⁾
Protection class	₩	13)
Weight Cable, 3-wire, 2 m Cable, 5-wire, 2 m Connector M12, 4-pin Cable gland	-	- 310 g - 200 g
Overvoltage category	-	-2Hxxxx: 2 -2Rxxxx: 3

 $^{^{2)}}$ Average service life 100,000 h at Ta = +25 °C.

	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) 14)
EMC ¹⁵⁾	EN 60947-5-2	
Ambient operating temperature	-25 °C +55 °C	
Ambient storage temperature	-40 °C +70 °C	

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

Ordering information

DC

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

 $^{^{\}mbox{\tiny 1)}}$ Object with 90 % reflectance (referred to standard white DIN 5033).

AC/DC

Sensing range max. 1)	Output type	Switching mode	Connection	Model name	Part no.
10 mm 2,000 mm Relay		0.11. 5 : 0	WTE280-2H1531	6044731	
	D-1	11.41.	Cable, 5-wire, 2 m	WTE280-2R1531	6044759
	Light switching	Cabla dland	WTE280-2H4331	6044730	
			Cable gland	WTE280-2R4331	6044758

 $^{^{\}mbox{\tiny 1)}}$ Object with 90 % reflectance (referred to standard white DIN 5033).

 $^{^{2)}}$ \pm 10 %.

 $^{^{3)}}$ May not exceed or fall short of $V_{\rm S}$.

⁴⁾ Without load.

 $^{^{\}rm 5)}$ Provide suitable spark supression for inductive or capacitive loads.

 $^{^{\}rm 6)}$ Signal transit time with resistive load.

⁷⁾ With light/dark ratio 1:1.

 $^{^{8)}}$ Do not bend below 0 $^{\circ}\text{C}.$

 $^{^{9)}}$ A = V_S connections reverse-polarity protected.

 $^{^{10)}}$ B = inputs and output reverse-polarity protected.

¹¹⁾ C = interference suppression.

¹²⁾ D = outputs overcurrent and short-circuit protected.

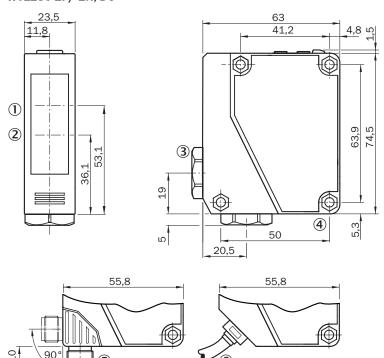
¹³⁾ Rated voltage 250 V AC/DC.

 $^{^{14}}$ 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

¹⁵⁾ 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.

Dimensional drawings

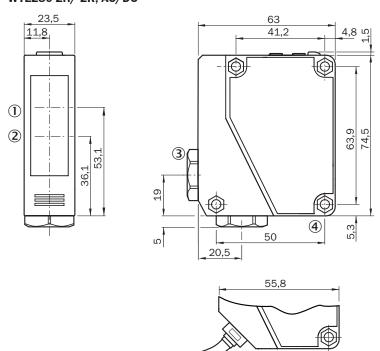
WTE280-2P/-2N, DC



- ① Center of optical axis, receiver
- ② Center of optical axis, sender
- $\ensuremath{\mathfrak{3}}$ Cable entry gland 3/8" for cable diameter 6 to 8 mm
- 4 Mounting hole, Ø 4.3 mm
- ⑤ Plug M12, 4-pin, 90° rotatable
- © Cable, 2 m, 3-pin, Ø 3,8 mm

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

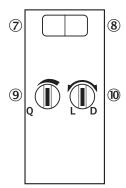
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- ① Center of optical axis, receiver
- 2 Center of optical axis, sender
- $\ensuremath{\mathfrak{3}}$ Cable entry gland 3/8" for cable diameter 6 to 8 mm
- 4 Mounting hole, Ø 4.3 mm
- ⑤ Cable, 2 m, 5-pin, Ø 6,3 mm

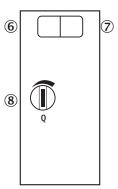
Adjustments

WTE280-2P/-2N, DC



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

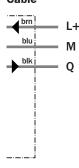
WTE280-2H/-2R, AC/DC



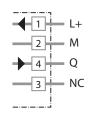
- 6 Status indicator LED green: Stability indicator
- ⑦ Status indicator LED, yellow: Status of received light beam
- Sensing distance adjustment: Potentiometer

Connection diagram

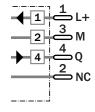
WTE280-2x1131, DC, Cable



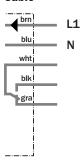
WTE280-2x4331, DC, Cable gland



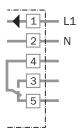
WTE280-2x2431, DC, Connector M12, 4-pin



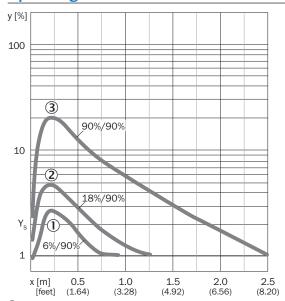
WTE280-2x1531, AC/DC, Cable



WTE280-2x4331, AC/DC, Cable gland

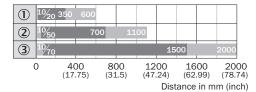


Operating reserve



- 1 Sensing range on black, 6 % remission
- $\ensuremath{\text{@}}$ Sensing range on gray, 18 % remission
- $\ensuremath{\mathfrak{B}}$ 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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Additional information

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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

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 ¹⁾ 0.01 m 12 m ²⁾	
Sensing range	0.01 m 13 m ¹⁾ 0.01 m 11 m ²⁾	
Type of light	Visible red light	
Light source 3)	BrightLight LED	
Light spot (distance)	Ø 260 mm (8 m)	
Sensitivity adjustment	Potentiometer	

¹⁾ PL80A.

Mechanics/electronics

	DC	AC
Supply voltage	10 V DC 30 V DC ¹⁾	24 V DC 240 V DC ²⁾ 24 V AC 240 V AC ²⁾
Residual ripple 3)	≤ 5 V _{pp}	-
Power consumption	≤ 20 mA ⁴⁾	≤ 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 ⁵⁾
Output current I _{max.}	100 mA	-
Switching current (switching voltage)	-	3 A (240 V AC) 3 A (30 V DC)
Response time	≤ 0.5 ms ⁶⁾	≤ 15 ms
Switching frequency 7)	1,000 Hz	33 Hz
Connection type	Cable, 2 m, 0.18 mm ^{2 8)} Connector Cable gland (depending on type)	Cable, 5 m, 0.76 mm ^{2 8)} Cable, 2 m, 0.76 mm ^{2 8)} Cable gland (depending on type)
Circuit protection	A ⁹⁾ B ¹⁰⁾ C ¹¹⁾ D ¹²⁾	A ⁹⁾ C ¹¹⁾
Protection class	(iii)	13)
Weight Cable, 3-wire, 2 m Cable, 5-wire, 2 m Cable, 5-wire, 5 m Connector M12, 4-pin Cable gland	- -	- 310 g 450 g - 200 g
Polarisation filter	√	

²⁾ P250.

 $^{^{\}rm 3)}$ Average service life 100,000 h at Ta = +25 °C.

	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) 14)
EMC ¹⁵⁾	EN 60947-5-2	
Ambient operating temperature	-25 °C +55 °C	
Ambient storage temperature	-40 °C +70 °C	

 $^{^{\}mbox{\tiny 1)}}$ Limit values, operation in short-circuit protected network max. 8 A.

Ordering information

DC

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

¹⁾ PL80A, C110.

AC/DC

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

¹⁾ PL80A, C110.

²⁾ ± 10 %.

 $^{^{\}rm 3)}$ May not exceed or fall short of $\rm V_{\rm S}.$

⁴⁾ Without load.

 $^{^{\}rm 5)}$ Provide suitable spark supression for inductive or capacitive loads.

 $^{^{\}rm 6)}$ Signal transit time with resistive load.

⁷⁾ With light/dark ratio 1:1.

⁸⁾ Do not bend below 0 °C.

 $^{^{\}rm 9)}$ A = $\rm V_{\rm S}$ connections reverse-polarity protected.

¹⁰⁾ B = inputs and output reverse-polarity protected.

¹¹⁾ C = interference suppression.

¹²⁾ D = outputs overcurrent and short-circuit protected.

¹³⁾ Rated voltage 250 V AC/DC.

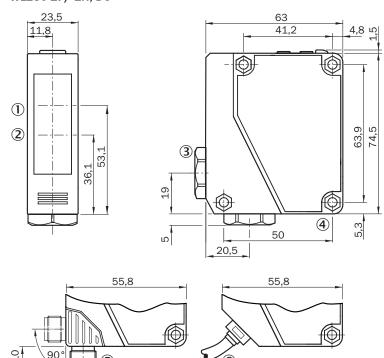
¹⁴⁾ In the case of a DC supply (relating to EN 61000-6-3) the length of cable between the supply source and the sensor must be < 30 m

¹⁵⁾ 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.

²⁾ P250.

Dimensional drawings

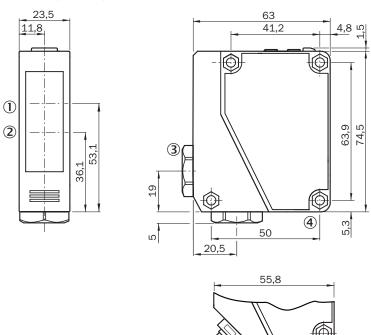
WL280-2P/-2N, DC



- ① Center of optical axis, receiver
- ② Center of optical axis, sender
- $\ensuremath{\mathfrak{3}}$ Cable entry gland 3/8" for cable diameter 6 to 8 mm
- 4 Mounting hole, Ø 4.3 mm
- ⑤ Plug M12, 4-pin, 90° rotatable
- © Cable, 2 m, 3-pin, Ø 3,8 mm

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

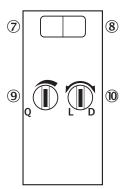
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- ① Center of optical axis, receiver
- ② Center of optical axis, sender
- $\ensuremath{\mathfrak{3}}$ Cable entry gland 3/8" for cable diameter 6 to 8 mm
- 4 Mounting hole, Ø 4.3 mm
- ⑤ Cable, 2 m, 5-pin, Ø 6,3 mm

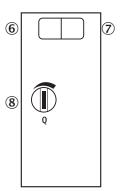
Adjustments

WL280-2P/-2N, DC



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

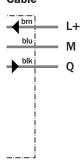
WL280-2H/-2R, AC/DC



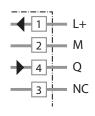
- 6 Status indicator LED green: Stability indicator
- ⑦ Status indicator LED, yellow: Status of received light beam
- Sensitivity adjustment: Potentiometer

Connection diagram

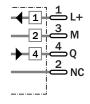
WL280-2x1131, DC, Cable



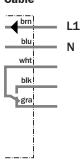
WL280-2x4331, DC, Cable gland



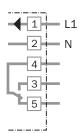
WL280-2x2431, DC, Connector M12, 4-pin



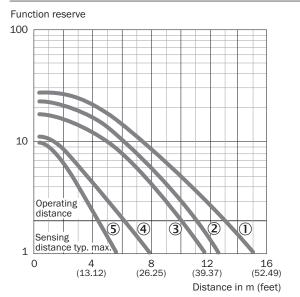
WL280-2x1x31, AC/DC, Cable



$\begin{tabular}{ll} WL280-2x4331, AC/DC, \\ Cable gland \end{tabular}$

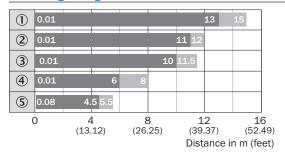


Operating reserve



- 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







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
- 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

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→ 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 1)	BrightLight LED
Light spot (distance)	Ø 0.6 m (20 m)
Sensitivity adjustment	Potentiometer

 $^{^{1)}}$ Average service life 100,000 h at Ta = +25 $^{\circ}\text{C}.$

Mechanics/electronics

	DC	AC
Supply voltage	10 V DC 30 V DC ¹⁾	24 V DC 240 V DC ²⁾ 24 V AC 240 V AC ²⁾
Residual ripple 3)	≤ 5 V _{pp}	-
Power consumption, sender	20 mA ⁴⁾	≤ 3.5 VA
Power consumption, receiver	20 mA ⁴⁾	≤ 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 ⁵⁾
Output current I _{max.}	100 mA	-
Switching current (switching voltage)	-	3 A (240 V AC) 3 A (30 V DC)
Response time	≤ 0.5 ms ⁶⁾	≤ 15 ms
Switching frequency 7)	1,000 Hz	33 Hz
Connection type	Cable, 2 m, 0.18 mm ^{2 8)} Connector Cable gland (depending on type)	Cable, 5 m, 0.76 mm ^{2 8)} Cable, 2 m, 0.76 mm ^{2 8)} Cable gland (depending on type)
Circuit protection	A ⁹⁾ B ¹⁰⁾ C ¹¹⁾ D ¹²⁾	A ⁹⁾ C ¹¹⁾
Protection class	€100	13)
	- - 300 g 380 g	- 620 g 900 g - 400 g
Overvoltage category	-	-2Hxxxx: 2 -2Rxxxx: 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) 14)
EMC ¹⁵⁾	EN 60947-5-2	
Ambient operating temperature	-25 °C +55 °C	
Ambient storage temperature	-40 °C +70 °C	

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

Ordering information

DC

Sensing range max.	Output type	Switching mode Connection		Model name	Part no.
0 m 60 m			Cable, 3-wire, 2 m	WSE280-2P1131	6044743
		Light/dark-switching	Connector M12, 4-pin	WSE280-2P2431	6044745
			Cable gland	WSE280-2P4331	6044741
			Cable, 3-wire, 2 m	WSE280-2N1131	6044744
		Light/dark-switching	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.
		Cable, 5-wire, 5 m	WSE280-2H1631	6044749	
0 m 60 m Relay Light switching		Cabla E wira 2 m	WSE280-2H1531	6044748	
	Relay	Light switching	Cable, 5-wire, 2 m	WSE280-2R1531	6044763
			Cable dand	WSE280-2H4331	6044747
			Cable gland	WSE280-2R4331	6044762

 $^{^{2)}}$ \pm 10 %.

³⁾ May not exceed or fall short of V_s.

⁴⁾ Without load.

 $^{^{\}rm 5)}$ Provide suitable spark supression for inductive or capacitive loads.

 $^{^{\}rm 6)}$ Signal transit time with resistive load.

⁷⁾ With light/dark ratio 1:1.

 $^{^{8)}}$ Do not bend below 0 $^{\circ}\text{C}.$

 $^{^{9)}}$ A = V_S connections reverse-polarity protected.

 $^{^{\}rm 10)}$ B = inputs and output reverse-polarity protected.

¹¹⁾ C = interference suppression.

¹²⁾ D = outputs overcurrent and short-circuit protected.

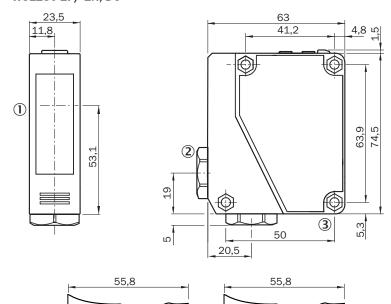
¹³⁾ Rated voltage 250 V AC/DC.

¹⁴⁾ 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

¹⁵⁾ 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.

Dimensional drawings

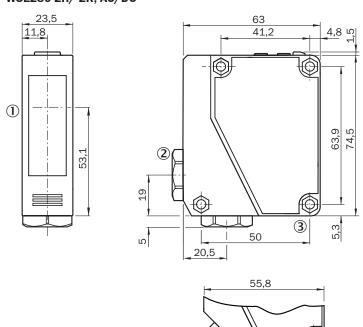
WSE280-2P/-2N, DC



- ① Centre of optical axis, sender and receiver
- ② Cable entry gland 3/8" for cable diameter 6 to 8 mm
- 3 Mounting hole, Ø 4.3 mm
- 4 Connector M12, 5-pin, rotatable by 90°
- ⑤ Cable, 2 m, 3-pin, Ø 3,8 mm

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

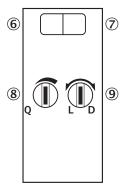
8



- ① Centre of optical axis, sender and receiver
- 2 Cable entry gland 3/8" for cable diameter 6 to 8 mm
- 3 Mounting hole, Ø 4.3 mm
- 4 Cable, 2 m, 5-pin, Ø 6,3 mm

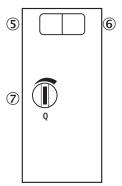
Adjustments

WSE280-2P/-2N, DC



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

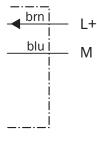
WSE280-2H/-2R, AC/DC



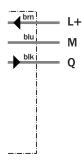
- ⑤ Status indicator LED green: Stability indicator
- ⑥ Status indicator LED, yellow: Status of received light beam (only receiver WE)
- 7 Sensitivity adjustment: Potentiometer (only receiver WE)

Connection diagram

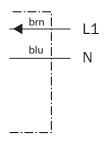
WSE280-2x1131 Sender, DC Cable



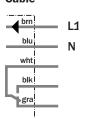
WSE280-2x1131 Receiver, DC Cable



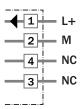
WSE280-2x1x31 Sender, AC/DC Cable



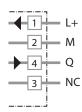
WSE280-2x1x31 Receiver, AC/DC Cable



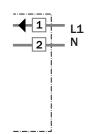
WSE280-2x4331 Sender, DC Cable gland



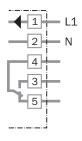
WSE280-2x4331 Receiver, DC Cable gland



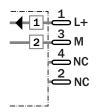
WSE280-2x4331 Sender, AC/DC Cable gland

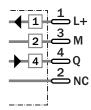


WSE280-2x4331 Receiver, AC/DC Cable gland

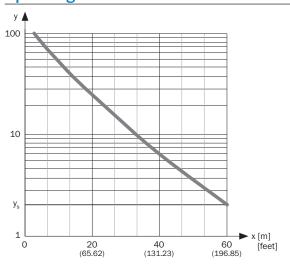


WSE280-2x2431 Sender, DC Connector M12, 5-pin WSE280-2x2431 Receiver, DC Connector M12, 5-pin

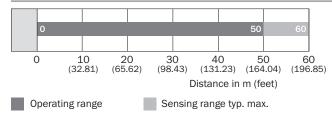




Operating reserve



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

, 10000001, typ	o. Oniversal terminal eyetems					
Figure	M aterial	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	•	•	•
		BEF-MS12G-A	4056054	•	•	•
		BEF-MS12G-B	4056055	•	•	•
	Steel, zinc coated	BEF-MS12L-A	4056052	•	•	•
	0.000, <u>1</u> 0 000.00	BEF-MS12L-B	4056053	•	•	•
		BEF-MS12Z-A	4056056	•	•	•
		BEF-MS12Z-B	4056057	•	•	•
0	Aluminum	BEF-RMC-D12	5321878	•	•	•

Reflectors

Reflectors								
Figure	Accessory type	Dimensions (L x W x H)	Material	Model name	Part no.	WTE280-2	WL280-2	WSE280-2
		47 mm x 47 mm	PMMA/ABS	P250	5304812	-	•	_
2	Angular	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	-	•	_
Part Comment		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	-	•	-

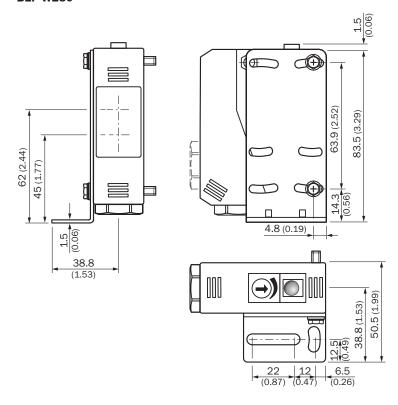
Plug connectors and cables

- 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		
				2 m	DOL-1204-G02M	6009382	•	•	•		
		IP 67	PVC	5 m	DOL-1204-G05M	6009866	•	•	•		
		11 01	1 10	10 m	DOL-1204-G10M	6010543	•	•	•		
	Straight			15 m	DOL-1204-G15M	6010753	•	•	•		
	Stagn.			2 m	DOL-1204-G02MC	6025900	•	•	•		
		IP 68	PUR halogen free	5 m	DOL-1204-G05MC	6025901	•	•	•		
1			IF 00	ron nalogen nee	10 m	DOL-1204-G10MC	6025902	•	•	•	
						15 m	DOL-1204-G15MC	6034749	•	•	•
		IP 67		2 m	DOL-1204-W02M	6009383	•	•	•		
			IP 67	IP 67	IP 67 PVC	IP 67 PVC	5 m	DOL-1204-W05M	6009867	•	•
	Angled			10 m	DOL-1204-W10M	6010541	•	•	•		
	Aligieu			2 m	DOL-1204-W02MC	6025903	•	•	•		
		IP 68	PUR halogen free	5 m	DOL-1204-W05MC	6025904	•	•	•		
				10 m	DOL-1204-W10MC	6025905	•	•	•		
	Straight		PBT	-	DOS-1204-G	6007302	•	•	•		
	Angled	IP 67	PBT	-	DOS-1204-W	6007303	•	•	•		

Dimensional drawings Mounting brackets/plates

BEF-W280



All dimensions in mm (inch)

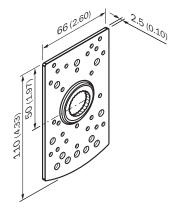
Dimensional drawings Terminal and alignment brackets

BEF-KHS-F01



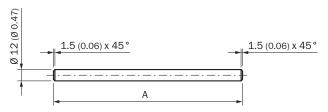
All dimensions in mm (inch)

BEF-KHS-N04



All dimensions in mm (inch)

BEF-MS12G-A BEF-MS12G-B

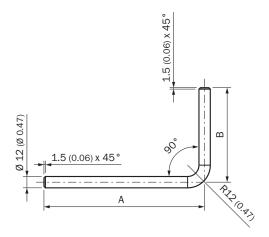


All dimensions in mm (inch)

A = 200 mm (BEF-MS12G-A)

A = 300 mm (BEF-MS12G-B)

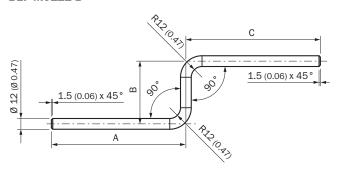
BEF-MS12L-A BEF-MS12L-B



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

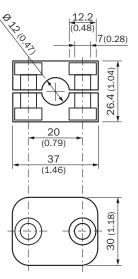


All dimensions in mm (inch)

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

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

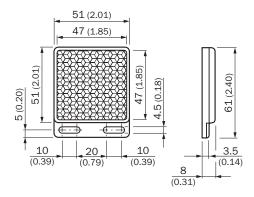
BEF-RMC-D12



All dimensions in mm (inch)

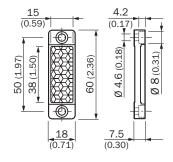
Dimensional drawings Reflectors

P250



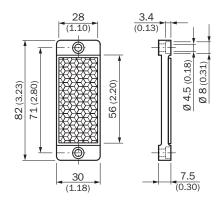
All dimensions in mm (inch)

PL20A



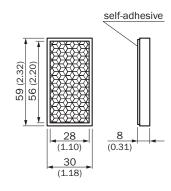
All dimensions in mm (inch)

PL30A



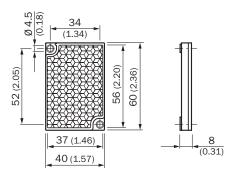
All dimensions in mm (inch)

PL31A



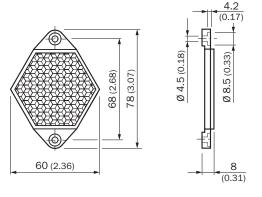
All dimensions in mm (inch)

PL40A



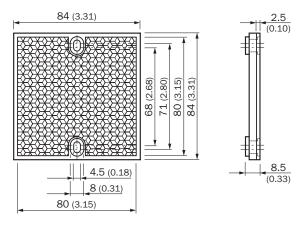
All dimensions in mm (inch)

PL50A



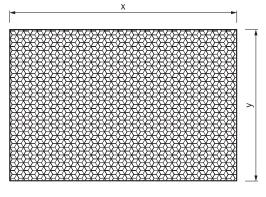
All dimensions in mm (inch)

PL80A



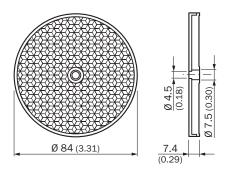
All dimensions in mm (inch)

REF-DG-K



x = 74.9 cmy = 91.4 cm

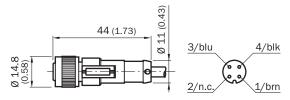
C110A



All dimensions in mm (inch)

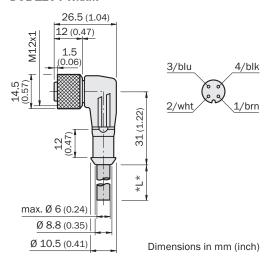
Dimensional drawings Plug connectors and cables

DOL-1204-GxxM, DOL-1204-GxxMC

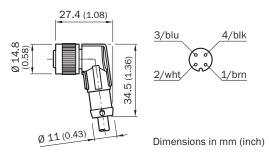


Dimensions in mm (inch)

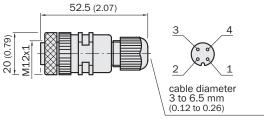
DOL-1204-WxxM



DOL-1204-WxxMC

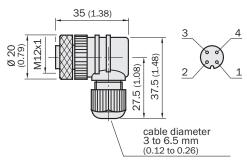


DOS-1204-G



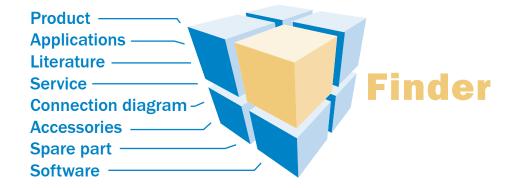
Dimensions in mm (inch)

DOS-1204-W



Dimensions in mm (inch)

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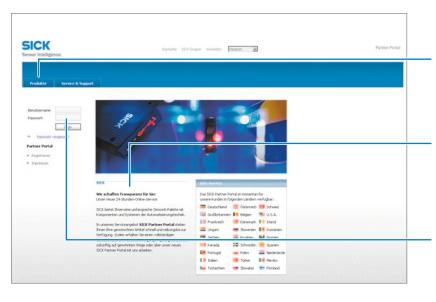
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