

Photoelectric sensors OR12

- OR12 ES Through-beam sensors
- OR12 ES Through-beam sensors with reduced interior beam
- OR12 RS Retroreflective sensors
- OR12 RT Diffuse reflective sensors



12 x 12 x 55 mm

Through-beam sensors
6 m (19.7 ft)¹⁾

12 x 12 x 55 mm

Through-beam sensors
1 m (3.28 ft)

Sensing type	
Sensing distance / range	
Model description	
PNP	
LA	Part number
	Wiring diagram (page/pos.)
Stock status: Ex stock/Built to order	
Model description	
PNP	
DA	Part number
	Wiring diagram (page/pos.)
Stock status: Ex stock/Built to order	
Model description	
[1] NPN	
LA	Part number
[2] Transmitter	Wiring diagram (page/pos.)
Stock status: Ex stock/Built to order	
Model description	
NPN	
DA	Part number
	Wiring diagram (page/pos.)
Stock status: Ex stock/Built to order	
Voltage range	
Short-circuit protection	
Output current	max.
Switching frequency	max.
LED for output function/supply voltage/diagnostic	
Adjustable sensitivity	
Timer function	
Diagnostic function	
Temperature range	min./max.
Protection type	
Screw-clamp termination	(page/Pos.)
Cable length (2 m)	Cross section (mm ²)
Plug	(page/Pos.)
Accessories	(page/Pos.)

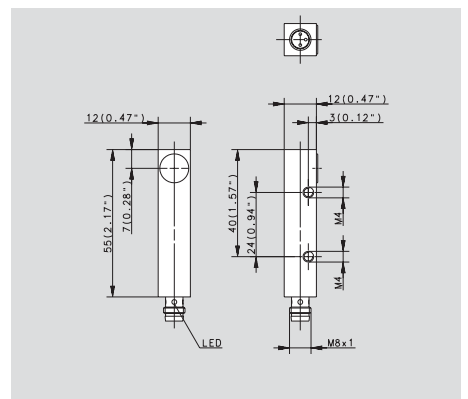
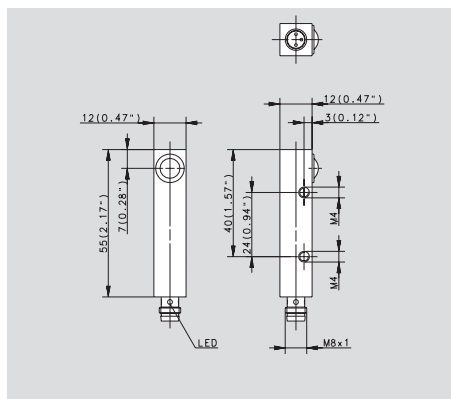
–	OR12-EE-DHTP-06.0-SL	–	OR12 EE-DHTP-01.0-SL
	655.1955.001		655.1955.002
	271/4		271/4
	●/–		●/–
OR12 EE-DDTP-06.0-SL	OR12-EE-DDTP-06.0-SLE	OR12 EE-DDTP-01.0-SL	OR12 EE-DDTP-01.0-SLE
655.1755.001	655.1755.003	655.1755.002	655.1755.004²⁾
271/4	271/4	271/4	271/4
●/–	–/●	●/–	–/●
OR12 SE-DOOS-06.0-SVC	[2] –	OR12 SE-DOOS-01.0-SVC	[2] –
655.1055.002		655.1055.003	
271/3		271/3	
●/–		●/–	
–	OR12-EE-DDTN-06.0-SL	–	OR12 EE-DDTN-01.0-SL
	655.1155.001		655.1155.002
	271/7		271/7
	–/●		–/●
SE: 10–36 V DC	EE: 10–36 V DC	SE: 10–36 V DC	EE: 10–36 V DC
–	●	–	●
–	200 mA	–	200 mA
–	>100 Hz	–	>100 Hz
–/●/–	●/–/–	–/●/–	●/–/–
–	–	–	–
–	–	–	–
●	–	●	–
–5 °C/+70 °C	–5 °C/+70 °C	–5 °C/+70 °C	–5 °C/+70 °C
+23 °F/+158 °F	+23 °F/+158 °F	+23 °F/+158 °F	+23 °F/+158 °F
IP 65/NEMA 12	IP 65/NEMA 12	IP 65/NEMA 12	IP 65/NEMA 12
–	–	–	–
–	–	–	–
280/1, 2; 282	280/1, 2; 282	280/1, 2; 282	280/1, 2; 282
–	273/5	273/5	273/5

Dimensions

¹⁾ Range 10 m and 60 m LASER on request

²⁾ Adjustable sensitivity

All dimensions in mm (inch)





12 x 12 x 65 mm

Retroreflective sensors

4 m (13.1 ft)

OR12 RS-DHTP-04.0-SL

655.4955.001

271/4

-/●

OR12 RS-DDTP-04.0-SL

655.4755.001

271/4

●/-

OR12 RS-DHTN-04.0-SL [1]

655.4355.001

271/7

-/●

OR12 RS-DDTN-04.0-SL

655.4155.001

271/7

-/●

10-36 V DC

●

200 mA

>100 Hz

●/-/-

-

-

-

-5 °C/+70 °C

+23 °F/+158 °F

IP 65/NEMA 12

-

-

280/1, 2; 282

273/5, 274



12 x 12 x 60 mm

Diffuse reflective sensors

200 mm (7.87")

OR12 RT-DHTP-0200-SLE

655.7955.001

271/4

●/-

OR12 RT-DDTP-0200-SLE

655.7755.001

271/4

-/●

OR12 RT-DHTN-0200-SLE [1]

655.7355.001

271/7

-/●

OR12 RT-DDTN-0200-SLE

655.7155.001

271/7

-/●

10-36 V DC

●

200 mA

>100 Hz

●/-/-

●

-

-

-5 °C/+70 °C

+23 °F/+158 °F

IP 65/NEMA 12

-

-

280/1, 2; 282

273/5



12 x 12 x 65 mm

Diffuse reflective sensors

1.2 m (3.94 ft)

OR12 RT-DHTP-01.2-SLE

655.7955.002

271/4

●/-

OR12 RT-DDTP-01.2-SLE

655.7755.002

271/4

-/●

OR12 RT-DHTN-01.2-SLE [1]

655.7355.002

271/7

-/●

OR12 RT-DDTN-01.2-SLE

655.7155.002

271/7

-/●

10-36 V DC

●

200 mA

>100 Hz

●/-/-

●

-

-

-5 °C/+70 °C

+23 °F/+158 °F

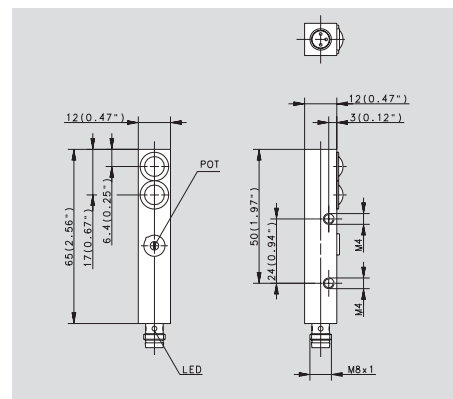
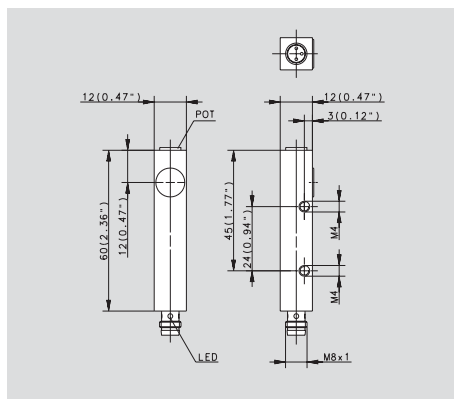
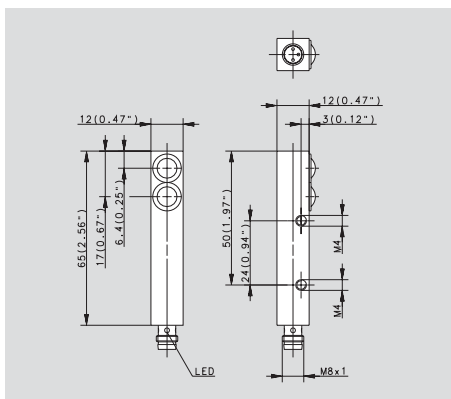
IP 65/NEMA 12

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280/1, 2; 282

273/5



Photoelectric sensors OR12

OR12 ES Laser-through-beam sensors
OR12 FF Convergent beam sensor
(Fixed-Focus)



12 x 12 x 55 mm

12 x 12 x 65 mm

Sensing type	
Sensing distance / range	
Model description	
PNP	
DA	Part number
	Wiring diagram (page/pos.)
Stock status: Ex stock/Built to order	
Model description	
PNP	
LA	Part number
	Wiring diagram (page/pos.)
Stock status: Ex stock/Built to order	
Model description	
Transmitter	
	Part number
	Wiring diagram (page/pos.)
Stock status: Ex stock/Built to order	

Laser-through-beam sensors		Convergent beam sensor (Fixed-Focus)
60 m (197 ft)		50 mm
Model description		
-	OR12-EE-DDTG-60.0-SL	-
	655.1755.005	
	-	
	●/-	
Model description		OR12 FF-DHTP-0050-SL
		655.8955.001
		271/4
		●/-
Model description		
OR12 SE-DOOS-60.0-SVC		
	655.1055.004	
	-	
	●/-	

Voltage range		
Short-circuit protection		
Output current		max.
Switching frequency		max.
LED for output function/supply voltage/diagnostic		
Adjustable sensitivity		
Timer function		
Diagnostic function		
Temperature range		min./max.
Protection type		
Screw-clamp termination		(page/Pos.)
Cable length (2 m)	Cross section	(mm ²)
Plug		(page/Pos.)
Accessories		(page/Pos.)

SE: 10-36 V DC	EE: 10-36 V DC	10-36 V DC
-	●	●
-	55 mA	200 mA
-	>1000 Hz	>100 Hz
-/●/-	●/-/-	●/-/-
-	-	-
-	-	-
●	-	-
-10 °C/+50 °C	-10 °C/+50 °C	-5 °C/+70 °C
+14 °F/+122 °F	+14 °F/+122 °F	-
IP 65/NEMA 12	IP 65/NEMA 12	IP 65/NEMA 12
-	-	-
-	-	-
280/1, 2; 282	280/1, 2; 282	280/1, 2; 282
273/5	273/5	273/5

Dimensions

All dimensions in mm (inch)

