

Cubic Miniaturized Photo Sensor



Micro Detectors

Italian Sensors Technology



FinMasi Group Company



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Cubic Miniaturized Photo Sensor

PRODUCT HIGHLIGHTS



21 x 11 x 31,4mm cubic dimension
High power RED LED or **Infrared** emission
stainless steel AISI316L metallic housing
PPSU lenses material
Switching frequency **500Hz**
Cable or **M8** connectors
Complementary outputs (**NO +NC**)
IP68 IP69K protection degree
-25°...+60°C operating temperature range

Diffused 200, 1.000 mm
BGS 25...200mm
RRX polarized 6m
Through beam 15m



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DIFFUSED



BACKGROUND SUPPRESSION



POLARIZED



THROUGH BEAM



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QFR8/BP-1F

EMISSION
R = Red
I = Infrared

OUTPUT
B = Compl. Outputs
(NO+NC)
0 = Emitter

OUTPUT
P = PNP
N = NPN
0 = Emitter

CONNECTION
A = Cable (2m)
F = Plug M8 (4pin)

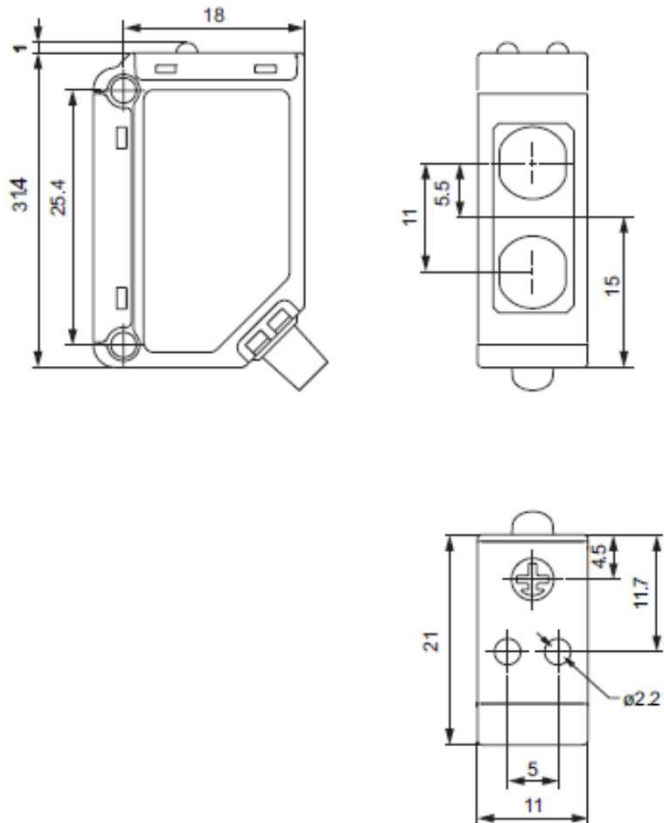
MODELS
4 = diffuse (wide angle) 200mm
8 = diffuse 1.000mm
N = polarized 6m
S = background suppression 25..200mm
H = Emitter 15m
D = Riceiver 15m

HOUSING
1= Metallic
Stainless steel
AISI316L

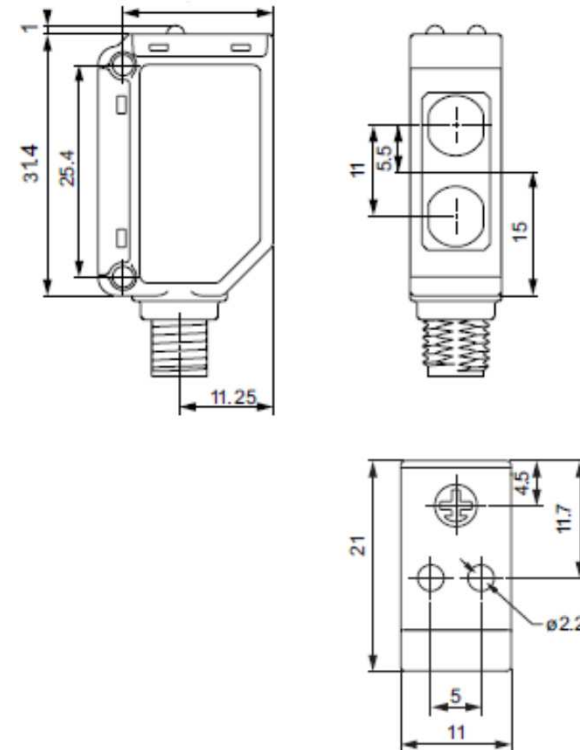
* = the products with pig-tail are not cULus at the moment

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CABLE VERSION



M8 CONNECTOR VERSION



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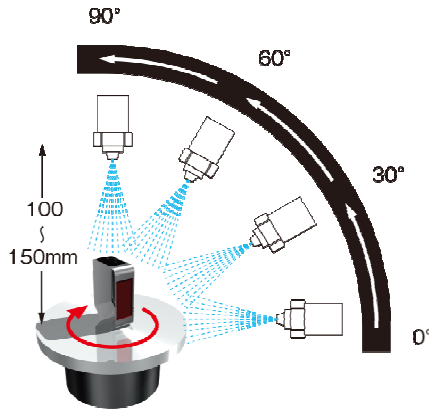
MODELS AVAILABLE

model	distance	emission	adjustment	housing	cable		plug M8	
					NPN (NO+NC)	PNP (NO+NC)	NPN (NO+NC)	PNP (NO+NC)
diffuse reflection	200 mm	infrared		metallic	QFI4/BN-1A	QFI4/BP-1A	QFI4/BN-1F	QFI4/BP-1F
	1000 mm				QFR8/BN-1A	QFR8/BP-1A	QFR8/BN-1F	QFR8/BP-1F
background suppression	200 mm	red	●	metallic	QFRS/BN-1A	QFRS/BP-1A	QFRS/BN-1F	QFRS/BP-1F
polarized	6 m				QFRN/BN-1A	QFRN/BP-1A	QFRN/BN-1F	QFRN/BP-1F
emitter	15 m	infrared	-	metallic	QFIH/00-1A	-	QFIH/00-1F	-
receiver	15 m		●		QFID/BN-1A	QFID/BP-1A	QFID/BN-1F	QFID/BP-1F

WIDE BEAM, to detect : SHINNY objects, TRANSPARENT objects, Objects WITH HOLES

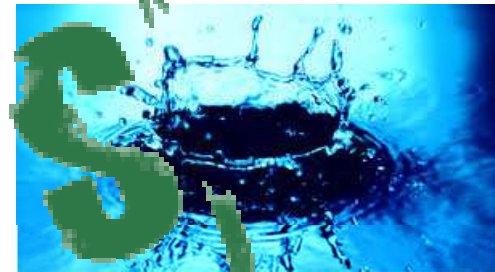


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IP69K test

Pressure **80-100bar**
 Flow rate : **14- 16 litres/min**
 Temperature : **80 °C/-5 °C**
 Nozzle angles : **0 °- 30 °- 60 °- 90 °**
 Test periods : **30 sec for each angle**



PASS

ECOLAB®

ECOLAB test

Topax 56	5%	240h@50 °C
P3 Hypochloron	1%	240h@24 °C
TOPAZ CL1	5%	240h@50 °C
TOPAZ AC1	4%	240h@40 °C
TOPAZ MD3	5%	240h@50 °C
P3 topactive OKTO	1%	240h@24 °C

IP68 test



WATER
 Depth: **1m**
 Time : **7 days**
 Temperature: **23 °C**

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COMPETITORS

IFM
O6 WetLine



Diffuse: 500mm
Background suppression: 200mm
Polarized: 5m
Thru-beam : 10m

Cable/Plug M8
NPN/PNP

SICK
G6 inox



Diffuse : 300 and 900mm
BgS: 250mm
Polarized: 6m
Thru-beam : 15m

Cable/Plug M8
NPN/PNP

BAUMER
O300



Diffuse : 300mm
Diffuse for transp...: 300mm
BgS: 200mm
Polarized : 6m

Cable/plug M12
Push-pull



BANNER
QM28
QMH 28



BgS : 200mm
Polarized: 3m
Polarized coax. 2,5m
Thru-beam : 8,5m

Cable/plug M8
PNP/NPN

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