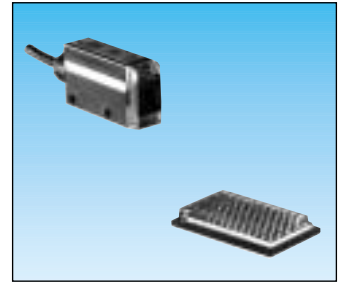
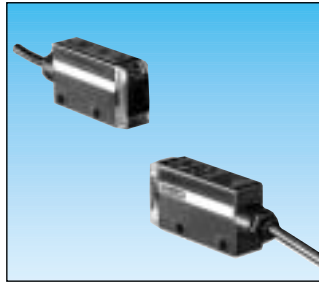


"Miniature" range photoelectric sensors

- Ranges up to 8 m
- Minimum size of object 0.5 mm
- Easily fitted : width 12 mm
- Sensitivity adjustment
- Stability indicator
- Output NPN/PNP
- Complementary functions of "Light on" "Dark on"



Features

Barrier
Axial

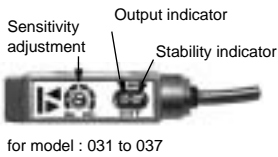
Barrier / reflector
Axial

Part numbers

		89 401 031	89 401 033
Maximum detection distance	cm	800	200
Minimum object size * Near emitter ** white paper	mm	Ø 8*	Ø 6*
Specifications			
Supply voltage	V \equiv	10-30 \pm 10%	10-30 \pm 10%
Voltage variation	%	\leq 10	\leq 10
Outputs			
Polarity PNP or NPN		PNP/NPN	PNP/NPN
Programmable for NO or NC operation		NO/NC	NO/NC
Max load	%	100 mA/30V	100mA/30V
Voltage sink	V	\leq 1.3	\leq 1.3
Protection against short-circuits		●	●
Sensing			
Modulated IR LED light source ● ●			
Max ambient light	Natural	lux	10000
	Artificial	lux	3000
Max frequency		kHz	0.17
Response time		ms	\leq 3
Operation and use			
Max absorbed current			18
Temperature range	Use	°C	-25 + 60
	Stored	°C	-25 +70
Relative humidity		mA	35 / 85
Insulation		°C	\geq 20 M Ω / 500 V \equiv
Dielectric strength		°C	1000 V 50/60 Hz / 1 min
Electric shock resistance (normal method)		%	1000 V 100 Hz / 1 μ s
Vibration resistance in 3 axes (amplitude)			10-55 Hz / 2 H (1.5 mm)
Shock resistance / 3 axes			50 g
Degree of protection			IP 66
Housing material			PBT
Connection (cable)			2 m / 0.3 mm ²
Fixture : Bracket and screws supplied in box			● ●
Weight	g	105	55

Features

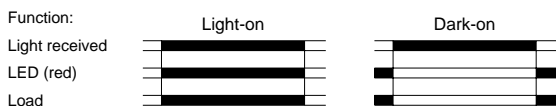
Connections

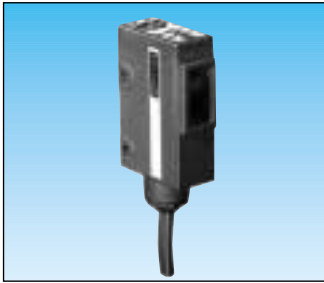


	Function	Output polarity	
	(NO) (NC)	NPN	PNP
Brown			+
Black		Load	
White			
Red			Load
Blue			-

10 • 30 V \equiv \pm 10 %

Output logic diagram





Proximity
Axial

89 401 032

30
Ø 5**

10-30 ±10%
≤ 10

PNP/NPN
NO/NC
100mA/30V
≤ 1.3

10000
3000
0.17
≤ 3

15
-25 + 60
-25 +70
35 / 85
≥ 20 MΩ / 500 V \equiv
1000 V 50/60 Hz / 1 min
1000 V 100 Hz / 1µs
10-55 Hz / 2 H (1.5 mm)

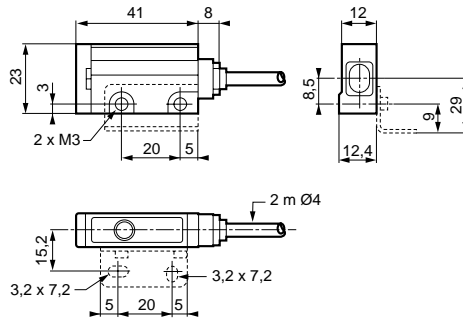
50 g
IP 66
PBT
2 m / 0.3 mm²

55

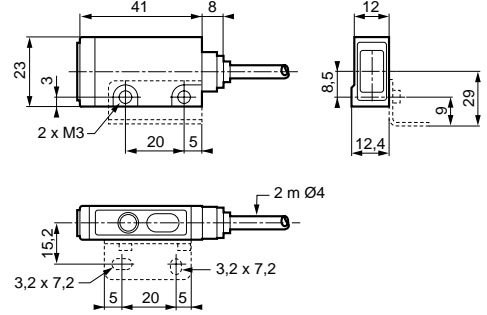
1

Dimensions

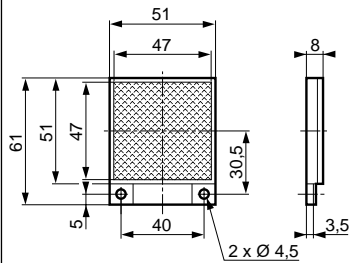
89 401 031 - Axial



89 401 032 - 89 401 033 - Axial



Reflector 89 401 909



To order, specify:

Standard products,
stocked

1 Part number

Example : "Miniature" range photoelectric sensor 89 401 031