

# FARS/BP-1E

cylindrical photosensors

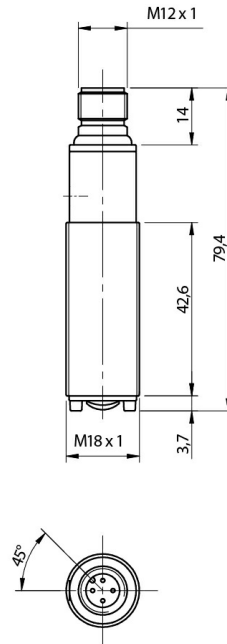


Micro Detectors

Italian Sensors Technology



Indicative image



## Detection properties

Nominal sensing distance	30..130mm with white target 100 x 100mm
Thermal drift of Sr	$\leq 10\% S_r, \leq 3\% S_r @ S_d > 60\text{mm}, < 110 \text{ mm}$
Repeat Accuracy	5%
Sensitivity adjustment	Trimmer

## Application

Function Principle	Background suppression
Optic position	Axial

## Outputs

Output type	PNP
Output Function	NO+NC
Switching frequency	1KHz

## Electrical data

Operating Voltage	10...30Vdc
No-Load supply current	≤25mA
Load current	≤100mA
Leakage current	≤10μA
Output voltage drop	2V max. IL =100 mA
Max ripple content	10%
LED indicators	Yellow (output state)
Time delay before availability	≤200ms
Short-circuit protection	Short circuit (autoreset)
Emission	Red (660 nm)
Interference to external light	5000lux (incandescent lamp), 10000lux (sunlight)

## Mechanical data

Dimensions	M18 x 1 /L =79,4mm
Weight	100g
Housing Material	Nickel plated brass / PC plug
Connections	M12 plug
Active Head Material	PMMA
Tightening torque	25Nm
Operating temperature	- 25°C...+ 70° C (Without freeze)
Diameter/Dimension	M18

## Test/Approvals

Approvals	CE, cULus
EMC compatibility	EN 60947-5-2
Shocks and vibrations	Vibration IEC 60068-2-6 / Shock IEC 60068-2-27
Degree of protection	IP67

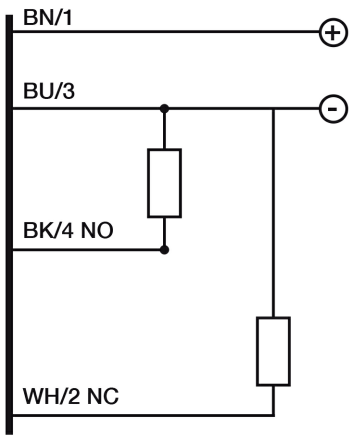
## Accessories

Supplied Accessories	nuts M18 x 1, screwdriver
----------------------	---------------------------

---

# ELECTRICAL DIAGRAMS OF THE CONNECTIONS

---

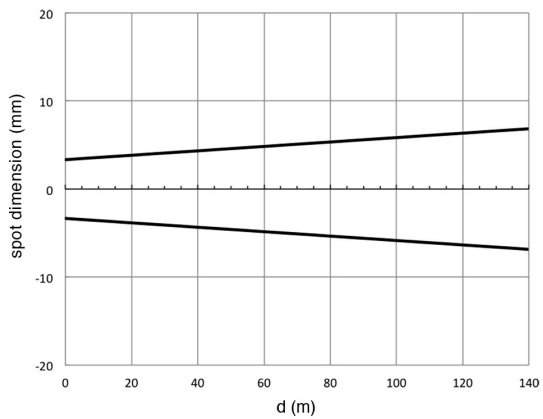


## CONNECTOR

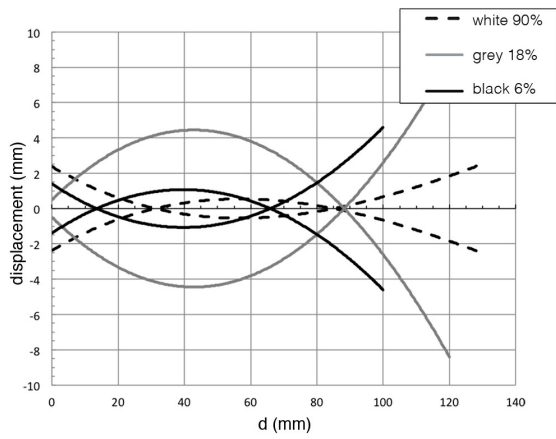


## RESPONSE CURVES

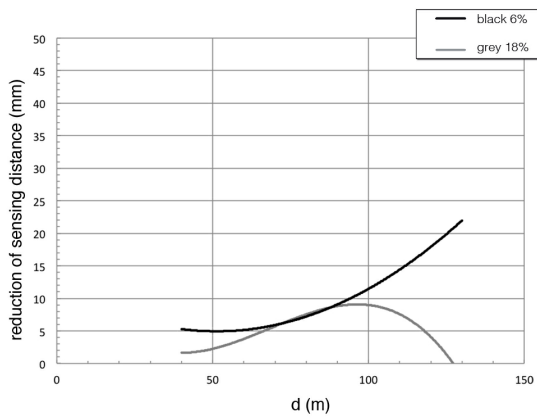
### Dimensione Spot



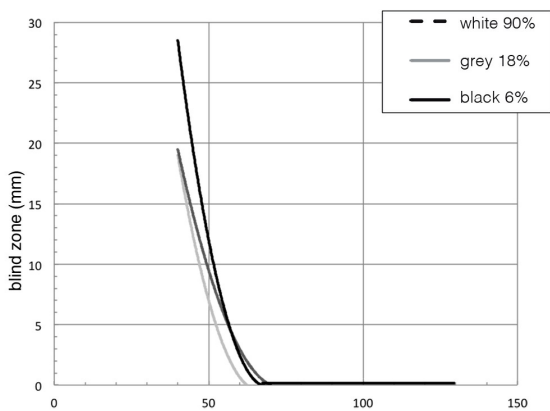
### Disassamento Parallelo



## Riduzione distanza di rilevamento



## Zona cieca



Fax 059 253973

E-mail [info@microdetectors.com](mailto:info@microdetectors.com)