

## S3N



### Detection properties

Nominal sensing distance	800mm
Sensitivity adjustment	1 turn trimmer
Minimum sensing distance (blind zone)	0mm

### Application

Function Principle	Background suppression
Notes	white target Kodak 90% 100 x 100mm
Optic position	Radial 90°
Functions	Background suppression

### Outputs

Output type	PNP L/D selectable by trimmer L/D Selectable
Output Function	L/D Selectable
Switching frequency	500Hz
Response time	1ms

### Electrical data

Operating Voltage	10...30VDC
No-Load supply current	≤ 35mA
Load current	≤100mA
Leakage current	≤ 300 µA
Output voltage drop	≤2V@Iload=100mA
Max ripple content	≤10%
LED indicators	yellow OUTPUT LED, green POWER ON LED
Short-circuit protection	Yes
Reverse Polarity Protection	Yes
Emission	LED Red (635nm)
Interference to external light	according to EN 60947-5-2 : 2020
Impulsive Overvoltage Protection	Yes
Insulation resistance	>20 MΩ 500 Vdc, between electronics and housing
Contact resistance	500 Vac 1 min., between electronics and housing
0,1µF @Vmax - 1µF @Vmin	Yes

### Mechanical data

Housing Material	Plastic Polymer Fiber Glass reinforced
Connections	M8 plug 4pin
Active Head Material	PMMA
Storage temperature	-25°C...+70°C
Plug connector material	Metal
shaft material	POM, PMMA
Diameter/Dimension	Cubic

### Test/Approvals

Approvals	CE cULus
EMC compatibility	EN 60947-5-2
Shocks and vibrations	0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)

### Generical Data

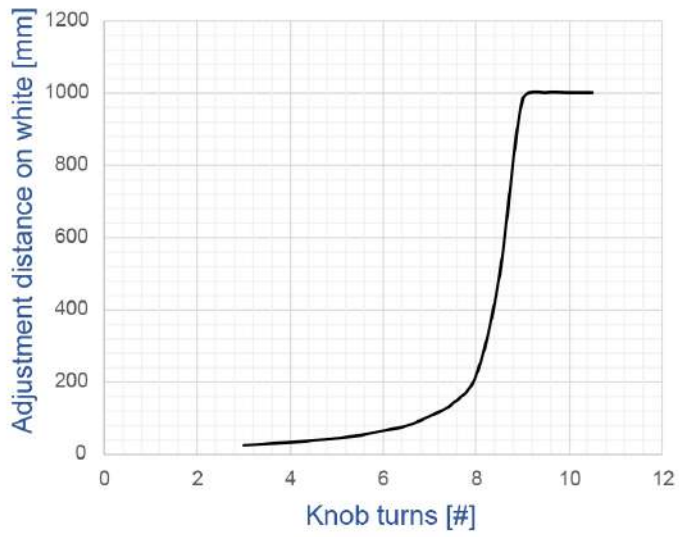
Dimensions	11x31x19 mm
Operating Temperature	-25°C ... 55°C
Mechanical Protection	IP67

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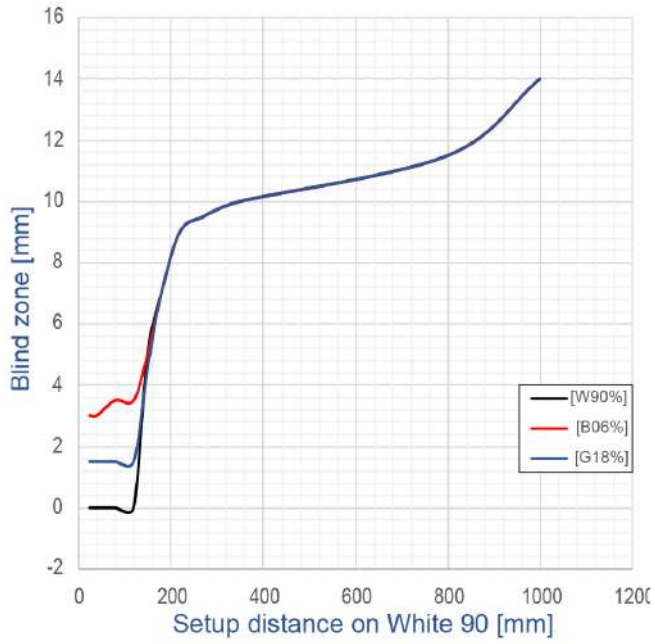
#### RESPONSE CURVES

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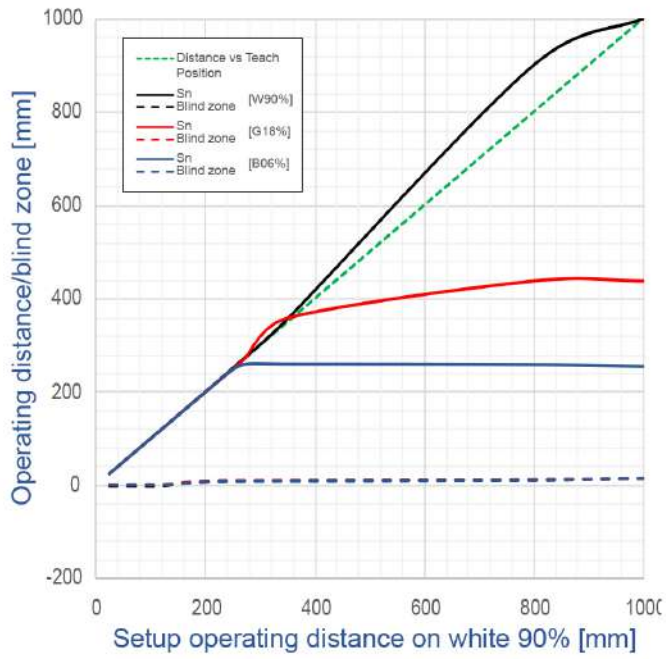
### Adjustment function



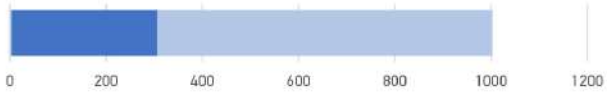
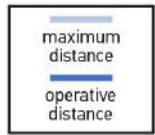
**Blind zone VS sensing distance**



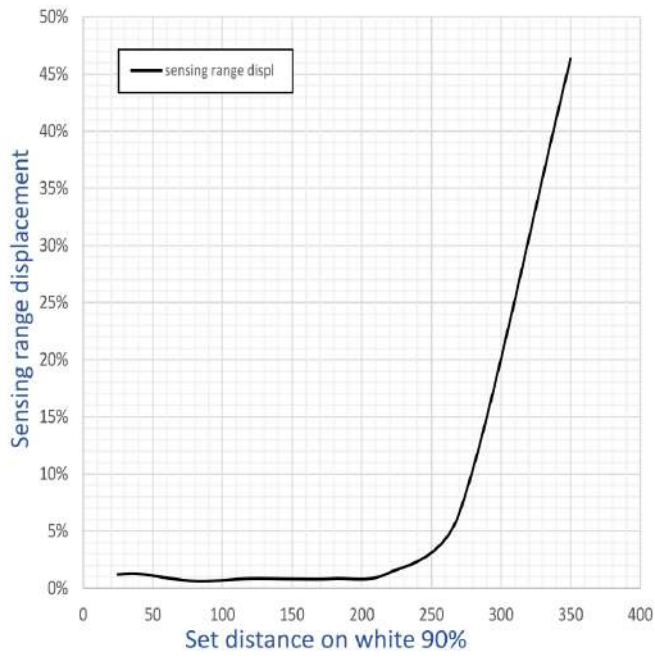
**Effective operative distance**



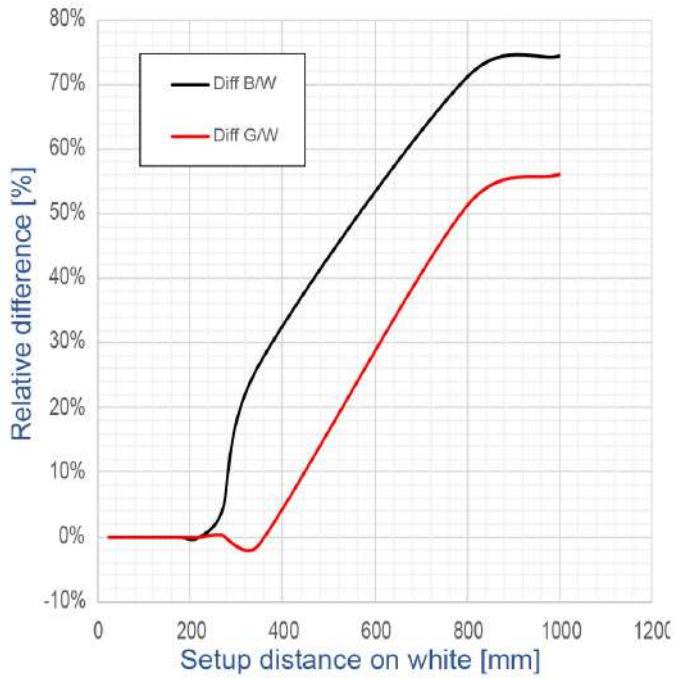
**Operating distance**



**Sensing range displacement**



### Teach behaviour



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