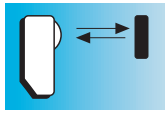
Diffuse sensors
Series 14

		Intensity difference	Background suppression
		Tw 600 mm	Tw 350 mm

PNP	light operate		
	dark operate		
	light/dark operate	FZDK 14P5101/S35A	FHDK 14P5101/S35A
NPN	light operate		
	dark operate		
	light/dark operate	FZDK 14N5101/S35A	FHDK 14N5101/S35A

technical data		
sensing distance adjustable Tw	5...600 mm	20...350 mm
sensing range at Tw = 20 mm	-	5...20 mm
sensing range at Tw = 350 mm	-	20...350 mm
curve	relative receiving signal	sensing distance diagram
output indicator	yellow LED	yellow LED
alignment aid / soiled lens indicator	flashing LED	flashing LED
light source / wave length	pulsed LED red / 660 nm	pulsed LED red / 660 nm
voltage supply range	10 - 30 VDC	10 - 30 VDC
max. supply current average value / peak value	35 mA / 40 mA	35 mA / 40 mA
max. switching current	100 mA	100 mA
voltage drop	≤ 2,2 VDC	≤ 2,2 VDC
response time / release time	≤ 1ms / ≤ 1ms	≤ 1ms / ≤ 1ms
sensitivity adjustment	pot 240°	10 turn mechanical adjustment
short circuit protection	yes	yes
reverse polarity protection	yes	yes
temperature range	-25...+65 °C	-25...+65 °C
housing material	PBT-ASA	PBT-ASA
protection class	IP 65 snap on connectors / IP 67 screw on connectors	IP 65 snap on connectors / IP 67 screw on connectors



Series 14

- **Fully adjustable sensing distance**
- **Background suppression by triangulation**
- **Visible red light for alignment aid**
- **Alignment aid / soiled lens indicator**
- **Plastic housing**

Tw adjustable up to 600 mm

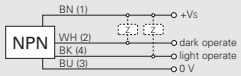
Background suppression

Alignment aid

Visible redlight

Plastic housing

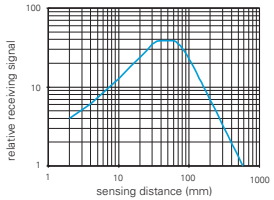
connection diagrams



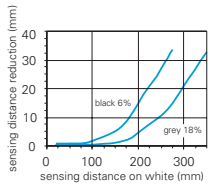
output states

	object present	object not present
light operate	LED PNP =HIGH NPN=LOW	LED PNP =LOW NPN=HIGH
dark operate	LED PNP =LOW NPN=HIGH	LED PNP =HIGH NPN=LOW

relative receiving signal



sensing distance diagram



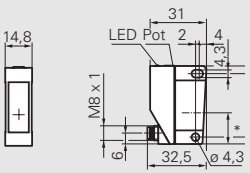
connectors

ES 8A	4 pin	2 m PVC
ES 9A	4 pin	2 m PVC
ESW 31AH0200	4 pin	2 m PUR halogen-free
ESG 32AH0200	4 pin	2 m PUR halogen-free

for details see accessories section

accessory

mounting bracket	134964



* emitter axis
Intesitiy difference
17,2 mm
Background suppression
12 mm