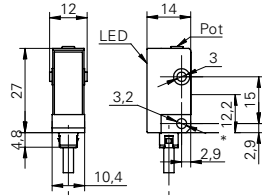


# Diffuse sensors with background suppression

**FHDK 10N5101**

**dimension drawing**



\* emitter axis

**general data**

type	background suppression
light source	pulsed red LED
sensing distance $T_w$	20 ... 120 mm
sensing range $T_b$ (at $T_w$ max.)	5 ... 120 mm
sensing range $T_b$ (at $T_w$ min.)	5 ... 20 mm
alignment / soiled lens indicator	flashing light indicator
light indicator	LED yellow
sensing distance adjustment	mechanical, 5 turn
distance to focus	35 ... 45 mm
wave length	660 nm
beam diameter	4 mm at focus
suppression of reciprocal influence	yes

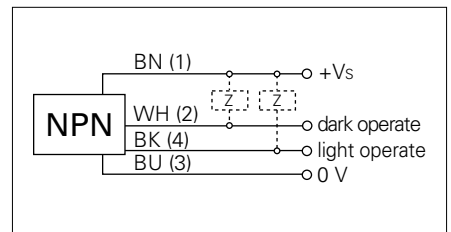
**photo**



**electrical data**

response time / release time	< 1 ms
voltage supply range +Vs	10 ... 30 VDC
current consumption max. (no load)	30 mA
current consumption typ.	20 mA
voltage drop $V_d$	< 1,8 VDC
output function	light / dark operate
output circuit	NPN
output current	< 100 mA
short circuit protection	yes
reverse polarity protection	yes

**connection diagram**



**mechanical data**

width / diameter	10,4 mm
height / length	27 mm
depth	14 mm
type	rectangular
housing material	plastic (ASA)
front (optics)	PMMA
connection types	cable 4 pin, 2 m

**ambient conditions**

operating temperature	-25 ... +65 °C
protection class	IP 65

