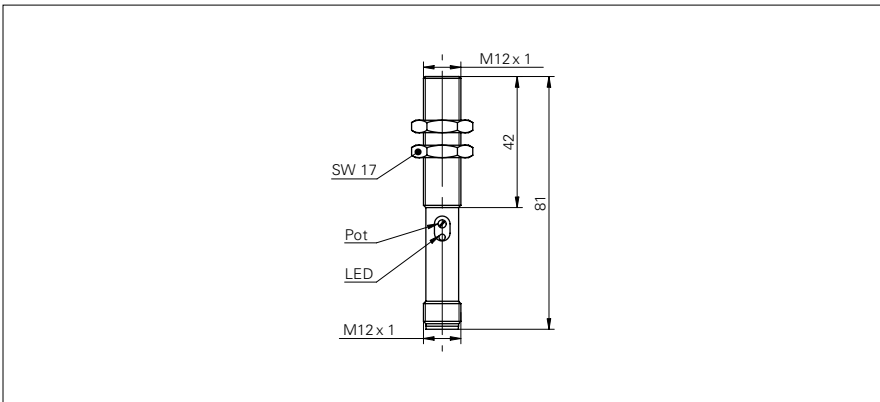


# Diffuse sensors with intensity difference

## FZAM 12

**sample drawing**



**general data**

type	intensity difference
light source	pulsed infrared diode
sensing distance Tw	30 ... 200 mm
alignment / soiled lens indicator	flashing light indicator
light indicator	LED yellow
sensitivity adjustment	potentiometer, 270°
wave length	880 nm
suppression of reciprocal influence	yes

**electrical data**

response time / release time	< 1 ms
voltage supply range +Vs	10 ... 30 VDC
current consumption max. (no load)	42 mA
current consumption typ.	24 mA
voltage drop Vd	< 1,8 VDC
output current	< 200 mA
short circuit protection	yes
reverse polarity protection	yes

**mechanical data**

width / diameter	12 mm
type	cylindrical threaded
housing material	brass nickel plated
front (optics)	PC

**ambient conditions**

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

**sample picture**



order reference	height / length	connection types	output circuit	output function
<b>FZAM 12N1104/S14</b>	80 mm	connector M12 4 pin	NPN	light operate
<b>FZAM 12N3104</b>	70 mm	cable 3 pin, 2 m	NPN	dark operate
<b>FZAM 12N3104/S14</b>	80 mm	connector M12 4 pin	NPN	dark operate
<b>FZAM 12P1104</b>	70 mm	cable 3 pin, 2 m	PNP	light operate
<b>FZAM 12P1104/S14</b>	80 mm	connector M12 4 pin	PNP	light operate
<b>FZAM 12P3104</b>	70 mm	cable 3 pin, 2 m	PNP	dark operate
<b>FZAM 12P3104/S14</b>	80 mm	connector M12 4 pin	PNP	dark operate