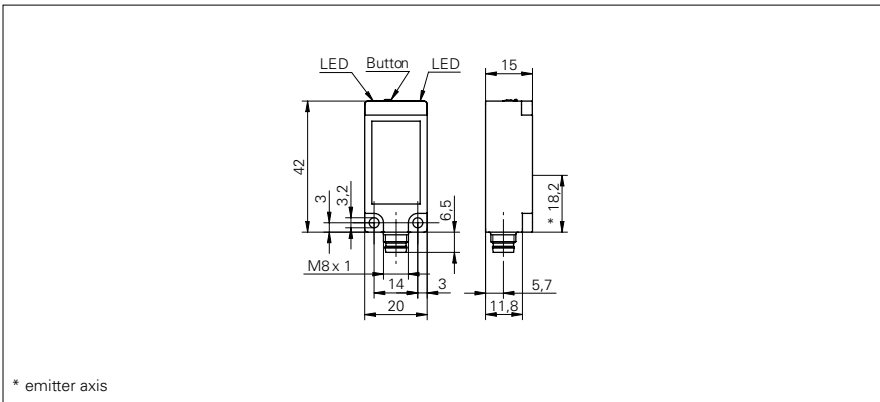


# Diffuse sensors with background suppression

**FHDK 20**

**sample drawing**



**general data**

type	background suppression
light source	pulsed red LED
sensing distance $T_w$	30 ... 200 mm
sensing range $T_b$ (at $T_w$ max.)	2 ... 200 mm
sensing range $T_b$ (at $T_w$ min.)	12 ... 30 mm
alignment / soiled lens indicator	flashing light indicator
light indicator	LED green
output indicator	LED yellow
sensing distance adjustment	Teach-in
wave length	660 nm
suppression of reciprocal influence	yes

**electrical data**

response time / release time	< 0,5 ms
voltage supply range +Vs	12 ... 30 VDC
current consumption max. (no load)	48 mA
current consumption typ.	28 mA
voltage drop $V_d$	< 1,8 VDC
output function	light / dark operate
output current	< 100 mA
short circuit protection	yes
reverse polarity protection	yes

**mechanical data**

width / diameter	20 mm
height / length	42 mm
depth	15 mm
type	rectangular
housing material	plastic (PBT-ASA)
front (optics)	PMMA
connection types	connector M8 4 pin

**ambient conditions**

operating temperature	-25 ... +65 °C
protection class	IP 67

**sample picture**



## Diffuse sensors with background suppression

**FHDK 20**

order reference	output circuit
FHDK 20N6901/S35A	NPN
FHDK 20P6901/S35A	PNP