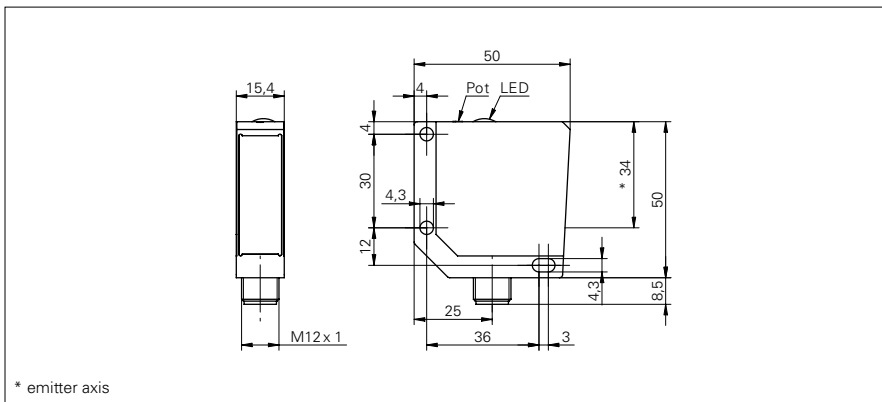


## Diffuse sensors with background suppression

### FHDM 16

#### sample drawing



#### general data

type	background suppression
light source	pulsed red LED
sensing range Tb (at Tw min.)	5 ... 20 mm
light indicator	LED yellow
sensing distance adjustment	mechanical, 5 turn
wave length	660 nm
suppression of reciprocal influence	yes
<b>sensing distance Tw = 20 ... 450 mm</b>	
sensing range Tb (at Tw max.)	20 ... 450 mm
<b>sensing distance Tw = 20 ... 600 mm</b>	
sensing range Tb (at Tw max.)	20 ... 600 mm

#### electrical data

voltage supply range +Vs	10 ... 30 VDC
current consumption max.	41 mA
current consumption typ.	29 mA
voltage drop Vd	< 1,8 VDC
output function	light / dark operate
output current	< 200 mA
short circuit protection	yes
reverse polarity protection	yes

#### mechanical data

width / diameter	15,4 mm
height / length	50 mm
depth	50 mm
type	rectangular
housing material	die-cast zinc
front (optics)	PMMA

#### ambient conditions

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

#### sample picture



**Diffuse sensors with  
background suppression****FHDM 16**

<b>order reference</b>	<b>sensing distance Tw</b>	<b>connection types</b>	<b>output circuit</b>	<b>response time / release time</b>
<b>FHDM 16N5001</b>	20 ... 450 mm	cable 4 pin, 2 m	NPN	< 1 ms
<b>FHDM 16N5001/S14</b>	20 ... 450 mm	connector M12 4 pin	NPN	< 1 ms
<b>FHDM 16N5004</b>	20 ... 600 mm	cable 4 pin, 2 m	NPN	< 5 ms
<b>FHDM 16N5004/S14</b>	20 ... 600 mm	connector M12 4 pin	NPN	< 5 ms
<b>FHDM 16P5001</b>	20 ... 450 mm	cable 4 pin, 2 m	PNP	< 1 ms
<b>FHDM 16P5001/S14</b>	20 ... 450 mm	connector M12 4 pin	PNP	< 1 ms
<b>FHDM 16P5004</b>	20 ... 600 mm	cable 4 pin, 2 m	PNP	< 5 ms
<b>FHDM 16P5004/S14</b>	20 ... 600 mm	connector M12 4 pin	PNP	< 5 ms