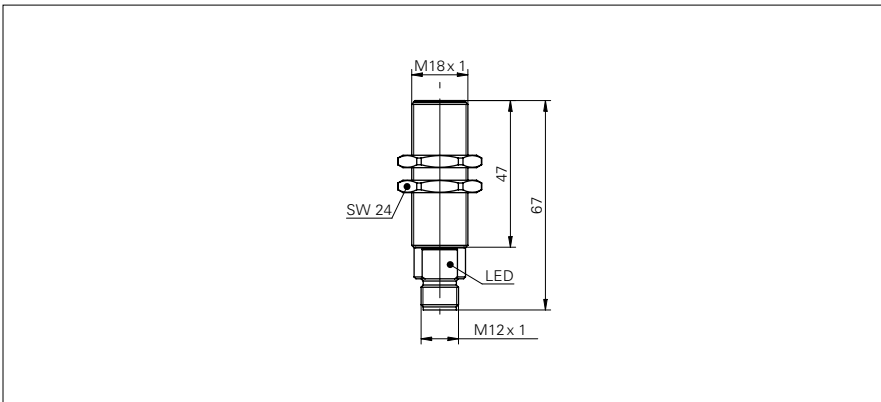


**Retro-reflective sensors**

**FPAM 18**

**sample drawing**



**general data**

type	retro-reflective sensor
light source	pulsed red LED
actual range $S_b$	3,2 m
nominal range $S_n$	4 m
polarization filter	yes
alignment / soiled lens indicator	flashing light indicator
light indicator	LED yellow
sensitivity adjustment	no
wave length	660 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)	35 mA
current consumption typ.	22 mA
voltage drop $V_d$	< 1,8 VDC
output function	dark operate
output current	< 200 mA
short circuit protection	yes
reverse polarity protection	yes

**mechanical data**

width / diameter	18 mm
type	cylindrical threaded
housing material	brass nickel plated / PC
front (optics)	PMMA

**ambient conditions**

operating temperature	-25 ... +55 °C
protection class	IP 67

order reference	connection types	height / length	output circuit
<b>FPAM 18N3151</b>	cable 3 pin, 2 m	57 mm	NPN
<b>FPAM 18N3151/S14</b>	connector M12 4 pin	67 mm	NPN
<b>FPAM 18P3151</b>	cable 3 pin, 2 m	57 mm	PNP
<b>FPAM 18P3151/S14</b>	connector M12 4 pin	67 mm	PNP

**sample picture**

