Structure

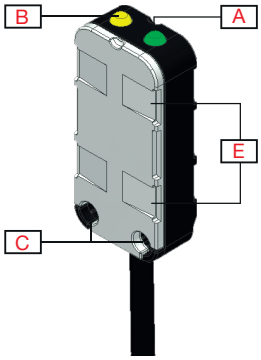


Fig. 1 *Cable*

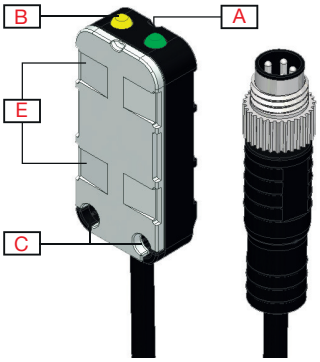


Fig. 2 *Pigtail*

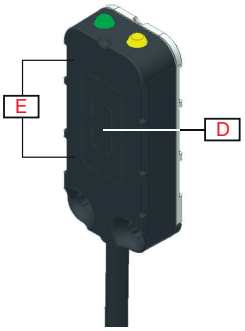


Fig. 3 *Sensing surface*

Element	Component	Function
A	LED	Green LED: Power ON
B	LED	Yellow LED: Output
C	2 M3	Fixing holes for sensor mounting
D	Sensing surface	
E	Recessed area for cable strips, max. 5 mm wide	

Sensing

Accuracy

Temperature drift	Factory settings	≤ 20% (-25°C... +80°C)
	Manual teach	≤ 20% (-25°C... +60°C)
Detection	Pipes diameter	Min. Ø 8 mm
	Out of the box: wall thickness	Plastic 0.5 - 6 mm (non-conductive plastic wall)
		Glass 0.5 - 4 mm (non-conductive glass wall)
	With manual setup: wall thickness	Up to 10 mm plastic wall (best case)
		Up to 10 mm glass wall (best case)
Detection liquids	Water-based liquids such as water, milk, syrup, honey, milkshakes, lubricates, acids, alkaline fluids, body fluids and other high-conductive liquids (up to 50 mS)	

Features

Power Supply

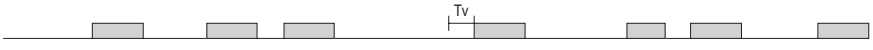
Rated operational voltage (U_B)	10 ... 30 VDC (ripple included)
Ripple (U_{rpp})	≤ 10%
No load supply current (I_o)	≤ 13 mA
Power-ON delay (t_v)	< 300 ms

Outputs

Output functions	NPN or PNP by sensor type	
Output switching function	N.O. and N.C by sensor type	
Rated operational current (I_e)	≤ 100 mA	
OFF-state current(I_r) PNP and NPN	50 µA	
Voltage drop (U_d)	< 1 .5 V	
Protection	Short circuit, reverse polarity and transients	
Utilization category	DC-1	Control of resistive loads and solid-state loads with optical isolation
	DC-13	Control of electromagnets
Load capacitance max at (U_e)	330 nF	

Operation diagram

Tv = Power-ON delay

power supply	ON	
Target	Present	
Break output (N.C.)	ON	
Make output (N.O.)	ON	

Response times

Operating frequency (f)	≤ 10 Hz	
Response times	≤ 50 ms	OFF-ON (t_{ON})
	≤ 50 ms	ON-OFF (t_{OFF})