



### TECHNICAL DOCUMENTATION

# IR-Reflection-detector sensor

AF26 R to probe tip for GF26 feed glass vessel



- For feed vessel for filling machines
- Made for GF26 glass vessels or probe tip in stainless steel tank
- Connection to evaluation unit AS1/6/8/51/83/88

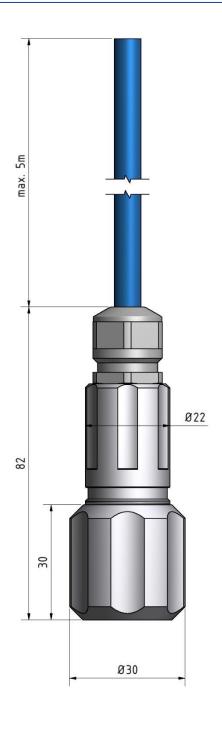
### Use

The IR-reflection-detector AF26 is made for feed vessels in sterile filling, in the aquasant-glass vessel GF26 or in stainless steel tanks where the glass-probe tip of AF26 is being used. With the respective AS\* analysis electronics unit the level in the feed vessel is controlled.

## **Application**

In the standard version the sensor is manufactured in stainless steel and is used for level control in a vessel. Above the drain in a feed vessel and with a time delay the feed is controlled with a maximum switch (AF26). The clamp screw cap for the glass shaft is protected with a PTFE-ring.





### Technical data

#### Type

M26x1 screw cap housing to the sensor tip with integrated coupler electronics on a blue 5 m 3-pole cable

Protection IP64

#### Mounting

compression fitting for glass probe tip shaft, in POM holder

Weight 520 g

Sensor material stainless steel 316L electropolished, Duran® glass

Temperature range -20 ... +100 °C media

Cleaning Spray on solvent, rub off

Measuring principle electro-optical

Connection to evaluation unit AS 1/6/8/51/83/88

Label laser engraving type, serial-no and logo

### **Flectrical instructions**

- Wiring must comply with the circuit and grounding diagram
- Connections to control unit AS \* with 3-pole cable blue, suitable for wire cross-section up to 0.75 mm2
- The connecting cable must suit the demands at the measuring loop.

### **Function**

Based on the law of refraction the IR-light beam is optically, totally reflected in a 90° glass cone in gas (angle of incidence  $\alpha$ is larger than the refracted angle  $\alpha R$ ). Due to the twofold total reflection the IR-light beam is detected back at the receiver, which is interpreted as an empty signal.

If the probe tip is immersed into liquid the IR-light beam is no longer totally reflected at the surface and the beam passes into the liquid. Consequently if the IR-light beam is interrupted, detection of the full level is displayed.

#### Conformity

Conformity assessment procedure acc. to module A category I CE conformity acc. to EN 62061 category: 1 / EN ISO 13849 PL: a ISO 9001:2008 CE1254

