

# EOS WTF & WTHF IP 69K



## EOS LIGHT CURTAINS WATERTIGHT IP 69K ENCLOSURE



Watertight enclosures allow light curtains and light grids to be used in a harsh working environments with exposure to water and steam.

Thanks to its inert (non-toxic) components, no residuals are left when the light curtains are washed down or when they come directly in contact with food.

This makes WTF and WTHF enclosures suitable for the Food & Beverage industry.

The watertight enclosure is made of:

- PMMA (polymethyl methacrylate) transparent enclosure
- POM-C (acetal resin – DELRIN®) sealing caps
- Anti-condensation system trough integrated GORE™ valve
- POM-C and Stainless steel fastening brackets (AISI 316L).

## EOS LIGHT CURTAINS WATERTIGHT IP 69K ENCLOSURE



The small EOS WTF and WTHF cylindrical enclosure (only 56mm diameter) is IP 69K protection rate tested and can withstand up to 80 bar of water jets pressure at the temperature of 80°C.

Enclosure incorporates a valve to drain humidity and avoid condensation.

WTHF version (Heated) has a thermostatically-controlled heating system and can work down to – 25° C.

The safety light curtain/grid is delivered already enclosed into its watertight tube with a 10m long prewired cable and the related fastening brackets.

**EOS LIGHT CURTAINS FOR FOOD IP69K**

**Anti-condensation system trough integrated GORE™ valve**



## EOS LIGHT CURTAINS FOR FOOD IP69K



## WTHF models

For low operating temperatures

- Heating system with thermostatic control
- Powered at 24 Vdc through the light curtain's cable
- Operating range -25 to 50°C

Ideal for low temperature storehouses or for outdoor plants in which light curtains are exposed to the inclemency of the weather.

## EOS LIGHT CURTAINS FOR FOOD IP69K

## Available models

**EOS4 X WTF/WTHF**

protected height 160 ... 1810 mm and 2, 3, 4 beams

resolution 14 mm, Max. range 5 m

resolution 30 mm and 2, 3, 4 beams, Max. range 17 m

**EOS2 X WTF/WTHF**

protected height 160 ... 1810 mm and 2, 3, 4 beams

resolution 30 mm and 2, 3, 4 beams, Max. range 10 m

*The safety light curtain/grid is delivered already enclosed into its watertight tube with a 10m long prewired cable and the relative fastening brackets in order to guarantee the light curtain/grid's technical features.*



**EOS LIGHT CURTAINS WATERTIGHT IP 69K ENCLOSURE**
**TECHNICAL FEATURES**

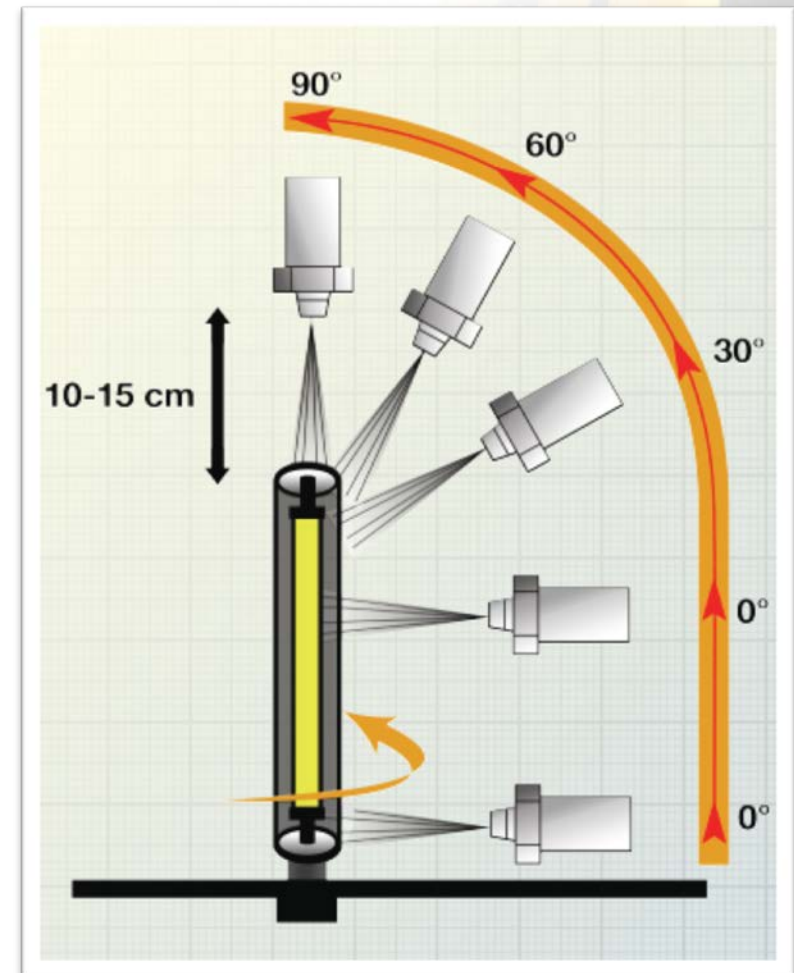
<b>Model</b>		<b>WTF</b>	<b>WTHF</b>
<b>Protection rating</b>		IP 69K	
<b>Operating temperature (°C)</b>		0 ... 55	- 25 ... 50
<b>Max. water pressure jets</b>		80 ... 100 bar at 80° C (± 5° C)	
<b>Max. range (m)</b>	<b>EOS4 X (14 mm resolution)</b>	2 or 5 selectable	
<b>Max. range (m)</b>	<b>EOS4 XH</b>	8 or 17 selectable	
<b>Max. range (m)</b>	<b>EOS2</b>	3 or 10 selectable	
<b>Resolution (mm)</b>	<b>EOS4</b>	14, 30	
<b>Resolution (mm)</b>	<b>EOS2</b>	30	
<b>Nr. Beams</b>	<b>EOS4, EOS2</b>	2, 3, 4	
<b>Protected height (mm)</b>	<b>EOS4, EOS2</b>	160 ... 1810	
<b>Electrical connections</b>		10-metre cable pre-wired with cable gland	
<b>WTHF heated power consumption</b>		-	24 VDC - 20 W x Protected height (m)
<b>Fastening mode</b>		2 x M6 stainless steel screws (not included)	

## Protection test IP69K

IP69K test according to DIN 40050 / part 9

Test conditions:

- Test with fan nozzle
- Test unit on turntable (5 revolutions/minute)
- Spray angles  $0^\circ$ ,  $30^\circ$ ,  $60^\circ$  and  $90^\circ$  with a duration of 30 seconds per position
- Distance of nozzle to test unit 100 - 150mm
- Spray quantity 14 to 16 litres/min
- Water pressure about 8,000 - 10,000 kPa (80 - 100 bar)
- Water temperature  $+80^\circ\text{C} \pm 5^\circ\text{C}$





## EOS WTF & WTHF



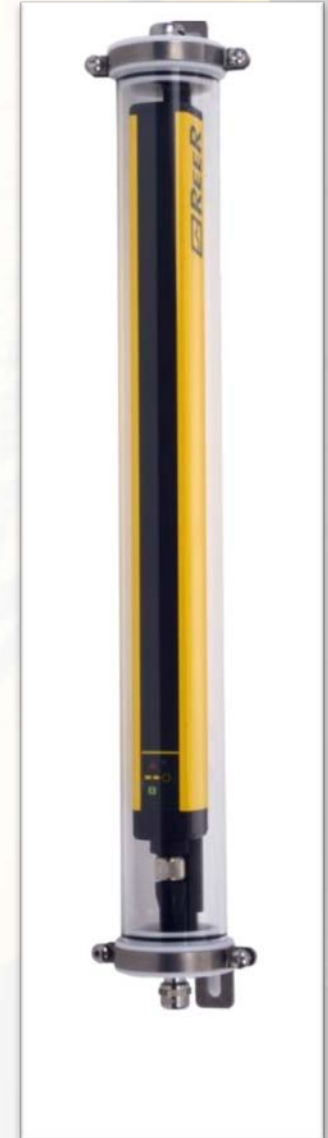
Material resistance of the tested series

**EOS2 – EOS4 WTF / WTHF** to the P3 product used in the test can be considered **Positive**.

### Test procedure

Ecolab-test F&E Nr. 40-1

- **Dipping test:** complete immersion in solution/liquid
- **Test Period:** 28 days
- **Temperature:** room temperature (constant)
- **Analysis:**
  - Visual judgement like swelling, brittleness, discoloring
  - compared to zero-reference factor (demineralized water)





## EOS WTF & WTHF

### Cleaning plan for food and beverage industry

- **Rinsing with water 40 – 50°C**

Rinsing with low pressure. Rinsing from top to bottom in the direction of the drains

- Cleaning of the drains

- **Foaming from bottom to top**

Alkaline: P3-topax 66

Acid: P3-topax 56

Temperature: cold up to 40 °C

Contact time: 15 min. recommended

- **Rinsing with water 40 – 50°C**

Rinsing from top to bottom with low pressure

- **Disinfection**

P3-topactive DES 1-3% 10-30 min.



## EOS WTF & WTHF

The EOS WTF and WTHF light curtains are suitable for the Food & Beverage industry



IP69K protection rate

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Material resistance tests, according to the cleaning procedures for food and beverage industry