ifm electronic

ECOLAB®

The Global Leader in Commercial Cleaning and Sanitizing Solutions

Ecolab GmbH & Co. OHG
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D-40551 Düsseldorf

certifies that for

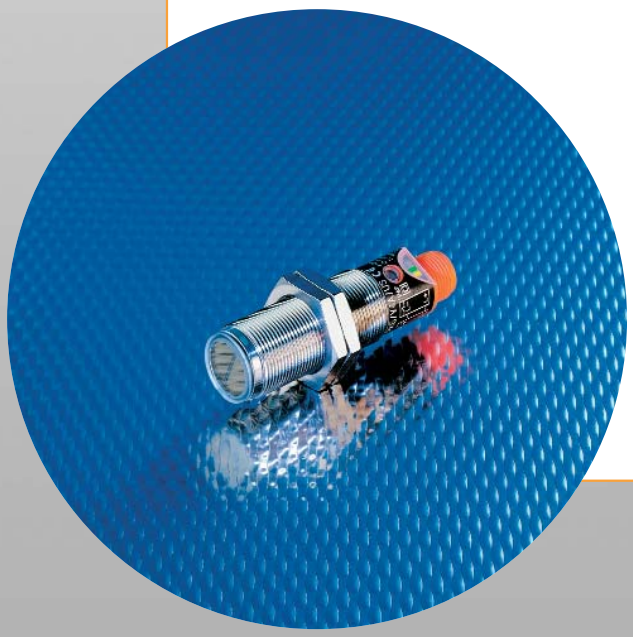
ifm electronic gmbh
Teichstraße 4
D-45127 Essen

material resistance tests

were performed with P3-topax 56, P3-topax 65, P3-topactive DES and demineralized water as a zero valent factor.

The material resistance of the tested sensors of the series OG-wetline, as well as the cable materials of the M12 series for the food industry to the P3 products used in the test can be considered to be positive according to the cleaning procedure mentioned overleaf.

Düsseldorf, 19.03.2002



i.A. T. Tyborski

i.V. R. Laaff

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This certificate is based on

- documented test procedures (test no.: F&E/ P3-E Nr. 40-1) according to material resistance
- defined product descriptions
- customized cleaning procedure

Product specification

P3-topax 56: Acid foam cleaning agent for the food industry
P3-topax 65: Alkaline foam cleaning agent for the food industry
P3-topactive DES: Acid disinfectant for the food industry

Test procedure

Henkel-Ecolab-test F&E Nr. 40-1

Dipping test: complete immersion in solutions

Test period: 28 days

Temperatures: 10 h –10 °C; 10 h +40 °C; 4 h for heating/cooling down (per day)

Analysis: Gravimetric: mass difference in % visual judgement like swelling, embrittlement, discolouring

compared to zero-valent factor (demineralized water)

Test report to ifm electronic dated 19.04.2001

Cleaning plan

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 for cleaning
Alkaline: **P3-topax 65,** Acid: **P3-topax 56** 2-3%
Foaming for disinfection
P3-topactive DES 1-3%, Temp.: cold up to 40 °C

Contact time
A contact time of 15 minutes is recommended.

Rinsing with water 40-50 °C
Rinsing from top to bottom with low pressure.

ifm

The partner in the food industry

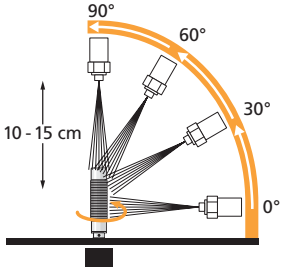
Description of the IP 68 test

Short description:
Protected against exposure to permanent submersion in water.

Definition:
The conditions must be agreed between manufacturer and user.
The conditions must however be more severe than for IP 67.

ifm definition:
Submersion in 1 m depth (0.1 bar)
Time: 7 days

IP 69 K test acc. DIN 40050 part 9
30 seconds cycles
14 - 16 liter per minute
water 60 °C



The OG-wetline sensors incorporate a zero-leak design.
The **OG-wetline** washdown sensors were tested in accordance with the IP 69K standard. The goal of this test is to duplicate pressure cleaning conditions on a plant floor.
In the test fixture, the switches were exposed to a 80 - 100 bar spray of water at a temperature of 60 °C.
The duration of each cleaning cycle was 30 seconds. The test was performed at specified angles for a spray nozzle located at a distance of 10 - 15 cm from the switch.

Product specification series OG-wetline

The high protection rating guarantees maximum sealing even in applications which are subjected to frequent cleaning, for example in the food industry.

Universal connector with gold-plated contacts.

High-grade stainless steel housing.

User-friendly fixing elements in stainless steel.

Shock test according to IEC60068-2-27
Vibration test according to IEC60068-2-6