

SG-IP69K SERIES

The **SG-IP69K** accessory, is a PMMA acrylic tube used to protect and seal the safety light curtains of **SG2**, **SG4** and **SG BODY COMPACT** series. Thanks to SG-IP69K accessory the IP protection of the safety light curtain is increased from **IP65 to IP67, IP68 and IP69K**.

The **Gore-Tex membrane** on the caps prevents water or dirt entering as well as internal condensation. The connection cable for the light curtain is protected and kept in its place by a M16 metric chock that prevents the entry of water or dirt.



SENSORS

FEATURES

- Guarantees IP67, IP68 and IP69K mechanical protection
- Acrylic tubular PMMA housing
- Available for all models of the different heights of the SG2, SG4 (150 – 1800 mm) and SG BODY Compact (2, 3 and 4 beams) series
- Does not compromise the performance of the light curtain in terms of alignment
- Do not change the EAA value

APPLICATIONS

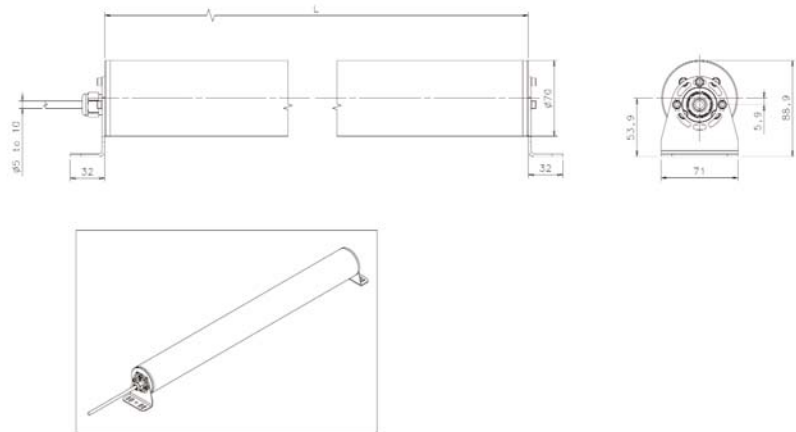
The SG-IP69K accessory is particularly used where high levels of humidity and temperature are present and machines or equipments are frequently washed with hot water (up to 80°C) at high pressure (up to 100 bar s) and / or cleaned with detergents. SG-IP69K is particularly suitable for FOOD industry applications:

- beverage production
- meat slaughter
- sausage production
- milk / cheese industry



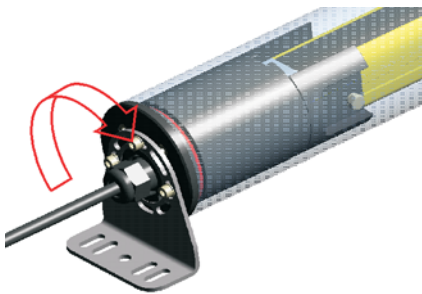
Two stainless steel rotating brackets, to be mounted on the product caps, are supplied and guarantee quick and easy installation. The PMMA Acrylic tube, thanks to its mechanical characteristics, avoids the deterioration of the light curtain's Effective Aperture Angle (EAA) guaranteeing the alignment ease.

DIMENSIONS

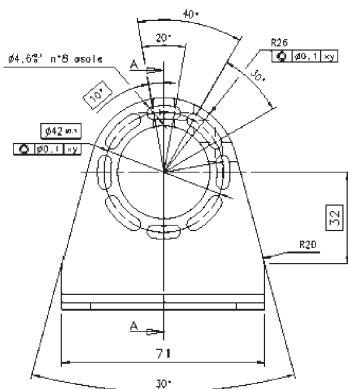


| MODEL | L (mm) |
|---------------|--------|
| SG-IP69K 150 | 373,5 |
| SG-IP69K 300 | 520,7 |
| SG-IP69K 450 | 670,8 |
| SG-IP69K 600 | 820,7 |
| SG-IP69K 750 | 970,8 |
| SG-IP69K 900 | 1120,7 |
| SG-IP69K 1050 | 1270,7 |
| SG-IP69K 1200 | 1420,8 |
| SG-IP69K 1350 | 1570,7 |
| SG-IP69K 1500 | 1720,8 |
| SG-IP69K 1650 | 1870,8 |
| SG-IP69K 1800 | 2020,8 |

mm



FIXING BRACKET



TECHNICAL DATA

| MECHANICAL DATA | |
|--|-----------------------------|
| Housing material: | Weep-Spin-Dry Policril PMMA |
| Depth: | 4mm |
| Protection degree: | IP67, IP68 and IP69K* |
| OPTICAL DATA | |
| Operative distance / reduction factor: | 10% for each unit* |
| EAA aberration (Effective Aperture Angle): | None |

* technical data refers to the safety light curtains installed inside the accessory

CHEMICAL RESISTANCE TABLE

| INORGANIC ACID | CONCENTRATION | RESISTANCE |
|---|---------------|------------|
| Boric acid | | FR |
| Hydrochloric acid | < 40% | FR |
| Chromic acid | < 40% | FR |
| Chlorosulfuric acid | | FR |
| Hydrogen fluoride | < 40% | MR |
| Phosphoric acid | < 30% | FR |
| Nitric Acid | < 20% | MR |
| Concentrate nitric acid | | NR |
| Sulfuric acid | < 40% | FR |
| Sulfuric acid | < 80% | MR |
| Sulfuric acid | 1% | FR |
| Acid for accumulators | | FR |
| ALKALINE ACID | | |
| Ammoniacal | | FR |
| Barium hydrate, saturate solution | | FR |
| Potassic Carbonate, saturate solution | | MR |
| Soda Ash, saturate solution | | FR |
| Milk of Lime | | FR |
| Caustic Potassium, whatever concentration | | MR |
| Sodium hydroxide, whatever concentration | | FR |
| INORGANIC SUBSTANCES | | |
| Chlorine water | | FR |
| Hydrogen peroxide 40 volums | | FR |
| Hydrogen peroxide 120 volums | | NR |
| Aluminium Chloride | | FR |
| Aluminium fluoride | | MR |
| Aluminium oxalate | | FR |
| Aluminium sulphate | | FR |
| Potassium alum | | FR |
| Ammonium carbonate | | FR |
| Ammonium chloride | | FR |
| Ammonium fluoride | | FR |
| Ammonium nitrate | | FR |
| Ammonium sulphate | | FR |
| Argent nitrate | | FR |
| Barium Chloride | | FR |
| Barium sulphate | | FR |
| Calcium Chloride | | FR |
| Calcium hypochlorite | | MR |
| Liquid Chlorine | | NR |
| Sulfuryl chloride | | NR |
| Ferric chloride (ico) | | FR |
| Ferric chloride (oso) | | FR |
| Ferric sulphate (oso) | | FR |
| Magnesium Chloride | | FR |
| Magnesium Sulphate | | FR |

LEGEND

FR = Full resistance
 MR = Medium resistance
 NR = No resistance

CHEMICAL RESISTANCE TABLE

| SOLVENTS E ORGANIC COMPOUNDS | CONCENTRATION | RESISTANCE |
|------------------------------|---------------|------------|
| Amyl acetate | | NR |
| Manganese(II) sulfate | | FR |
| Mercury sulphate | | MR |
| Nickel sulphate | | FR |
| Potassium bicarbonate | | FR |
| Potassium dichromate | | FR |
| Potassium carbonate | | FR |
| Potassium cyanide | | FR |
| Potassium ferricyanide | | FR |
| Niter (saltpeter) | | FR |
| Potassium permanganate | | FR |
| Potassium sulfite | | FR |
| Potassium sulfate | | FR |
| Copper(II) chloride | | FR |
| Copper sulphate | | FR |
| Silicon tetrachloride | | NR |
| Sodium bisulphite | | FR |
| Sodium cyanide | | FR |
| Sodium chlorate | | FR |
| Sodium Cloride | | FR |
| Sodium fluoride | | FR |
| Sodium phosphate | | MR |
| Sodium hypochlorite | | MR |
| Sodium nitrate | | FR |
| Sodium sulphate | | FR |
| Sodium sulphur | | FR |
| Tin chloride (oso) | | FR |
| Tin chloride (ico) | | FR |
| Tin sulphate (ico) | | FR |
| Zinc sulphate | | FR |
| Zinc chloride | | FR |
| Sulphur | | FR |

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CHEMICAL RESISTANCE TABLE

| ORGANIC ACIDS | CONCENTRATION | RESISTANCE |
|-------------------------------------|---------------|------------|
| Concentrated acetic acid | | NR |
| Acetyl acid | < 10% | FR |
| Butyric acid | < 5% | FR |
| Formic acid | | NR |
| Formic acid | < 2% | FR |
| Lactic acid | < 10% | FR |
| Oxalic acid | | FR |
| Picric acid | 1% (in water) | FR |
| Stearic acid | | FR |
| Tartaric acid | < 20% | FR |
| Thioglycolic acid | < 10% | MR |
| Trichloroacetic acid | | NR |
| Ethyl acetate | | NR |
| Acetone | | NR |
| Alcool allilico | | NR |
| Alcool amilico | | NR |
| N-Butanol | | NR |
| Ethil alcohol | < 20% | FR |
| Ethyl alcohol | | NR |
| Isopropyl alcohol | | NR |
| Wood alcohol | | NR |
| 1-propyl alcohol | | NR |
| Acetic aldehyde | | NR |
| Acetic anhydride | | NR |
| Formaldehyde | | FR |
| Aniline | | NR |
| Benzine | | MR |
| Benzole | | NR |
| Ethil bromide | | NR |
| Butirato di etile | | NR |
| Chlorophenol | | NR |
| Chloroform | | NR |
| Ethil chloryde | | NR |
| Aviation gasoline | | MR |
| Cresol, methyl phenol | | NR |
| Decalina | | FR |
| Diacetonalcool | | NR |
| 1,4-Dioxane | | NR |
| Ethylene bromide | | NR |
| Bis(2-ethylhexyl) phthalate | | MR |
| Heptane | | FR |
| Esalina | | FR |
| Hexane | | FR |
| ThilChloroether | | NR |
| Petroleum ether | | FR |
| Phenol | | FR |
| Ethyl ether | | NR |
| Ftalato diamilico | | NR |
| Ftalato dibutilico | | NR |
| Glycerine | | FR |
| 2-etandiolo | | FR |
| Butyl lactate | | NR |
| Methyl ethyl ketone | | NR |
| Monobromo naftalina | | FR |
| Naphthalene | | FR |
| Pyridine | | NR |
| Propylene, methyl ethylene, propene | | NR |
| Carbon disulfide | | NR |
| Freon | | NR |
| Tetrachloroethylene | | NR |
| Carbon tetrachloride | | NR |
| Tetrahydrofuran | | NR |
| Tetralina | | NR |
| Tolulo | | NR |

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CHEMICAL RESISTANCE TABLE

| DISINFECTANTS | CONCENTRATION | RESISTANCE |
|------------------------------|---------------|------------|
| Hydrogen peroxide 100 volums | | FR |
| Turpentine | | FR |
| Trichloroethylene | | NR |
| Tricresisolfato | | NR |
| Trietillamina | | FR |
| Xylol | | NR |
| GAS | | |
| Ammonia | | FR |
| Carbon dioxide | | FR |
| Sulfur trioxide | | FR |
| Sulfur dioxide | | FR |
| Nitrogen dioxide | | FR |
| Gas illuminante | | FR |
| Hydrogen sulfide | | FR |
| Methane | | FR |
| Carbon monoxide | | FR |
| Oxygen | | FR |
| Ozone | | FR |
| Bromine vapors | | MR |
| Chlorine vapors | | MR |
| FOODS | | |
| Vinegar | | FR |
| Water | | FR |
| Mineral water | | FR |
| Anise | | FR |
| Beer | | FR |
| Coffee | | FR |
| Cinnamon | | FR |
| Chocolate | | FR |
| Onion | | FR |
| Chamomile extract | | FR |
| Lauro leaves | | FR |
| Dianthus | | NR |
| Milk of Lime | | FR |
| Liquors | | NR |
| Nutmeg | | FR |
| Pepper | | FR |
| Cider | | FR |
| Juice | | FR |
| Wine | | FR |

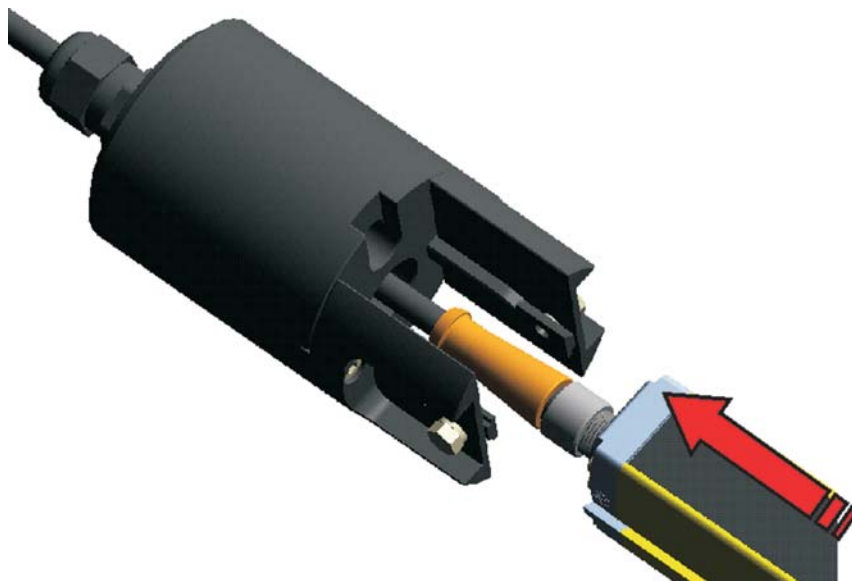
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CHEMICAL RESISTANCE TABLE

| FATS, OILS, WAX | CONCENTRATION | RESISTANCE |
|--|---------------|------------|
| Refining fatty acid | | FR |
| Floor wax | | MR |
| Diesel oil | | FR |
| Vegetable oils and fats | | FR |
| Mineral oils | | FR |
| Moneral oils and fats | | FR |
| Transformer oil | | FR |
| DETERGENTS | | |
| Alcool | < 20% | FR |
| Carbolic acid | | NR |
| DDT (dichlorodiphenyltrichloroethane) | | MR |
| Formalia (se è formalina = Formaldehyde) | | FR |
| Pasta di cloramina | | NR |
| Calcium hypochlorite pulp | | FR |
| Ethanol denaturated | | NR |
| Soluzione cloramina | < 2% | FR |
| Calcium chloride solution | < 2% | FR |
| Mercury(II) chloride | | FR |
| Alcool anidro | | NR |
| Pure gasoline | | NR |
| Sodium hypochlorite | | FR |
| Solvent stain remover | | NR |
| Ammonia water solution | | FR |

| LEGEND |
|------------------------|
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MODELS

| MODEL | DESCRIPTION | ORDER N° |
|---------------|------------------------|-----------|
| SG-IP69K 150 | Tubular IP69K H=150mm | 95ASE1290 |
| SG-IP69K 300 | Tubular IP69K H=300mm | 95ASE1300 |
| SG-IP69K 450 | Tubular IP69K H=450mm | 95ASE1310 |
| SG-IP69K 600 | Tubular IP69K H=600mm | 95ASE1320 |
| SG-IP69K 750 | Tubular IP69K H=750mm | 95ASE1330 |
| SG-IP69K 900 | Tubular IP69K H=900mm | 95ASE1340 |
| SG-IP69K 1050 | Tubular IP69K H=1050mm | 95ASE1350 |
| SG-IP69K 1200 | Tubular IP69K H=1200mm | 95ASE1360 |
| SG-IP69K 1350 | Tubular IP69K H=1350mm | 95ASE1370 |
| SG-IP69K 1500 | Tubular IP69K H=1500mm | 95ASE1380 |
| SG-IP69K 1650 | Tubular IP69K H=1650mm | 95ASE1390 |
| SG-IP69K 1800 | Tubular IP69K H=1800mm | 95ASE1400 |

NOTE: Each package contains what is necessary to protect a single unit (TX or RX). To protect both TX and RX, two pieces of the same code are needed



The company endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct installation and use, the company can guarantee only the data indicated in the instruction manual supplied with the products.