



SG-IP69K

IP69K tubular protection for safety light curtains

Instruction Manual



826004084 (Rev.D)

GENERAL INFORMATION

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 entry of water or dirt and prevents the presence of condensation inside. The connection cable for light curtain is protected and kept in place by a metric type cable gland M16 that prevents the entry of water or dirt.

2 stainless steel rotating brackets, to be mounted on the product caps, guarantee a quick and easy installation.

HIGHLIGHTS

- IP67, IP68 and IP69K protection
- PMMA acrylic tube
- Unique profile with different lengths suitable for all controlled heights of SG2, SG4 Series (150 - 1800 mm) and SG BODY COMPACT series (2, 3 and 4 rays).
- Does not compromise the performance of the light curtain in terms of alignment.
- Does not change the EAA value

TYPICAL APPLICATIONS

The SG-IP69K accessory is particularly used where high levels of humidity and temperature are present and machines or equipment 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, dairy industry, etc. ...

PACKAGE CONTENTS

The package contains the following items:

a) PMMA transparent tube	(1 pcs)	• Nuts and bolts: - M5 square nut (4 pcs) - TE M5x6 UNI 5739 screw (4 pcs) - UNI 8842 J5 metallic elastic washer (4 pcs) - INOX TCEI M4x8 UNI 5931 screw (6 pcs) - A4 UNI 8840 ZB metallic washer (6 pcs) - INOX TCEI M4x18 UNI 5931 screw (8 pcs)
b) Lower assembled support	(1 pcs)	
c) Upper assembled support	(1 pcs)	
d) Closing cap with silicone compound OR	(2 pcs)	
e) INOX rotating brackets	(2 pcs)	

Sub-assembly **b-d** and **c-d** are pre-installed and inserted inside PMMA tube **a** to increment package robustness.

MECHANICAL INSTALLATION

ASSEMBLY INSTRUCTIONS

First of all, remove closing caps **d** from sub-assemblies **b** and **c**, then remove the aforementioned **b** and **c** from tube **a** to obtain what is shown in Fig. 1.

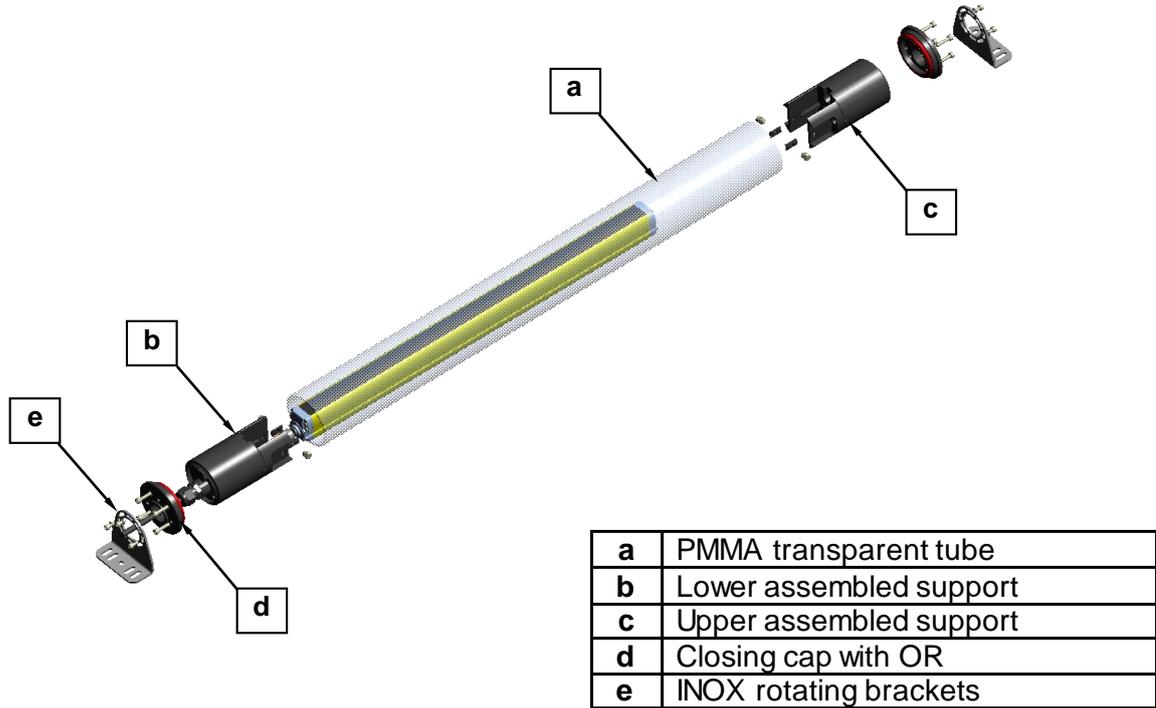


Figure 1

Place the M5 square nuts on the inner side of the support wings, aligned with the holes and fix them, without completely tightening the TE M5x6 UNI 5739 screws (and special washers) so that they remain in place but still have ample play (Fig.2 and Fig.3).

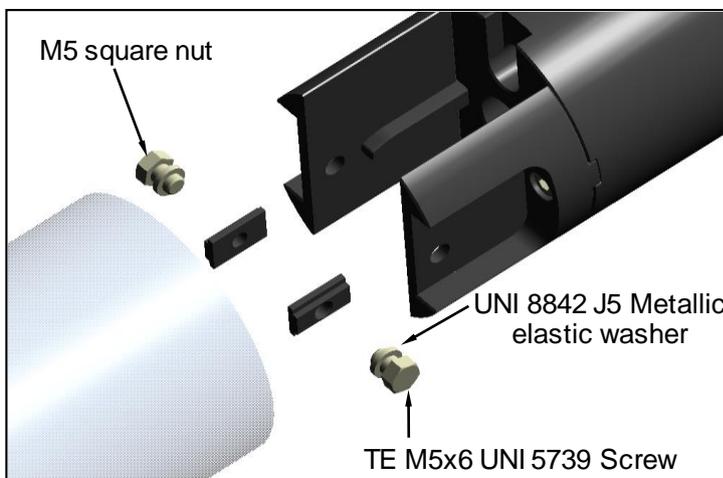


Figure 2

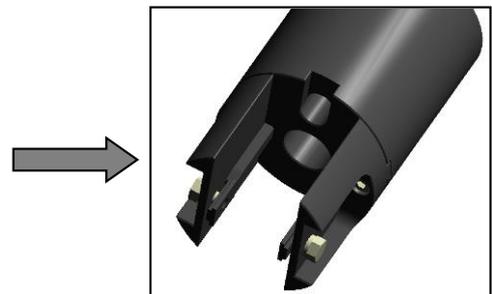
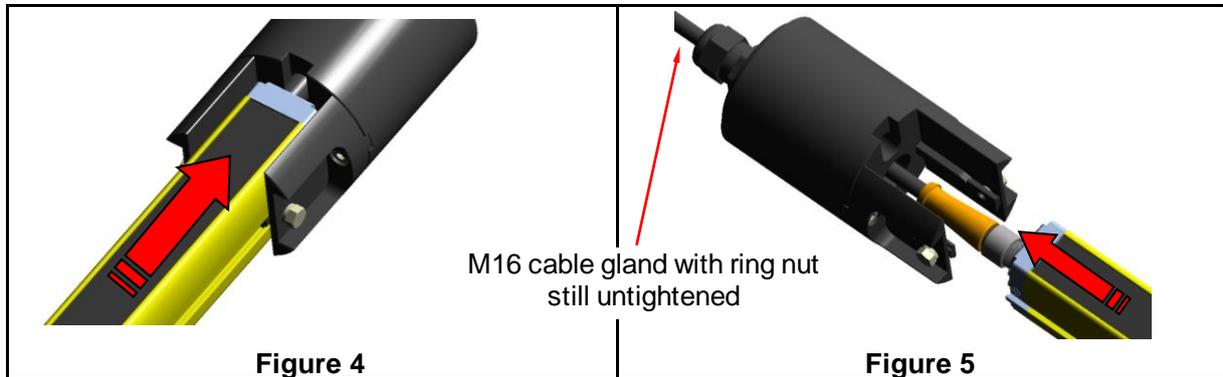


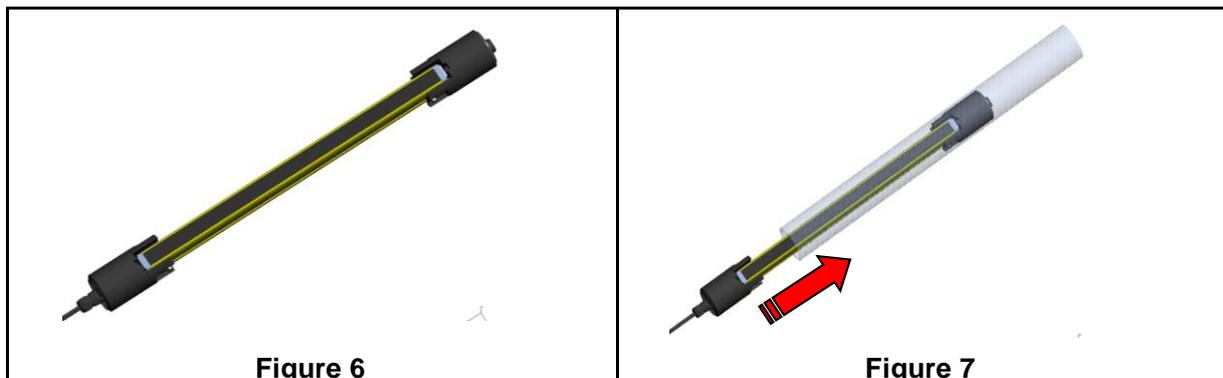
Figure 3

Then, insert the adapters in the Datalogic safety light curtain lateral grooves (Fig.4) until you reach the back side, and then fully tighten the screws to fix the curtain to **c** (max. tightening torque 1.2 Nm). Repeat the same operation for **b** part too, be careful when passing the safety light curtain cable (that must be connected to the curtain before starting this assembly procedure) through the hole corresponding to M16 cable gland before tightening the screws completely (Fig.5).

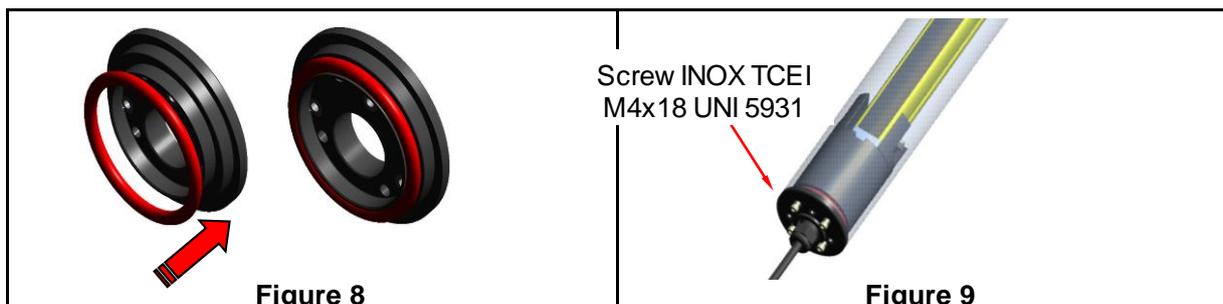


When both part **b** and **c** are completely installed, firmly tighten the gland nut to fix the cable. Check once again that the M5x6 UNI TE 5739 screws are well tightened on their elastic washers.

Once the system appears like shown in Fig.6, it can be placed inside the transparent tube (Fig.7).



At this point, you have to prepare the 2 closing caps with the corresponding O-ring, as shown in Fig. 8, and then apply them to both upper and lower sides of the PMMA tube.



Finally, tighten the 4 INOX TCEI M4x18 UNI 5931 screws (max. tightening torque 0.8 Nm) on both sides for the complete compression of the O-ring seal against the tubular inner surface (Fig.9).

To mount the brackets, place them on both caps aligned to the appropriate bracket's central hole, then lock in the desired angular position with 3 INOX TCEI M4x8 UNI 5931 screws (max. tightening torque 0.8 Nm) (Fig.10).

The bracket is designed to allow all the "main" positions, with intermediate angular adjustment range within 20 and 30 degrees depending on the position required (Fig. 11 and Fig.12).

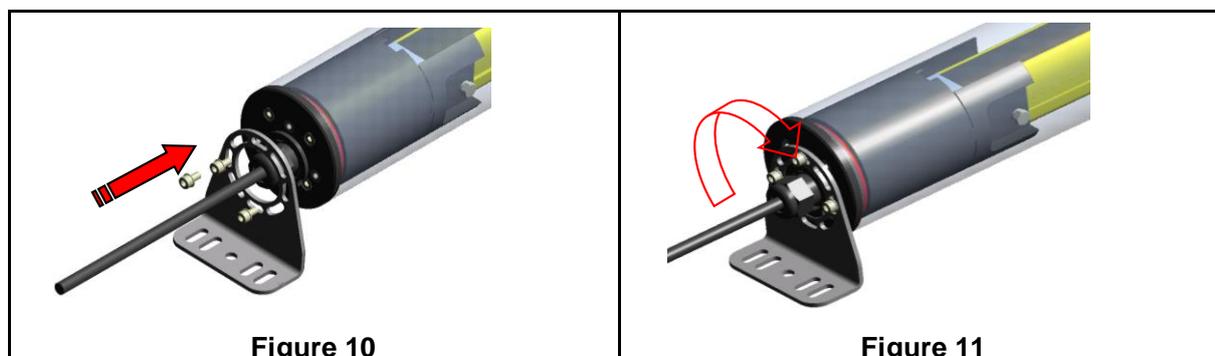


Figure 10

Figure 11

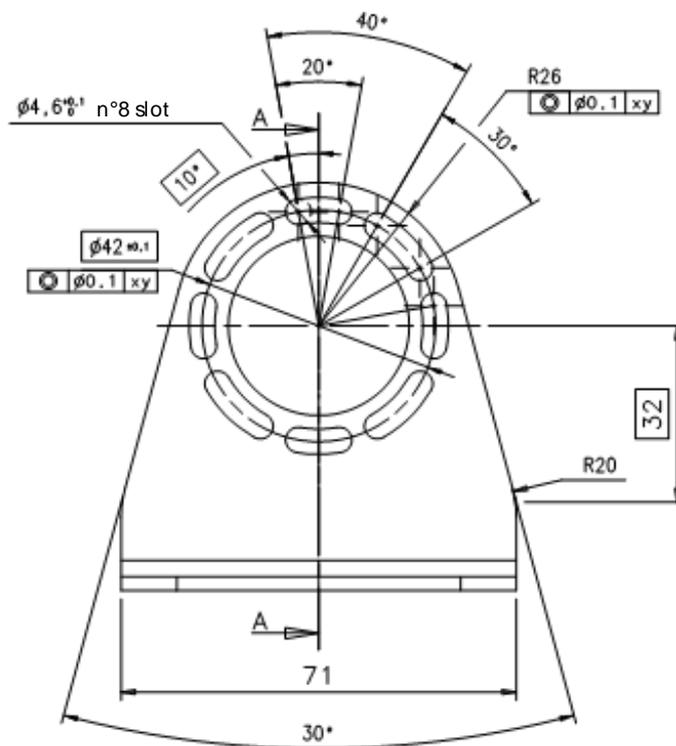


Figure 12

TECHNICAL DATA

OPTICAL DATA	
Operative distance / reduction factor:	10% for each tubular
EAA aberration (Effective Aperture Angle)	None
MECHANICAL DATA	
Body material:	PMMA centrifugal cast Policril
Thickness	4 mm
Protection grade	IP67, IP68 and IP69K

CHEMICAL RESISTANCE TABLE

Tubular PMMA POLICRIL material chemical resistance table is available on product's datasheet.

AVAILABLE MODELS

MODEL	DESCRIPTION	ORDER No.
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
SG-IP69K-2-050	Tubular IP69K H=500mm	95ASE1410
SG-IP69K-3-080	Tubular IP69K H=800mm	95ASE1420
SG-IP69K-4-090	Tubular IP69K H=900mm	95ASE1430
SG-IP69K-4-120	Tubular IP69K H=1200mm	95ASE1440

OVERALL DIMENSIONS

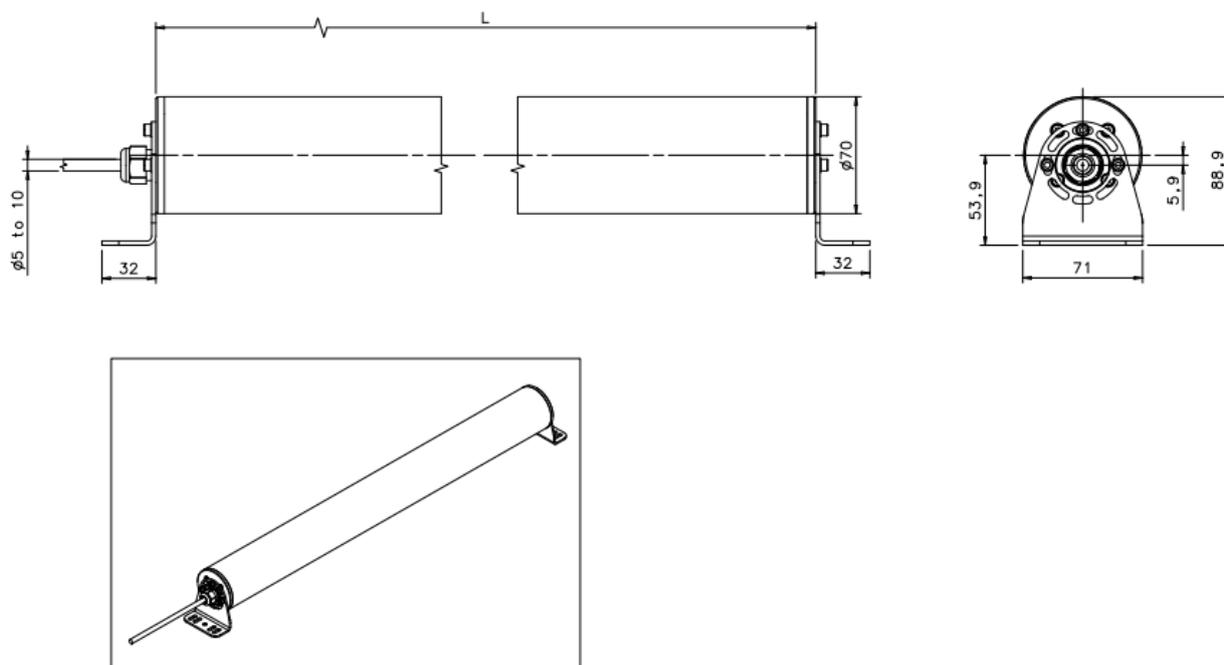


Figure 13

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
SG-IP69K-2-050	813
SG-IP69K-3-080	1113
SG-IP69K-4-090	1213.5
SG-IP69K-4-120	1513.5

CE COMPLIANCE

CE marking states the compliance of the product with essential requirements listed in the applicable European directive. Since the directives and applicable standards are subject to continuous updates, and since Datalogic promptly adopts these updates, therefore the EU declaration of conformity is a living document. The EU declaration of conformity is available for competent authorities and customers through Datalogic commercial reference contacts. Since April 20th, 2016 the main European directives applicable to Datalogic products require inclusion of an adequate analysis and assessment of the risk(s). This evaluation was carried out in relation to the applicable points of the standards listed in the Declaration of Conformity. Datalogic products are mainly designed for integration purposes into more complex systems. For this reason it is under the responsibility of the system integrator to do a new risk assessment regarding the final installation.

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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Helpful links at www.datalogic.com: **Contact Us, Terms and Conditions, Support.**

The warranty period for this product is 36 months. See General Terms and Conditions of Sales for further details.



Under current Italian and European laws, Datalogic is not obliged to take care of product disposal at the end of its life. Datalogic recommends disposing of the product in compliance with local laws or contacting authorised waste collection centres.

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