## **CFSQ**

# Hinges with built-in safety switch



## MATERIAL

Self-extinguish high-rigidity SUPER-technopolymer, black colour, matte finish.

Thanks to its housing made out of SUPER-technopolymer, the CFSQ hinge guarantees the double insulation of the internal circuits, therefore there is no need of grounding connection. Furthermore, the housing protects the electric contacts from shocks, atmospheric agents and accidental penetration of tools.

## ROTATING PIN

AISI 303 stainless steel.

### STANDARD EXECUTIONS

Assembly by means of pass-through holes for M6 countersunk-head screws UNI 5933, DIN 7991.

Starting work angle 0°:

- C-A-D: axial connector, microswitch on the right.
- C-A-S: axial connector, microswitch on the left.
- C-B-D: rear connector, microswitch on the right.
- C-B-S: rear connector, microswitch on the left.
- F-A-D: axial cable, 2 or 5 m length, microswitch on the right.
- F-A-S: axial cable, 2 or 5 m length, microswitch on the left.
- F-B-D: rear cable, 2 or 5 m length, microswitch on the right.
- **F-B-S**: rear cable, 2 or 5 m length, microswitch on the left. Starting work angle -90°:
- C-A-D-EA: axial connector, microswitch on the right.
- C-A-S-EA: axial connector, microswitch on the left.
- **C-B-D-EA**: rear connector, microswitch on the right.
- **C-B-S-EA**: rear connector, microswitch on the left.
- Cable type: UL/CSA STYLE 2587 3 X AWG 22.



## FEATURES AND APPLICATIONS

- The hinge with built-in switch (ELESA patent) is a safety device because in case of accidental opening of doors, machine protections, or safety doors on machines and production equipment, it automatically breaks off the power supply hence protecting the operators.
- This hinge can be subject to frequent cleaning cycles and can be used in any situation or environment where a special attention to cleaning and hygiene is requested, thanks to the IP67 protection class and the use of stainless steel elements for closing the hinge body.
- Switch equipped with two contacts: one NC contact and one change-over NO contact, form C, see IEC EN 60947-5-1 standard.
- Switch set with positive opening (in compliance with IEC EN 60947-5-1 standard, K attachment): the contacts break off for the direct movement of an actuator, onto which the working force is applied through non elastic elements.
- Quick release switch: the stroke speed of the contact-holder slider does not depend on the working speed.



ELESA Original design



- Easy to assemble: the built-in safety switch is integrated into a single body with the hinge, thus offering a very easy and fast assembly. This is a great advantage in comparison with some traditional systems which still require to set up separately a hinge and a safety switch connected by a special pin to replace the standard pin of the hinge.
- Universal usage: CFSQ hinges can be assembled on the most common aluminium profiles.

ROTATION ANGLE (APPROXIMATE VALUE)

CFSQ: max 190° (-10° and +180° see Fig.1).

CFSQ-EA: max 270° (-90° and +180° see Fig.1).

 $0^\circ$  is the condition where the interconnected surfaces are on the same plane.

See Built-in safety switch functioning and maintenance.

The hinge must not be stressed by any negative angle of less than -10° (CFSQ) and -90° (CFSQ-EA).

### ACCESSORIES ON REQUEST

FC-M12x1: extensions with 4 pole M12 female axial connector.



