MATERIAL

- **Hinge body**: self-extinguish high-rigidity SUPER-technopolymer, black or grey colour RAL 7040 (C33).
- **Rotation pin**: glass-fibre reinforced polyamide-based tecnopolymer (PA), black or grey colour RAL 7040 (C33).
- **Assembly kit** (see assembly instructions):
  - n°4 technopolymer covers (fig.3).
  - n°4 technopolymer bushings (fig.4 e fig.5).
  - n°2 thermoplastic elastomer safety plugs (fig.7) to guarantee IP67 protection class.
- **Switch**: four slow action electrical contacts with double interruption Zb shaped (see IEC EN 60947-5-1) wich can be set in normally open (NO) or normally closed (NC) mode in production.

Positive opening in compliance with IEC EN 60947-5-1 annex K: the separation of the electrical contacts is the direct result of an actuator action on which an action force is applied by means of non elastic elements, that is to say not dependant on, for example, spring-like elements. The contact elements guarantee a self-cleaning action of the silver-alloy pastes.

Thanks to its housing made out of SUPER-technopolymer, the CFSW 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.

STANDARD EXECUTIONS

CFSW. hinge must be mounted with the side containing the micro-switch on the fixed part (frame structure) and the other side on the movable part (door). The executions shown below refer to the hinges with the micro-switch on the right side.

- **C-A**: 8 pole male connector, top axial output.
- **C-C**: 8 pole male connector, bottom axial output.
- **C-B**: 8 pole male connector, back output.
- **F-A**: 2 or 5 m cable, 8 conductors, top axial output.
- **F-C**: 2 or 5 m cable, 8 conductors, bottom axial output.
- **F-B**: 2 or 5 m cable, 8 conductors, back output.
- **FC-B**: 0,2 m cable, with 8 pole male connector, back output.

Cable type: UL/CSA STYLE 2587 8 X AWG 22.

Contact blocks in the standard execution:

- **NO-NC-NO-NC**: 2 NO contacts + 2 NC contacts.
- **NO-NC-NC-NC**: 1 NO contact + 3 NC contacts.

FEATURES AND APPLICATIONS

- Hinge with built-in multiple 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.
- Limited size, different assembly and output options (cable/connector) make this product easy to install on the most common aluminium profiles (30 mm minimum wide).
- Easy to assemble: the built-in safety multiple switch and the hinge come in one piece offering a very easy and fast assembly. This is a big advantage in comparison with some traditional systems which 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: CFSW. hinges can be assembled on the most common aluminium profiles.
- By using a redundant system, the CFSW hinges allow to have a system design up to SIL3 in compliance with IEC 62061, PLe in compliance with EN ISO 13849-1 or security category 4 in compliance with EN 954-1 with redundant structure.

ELESA Original design