

QUADRO-PROFILE

3100.6000F

Functional description of the system

The evaluation electronics monitor the safety strip, which is equipped with a terminating resistor and operates using the closed circuit principle. An amount of current defined by the resistance (8.2 k Ω) flows through the safety strip. When mechanical pressure causes the resistance in the safety strip to drop below 5.5 k Ω , this is recognised as an actuation (evaluation electronics: LED RED). When contact resistance or a broken cable raises the resistance in the safety strip above 11.5 k Ω , this condition is recognised as a broken cable and/or fault (evaluation electronics: LED YELLOW). In both cases, the system stops (evaluation electronics: safety relays K1 and K2 open).



Quadro-Profile 3100.6000F

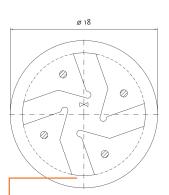
Nano Profile

Article no.	3100.6000F
Material	EPDM
Weight	0.248kg/m
Shore hardness	conductive mixture: 65 +/- 5 Shore A non-conductiv mixture: 60 +/- 5 Shore A
Interconnection	Series connection electr. max. 10 switching strips
Min. and max. length of the switching strip	0.1m to 100m
Storage temperature	-10 °C to +15 °C respectively +25 °C (DIN 7716)
Delivery length	20m
Response time of the evaluation electronics	< 12 ms

Certified characteristic data

Actuation angle (a)	+/- 180°
Ineffective border area	40mm
Finger safety	no
Max. operating speed	200mm/s
Climatic conditions	-10 °C to 55 °C
Level of protection	IP67 or IP54 with hole for pressure compensation *
Number of switching cycles	> 10,000 Switching cycles

^{*} In order to achieve pressure compensation with small strips (≤2m) under extreme temperature di erentials, the bottom of the cap of the strip has been pierced (IP54).



Profile cross-section
Quadro-Profile 3100.6000F

For dimensions without tolerance particulars, tolerance-free dimensions as per DIN ISO 3302-1 E2 shall apply.

The product is intended for use in an enclosure. The technical data given here only apply to the safety edge. The technical data of the complete system may differ.

You can choose any of several different variants for compatible evaluation signals (Category 1/PL c and Category 3/PL e, SIL3).