

# Contact-Duo-Profile

## 3100.0110N

### 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 $\Omega$ ) flows through the safety strip. When mechanical pressure causes the resistance in the safety strip to drop below 5.5 k $\Omega$ , 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 $\Omega$ , 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).



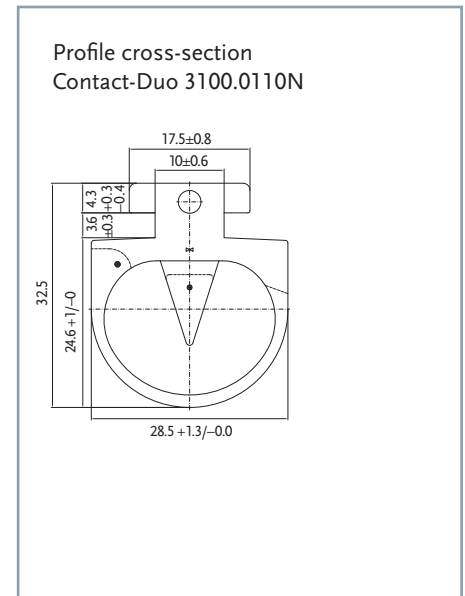
Contact-Duo 3100.0110N

Contact-Duo-Profile	
Article no.	3100.0110N
Material	NBR
Weight	0,546 kg/m
Shore hardness	Conductive mixture: 71 +/-5 Shore A Non-conductive mixture: 54 +/-5 Shore A
Interconnection	Series connection electr. max. 10 switching strips
Min. and max. length of the switching strip	0.1 m to 100 m
Storage temperature	-10°C to +15°C respectively +25°C (DIN 7716)
Delivery length	20 m
Response time of the evaluation electronics	< 12 ms

Certified characteristic data	
Actuation force	74 N at 200 mm/s
Actuation angle ( $\alpha$ )	+/-20°
Ineffective border area	20 mm (left/right), 30 mm (left/right) with finger safety
Finger safety	yes
Max. operating speed	200 mm/s
Climatic conditions	+5°C to +55°C
Level of protection	IP67
Number of switching cycles	> 10,000 switching cycles

Deformation travels	
Test temperature	20°C
Speed	200 mm/s
Actuation force	74 N
Pre-travel at max. operating speed	7.4 mm
Working travel 600N	13.2 mm
Compensation travel at 250 N	3.5 mm*
Compensation travel at 400 N	5.5 mm*

\* Only if the sensor would not be deformed permanently.



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

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