Contact-Duo-Profile

Functional description of the system

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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).



Contact-Duo 3100.1610N

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Contact-Duo-Profile	
Article no.	3100.1610N
Material	NBR
Weight	0.839 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

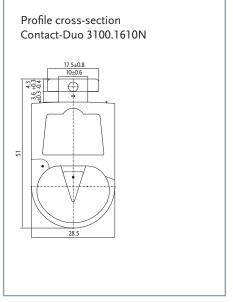
Actuation force	85 N at 200 mm/s
Actuation angle (α)	+/-45°
Ineffective border area	20 mm
Finger safety	yes
Max. operating speed	200 mm/s
Climatic conditions	+5 °C to +55 °C
Level of protection	IP67
Number of switching cycles	> 10,000 switching cycles

Deformation travels

Test temperature	20°C	
Speed	200 mm/s	
Actuation force	85.0 N	
Pre-travel at max. operating speed	9.4 mm	
Working travel 600 N	31.0mm	
Compensation travel at 250 N	8.9 mm*	
Compensation travel at 400 N	15.3 mm*	

* 3.8 mm reduction because of recovery

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



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



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