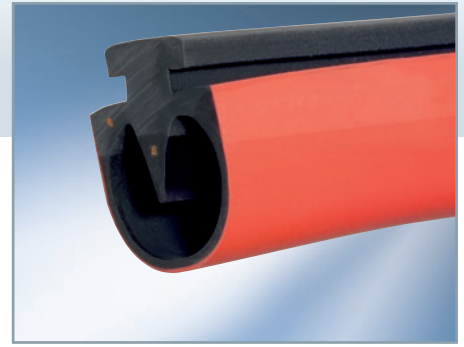


# Contact-Duo-Profile

3100.0110 RED



Contact-Duo 3100.0110 RED

## 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-Profile	
Article no.	3100.0110 RED
Material	NBR
Weight	0.474 kg/m
Shore hardness	Conductive mixture: 62 +/-5 Shore A Non-conductive mixture: 60 +/-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

Connection system specifications documented in a separate data sheet

Certified characteristic data	
Actuation force	76 N at 200 mm/s
Actuation angle ( $\alpha$ )	+/-20°
Ineffective border area	0 mm (for Finger safety 30 mm)
Finger safety	yes
Max. operating speed	200 mm/s
Climatic conditions	5 °C to +55 °C
Level of protection	IP67 (EN 60529)
Number of switching cycles	> 10,000 switching cycles (DIN EN 13856-2)

# Contact-Duo-Profile

3100.0110 RED

Deformation travels	5 °C	20 °C	20 °C	20 °C	55 °C
Test temperature	5 °C	20 °C	20 °C	20 °C	55 °C
Speed	10 mm/s	10 mm/s	100 mm/s	200 mm/s	10 mm/s
Actuation force	42.7 N	41.7 N	55.4 N	72.8 N	38.7 N
Response travel A	5.4 mm	6.2 mm	6.7 mm	9.2 mm	7.3 mm
Total deformation at 250 N B1	9.1 mm	10.4 mm	9.2 mm	12.2 mm	12.1 mm
Total deformation at 400 N B2	11.2 mm	12.5 mm	11.7 mm	14.2 mm	13.6 mm
Total deformation at 600 N C	13.1 mm	14.7 mm	14.3 mm	16.3 mm	14.8 mm
Compensation travel at 250 N	3.7 mm	4.1 mm	2.5 mm	3.0 mm	4.8 mm
Compensation travel at 400 N	5.8 mm	6.3 mm	5.0 mm	5.0 mm	6.3 mm
Max. stopping distance	4.8 mm	5.3 mm	4.2 mm	4.2 mm	5.2 mm



## EG - Baumusterprüfbescheinigung EC type-examination certificate

Hiernit wird bescheinigt, dass das unten beschriebene Produkt der Firma  
*This certifies that the product mentioned below from company*

**Gelbau GmbH & Co. KG**  
Grandkaule 8-10  
53859 Niederkassel  
Deutschland

die Anforderung des Anhangs 1 der Maschinenrichtlinie 2006/42/EG als eine Grundlage für die EG-Konformitätserklärung erfüllt.  
*meets the requirements of Annex 1 of the Directive 2006/42/EC as a basis for the EC declaration of conformity.*

Gepflichtet nach: EN ISO 13856-2:2013  
Tested in accordance with: EN ISO 13849-1:2008/AC:2009

Beschreibung des Produktes: Sicherheitschaltleiste  
(Details s. Anlage 1)  
*Description of product: safety edge (Details see Annex 1)*

Typenbezeichnung: 3100.0110RED  
*Type designation:*

mit Sicherheitsschaltgeräten with safety control units	Kat.3 cat.3	342.dxfef	252.dxfef 352.dxfef 452.0x 452.4x	262.dxfef 362.dxfef 462.0x 462.4x
und Sicherheitsschaltgeräten with safety control units	Kat.1 cat.1	212.0x	B212.0x B412.0x	232.0x 332.0x 414.0x

Bemerkungen: Keine  
*Remarks: none*

Registrier-Nr. / Registration No. 44 205 12152624  
Prüfbericht Nr. / Test Report No. 3515 3636  
Aktzeichen / File reference 8000442875

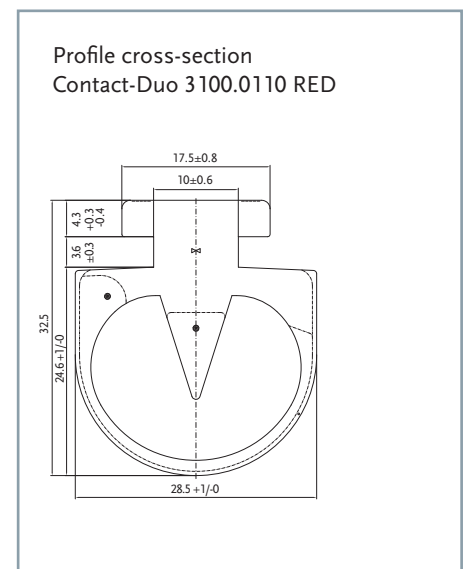
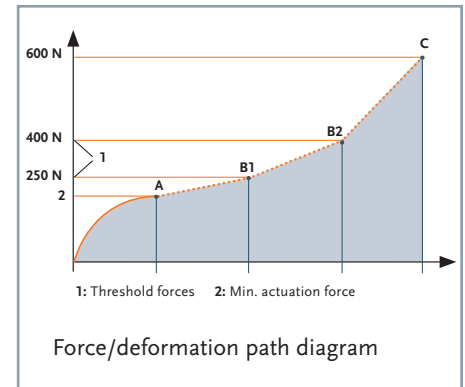
Gültigkeit / Validity  
von / from 2016-01-11  
bis / until 2021-01-10

Essen, 2016-01-11



TUV NORD CERT GmbH  
Zertifizierungsstelle Maschinen  
Certification Body Machines  
Benannte Stelle 0044 / Notified Body 0044





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).