

For general use with electrical and fire safety requirements to EN 12882

# FRS conveyor belts

## Requirements to EN 12882

- Electrical conductivity
- Drum friction test
- Resistance to ignition
- Determination of fire propagation

## Current test standards for fire and safety requirements on fabric and steel cord conveyor belts

Category	Application	Assessment of flame resistance	Surface resistance to EN ISO 284	Drum friction EN 1554					
				Processes	Flame	Glowing	Load	Time	Maximum drum temperature
1	General use, risk only through electrostatic discharge.		$\leq 300 \text{ M}\Omega$	Not required					
2A	As for category 1, additional hazard from small open flames on the cover stock (additional causes of fire).		$\leq 300 \text{ M}\Omega$	Not required					
2B	As for category 2A, the additional risk is smaller, open flame on the carcass.		$\leq 300 \text{ M}\Omega$	Not required					
3A	As for category 2A, additional hazard of local heating due to friction.		$\leq 300 \text{ M}\Omega$	A1	No	Permitted	Constant 343 N	1 h	No
3B	As for category 3A, there is an additional risk due to small, open flame on the carcass.		$\leq 300 \text{ M}\Omega$	A1	No	Permitted	Constant 343 N	1 h	No
4A	As for category 1, additional risk of fire spreading caused by additional fire sources. Secondary safety device?		$\leq 300 \text{ M}\Omega$	Not required					
4B	As for category 4A, additional hazard of local heating due to friction. Secondary safety device?		$\leq 300 \text{ M}\Omega$	A1	No	Permitted	Constant 343 N	1 h	No
5A	As for category 4B, there is however an increased risk of local heating due to friction. Secondary safety device?		$\leq 300 \text{ M}\Omega$	A2	No	Permitted	Max. 1,715 N	2.5 h	No
5B	As for category 5A, with an additional risk from glowing. Secondary safety device?		$\leq 300 \text{ M}\Omega$	A2	No	No	Constant 343 N	2.5 h	No
5C	As for category 5B with an additional risk when operating in a potentially combustible atmosphere. Secondary safety device?		$\leq 300 \text{ M}\Omega$	A2	No	No	Constant 343 N	2.5 h	400° C