

# TRANSFLAM

## Grade K vs FH

What is the difference between Grade K and Grade FH?

### PRODUCT SHEET

### HIGHLIGHTS

- Excellent fire resistance and protection against flame propagation
- Improved abrasion and impact resistance
- Cost competitive solution for typical applications
- Applicable on steel cord and textile belts
- In compliance with electrical and safety requirements of many international standards

### APPLICATIONS

-  Underground mining  
Hard rock mining
-  Cement industry
-  Steel industry
-  Grain and sugar industries  
Mineral processing plants
-  Overland conveyors  
Paper and wood industries  
Port operations  
Power and heating plants  
Recycling industry  
Tunnelling

## What is the difference between Grade K and Grade FH?

Both grades, **K** and **FH**, belong to the group of Flame Retardant compounds and fulfil the requirements according to ISO 340 with covers and antistatic according to ISO 284.

**Grade K** is referred to in several standards. The table below gives an overview of the minimum requirements according to each standard.

### AVAILABLE FOR THE FOLLOWING BELT TYPES

- Multitrans
- Sempercord
- Metalcord
- Metaltrans
- Autostable
- Transpipe
- Ripstop
- Translev
- Biathlon



	Standard	Standard Description	Tensile Strength [MPa]	Elongation at Break [%]	Abrasion (non-rotating) [mm <sup>3</sup> ]
1	DIN22131 [withdrawn]	Steelcord conveyor belts for hoisting and conveying	20	400	200
2	ISO15236 [replaces DIN22131]	Steel cord conveyor belts	15	350	200
3	ISO22721	Conveyor belts; Specification for rubber- or plastics- covered conveyor belts of textile construction for underground mining	20	400	200

Sempertrans identified a market demand for flame retardant compounds, such as grade K, with improved mechanical properties during the last decades. This demand mainly comes from hard rock applications, where the impact, cut & gouge, and abrasion resistance of a K-grade compound was insufficient.

Subsequently, Sempertrans developed its FH-grade to fill this niche and provide an almost DIN-X (or AS-M) grade similar compound with flame retardant properties.

The table below shows the minimum mechanical properties of Sempertrans FH-grade, also fulfilling the requirements according to ISO 340 with covers and antistatic according to ISO 284.

	Grade	Tensile Strength [MPa]	Elongation at Break [%]	Abrasion (non-rotating) [mm <sup>3</sup> ]
1	FH	20	500	100

Both grades fulfill the requirements of ISO 340 for covers and ISO 284 for antistatic properties. However, Grade FH provides an almost DIN-X (or AS-M) grade similar compound with improved mechanical properties compared to Grade K.

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