NORMS AND EXPLANATIONS

WHEN WE REFER TO THE FOLLOWING NORMS IT MEANS:

ANTISTATIC PROPERTIES: EN ISO 284:2012 (previously EN20284, DIN22104)

The mentioned standards are actually referring to the test method itself, specifying how and under which circumstances the test must be conducted. Thus the electrical resistance of the conveyor belt, when tested in accordance with the method, shall not exceed 3 x 10^8 Ω (300 MΩ)

ABRASION LOSS: DIN 22102

The abrasion loss is stated in mm^3. The lower the value, the better the abrasion resistance of the belt.

FLAMMABILITY CHARACTERISTICS – CONVEYOR BELTS:

ISO340 "K" & "S"

Mentioned standard is actually describing how and under which conditions the test must be conducted. 6 pcs of belting are prepared acc. to the norm and the test is conducted. Amongst other afterflame, afterglow and flame is measured after the source of ignition has been removed. The sum of the period of combustion for each of the series of the six tests shall be less than 45 seconds and no individual value shall be greater than 15 seconds. As you can see on our product sheets we distinguish between ISO 340 "K" & "S"

ISO340 "K"

Means that the test is only conducted on the top & bottom cover of the belt. Thus when marked "K" only the top and bottom covers are flame resistant.

ISO340 "S"

Means that the test is conducted on the top & bottom cover + the core of the belt. Thus when marked "S" the top and bottom covers + the core of the belt are flame resistant.

TEMPERATURE RESISTANCE

The temperatures specified in the data sheets, applies in principal, for the material as well as the ambient temperature. However, you need to be very cautious about the following:
If the ambient temperature exceeds e.g. -20 ° / + 100 ° C (please refer to the data sheets for details) this may reduce the belt performance and cause a malfunction during operation.

The indicated temperatures stated in the data sheets are minimum and maximum temperatures, respectively, and are not expressing optimal temperature conditions in relation to belt life. The temperature data indicate the minimum/maximum temperatures which the belt can resist.

The permitted temperature range also depends on how the belt is exposed to the temperature. The permitted temperature is lower in the case of closed systems (e.g. elevator belt, pipe conveyor).
Therefore, a belt/elevator belt can have a significantly decreased lifetime if the ambient temperature is e.g. 100° C compared to a belt which operates in an ambient temperature of e.g. 45° C. Furthermore, the content of e.g. oil and acid in the transported material in combination with high temperatures can likewise have a negative impact on the belt lifetime – a good example is wood pellets being transported directly from the press.

EXAMPLE:
A belt has a normal lifetime of approx. 7 years at an ambient temperature of 50° C. Now the ambient temperature is increased to 60° C and the expected theoretical lifetime will decrease to approx. 3.5 years, etc.
Thus, the guideline is: For every 10° C increase in the ambient temperature, the expected belt life will be decreased by app. 50%. This is especially the case for elevator belts, as these are encapsulated. Thus, we always recommend to incorporate maximal ventilation in the elevator.

For elevator belts and conveyor belts used in cold areas with temperatures below -20° C or more, disregarding the indicated potentially lower temperature resistance in the data sheets, we recommend leaving the belt/elevator belt running permanently (possibly by means of a service motor) to secure that the belt keeps it's flexibility and doesn't freeze on the pulleys when starting up the conveyor.

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Subject to alterations

NORMS AND EXPLANATIONS

WHEN WE REFER TO THE FOLLOWING NORMS IT MEANS:

EN 12882: 2008 (CAT. 2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 5C)

This standard has been designed to help the user to select the category most suitable to the particular circumstances of the application. The user/designer of the conveyor should amongst other consider the following points making the risk assessment:

- Hazards associated with the discharge of static electrical energy
- Hazards caused by the propagation of a flame along the belt which have been exposed to a high energy source such as fire
- Hazards associated with the impingement of small naked flames on the cover or and carcass of the conveyor belt at rest
- Hazards caused by stalling of the conveyor belt and the continued operation of the driving mechanism causing localized heating of the belt through contact with the drive drum or other sources of frictional heat.

The risk or probable rate of occurrence of these hazards and the degree of harm which they can cause will vary depending upon the particular circumstances of the site or application. Thus the safety level required will vary from application to application, depending upon the risks judged to be pertinent. Above mentioned hazards should not be taken as the only possible hazards affecting the safety in operation.

DIN 22102 – BELT WIDTH TOLERANCES

if nothing else has been agreed, we deliver acc. to below listed tolerances:

BELT WIDTH:

100 mm - 500 mm:	+/- 5 mm
501 mm - 3200 mm:	+/- 1%

DIN 22102 – ELONGATION AT MAX. WORKING LOAD

The elongation of our conveyor- and elevator belts is mentioned on each product sheet. The elongation value is valid for belts with fabrics made of polyester (E) in the warp direction. Other kinds of fabric might reduce or increase the elongation.

EP200 – EP500:	Max. 1,5 %
EP630 – EP1250:	Max. 2,5 %
EP1600 – EP3150:	Max. 3 %

DIN 22102 – BELT LENGTH TOLERANCES

- if nothing else has been agreed, we deliver acc. to below listed tolerances:

ENDLESS LENGTH:

Up to 15 m:	+/- 50 mm
15,1 mtr – 20 m:	+/- 75 mm
More than 20 m:	+/- 0,5 %

OPEN LENGTH:

One length:	- 0 % / + 2,5 %

PARTIAL LENGTHS:

Every partial length can deviate +/- 5 %
- but the total sum of the partial lengths only +/- 2,5 %

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