

ELEMET[®]

Steel elevator belts



ELETEX[®]

Textile elevator belts



PRODUCTS DESCRIPTION

➤ **ELEMET - STEEL ELEVATOR BELTS**

The structure of ELEMET elevator belts is a steel carcass composed by a strong warp of steel cord with suitable elastic modulus such to reach the best compromise between low elongation and good flexibility (see picture). This characteristic makes the belt easier to be aligned than traditional steel cord elevator.

Furthermore, the cable elasticity allows the use of pulleys with lower diameters, depending on the requirements of clamps and buckets.

Two regular steel wefts placed on top and bottom cover give to the belt high transversal stiffness, necessary to assure the best stability during the running; at the same time, it helps the belt for the buckets holding up highly increase cutting and tear resistance.

Due to the high quality of steel cord, it is possible to design ELEMET with very low safety factors.



➤ **ELETEX – TEXTILE ELEVATOR BELTS**



Belts designed to be used in bucket elevator plant only. The special construction of the reinforced polyester-nylon fabrics assures the use of such belts also for severe loading requirements. The result are the following:

- Polyester warp assures high resistance to heavy working conditions.
- Nylon weft guarantees transverse tearing strength and strong bolt holding.

All ELETEX are supplied with cut edges because synthetic fabrics used for their production do not need protection against humidity as they can't absorb any liquid. The 2 mm thickness both for top and bottom cover is designed to protect the carcass and at the same time assures the best bucket support without bolt loosening.

COVERS SPECIFICATIONS

➤ **ELEMET - STEEL ELEVATOR BELTS**

SX – Medium temperature resistance: SX is a rubber compound assuring resistance against abrasion; it is formulated for maximum temperature of 100°C. It is not oil resistant.

BX – Superior temperature resistance: BX is the rubber cover that assures the maximum heat resistance for a rubber compound. It is designed to work at maximum temperature of 180°C. It is not oil resistant.

➤ **ELETEX - TEXTILE ELEVATOR BELTS**

OX - (G grade DIN 22102) Oil resistant quality: OX is a standard rubber compound designed for elevator belts working at ambient temperature. This compound is antistatic according to ISO 284 and oil resistant too.

AX – High temperature resistance: AX is a rubber compound especially designed for textile elevator belts to guarantee good performances with abrasive and hot materials up to 150°C. This compound is antistatic according to ISO 284 but not oil resistant.

BX – Superior temperature resistance: BX is the rubber cover that assures the maximum heat resistance for a rubber compound. It is designed to work at maximum temperature of 180°C. It is not oil resistant.

AG - (K+G grade DIN 22102, class 2A EN 12882) Self extinguish and oil resistant compound: AG is a nitrile compound typically designed for bucket elevator systems used in cereal silos. It provides superior resistances to vegetable oils and animal fats; it is also selfextinguishing and antistatic according to ISO 340 and ISO 284 or equivalent in order to guarantee high safety into the conveyor plant. The maximum allowed temperature of the conveyed material is 100°C.



RECCOMENDED PULLEY DIAMETERS (mm)

ELEMET

Belt style	N/mm	800	1000	1250	1600	2000	2250	2500	2750	3000	3200	3500
Drive pulley	mm	500	500	630	630	800	800	800	800	800	800	800
Lower pulley	mm	400	400	500	500	630	630	630	630	630	630	630

ELETEX

Belt style	N/mm	400/3	500/4	630/4	800/5	1000/5	1250/5	1600/5
Drive pulley	mm	400	500	500	630	800	1000	1000
Lower pulley	mm	315	400	400	500	630	800	800

According to the OEM experience, different choices in the joining system or in the bucket bolts could need higher pulley diameters.

TECHNICAL SPECIFICATIONS

ELEMET

Belt style	N/mm	800	1000	1250	1600	LE2000	LE2250	LE2500	LE2750	LE3000	LE3200	LE3500
HEAT RESISTANT COVER SX (100°C)												
Cover thick.	mm	3+3	3+3	3+3	3+3	-	-	-	-	-	-	-
Belt thick.	mm	11,4	11,4	12,3	12,3	-	-	-	-	-	-	-
Belt weight	kg/m ²	17,6	18,2	20,1	21,4	-	-	-	-	-	-	-
SUPER HEAT RESISTANT COVER BX (180°C)												
Cover thick.	mm	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4
Belt thick.	mm	13,4	13,4	14,3	14,3	15,0	15,0	15,0	15,0	15,8	15,8	15,8
Belt weight	kg/m ²	19,2	19,9	22,0	23,1	24,4	25,5	26,0	27,0	29,1	29,9	31,2

Maximum elongation at working tension (for safety factor ≥ 10)

Elemet with Standard Elongation (up to belt style 1600 kN/m) $\leq 0,40$ %

Elemet LE with Low Elongation (from 2000 up to 3500 kN/m) $\leq 0,25$ %

Available special constructions on demand and under technical approval.

ELETEX

Belt style	N/mm	400/3	500/4	630/4	800/5	1000/5	1250/5	1600/5
HEAT RESISTANT COVER AX (150°C)								
Cover thick.	mm	2+2	2+2	2+2	2+2	2+2	2+2	3+3
Belt thick.	mm	6,8	7,8	8,4	9,5	10,7	11,7	14,7
Belt weight	kg/m ²	8,4	9,6	10,2	11,5	13,2	14,5	18,6
SUPER HEAT RESISTANT COVER BX (180°C)								
Cover thick.	mm	-	-	-	3+3	3+3	3+3	3+3
Belt thick.	mm	-	-	-	11,5	12,7	13,7	14,7
Belt weight	kg/m ²	-	-	-	13,2	14,9	16,1	17,8
OIL RESISTANT COVER OX								
Cover thick.	mm	2+2	2+2	2+2	2+2	2+2	2+2	3+3
Belt thick.	mm	6,8	7,8	8,4	9,5	10,7	11,7	14,7
Belt weight	kg/m ²	8,6	9,7	10,4	11,7	13,4	14,7	19,0
SELF EXTINGUISH AND OIL RESISTANT AG								
Cover thick.	mm	2+2	2+2	2+2	2+2	2+2	2+2	3+3
Belt thick.	mm	6,8	7,8	8,4	9,5	10,7	11,7	14,7
Belt weight	kg/m ²	9,1	10,2	10,9	12,2	13,9	15,2	19,7

Available special constructions on demand and under technical approval.

TECHNICAL DATA SHEETS

CUSTOMER:

DATE:

ELEVATOR TYPE:

REF:

MATERIAL CHARACTERISTICS

Material:

Temperature

DENSITY: Ton/m³

AVERAGE: °C

LUMP SIZE:mm

MAX: °C

CONVEYOR DATA

ELEVATION:m DESIGN CAPACITY: Ton/h SPEED:m/sec

WIDTH:mm AVERAGE CAPACITY:Ton/h MAX TENSION:kN/m

DRIVE UNIT

DRIVE PULLEY SURFACE

STEEL

RUBBER

APPLIED POWERkW

PULLEY DIAMETER

DRIVE PULLEY:mm

MATERIAL:

VOLUME:

WEIGHT (empty):

TAIL PULLEY:mm

STEEL OR PLASTIC

IN dm³

in kg/each

TAKE-UP

SCREW

TAKE-UP TRAVEL:m

COUNTERWEIGHT

APPLIED COUNTERWEIGHT:.....kg

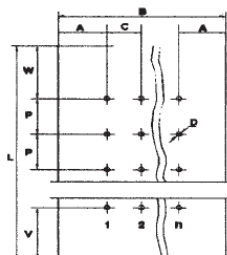
SPLICING

VULCANIZED

MECHANICAL FASTENERS:

TYPE:

DRILLING LAYOUT



L (total belt length) = mm A (free lateral space) = mm

W (top terminal area) = mm C (distance between holes) = mm

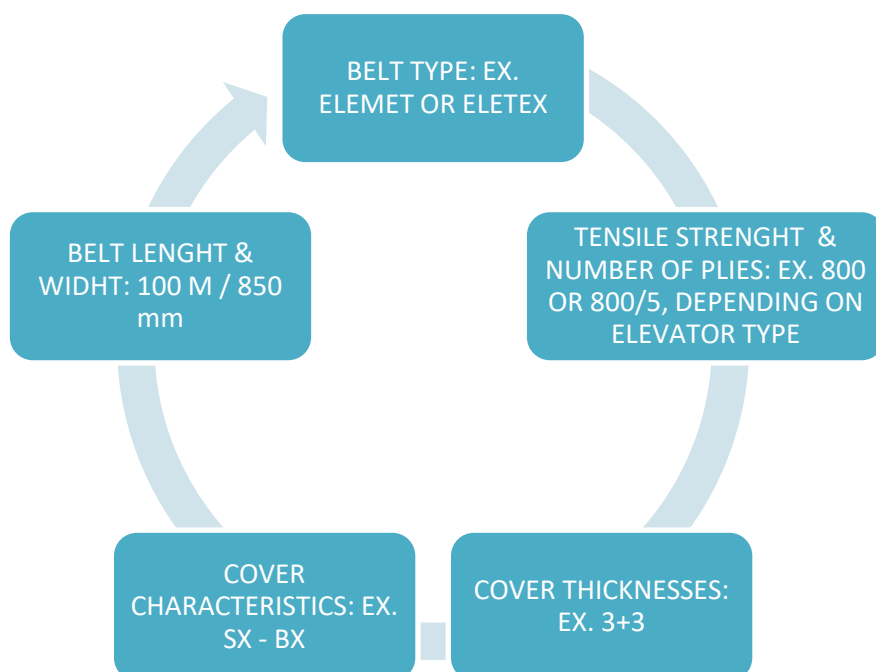
V (bottom terminal area) = mm N (hole number for each bucket) =

P (bucket pitch) = mm D (hole diameter) = mm

Drawing is only for reference, if different please enclose your own layout.

ELEMENTS FOR THE ORDER

Let's come to an important moment: making an order. In the aim of avoiding any kind of errors or misunderstandings, we suggest using the belt designation of these examples:



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