

BUCKET ELEVATOR TYPE EF

GENERAL

| | |
|-------------|--|
| Brand | Cimbria |
| Designation | Bucket Elevator |
| Model | EF |
| Use | Industry |
| Application | Vertical transport of loose bulk materials, such as grain like products. |



Cimbria type EF bucket elevator is designed for vertical transport of loose bulk materials, such as grain like products.

The EF elevator is intended for installation in an industrial environment.

The EF elevator has a totally enclosed construction divided into modular sections consisting of a head section, leg section and a boot section.

FEATURES

- Head pulley
- Boot pulley with slide plates
- Backstop, built in freewheel or separate
- Slatted or solid boot pulley
- Slatted head pulley or solid head pulley with rubber lagging

DRIVE SYSTEM

- Parallel shaft helical gearmotor, hollow shaft
- Helical bevel gearmotor, hollow shaft (optional)
- Gearmotor mounted on right or left hand side as specified
- Electrical soft starter ≥ 15 kW (highly recommended)

CONTROLLERS

- Rotation sensing
- Bearing heat sensing (optional)
- Misalignment detectors (optional)

ACCESSORIES

- Connection for flour intake (EF-8, 10)
- Connection for negative pressure
- Cleaning system for boot
- Equipotential bonding of shafts (ATEX configuration)
- Explosion relief (ATEX configuration)
- Inlet module
- Inlet hopper
- Outlet module
- Scraper for solid boot pulley (EF-8)
- Support system; data sheet 102.01.101

Technical data

| Machine | EF-8 | EF-10 | EF-12 | EF-14 |
|----------------------|--|-----------------------|-----------------------|-----------------------|
| Maximum capacity | 85 m ³ /h | 150 m ³ /h | 218 m ³ /h | 374 m ³ /h |
| Minimum belt speed | 2.10 m/s | 2.10 m/s | 2.40 m/s | 2.40 m/s |
| Maximum belt speed | 2.80 m/s | 3.00 m/s | 3.10 m/s | 3.65 m/s |
| Maximum bulk density | 850 kg/m ³ | | | |
| Drive motor size | According to application | | | |
| Sound pressure level | 75 to 87 dB(A) | | | |
| Operating conditions | Indoor and outdoor -15°C to +40°C ambient | | | |

NOTE: All capacities in the above table are based on the handling of dry and cleaned wheat.

Materials

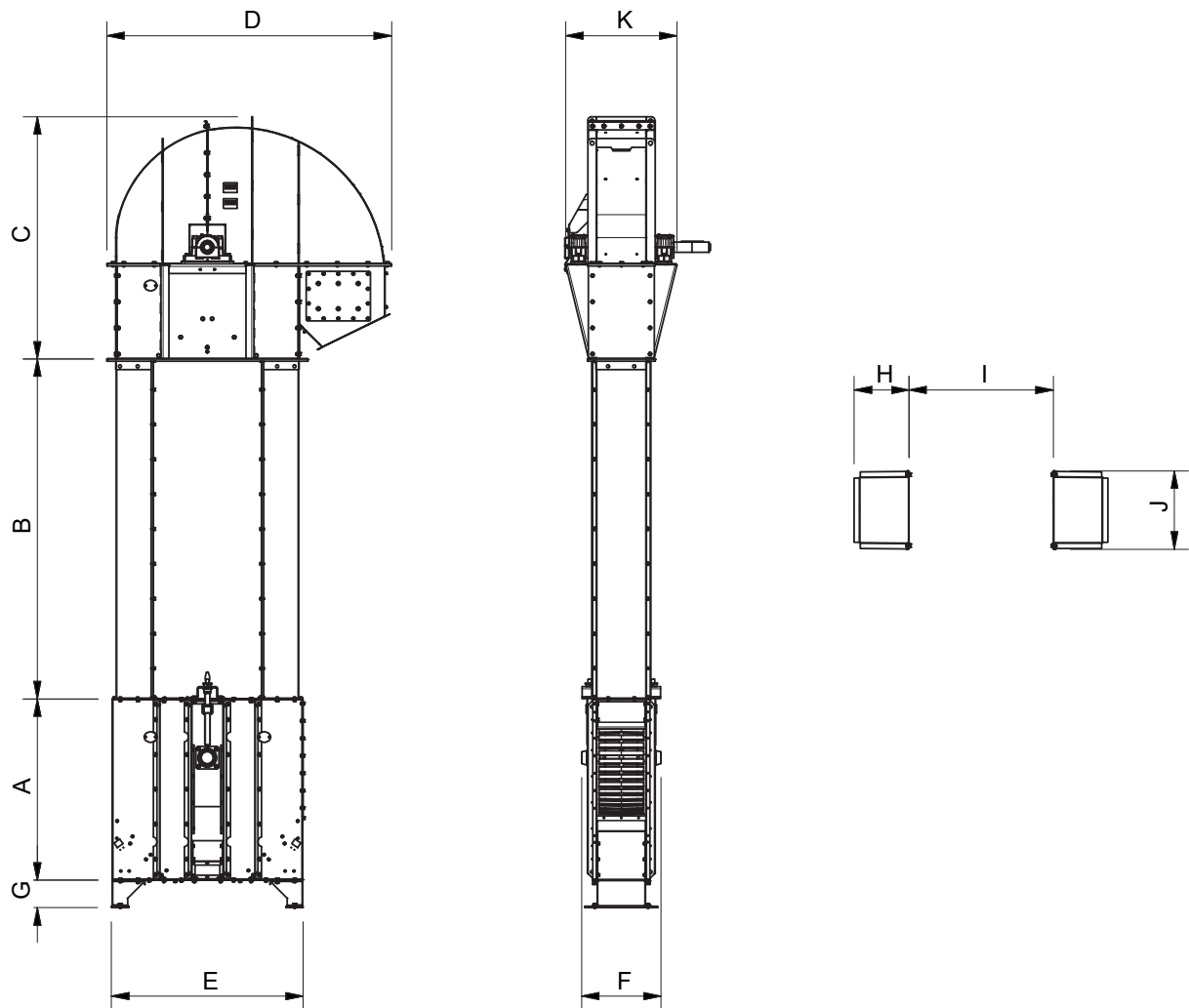
| | | |
|-------------------------|----------------|---|
| Casing | Standard (top) | Hot-dip galvanized |
| | Standard | Pre-galvanized steel |
| | Optional | Stainless steel |
| Casing wear parts (top) | Standard | Hot-dip galvanized Painted |
| | Optional | Steel (Hardox®) |
| Belt material | Standard | Standard belt, antistatic, (SBR/NBR) |
| | Optional | Oil-resistant belt 'GS', antistatic (NBR) |
| | Optional | FDA compliant belt, white, oil-resistant 'GS', antistatic (NBR) |
| Belt fasteners | Standard | Steel |
| | Optional | Stainless steel |
| Buckets | Standard | Steel |
| | Optional | Stainless steel |
| | Optional | Plastic (PEHD) |
| Spacers for buckets | Optional | Plastic (PEHD) |
| Outlet wear parts | Standard | Steel (Hardox®) |

Compliance

| | | |
|------|----------|---|
| ATEX | Standard | Non-zone inside Non-zone outside |
| | Optional | Zone 22 or 21 inside Zone 22 outside |

NOTE: Specific requirements apply for ATEX compliance.

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| | A [mm] | B [mm] | C [mm] | D [mm] | E [mm] | F [mm] | G [mm] | H [mm] | I [mm] | J [mm] | K [mm] |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| EF-8 | 825 | 1950 | 1100 | 1330 | 895 | 380 | 108 | 210 | 472 | 286 | 520 |
| EF-10 | 1040 | 1950 | 1390 | 1630 | 1100 | 455 | 158 | 236 | 620 | 337 | 640 |
| EF-12 | 1254 | 1950 | 1600 | 1890 | 1300 | 550 | 160 | 270 | 755 | 400 | 770 |
| EF-14 | 1465 | 1950 | 1810 | 2150 | 1490 | 630 | 162 | 306 | 880 | 458 | 820 |

| | Boot section [kg] | Head section [kg] ¹ | Leg section [kg/m elevator] | Belt [kg/m] | Weight of material [kg/m] ² | Belt types | | | | | Belt width [mm] | |
|--------------|----------------------|-----------------------------------|--------------------------------|----------------|---|------------|-----------|-----------|------------|------------|--------------------|-----|
| EF-8 | 103 | 210 | 33 | 3.0–3.5 | 6.1 | 500/3 1+3 | 630/3 1+3 | | | | | 200 |
| EF-10 | 203 | 385 | 41 | 4.4–5.0 | 10.6 | | 630/3 1+3 | 800/4 1+3 | | | | 250 |
| EF-12 | 385 | 515 | 48 | 5.5–8.2 | 15.1 | | 630/3 1+3 | 800/4 1+3 | 1000/4 1+3 | | | 315 |
| EF-14 | 510 | 845 | 76 | 6.4–10.4 | 21.4 | | 630/3 1+3 | 800/4 1+3 | 1000/4 1+3 | 1250/4 1+3 | | 370 |

[1] Weight of head section is without gearmotor

[2] With material bulk density 760 kg/m³