

CHAIN CONVEYOR RM

Cimbria type RM chain conveyor is designed for moving dry bulk materials, such as grains and grain-like products, but can successfully be used to transport other materials, such as granulate, shavings etc. Cimbria will assist with consulting. The conveyor can be arranged with several slide gates for material outlets. It can be configured for reversible operation and has a very large capacity. Curved back plate used with return buckets can ensure that the material does not accumulate at the end of the conveyor. Intermediate sections with double bottom and raised cover can be equipped with capacity regulation.

FEATURES

- Single bottom casing with return rollers or double bottom casing
- Dual-side or top loading
- Single or double strand conveyor chain, pins-and-bush assembly; data sheet 102.02.101
- Welded flights with bolted scraper flaps
- Manual chain tensioning at tail end
- Wear plates on bottom

DRIVE SYSTEM

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

CONTROLLERS

- Overflow sensing
- Rotation sensing (optional)
- Bearing heat sensing (optional)
- Explosion relief (optional); data sheet 50

ACCESSORIES

- Outlet for Q-pipe system
- Top covers for inlet sections
- Slide gates; data sheet 102.02.100
- Return buckets for chain
- Inspection windows
- Wear plates along lower sides
- Sun cover for gearmotor
- Support system; data sheet 102.02.102
- Centre drive
- Air cleaning

| Technical data | | |
|-----------------------------------|---|------------------------|
| Maximum capacity | RM-10 | 334 m ³ /h |
| | RM-12 | 505 m ³ /h |
| | RM-14 | 821 m ³ /h |
| | RM-16 | 1306 m ³ /h |
| Maximum bulk density | 850 kg/m ³ | |
| Drive motor size | According to application | |
| Chain speed | Up to 0.60 m/s | |
| Sound pressure level | 75 to 85 dB(A) | |
| Maximum length and angle of slope | Depends on the material properties and the length and angle of the conveyor | |
| 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 | RM-10, -12 | Pre-galvanised steel |
| | | RM-14, -16 | Hot-dip galvanised steel |
| | Optional | Hot-dip galvanised steel Stainless steel Painted steel | |
| Wear plates, bottom | | PE-UHMW, antistatic, 10 mm | |
| Wear plates, sides | Optional | Hardox® steel, 4 or 6 mm | |
| Chain | | Steel, oil coated | |
| Rollers | | Steel, oil coated | |
| Scraper flaps | | PE-UHMW, antistatic | |

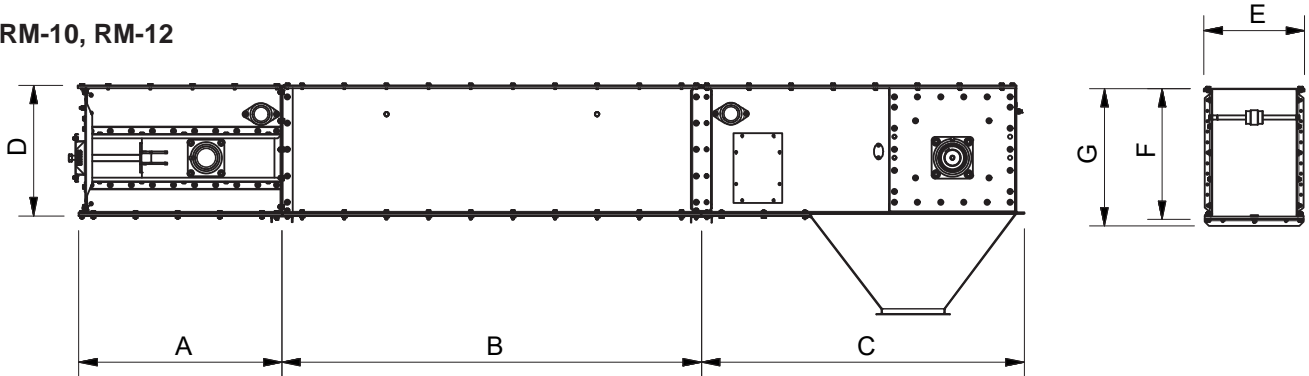
| Compliance | | |
|------------|----------|---|
| ATEX | Standard | Non-zone inside Non-zone outside |
| | Optional | Zone 22 or 21 inside Zone 22 or 21 outside |

NOTE: Specific requirements apply for ATEX compliance.

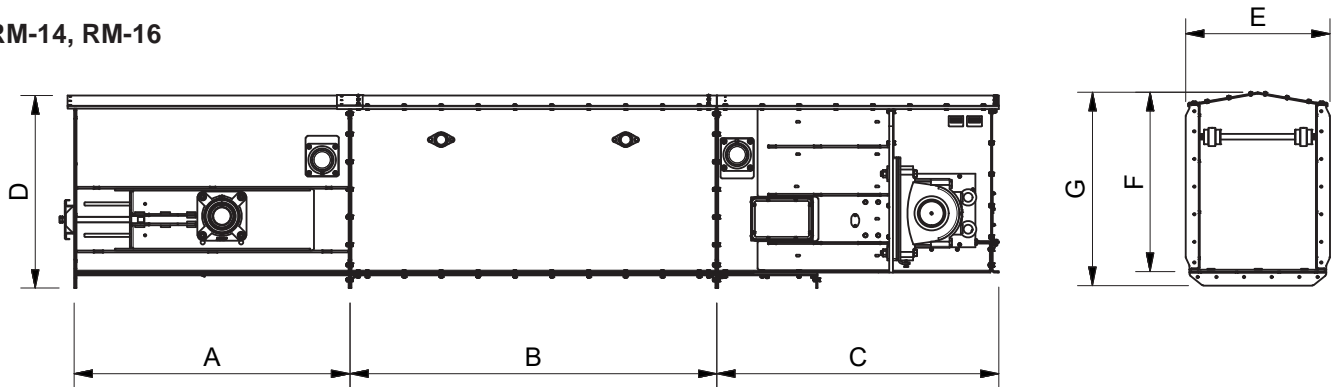
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DIMENSIONS

RM-10, RM-12



RM-14, RM-16



| | A [mm] | B [mm] | C [mm] | D [mm] | E [mm] | F [mm] | G [mm] | |
|--------------|--------|-------------------------|--------|--------|--------|--------|--------|--|
| RM-10 | 964 | 490 / 990 / 1990 / 3000 | 1530 | 620 | 477 | 622 | 652 | |
| RM-12 | 970 | 490 / 990 / 1990 / 3000 | 1530 | 736 | 595 | 736 | 756 | |
| RM-14 | 1496 | 490 / 990 / 1990 | 1530 | 1045 | 782 | 972 | 1048 | |
| RM-16 | 1496 | 490 / 990 / 1990 | 1530 | 1282 | 952 | 1212 | 1282 | |

| | Grain layer thickness [mm] | Grain layer width [mm] | Thickness, top plate [mm] | Thickness, side plate [mm] | Thickness, bottom plate [mm] | Weight with material [kg/m] ¹ | Driving section [kg] ² | Intermediate section [kg/m] | Tension section [kg] |
|--------------|----------------------------|------------------------|---------------------------|----------------------------|------------------------------|--|-----------------------------------|-----------------------------|----------------------|
| RM-10 | 420 | 400 | 2.5 | 4 | 4 | 255 | 260 | 115 | 220 |
| RM-12 | 530 | 500 | 2.5 | 4 | 4 | 355 | 265 | 145 | 240 |
| RM-14 | 660 | 630 | 2.5 | 6 | 6 | 570 | 1100 | 250 | 800 |
| RM-16 | 850 | 800 | 3.0 | 6 | 6 | 800 | 1350 | 290 | 1120 |

[1] With material bulk density 760 kg/m³

[2] Weight of driving section without motor