

Compact Belt Tracking 2G (CBT 2G)

General description



The IPCO Compact Belt Tracking 2G (CBT 2G) device is a versatile, easy to install belt alignment solution that builds on the strengths of the original model to provide reliable tracking and a long belt life.

The CBT proved an effective solution for retrofitting to existing systems, and is now in widespread use on conveyors across many industrial sectors.

The next generation CBT 2G delivers a range of additional benefits including:

- Faster, more precise tracking performance.
- Easier installation, set up and servicing.
- Contact-free optical belt edge sensing.
- Longer working life for device and belt.

Scope of supply

The CBT2 system consists of:

1. System control panel

The electronic portion – or 'brain' – of the tracking system. An intuitive user interface enables quick and easy setting of tracking parameters and displays system information.

2. Belt edge sensor and cable

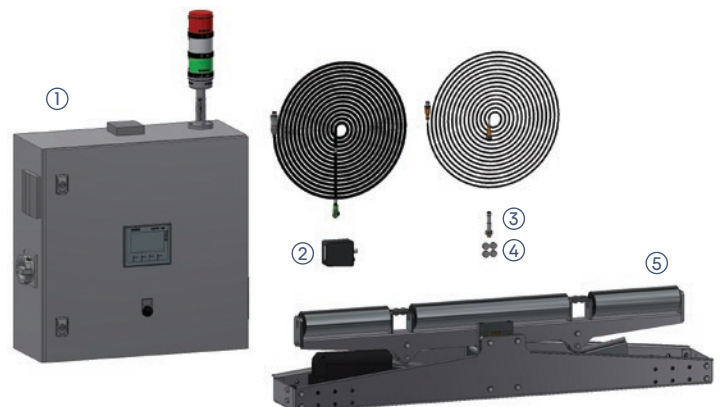
An optical sensor continuously monitors the position of the belt edge. The use of a contact free sensor eliminates the possibility of belt wear caused by physical sensors. Supplied with a 10 m cable with M12 connection.

3. Drum speed sensor and cable

An inductive sensor senses magnets on the drum to help the system estimate belt speed. Supplied with a 10 m cable with M12 connection.

4. Magnets

Magnets placed on the drum help the speed sensor detect drum movement.



5. CBT 2G unit

This is the mechanical portion of the tracking system, actuating belt tracking. The unit is mounted to the conveyor frame.

Function description

The optical sensor continuously monitors the position of the belt edge. Any deviation immediately triggers a corrective action in the CBT 2G unit to restore smooth, straight running. The tracking effect is achieved by tilting rollers that cause the belt to move laterally in the appropriate direction. A closed loop control system enables faster, more precise tracking.

Installation

The CBT 2G device should be installed close to the drive drum or the tensioning drum and on the belt strand entering onto the drum. The maximum break angle should normally not be more than 3°.

The CBT 2G can be placed so that the tilt roller breaks the belt inwards or outwards.

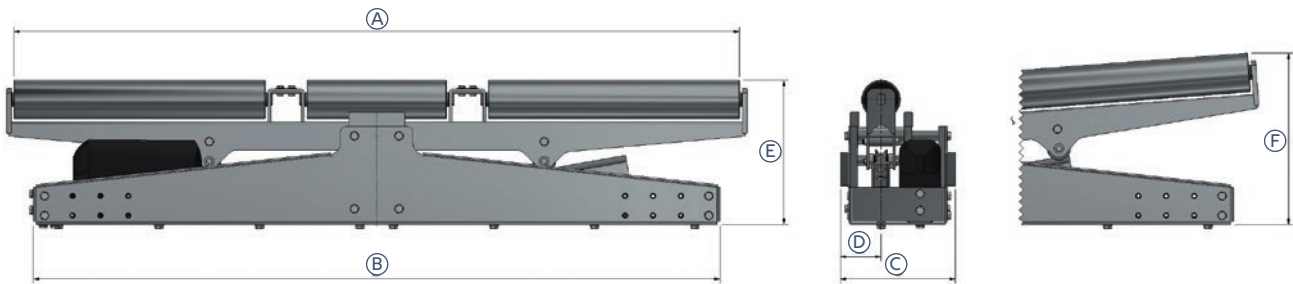
Benefits and improvements

The technical advances incorporated into the next generation CBT2 deliver a range of user benefits including:

- Increased tracking speed and precision (improved hardware & software).
- Easier operation and control thanks to intuitive user interface.
- Easier installation, setup and servicing.
- Cost effective – replace worn parts with spares, rather than replacing the whole unit.
- Improved roller quality for extended service life and smoother, quieter operation.
- Contact free optical sensor eliminates need for bulky Belt Edge Detector (BED).

Available sizes for CBT 2G

CBT model name	CBT 2G 800	CBT 2G 1000	CBT 2G 1200	CBT 2G 1500
Belt width, mm	800	1000	1200	1500
Compact belt tracking dimensions, mm				
A	900	1100	1300	1625
B	970	1230	1230	1670
C	206	206	206	206
D	63	63	63	63
E	257	257	257	257
F	307	307	306	331
Weight, kg	40	47	50	60
All models				
Linear actuator (kW)	0.312			
Voltage (V)	24			
Control box dimensions (mm)	600 (h) x 600 (w) x 250 (d)			
Control box weight (kg)	33			



Accessories

A range of accessories is available for use with the CBT 2G:

- **Safety plow:**
Removes unwanted product or debris from the belt, eliminating risk of damage to the belt or rollers.
- **Mounting legs:**
For mounting the CBT 2G on the floor.
- **Hanging brackets:**
For mounting the CBT 2G to a frame structure.
- **Belt edge sensor bracket:**
Generic bracket for belt edge sensor.

Data given in this document are nominal values and are not guaranteed. Information relating to material, specifications, properties and/or performance is intended as guidance on determining suitability, and may be subject to change without notice.