



# Akapp-Stemmann

A Wabtec Activity

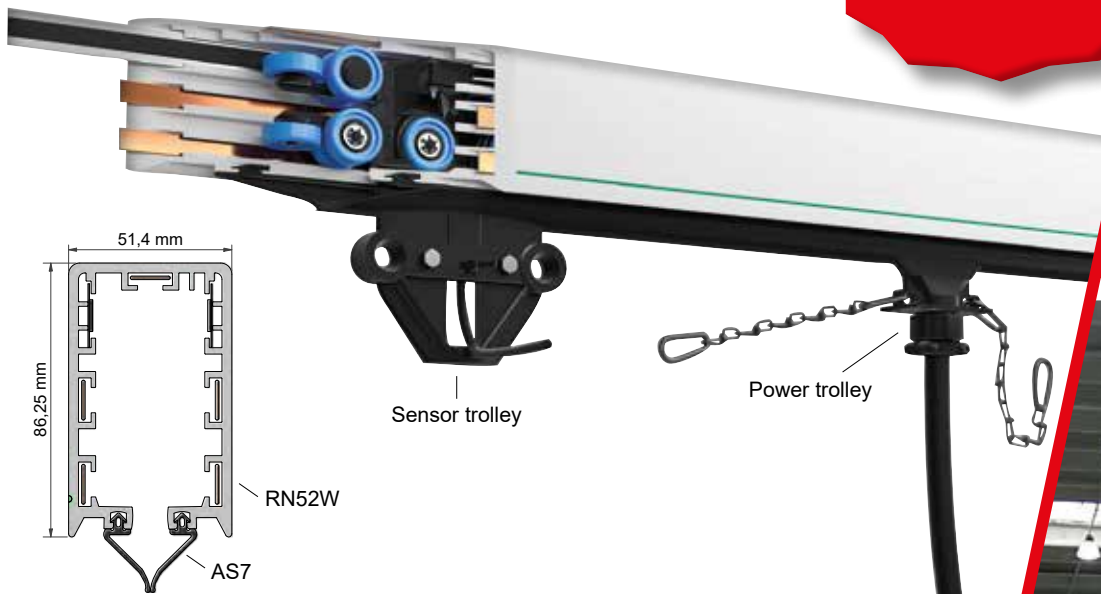
## PowerPOZ

Conductor system with integrated contactless positioning system

Developed for use in demanding crane and production facilities, such as:

- Overhead cranes
- Agricultural sector (feed/spreading robots)
- Precast concrete production

**NEW!**



### System characteristics:

- Fully integrated, protected positioning system
- Up to 5 copper power strips, each max. 160A current
- Max. system length 520m (with 2 position magnetic tapes)
- High accuracy in positioning:  $\pm 2,5\text{mm}$  (semi-absolute)
- Self-resetting position signal, if necessary. signal loss
- Protection class: system IP44 (with AS7 seal); sensor IP67
- Resistant to environmental influences, such as dust or moisture
- Ambient temperature  $-10^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$
- Applicable in installations with curves
- Travel speed max. 240m/min.



## Akapp-Stemmann PowerPOZ - Essential components



### Housing

Type RN52W

- 5 channels for power / energy
- 2 channels for positioning
- temperature range -10°C to +60°C



### Positioning tape

Type PowerPOZ MT10/20

- contactless position transfer
- max. length 260m
- delivery on custom rolls



### Sensor trolley

Type PowerPOZ PTR/1,5m

- power tension 10V - 30V DC
- speed up to 240m/min. (straight)
- incl. 1,5m connection cable



### Towing arm

Type SCL/PowerPOZ

- easy assembly
- eliminates hor. and vert. tolerances
- easily adjustable



### Fixed point positioning tape

Type MT10/20-FP

- fixation of positioning tape
- stability of positioning system
- integrated in 200mm housing



### End cap

Type RN52W-EC

- safe system end closure
- prevents dust/moisture in system
- length 300mm



### Drawing tool PowerPOZ

Type MT10/20-MT

- easily pulling-in positioning tape
- with special mounting clip
- reusable



### Turntable PowerPOZ

Type MT10/20-UC

- especially for tape lengths >100m
- optimal alignment tape pulling-in
- also available on a rental basis



### Roller nozzle

Type MT10/20-RN

- to be used with turntable
- optimal input in housing
- eliminates alignment movements

## Data-position signal

The PowerPOZ conductor system features a **semi-absolute** positioning system. After start-up, the position is determined with only 300 mm of travel. Output signal: SSI 25bit (Gray code), PLC/interface compatible.

## Additional information

### Mounting

Just like the copper strips for power supply, the magnetic positioning strips are simply pulled into the housing, at system lengths up to 100m, using the drawing tool. For longer tracks, we recommend the use of a turntable with a roller nozzle. See images above.

### System length

A magnetic positioning strip has a maximum length of 260m. For longer systems, a second positioning strip is required, which is fitted in the opposite channel. A second sensor trolley is then also used. This makes the maximum system length with positioning tape 520m.

### Horizontal curves

Minimum radius 800mm, maximum angle 180°.

Curves with radii >40.000mm are considered straight lengths.

### Vertical curves

Minimum radius 4500mm, maximum angle 2,5°. From radius 6000mm: maximum angle 7°.

Curves with radii >80.000mm are considered straight lengths.

For more information, please contact us. We are happy to advise you further about our products.