

Our references include:

Turkey: TCDD, Mersin - Toprakkale line

Brazil: Rio de Janeiro (Metro)

India: Various metros in India

Malaysia: KTMB (National Railways)

Thailand: SRT (National Railways)



National Railways, Malaysia

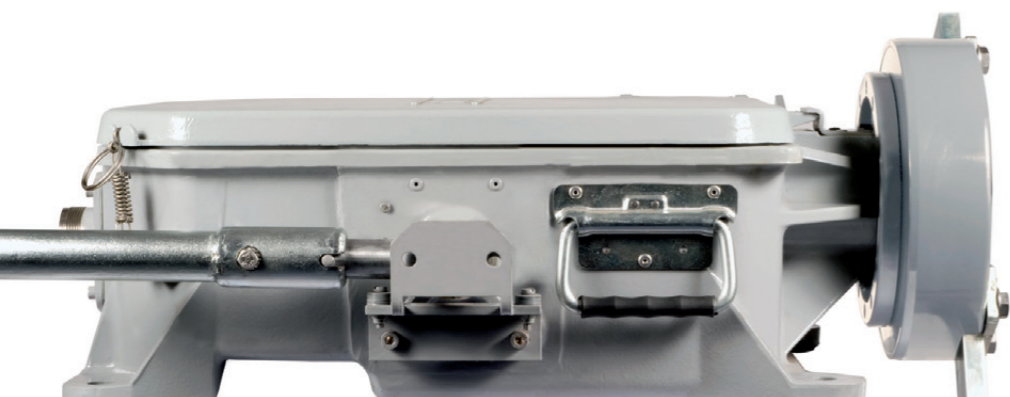


MCEM91T Trailable point machine

"Point machine in its simplest form,
robust and well-proven all over the world..."

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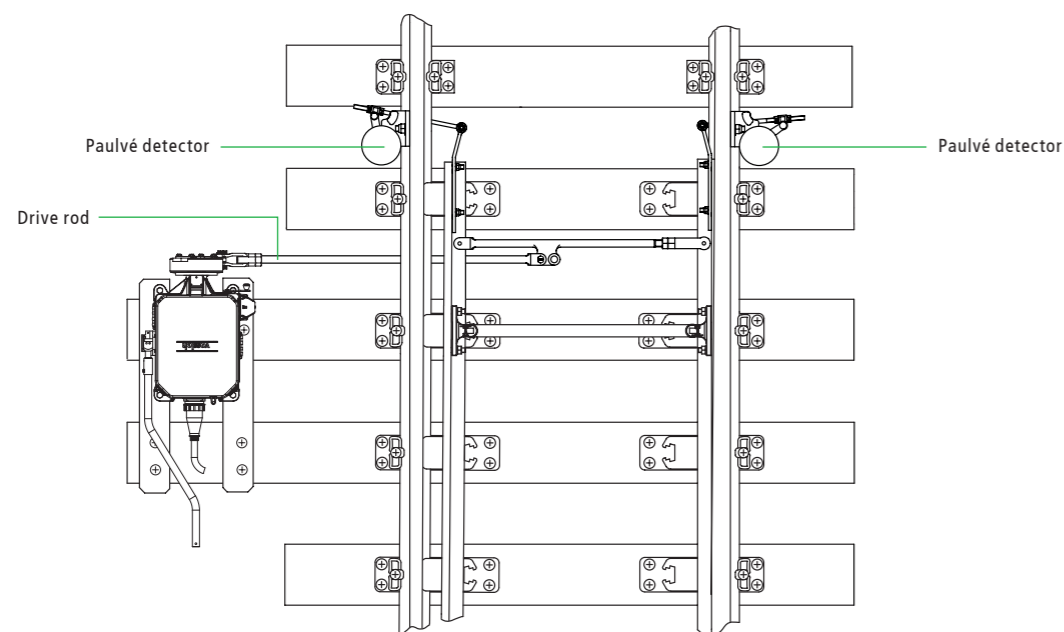
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'Light, robust and reliable, the MCEM91T point machine is suitable to drive switches of any rail guided transport. Equipped with a trailing disc, it adapts to all conventional lines.'

The electromechanical trailable point machine provides the electrical drive of the switch, its locking, and detection in end positions.

Trailable version of the MCEM91, it includes a trailing disc that enables switch trailing, while protecting the point machine.

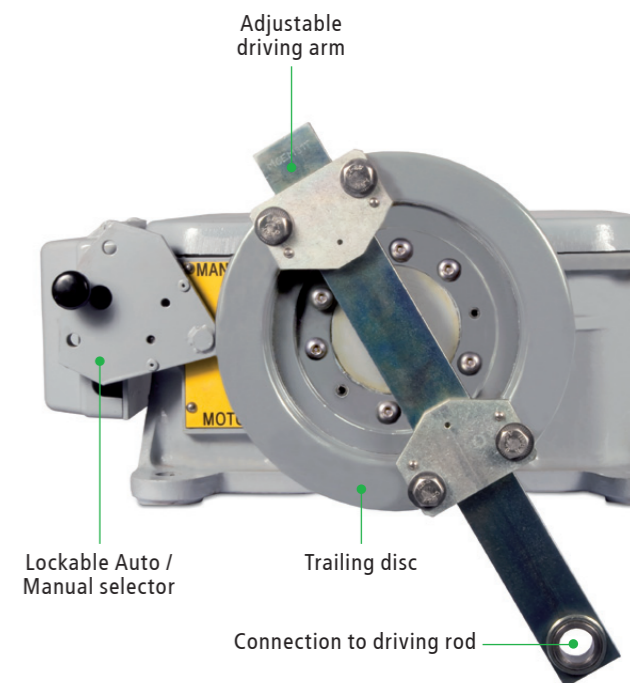


With the MCEM91T point machine, a rod provides the drive function. This driving rod can also be easily integrated into a bearer, thus permitting the mechanised tamping of the turnout. One pair of Paulvé detectors at the switch toe can detect the trailing by comparing the position of the switch with the position of the drive. The mechanism is also equipped with a trailing detection device.

Description

The MCEM91T point machine is made up of various components:

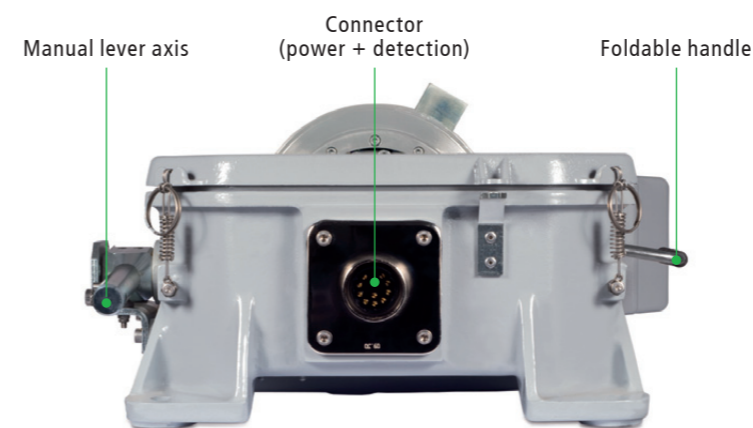
- An electric motor (voltage as required - DC or AC)
- A drive torque limiter device
- A gear box
- A locking mechanism in end position
- A driving arm connected to the trailing disc
- A trailing disc
- A trailing detection device (optional)
- A switch equipped with control and power contacts
- A manual emergency command with lever or crank
- An electrical watertight connector (optional)
- A locked cover



Installation and application

In terms of application, the MCEM91T point machine offers unequalled flexibility:

- Adaptable to any type of railway and to metro tracks with steel or rubber tyres
- Compatible with all bearers including timber and concrete bearers, metallic bearers, concrete slab track, etc.
- Accepts all types of fixations: coachscrews, bolting, etc.
- Designed for conventional traffic and heavy loads
- Stroke can be adjusted simply by moving the driving arm
- Reduced maintenance



Technical characteristics

- Protection index: IP55 or IP67 (option)
- Weight: 130 Kg
- Adjustable stroke: 115 to 260 mm
- Maximum load during drive: 400 to 900 daN
- Trailing force: 925 daN (stroke of 220 mm), 1 070 daN (stroke of 160 mm)
- Maximum trailing speed: 50 km/h
- Switch time: 3.5 to 4.8 s
- Anti-vandalism protection: included
- MTBF: over 30 years
- MTTR: 0,67 hours

Operation

MCEM91T point machine belongs to the family of locked electromechanical switch mechanisms. Due to its pendular movement, the throw is given by the driving arm length. While throwing, the point machine driving arm moves on a 60° angle with locking in end positions.

In addition to the internal locking and to ensure safety, the point machine is equipped with an internal "anti-veering" device designed to counter vibration effect caused by passing rolling stock. The MCEM91T point machine includes a trailing disc. The disengaging force required can be factory adjusted. After trailing, the internal mechanism is re-coupled to the driving arm by having a technician drive manually the mechanism.

Trailing detection contacts can be connected directly in series to the drive detection contacts or separately on a detection loop dedicated to trailing.

Simple and robust, the point machine can be easily adapted to any network or interlocking.