

SELF NORMALISING TRAILABLE CYLINDER

The Self Normalising Cylinder is designed to allow trains to pass one another on single lines without personnel leaving the train to operate a hand tumbler. ACTOM Signalling manufactures the trailable cylinder. Except for on-condition inspection cycles, the mechanism is maintenance free.

The trailable cylinder meets the demands for safety and reliability of railway signalling equipment in a crossing loop situation.

The train leaving the passing loop trails the point set. The cylinder returns the switchblades to normal once the train set clears the turnout, ready for the entry of the next train.

Description

Incorporated in the design is an internal, easily adjustable time delay mechanism whereby the normalising action can be pre-set over a wide range of time settings.

The trailable cylinder is a hydro/mechanical device and requires no electric power. The trailable cylinder is mounted on a steel cradle, fixed on two sleepers.

The cylinder has compact dimensions and can be conveniently handled in the field. For shunting purposes or opposing train movements, the points can be operated in the conventional manner with a hand tumbler.

The trailable cylinder can also be used in conjunction with a mechanical points indicator where no electric signalling is available.

Operation

The trailable cylinder's sequence of operation, with a train trailing through a



points set is as follows:

- The open switch is forced closed by the first wheel of the train, unlocking the C1 H clamp lock and opening the closed blade. At the same time the spring in the self-normalising trailable cylinder is compressed.
- Once the wheel has cleared the blade, the timer mechanism begins operating.
- Subject to the timer setting of the cylinder, the operating rod of the trailable cylinder retracts slowly, returning the blades towards the set position.
- At a preset distance from the end of the cylinder stroke, the piston rod closes at speed and locks the switch to the stock rail.
- The switch is now safe and ready for the next train movement.

Stroke

Maximum stroke of 245 mm, giving a minimum points opening of 90 mm and a maximum opening of 210 mm.

Specifications

- Length 1000 mm.
- Diameter 140 mm.
- Weight 90 kg.
- Retention force when closed: 1.2 kN.
- Trailing force at 130 mm opening: 8.7 kN.
- Operating temperature from -10 °C to +45 °C

Ordering Details

- Self-normalising trailable cylinder.
- Clamp Lock with or without detection.

SIGNALLING

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