



Auto-Warning Telltale (AWTT)



PRODUCT CATEGORY:
EXTENSOMETERS

TROLEX

Mechanical Telltales

The Mechanical Telltales from Trolex's RMT product line are low-cost, visual tools for monitoring movement in a tunnel roof, typically for use in underground mines. There are 3 models of telltales: Auto-Warning Telltale (AWTT), Mechanical Telltale and Rotary Telltale. All models include a visual scale for monitoring movement (in mm). The AWTT model also includes LED's for indication of movement above a set threshold, from a further distance.

All models use spring leg anchors for ease of installation up-hole from the roof. The AWTT model is ATEX/IECEX rated for use in hazardous environments (see specifications for more details).

> BENEFITS

- | | |
|-------------------------|---------------------|
| ✓ Increase Safety | ✓ High Reliability |
| ✓ Increase Productivity | ✓ Technical Support |

AWTT SPECIFICATIONS

DESCRIPTION	SPECIFICATIONS
Trigger Threshold	Factory pre-set at 5mm travel, user adjustable
Display Facility	Red flashing LEDs, minimum of two, four as standard
Accuracy	±0.5mm, trigger level
Number of Anchors	1
Hole Size	35-50mm hole
Anchor Options	60mm or 100mm spring leg span
Anchor s/s Wire Length	1 to 15 metres (10m supplied as standard)
Certification Approvals	ATEX Ex I M1, Ex ia I Ma and IECEX, Ex ia I Ma (-20°C ≤ +40°C)
Operational Life (once triggered)	Approx. 2months (continuous flashing)
Power Source	Supplied with 1 Alkaline Battery, not user replaceable
Environmental	Sealed-for-life electronics module to IP67
Head Assembly Dimensions	215mm Length x 100mm Diameter
Weight	0.5kg
Operational Temperature Range	-20 to + 40°C (Note: higher temperatures reduce battery life)

AUTO-WARNING TELLTALE (AWTT)

APPLICATIONS

Typically installed in vertical boreholes where access may become restricted or would constitute a high risk for direct or close-up viewing.
Includes: goaf, waste or caving areas in pillar recovery operations.
Fully proven in coal mine tunnels.

FEATURES

Gives a visible indication (flashing LEDs) when triggered by a pre-set level of strata movement
Once triggered, the AutoWarning Telltale flashes for months or until manually reset
Visual displacement reading in mm with traffic light warning system at pre-set threshold level
Small diameter drill hole needed (35mm (1^{3/8}" bit) recommended)

AWTT ORDERING INFO

ITEM	PART #
Auto Warning Telltale	TTAW01
FOR HOLE DIAMETER 35-50 MM:	
Number of LEDs	2 or 4
Anchor Depth (specify)	10 m = standard
Colour Ranges on Label (specify)	White: 5 mm common Green: 25 mm common Yellow: 25 mm common Red: 25 mm common

ACCESORIES - INSTALL TOOLS (FOR ALL MODELS)

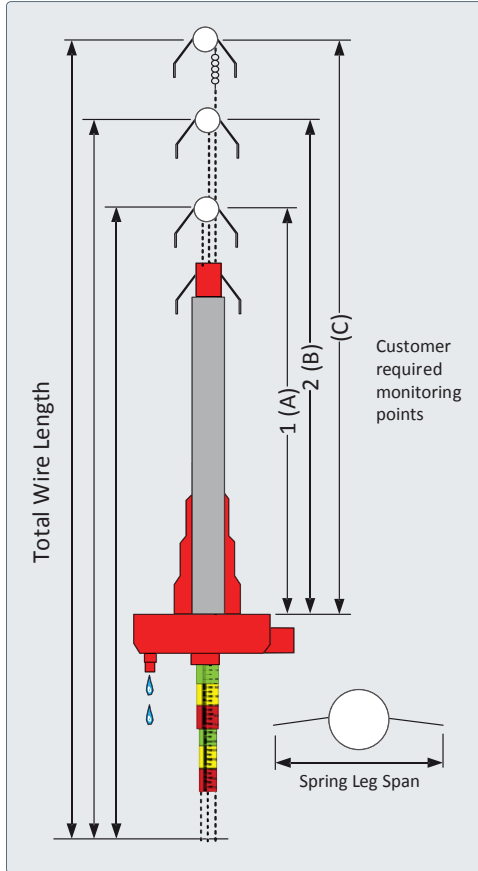
PART #	DIAMETER	DESCRIPTION
TTR01	Installation Rod 3/4 dia 1m machined	For Telltales or Wire Extos TTR01
RD-PL-02	Poly Drain Rod 3/4 x 1 m	Universal Fittings Riveted 11811
TTR01.07	Installation Rods, 7 of 3/4 dia x1m	1 Slotted, 6 standard for Telltales or Wire Extos
TTR01.12	Installation Rods, 12 of 3/4 dia 1m	1 Slotted, 11 standard for Telltales or Wire Extos
TTR01.20	Installation Rods, 20 of 3/4 dia 1m	1 Slotted, 11 standard for Telltales or Wire Extos

Mechanical Telltales



PRODUCT CATEGORY:
EXTENSOMETERS

SPECIFICATIONS + ORDERING



Mechanical Telltale

MECHANICAL TELLTALE

APPLICATIONS

Typically installed in vertical boreholes close to the face and near to the centre of the heading as part of the normal cycle by purpose trained personnel.

The installation spacing should not exceed 20m/60ft (UK). This does not prevent additional Telltales being installed where geological abnormalities or other changes occur. We recommend that Telltales are installed either side of fault planes.

Fully proven in coal mine tunnels.

MECHANICAL TELLTALE ORDERING INFO

ITEM	PART #
Telltale Mechanical	TT
Head Assembly Type	W - Water Diverting (wet hole) P- Plastic Tube (dry hole)
Hole Diameter	35-50 mm
Number of Anchors	2 or 3
Shear Spring	N - (no spring) S - (with shear spring)
Anchor Depths (specify)	Depth 1: 2.5 m common Depth 2: 5.5 m common Depth 3: 10 m common
Color Ranges on Label (for Anchor Depths 1, 2, and 3) (specify)	White: 5 mm common Green: 25 mm common Yellow: 25 mm common Red: 25 mm common

FEATURES

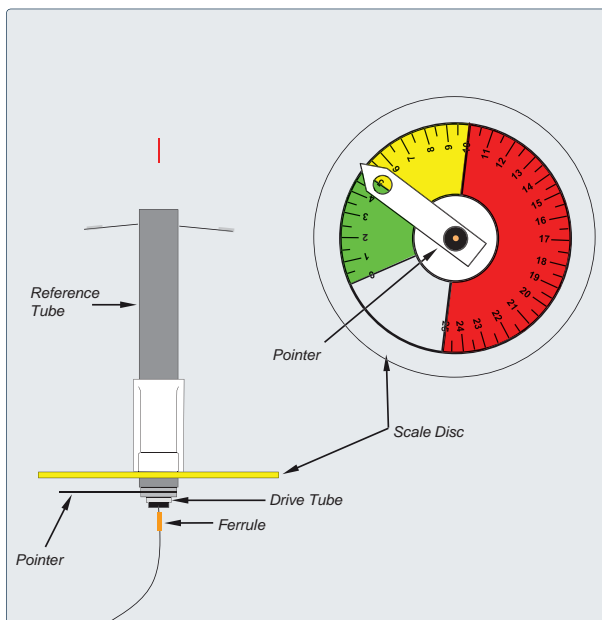
Visual displacement reading in mm with traffic light warning system.

Small diameter drill hole needed (35mm (1³/₈" bit) recommended).

Dual (for 3m long rockbolts) or triple (for where long tendons used) height models available.

SPECIFICATIONS

DESCRIPTION	SPECIFICATIONS
Labels	1mm visual markings
Number of Anchors	2 or 3
Hole Size	35-50mm hole (others available on request)
Anchor Options	60mm or 100mm spring leg span
Head Assembly Dimensions	Water Diverting = 215mm Length x 100mm Diameter Non-Water Diverting (plastic sleeve) = 300mm Length x 100mm Diameter
Shear Spring	Extension spring located between the spring anchor and longest indicator suspension wire. This can be used to detect wires that are becoming trapped in the hole.
Water Diverting Sleeve	Model suitable for wet applications
Plastic Sleeve	Open Top/Bottom for dirt to pass through - for dry applications



Rotary Telltale

ROTARY TELLTALE

APPLICATIONS

Typically installed in vertical boreholes close to the face and near to the centre of the heading as part of the normal cycle by purpose trained personnel.

The installation spacing should not exceed 20m/60ft (UK). This does not prevent additional telltales being installed where geological abnormalities or other changes occur. We recommend that Telltales are installed either side of fault planes.

Fully proven in coal mine tunnels.

FEATURES

Visual displacement reading in mm with traffic light warning system, rotary dial - removes parallax error as it is easier for the user to take readings on the rotary face.

Small Diameter drill hole needed (35mm (1 3/8" bit) recommended).

Single point model only.

ROTARY TELLTALE ORDERING INFO

ITEM	PART #
Rotary Telltale	TTRT01
FOR HOLE DIAMETER 35-50 MM:	
Anchor Depth (specify)	10 m = standard
Colour Ranges on Label (specify)	White: 5 mm common Green: 25 mm common Yellow: 25 mm common Red: 25 mm common

SPECIFICATIONS

DESCRIPTION	SPECIFICATIONS
Labels	1mm visual markings on rotary face
Number of Anchors	1
Hole Size	35-50mm hole
Anchor Options	100mm spring leg span
Head Assembly Dimensions	150 mm Length x 150 mm Diameter
Plastic Sleeve	Open Top/Bottom for dirt to pass through - for dry applications