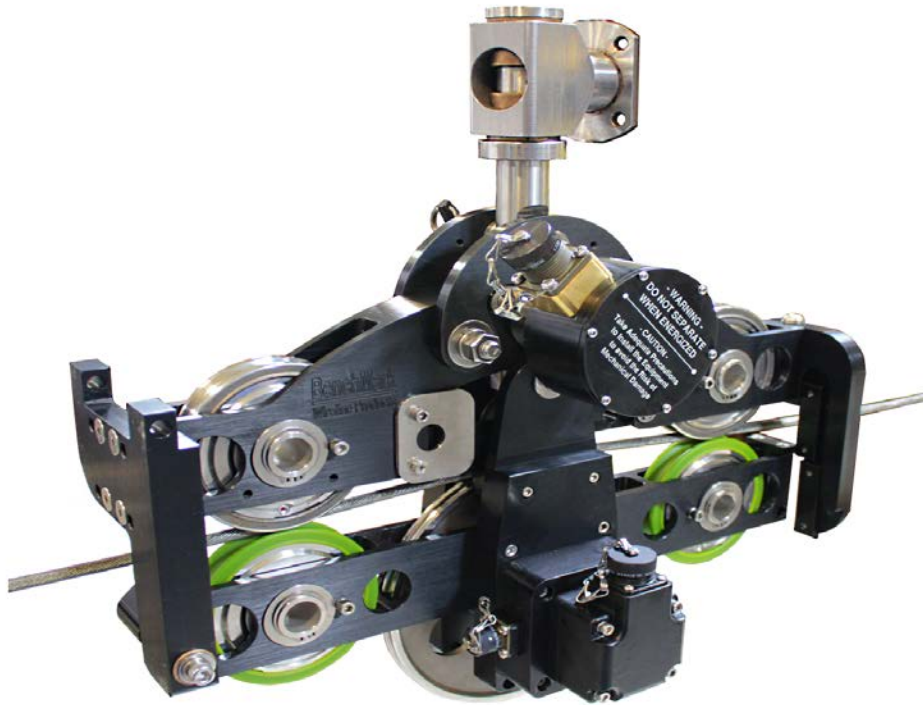


# AM3K MEASURING HEAD - CASED HOLE



## PRODUCT DESCRIPTION

The **AM3K Measuring Device** combines in one compact, lightweight unit, both depth measurement and line tension measurement capabilities.

The wireline runs across three steel wheels which creates a force on the load axle normal to the axis of the wireline. The center wheel is a hardened 2.0000 ft. (609.600 mm) circumference wheel with a 3/8" groove. This wheel is slightly offset from the other two which creates a slight bend in the cable. As wireline tension increases the small offset creates a corresponding bending force on the strain-gauged load axle. An electronic signal is transmitted via an electrical cable to the hoistman's panel and/or logging computer representing wireline tension. A calibration resistor is included in the load pin to send out a signal to calibrate the computer system.

The measuring wheel is coupled to an optical encoder that transmits electrical signals via an electrical cable to the hoistman's panel and/or logging computer representing cable depth and speed.

An independently powered encoder and display panel are used for back up depth indication. It uses a magnetic sensor to eliminate the need for a mechanical drive cable and mechanical counter.

A spring mounted tension roller is used to hold the measuring wheel in contact with the wireline to prevent cable slippage under low tension conditions. The two steel guide rollers properly hold the cable in line with the measuring wheel. Two composite guide rollers are provided to keep the wireline in the head under no load conditions.

Wear blocks are used to prohibit cable contact with the frame members. The head is resistant to corrosion by anodized all aluminum parts and using SST or plated steel parts. All the bearings are SST and greaseable to increase their useful life.

## PRODUCT FEATURES

- Compact size and weight for easy mounting and handling
- Variety of available mounts such as overhead spooling arm, bottom "pedestal" mount, or single overhead horizontal bar.
- Wireline installed quickly and easily by removing one quick release pin
- Complete head easily removed from mount by removing one quick release pin
- Works with wide range of e-line and braided line cables: 3/16" to 3/8"
- No wheel change needed when changing cable sizes
- Spring loaded pressure roller ensures depth accuracy under low tension conditions
- Less stress on the wireline by greatly reducing the amount of bend required to measure wireline tension
- Can measure wireline tension up to 10,000 pounds – 4,535 kg
- Tension load axle & amplifier configurations available to match a variety of display panels /computer systems
- Variety of different encoders are available to match customer's requirements
- Can be fitted with second optical encoder for redundancy.
- Fully independent backup depth output
- Corrosion resistant materials used
- Bearings are SST and greaseable to increase life
- Zone II encoder & load pins available

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## GENERAL SPECIFICATIONS

Height:	14.3"	.363 m
Length:	20.4"	.518 m
Width:	8.1"	.205 m
Weight:	30 lbs	13.6kg
Maximum Tension:	10,000 lbs	4,535 kg
Line Sizes:	3/16" – 3/8"	4.7625 mm – 9.525 mm
Operating Temperature:	-40°C to +65°C	-40°F to +149°F
Encoder:	1,200 PPR, others available	
Backup Counter:	4 PPR Quadrature	
Load Pin:	Passive low voltage, Differential voltage, 4-20ma current loop	

