

Tachometers and Tach/Hourmeters – AT and ATH Series



Features

- 0 - 3000 or 4000 RPM scale
- Optional LCD hourmeter, 0 to 100,000 hours
- Sensing from Magnetic Sensor, Battery Charging Alternator or Ignition Signal
- High Visibility Analogue Readout
- Air Core Movement
- Easy Calibration through DIP Switches
- Through-Dial Lighting
- Powered by 11-28 VDC Battery



* Products covered by this bulletin comply with European Union EMC directive 2004/108/EC regarding electromagnetic compatibility except as noted.

AT series tachometers are rugged, transistorized instruments with solid-state circuitry for indication of engine RPM. They are equipped with a bracket for mounting into a standard 86 mm (3- 3/8 in.) dash mounting hole. A full 270° sweep of the pointer gives an accurate indication on a large easy-to-read scale and the dial can be illuminated for night reading. ATH models are also equipped with an LCD hourmeter to record the elapsed engine running time.

Alternator sensing AT(H)A models are designed to function from pulses generated by a battery charge alternator with 4, 8, 12, 14, or 16 rotor poles. **Magnetic sensor AT(H)S models** receive a signal from a magnetic pickup sensor, located in close proximity to an engine flywheel or gearwheel with 50 to 304 teeth.

All models are powered by a 11-28 VDC battery (negative ground, positive ground or isolated electrical systems) and are reverse polarity protected. Backlight illumination is by use of a replaceable 12 V bulb (fitted as standard) or 24V bulb (included loose with each unit).

Series Models

ATS Series Magnetic Sensor Signal Tachometer

50-304 flywheel teeth 11-28 VDC, 2.5 to 15.2 kHz @ 3000 RPM

ATHS Series Magnetic Sensor Signal Tachometer/Hourmeter

50-304 flywheel teeth 11-28 VDC, 2.5 to 15.2 kHz @ 3000 RPM

ATA Series Alternator Signal Tachometer

3-40 pulses/engine revolution (typ) 11-28 VDC, 150 to 2000 Hz @ 3000 RPM

ATHA Series Alternator Signal Tachometer/Hourmeter

3-40 pulses/engine revolution (typ) 11-28 VDC, 150 to 2000 Hz @ 3000 RPM

Bezel Styles

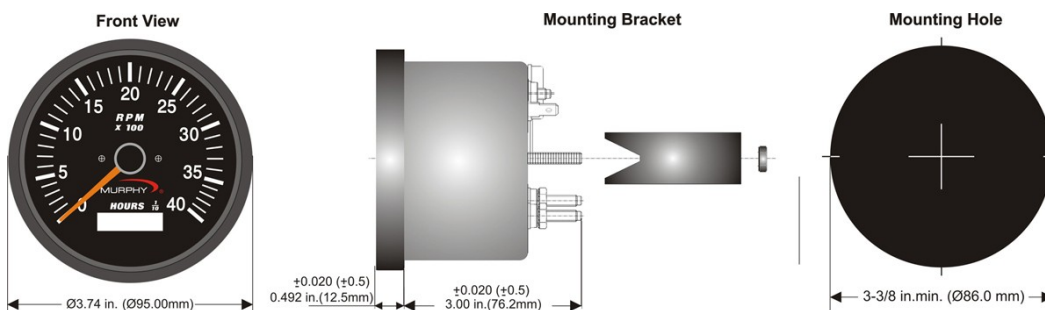


4000 RPM models available with any bezel option
3000 RPM models available with black SAE bezel only

Applications

These tachometers are specially designed for use on truck, marine, industrial, or stationary engines.

Dimensions



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Specifications

Magnetic Sensor Driven Models

Power Input: 11-28 VDC (70mA – 120mA except lamp load)
Backlight: 3.4W T-10 wedge base bulb, 12V bulb (supplied fitted) or 24V bulb (supplied loose)
RPM Input Signal Voltage: 1.5Vrms minimum
Accuracy: Tachometer: +2% full scale
 Hourmeter: +0.01% hours, +1 count
Temperature Range: -40°C to +82°C
 (no permanent damage shall occur)
Dial (Face Plate): 270° sweep, white numerals over black background
Bezel: 304 stainless steel for bright (4000 RPM models only) and IS 513 E.E.E. CRCA steel for black (all models)
Scales: 0-3000 or 0-4000 RPM
Case Material: Plastic
Hourmeter Range: 99999.9 hours in 0.1 increments.

Alternator Driven Models

Power Input: 11-28 VDC (70mA – 120mA except lamp load)
Backlight: 3.4W T-10 wedge base bulb, 12V bulb (supplied fitted) or 24V bulb (supplied loose)
RPM Input Signal Voltage: V low: 0.5V max, V high: 8.0V min.
Accuracy: Tachometer: +2% full scale
 Hourmeter: +0.01% hours, +1 count
Temperature Range: -40°C to +82°C
 (no permanent damage shall occur)
Dial (Face Plate): 270° sweep, white numerals over black background
Bezel: 304 stainless steel for bright (4000 RPM models only) and IS 513 E.E.E. CRCA steel for black (all models)
Scale: 0-3000 or 0-4000 RPM
Case Material: Plastic
Hourmeter Range: 99999.9 hours in 0.1 increments.

How to Order

Standard stock items marked *

Stock code	Model	Description
Alternator Signal Tachometers		
0-3000 RPM scale, 3 – 40 pulses/revolution		
20.70.0234*	ATA-30-C	SAE black stainless steel bezel
20.70.0236	ATA-30-B	SAE bright stainless steel bezel
0-4000 RPM scale, 3 – 40 pulses/revolution		
20.70.0134	ATA-40	Bright stainless steel bezel
20.70.0135	ATA-40-A	Black stainless steel bezel
20.70.0136	ATA-40-B	SAE bright stainless steel bezel
Alternator Signal Tach/hourmeters		
0-3000 RPM scale, 3 – 40 pulses/revolution		
20.70.0239*	ATHA-30-C	SAE black stainless steel bezel
20.70.0237	ATHA-30-B	SAE bright stainless steel bezel
Alternator Signal Tach/hourmeter		
0-4000 RPM scale, 3 – 40 pulses/revolution		
20.70.0137	ATHA-40	Bright stainless steel bezel
20.70.0141	ATHA-40-A	Black stainless steel bezel
20.70.0139	ATHA-40-B	SAE bright stainless steel bezel
20.70.0140	ATHA-40-C	SAE black stainless steel bezel
Magnetic Sensor Tachometers		
0-3000 RPM scale, 50 – 304 flywheel teeth		
20.70.0238*	ATS-30-C	SAE black stainless steel bezel
20.70.0240	ATS-30-B	SAE bright stainless steel bezel
0-4000 RPM scale, 50 – 304 flywheel teeth		
20.70.0227	ATS-40	Bright stainless steel bezel
20.70.0228	ATS-40-A	Black stainless steel bezel
20.70.0229	ATS-40-B	SAE bright stainless steel bezel
20.70.0230	ATS-40-C	SAE black stainless steel bezel
Magnetic Sensor Tach/hourmeters		
0-3000 RPM scale, 50 – 304 flywheel teeth		
20.70.0235*	ATHS-30-C	SAE black stainless steel bezel
20.70.0237	ATHS-30-B	SAE bright stainless steel bezel
0-4000 RPM scale, 50 – 304 flywheel teeth		
20.70.0142	ATHS-40	Bright stainless steel bezel
20.70.0143	ATHS-40-A	Black stainless steel bezel
20.70.0225	ATHS-40-B	SAE bright stainless steel bezel
20.70.0226	ATHS-40-C	SAE black stainless steel bezel

Warranty – A two year limited warranty on materials and workmanship is given with this FW Murphy product. A copy of the warranty may be viewed or printed by going to www.fwmurphy.com/warranty

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