

# MOVIPORT C118 Hand Held Tachometer

all you need to measure Speed

interchangeable sensors adjustable to all applications





## easy to handle:

Plug-in the sensor, immediately at the C118, or via the extension cable – switch to duty – choose unit to read –ready to use!

Its automatic signal conditioning cares for operation without problems.

## offering quite a lot of further facilities:

- Analog output with adjustable high and low end.
- Pulse output to trigger other devices by the target mark.
- Additional computing facility (activated by key): converts measurements according to programmable multiplying or dividing factors, for instance to regard a roll circumference, a gear ratio, or a flowmeter calibration factor.

#### and even more:

- Pre-Divider function compensates unequal pulse distances in the input signal.
- Optimum measuring principle with fast response but stabilized results, by pulse distance function automatically extended over a (programmable) minimum time.
- Measuring range 1/min up to 1 million/min with adjustable or automatic decimals.
- Key selected ranges: /sec, /min, /h.
- MAX/MIN Memory and Average computing with manually controlled begin and end of period.
- Totalizing function with controlled Start and Stop.
- Unit supply optional by inserted batteries, or by rechargeable cells, or by mains power adapter.
- Selection of power shut-off when idling.
- Optional: RS232 Data Interface.

#### C118 Features

#### **Analog Output**

0...2 volts, source resistance 100 ohms, safe against short circuit. Linear rise with readings, with programmable span (low end and high end). Resolution 12 bit.

#### **Pulse Output**

Repeating the input pulse sequence, reduced by programmed pre-divider. Square wave signal. 5 volts TTL level.

#### Measurement

Pulse distance measuring principle, with period time automatics. Programmable minimum and maximum time.

Range 0 ... 100 kHz.

Accuracy + 0.05 % + 1 in last digit.

Key selection of totalizing mode = counting (scaled) input pulses, with controlled start and stop.

## Key selection between two Operation Modes

FIX = ready straight speed measurement, VAR = full use of all computer facilities.

#### VAR = full use of all computer facilities.

#### Sensors fitting the C118

(see specific data sheets for details)

## Optoelectronic Sensors (Series A1S ...)

Favorite to variable use, as easy to get ready: mark target by a dot, or a reflecting tape, or use an existing hole, cam, or screw heads. No special requirements to the target material. Operates without contact, and without a retroaction to the target. No danger at any high speed. Plugs immediately into the C118, or via the extension cable (SAK.).

Versions to meet special demands:

Reduced shaft length, and/or high light intensity to improve a poor contrast, with firmly attached cable for humid ambiance (at paper machines, for instance).

Our Laser type sensor version detects the reflection tape from a distance of 2 meters, and more.

#### Differential Halleffect Sensors (Series A5S...)

Use at rotating steel profiles (gear wheel, slotted shaft), under oil, or water. Threaded shaft of stainless steel, hermetically sealed. Accepts temperature up to 125 °C (255 °F). Operates from zero up to any high speed.

#### **Conversion of Measurements**

By 6 digits programmable computing factor, for multiplying or dividing mode, to automatically consider a roll circumference, a gear ratio, or a transducer scaling factor.

#### Display

6 digits, to read by .../sec, .../min, ... /h, or totals. Decimals gliding or programmable firm. Key recall of minimum, maximum, and average, within a controlled period of time.

#### Signal Input

To sensor pulses or AC-voltage 50 millivolts ... 60 volts. Key selection of automatic adaptation or firm response characteristics. Pre-divider programmable to 001...255 input pulses.

#### **Power supply**

Inserted batteries (4 x 1.5 v) or rechargeable cells. Adapter with plug-in cable available for mains supply 100 .. 250 v AC. Operational Conditions

Ambient temperature -10 °C...+55 °C (14 ...130 °F). Weight (with batteries) approx. 480 g. Dimensions 195 x 100 x 40 mm.

#### Magnetic pick-up Sensors (Series A2S...)

Detecting a magnetic field (as surrounding a motor, or transformer, or ignition coil, or rotating magnets). Special versions fit into ship diesel turboblowers.

#### Wheel pulsers (Series A1L...)

Run on a web or roll surface, for speed measurement or length totalizing. Delivering high pulse rate for fine resolution. Available as single or twin wheeler, with different diameter.

#### Available Extras ready to assist you

#### **Magneto-based Sensor Clamp**

Fine adjustable, holds all our non-contact sensors. Helpful at critical and at longer term applications.

#### Plug-in cable to the C118 Outputs

For alternative use of the analog or the pulse output. Ready made, other end with BNC connector.

## Plug-in cable to the C118 Input

Ready to connect other signal sources .

#### Supply adapter

To feed the C118 from mains 100  $\dots$  250 volts AC. Its cable plugs into a front jack at the C118.

## Various C118 Kits to meet any Demand

#### Ordering No. C118BS

The standard equipment, adequate to most applications. Includes battery-powered meter, standard optosensor, 2mtrs. ready extension cable, marking aids, and carrying case.

#### Ordering No. C118.1BS

Same as C118BS, but with RS232 data interface at the meter.

#### Ordering No. C118.2BS

Same as C118BS, but meter with additional manual sensitivity adjustment. Helpful at low speed < 100 pulses/min.

#### Ordering No. C118.3BS

Same as C118.2BS, but with RS232 data interface

## Ordering No. C118.2BP

Meets difficult applications, as typical for the wet section of paper machines. Includes meter with additionally adjustable sensitivity, optosensor with increased light intensity and firm 5 mtrs. cable, marking aids, and carrying case.

#### Ordering No. C118.3BP

Same as C118.2BP, but with RS232 data interface.

## Ordering No. C118.4

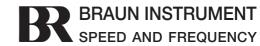
Meter additionally equipped with sensor controlled start/stop of length totalizing. Successfully used to determine the length of the felt in paper machines during full operation.

Accessories to be specified separately.



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