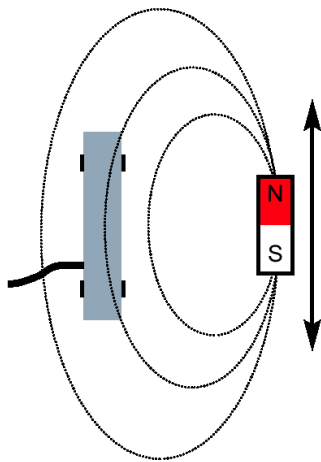



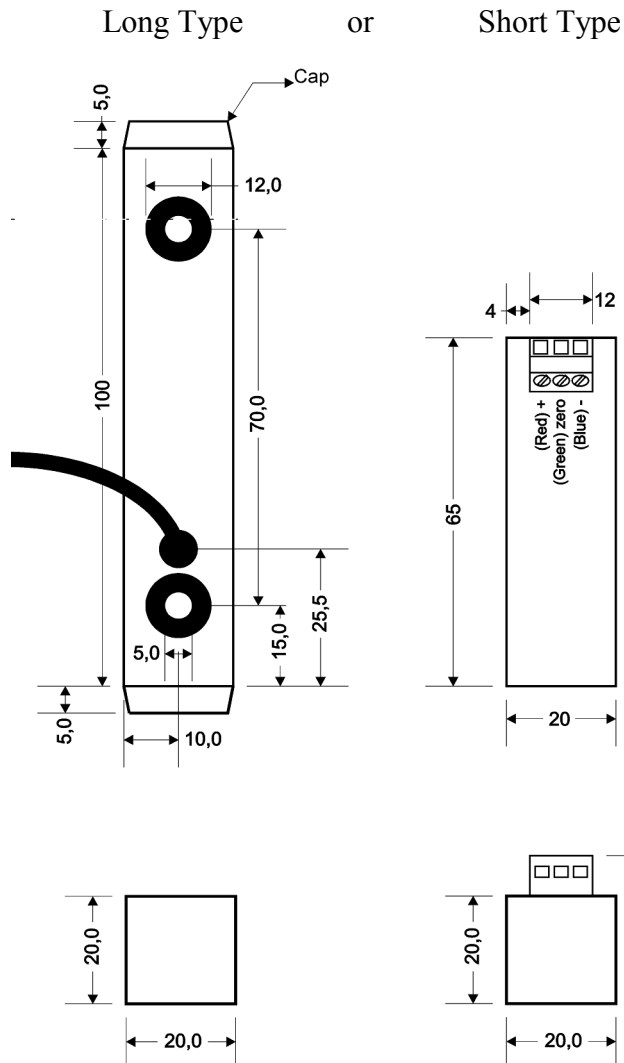
MAT provides magnetic angle sensing and PC programmable computation to a 4 to 20 mA output signal. Designed to measure the position and movement of a magnet attached to or embedded within a moving element, the MAT is ideally suited to a wide range of measurement and control applications.



## Features & Benefits

- Magnetic Actuation → No Direct Contact
- PC Programmable → Easily Configured to any Application
- Fast Response and High Repeatability → Identifies Critical Changes
- Up to 11 Calibration Points → Input/Output Linearisation
- Automatic Gain Control → Adjusts to Available Magnetic Strength
- Adjustable Low-Pass Filter → Electronic Smoothing of Output
- 
 ATEX Directive Compliant → Suitable for New Designs/Applications
- Low Power Consumption → Economical Solution
- 2-wire, 4 to 20 mA Output → Simple, Industry Standard Connection

# Dimensions



# Specification

Typical Linear Resolution	0.05mm
Typical Linear Range	5mm to 1m
Output	: 4 to 20mA (2-wire)
Voltage	: 8 to 30V DC
Loop Resistance	: 800Ω max. @ 24V
Flow Range	: 10:1
Temperature	: -15°C to 60°C
Housing	: Aluminium
Connection	: 1 metre flying lead or 3-way terminal block

# PC Interface

With an RS232 interface module and Windows application, the MAT can be set up and customized to suit most applications.

Programmable variables include:

Calibration points,  
Low-pass-filter constant,  
Low-cut-off value and Serial number.

These are stored in non-volatile memory, ensuring data integrity for many decades without the need for any maintenance.



# Certifications

## EMC

Compliant with IEC EN61326  
(KEMA file 2007540-KRQ/EMC 00-4736)

## HAZARDOUS AREAS

**TnA:** (ATEX/CENELEC)  
II 3 G EEx nA II T6 (KEMA 01ATEX1034 X)  
EN 50021:1999  
(NORTH AMERICA)  
Class I, II, III, Div 2, Group A,B,C,D,E,F,G

**Tia:** (ATEX/CENELEC)  
II 2 GD and 2D T70 °C EEx ia IIC T6  
(KEMA 01ATEX1032 X)  
EN 50014:1997, EN 50020:1994 & EN 50281-1-1:1998  
(NORTH AMERICA)  
Class I, II, III, Div 1, Group A,B,C,D,E,F,G

# Ordering Codes

EXAMPLE MAT01 TnA LONG

## Output

TnA = 4 to 20mA \*  
Tia = 4 to 20mA EEx ia IIC T6 (Intrinsically safe)

## Package

LONG = 110mm, with flying lead  
SHORT = 65mm, with terminals

## ACCESSORIES:

PCI = PC Interface and Software

\* TnA models are also certified for use in hazardous areas; approval code EEx nA II T6

# INFLUX

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