

QUICK GUIDE

EE671 - Miniature Air Flow Probe

Find this document and further product information on our website at www.epluse.com/ee671.

Electrical Connection



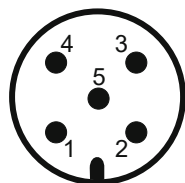
Important note:

The manufacturer cannot be held responsible for personal injuries or damage to property as a result of incorrect handling, installation, wiring, power supply and maintenance of the device.



Please note:

The device may only be powered with a power supply class III ⚡ (Europe) or with a class 2 supply (North America).



M12 device plug front view

Pin number	Wire colour	Analog output	Digital interface
1	grey	SDA (digital setup interface E2)	V+ = Supply voltage
2	brown	GND	RS485 B (D-)
3	green	AV = Analog output	GND
4	yellow	SCL (digital setup interface E2)	RS485 A (D+)
5	white	V+ = Supply voltage	n.c.

Modbus RTU

The EE671 air flow probe represents 1 unit load in a Modbus RTU network.

Factory settings: Modbus address 238, baud rate 9600, even parity, 1 stop bit. The Modbus address can be customised in the register 0x00 (value margin 1 - 247 permitted). Selectable Baud rates are 9600, 19200 and 38400, parity may be even, odd or none.

Device address, Baud rate and parity can be set via:

1. PCS10 Product Configuration Software and the appropriate configuration cable HA011018.

The PCS10 can be downloaded free of charge from www.epluse.com/pcs.

2. Modbus protocol in the register 60001 (0x00) and 60002 (0x01).

For Modbus protocol settings see Application Note Modbus AN0103 (www.epluse.com/ee671).

Measured value	Unit	Scaling	Type	Register [DEC]		Protocol address [HEX]		
Read registers (function code 0x03 / 0x04)								
Serial number			ASCII	0001		0x00		
Software version			Binary	0009		0x08		
Sensor name			ASCII	0010		0x09		
Temperature	°C		32 bit float	²⁾ 1003	³⁾ 0026	²⁾ 0x3EA	³⁾ 0x19	
Temperature	°F		32 bit float	↓ 1005	↓ 0028	↓ 0x3EC	↓ 0x1B	
Temperature	K		32 bit float	1009	0030	0x3F0	0x1D	
Air velocity	m/s		32 bit float	1041	0032	0x410	0x1F	
Air velocity	ft/min		32 bit float	1043	0034	0x412	0x21	
Temperature ¹⁾	°C	²⁾ x 100	³⁾ x 100	16 bit integer	4002	0046	0xFA1	0x2D
Temperature ↓	°F	↓ x 50	↓ x 100	16 bit integer	4003	0047	0xFA2	0x2E
Temperature	K	x 50	x 100	16 bit integer	4005	0048	0xFA4	0x2F
Air velocity	m/s	x 100	x 100	16 bit integer	4021	0049	0xFB4	0x30
Air velocity	ft/min	x 1	x 10	16 bit integer	4022	0050	0xFB5	0x31
Write registers (function code 0x06)								
Modbus address				0001		0x00		
Communication parameters				0002		0x01		

1) Please observe correct scaling for used registers

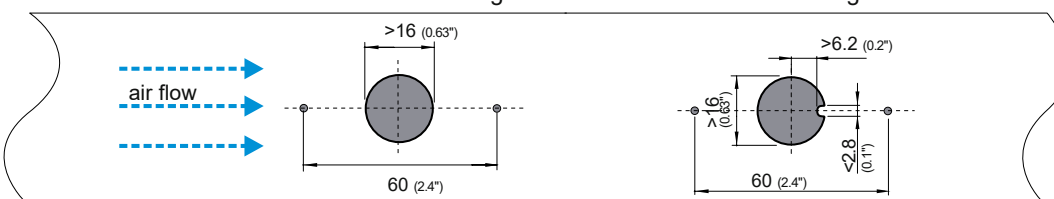
2) Measured values available in both registers

3) Registers in right column not intended for new design (0026...0050 / 0x19...0x31) } left column E+E standard registers, right column legacy registers

Drilling Pattern

conventional drilling:

laser cutting:



By leaving a key notch, the flange can be mounted only in the correct direction.

