RHE14

Compact/Embedded System Coriolis Mass Flow Transmitter

Features

- Low installation cost
- Space saving DIN rail mounting housing
- Analog output for mass flow
- Tandem pulse outputs – one passive open collector, one active TTL
- 2 digital status outputs
- Digital input for external zero command
- Metric and English units
- Power consumption 2W
- RS232 communications port
- Dedicated SensCom software packages for configuration and control

Applications

- Filling and dispensing
- Liquid and gas applications
- Feed stocks and transfers

Benefits

- Ideal as an embedded transmitter in OEM systems
- Additional expansion modules available for hazardous area sensor use and PROFIBUS communications
- Low cost mass flow only meter
- Works with all sizes of Rheonik RHM flow sensors

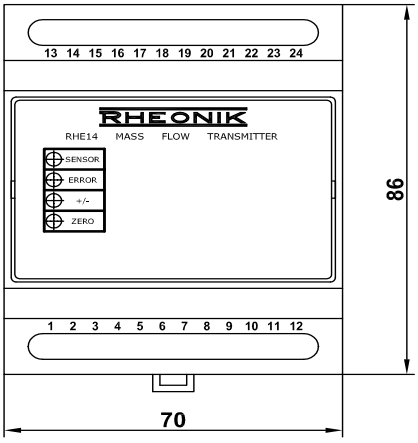
RHE14 General Specifications

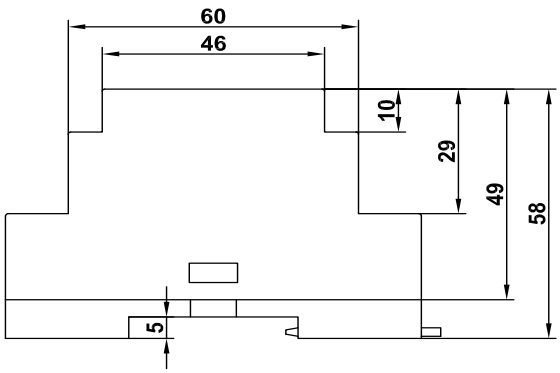
Housing:	DIN rail mounting enclosure (polycarbonate (PC) and polyphenylene oxide (PPO))
Enclosure Rating:	IP 20
Ambient Temperature:	-40°C to +65°C (-40°F to +149°F)
Dimensions:	70 x 86 x 58 mm (2.76 x 3.39 x 2.28 in)
Operation:	Via serial port using SensCom PC software
Sensor Cable Connection:	Screw terminals
Analog Outputs:	1 active 4-20 mA output, configurable for mass flow or temperature
Pulse Outputs:	2 outputs, one active (TTL, IOHmax = -0.4 mA, IOLmax = 8 mA), one passive (opto-isolated open collector type, Fmax = 10 kHz, Umax = 24 V, Imax= 10mA *(requires external power supply and site installed current limiting/pull up resistor))* operating in tandem
Digital Outputs:	2 digital outputs individually configurable as either active or passive *(requires external power supply and site installed current limiting/pull up resistors)* for error and flow direction
Digital Inputs:	1 input for remote zero
Power Supply:	8 – 28 VDC +/- 10%
Digital Data Communications:	RS232 with either HART or Rheonik simple ASCII protocol
Weight:	0.2 kg (0.44 lb)

Hazardous Area Installation Overview

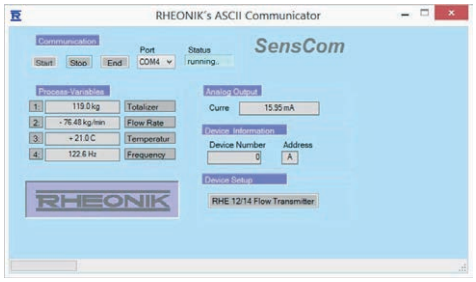
	Zone 0/1	Zone 2	Safe Zone
ATEX All Zones			
	Part Number Code AT		Part Number Code N
ATEX Zone 2 Only			
		Part Number Code 2	Part Number Code N

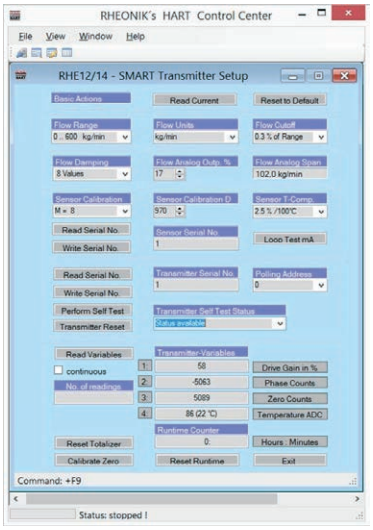
RHE14 Dimensions

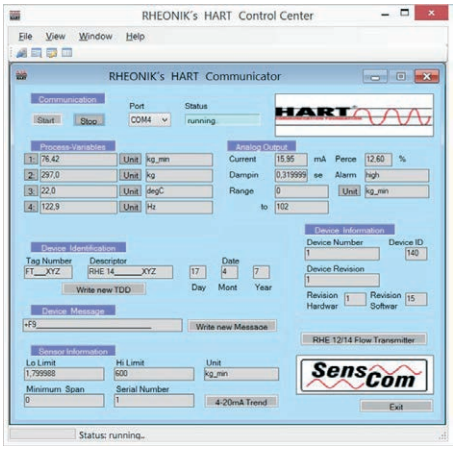




SensCom Communication Software







SensCom is a simple-to-use PC interface used for configuration and diagnostic review purposes. Two versions are available (depending upon the I/O configuration selection of the transmitter) using either simple ASCII protocol or HART over a serial data line. Connection is through screw terminals on the transmitter. SensCom software is downloadable free-of-charge from the Rheonik website and available on CD as an accessory if a permanent factory supplied copy is required.

RHE14 Part Number Code

Construction Type

T1 DIN rail mount

Supply Voltage

D1 8 – 28 VDC

I/O Configuration

I2 1 x 4-20mA, 1 x pulse, 2 x digital output, 1 x digital input, HART

IA 1 x 4-20mA, 1 x pulse, 2 x digital output, 1 x digital input, simple ASCII

Hazardous Area Approval

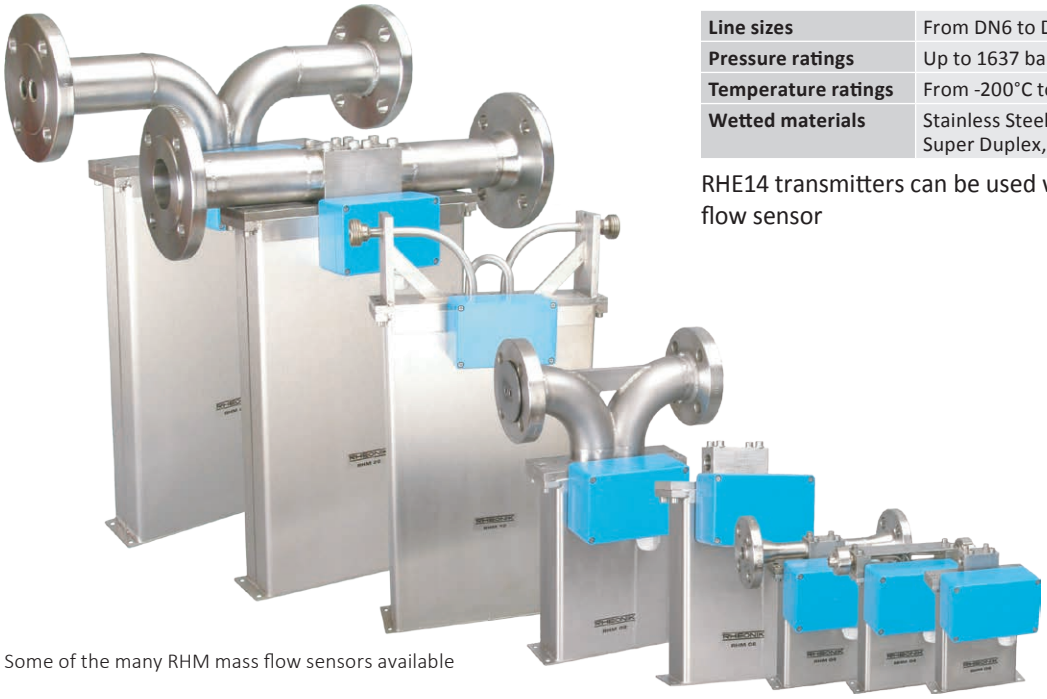
N None

RHE14	T1	D1		N

RHE14 Accessories

Part Number	Description
ARHE14-RS	PC Interconnection cable (screw terminal leads to 9 Pin RS 232 PC socket)
ARHE14-MO	USB to 9 Pin RS 232 serial adapter
ARHE14-SO	SensCom HART communicator software (on CD)
ARHE14-AS	SensCom ASCII communicator software (on CD)
ARHE14-PW	Power supply module, input: 85 to 250 V, output: 24 VDC / 30 W (non-EEx, DIN rail mounting)
ARHE-C1	Standard blue PVC sheathed transmitter-sensor interconnecting cable recommended for cable length < 100 meters (< 30 meters for RHM 30 and bigger sensors)
ARHE-C3	High performance blue PVC sheathed steel armoured transmitter-sensor interconnecting cable recommended for cable length > 100 meters. Max. 300m (max. 100m for RHM 30 and bigger sensors)
RHE15	Profibus module (see separate data sheet)
RHE14 EZB	Zener barrier module for use with sensor in hazardous area (see separate data sheet)

Flow Sensor Range



Some of the many RHM mass flow sensors available

The RHM range of mass flow sensors features

Line sizes	From DN6 to DN300 / ¼" to 12"
Pressure ratings	Up to 1637 bar / 23743 psi
Temperature ratings	From -200°C to 350°C / -328°C to 662°F
Wetted materials	Stainless Steel, Alloy C22, Duplex, Super Duplex, Tantalum, Others

RHE14 transmitters can be used with all sizes of RHM flow sensor

RHE14 transmitters can only be used with RHM Flow Sensors having calibration option A, B or Goldline and temperature ranges T1, TA or T2

About Rheonik

Rheonik has the single purpose: to design and manufacture the very best Coriolis meters available. Our research and engineering resources are dedicated to finding new and better ways to provide cost effective accurate mass flow solutions. Our manufacturing group care for each and every meter we produce from raw materials all the way to shipping and our service and support group are available to help you specify, integrate, start-up and maintain each and every Rheonik meter you have in service. Whether you own just one meter or have hundreds, you will never be just another customer to us, you are a valued partner. Need a special configuration for your plant – don't compromise with a "standard" product from elsewhere, if we can't configure it from our regular product range, we can build you what you need as a custom meter.

Rheonik only make Coriolis meters – we are **The Coriolis Experts** – contact us for all of your Coriolis meter requirements.