RHE12

Hazardous Area Coriolis Mass Flow Transmitter

Features

- Field mounting
- Compact, pressure safe housing
- ATEX and CSA approvals for installation in hazardous areas
- 24 VDC power supply
- Configurable analog output for mass flow or temperature
- HART communications interface transmits all PV's and totalizer
- Configurable pulse output
- Metric and English units
- Protection class IP66 / Type 7X
- Power consumption approx. 7W
- Simple magnetic key operation
- Dedicated SensCom software package for configuration via laptop

Applications

- General process flows
- Liquid and gas applications
- Feed stocks and transfers

Benefits

- Low cost mass flow only meter
- Works with all sizes of Rheonik RHM flow sensors
- Remote electronics provides installation flexibility

RHE12 General Specifications

Housing:	Epoxy coated aluminium, explosion proof. Adaptable for standard 2" pipe or wall/panel/ frame mount
Enclosure Rating:	IP 66 / Type 7X
Ambient Temperature:	-20°C to +55°C (-4°F to +131°F)
Dimensions:	200 x 114 mm (7.9 x 4.5 in) plus cable entry clearance and mounting bracket footprint
Display:	LCD, 16 characters, 2 lines
Operation:	Through-glass via 2 magnetic sensors (two magnets are included with the transmitter for operation) for all menu navigation and settings
Sensor Connection:	Integral sensor cable with 2m or 10m length through approved cable gland (ATEX) or conduit seal fitting (CSA). Optional terminal box for separate custom length cable connection available
Analog Outputs:	1 active 4-20 mA output, configurable for mass flow or temperature
Pulse Output:	1 passive opto-isolated open collector type, F_{max} = 10 kHz, U_{max} = 24 V, I_{max} = 10 mA *(requires external power supply and site installed current limiting/pull up resistors)*
Power Supply:	24 VDC +/- 10%
Digital Data Communications:	HART over analog output
Cable Entries:	2 x ¾" NPT
ATEX Approval:	Transmitter: Ex II 2 (1) G Ex db [ia Ga] IIC T6 Sensor: Ex II 1 G, EEx ia IIC T6-T1
CSA Approval:	Transmitter: Class I, Div. 1, Gr. BCD Sensor: Class I, Div. 1, Gr. ABCD
Weight:	3 kg (6.6 lb)

Hazardous Area Installation Overview

	Zone 0	Zone 1	Zone 2
ATEX All Zones			

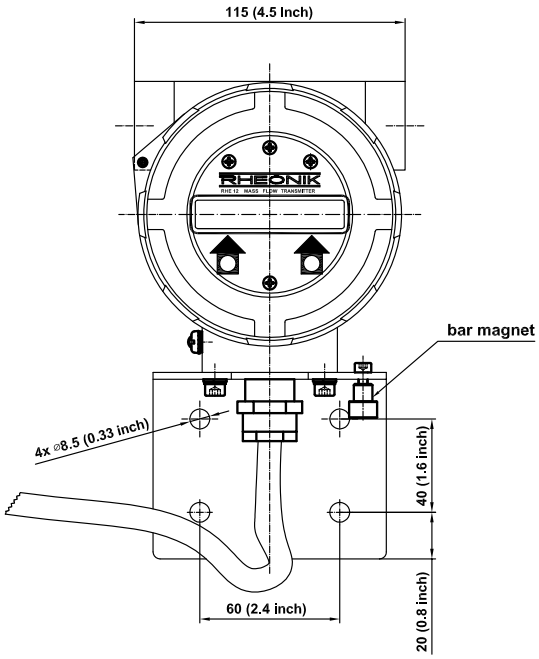
Part Number Code E (transmitter) and AT (sensor)

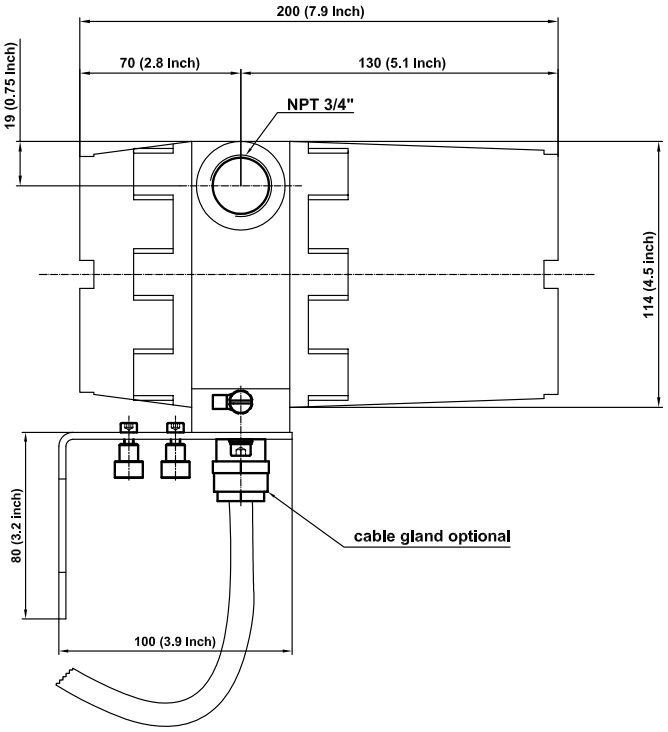
	Cl. 1, Div. 1, Gr. A	Cl. 1, Div. 1, Gr. BCD	Cl. 1, Div. 2
CSA All Zones			

Part Number Code CS

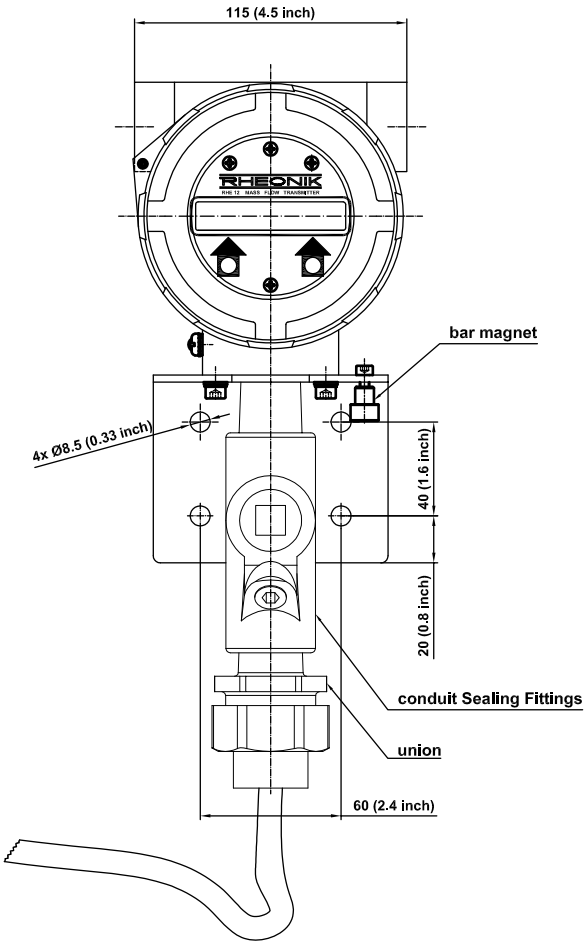
RHE12 Dimensions

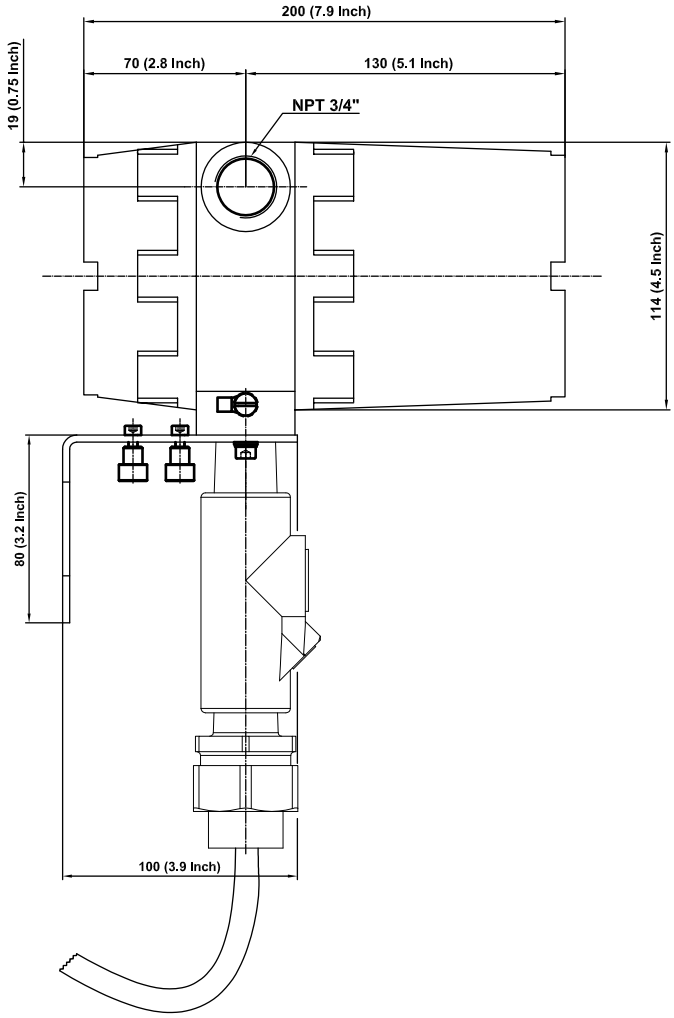
ATEX Approved



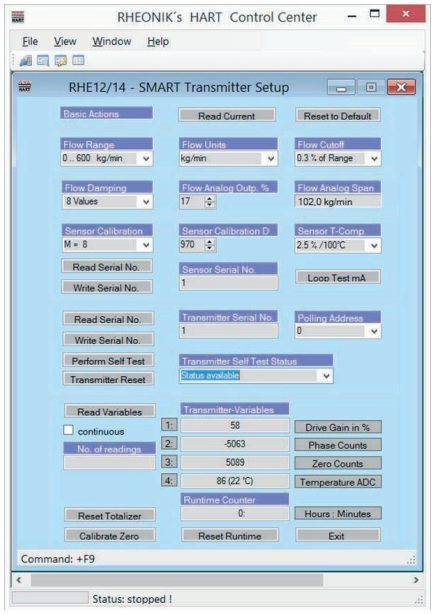


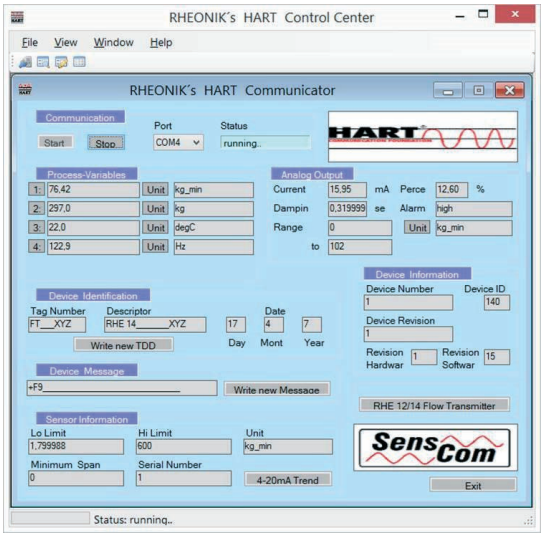
CSA Approved





SensCom Communication Software





SensCom is a simple-to-use PC interface that connects to the RHE12 transmitter using HART protocol for configuration and diagnostic review purposes. Connection is through FSK modem via the analog input terminals of 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.

RHE12 Part Number Code

Construction Type

T1 2 meters integral cable to sensor
T2 10 meters integral cable to sensor

Supply Voltage

D1 24VDC

I/O Configuration

HH 1 x 4-20 mA, HART

Hazardous Area Approval

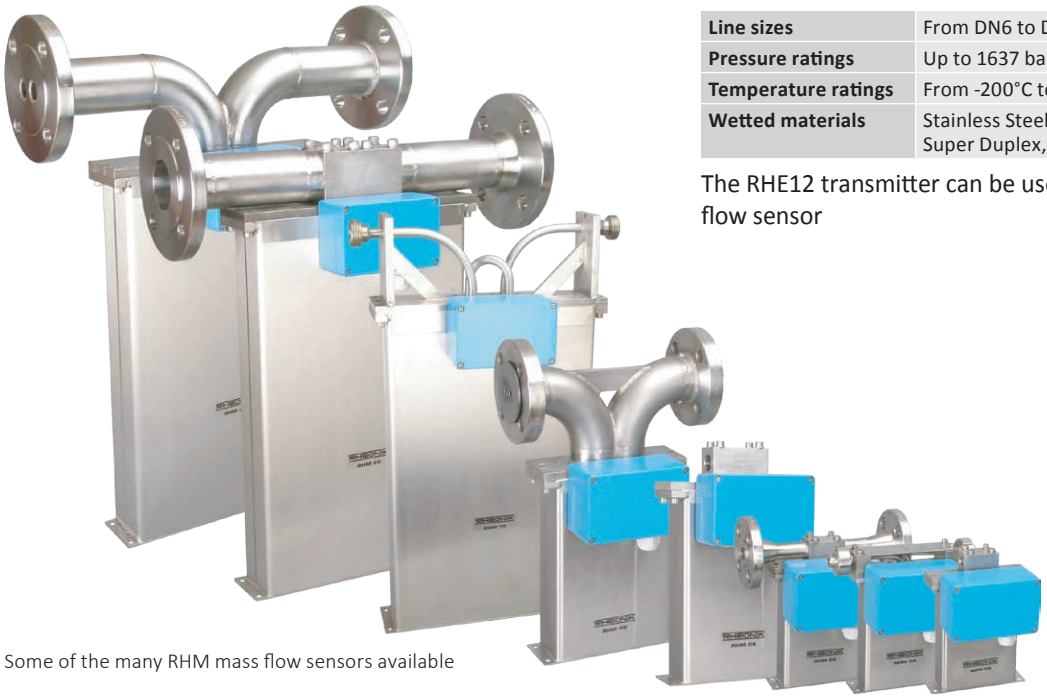
E ATEX approval Ex II 2 (1) G Ex db [ia Ga] IIC T6
CS CSA approval USA-Canada, Class I, Div. 1, Gr. B, C, D

RHE12 | | | HH | |

RHE12 Accessories

Part Number	Description
ARHE12-HM	FSK modem (9 Pin DIN connector to clip on ends)
ARHE12-SO	SensCom HART communicator software (on CD)
ARHE12-PW	Power supply module, input: 85 to 250 V, output: 24 VDC / 30 W (non-EEx, DIN rail mounting)
ARHE-IT	Epoxy coated aluminium terminal box for cable extension
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)

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

The RHE12 transmitter can be used with all sizes of RHM flow sensor

RHE12 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.