Technical Datasheet

WT.02.G

Local converter

with interface

Application

The WT.02.G local converter is a frequency converter (4-20 mA) with a digital input stage.

Thanks to the low bottom limit frequency (typically < 0.5 Hz), the WT.02.G F/I converter is especially well suited for low flow rates.

In addition to the analog output signal, it has a open collector output that can be used as a switch output or frequency output as desired. The frequency output is freely scalable. This means the frequency output can be coordinated with the volume flow independently of the measuring cell being used.

The W*.02.G has an interface integrated into the M12 sensor plug. With the help of the WT.02-CON.USB.01 interface adapter and the "KEM EasyControl" programming and visualization software, the operating parameters can be set and the input frequency and flow rate can be read.

Both the analog and the frequency output can be linearized with up to 10 points. When the W*.02.G is ordered with a measuring cell, the analog output is preconfigured for it.

Special features

- Setting the operating mode
- Integrated interface
- Linearization of current and frequency output

Accessories

WT.02-CON.USB.01	USB adapter for the W*.02.G with output plug for looping through the analog signal. In remote control operation, the W*.02.G can be supplied either directly by the USB voltage or externally.
EasyControl	Remote control software for WINDOWS® XP, VISTA, and 7 (XP requires SP3 or N.NET-Framework).
Other adapters and special software drivers on request.	

Technical Data

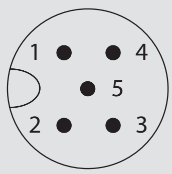
Analog signal

Type	4 - 20 mA
Resolution	5 µA
Supply Voltage	12 - 30 V, regulated
Allowable Apparent Ohmic Resistance	(U_B -12 V) / 20 mA, max. 800 Ω
Operating Modes	ON (frequency proportional current) OFF (frequency-independent supply current 4 mA)

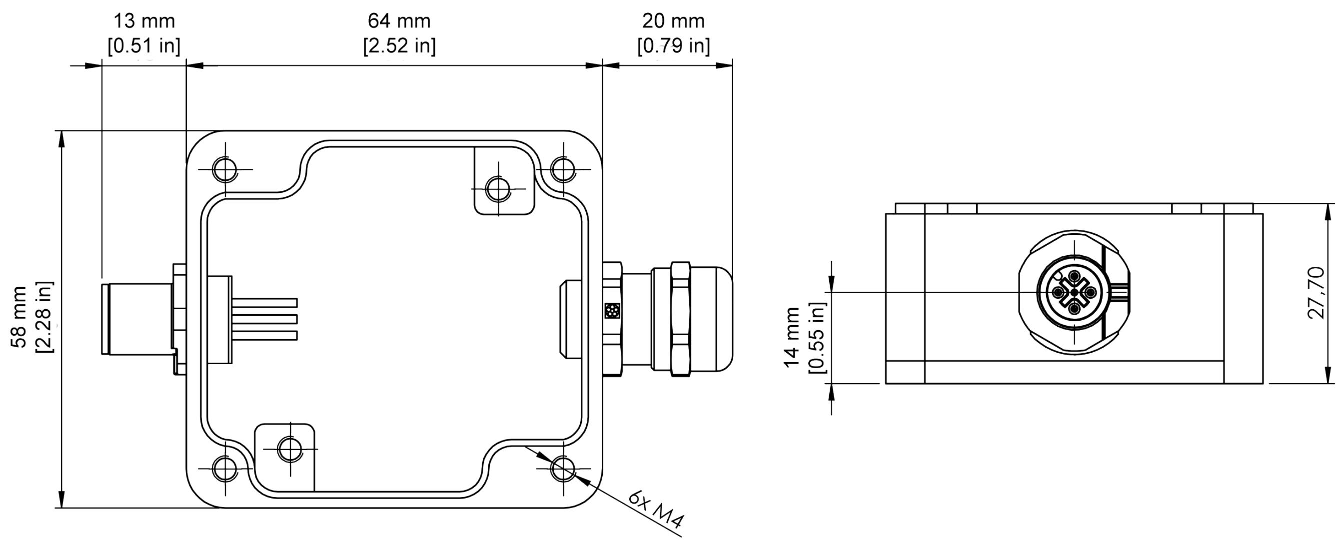
Digital output

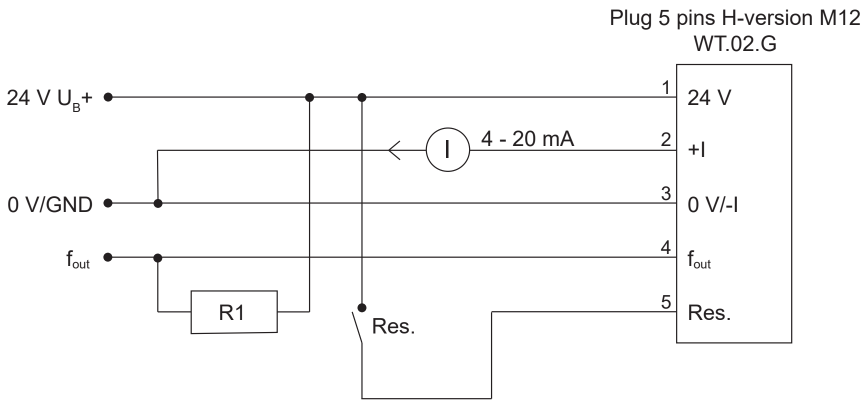
Type	Open collector
Protective Resistance	800 Ω
Frequency Range	1 - 5,000 Hz
Operating Modes	OFF (frequency output deactivated) 1:1 (output frequency = input frequency) CORR (scalable output frequency) SW (switch output)

Additional data

Measuring Frequency	WT: 1 - 3,000 Hz (typically 0.5 to 5,000 Hz)
Response Time	250 ms (for input frequency > 5 Hz)
Temperature Drift	< 100 ppm/K
Plug Connector	M12 plug-in connector (5-pin, male, A-coded) 1 = +U_B 2 = +I 3 = 0 V/-I 4 = Collector (frequency output) 5 = Remote control 
Ambient Temperature	-40 °C up to +70 °C [-40 °F up to +158 °F]
Dimensions	See dimensional drawing (page 4)
Material	Aluminum
Protection Class	IP65

Dimensional Drawing





R1 is only necessary if f_{out} is to be active.

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