

Technical Datasheet



WIE

Programmable Local Converters
with Interface

Description

The local converters type WIE-** are passive 4 - 20 mA sensors with inductive input stage. The pre-assembled sensor cable allows for a fast connection of the inductive sensor series "IF*".

Consequently the WIE-** sensor is able to measure and evaluate flow rates with a medium temperature up to +350 °C [+662 °F].

In addition to the analogue output which is proportional to the flow rate the sensors provide a digital output, which can be used either as a switch or frequency output. The frequency output is freely scaleable and allows a standardisation of the frequency value.

The WIE-** have an interface integrated in the M12 sensor plug. The interface adapter CON.USB.WT and remote software KEM »EasyControl« allow for programming the operating parameters and to read the input frequency.

Both analogue and frequency output can be linearized with up to 10 points. When ordered with a flow meter the WIE-** output will be adjusted to this meter.

Features

- Adjustment of operation mode
- Built in Interface
- Linearization of Current and Frequency Output

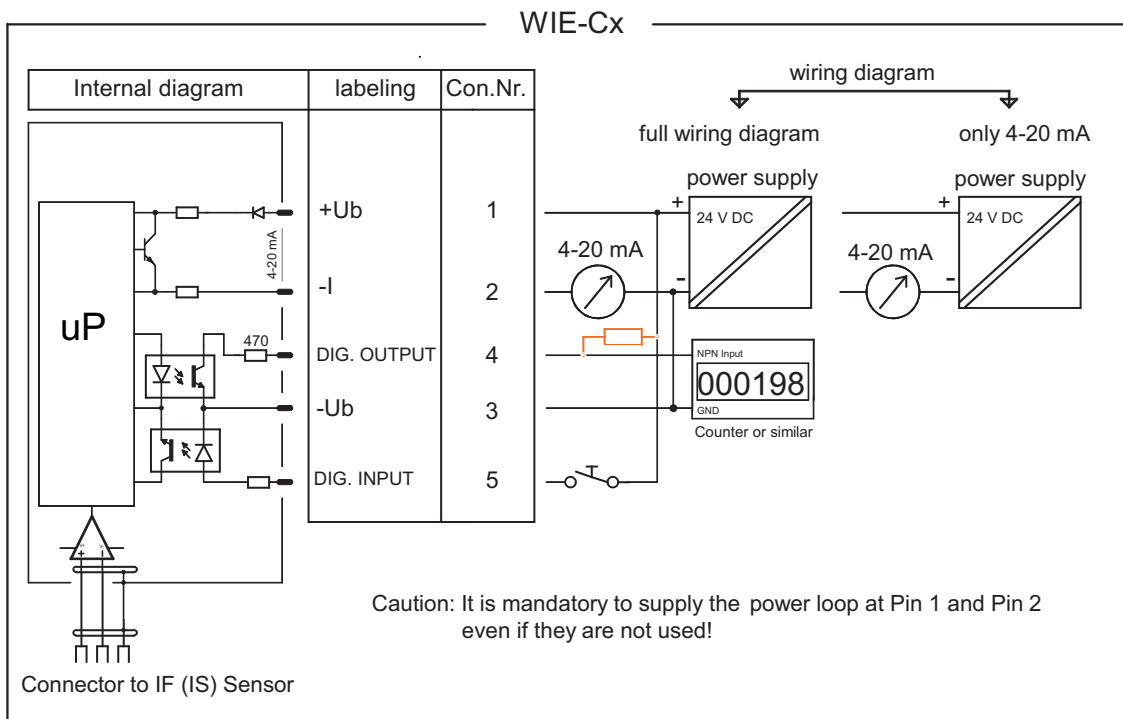
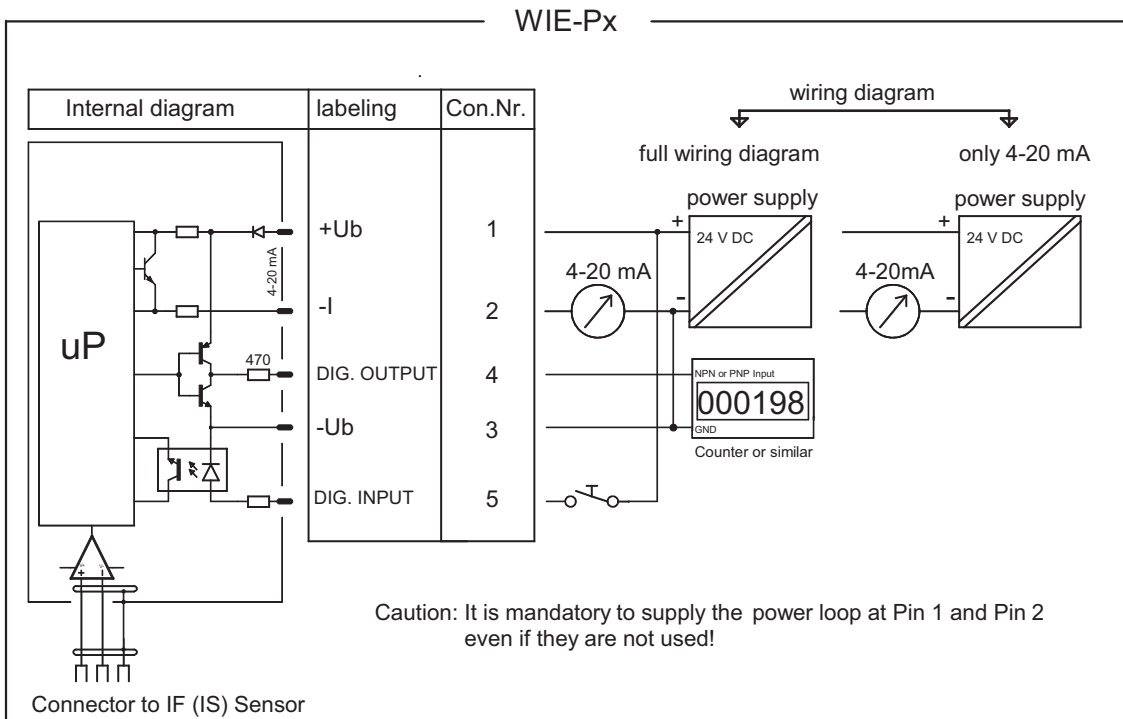
Accessoires

CON.USB.WT:	USB-adapter for WIE-** with output plug to loop through the analogue and frequency output. In the remote mode the WIE-** can be powered via the USB interface or via an external power supply.
EasyControl:	Remote software for WINDOWS XP®, VISTA and 7 (for WINDOWS® XP SP3 or N.NET-framework is required).
Other adapters and drivers on request.	

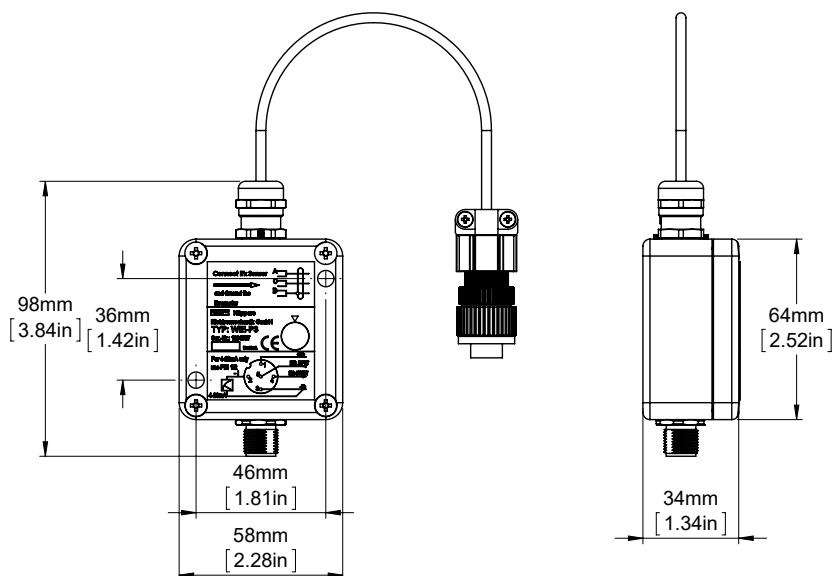
Technical Data

Analogue Signal	Version C	Version P
Type	4 - 20 mA, 2-wire (passive)	
Resolution	5 μ A	
Supply Voltage	12 - 30 V, regulated	
Allowable Load	$(U_B - 12 \text{ V}) / 20 \text{ mA}$, max. 800 Ω	
Operating Modes	ON (frequency proportional current) OFF (supply current 4 mA independent of frequency)	
Digital Output	Version C	Version P
Type	Open collector, potential free	Push pull
Protective Resistor	470 Ω	470 Ω
Supply Voltage	< 35 V	See analogue signal
Load Current	< 20 mA	
Frequency Range	1 - 5,000 Hz	
Operating Modes	OFF (frequency output disabled) 1:1 (output frequency = input frequency) CORR (scaleable output frequency) SW (switch output)	
Further Specifications	Version C	Version P
Measuring Frequency	7 - 3,000 Hz (typ 5 up to 5,000 Hz)	
Response Time	250 ms (for input frequencies > 7 Hz)	
Temperature Drift	< 100 ppm/K	
Connection	1 = +I 2 = -I 3 = emitter (digital ground) 4 = collector (digital OUT) 5 = digital input	1 = + U_B 2 = -I (4 - 20 mA) 3 = - U_B 4 = push pull (digital OUT) 5 = digital input
Plug Connection	Version 3: 3-pin.; Alumnum; Type: MS3106A-10SL3P Version 4: 4-pin. M12, Type: 5-pin A coded	
Cable Length	1 m	
Ambient Temperature	-40 $^{\circ}$ C up to +70 $^{\circ}$ C [-40 $^{\circ}$ F up to +158 $^{\circ}$ F]	
Dimensions	See dimensional drawing (page 4)	
Material	Aluminum	
Protection Class	IP67	

Wiring Diagram



Dimensional Drawing



Ordering Code

WIE - X - X

Digital Output

Open Collector	C
Push Pull	P

Sensor Plug Connectors

M12 5-pin	4
Aphenol 3-pin	3



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