bürkert
FLUID CONTROL SYSTEMS

Flow transmitter/ pulse divider



- Microprocessor-controlled electronics
- 2-wire (4 … 20 mA) / 3-wire (NPN/PNP) - operation
- Pluggable to flow sensor 8020, 8030 or 8070
- Removable display unit

Type 8022 can be combined with...



Type 8020
Flowmeter



Type 8030
Flowmeter



Type SE30 + S077
Flowmeter

The electronic module Type 8022 operates either as a flow transmitter (only with sensors pulse "Low Power" version Type 8020, 8030, 8070) or as a pulse divider (with all versions of sensors of Type 8020, 8030, 8070). The module operates the output of the sensors, displays the flow value and converts it to the signal output in mA or pulse.

In operation as a flow transmitter, the frequency signal of the sensor is converted in a 4 … 20 mA signal (2-wire operation).

In operation as a pulse divider, the input frequency is converted into an adjustable output frequency.

The use of the display unit allows the switching between the two modes.

Technical data	
Power supply	12 … 30 V DC, filtered and regulated, SELV (safety extra low voltage) circuit with a non dangerous energy level
Voltage tolerance	± 10 %
Residual ripple	< 5 %
Power consumption max. Flow transmitter (4…20 mA output, 2-wire operation) Pulse divider (NPN/PNP output, 3-wire operation)	 0.6 W 3.2 W with ▪ 0.2 W from the device ▪ 1.5 W max. from the flow sensor* ▪ 1.5 W max. from the PNP/NPN output*
Ambient temperature	-10 … + 60 °C
Frequency input	1 … 600 Hz
4 … 20 mA output	Accuracy ± 1.5 % of full scale max. loop impedance: 1000 Ω at 30 V DC ; 700 Ω at 24 V DC; 100 Ω at 12 V DC
NPN/PNP output	Accuracy ± 1 % of measured value 1 … 600 Hz, "open collector", max. 50 mA
Electrical connection	Terminal strip 4 pins or male M12 connector
Housing material	Polyamide / PC

* depending on the customer configuration

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Standards, directives and certification	
Protection class	IP65 according to EN 60529 if the following conditions are met: ▪ cable gland wired or blanked off, or female connector plugged and tightened ▪ gland nut tightened with a tightening torque of 1 Nm ± 20 % ▪ housing closed and screws of cover tightened with a tightening torque of 0.30 Nm ± 20 %, or display and control module plugged and tightened with a tightening torque of 0.30 Nm ± 20 %
Standard and directives CE	The applied standards, which verify conformity with the UE Directives, can be found on the EU Type Examination Certificate and/or the UE Declaration of conformity (if applicable)
Certification UL-Recognized for US and Canada	UL61010-1 + CAN/CSA-C22.2 No.61010-1

Specific technical data of UL-recognized products for US and Canada	
Operating environment	Degree of pollution 2, according to EN 61010-1
Installation category	Category I, according to UL61010-1

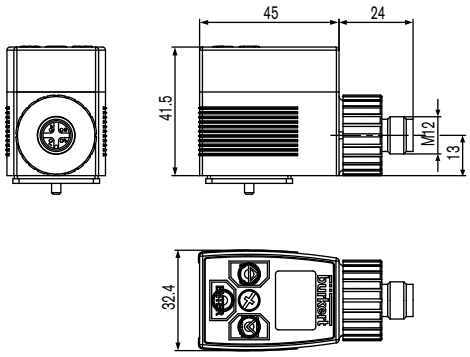
Functions of the flow transmitter / pulse divider Type 8022

- Microprocessor-controlled electronics
- Transmitter operation: conversion of the input frequency into a 4 … 20 mA signal (2-wire operation)
- Scalable 4 … 20 mA signal
- Pulse divider operation: Transforms the input to an adjustable output frequency (3-wire operation)
- Displays the flow in a selectable unit
- Removable display unit (is only required to configure or to display)

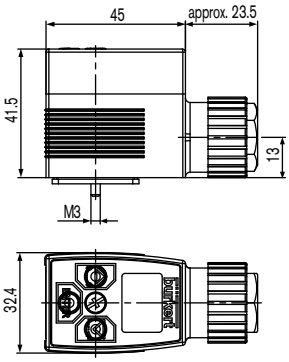
Dimensions [mm]

With display unit

Version with M12 connector

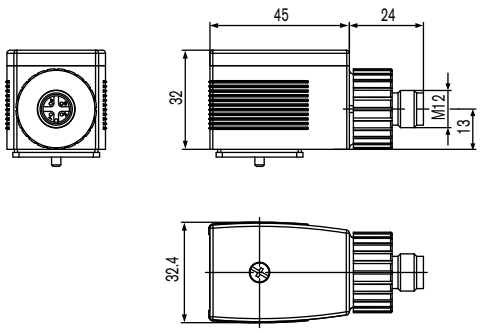


Version with PG gland

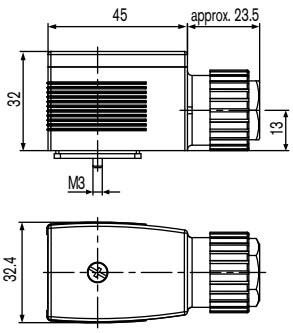


Without display unit

Version with M12 connector



Version with PG gland



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Ordering chart basic units and accessories

Version	UL certification	Article no.
Flow transmitter / pulse divider Type 8022 without display unit, PG connection	No	215644
Flow transmitter / pulse divider Type 8022 with display unit, PG connection	No	215645
Flow transmitter / pulse divider Type 8022 without display unit, PG connection	Recognized	563223
Flow transmitter / pulse divider Type 8022 with display unit, PG connection	Recognized	563224
Flow transmitter / pulse divider Type 8022 without display unit, male M12 connector	No	215646
Flow transmitter / pulse divider Type 8022 with display unit, male M12 connector	No	215647
Display unit for Type 8022	No	562876
Cover set (for operating without display unit)	No	670549
Right-angle female M12 connector, 4 pins	No	784301
Straight female M12 connector, 4 pins, with 5 m cable	No	918038

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In case of special application conditions, please consult for advice.
Subject to alteration.
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