



Universal Dosing Device



measuring
•
monitoring
•
analysing



- 4 1/2-position LED display
- 2 x 16-position LC display
- Frequency, temperature and pressure input
- Two limit values
- Analogue output
- Sensor power supply
- Scalable
- MIN./MAX. memory
- Sensor linearization



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Model:
ADI-ZF



Description

The new KOBOLD universal dosing device ADI-Z offers a range of functions such as indication of flow rate, flow rate meter, dosing functions, and limit value monitoring of pressure and temperature in a single device.

You can read the instantaneous value of the flow rate on the 4 1/2-position digital display. The actual cumulated throughput along with temperature and pressure from two external sensor inputs are displayed on the 2-line LC display. A convenient batch function controls two switching outputs in single or loopback mode. Two control inputs are also available for remote start/stop.

The input signals are digitized and processed by a micro-processor. You may scale the display, set the switching point, call up memory and linearization functions with three programming buttons.

As a flow controller the standard device comes with the following functions:

- Scaling by teach-in or pulse rate entry
- MIN./MAX. memory
- 6 Point sensor linearization (only frequency input)
- 2 Control inputs
- 2 Switching outputs
- Measuring: pressure, temperature, flow

Along with the standard functions the device can also be supplied with the following options:

- Analogue output 0(4) - 20 mA
- Sensor supply 5/12/24 V_{DC}

Technical Details

Digital display for flow rate:	4 1/2-digit, 14 mm high red LED display, programmable decimal-point setting
Summator:	LC display, 8-digit, with reset, two programmable decimal point positions; Units: [L] l, [m³], [gal uk], [gal us]
Pressure read-out:	LC display, 4-digit, 1 programmable decimal point position [bar], [psi], [Mpa] units
Temperature display:	LC display, 4-digit, [°C], [F] units
Scanning frequency/ display time:	1 s ⁻¹

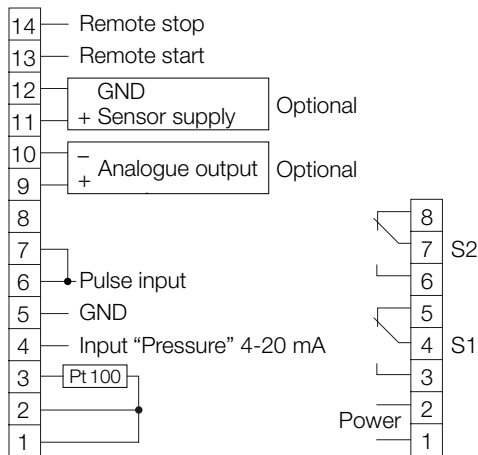
Inputs

• Frequency input:	0.5 - 2000 Hz
Display resolution:	19999 digit
Frequency resolution:	0.01 Hz
Accuracy:	at f < 500 Hz: 0,05 Hz +/- 1 digit at f > 500 Hz: 1 Hz +/- 1 digit
Temperature drift:	50 ppm/K
• Pressure:	4-20 mA (Ri < 200 Ohm)
Display resolution:	1000 digit
Resolution (analogue):	approx. 14 bit
Accuracy:	0.2 % of f.s. +/- 1 digit
Temperature drift:	100 ppm/K
• Temperature:	PT 100, 3-wire
Display resolution:	-60...650 °C; -76...1202 °F
Resolution:	approx. 14 bit
Accuracy:	+/- 1 K; +/- F
Temperaturdrift:	150 ppm/K
Control inputs:	1x remote start, 1x remote stop, TTL level (control level: 5-40 V _{DC} ; ≥ 0.5 s)
Sensor supply: (option)	2 V 5 V _{DC} /15 mA, 12 V _{DC} /30 mA or 24 V _{DC} /50 mA
Power supply:	230, 115, 48, 24 V _{AC} ± 15 % 50-60 Hz, 24 V _{DC} ± 20 %
Limit values:	2 changeover relay contacts max. 115/230 V _{AC} /5 A or 30 V _{DC} /5 A (cosφ = 1) or 2 transistor outputs passive, max. 40 V _{DC} , that can be assigned to frequency, pressure, temperature or batch function
Analogue output: (optional):	0-20 mA, 4-20 mA (max. load: 500 Ω) or 0-10 V _{DC} , electr. isolated, for flow
Temperature range:	-20 to +80 °C operating temperature -20 to +80 °C storage temperature
Dimensions:	96 x 96 x 105 mm (WxHxD) incl. screw-type terminal (panel mounting) 116 x 116 x 123 mm (WxHxD) (field housing)
Cut-out-dimensions:	92 ^{+0.8} x 92 ^{+0.8} mm (panel mounting)
Case material:	glass-fibre-reinforced Noryl (panel mounting), aluminium (powder coated)/PA 66 (field housing)
Protection type:	front panel IP 40, terminals IP 00 (panel mounting), IP 65 (field housing)
Mounting:	fastening clip form B (DIN 43 835) (panel mounting) wall and pipe mounting (field housing)
Connection:	pluggable terminal block (panel mounting), cable connection (field housing)
Weight:	approx. 700 g (panel mounting) approx. 1600 g (field housing)

Ordering Details (example: ADI-ZF 0 4 W 2 X)

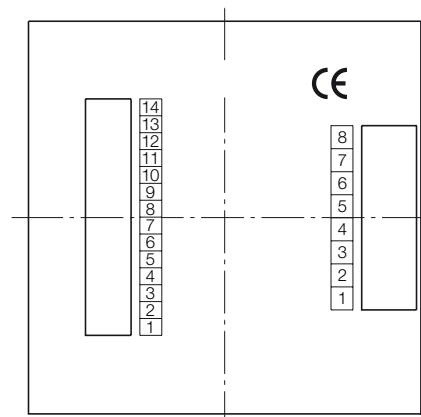
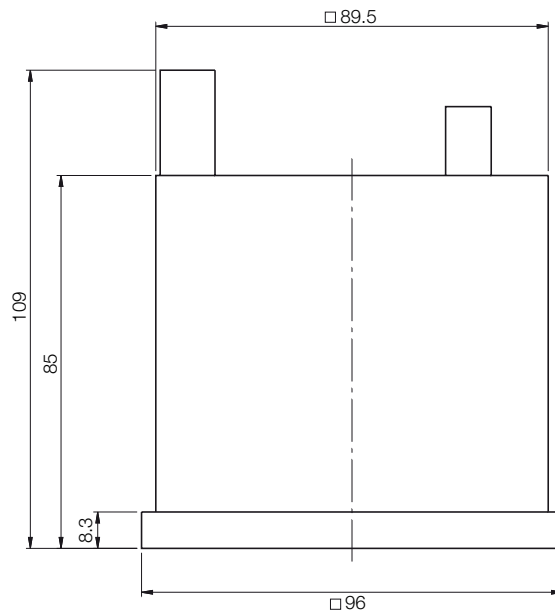
Model	Description	Power supply	Output	Sensor supply	Switch contact	Housing
ADI-ZF..	Dosing Device with frequency, temperature and pressure input, sensor linearization min./max. memory	..0.. = 230 V _{AC} ..4.. = 115 V _{AC} ..1.. = 48 V _{AC} ..2.. = 24 V _{AC} ..3.. = 24 V _{DC}	..0.. = without ..1.. = 0-10 V ..2.. = 0-20 mA ..4.. = 4-20 mA	..0.. = without ..U.. = 5 V _{DC} ..V.. = 12 V _{DC} ..W.. = 24 V _{DC}	..2.. = 2 change-over contacts ..6.. = transistor, passive	..X = panel mounting ..F = field housing ..S = field housing with wall mounting; smoothly rotatable ..R = field housing with pipe fastening; for 2" pipes

Electrical connection



Dimensions

Panel mounting (housing x)



Dimensions

Field housing

