



## Universal Dosing Device



measuring  
•  
monitoring  
•  
analysing



- 4 1/2 digit LED display
- 2 x 16 digit LC display
- Frequency, temperature and pressure input
- 2 limit values
- Analogue or pulse output
- Sensor supply
- User scaling
- MIN/MAX memory
- Sensor linearization

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**Model:**  
ADI-Z



**Description**

The new KOBOLD universal dosing device ADI-Z offers a range of functions such as indication of flow rate, flow rate counter, 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-digit 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 in a state-of-the-art  $\mu$ -processor. Display scaling, switching point setting, memory function and linearization may be selected 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
- Sensor linearization

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

- Analogue output 0(4) - 20 mA
- Frequency output 0 to 1000 Hz
- Sensor supply 5/12/24 V<sub>DC</sub>

**Technical Details**

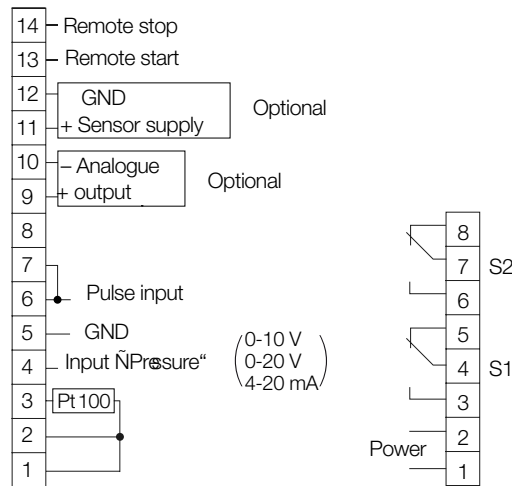
Digital display for flow rate:	4 1/2-digit, 14 mm high red LED display, programmable decimal-point setting
Summator:	LC display, 8-digit, with reset, two programmable decimal point positions; Units: [l], [m <sup>3</sup> ], [galuk], [galus]
Pressure read-out:	LC display, 4-digit, 1 programmable decimal point position [bar], [psi], [Mpa] units
Temperature display:	LC display, 4-digit, [°C], [F] units
Scanning frequency/display time:	s <sup>-1</sup>
Inputs:	
• Frequency:	frequency input 0.5 - 2000 Hz (PNP/NPN/Namur/TTL)
• Pressure:	4 - 20 mA (Ri < 200 $\Omega$ )
• Temperature:	Pt 100, 3-wire
Control inputs:	1x remote start, 1x remote stop, TTL level (control level: 5 - 40 V <sub>DC</sub> ; $\geq 0.5$ s)
Sensor supply: (option)	5 V / 15 mA, 12 V <sub>DC</sub> / 30 mA and 24 V <sub>DC</sub> / 50 mA
Power supply	230, 115, 48, 24 V <sub>AC</sub> $\pm 15\%$ 50 - 60 Hz, 24 V <sub>DC</sub> $\pm 20\%$
Limit values:	2 changeover relay contacts max. 115/230 V <sub>AC</sub> / 5 A or 30 V <sub>DC</sub> / 5 A (cos $\phi$ = 1) or 2 transistor outputs passive, max. 40 V <sub>DC</sub> , that can be assigned to frequency, pressure, temperature or batch function
Analogue output: (optional):	0 - 20 mA, 4 - 20 mA (max. load: 500 $\Omega$ ) and 0 - 10 V <sub>DC</sub> , electr. isolated
Temperature range:	-20 to +80 °C operating temperature -20 to +80 °C storage temperature
Dimensions:	96 x 96 x 105 mm (W x H x D) incl. screw-type terminal (panel mounting) 116 x 116 x 123 mm (W x H x D) (field housing)
Cut-out-dimensions:	92 <sup>+0.8</sup> x 92 <sup>+0.8</sup> 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)



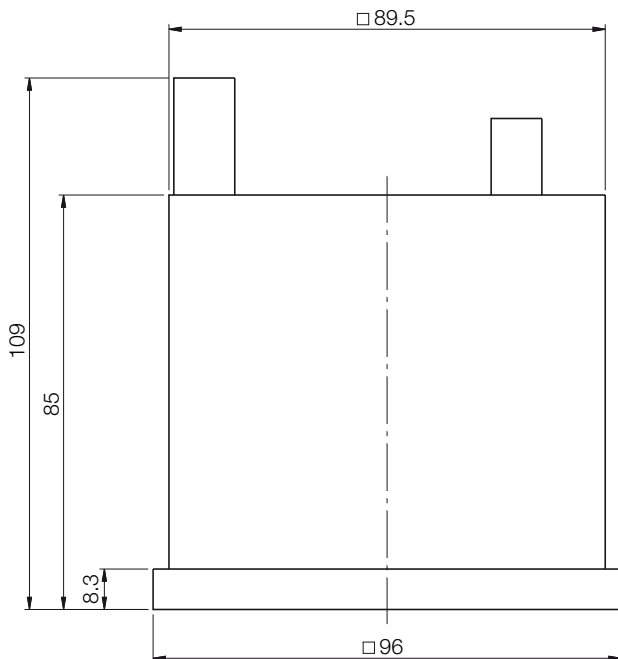
**Order Details** (Example: ADI-ZF 0 4 W 2 X)

Model	Description	Supply	Output	Sensor supply	Switching contact	Housing
ADI-ZF..	Dosing Device 96 x 96 mm with frequency, temperature and pressure input, sensor linearization Min/Max memory	..0.. = 230 V <sub>AC</sub> ..4.. = 115 V <sub>AC</sub> ..1.. = 48 V <sub>AC</sub> ..2.. = 24 V <sub>AC</sub> ..3.. = 24 V <sub>DC</sub>	..0.. = without ..1.. = 0-10 V ..2.. = 0-20 mA ..4.. = 4-20 mA	..0.. = without ..U.. = 5 V <sub>DC</sub> ..V.. = 12 V <sub>DC</sub> ..W.. = 24 V <sub>DC</sub>	..2.. = 2 change- over contacts  ..6.. = transistor, passive	..X = panel mounting ..F = field housing ..W = field housing with wall mounting; mounted in 90° steps  ..S = field housing with wall mounting; finely rotatable  ..R = field housing with pipe mounting; for 2" piping

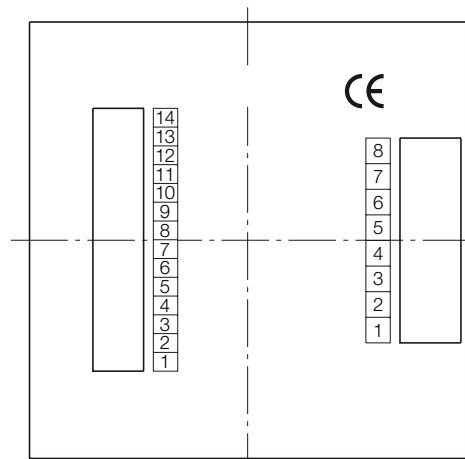
**Electrical Connection**



**Dimensions**



Model: ADI-



## Differential Pressure Flowmeter

- Measuring Range:  
3-25 to 399-2000 L/min water  
7.5-42.5 to 700-2800 m<sup>3</sup><sub>N</sub>/h air
- Connection: G 1/2...G 3
- Accuracy:  
± 3% of F.S.
- Material:  
Aluminium-  
bronze or St. St.
- Mechanical  
pointer display,  
digital display,  
bargraph display
- Analogue output,  
contacts



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