

DR15

Turbine flow meter, counter and batching unit

- for low viscosity liquids
- materials: wetted materials made of PP, PVDF and alloy 59
- 2 calibrated measuring ranges, 10-60 l/min, 20-120 l/min
- 3 additional user-defined measuring ranges
- accuracy: $\pm 2.5\%$ of full scale, ' reproducibility $< 0.5\%$ of full scale
- LCD display for flow rate and totalizing, control output for dosing, pulse output proportional to flow rate
- power supply: battery or 24 VDC



Description:

A turbine mounted in the flow tube is rotated by the flowing liquid. The rotary motion is sensed by two reed relays via a magnetical coupling, and transmitted to an electronic in the form of a frequency proportional to the flow. The electronics module calculates the flow rate and the total quantity and operates a transistor contact, which is available to energize a pump or a valve when a programmable total quantity has been counted.

Typical Applications:


Model DR15 flow meters and dosers are used to monitor, measure and dose low-viscosity liquids such as water, diesel oil, sodium hydroxide solution and the like. Applications are to be found in coolant monitoring, filling processes and in the chemical industry, to mention but a few.


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Models:

DR15.PO...	measuring tube made of POM (available on request)
DR15.PP...	measuring tube made of PP
DR15.PV...	measuring tube made of PVDF (available on request)

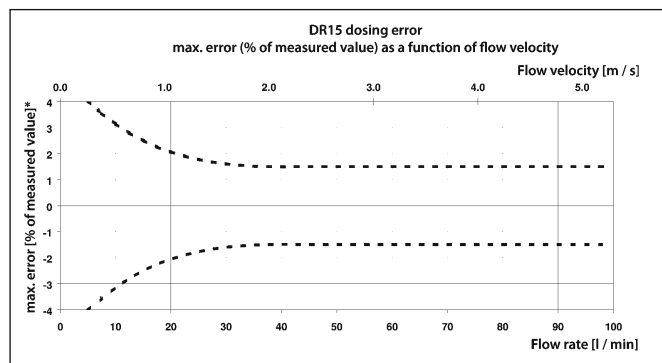
Measuring ranges:

DR15.x.1...	10–60 l/min
DR15.x.2...	20–120 l/min

Electronics options:

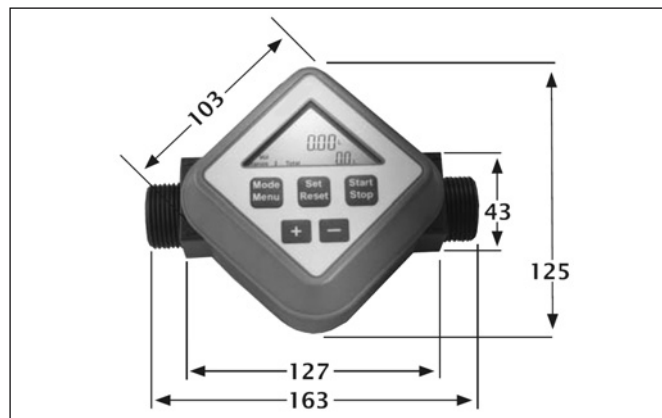
DR15...EB	battery operated
DR15...E24	24 VDC power supply
DR15...0	no output signals
DR15...I	with pulsed output (40 ml/pulse, NPN o/c, 2-channel)
DR15...K	with switched transistor output for dosing (NPN o/c)
DR15...KI	with switched and pulsed output

Measuring accuracy:



*) under reference conditions (process liquid: water; ambient and water temperature: 20 °C; with minimum required inlet and outlet pipe sections and matching inside pipe diameters)

Dimensions:



Model Coding:

Order Number:	DR15.	S.	PP.	1	EB.	K.	0
Turbine flow meter, counter and doser							
Process connection:	S = G 1 male thread						
Material:	PP = polypropylene						
Measuring ranges:	1 = 10-60 l/min 2 = 20-120 l/min						
Power supply:	EB = battery (with electronics 0 or K only) E24 = 24 VDC						
Electronics options:	0 = no output signal (flow meter and counter only) I = pulsed output (flow meter and counter only) K = switched output (flow meter, counter, doser) IK = pulsed and switched output (flow meter, counter, doser)						
Options:	0 = none 9 = please specify in writing						

Other models like 1" NPT process connection, device tube made of POM or PVDF available upon request.

Technical Specifications:

Max. pressure:	
at 20 °C	10 bar
at 40 °C:	8 bar (PVDF), 7 bar (POM, PP)
at 60 °C:	6 bar (PVDF), 4 bar (POM), 3 bar (PP)
Max. temperature:	60 °C
Process connection:	G 1 male thread, (NPT on request)
Materials:	
Measuring tube:	PP (POM or PVDF on request)
Turbine:	PVDF
Axle shaft:	NiCroFer 2.4605 (alloy 59)
Gasket:	Viton
Electronics enclosure:	plastic
Mounting position:	preferably horizontal with display on top
Accuracy:	± 2.5% f.s. for flow rate, ± 1.5% of set quantity for dosing (<20 l/min: ± 3%)
Resolution:	0,05 L
Display:	LCD, 2 x 6 digits
Operation:	keypad with 5 buttons
Outputs:	
Pulses:	NPN open collector
Switched output:	NPN open collector
Power supply:	9-32 VDC or lithium battery type AA, 3.6 V, 2300 mAh
Weight:	approx. 300 g

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