# DR56

## **Plastic Paddle Wheel Flowmeter**

- for liquids
- measuring range 20...1000 l/h
- process connection G 3/8 male
- housing made of POM or ECTFE
- independent of position
- no inlet and outlet pipe runs needed
- max. pressure: 10 bar
- max. temperature: 80 °C



#### **Description:**

The plastic paddle wheel flow meter of the DR56 series measure the flow of water and water-like (low viscous) media. They consist of a sensor and an optional transmitter.

The sensor has a paddle wheel which is mounted in a housing made of POM or ECTFE and is rotated by the flowing medium. This rotary motion is picked up by a Hall sensor system and emitted as a flow-proportional frequency signal. A convenient control unit with display is available as an option, which can also be mounted on the flow meter.

#### **Typical applications:**

The DR54 impeller flow meters are very resistant to many process media due to their design made of insensitive plastics. Almost all low-viscosity liquids can be measured reliably and cost-effectively with this device.

- cooling circuits
- · osmosis plants
- electroplating / photo industry
- agriculture / gardening
- filling plants / washing plants



#### **Models:**

plastic housing POM

plastic housing ECTFE

#### **Technical Data:**

Measuring range: 20...1000 l/h

**Accuracy:** +/- 2,5 % of average value

Repeatability: +/- 1 %

Serial dispersion: Max. +/-2 %

Max. process pressure: 10 bar

Max. process temp.: -10...60 °C (output 4...20 mA or

control unit)

-10...80 °C (output Push-Pull)

(higher on request)

Bearing: pivot bearing

**Power supply:** 4,5...24 VDC (Push-Pull)

8...24 VDC (4...20 mA output)

**Process connection:** G 3/8 male thread

Paddle wheel: 6 paddles (1 or 3 pulses/turn)

Materials:

housing: POM or ECTFE

bearing: POM, ECTFE, ruby or Al<sub>2</sub>O<sub>3</sub>

pivot: stainless steel, sapphire or Al<sub>2</sub>O<sub>3</sub>

gaskets: FKM, EPDM, FFKM (Kalrez)

**Output signal:** 

Push-Pull 146 pulses/l at 1 pulses/turn or pulse output: 438 pulses/l at 3 pulses/turn

analogue output: 4...20 mA (2-wire)

**Electrical connection:** PVC cable, free cable ends

M12 plug an PVC cable cubic plug acc. to EN 175301-803A

**Mounting position:** any, horizontal in direction of arrow,

best ventilation

Protection class: IP65

#### **Order Code:**

Order number: DR56. P. 1. A. 1. A. F. P. 1. 0

Plastic turbine flowmeter

**Housing material:** P = plastic POM

E = plastic ECTFE

**Measuring ranges:** 1: 20...1000 l/h

Process connection:

A = G 3/8 male thread

Pulses / number of magnets:

Material bearing / pivot\*:

1 = 1 pulses/turn, 146 pulses/l (1 magnet) 3 = 3 pulses/turn, 438 pulses/l (3 magnets)

(increase of pulse frequency on request)

A = housing material (POM or EPDM) / stainless steel

B = ruby / stainless steel

C = ruby / sapphire (can be used only up to 500 l/h)

 $D = Al_2O_3 / Al_2O_3$  (can only be used from 80 l/h)

Gaskets:

F = FKM

E = EPDM

K = FFKM (Kalrez)

Output signal:

P = Push-Pull pulse output

A = 4...20 mA (2-wire)

9 = without (only in combination with control unit AZ50)

**Electrical connection:** 

1 = 1 m PVC cable (3-wire)

2 = 1,9 m PVC cable (3-wire)

3 = 3 m PVC cable (3-wire) 4 = M12 plug an PVC cable 1,9 m

5 = cubic plug acc. to EN 175301-803A

6 = prepared for control unit AZ50

Options:

0 = without

9 = please specify in plain text

\*For optimum selection of materials, please specify medium, measuring range, operating pressure and temperature.

### **Accessory:**

**AZ50** control unit with comfortable display, analogue output

switching points, etc.

#### **Dimensions:**





