

# DU06

## Ultrasonic- Flowmeter and Counter with Local Indication

- heavy duty meter, brass- and stainless steel version
- for 1/2" to 2" pipes
- very broad measurement range:  
0,5...80 to 8...1000 l/min
- 2-line LCD-display for flow  
and total indication
- output signals: 4...20 mA,  
0...10 V for flow,  
pulses for total



### Description:

The DU06 flowmeter is fitted with two ultrasonic sensors that are facing each other. The echo travel time is a function of the flow rate. The sensors act alternately as transmitter and receiver.

The echo time difference is proportional to the flow rate. In contrast to other types of ultrasonic flowmeters, the sensors are oriented parallel to the flow stream. This results in an extremely compact meter which is highly accurate, has outstanding turndown ratio dynamics and can monitor and meter very high flow rates without any reduction in pipe cross-sectional area.

### Typical applications:

The DU06 measures, monitors and totalizes liquid flow. Among the applications for this device are cooling systems (water / glycol mixtures), non-conductive products (demineralized water, low viscous oils) and chemically aggressive and caustic liquids.

## Models:

**DU06.M...** brass version, housing made of brass 2.0401, sensors made of stainless steel 1.4571, FKM gaskets, (EPDM optional), for 1/2" pipe only

**DU06.E...** stainless steel version, housing made of stainless steel 1.4571, sensors made of stainless steel 1.4571, FKM gaskets, (EPDM optional), for 1/2" to 2" pipe

## Measuring ranges:

Measuring range *)	Brass-version	St. steel-version	Process-connection
0,5...80 l/min	DU06.M...R015	DU06.E...R015	R 1/2 male
1...180 l/min	-	DU06.E...R025	R 1 male
8...1000 l/min	-	DU06.E...R050	R 2 male

\*) Maximum ranges are specified. For a higher resolution the output can be programmed for end values < max. measuring range

## Electrical Data:

**Output signal:** adjustable on site: 4...20 mA, 0...10 V or frequency output and 2 limit relays

### Connection 4 pin plug: Power supply, output signal

Pin 1: 4-20 mA / 0-10 V / frequency output

Pin 2: GND

Pin 3: GND

Pin 4: +24 VDC  $\pm 15\%$

### Connection 6 pin plug: Relay output

Pin 1: relay 2, N/O contact

Pin 2: relay 2, common contact

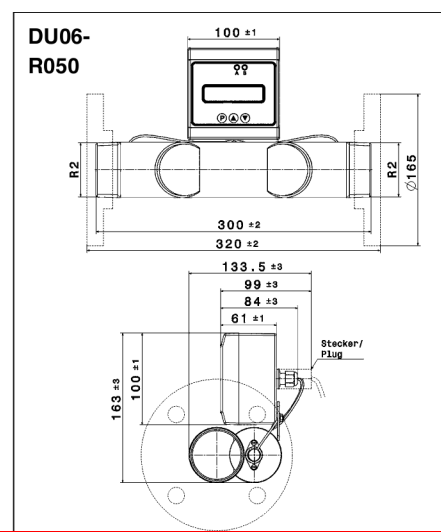
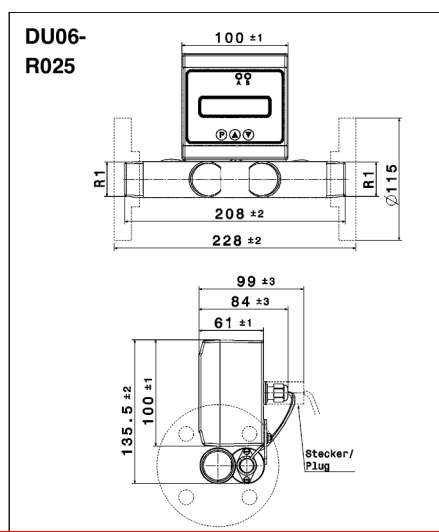
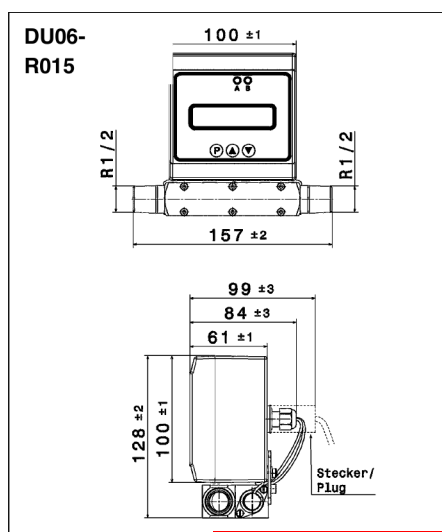
Pin 3: relay 2, N/C contact

Pin 4: relay 1, N/O contact

Pin 5: relay 1, common contact

Pin 6: relay 1, N/C contact

## Dimensions:



## Order Code:

**Order number:** DU06. E. V. R025. 0. 0

**Ultrasonic flowmeter and counter with local indication**

### Material version:

M = brass housing, sensors st. steel (with R 1/2 male connection only)

E = st. steel housing, sensors st. steel

S = special version

### Gaskets:

V = FKM (standard)

E = EPDM

S = special gasket

### Measuring range / Process connection:

R015 = 0,5...80 l/min, R 1/2 male

R025 = 1...180 l/min, R 1 male (only DU06.E...)

R050 = 8...1000 l/min, R 2 male (only DU06.E...)

### Output signal:

0 = universal output for power, voltage or frequency, adjustable on site and 2 limit relays

### Options:

0 = without

9 = please specify in plain text

## Technical Data:

**Max. pressure:**

25 bar

**Medium temperature:**

-20...+100 °C

**Ambient temperature:**

-10...+60 °C

**Accuracy:**

$\pm 2\%$  of full scale

**Mounting position:**

any, rotatable housing

**Medium:**

acoustically conductive liquids, solids content < 10 Vol. %

**Power supply:**

24 VDC  $\pm 15\%$

**Power consumption:**

200 mA max.

**Outputs:**

4...20 mA, 0...10 V, frequency-output (programmable, max. 32 kHz),

Ri = 2 kOhm

**Limit value relay:**

2 x changeover cont., 30 VDC / 1 A

**Display:**

LCD, 2 x 16 digit, illuminated

**Protection class:**

IP65

**Response time:**

0,8...8 s, factory setting ca. 1,6 s

**Flow direction:**

adjustable in device