

### Reliability in Explosive Atmosphere

The FLUXUS® ADM 8X27 ultrasonic flowmeters are presented in an IP66 enclosure for permanent installation. They are ATEX certified for use in explosion hazard zones 1 and 2. All electronic components are housed in a flame-proof enclosure. The meter's terminals and terminal boxes use the "increased safety" protection type. The all-stainless-steel FLUXUS® ADM 8127 was engineered especially for offshore applications. It is seawater-proof and corrosion-proof.

The instrument works according to the transit-time principle. Thanks to its exceptional dual-uP technology, high number of measuring cycles per second and adaptive signal processing, FLUXUS® ADM 8X27 produces stable and reliable measuring results even under difficult conditions.

The operation of the flowmeter is especially easy thanks to the clearly structured user dialogue. The keys of the command panel can be operated without opening the instrument, with a magnetic pen. Since the transducers are mounted on the pipe, they are not subject to wear and tear and can be installed rapidly, without cutting into the pipe and without process interruption. The measurement causes no pressure loss. Chemically aggressive media are not a problem; there is no need for expensive materials.

All FLEXIM flow transducers for liquids can be connected. Clamp-on flow measurement of liquids is possible on pipes with diameter ranging from DN6 to DN6500 and at temperatures ranging from -30 °C to 400 °C. The standard transducers have a degree of protection of IP65. Explosion protected types (FM or ATEX) are available. You will find more information about the transducers in the corresponding specification sheet.



FLUXUS® ADM 8027



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### Features

- Use in explosion hazard zones 1 and 2
- Operation directly at the instrument, without PC
- Connection enclosure and electronics enclosure are hermetically sealed
- 1 or 2 flow channels
- Unique signal processing
- Enhanced status information

## Technical Data

### Measurement

Measuring principle:	Transit time difference correlation principle
Flow velocity:	(0.01 to 25)m/s
Repeatability:	0.15% of reading $\pm$ 0.01 m/s
Accuracy*	
- with 7 points wet flow calibration:	$\pm$ 1.2% of reading $\pm$ 0.01 m/s
- with process calibration**:	$\pm$ 0.5% of reading $\pm$ 0.01 m/s
Measurable fluids:	All acoustically conductive fluids with <10% gaseous or solid content in volume

### Transmitter

Enclosure:	
- Weight:	8027: approx. 2.8kg 8127: approx. 8.5kg
- Deg. of protection:	IP66 acc. to EN60529
- Material:	8027: cast aluminum 8127: steel 1.4571
- Dimensions:	S. drawing on page 4
Flow channels:	1 or 2
Power supply:	(100 to 240)VAC / 12VDC / 24VDC
Display:	2 x 16 characters, dot matrix, backlight
Operating temperature:	-10°C to 50°C
Power consumption:	< 15W
Signal damping:	(0 to 100)s, adjustable
Measuring cycle:	(100 to 1000)Hz (1 channel)
Response time:	1s (1 channel), 70ms opt.
Use in explosive atmosphere	
- Hazard zones:	ATEX zone 1 and 2
- Explosion protect. temp. acc. to ATEX:	8027: -20°C to 60°C 8127: -20°C to 50°C
- Marking:	CE 0044; Ex II2G 8027: EEx de IICT6T <sub>a</sub> -20°C...60°C 8127: EEx de IICT6T <sub>a</sub> -20°C...50°C
- Certification:	8027: IBExU 01 ATEX 1064 8127: IBExU 05 ATEX 1078
- Type of protection:	Electronics: flameproof enclosure Terminals: increased safety

\* under reference conditions and with  $v > 0.15$  m/s

\*\* if reference uncertainty better than 0.2%

### Measuring functions

Physical quantities:	Volume and mass flow rate, flow velocity
Totalizers:	Volume, mass
Calculation functions:	Average, difference, sum
Operating languages:	Dutch, English, French, German, Spanish

### Data logger

Loggable values:	All physical quantities and totalized measured values
Capacity:	>100000 meas. values

### Communication (optional)

Interface:	RS485
Data:	Actual meas. value, logged data, parameter records

### Software FluxData (optional)

Functions:	Downloading meas. data/ parameter records, graphical presentation, conversion to other formats
Operating systems:	All Windows™ versions

### Outputs (optional)

All outputs are galvanically isolated from the main device. The basic instrument is equipped with 1 current output and 1 binary output (OC). A maximum of 2 binary outputs (relays), 1 binary output (OC) and 1 current output can be added.

#### Current

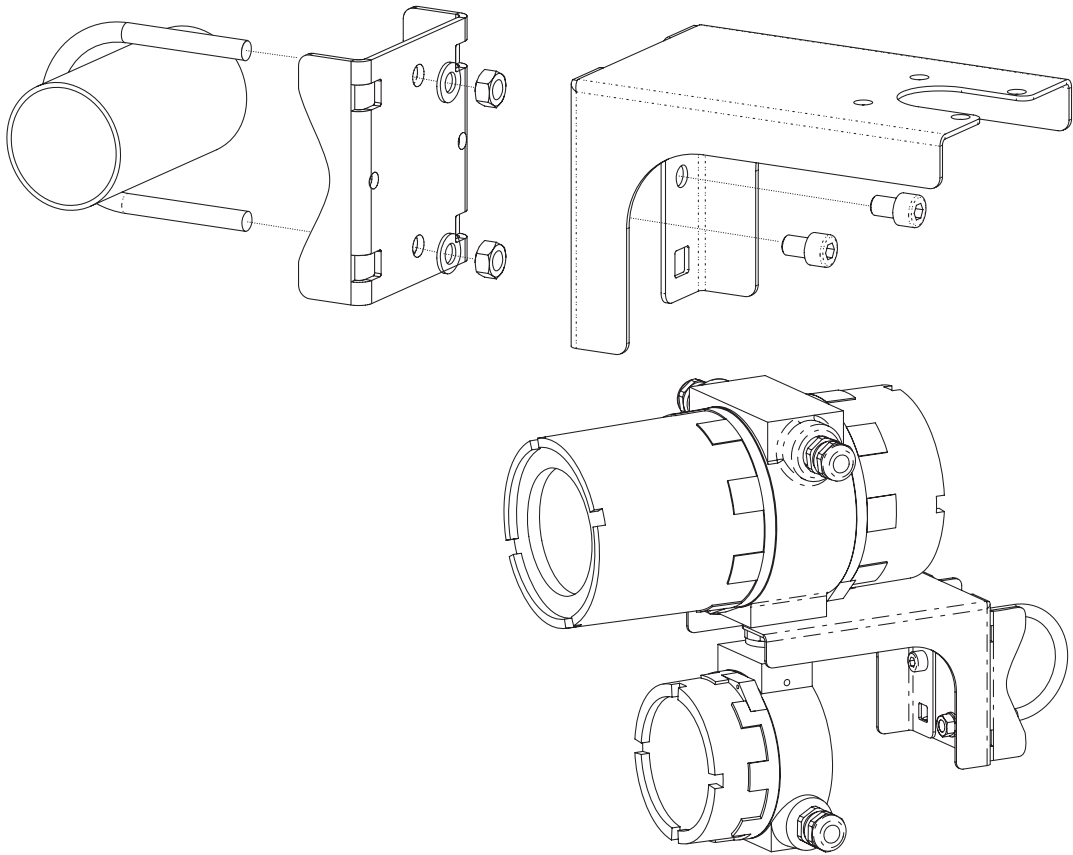
- Type:	active, $R_{ext} < 500\Omega$
- Range:	(0/4 to 20)mA
- Accuracy:	0.1% of reading $\pm$ 15µA

#### Binary

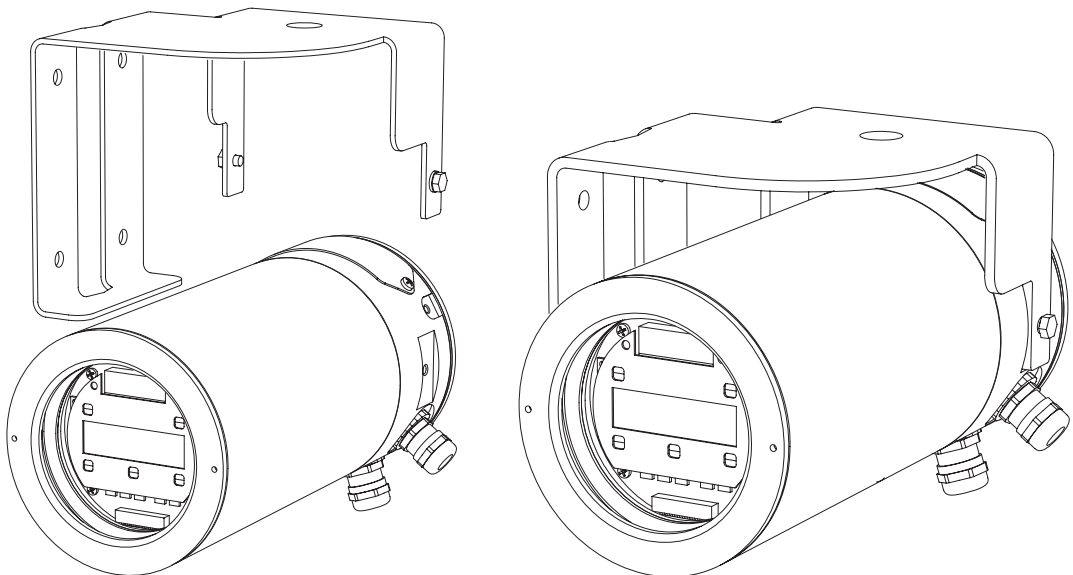
- Open collector:	24V/4mA
- Reed relay:	48V/0.1A
- Function as state output:	Limit, sign change or error
- Properties of the pulse output (OC):	Value: (0.01 to 1 000)units Width: (80 to 1000)ms

## Mounting Kit

### FLUXUS ADM 8027

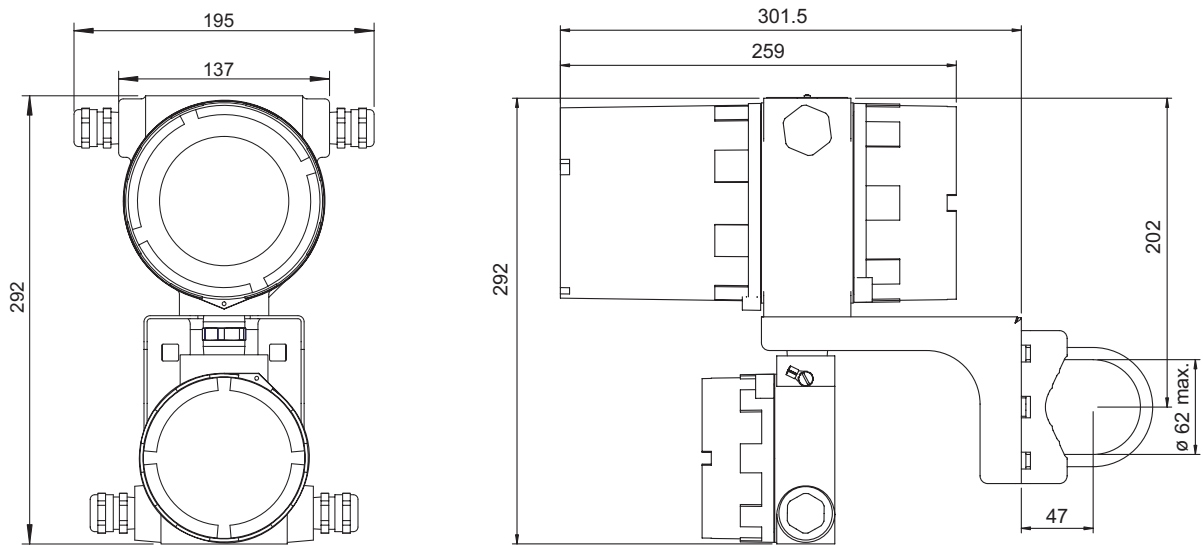


### FLUXUS ADM 8127



## Dimensions (in mm)

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