



## Application Low Flow

### Flow Transmitter

#### Technical Data

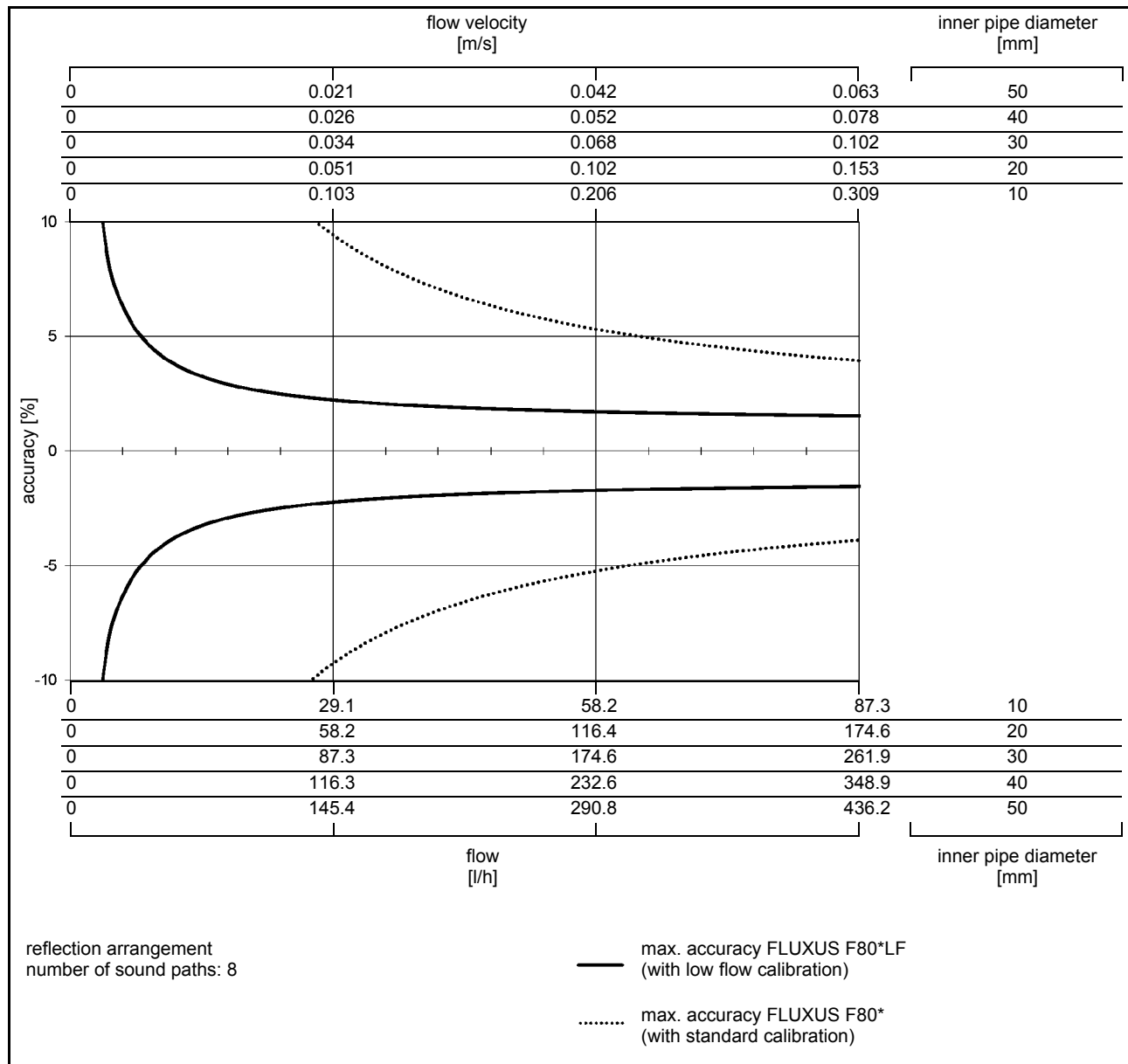
FLUXUS	F808LF-A1	F801LF-A1		ADM 8127C24
design	explosion proof field device	explosion proof offshore device		
		active current outputs, binary outputs	passive current outputs, binary outputs	frequency output, binary output
				intrinsically safe outputs: passive current output, binary output
application	extreme low flow measurement for liquids			
transducers	CDQ*N**			
transducer mounting fixture	Variofix L with bolt mounting plate VLQ-DS-B (outer pipe diameter ≤ 48 mm) Variofix L VLQ-DS-S (outer pipe diameter > 48 mm)			
				
<b>measurement</b>				
measurement principle	transit time difference correlation principle			
flow velocity	depending on pipe diameter, see diagrams			
medium	all acoustically conductive liquids with < 2 % gaseous or solid content in volume			
temperature compensation	corresponding to the recommendations in ANSI/ASME MFC-5.1-2011			
accuracy	depending on pipe diameter, see diagrams			
<b>flow transmitter</b>				
power supply	100...240 V/ 50...60 Hz or 20...32 V DC	100...240 V/50...60 Hz or 20...32 V DC or on request: 11...16 V DC		24 V DC ±10 %
power consumption	< 8 W	< 8 W		< 4 W
number of flow measuring channels	1			
damping	0...100 s, adjustable			
measuring cycle	100...1000 Hz			
response time	1 s			
housing material	cast aluminum, special offshore coating	stainless steel 316/316L (1.4401, 1.4404, 1.4432)		
degree of protection according to IEC/EN 60529	IP66			
dimensions	see dimensional drawing			
weight	5.3 kg	8.5 kg		
fixation	wall mounting, 2" pipe mounting			
operating temperature	-30...+60 °C (< -20 °C without operation of the display)	-20...+60 °C		-20...+50 °C
display	2 x 16 characters, dot matrix, backlight			
menu language	English, German, French, Dutch, Spanish			

FLUXUS		F808LF-A1	F801LF-A1		ADM 8127C24
<b>explosion protection</b>					
A T E X / I E C E x	zone	1	1		1
	marking	<b>CE</b> 0637 <sup>(Ex)</sup> II2G II2D Ex db e IIC T6 Gb Ex tb IIIC T 100 °C Db T <sub>a</sub> -40...+60 °C	<b>CE</b> 0637 <sup>(Ex)</sup> II2G II2D Ex d e IIC T6 Gb Ex tb IIIC T 100 °C Db T <sub>a</sub> -20...+60 °C	<b>CE</b> 0637 <sup>(Ex)</sup> II2G Ex d e [ib] IIC T4 Gb T <sub>a</sub> -20...+50 °C	
	certification ATEX	IBExU11ATEX 1022 X	IBExU05ATEX1078		IBExU05ATEX1078
	certification IECEx	IECEX IBE 11.0006X	IECEX IBE 12.0020		
	type of protection	gas: electronics compartment: flameproof enclosure connection compartment: increased safety dust: protection by enclosure	gas: electronics compartment: flameproof enclosure connection compartment: increased safety dust: protection by enclosure	electronics compartment: flameproof enclosure connection compartment: increased safety output circuits: intrinsic safety	
intrinsic safety parameters	-	-		U <sub>m</sub> = 250 V AC intrinsically safe outputs: U <sub>i</sub> = 28.2 V P <sub>i</sub> = 0.76 W L <sub>i</sub> , C <sub>i</sub> negligible	
<b>measuring functions</b>					
physical quantities	volumetric flow rate, mass flow rate, flow velocity				
totalizer	volume, mass				
diagnostic functions	sound speed, signal amplitude, SNR, SCNR, standard deviation of amplitudes and transit times				
<b>data logger</b>					
loggable values	all physical quantities, totaled values and diagnostic values				
capacity	> 100 000 measured values				
<b>communication</b>					
interface	- process integration (optional): Modbus RTU or HART - diagnosis: RS232 <sup>1</sup>	- process integration (optional): RS485 (emitter) or Modbus RTU - diagnosis: RS232 <sup>1</sup>	- process integration (optional): RS485 (emitter) or Modbus RTU or HART - diagnosis: RS232 <sup>1</sup>	- diagnosis: RS232 <sup>1</sup>	- diagnosis: RS232 <sup>1</sup>
<b>serial data kit (optional)</b>					
software (all Windows™ versions)	- FluxData: download of measurement data, graphical presentation, conversion to other formats (e.g. for Excel™) - FluxDiag (optional): online diagnostics and report generation - FluxKoeff: creating fluid data sets - FluxSubstanceLoader: upload of fluid data sets				
cable	RS232 <sup>1</sup>				
adapter	RS232 - USB <sup>1</sup>				

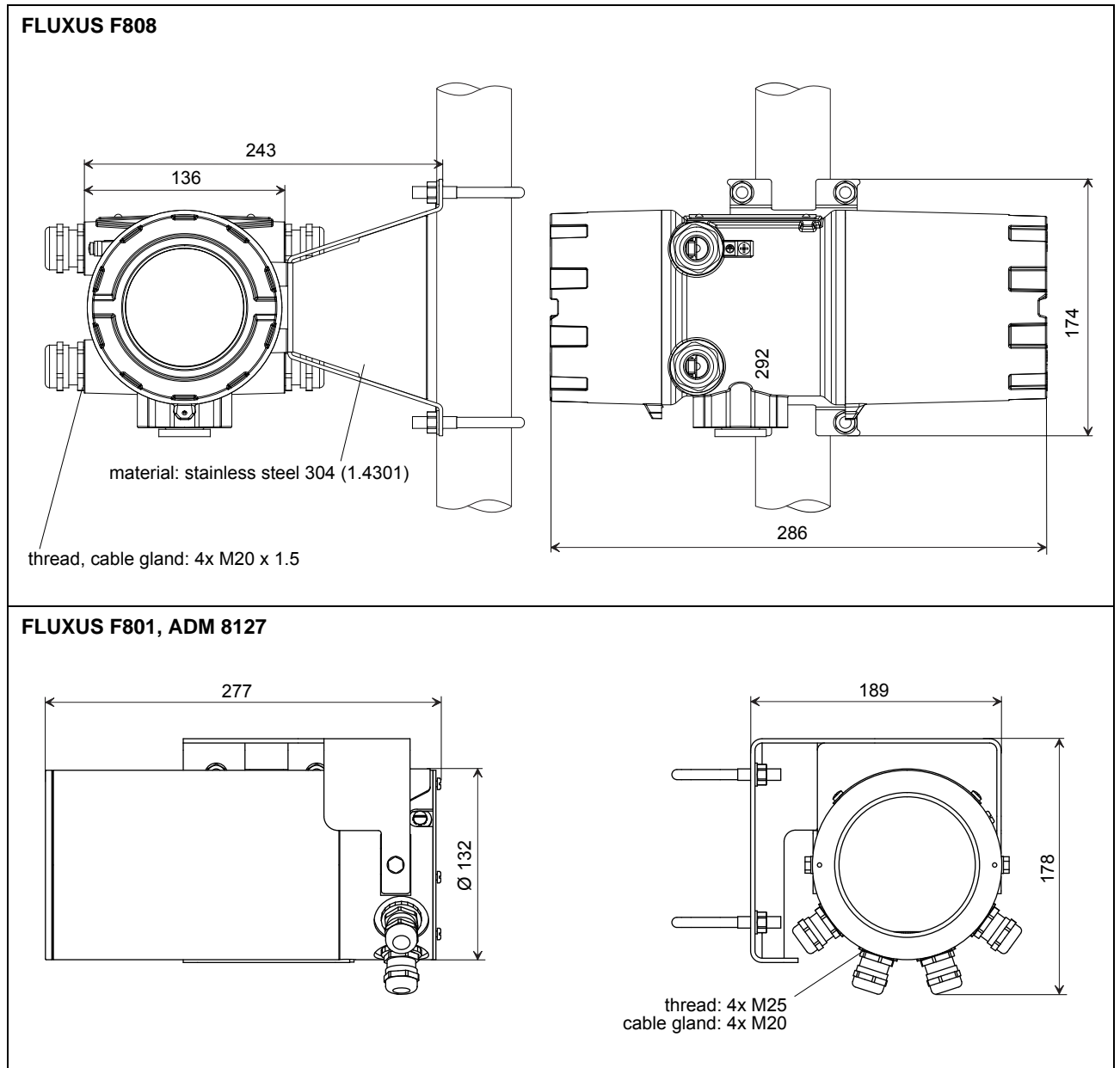
<sup>1</sup> connection of the interface RS232 outside of explosive atmosphere (housing cover open)

FLUXUS	F808LF-A1	F801LF-A1		ADM 8127C24	
<b>outputs</b>					
	The outputs are galvanically isolated from the transmitter.				
number	current output: 1 binary output: 1  or current output: 1 Modbus  or current output: 1/ HART binary output: 1	active current output: 1...2 and binary output (open collector): 1...2  or active current output: 1...2 and binary output (open collector): 1 and binary output (Reed relays): 1	passive current output: 1...2 and binary output (open collector): 1...2  or passive current output: 1...2 and binary output (open collector): 1 and binary output (Reed relays): 1	frequency output: 1 and binary output (open collector): 1	passive current output: 1 and binary output (open collector): 1
<b>current output</b>					
current output I1, (I2) - range - accuracy  - active output - passive output	0/4...20 mA 0.1 % of reading ±15 µA R <sub>ext</sub> < 500 Ω U <sub>ext</sub> = 4...26.4 V, depending on R <sub>ext</sub> R <sub>ext</sub> < 1 kΩ	0/4...20 mA 0.1 % of reading ±15 µA R <sub>ext</sub> < 500 Ω -	0/4...20 mA 0.1 % of reading ±15 µA - U <sub>ext</sub> = 4...26.4 V, depending on R <sub>ext</sub> R <sub>ext</sub> < 1 kΩ	- - - -	4...20 mA 0.1 % of reading ±15 µA - U <sub>ext</sub> = 4...28.2 V, depending on R <sub>ext</sub> R <sub>ext</sub> < 1 kΩ intrinsic safety
current output I1 in HART mode - range - passive output - active output	4...20 mA U <sub>ext</sub> = 7...30 V DC U <sub>int</sub> = 24 V	- - -	4...20 mA U <sub>ext</sub> = 10...24 V -	- - -	- - -
<b>frequency output</b>					
- range - passive output	- -	- -	- -	0...5 kHz 30 V/100 mA I <sub>off</sub> = 0.8 mA optional: 8.2 V DIN EN 60947-5-6 (NAMUR)	- -
<b>binary output</b>					
Reed relay open collector	- 24 V/4 mA  optional (only in combination with HART): 30 V/100 mA or 8.2 V DIN EN 60947-5-6 (NAMUR)	48 V/100 mA 24 V/4 mA	48 V/100 mA 24 V/4 mA	- 30 V/100 mA I <sub>off</sub> = 0.8 mA	- 24 V/4 mA intrinsic safety
binary output as alarm output - functions	limit, change of flow direction or error				
binary output as pulse output - pulse value - pulse width	0.01...1000 units 80...1000 ms				

**Diagrams**



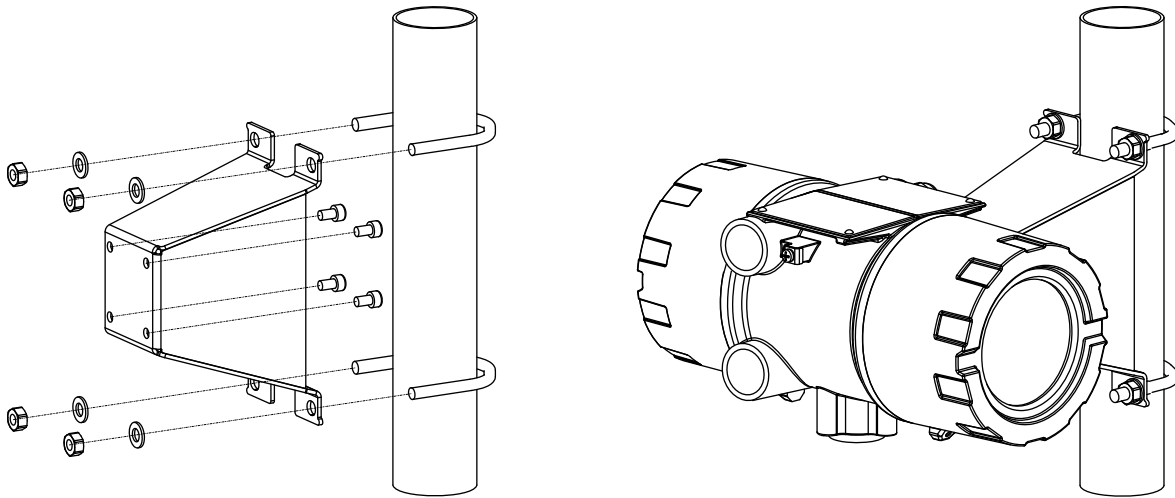
### Dimensions



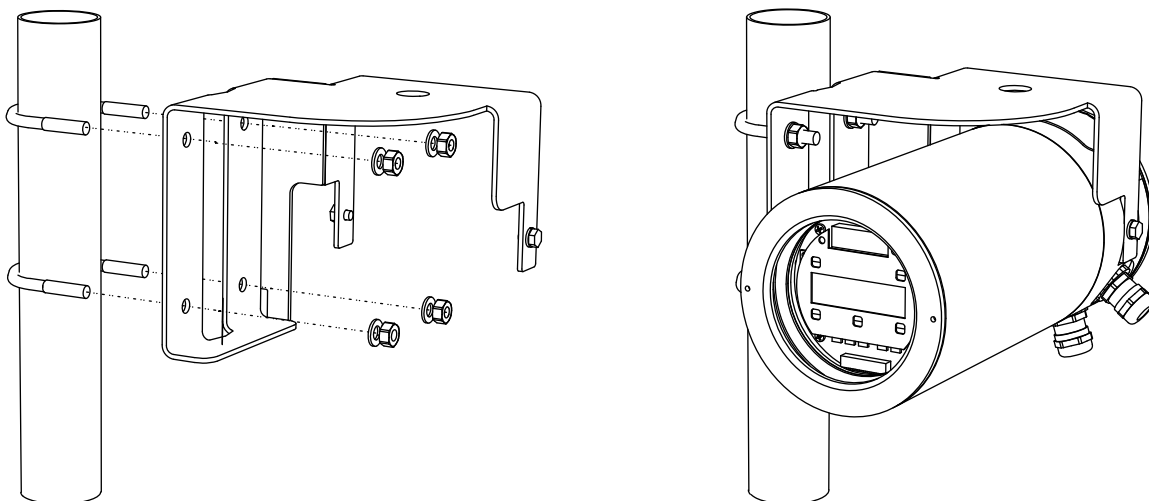
in mm

### Wall and 2 " Pipe Mounting Kit

#### FLUXUS F808



#### FLUXUS F801, ADM 8127



FLEXIM GmbH  
 Wolfener Str. 36  
 12681 Berlin  
 Germany  
 Tel.: +49 (30) 93 66 76 60  
 Fax: +49 (30) 93 66 76 80

internet: [www.flexim.com](http://www.flexim.com)  
 e-mail: [info@flexim.com](mailto:info@flexim.com)

Subject to change without notification. Errors excepted.  
 FLUXUS® is a registered trademark of FLEXIM GmbH.

TSFLUXUS\_SU\_F80xLFV1-7EN\_Leu, 2015-12-10