

## Flow Transmitter FLUXUS F800SR-A1, F801SR-A1

### Technical Data

FLUXUS	ADM 8027 (type SIL: F800SR-A1)	F801SR-A1
design	SIL	
		
<b>measurement</b>		
measurement principle	transit time difference correlation principle, automatic NoiseTrek selection for measurements with high gaseous or solid content	
flow velocity	0.01...25 m/s	
repeatability	0.15 % of reading $\pm$ 0.01 m/s	
fluid	all acoustically conductive liquids with < 10 % gaseous or solid content in volume (transit time difference principle)	
temperature compensation	corresponding to the recommendations in ANSI/ASME MFC-5.1-2011	
<b>accuracy<sup>1</sup></b>		
with standard calibration	$\pm$ 1.6 % of reading $\pm$ 0.01 m/s	
with advanced calibration (optional)	$\pm$ 1.2 % of reading $\pm$ 0.01 m/s	
with field calibration <sup>2</sup>	$\pm$ 0.5 % of reading $\pm$ 0.01 m/s	
<b>flow transmitter</b>		
power supply	100...240 V/50...60 Hz or 20...32 V DC	
power consumption	< 10 W	< 8 W
number of flow measuring channels	1, optional: 2	
damping	0...100 s, adjustable	
measuring cycle (1 channel)	100...1000 Hz	
response time	1 s (1 channel), option: 70 ms	
housing material	cast aluminum, powder coated	stainless steel 316/316L (1.4401, 1.4404, 1.4432)
degree of protection according to IEC/EN 60529	IP66	
dimensions	see dimensional drawing	
weight	6 kg	8.5 kg
fixation	wall mounting, 2 " pipe mounting	
ambient temperature	-20...+60 °C	-20...+50 °C
display	2 x 16 characters, dot matrix, backlight	
menu language	English, German, French, Dutch, Spanish	
<b>explosion protection</b>		
A T E X / I I C	zone	1
	marking	CE 0637  II2G Ex d e IIC T6 Gb T <sub>a</sub> -20...+60 °C
	certification ATEX	IBExU05ATEX1078
	certification IECEx	ECEx IBE 12.0020
E X	type of protection	electronics compartment: flameproof enclosure connection compartment: increased safety

<sup>1</sup> for transit time difference principle, reference conditions and  $v > 0.15$  m/s

<sup>2</sup> reference uncertainty < 0.2 %

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<b>measuring functions</b>		
physical quantities	volumetric flow rate, mass flow rate, flow velocity	
totalizer	volume, mass	
calculation functions	average, difference, sum (2 measuring channels necessary)	
diagnostic functions	sound speed, signal amplitude, SNR, SCNR, standard deviation of amplitudes and transit times	
<b>data logger</b>		
loggable values	all physical quantities, totalized values and diagnostic values	
capacity	> 100 000 measured values	
<b>communication</b>		
interface	- diagnosis: RS232 <sup>3</sup>	
<b>serial data kit (optional)</b>		
software (all Windows™ versions)	<ul style="list-style-type: none"> <li>- FluxData: download of measurement data, graphical presentation, conversion to other formats (e.g. for Excel™)</li> <li>- FluxDiag (optional): online diagnostics and report generation</li> <li>- FluxKoeff: creating fluid data sets</li> <li>- FluxSubstanceLoader: upload of fluid data sets</li> </ul>	
cable	RS232 <sup>3</sup>	
adapter	RS232 - USB <sup>3</sup>	
<b>outputs (optional)</b>		
	The outputs are galvanically isolated from the transmitter.	
<b>current output</b>		
number	2 (1 (SIL 2), 1 (diagnosis))	
range	0/4...20 mA	
accuracy	0.1 % of reading ±15 µA	
active output	R <sub>ext</sub> < 500 Ω	
<b>binary output</b>		
number	1...2 (diagnosis)	
open collector	24 V/4 mA	
binary output as alarm output		
- functions	limit, change of flow direction or error	
open collector as pulse output		
- pulse value	0.01...1000 units	
- pulse width	1...1000 ms	

<sup>3</sup> connection of the interface RS232 outside of explosive atmosphere (housing cover open)



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