Supplement to Technical specification TSFLUXUS_F8Vx-xXX_Leu

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Flow transmitter FLUXUS F800SR-A1, F801SR-A1

Technical data

FLUXUS ADM 8027 (type SIL: F800SR-A1) F8013 design SIL	SR-A1	
	Ex.	
measurement		
	transit time difference correlation principle, automatic NoiseTrek selection for measurements with high gaseous or solid content	
flow velocity 0.0125 m/s		
repeatability 0.15 % of reading ±0.01 m/s	0.15 % of reading ±0.01 m/s	
principle)	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 MF	corresponding to the recommendations in ANSI/ASME MFC-5.1-2011	
accuracy ¹		
with standard calibration ±1.6 % of reading ±0.01 m/s		
with advanced calibration ±1.2 % of reading ±0.01 m/s		
(optional)		
with field calibration ² ±0.5 % of reading ±0.01 m/s		
flow transmitter power supply 100230 V/5060 Hz		
power supply 100230 V/5060 Hz or		
2032 V DC		
power consumption < 10 W < 8 W	l	
number of flow measuring 1, optional: 2		
channels		
damping 0100 s, adjustable measuring cycle (1 channel) 1001000 Hz		
measuring cycle (1 channel) 1001000 Hz response time 1 s (1 channel), option: 70 ms		
	ess steel 316/316L (1.4401, 1.4404, 1.4432)	
degree of protection accord- IP66	(1.4401, 1.4404, 1.4402)	
ing to IEC/EN 60529		
dimensions see dimensional drawing		
weight 6 kg 6.6 kg		
fixation wall mounting, 2" pipe mounting		
	+50 °C	
display 2 x 16 characters, dot matrix, backlight		
menu language English, German, French, Dutch, Spanish		
explosion protection		
a zone	1120	
A	637 II2G II2D	
T marking C € 0637 (a)		
marking C € 0637 ⓑ II2G Ex db eb IIC T6 Gb	e IIC T6 Gb	
T marking C € 0637	e IIC T6 Gb IIIC T 100 °C Db	
$ \begin{array}{c c} \textbf{T} \\ \textbf{T} \\ \textbf{E} \\ \textbf{X} \\ \textbf{I} \\ \textbf{G} \\ \textbf{Ex} \\ \textbf{xb} \\ \textbf{b} \\ \textbf{I} \\ \textbf{I} \\ \textbf{C} \\ \textbf{C} \\ \textbf{OB} \\ \textbf{Ex} \\ \textbf{d} \\ \textbf{G} \\ \textbf{Ex} \\ \textbf{tb} \\ \textbf{T}_{\textbf{a}} - 20 + 60 \\ \textbf{°C} \\ \textbf{C} \\ \textbf{Ex} \\ \textbf{tb} \\ \textbf{T}_{\textbf{a}} - 20 \\ \textbf{C} \\ \textbf{C} \\ \textbf{Ex} \\ \textbf{C} \\ \textbf{C} \\ \textbf{Ex} \\ \textbf{C} \\ \textbf{C}$	IIIC T 100 °C Db)+60 °C	
marking $C \in 0637 \otimes III = 100$ $C \in 0637 \otimes III$ $C \in 0637 \otimes III = 100$ $C \in 0637 \otimes III = 1$	IIIC T 100 °C Db)+60 °C J05ATEX1078	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	IIIC T 100 °C Db 0+60 °C J05ATEX1078 (IBE 12.0020	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	IIIC T 100 °C Db)+60 °C J05ATEX1078	

 $^{^{1}}$ for transit time difference principle, reference conditions and v > 0.15 m/s

² reference uncertainty < 0.2 %

FLUXUS	ADM 8027 (type SIL: F800SR-A1)	F801SR-A1
measuring functions		
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	
communication interfaces		
diagnostic interfaces	- RS232 ³ - USB (with adapter) ³	
serial data kit (optional)		
software	- FluxDiagReader: download of measured values and parameters, graphical presentation	
	- FluxDiag (optional): download of measurement dat	a, graphical presentation, report generation
	- FluxSubstanceLoader: upload of fluid data sets	
cable	RS232 ³	
adapter	RS232 - USB ³	
data logger		
loggable values	all physical quantities, totalized values and diagnosti	ic values
capacity	> 100 000 measured values	
outputs (optional)		
	The outputs are galvanically isolated from the transn	nitter.
	current output	
number	2 (1 (SIL 2), 1 (diagnosis))	
range	0/420 mA	
accuracy	0.1 % of reading ±15 μA	
active output	$R_{\text{ext}} < 500 \Omega$	
binary output		
number	12 (diagnosis)	
open collector	24 V/4 mA	
binary output as alarm output		
- functions	limit, change of flow direction or error	
open collector as pulse out-		
put		
- pulse value	0.011000 units	
- pulse width	11000 ms	

³ connection of the interface RS232 outside of explosive atmosphere (housing cover open)



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 e-mail: info@flexim.com