





## Flow transmitter FLUXUS F70xSR

### Technical data

FLUXUS	F704SR-NN F704SR-F2	F705SR-NN F705SR-F2	
design	standard field device SIL2	field device with stainless steel housing SIL2	
			
<b>measurement</b>			
measurement principle	transit time difference correlation principle, automatic NoiseTrek selection for measurements with high gaseous or solid content		
flow velocity	0.03 to 82 ft/s		
repeatability	0.15 % of reading $\pm$ 0.03 ft/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 $\pm$ 0.03 ft/s		
with advanced calibration (optional)	$\pm$ 1.2 % of reading $\pm$ 0.03 ft/s		
with field calibration <sup>2</sup>	$\pm$ 0.5 % of reading $\pm$ 0.03 ft/s		
<b>flow transmitter</b>			
power supply	100 to 230 V/50 to 60 Hz		
power consumption	< 15 W		
number of flow measuring channels	1, optional: 2		
damping	0 to 100 s, adjustable		
measuring cycle (1 channel)	100 to 1000 Hz		
response time	1 s (1 channel), option: 70 ms		
housing material	aluminum, powder coated	stainless steel 316L	
degree of protection	NEMA 4	NEMA 4X	
weight	6.8 lb	10.8 lb	
fixation	wall mounting, optional: 2" pipe mounting		
ambient temperature	-4 to +140 °F		
display	2 x 16 characters, dot matrix, backlight		
menu language	English, German, French, Dutch, Spanish		
<b>explosion protection (optional)</b>			
<b>F M</b>	transmitter marking	F704SR-F2 F70[1 or 2]Z2**9:  NI/Cl. I,II,III/Div. 2/ GP. A,B,C,D,E,F,G/ T4A Ta = 55 °C	F705SR-F2 F703Z2**9:  NI/Cl. I,II,III/Div. 2/ GP. A,B,C,D,E,F,G/ T4A Ta = 55 °C

<sup>1</sup> for transit time difference principle, reference conditions and  $v > 0.49$  ft/s

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

FLUXUS	F704SR-NN F704SR-F2	F705SR-NN F705SR-F2
<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>communication interfaces</b>		
diagnostic interfaces	- RS232 - USB (with adapter)	
<b>serial data kit (optional)</b>		
software	- FluxDiagReader: download of measured values and parameters, graphical presentation - FluxDiag (optional): download of measurement data, graphical presentation, report generation - FluxSubstanceLoader: upload of fluid data sets	
cable	RS232	
adapter	RS232 - USB	
<b>data logger</b>		
loggable values	all physical quantities, totalized values and diagnostic values	
capacity	> 100 000 measured values	
<b>outputs</b>		
The outputs are galvanically isolated from the transmitter.		
<b>current output</b>		
number	2 (1 (SIL 2), 1 (diagnosis)), optional: 3 to 4 (1 (SIL 2), 2 to 3 (diagnosis))	
- range	0/4 to 20 mA	
- accuracy	0.1 % of reading $\pm 15 \mu\text{A}$	
- active output	$R_{\text{ext}} < 500 \Omega$	
<b>binary output (optional)</b>		
number	1 to 3 (diagnosis)	
optorelay	26 V/100 mA	
binary output as alarm output		
- functions	limit, change of flow direction or error	
binary output as pulse output	mainly for totalizing	
- pulse value	0.01 to 1000 units	
- pulse width	1 to 1000 ms	



FLEXIM AMERICAS Corporation  
Edgewood, NY 11717  
USA  
Tel.: (631) 492-2300  
Fax: (631) 492-2117

internet: [www.flexim.com](http://www.flexim.com)  
e-mail: [usinfo@flexim.com](mailto:usinfo@flexim.com)  
1-888-852-7473

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