2.2. Electrical Specifications

Parameter	Symbol	Condition	Min.	Typ.	Max	Units	Comments
Supply Voltage	V_{DD}			5		V	Recommended: 5V +/- 5%
Power-up/down level	V_{POR}		2.3	2.5	2.7	V	
Supply current	I_{DD}	Measuring			5.5	mA	
Ratiometric analog output							
Output range			10%		90%	V_{DD}	
Resistive load to GND			10 [1]	100		kOhm	
Resistive load to VDD			1000			kOhm	
Capacitive load	C_{load}				100	nF	
Output voltage Integral Non Linearity (INL)					5	mV	
Output voltage noise (RMS)				0.5		mV	

2.3. Timing Specifications

Parameter	Symbol	Min.	Typ.	Max.	Units	Comments
Power-up time	t_{PU}			30	ms	Time to first reliable measurement

2.4. Mechanical Specifications

Parameter	Symbol	Min.	Typ.	Max.	Units	Condition/Comment
Operating pressure range		0.7		1.3	bar	absolute
Allowable overpressure	P_{max}	-0.2		0.2	bar	gauge
Rated burst pressure	P_{burst}			>1	bar	gauge
Weight	W			10	g	

2.5. Materials

Parameter	
Wetted materials	PPE+PS blend, Si, glass (Si_3N_4, SiO_x), gold, FR4, copper alloy, lead-free solder, epoxy, polyurethane, stainless steel (annealed)
REACH, RoHS	REACH and RoHS compliant

[1] For a resistive load to GND less than 100kOhm, a 1nF capacitor to GND on the AOUT is recommended

2.6. Absolute Minimum and Maximum Ratings

Parameter	Rating	Units
Supply Voltage V_{DD}	-0.3 to 5.5	V
Max Voltage on pins (Inputs)	-0.3 to V_{DD}+0.3	V
Input current on any pin	±70	mA
Operating temperature range[1]	0 to +60	°C
Storage temperature range	-20 to +70	°C
Max. humidity for long term exposure	40°C dew point	
ESD HBM (human body model)	2	kV

3. Pin Assignment

The pin assignments of the SFM3020 series can be found in Table 1.The cap of the SFM3020 is compatible with DuraClik™ Wire-to-Board Receptacle Housing, Single Row, 4 Circuits. (Molex product number: 502351-0400).

Pin no.	Name	Description
1	NC	Do not Connect
2	VDD	V_{dd} Supply
3	GND	Connect to ground
4	Aout	Linear analog voltage output

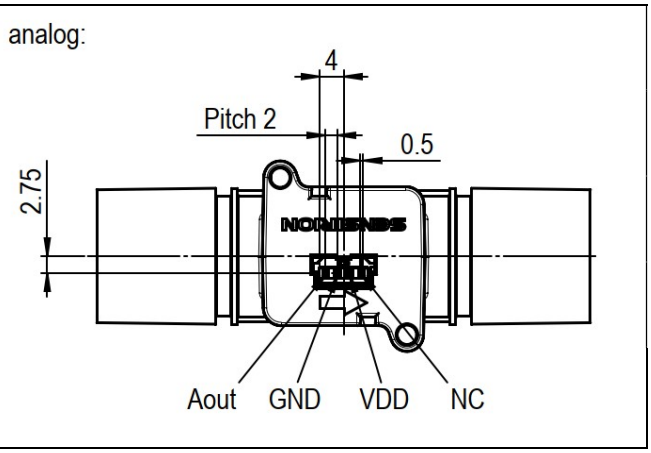

Table 1: *SFM3020 series pin assignment.*

[1] For Air and N_2. Long term exposure to (high concentrations of) O_2 at high temperatures can reduce the product lifetime