



Mass Flowmeter Calibration Certificate

Model: 4040
Serial Number: 40402249011
Verification date: 06-Dec-2022

Rev: H

Summary Status	
<input type="checkbox"/> As-Found	<input checked="" type="checkbox"/> In Tolerance
<input checked="" type="checkbox"/> As-Left	<input type="checkbox"/> Out of Tolerance

Environmental Conditions	
Pressure:	100.6 kPa
Temperature:	19.5°C

Air Flow

Tolerance: $\pm(1.75\%$ of reading or 0.050 SLPM*)

Reference Measured (SLPM)	Allowable Range	
	Min	Max
0.545	0.495	0.595
2.001	1.951	2.051
5.831	5.729	5.933
14.48	14.22	14.73
28.91	28.40	29.41
45.32	44.52	46.11
61.48	60.40	62.56
79.97	78.57	81.36
99.38	97.64	101.1
109.8	107.8	111.7
139.8	137.4	142.3
180.1	176.9	183.2
220.4	216.5	224.2
259.7	255.2	264.3
298.7	293.5	304.0

PASS

Oxygen Flow

Tolerance: $\pm(1.75\%$ of reading or 0.050 SLPM*)

Reference Measured (SLPM)	Allowable Range	
	Min	Max
0.544	0.530	0.594
1.997	1.986	2.047
5.585	5.614	5.683
14.48	14.42	14.73
28.99	29.20	29.50
45.32	45.24	46.11
61.36	61.51	62.43
79.82	79.81	81.21
100.3	100.1	102.0
110.4	110.3	112.3
139.9	139.8	142.3
180.0	179.9	183.1
220.6	220.4	224.4
260.8	260.7	265.3
301.4	301.2	306.7

PASS

Pressure

Tolerance: ± 0.110 psia

Reference Measured (psia)	Allowable Range	
	Min	Max
14.59	14.59	14.70
22.49	22.48	22.60

PASS

Temperature

Tolerance: ± 1.000 °C

Reference Measured (°C)	Allowable Range	
	Min	Max
19.48	19.40	20.48

PASS

Internal Calibration Reference(s)		
Measurement Type	Reference (FC16)	Due for Calibration
Flow	UKFC16	28-Feb-2023
Pressure	UKFC16P	28-Feb-2023
Temperature	UKFC16T	28-Feb-2023

TSI Std Conditions: 70 °F (21.11 °C) and 14.7 psia

Calibrated by:

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*Tolerance specified: whichever is greater

TSI does hereby certify that this flowmeter has been calibrated using TSI procedure 10000021269. The calibration of the reference standards maintain national laboratory traceability to members of the European co-operation for Accreditation (EA).