

## HLX06D-I Inline Type Air Flow Transmitter



### | Features |

- Thermal mass flow sensor
- Accuracy :  $\pm 1.5\%$  F.S., Operating pressure : Max. 16 bar
- Multiple output option : 4 ... 20 mA / 0 ... 10 V / RS-485 / Frequency / Pulse ( Option )
- Full pipe size range ( DN15 / DN25 / DN40 / DN50 ), easy installation
- Built-in temperature compensation, accurate measurement
- Calibrated by sonic nozzles calibration system
- Stainless steel housing, aluminum alloy pipe
- Connecting to software via RS-485 enables data logging, graph recording, and cumulative flow display (optional)

### | Applications |

Compressed air system / Pneumatic system / Refrigerated air dryer / Adsorption air dryer /  
Air consumption monitoring / Pipeline leak monitoring

## | Specification |

### Input

Sensor type	Thermal mass flow sensor
Measuring range*	DN15 : 0.1 ... 76 m <sup>3</sup> /h
	DN25 : 0.4 ... 212 m <sup>3</sup> /h
	DN40 : 0.9 ... 543 m <sup>3</sup> /h
	DN50 : 1.5 ... 848 m <sup>3</sup> /h

\*The measurement range is defined at the standard condition(1013 mbar, 20°C).

### Output

Output signal	4 ... 20 mA / 0 ... 10 V / RS-485
	Frequency ( 0 ... 100 Hz )
	Pulse ( 1 ... 100 l/pulse, option )
Signal connection	3-wire
Warm-up time	About 60 sec
Response time	t <sub>90</sub> ≤ 3 sec
Load resistance	Voltage output : ≥ 100 KΩ
	Current output : ≤ 250 Ω

### Accuracy

Accuracy	± 1.5% F.S.
Temp. influence	0.05% / °C
Repeatability	0.5%

### Environmental

Medium	Air / Non-corrosive gas
Operating Temp. & Humid.	0 ... 50°C / 20 ... 90%RH(Non-condensing)
Storage Temp.	-20 ... 85°C
Operating pressure	16 bar

### Electrical

Power supply	DC 24 V ± 10%
Current consumption	24 V : 110 mA
Electrical connection	M12

### Installation

Pipe size	DN15 ( 1/2" )
	DN25 ( 1" )
	DN40 ( 1-1/2" )
	DN50 ( 2" )
Pipe connection	G thread

### Certification

Certification	CE
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### Protection

IP rating	IP65 (IP67 option)
Electrical protection	■ Reverse polarity
	■ Over-voltage
	■ Short-circuit

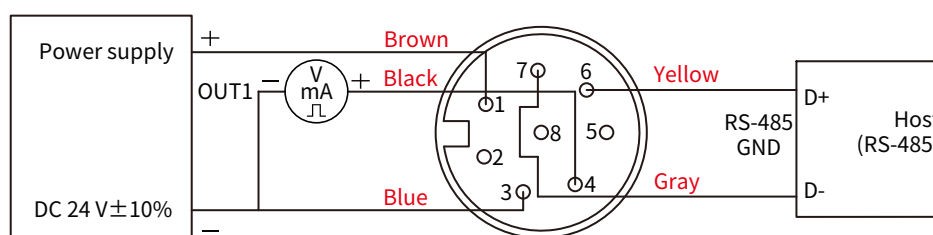
### Material

Cover	PC
Housing	SUS304
Pipe	Aluminum alloy
Probe head	PC with glass fiber
Weight	DN15 ( 1/2" ) : 697 g
	DN25 ( 1" ) : 811 g
	DN40 ( 1-1/2" ) : 1232 g
	DN50 ( 2" ) : 1021 g

### Display & Operation (See manual for details)

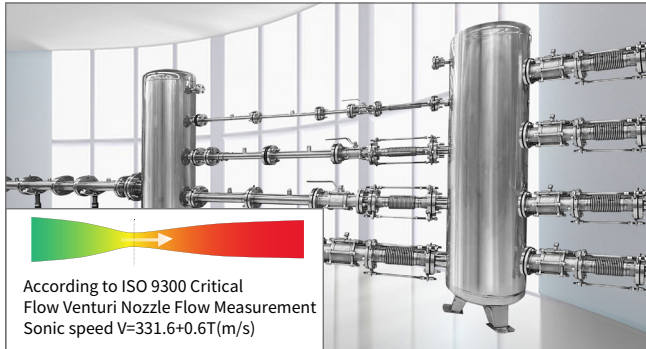
Display value	4 digits, adjustable brightness
Measurement display	Out1 (Default : Nm <sup>3</sup> /h)
Unit selection	Nm <sup>3</sup> /h · L/min

## | Diagram |



\*Please make sure the product and the device which connect with RS-485 are on common ground, avoid damaged product.

### | Calibration System |

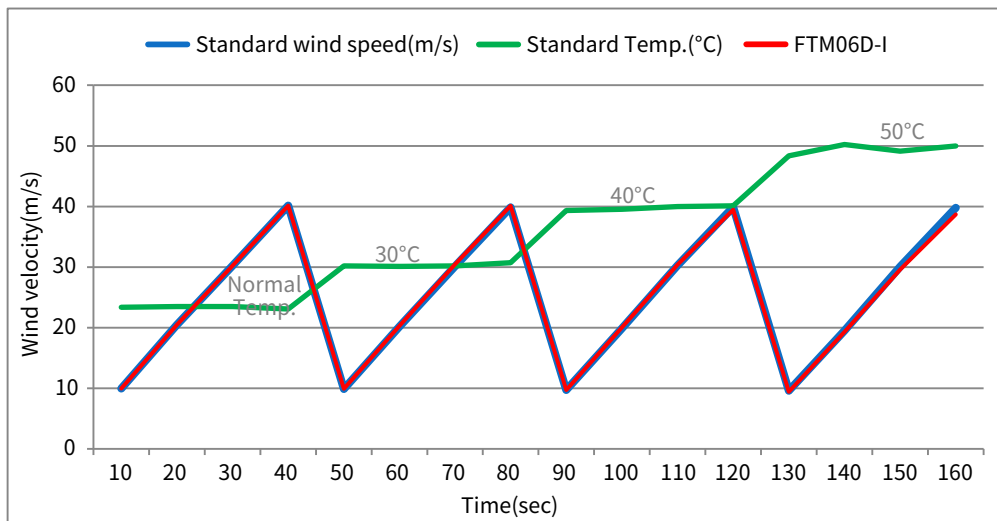


Air volume standard calibration system

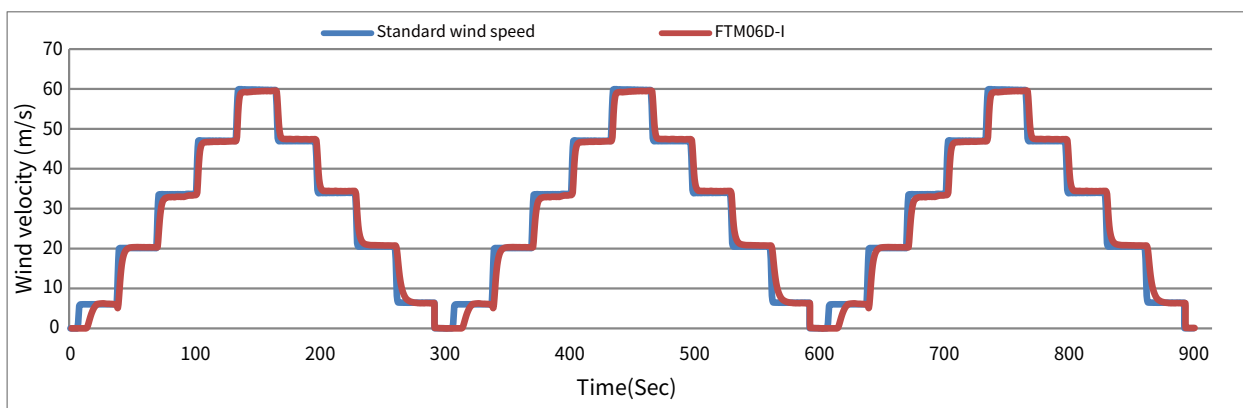
Air volume : 0.5 m<sup>3</sup>/h ... 1000 m<sup>3</sup>/h

Referring to ISO 9300 "Flow Measurement of Critical Flow Venturi Nozzles", this device is a standard flow device combination consisting of multiple venturi nozzles according to the maximum and minimum flow ranges that need to be calibrated.

### | Temperature Compensation Verification |

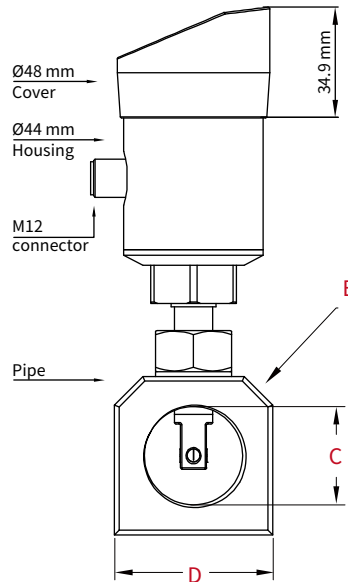
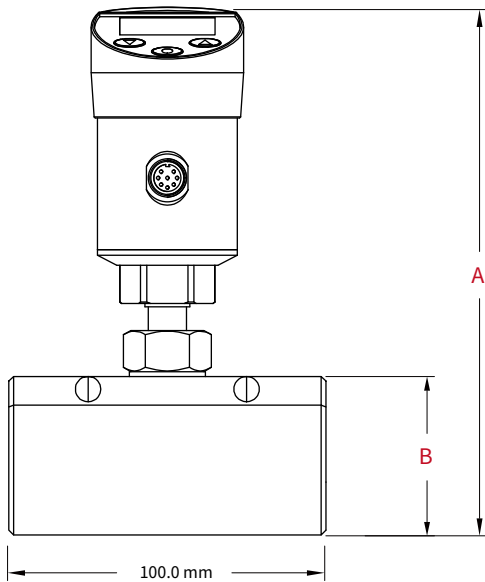
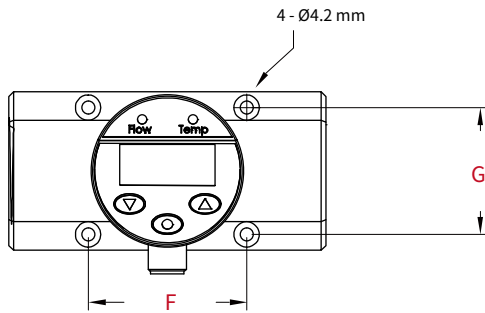


### | 3-Cycle Linear Curve |



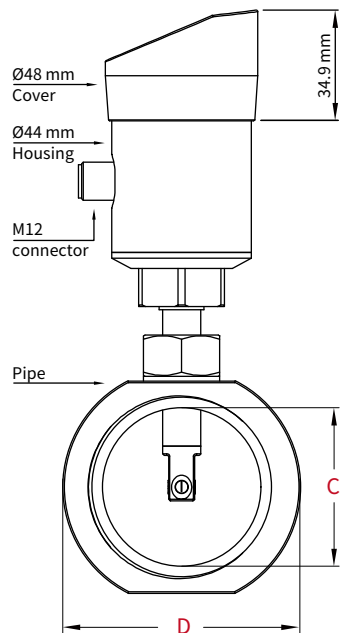
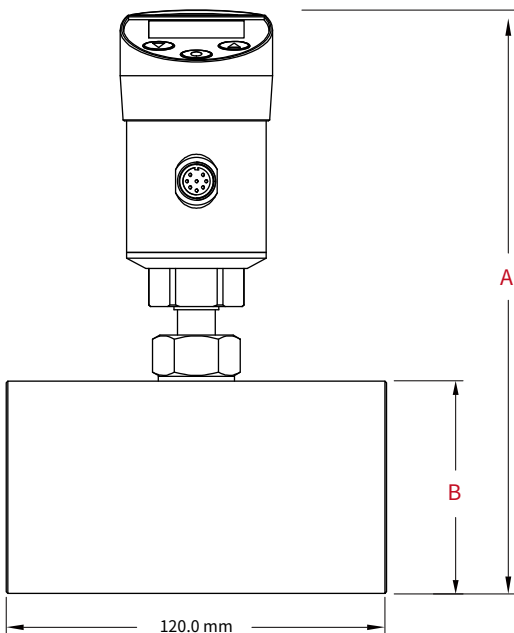
### Dimension | Unit : mm

#### ■ DN15 (1/2") 、DN25 (1")



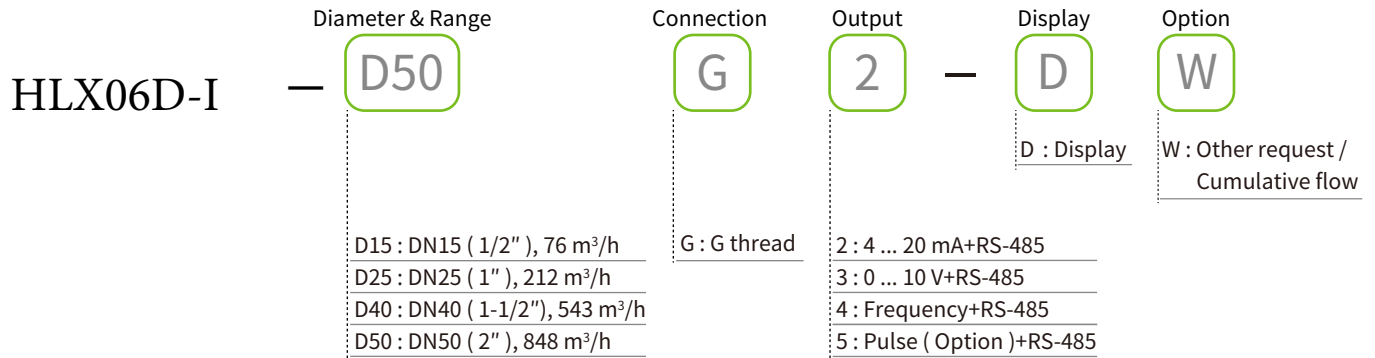
	DN15 (1/2")	DN25 (1")
A	161.4 mm	166.4 mm
B	40.0 mm	50.0 mm
C	DN15 (1/2")	DN25 (1")
D	40.0 mm	50.0 mm
E	Suitable for M4 screws length above 45 mm	Suitable for M4 screws length above 55 mm
F	35.0 mm	50.0 mm
G	30.0 mm	40.0 mm

#### ■ DN40 (1-1/2") 、DN50 (2")



	DN40 (1-1/2")	DN50 (2")
A	183.9 mm	183.9 mm
B	67.0 mm	67.0 mm
C	DN40 (1-1/2")	DN50 (2")
D	75.0 mm	75.0 mm

## | Ordering Guide |



## | Air Velocity / Flow Conversion Table |

ID of pipe	Air velocity inside pipe			
	40m/s	60m/s	90m/s	120m/s
DN15 (1/2")	25 m <sup>3</sup> /h	38 m <sup>3</sup> /h	57 m <sup>3</sup> /h	76 m <sup>3</sup> /h
DN25 (1")	71 m <sup>3</sup> /h	106 m <sup>3</sup> /h	159 m <sup>3</sup> /h	212 m <sup>3</sup> /h
DN40 (1-1/2")	181 m <sup>3</sup> /h	271 m <sup>3</sup> /h	407 m <sup>3</sup> /h	543 m <sup>3</sup> /h
DN50 (2")	283 m <sup>3</sup> /h	424 m <sup>3</sup> /h	636 m <sup>3</sup> /h	848 m <sup>3</sup> /h

## | Additional Option Test Report | For more detailed information please contact us.

### ■ ILAC / TAF

Calibration Laboratory - ( ILAC / TAF ) Test report.  
 (TAF accreditation : 3032, complying with ISO / IEC 17025 ) TAF has mutual recognition arrangement with ILAC MRA

Project	Measurand level or range
Air velocity transmitter	0.2 m/s ... 60 m/s

### ■ ISO 9001

Project	Measurand level or range
Air velocity / Air volume	Air velocity : $\leq 120$ m/s
	Air volume : 0.5 m <sup>3</sup> /h ... 1000 m <sup>3</sup> /h