

# Thermo Air Velocity Transmitter TSF14

**Taishio**

## FEATURES

- Temperature compensation, linear adjustment function
- Switching analogue output by dip switch
- Off set function by button

## APPLICATION

- Monitoring air and flow for industrial process
- HVAC, building, factory



## Input

Input Type of Air Velocity	thermal mass flow sensor
air velocity max measuring range	20 m/s
air velocity min. measuring range	0.2 m/s

## Output

output	4 ... 20 mA / 0 ... 10 VDC
signal connection	3-wire
load resistance	current output : $\leq 500\Omega$ ; voltage output : $\geq 10K\Omega$
response time	reach 90% of ultimate value within 3 sec.
angular dependence	<3% measuring value (with < 10° angle)

## Accuracy (+ 25°C)

accuracy	$\pm 3\%$ F.S. (nonlinear error, hysteresis error, repeatability error)
thermal sensitivity temp. error	0.2 % / °C

## Environment

measured media & temperature	air : 0 ... 50°C
working temperature	0 ... 50°C
environment humidity	95 %RH ( non-cond. )
storage temperature	-20 ... + 60°C

## Electrical

power supply	8 ... 35VDC & 12 ... 30VAC
current consumption	DC 8V : 300mA · 24V : 100mA AC 12V : 350mA · 24V : 180mA
overvoltage protection	DC : < 45V ; AC : < 40V
electrical connection	terminal

## Installation ; Protection

installation; way to fix	duct; flange
protection degree	IP 54
electrical protection	⊙ polarity protection ⊙ over-voltage ⊙ short circuit

## Certification

CE Certification	<b>Emission</b> EN 61326-1:2006 Class B EN 55011:2009 / A1:2010 Group1 ClassB
	<b>Immunity</b> EN 61326-1 : 2006 EN 61000-4-2:2009 EN61000-4-3:2006/A2:2010 EN 61000-4-8:2010

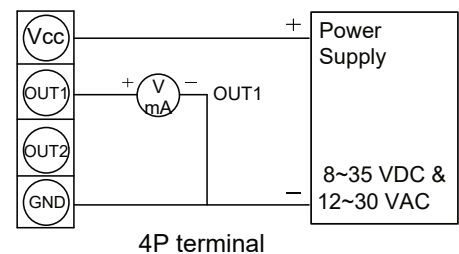
## Material

housing / probe	PC fire-proof ( UL94V-2 ) / PC fire-proof
measuring head / cable	PC with glass fiber
weight	147g

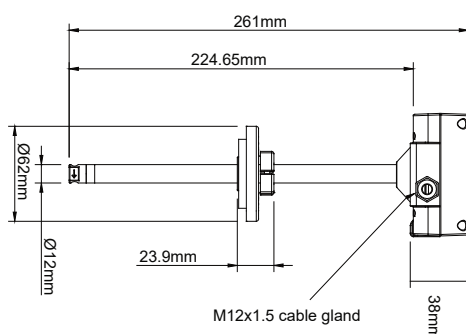
## ORDERING GUIDE

TYPE	TSF	14	—	20	1	1	—	N
installation	duct	14	—					
range	20 m/s			20				
output	4 ... 20 mA 0 ... 10 V				1 6			
power supply	8 ... 35 VDC & 12 ... 30 VAC					1	—	
option	cable gland							N

## CONNECTION DIAGRAM



## DIMENSION



## DIP SWITCH

Position	1	2
Function	Enable / Disable	Output type
Status	ON	0-10V
	OFF	4-20mA