



森特奈

SENTINEL ELECTRONICS



Flow Sensors

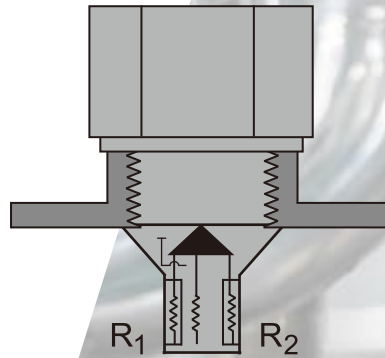
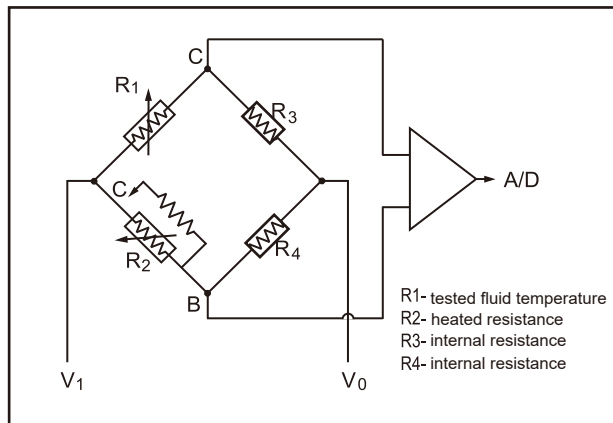
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SENSING YOUR MIND!

Thermal Flow Sensor

Flow speed or flow rate monitoring of liquid and gaseous media plays an important role in the field of factory and process automation. There are multiple application possibilities for flow sensors but they mainly fulfill monitoring tasks in cooling circuits, exhaust ducts and air-conditioning systems.

In order to detect, display and signal critical changes of flow rates or flow speed to the control system, electronic flow sensors are increasingly applied. The detection of flow speed does not require exact and costly measuring but rather a reliable monitoring of limit values. Flow sensors thus have to provide a high degree of reproducibility. They detect not only limit value of flow speeds but also the flow drift, meaning the increase or decrease of flow speed. The output signal can either be analog or binary, depending on whether continuous measurement is required or the monitoring of a limit value.

Sentinel offers a wide range of sensors with integrated or downstream electronics – for liquids or gaseous media.



Features

- Calorimetric principle
- Flow Monitoring for liquid media
- Temperature Monitoring
- G1/2" and M18 thread, support customer customization
- M12x1 connector or cable connection

Application

- Automobile manufacturing
- Metal processing
- Metallurgy industry
- monitoring tasks in cooling circuits
- monitoring hydraulic system
- air-conditioning systems
- exhaust ducts



PLSN Flow Sensor

Compact and programmable
Thermal flow sensor



Bluetooth communication

Switch point LEDs

large size digital tube and
the display can be inverted
by 180°

Three programmable buttons
can quickly select and switch
the menus

Compact exterior size 35mm

The 304 or 316L
stainless steel housing

330°

the housing can be
freely rotated by 330°

flexible adaptation to
almost any process

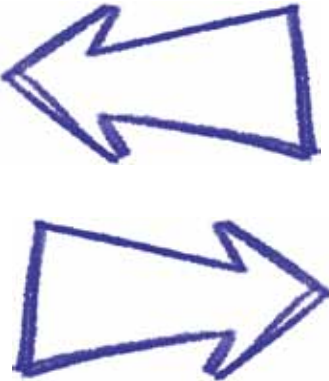
G1/2, M18*1.5 thread

The probe length can be customized

 **Bluetooth**

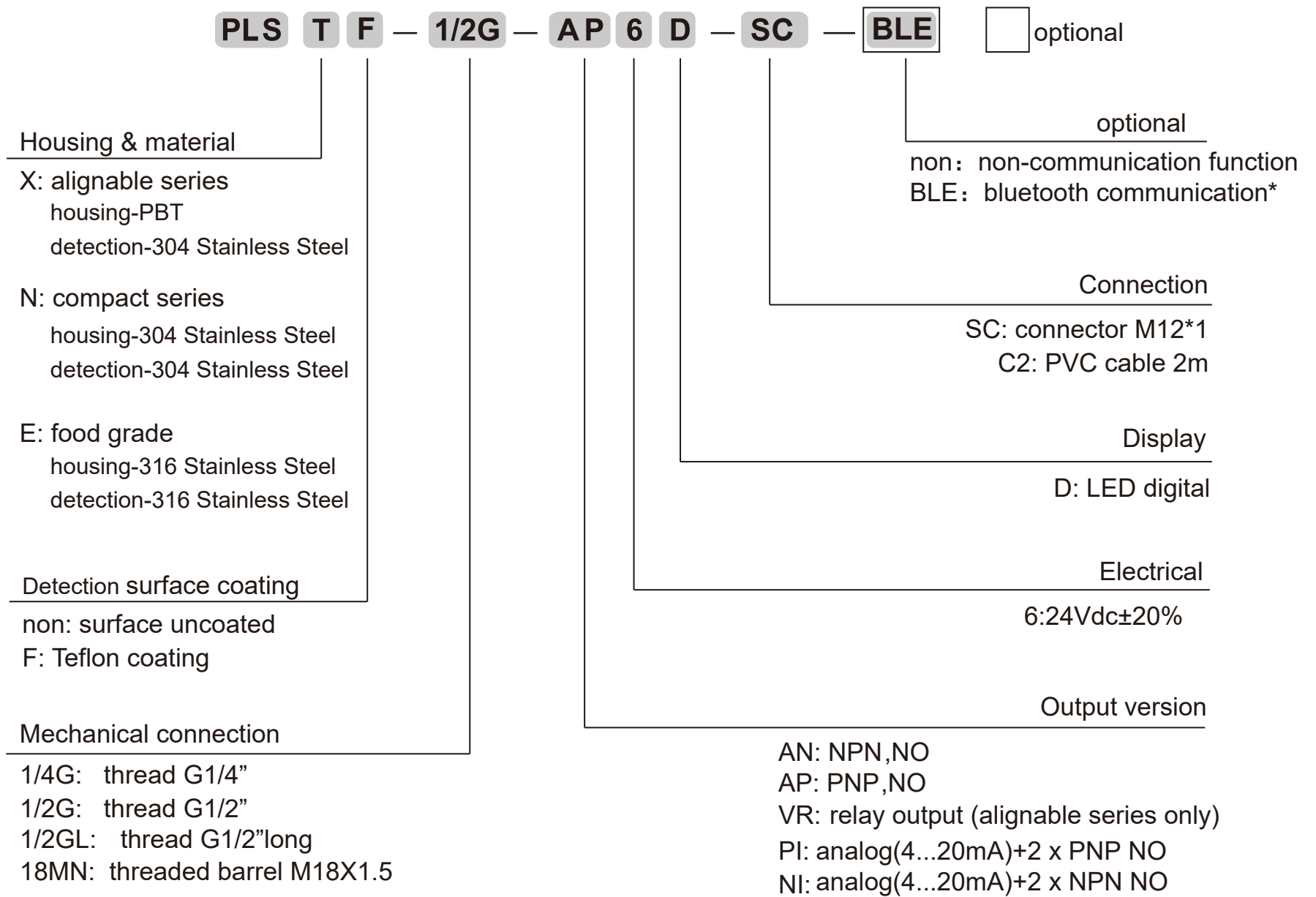


Set parameters by phone via Bluetooth



Independently developed APP

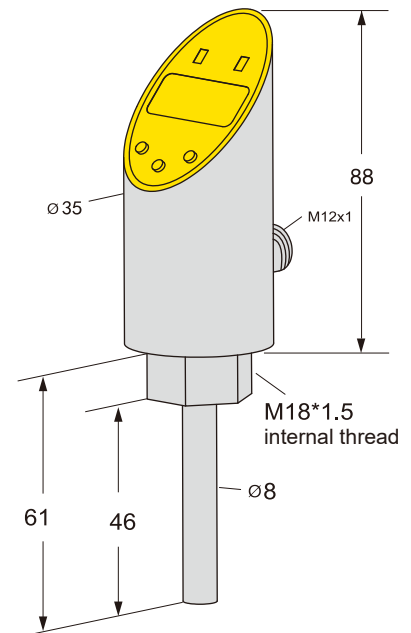
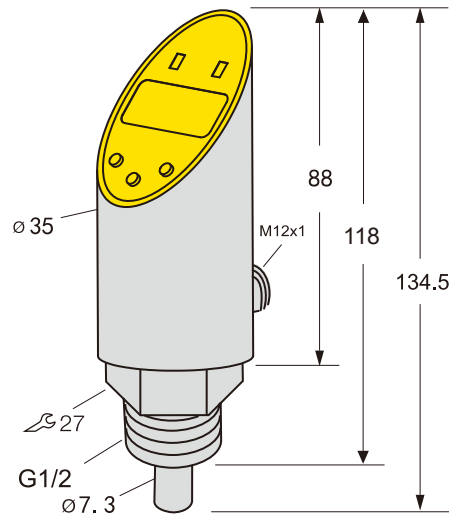
Selection Guide



note: 1、 Stainless steel housing sensor have temperature switch function

* 2、 The bluetooth mode is only applicable to compact products

Dimensions



Product series		
Monitoring Flow	✓	✓
Operating voltage	24VDC	24VDC
Sensing range Water	1...150cm/s	1...150cm/s
Sensing range Oil	3...300cm/s	3...300cm/s
Process pressure	≤100bar	≤100bar
Response time	typ.2s	typ.2s
Short-circuit protection	✓	✓
Reverse polarity protection	✓	✓
Process connection	G1/2" external thread	M18x1.5 internal thread
Probe material	304 or 316L Stainless steel	304 or 316L Stainless steel
Housing material	304 Stainless steel	304 Stainless steel
Setting	programming button	programming button
Output type	4...20mA+2xPNP or 4...20mA+2xNPN	4...20mA+2xPNP or 4...20mA+2xNPN
Protection class	IP65	IP65
Electrical connection	M12x1 connector	M12x1 connector
Medium temperature	-20°C...80°C	-20°C ...80°C
Display	LED digital tube	LED digital tube

PLSX Flow Sensors

Immersion sensor with integrated processor

3 colors of LEDs indicate the status of the flow rate

Adjustment via potentiometer

G1/2, G1/4, M18*1.5 thread
Flexible adaptation to almost any process

PBT housing
Protection class IP67

5 pin M12x1 connector





G1/4 external thread

G1/2 external thread

M18 internal thread



G1/4



G1/2



G1/2



N1/2



G3/4



D < 200 mm



D < 25 mm



D < 15 mm



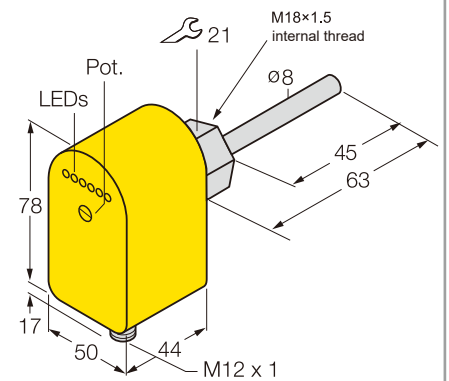
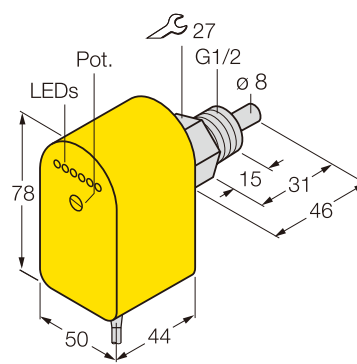
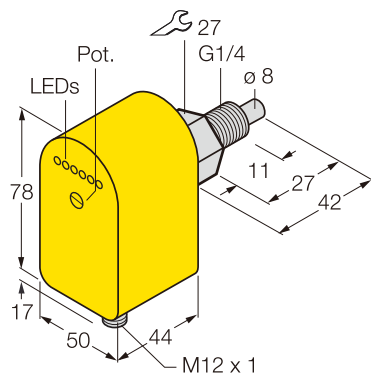
D < 12 mm

cm/s

Accessory



Dimensions



Product series			
Monitoring Flow	✓	✓	✓
Operating voltage	24VDC	24VDC	24VDC
Sensing range Water	1...150cm/s	1...150cm/s	1...150cm/s
Sensing range Oil	3...300cm/s	3...300cm/s	3...300cm/s
Process pressure	≤100bar	≤100bar	≤100bar
Response time	typ.2s	typ.2s	typ.2s
Short-circuit protection	✓	✓	✓
Reverse polarity protection	✓	✓	✓
Process connection	G1/4" external thread	G1/2" external thread	M18x1.5 internal thread
Probe material	304 or 316L Stainless steel	304 or 316L Stainless steel	304 or 316L Stainless steel
Housing material	PBT	PBT	PBT
Setting	adjustable resistance	adjustable resistance	adjustable resistance
Output type	PNP NO,NPN NO,Relay	PNP NO,NPN NO,Relay	PNP NO,NPN NO,Relay
Protection class	IP65	IP65	IP65
Electical connection	M12x1 connector or 2m cable	M12x1 connector or 2m cable	M12x1 connector or 2m cable
Medium temperature	-20 °C ...80 °C	-20 °C ...80 °C	-20 °C ...80 °C
Display	6 LEDs lamps	6 LEDs lamps	6 LEDs lamps

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