

# SHEATH TYPE RESISTANCE SENSOR



NEW-FLOW sheath type resistance sensor is high precision and reliability measuring temperature sensor.

## Technical Data

**Head Housing:** Weather proof; Explosion proof available  
**PT100Ω Element**

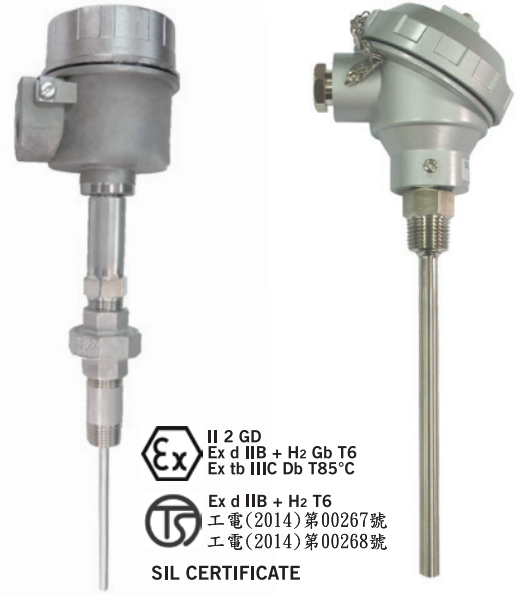
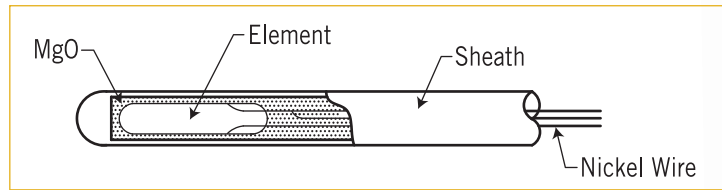
**Sensor Dimensions:**  $\phi 1.6\sim\phi 12.75\text{mm}$  on request

**Sheath Material:** SS316

**Working Temperature Limited:**  $-200\sim 650^{\circ}\text{C}$ , according to applicable standards table.

**Measuring Wiring Method:** 2 wire, 3 wire, 4 wire available

## Component List

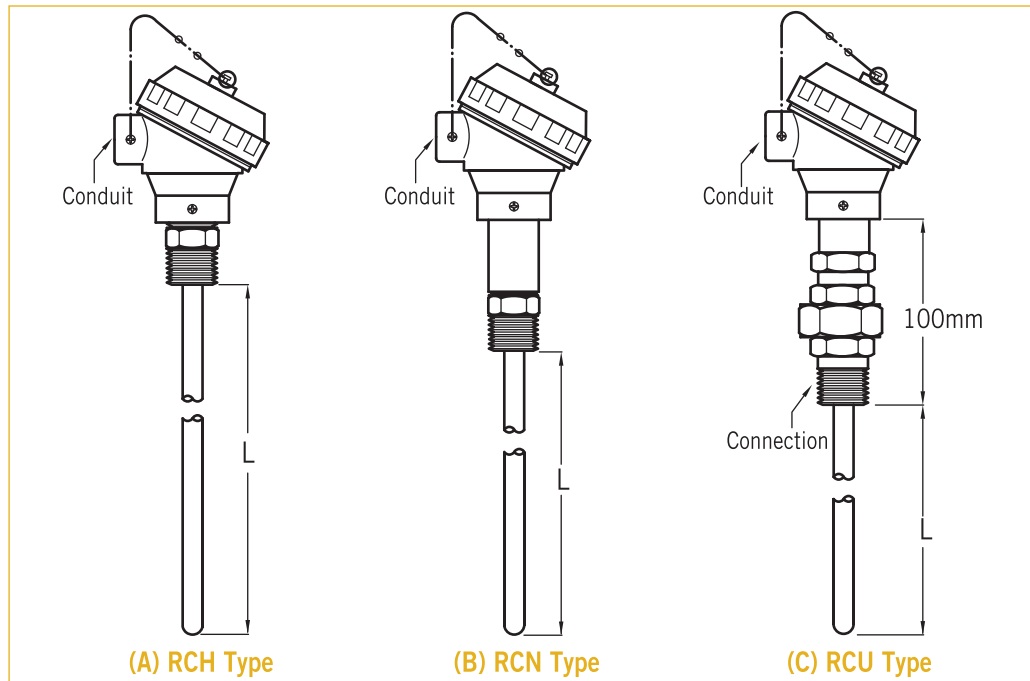


**Ex** II 2 GD  
 Ex d IIB + H<sub>2</sub> Gb T6  
 Ex tb IIIC Db T85°C  
**TS** Ex d IIB + H<sub>2</sub> T6  
 工電(2014)第00267號  
 工電(2014)第00268號  
**SIL CERTIFICATE**

Explosion Proof

Weather Proof

## Resistance Sensor Model

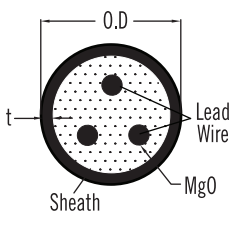


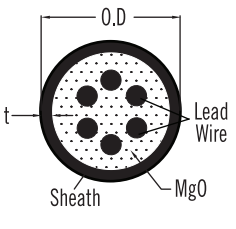
## Sensor Type

(A) Spring Loading Hexagonal Head Thread Type	(C) Welded Hexagonal Head Thread Type
(B) Spring Loading Nipple Thread Type	(D) Welded Nipple Thread Type

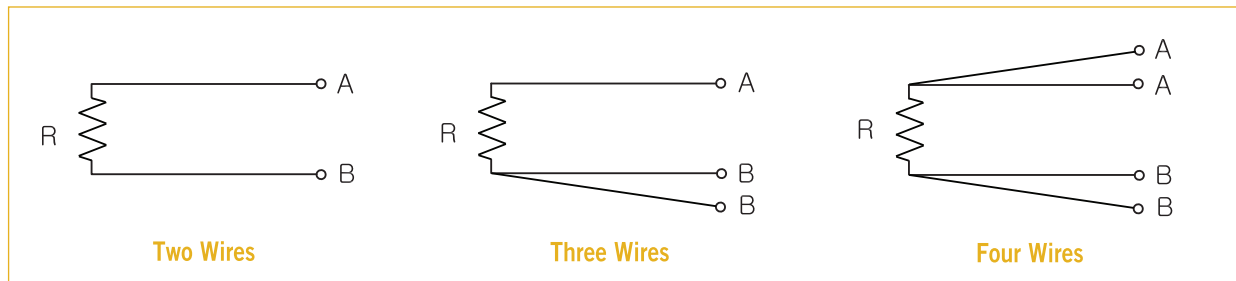
unit=mm

### Thermo Resistance Sensor Size

SINGLE ELEMENT						
	Sheath (unit:mm)			Lead Wire (unit:mm)		Sheath max. length (unit:M)
	O.D	t	Material	Diameter	Material	A
	Ø1.6	0.25	SUS316	Ø0.25	Nickel	100
Ø3.2	0.47	Ø0.51		83		
Ø4.8	0.72	Ø0.76		35		
Ø6.0	0.93	Ø1.00		20		
Ø8.0	1.16	Ø1.30		11.5		
Ø9.0	1.25	Ø1.46		21		
Ø12.75	1.80	Ø1.50		10.5		

DOUBLE ELEMENT						
	Sheath (unit:mm)			Lead Wire (unit:mm)		Sheath max. length (unit:M)
	O.D	t	Material	Diameter	Material	A
	Ø3.2	0.38	SUS316	Ø0.30	Nickel	83
Ø4.8	0.72	Ø0.50		35		
Ø6.0	0.93	Ø0.72		20		
Ø8.0	1.16	Ø0.90		11.5		
Ø9.0	1.25	Ø1.00		21		
Ø12.75	1.80	Ø1.50		10.5		

### Wiring Method



### Standard Table For PT100 (R100/RO=1.385)

IEC Pub. 751-1983 JIS C1604-1997			ASTM E1137-1995	
Class	Tolerance (°C)	Measuring Current Under 2mA	Class	Tolerance (°C)
A	±(0.15+0.002 t )		A	±(0.13+0.0017 t )
B	±(0.3+0.005 t )		B	±(0.25+0.0042 t )

\*|t| : display temperature (°C) on request range.

### Ordering Information

Model	RCH	RCN	RCU																								
<b>Code</b>	<b>Head Housing Protection</b>																										
	Weather Proof (1) HN (2) HP (3) HD (4) HI (5) HB (6) LS (7) option																										
	Explosion Proof (8) XDS (9) XDA (10) S1 (11) S2 (12) ES (13) EA (14) option																										
<b>Code</b>	<b>Sensor Type</b>																										
A	Spring Loading Hexagonal Head Thread Type												C	Welded Hexagonal Head Thread Type													
B	Spring Loading Nipple Thread Type												D	Welded Nipple Thread Type													
<b>Code</b>	<b>Sensor Connection Size</b>																										
	Thread type (1) ½" NPT (2) ¾" NPT (3) Option																										
<b>Code</b>	<b>Conduit Connection</b>																										
	(A) ½"NPT Female (B) ¾"NPT Female (O) option																										
<b>Code</b>	<b>Sensor Dimensions "O.D" mm</b>																										
	(1) 1.6 (2) 3.2 (3) 4.8 (4) 6.0 (5) 8.0 (6) 9.0 (7) 12.75 (0) option																										
<b>Code</b>	<b>Sheath Material</b>																										
A	SS316						O	Option																			
<b>Code</b>	<b>Element Type</b>																										
1	PT100																										
<b>Code</b>	<b>Element No</b>																										
S	Single						D	Double																			
<b>Code</b>	<b>Sensor Class</b>																										
	(1) Class A (2) Class B																										
<b>Code</b>	<b>Sensor Insertion length "L"</b>																										
	Plesae directly fill in requesting length (mm).																										
<b>Code</b>	<b>Transmitter</b>																										
1	NT-IB																										
2	5335A (SIL)																										
3	5335D (SIL)																										
4	Other																										
5	Without																										

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