

# 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**

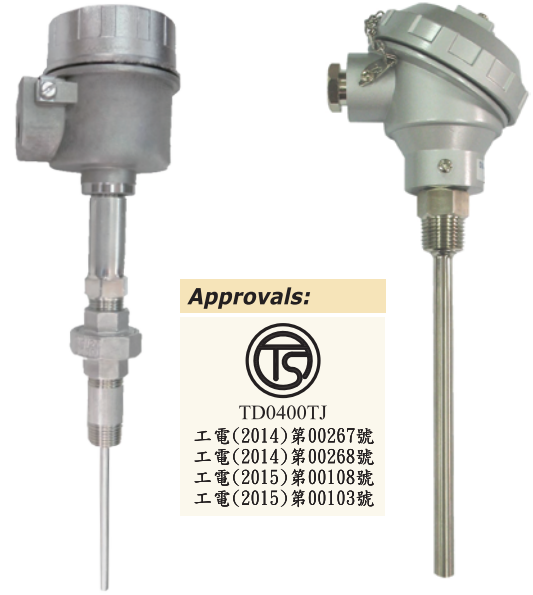
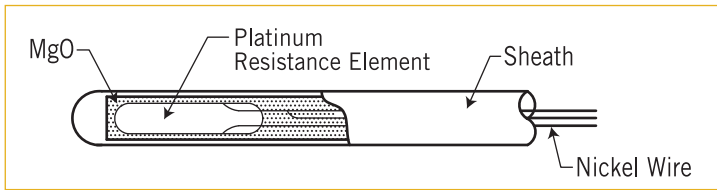
**Sensor Dimensions:**  $\phi 1.6 \sim \phi 12.75\text{mm}$  on request

**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



### Approvals:



TD0400TJ

工電(2014)第00267號

工電(2014)第00268號

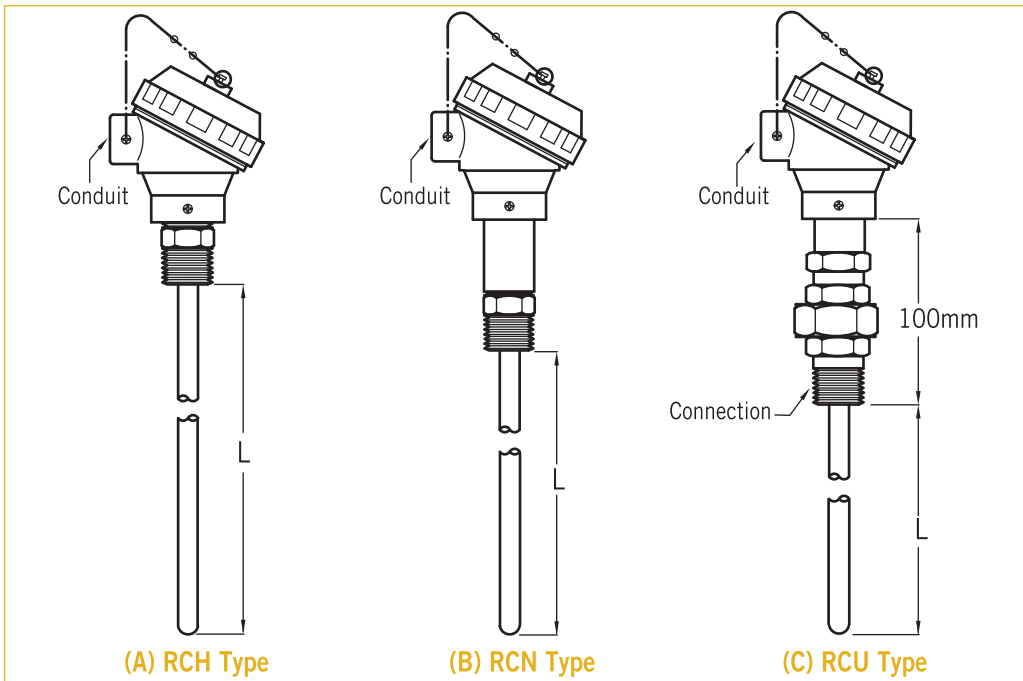
工電(2015)第00108號

工電(2015)第00103號

Explosion Proof

Weather Proof

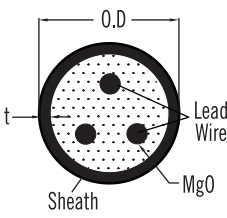
## Resistance Sensor Model

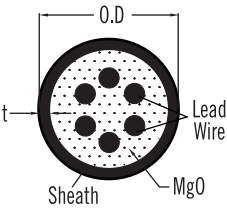


## Sensor Type

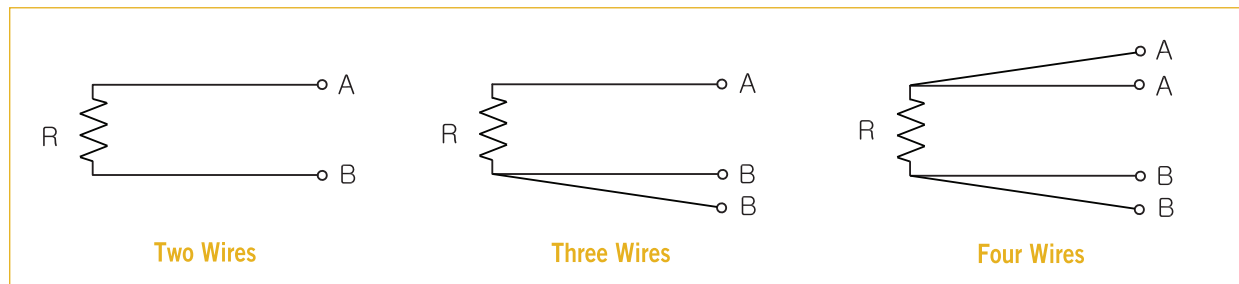
(A) Spring Loading Hexagonal Head Thread Type (RCU Type)	(C) Welded Hexagonal Head Thread Type (RCH Type)
(B) Spring Loading Nipple Thread Type (RCN Type)	(D) Welded Nipple Thread Type (RCN Type)

## 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/R0=1.385)

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

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

