

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

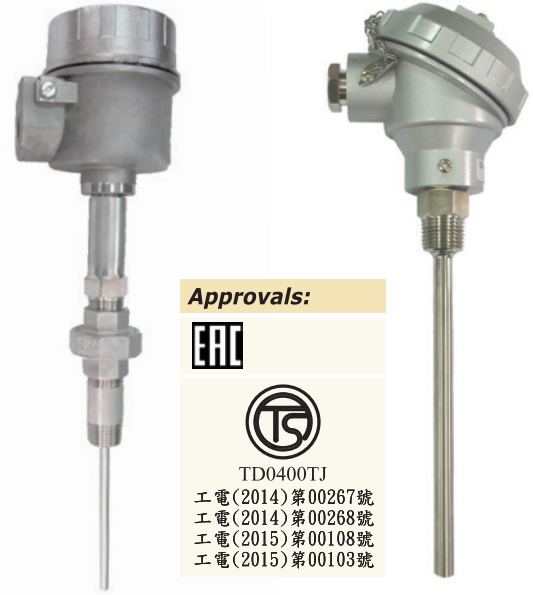
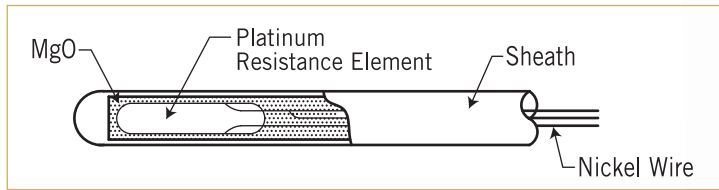
Sensor Dimensions: $\phi 1.6 \sim \phi 12.75\text{mm}$ on request

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

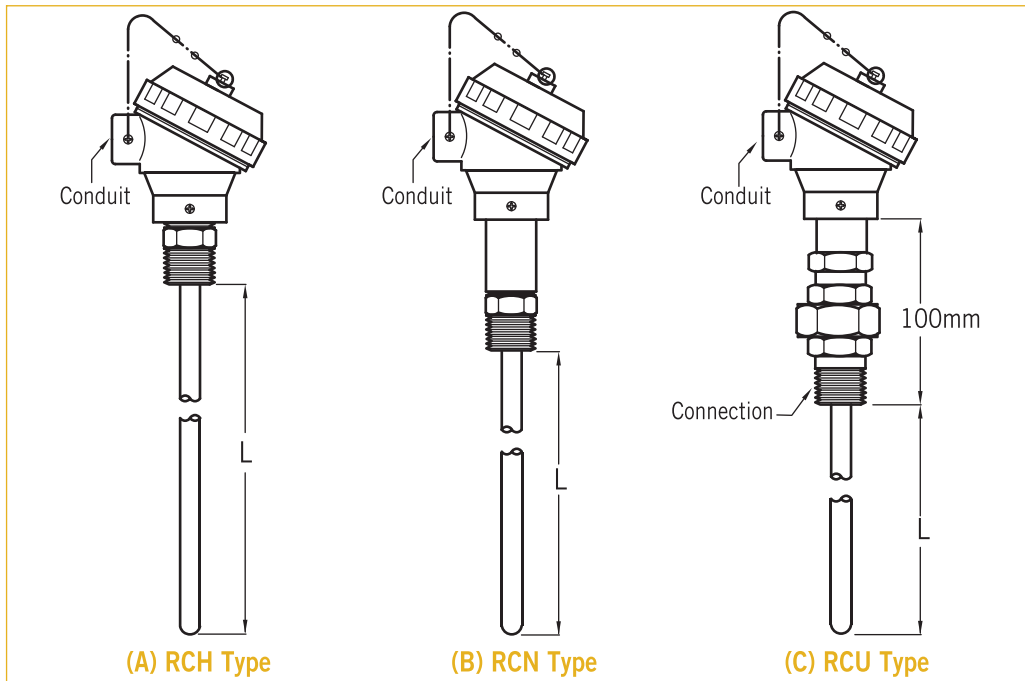
工電(2015)第00108號

工電(2015)第00103號

Explosion Proof

Weather Proof

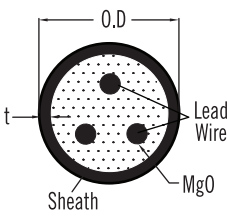
Resistance Sensor Model

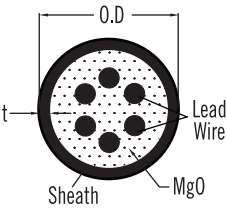


Sensor Type

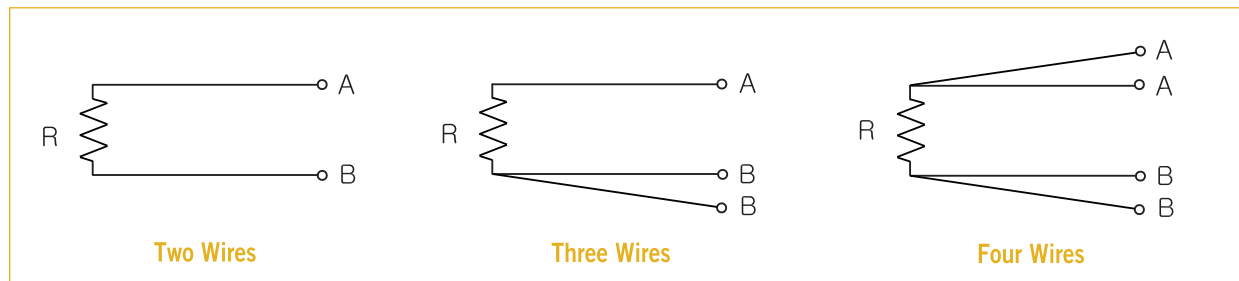
| (A) Spring Loading Hexagonal Head Thread Type (RCU Type) | (C) Welded Hexagonal Head Thread Type (RCH Type) |
|--|--|
| | |
| (B) Spring Loading Nipple Thread Type (RCN Type) | (D) Welded Nipple Thread Type (RCN Type) |
| | |

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 | $\pm(0.13+0.0017 t)$ |
| B | $\pm(0.3+0.005 t)$ | | B | $\pm(0.25+0.0042 t)$ |

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

Ordering Information

| | | | | | | | | | | | | | | |
|--------------|--|-----|-----------------------------------|--|--|--|--|--|--|--|--|--|--|-------------------------------|
| Model | RCH | RCN | RCU | | | | | | | | | | | |
| Code | Head Housing Protection | | | | | | | | | | | | | |
| | 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 | | | | | | | | | | | | | |
| Code | 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 | | | | | | | | | | | |
| Code | Sensor Connection Size | | | | | | | | | | | | | |
| | Thread type (1) 1/2" NPT (2) 3/4" NPT (3) Option | | | | | | | | | | | | | |
| Code | Conduit Connection | | | | | | | | | | | | | |
| | (A) 1/2" NPT Female (B) 3/4" NPT Female (0) option | | | | | | | | | | | | | |
| Code | Sensor Dimensions "O.D" mm | | | | | | | | | | | | | |
| | (1) 1.6 (2) 3.2 (3) 4.8 (4) 6.0 (5) 8.0 (6) 9.0 (7) 12.75 (0) option | | | | | | | | | | | | | |
| Code | Sheath Material | | | | | | | | | | | | | |
| A | SS316/SS316L | 0 | Option | | | | | | | | | | | |
| Code | Element Type | | | | | | | | | | | | | |
| 1 | PT100Ω | | | | | | | | | | | | | |
| Code | Element No | | | | | | | | | | | | | |
| S | Single | D | Double | | | | | | | | | | | |
| Code | Sensor Class | | | | | | | | | | | | | |
| | (1) Class A (2) Class B | | | | | | | | | | | | | |
| Code | Sensor Insertion length "L" | | | | | | | | | | | | | |
| | Please directly fill in requesting length (mm). | | | | | | | | | | | | | |
| Code | Transmitter | | | | | | | | | | | | | |
| 1 | NT-IB | | | | | | | | | | | | | |
| 2 | 5335A (SIL) | | | | | | | | | | | | | |
| 3 | 5335D (SIL) | | | | | | | | | | | | | |
| 4 | Other | | | | | | | | | | | | | |
| 5 | Without | | | | | | | | | | | | | |
| Code | Explosion Proof Type / Head Housing Model | | | | | | | | | | | | | |
| N | For Weather Proof Type | | | | | | | | | | | | | |
| A | Certificate on Housing Only / S1 & S2: EEx d IIC-T6, II 2 GD | | | | | | | | | | | | | |
| B | Taiwan Explosion Proof Certification / ES & EA: Ex d IIB + H2 T6 Gb | | | | | | | | | | | | | |
| S | Certificate on Housing Only / XDS & XDA: II 2 G D Ex d IIC T6 Ex tD A21 T100°C | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | Complete Ordering Code |

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