

### Product overview

The TCR corrosion-resistant thermocouple (thermal resistance) is of new anticorrosive material, wrapped with teflon F46, applicable to temperature measurement in various corrosive media of petroleum and chemical engineering and a special temperature measurement instrument in the chlor-alkali industry.



### Product parameters

- Electrical outlet: M20x1.5 and NPT1 / 2;
- Thermal response time:  $\leq 8S$ ;
- Protection grade: IP65;
- Explosion-proof grade dll BT4 and dll CT5.

### Technical indicators

|   |   |
|---|---|
| Stainless steel (0Cr18Ni12Mo2Ti)<br>Protective tube | It's used for media with weak corrosivity (such as industrial water, domestic water and sewage) and applicable to the industrial sectors (such as petroleum, chemical engineering and steel) and fields (such as municipal administration and environmental protection).  |
| Hastelloy B protective tube                         | It is of good corrosion resistance against hydrochloric acid in all concentrations below the boiling point, capable of resistance to the corrosion of non-chloride acids and alkalis (such as sulfuric acid, phosphoric acid, hydrofluoric acid and organic acid) and nonoxidizing salt solution.   |
| Hastelloy C protective tube                         | It's capable of resistance to the corrosion of nonoxidizing acids (such as nitric acid, mixed acid or mixed medium of chromic acid and vitriol), oxidizing salts, including Fe <sup>+++</sup> , Cu <sup>++</sup> or those containing other oxidants, such as hypochlorite solution above normal temperature and seawater.   |
| Titanium protective tube                            | It's capable of resistance to corrosion of seawater, various chlorides, hypochlorite and oxidizing acids (including fuming sulphuric acid), organic acid and alkali. It's not capable of resistance to corrosion of pure reducing acids (such as quicksand and hydrochloric acid). However, when the acid contains oxidizing agents (such as nitric acid, Fe <sup>+++</sup> and Cu <sup>++</sup> ), the corrosivity will greatly lower. |
| Teflon tube   | It's a plastic whose chemical performance is the most stable and capable of resistance to boiling hydrochloric acid, sulfuric acid, nitric acid, aqua regia, concentrated alkaline and various organic solvents. It's not capable of resistance to corrosion of chlorine trifluoride, high temperature chlorine trifluoride, high speed liquid fluorine, liquid oxygen and ozone  |

### Product model selection

| Model  | Graduation number | Coating | Temperature measurement range °C | Diameter of the protective tube d | Specification   |
|--|-------------------|---------|----------------------------------|-----------------------------------|---|
| TCRP-130F<br>TCRP-230F<br>TCRP-330F<br>TCRP-430F     | P                 | F46     | 0~300                            | 16+2<br>Special negotiation       | 300×150<br>350×200<br>400×250<br>450×300                |
| TCRP2-130F<br>TCRP2-230F<br>TCRP2-330F<br>TCRP2-430F |                   | F46     | 0~250                            |                                   | 550×400<br>650×500<br>900×750<br>1150×1000<br>1650×1500 |
| TCRC-130F<br>TCRC-230F<br>TCRC-330F<br>TCRC-430F     | C                 |         |                                  |                                   |   |