

**MODEL INFORMATION – IS30C**

| Model | Product Description  |   |   |
|-------|--|---|---|
| IS30C | Series IS30C Thermocouple - with Precious Metal Sensors in Ceramic Insert, and with Ceramic Thermowell - Acc. to DIN 43733 |   |   |
| Code  | Explosion Proof Rating   |   |   |
| 1     | Standard   |   |   |
| 2     | EEx d IIC T6 Flameproof Approval acc. EN50018  |   |   |
| 3     | EEx ia IIC T6 Intrinsically Safety acc. EN 50020   |   |   |
| Code  | Sensor Type – Acc. to IEC 60584  |   |   |
| R     | R : PtRh13%-Pt   |   |   |
| S     | S : PtRh10%-Pt   |   |   |
| B     | B : PtRh70%-Pt Rh6%  |   |   |
| X     | Other  |   |   |
| Code  | Precision Class  | Tolerance for R & S                                       | Tolerance for B                               |
| 1     | Class 1  | 0 to 1100°C, ±1°C / 1100 to 1600°C ±[1+0.003x(t-1100)] °C | Not Established                               |
| 2     | Class 2  | 0 to 600°C, ±1.5°C / 600 to 1600°C, ±0.0025t°C            | 600 to 1700°C ±0.0025t°C                      |
| 3     | Class 3  | Not Established   | 600 to 800°C, ±4°C / 800 to 1700°C, ±0.005t°C |
| Code  | Number of Elements   |   |   |
| 12    | Single   |   |   |
| 22    | Double   |   |   |
| Code  | Wire Diameter [mm]   | Temperature [°C]  |   |
| 35    | 0.35   | 0 to 1400/R,S; 0 to 1600/B                                |   |
| 50    | 0.50   | 0 to 1500/R,S; 0 to 1800/B                                |   |
| XX    | Other  |   |   |
| Code  | Insulation Rod Diameter d / Material   |   |   |
| A     | 8.5 mm / C 799 <sup>(1)</sup>  |   |   |
| B     | 5.5 mm / C 799, Only for Inner Tube Dia. Ø 10x6 mm   |   |   |
| X     | Other  |   |   |
| Code  | Protective Tube Material / Dimensions D2- ODxD [mm]  | Inner Tuber Material - OD/ID [mm]                         | Max. Temperature [°C]                         |
| C724  | Ceramic C799 / Ø24x18mm  | C-799 - Ø 15x10   | 1800  |
| C715  | Ceramic C799 / Ø15x10mm  | C-799 - Ø 9.6x6.4   | 1800  |
| S925  | SA <sup>(2)</sup> Silicon Carbide / Ø1"x1/2"   | C-799 - Ø 10x6  | 1600  |
| S920  | SA Silicon Carbide / Ø3/4"x1/2"  | C-799 - Ø 10x6  | 1600  |
| M620  | LT-1 <sup>(3)</sup> Metal Ceramic / Ø 7/8"x5/8"  | C-799 - Ø 10x6  | 1370  |
| M625  | LT-1 <sup>(3)</sup> Metal Ceramic / Ø1"x3/8"   | C-799 - Ø 9x6   | 1370  |
| XXXX  | Other  |   |   |
| Code  | Holding Tube Material  |   |   |
| A10   | AISI 316(DIN1.4401)  |   |   |
| A15   | AISI 314(DIN1.4841)  |   |   |
| A18   | AISI 310(DIN1.4845)  |   |   |
| A20   | AISI 446(DIN1.4762)  |   |   |
| A22   | INCONEL 600(DIN 2.4816)  |   |   |
| A23   | INCOLOY 800(DIN 1.4876)  |   |   |
| XXX   | Other  |   |   |
| Code  | Holding Tube Dimension D1- OD [mm]   |   |   |
| D32   | Ø 32   |   |   |
| D21   | Ø 21   |   |   |
| XXX   | Other  |   |   |
| Code  | Assembly Type  |   |   |
| A1    | Two Ceramic Tubes with Holding Tube Standard Assembly  |   |   |
| A2    | Two Ceramic Tubes with Holding Tube and Safety Sealing Assembly  |   |   |
| XX    | Other  |   |   |
| Code  | Connection Head  | IP Rating   |   |
| K     | KNE, Aluminum  | 67  |   |
| D     | DIN A, Aluminum  | 54  |   |
| S     | KNE, AISI 316(DIN 1.4401)  | 67  |   |
| E     | EEx'd, Aluminum  | 67  |   |
| X     | Other  |   |   |
| Code  | Wire Entry   |   |   |
| N     | 1/2" NPT F   |   |   |
| M     | M20x1.5 F  |   |   |
| X     | Other  |   |   |
| Code  | Process Connection   |   |   |
| U21   | 1-1/2" ANSI 150 LBS RF   |   |   |
| U22   | 1-1/2" ANSI 300 LBS RF   |   |   |
| U31   | 2" ANSI 150 LBS RF   |   |   |
| U32   | 2" ANSI 300 LBS RF   |   |   |
| G21   | DIN DN40 PN16 RF   |   |   |
| G23   | DIN DN40 PN40 RF   |   |   |
| G31   | DIN DN50 PN16 RF   |   |   |
| G33   | DIN DN50 PN40 RF   |   |   |
| XXX   | Other  |   |   |
| Code  | Process Connection Material  |   |   |
| A10   | AISI 316(DIN1.4401)  |   |   |
| A00   | Equal to Holding Tube  |   |   |
| XX    | Other  |   |   |
| Code  | Extension Length "N" [mm]  |   |   |
| 200   | 200  |   |   |
| XXX   | Other  |   |   |

| Code   | Insertion Length "LU" [mm]              |
|--|---|
| 0500   | 500                                     |
| XXXX   | Other                                   |
| Code   | Holding Tube Insertion Length "LP" [mm] |
| 0200   | 200                                     |
| XXXX   | Other                                   |
| Code   | Additional Options                      |
| G  | Cable Gland                             |
| A  | Adjustable Process Connection           |
| X  | Other                                   |
| <b>Typical Model Number: IS30C 1 B 2 12 50 A C724 A10 D32 A1 K N U21 A10 200 0500 0200</b> |   |

- (1) C 799: Ceramic - 99.7% Al<sub>2</sub>O<sub>3</sub>, According to DIN EN 60672
- (2) SA: Silicon Carbide - 99.1% SiC, According to DIN EN 12212
- (3) LT-1: Metal Ceramic - 76% chromium/24% Al<sub>2</sub>O<sub>3</sub>

**Figure for High Temperature Thermocouples**

