

Sanitary digital thermometer iTHERM TM411

Hygienic temperature measurement instrument for optimum product quality, process safety and efficiency



优势:

- Optimum process control: Fast sensor response times with iTHERM QuickSens technology (t90: 1.5 s)
- Up to 75% faster and safer recalibrations with iTHERM QuickNeck – tool-free quick-release for instant insert removal
- High sensor availability under rough conditions: Vibration resistant RTD technology iTHERM StrongSens (> 60g)
- Easy product selection, configuration and maintenance
- Increase productivity and product safety in sanitary applications with highly accurate and reliable measurements
- Thermowells, hygienic process connections and housings expertly manufactured from high-grade materials treated for low surface roughness

详细信息和最新价格参见:

www.endress.com.cn/TM411

产品规格参数

- **测量精度** Cl. A , 遵循IEC 60751标准 Cl. AA, 遵循IEC 60751标准
- **响应时间** 取决于设置 QuickSens : t90 = 1.5秒 StrongSens : t90 = 9.5秒
- **最大过程压力 (静压)** 20 °C时 : 40 bar (580 psi)
- **工作温度范围** PT100 : -200...600 °C (-328...1.112 °F)
StrongSens : -50...500 °C (-58...932 °F) QuickSens : -50...200 °C (-58...392 °F)

应用领域: The modular sanitary thermometer iTHERM TM411 with digital display delivers highly accurate, reliable and fast temperature measurements in process lines, vessels, tanks, fermenters and more. The high-performance device is designed for the strictly regulated food and

life sciences industries. Configure your hygienic instruments from a selection of thin film RTDs with QuickSens or StrongSens technology or 2x Pt100 wire wound temperature sensors, smart transmitters and hygienic process connections.

特征和规格

温度计

测量原理

热电阻

特点/应用

英标型

模块化温度计

卫生/防腐设计 (3-A[®]、EHEDG、ASME BPE、FDA)

卫生型过程连接

带延长颈

适用危险区

带热保护套管

QuickSens的响应时间短

StrongSens坚固耐用

QuickNeck的二次标定简单经济

热保护套管

焊接热保护套管

无热保护套管

三通和转接头

铠装芯子/探头

矿物绝缘 (MI) , 可弯曲

管道型, 绝缘线芯, 不能弯曲

热保护套管外径

6.0 mm (0.24")

9.0 mm (0.35")

12.7 mm (0.5")

温度计

热保护套管材质

1.4435, 铁素体低于1%
316L

过程连接

卡套螺纹
焊座
ISO2852接头
DIN 11851螺纹管道接头
DIN 11864-1防腐螺纹管道接头
金属密封系统
ISO 228螺纹, 使用Lquiphant转接头
APV Inline
Varivent
Ingold
SMS 1147
Neumo Biocontrol
三通和转接头

热保护套管末端类型

直管型
缩径型
锥管型

表面光洁度Ra

0.76 μm (29.92 μin)
0.38 μm (14.96 μin)
0.38 μm (14.96 μin), 电抛光处理

温度计

工作温度范围

PT100 :

-200...600 °C

(-328...1.112 °F)

StrongSens :

-50...500 °C

(-58...932 °F)

QuickSens :

-50...200 °C

(-58...392 °F)

最大过程压力 (静压)

20 °C时 : 40 bar (580 psi)

测量精度

Cl. A , 遵循IEC 60751标准

Cl. AA, 遵循IEC 60751标准

响应时间

取决于设置

QuickSens : t₉₀ = 1.5秒

StrongSens : t₉₀ = 9.5秒

模块化温度变送器

是 (4...20 mA ; HART ; PROFIBUS PA ; FOUNDATION
FIELDBUS)

防爆认证

ATEX II

ATEX IECEx

FM

CSA

NEPSI

CRN

证书

SIL (仅针对变送器)

更多信息 www.endress.com.cn/TM411