



E-mail: slt@sealantern.com.cn

[Http://www.sealantern.com.cn](http://www.sealantern.com.cn)

SLT-08D/SLT-08C
WATER INGRESS ALARM SYSTEM

SLT
SERIES

散货船货舱进水探测报警系统



公司总部地址: 中国天津. 华苑产业园区. 竹苑路6号
 邮政编码: 300384
 电 话: +86-22-23078176/77/78
 传 真: +86-22-23078179
 E-mail: slt@sealantern.com.cn
[Http://www.sealantern.com.cn](http://www.sealantern.com.cn)

ADD: NO.6 ZHUYAUN ROAD HUAYUAN INDUSTRIAL
 DISTRICT, TIANJIN, CHINA
 ZIP CODE: 300384
 TEL: +86-22-23078176/77/78
 FAX: +86-22-23078179
 E-MAIL: slt@sealantern.com.cn
[Http://www.sealantern.com.cn](http://www.sealantern.com.cn)

WATER INGRESS ALARM SYSTEM

斯莱顿电子公司向您承诺，我们使用世界上最好的元器件来制造产品，并不断努力向客户提供最满意的产品和服务。我司的产品质量管理体系已通过国际知名产品质量保证机构的审查，取得了ISO9001认证。

Sealantern promises you that we choose the parts with top quality in the world to manufacture our products and continually exert ourselves to reach your full satisfaction. Our company has passed the well-known quality identification inspection and got the ISO9001 certificate.



SLT-08D / SLT-08C WATER INGRESS ALARM SYSTEM SLT-08D / SLT-08C 货舱进水探测报警系统

产品符合如下标准：

The product can satisfy relevant marine standards as following:

Hold, ballast and dry space water level detectors (Chapter XII, Regulation 12(Resolution MSC. 134(76))) Performance Standards for Water Level Detectors on Bulk Carriers (Resolution MSC.145 (77)) IACS UI SC180

产品取得如下船级社产品形式认证：

The product is admitted by classification societies as following:

ABS, BV, CCS, CR, DNV, GL, KR, LRS, NK, RS

2003年

获得BVQI的ISO9001：2000产品质量体系认证，并取得10家船级社的产品形式认证

2005年6月

二千余条散货船安装SLT-08C型产品

2003

Awarded BVQI-ISO9001：2000 product quality management system

SLT-08C system got product type approval from 10 classification societies.

June,2005

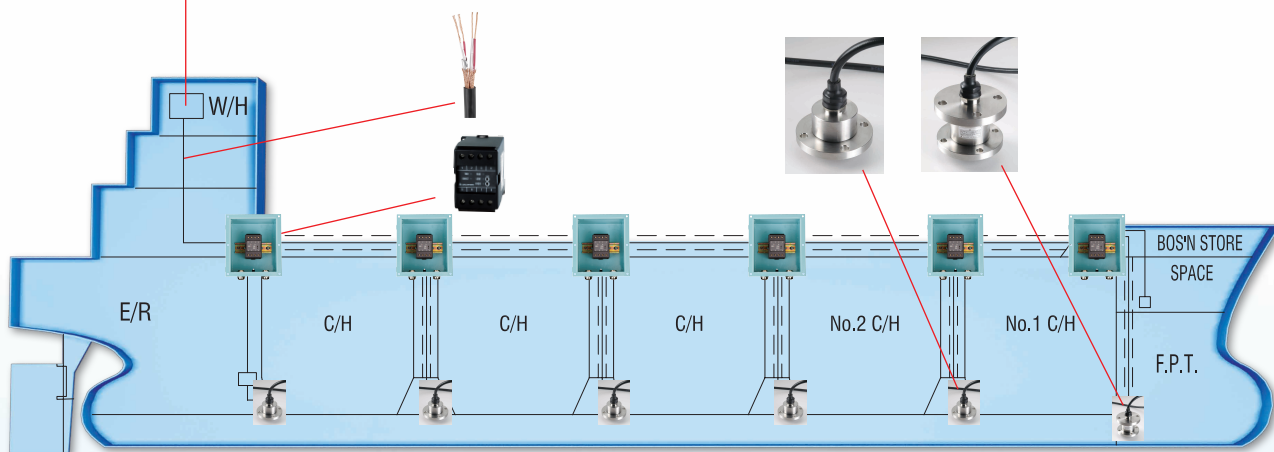
SLT-08C system has been working in good condition on more than 2000 bulk carriers all over the world.

SLT-08D WATER INGRESS ALARM SYSTEM



节省您的安装成本
电磁兼容水平达军级标准

SAVE YOUR INSTALLATION COST
EMC REACHES MILITARY STANDARD



特点:

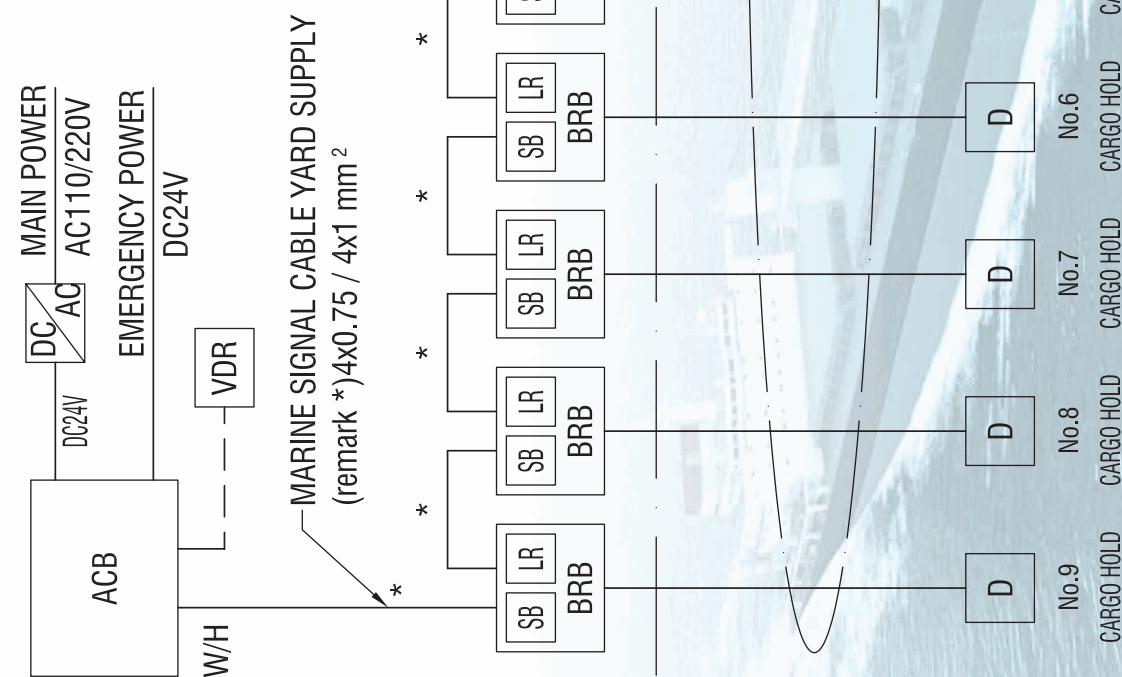
1. 报警控制面板外形美观，设计小巧，安装方便，操作简单。报警面板为嵌入式安装，可方便地安装在主控制台。
2. 电缆用量少，系统成本低。该系统采用总线技术，从驾驶室到船首只用一根 $4 \times 1\text{mm}^2$ 电缆，探测器的电缆通过安全栅并联在该电缆上，实现探测器供电和数据采集功能。
3. 系统传输和采集数据采用数字方式，抗干扰能力强，稳定性高。
4. 数据接口丰富，可采用RS232/422/485，VC/VO，方便地与VDR连接。
5. 安全栅接线盒为不锈钢制造，安装在主甲板，经久耐用。
6. 探测器性能优良，采用安全可靠的安装方式，并可方便地进行功能实验。

Characters

1. The Alarm control panel has advantages including artistic externality, compact configuration, convenient installation, easy-to-master operation. The alarm panel is installed on main console by flush type, it can be installed on the wheel house very easily.
2. Less cables are needed for installation and lower cost for the whole system, which only needs one $4 \times 1\text{mm}^2$ cable from wheel house to the fore bosun store. The detector cable is connected to the $4 \times 1\text{mm}^2$ cable in parallel via safety barrier, to provide power to detector and do data transfer.
3. The data are transferred in digital format with strong anti-jamming performance and high stability.
4. Data interface is designed in RS232/422, VC/VO formats, and can be connected to the VDR conveniently.
5. Made of stainless steel to ensure longer lifetime, the safety barrier is installed on the main deck.
6. With excellent performance, the detectors are designed with safe and reliable installation method and easy approaching for function tests.

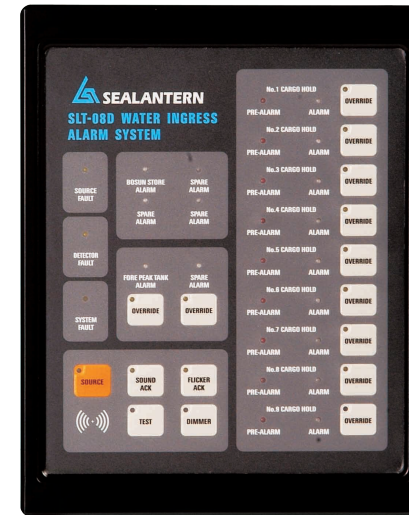
SLT-08D GENERAL SYSTEM DRAWING

D	WATER LEVEL DETECTOR
JB	JUNCTION BOX
RB	JUNCTION BOX FOR REGULATOR
BRB	JUNCTION BOX FOR BARRIER & REGULATOR
ACB	ALARM PANEL & CONTROL BOX

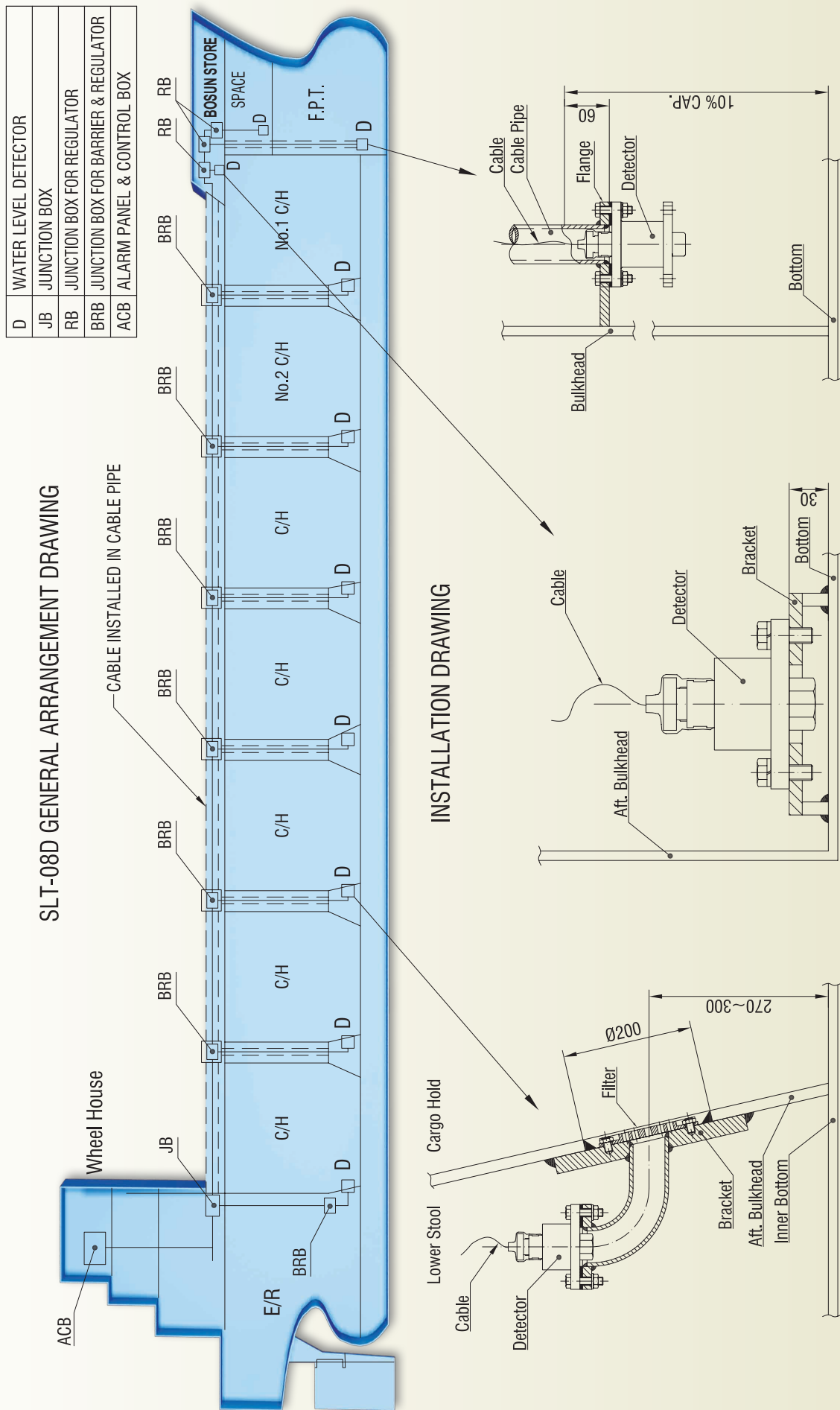
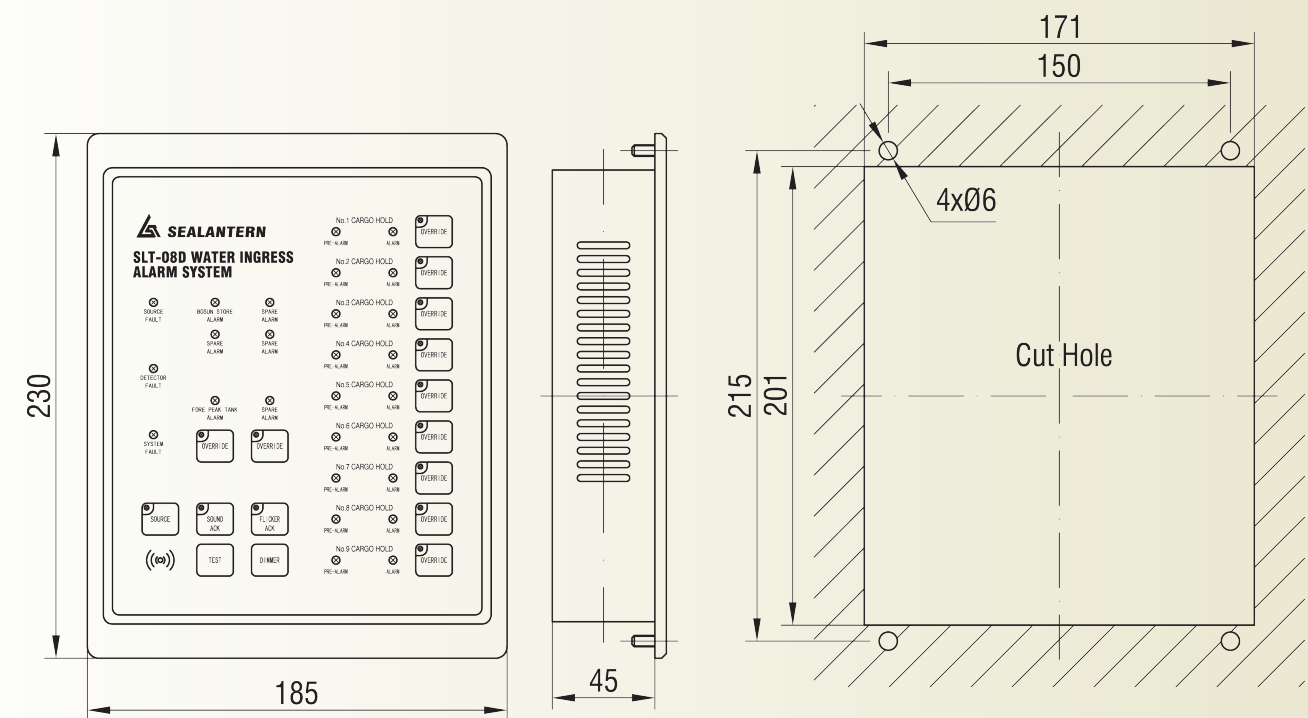


A 报警面板 Alarm panel

- a. Main Power: AC110/220V,50/60Hz
- b. Emergency Power: DC 24V
- c. Consumed Power: 30W
- d. Output: DC 24V
- e. Enclosure Protection: IP22
- f. Cooling Type: Self-cool
- g. Dimension: 230 × 185 × 50mm
- h. Weight: 3Kg



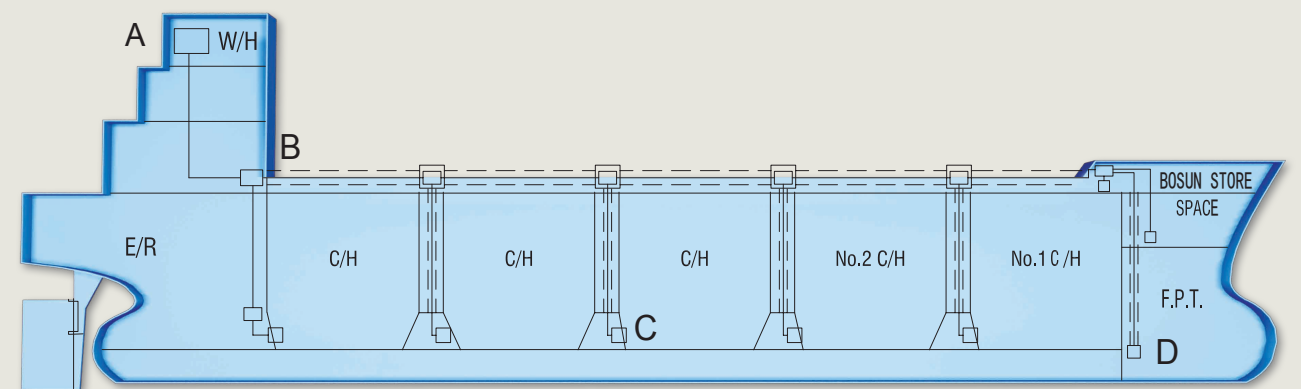
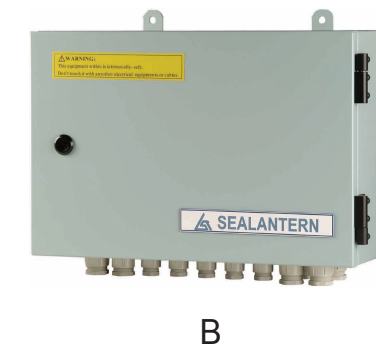
Flush type installation



SLT-08C WATER INGRESS ALARM SYSTEM

原理：传感器感应水的压强 $P=\rho gh$ (h为水深, ρ 为海水密度)。当水深从0~4m变化时，传感器输出4~20mA电流信号，计算机自动判断报警点数值。当水深到0.5m及2m时发出报警信号。

Principle: the sensor detects the depth of the liquid by $P=\rho gh$ (h-water depth, ρ -seawater density). When the depth of the liquid is changing from 0 to 4m, the sensor outputs 4~20mA current signal. Computer can automatically judge the value of the alarm point and alarm at 0.5m & 2m liquid level.



C

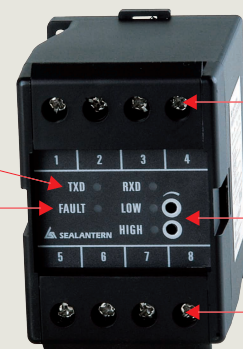
D

安全栅及设定器接线盒(SUS304)
Safety Barrier and Regulator Junction Box



数据收发指示
Data Transfer

探测器故障指示
Detector Fault Indication



现场总线端子
Field Bus Terminal

报警水位设定
Water Level Regulator

探测器端子
Detector Terminal

参数

防护等级: IP68
防爆等级: Ex(ia)IIC

Parameters
Protection Grade: IP68
Explosion Protection Grade: Ex(ia)IIC

Um=250V Po=0.66W
Uo=28V Co=0.083 μ F
Io=93mA Lo=4.2mH



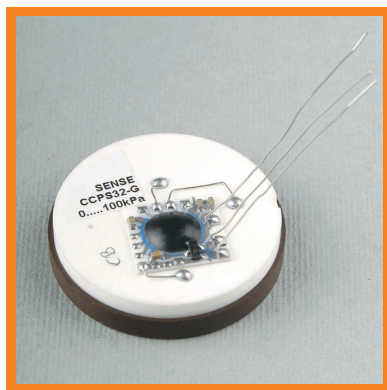
压力变送器



Detector



Detector



德国E+H陶瓷电容压力传感器
CCPS of E+H Company-Germany

使用德国E+H公司CCPS32陶瓷电容压力传感器

We select CCPS32 produced by E+H Company Germany as the sensor in our detector.

参数

工作电压: 12.5V~36V DC
 测量范围: 0~40KPa
 输出电流: 4~20mA
 工作温度: -30~+70°C
 精度: 线性度: $\pm 0.2\%$
 迟滞: 优于0.01%满量程
 稳定度: 每年优于0.1%
 位置安装影响: 任意安装对零点无影响。
 防爆等级: Exia II CT4-T6

Characteristics

Working Voltage: 12.5V~36V DC
 Measure Range: 0~40KPa
 Output Current: 4~20mA
 Working Temperature: -30~+70°C
 Precision: Linearity: $\pm 0.2\%$
 Delay: Superior to 0.01%full range
 Stability: Superior to 0.1% per annum
 Position-Caused Effect: Any position has no effect to zero point
 Explosion-Protection Grade: Exia II CT4-T6

陶瓷是一种公认的高弹性抗腐、抗磨损、抗冲击和振动的材料。陶瓷的热稳定性可以使它的工作温度范围高达-40~125°C而且具有测量的高精度，高稳定性。

Ceramic is a high-flexibility material with performances of anti-corrosion, anti-abrasion, anti-shock and anti-vibration. This material has high temperature stability, which makes it possible to tolerate high working temperature ranging from -40°C to 125°C as well as excellent measure precision and stability.



特点

传感器为陶瓷材料，耐腐蚀性极强。
 本质安全型，采用本质安全电路，适用于爆炸危险区域。
 抗过载、抗冲击能力强，过压可达量程的百倍。
 稳定性高，每年优于0.1%满量程。
 德国E+H KAVLICO 专利产品，为欧美E+H, ABB, SIEMENS, H&B, VEGA压力变送器首选产品。

Features

1. The sensor is made of ceramic material of high corrosion-proof performance.
2. Intrinsically safe product with intrinsically safe circuit inside, which can work in dangerous circumstances of potential explosion.
3. With strong abilities of anti-overload and anti-shock, as well as overload endurance of centuple measure limit.
4. High stability and superior to 0.1% measure limit per annum.
5. Patent product of E+H KAVLICO Company which is the first choice of Europe E+H, ABB, SIEMENS, H&B, VEGA and many other companies.

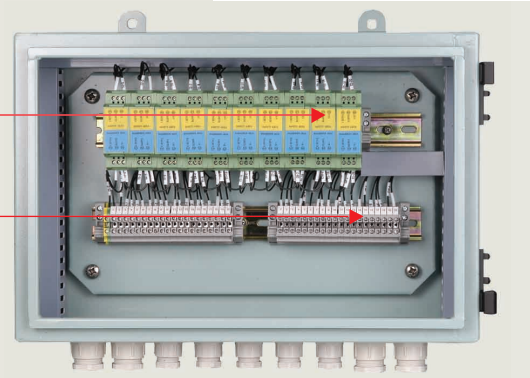
PRESSURE TRANSMITTER

安全栅接线箱
Safety Barrier Junction Box



安全栅
Safety Barrier

德国菲尼克斯接线端子
PHENIX Terminal-Germany



参数

防护等级: IP56
防爆等级: Ex(ia)IIC

Characteristics
Protection Grade: IP56
Explosion Protection Grade: Ex(ia)IIC

Um=250V Po=0.66W
Uo=28V Co=0.083 μF
Io=93mA Lo=4.2mH

