



Food | Pharma | Biotechnology | Semiconductor

Sanitary applications

PRESSURE | TEMPERATURE | LEVEL | DIAPHRAGM SEAL



2014/34/EU

II 3GD

Ex ic IIC T4...T5 Gc°C

Ex ic IIIC T135°C...T100 Dc Ta: -30°C~+80°C



WETTED PARTS -AVAILABLE SS 316L , HASTELLOY-C276 , INCONEL 625 , MONEL 400

Wetted Parts SS 316L (AS PER NACE MR 0175)

**Sensors Available In Piezo Resistive/Ceramic/Micro Fused
Helium Leak Tested**

SS316 Enclosure

Fully Stainless Welded Design

Temperature Compensation: -20°C(-4°F) to 100°C(212°F)

Operating Temperatures: -40°C(-40°F) to 120°C(248°F)

IP 68 Enclosure Protection

Proof Pressure Up to 3 x Full Scale value up to 6000psi

Burst Pressure Up to 5 x Full Scale value Up to 6000psi

Accuracy Available Up to 0.05%

Zero and Span Adjustment

Re Calibration available Upto 50% F.S value

Range Units Are Re – Programmable

Reverse Polarity Protection

Life Span More Than 4 Million Cycles

***PLEASE REFER TRANSMITTERS CATALOGUE FOR DETAILS**

About us :

Elite Instruments is a Singapore-headquartered high-technology engineering company specializing in the development, manufacturing and global supply of precision process instrumentation for mission-critical industrial applications.

Since 2010, Elite has combined advanced engineering, innovative product development and state-of-the-art manufacturing to deliver measurement solutions that meet the highest international standards for accuracy, reliability and long-term performance.

With a cumulative investment of over USD 12 million, a modern manufacturing footprint exceeding 30,000 m², and a team of more than 360 highly skilled engineers and manufacturing professionals, Elite has established itself as a trusted technology partner for customers operating in some of the world's most demanding industries.

Our manufacturing facilities integrate advanced production technologies, precision machining, automated calibration systems and comprehensive quality assurance processes, enabling us to deliver consistent product quality and dependable performance across every stage of production.

Our comprehensive product portfolio includes:

- **Pressure gauges**
- **Differential Pressure Gauges**
- **Ultra-high-pressure gauges**
- **Temperature gauges**
- **Diaphragm seals**
- **Pressure, Temperature & Level Transmitters**
- **Thermowells**
- **RTD & Thermocouples**
- **Instrument Valves & Manifolds**
- **Instrumentation Accessories**

Headquartered in Singapore, with manufacturing operations in India, Saudi Arabia, China, Kazakhstan and Mexico, Elite provides localized manufacturing capabilities, responsive technical support and efficient global supply to customers across more than 50 countries.

Elite serves a diverse range of industries, including Oil & Gas, Chemical & Petrochemical, Power Generation, Water & Wastewater, Pharmaceutical, Food & Beverage, Marine and General Process Industries.

Every Elite instrument undergoes rigorous inspection, calibration and performance testing before shipment, ensuring compliance with stringent international quality requirements. Our commitment to engineering excellence, continuous innovation and customer-focused development enables us to deliver reliable solutions for the most challenging industrial environments.

Beyond our standard product portfolio, Elite collaborates closely with customers to develop customized instrumentation and OEM solutions engineered to meet unique application requirements.

Elite Instruments - Advanced Measurement Technology. Engineered in Singapore. Trusted Worldwide.

ELITE components for hygienic processes

- Hygienic design of wetted parts in view of materials and surface quality: stainless steel 316 Ti/ 316 L, Monel, Hastelloy, platinum, titanium, PFA/PTFE coatings, plastic materials
- Surface quality with $Ra \leq 0.3 \mu m$ (optionally $0.2 \mu m$)
- Perfect external cleanability due to stainless steel housings with a degree of protection of up to IP 68
- Device design as per EHEDG recommendations
- Welding seams with $Ra \leq 0.8 \mu m$
- FDA-listed materials
- Resistance to acid, alkaline and alcoholic cleaning agents
- Suitable for CIP and SIP
- High resistance to vibration and temperature
- Numerous process connections for optimum adaptation to the application
- Relevant certificates such as SIL, PED, 3-A, Ex are available



ELITE products are subject to stringent requirements

PED/DGRL
(Pressure Equipment
Directive 2014/68/EU)

Ex
(Explosion Protection
Directive 2014/34/EU)

SIL
Safety Integrity Level
as per IEC 61508/IEC 61511)



**PED
DGRL**



FDA
Food and Drug Administration

Organisation of the US Department of Health. Issues recommendations, directives and test methods for the examination of materials.

3-A
Sanitary Standards, Inc.

Non-profit organisation (USA) for product safety in processes of the food and pharmaceutical industries.

PRESSURE

PT-03

For demanding Industrial Application



Accuracy :

- $\leq 0.125, 0.25$ or 0.5 BFSL

Measuring Range:

- $0 \dots 0.4$ to $0 \dots 1,600$ bar
- $0 \dots 0.4$ to $0 \dots 40$ bar abs
- $-0.4 \dots 0$ to $-1 \dots +59$ bar

Special features:

- Extreme operating conditions
- Customer-specific variants
- Free test log

PT-43

Intrinsic safety Ex i



Accuracy :

- $\pm 0.25\%$ F.S

Measuring Range:

- $-1 \dots 0$ to $0 \dots 1,000$ bar

Special features:

- Temperature compensation: $-20^\circ\text{C} \sim 100^\circ\text{C}$
- All welded Internal Sealing
- IO-LINK+Switch/ HART/RS485/ Magnetic adjustment (optional)

EPK-09

Electronic pressure switch with display



Accuracy :

- ≤ 0.5

Measuring Range:

- $0 \dots 0.4$ to $0 \dots 1,000$ bar
- $0 \dots 0.4$ to $0 \dots 25$ bar abs
- $-1 \dots 0$ to $-1 \dots +24$ bar

Special features:

- Condition monitoring via IO-Link
- Reduction of variants
- Easy installation, good readability
- Parameterisation via 3 buttons

PT43SFD

Universal process transmitter, with pressure port



Accuracy :

- ≤ 0.1

Output signal:

- $4 \dots 20$ mA, HART®

Measuring Range::

- $0 \dots 0.4$ to $0 \dots 1,000$ bar
- $0 \dots 1.6$ to $0 \dots 40$ bar abs.
- $-0.2 \dots +0.2$ to $-1 \dots +40$ bar

Special features:

- Multi-functional display
- Simple menu navigation
- Conductive plastic case
- Large LC display, rotatable

PT60S

Industrial process transmitter



Non-linearity (% of span):

- $\leq 0.075 \dots 0.1$

Measuring Range:

- $0 \dots 0.1$ to $0 \dots 4,000$ bar
- $-1 \dots 0$ to $-1 \dots +60$ bar
- $0 \dots 0.1$ to $0 \dots 60$ bar abs.

Output signal:

- $4 \dots 20$ mA, HART®, PROFIBUS® PA, FOUNDATION™ Fieldbus

Special features:

- Freely scalable measuring ranges (turndown to 30 : 1)
- Case from plastic, aluminium or stainless steel

DPT66S

Differential pressure transmitter, intrinsically safe or with flameproof enclosure



Non-linearity (% of span):

- $\leq 0.065 \dots 0.1$

Measuring Range:

- $0 \dots 10$ mbar to $0 \dots 16$ bar

Output signal:

- $4 \dots 20$ mA, HART®, PROFIBUS® PA, FOUNDATION™ Fieldbus

Special features:

- Freely scalable Measuring Range:s
- Static load 160 bar, optionally 400 bar
- Case from plastic, aluminium or stainless steel
- With integrated display and instrument
- 3- or 5-way valve optional
- SIL 2 per IEC 61508

PT43SFD

For Hygienic Processes



Accuracy:

- ≤ 0.2

Measuring Range:

- $-0.25 \dots 0$ to $-1 \dots +24$ bar
- $0 \dots 0.25$ to $0 \dots 25$ bar gauge
- $0 \dots 0.25$ to $0 \dots 16$ bar abs.

Special features:

- Flush diaphragm with a surface roughness of $R_a < 0.4 \mu\text{m}$ all welded

EPK09SF

Compact diaphragm seal system, hygienic design, with IO-Link and switching outputs



Accuracy(% of span):

- $\leq \pm 1 / \leq \pm 0.5$

Measuring Range:

- $0 \dots 1$ to $0 \dots 25$ bar
- $0 \dots 15$ to $0 \dots 300$ psi

Switching output:

- 1 or 2 (PNP or NPN)

PT70SFDF

Process pressure transmitter in stainless steel case



Accuracy:

- 0.075 to 0.25%

Measuring Range:

- $0 \dots 0.1$ to $0 \dots 600$ bar
- $-1 \dots 0$ to $-1 \dots +60$ bar
- $0 \dots 0.1$ to $0 \dots 60$ bar abs.

Output signal:

- $4 \dots 20$ mA, HART®, PROFIBUS® PA, FOUNDATION™ Fieldbus

PRESSURE

PT70SFDT

Universal process transmitter with flush process connection

Non-linearity (% of span):
≤ 0.1

Measuring Range:

- 0 ... 0.4 to 0 ... 600 bar
- 0 ... 1.6 to 0 ... 40 bar abs.
- -0.2 ... +0.2 to -1 ... +40 bar

Output Signal:

- 4 ... 20 mA, HART®

Special features:

- Multi-functional display (optional)
- Freely scalable Measuring Range:
- Simple menu navigation
- Conductive plastic case or stainless steel case in hygienic design
- Large LC display, rotatable



PT43SID

In-line process transmitter, hygienic design

Non-linearity (% of span):
• 1 % (at process temperature)

Output Signal:

- 4 ... 20 mA with HART® signal (HART® rev. 7)
- 4 ... 20 mA

Measuring Range:

- 0 ... 16 bar (0 ... 200 psi)
- -1 ... 15 bar [-30 inHg ... +200 psi]
- 0 ... 16 bar abs. [0 ... 200 psi abs.]

Special feature:

- 0 ... 16 bar (0 ... 200 psi)
- Dead-space free hygienic design
- In-line pressure measurement with sensor tube without system fill fluid



P13SFI

Pressure measuring instrument with integrated diaphragm element monitoring

Application:

- For the production of active pharmaceutical ingredients (API)

Nominal size:

- 100 mm

Scale range:

- -1 ... 1.5 to -1 ... 15 bar
- 0 ... 2.5 to 0 ... 16 bar

Accuracy class:

- 1.6

Overload safety:

- 1.5 ... 4 x full scale value, max. pressure rating of the process connection

Special feature:

- Fully autoclavable Optional sterilization of the reference chamber per ISO 20857/2010 connection



P39NSF

Stainless steel version, standard

Nominal size:

- 40, 50, 63 mm

Scale range:

- 0 ... 1 to 0 ... 1,000 bar

Accuracy class:

- 2.5

Ingress protection:

- IP54



P25

Stainless steel version

Nominal size:

- 63, 100, 160 mm

Scale range:

- 0 ... 0.6 to 0 ... 1,600 bar

Accuracy class:

- 1.0/1.6 (NS 63)

Ingress protection:

- IP65



P17

Safety version, stainless steel, high overload safety

Nominal size:

- 100, 160 mm

Scale range:

- 0...0.6 to 0...40bar

Accuracy class:

- 1.0/1.6 (NS 63)

Ingress protection

- IP65



P27

Pressure measuring instrument with switch contacts

Nominal size:

- 100, 160 mm

Scale range:

- 0...0.6 to 0...1,600 bar

Accuracy class:

- 1.0

Ingress protection:

- IP65



P36

Pressure measuring instrument with electrical Output Signal:

Nominal size:

- 100, 160 mm

Scale range:

- 0...0.6 to 0...1,600 bar

Accuracy class:

- 1.0

Ingress protection:

- IP54, filled IP65



P13SF

Pressure measuring instrument with flush diaphragm element

Nominal size:

- 63mm, 100 mm

Scale range:

- -1...0.6to-1...15 bar
- 0 ... 1.6 to 0 ... 16 bar

Accuracy class:

- 1.6

Overload safety

- 2... 5 x full scale value, max. pressure rating of the process connection

Special feature

- Completely autoclavable (optional)



PRESSURE

P25D04M

With pressure gauge per EN 837-1 with milk thread fitting or SMS threaded connection



Process connection:

- DSS18F: Grooved union nut/ threaded coupling
- DSS19F: Threaded connection per SMS standard (SS 3352)

PNmax.:

- 25 bar

System fill fluid:

- FDA Approved Oil

P25D07

With pressure gauge per EN 837-1, with clamp connection



Process connection:

- TRI-CLAMP DIN 32676 or BS4825

PNmax.:

- 25 bar

System fill fluid:

- FDA Approved Oil

P25D07EP

With pressure gauge in hygienic design, with clamp connection



Process connection:

- TRI-CLAMP DIN 32676 or BS4825

PNmax.:

- 25 bar

System fill fluid:

- FDA Approved Oil

Special feature:

- External zero point setting
- Electropolished case
- Autoclavable

PT43D04M

With high-quality pressure sensor, with milk thread fitting



Process connection:

- Milk thread fitting per DIN 11851

PNmax.:

- 25 bar

System fill fluid:

- FDA Approved Oil

PT43D04

With high-quality pressure sensor, with SMS threaded connection



Process connection

- Threaded connection per SMS standard (SS 3352)

PNmax. :

- 25 bar

System fill fluid:

- FDA Approved Oil

PT43D07

With high-quality pressure sensor, with clamp connection



Process connection

- TRI-CLAMP@DIN 32676 or BS4825

PNmax.:

- 25 bar

System fill fluid:

- FDA Approved Oil

P25D07BP

Compact pressure gauge in accordance with ASME with 3/4" clamp connection



Process connection:

- TRI-CLAMP per ASME BPE 3/4", 1"

PNmax.:

- 600 psi (40 bar)

System fill fluid:

- FDA Approved Oil

DGPG100

Precision digital pressure gauge



Measuring range:

- -1 ... 10,000 bar

Accuracy(% of span):

- Down to 0.05 % FS

Special feature:

- Integrated data logger compatible
- Data transfer via Bluetooth
- Password protection possible
- Robust case IP65

P09D07

Pressure measuring instrument with flush diaphragm element



Process connection:

- TRI-CLAMP per ASME BPE 3/4", 1"

PNmax.:

- 600 psi (40 bar)

System fill fluid:

- FDA Approved Oil

DIAPHRAGM

D04

Milk thread fitting



Process connection:

- Thread with grooved union nut

PNmax.:

- 40 or 25 bar

D07

TRI-CLAMP®



Process connection:

- TRI-CLAMP DIN 32676 or BS4825

PNmax.:

- 40 bar (DN 20 ... 50)
- 25 bar (from DN 65)

D13

DRD connection



Process connection:

- DRD connection

PNmax.:

- 25 bar

D14

VARIVENTR® connection



Process connection:

- For installation into the VARINLINE® access unit or connecting flange

PNmax.:

- 25 bar

D15

NEUMO BioConnect® connection



Process connection:

- NEUMO BioConnect thread or flange

PNmax.:

- 16 bar (thread)
- 70 bar (flange)
- Higher pressures on request

D16

Aseptic connection per DIN 11864



Process connection:

- DIN 11864-1 threaded connection
- DIN 11864-2 flange
- DIN 11864-3 clamp connection

PNmax.:

- 16 ... 40 bar depending on the process connection

D18

Milk thread fitting DIN 11851



Process connection:

- Thread

PNmax.:

- 40 bar (DN 20... 40)
- 25 bar (from DN 50)

D18TC

TRI-CLAMP®



Process connection:

- TRI-CLAMP®, clamp DIN 32676, ISO2852

PNmax.:

- 40 bar (DN 20... 40)
- 25 bar (from DN 50)

D18SC

Aseptic connection



Process connection:

- DIN 11864-2 flange
- DIN 11864-1 threaded connection
- DIN 11864-3 clamp connection

PNmax.:

- 16 ... 40 bar depending on the process connection

TEMPERATURE

ETT01F

Miniature design with flange connection

Sensor element:

- Pt100, Pt1000

Measuring range:

- -30...+250°C

Output:

- Pt100, Pt1000, 4 ...20 mA

Connection to thermowell:

- Removable G 3/8 "

Ingress protection:

- IP69K autoclavable



ETT01MW

Miniature design for orbital welding

Application:

- Invasive temperature measurement in the product stream

Sensor element:

- Pt100, Pt1000

Measuring range:

- -30...+150°C

Output:

- Pt100, Pt1000, 4... 20 mA

Connection to thermowell:

- Removable G 3/8"

Ingress protection:

- IP69K autoclavable



ETT01D07

Miniature design with welded flange connection

Sensor element:

- Pt100, Pt1000

Measuring range:

- -30...+250°C

Output:

- Pt100, Pt1000, 4... 20 mA

Connection to thermowell:

- Welded

Ingress protection:

- IP69K autoclavable



ETTSDF

With flange connection

Sensor element:

- Pt100

Measuring range:

- -50...+250 °C

Output:

- Pt100, 4 ... 20 mA

Connection to thermowell:

- Removable M24



ETTSDIW

For orbital welding

Application:

- Invasive temperature measurement in the product stream or flange

Sensor element:

- Pt100

Measuring range:

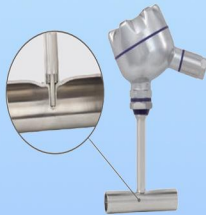
- -50...+150 °C

Output:

- Pt100, 4 ...20 mA

Connection to thermowell:

- Removable M24



ETTSDPI

In-line resistance thermometer

Application:

- For piggable systems and powdery media

Sensor element:

- Pt100

Measuring range:

- -50...+150°C

Output:

- Pt100, 4... 20 mA

Pin assignment:

- 3-or 4-wire



ETTSDNM

Flush

Application:

- For flush vessel mounting when using wipers

Sensor element:

- Pt100

Measuring range:

- -50...+250°C

Output:

- Pt100, 4... 20 mA

Connection method:

- 2-,3-and 4-wire



ETTH

Digital temperature transmitter with HART® protocol

Input:

- Universal use for 1 or 2 sensors: resistance thermometers (upto 2 x 3-wire), thermocouples potentiometers, reed chains

Accuracy:

- <0.1%

Output:

- 4 ... 20 mA, HART® protocol

Special feature:

- Universal use for 1 or 2 sensors: Detection technology (SP 05.26) (fullassessment), True Drift Detection technology (SP 05.26)



T02DF

Bimetal thermometer for sanitary applications

Nominal size:

- 63,80, 100, 130 mm

Scale range:

- -50 ...50 °Cto-20...200 °C

Wetted parts:

- Stainless steel 316L

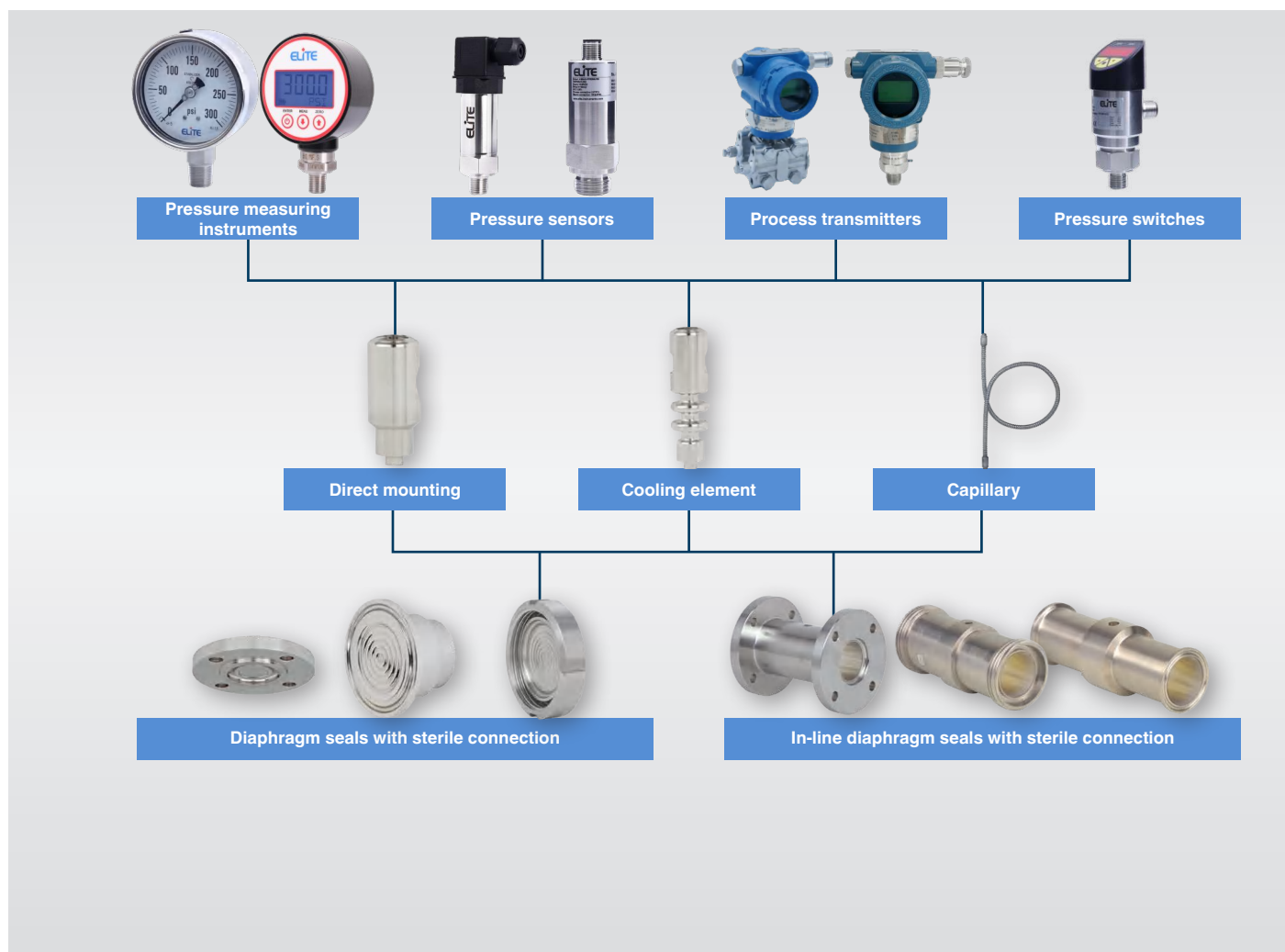
Option:

- Case filling with FDA-approved silicone oil
- Certification packages for food and pharmaceutical applications



Connection to the process with diaphragm seals

The combination of mechanical or electronic pressure measuring instruments with flush diaphragm seals meets the stringent demands made on hygienic instrumentation and is suitable for even the most difficult measuring requirements. Mounting of the diaphragm seals to the measuring instruments may be made via a direct connection, for high temperatures via a cooling element or via a flexible capillary.



In hygienic processes, ELITE uses only FDA-listed hydraulic oils or, on customer request, special vegetable oil to exclude the risk of contamination of the medium in the case of a rupture of the diaphragm.

EU Declaration of Conformity

Document No.: ESE-EI-001

Manufacturer: ELITE INSTRUMENTS PTE. LTD.

Address: 3014A MIT-KEPANG UBI #03-06 UBI ROAD 1 SINGAPORE 408703

Declaration under our sole responsibility that the following products:

Product: Pressure Transmitters, Temperature Transmitters,
Digital pressure gauges

Model: PT-03, PT-30, PT-31, PT-32, PT-33, PT-40, PT-41, PT-43, PT-70, SPT-80,
SPT-81, SPT-82, ETT-01, DG-75

are in conformity with the following relevant Union harmonization legislation

ATEX Directive 2014/34/EU

The compliance with the Essential Health and Safety Requirements has been assured with compliance with the following standards:

EN IEC 60079-0:2018

EN 60079-11:2012

Factory production control complying with the procedure regarding internal production control specified in Annex VIII of 2014/34/EU. Assessment of compliance of the product with the requirements relating to safety standards listed above was performed by manufacturer ELITE INSTRUMENTS PTE. LTD. Documents related to ATEX certification are deposited at SGS FIMKO (Technical documentation is archiving in SGS UK company).

The ATEX marking of product include the codes:



II 3GD

Ex ic IIC T4...T5 Gc

Ex ic IIIC T135°C...T100°C Dc Ta: -30°C~+80°C



For and on behalf of ELITE INSTRUMENTS PTE. LTD.

Signature: _____

S. N. Reddy

Print Name: _____

S N Reddy

Title: _____

Managing Director

Place: _____

Singapore

Date: _____

2025/07/07



Asia

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OUR MAJOR CLIENTS:

Our ARAMCO Approved 9COMs:

						
6000002845	6000002754	6000002749	6000002743	6000002814	6000002888	6000002756
THERMOWELL	PRESSURE GAUGE / INDICATOR	DIFFERENTIAL PRESSURE GAUGE / INDICATOR	TEMPERATURE / PRESSURE GAUGE	RTD - RESISTANCE TEMPERATURE DETECTOR	THERMOCOUPLE	TEMPERATURE GAUGE / INDICATOR

FOR RFQ CONTACTS

