

## Hygienic / Sanitary Pressure-Level Transmitters: **8000 SAN Series**

- **Stainless Steel Housing.**
- **Accuracy 0.2% from adjusted span.**
- **Active Temperature Compensation.**
- **Zero / Span internally adjustable.**
- **Strong flush diaphragms.**
- **Many process connections.**
- **ATEX EEx ia.**

### Performance **characteristics**

#### Enclosure / Housing

- Robust stainless steel 304. Protection to IP65.

#### Process connections

- Dairy fitting to DIN 11851.
- Hygienic Weld Fitting.
- Tri-clamp connection.
- ANSI Flange 150#

#### Options

- Standard enclosure.
- Integral Digital Indicator.

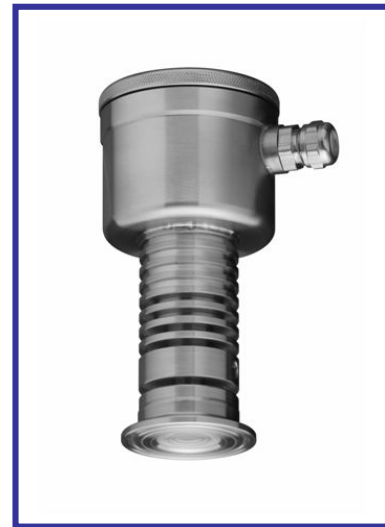
#### Ranges

- From 0 up to 16 bar, with max overpressure of 60 bar.

#### Accuracy

- $\pm 0.2\%$  of adjusted span.

**8000 SAN  
ISSUE D.1**



### Product **applications**

**The 8000 SAN is suitable for a wide range of applications in many Industry sectors:**

- Food and Beverage
- Water
- Pulp and Paper
- Sanitary
- Hygienic

**The choice of models available ensures that the 8000 SAN is suitable for use in:**

- Corrosive atmospheres
- Resistant to chemical attack

#### **How can we help you?**

Delta Controls' range of reliable pressure and temperature measurement instruments can be customised to meet individual requirements. For technical advice or to discuss your application, please contact us on +44 (0)1252 729 140

## Process Connections Options Overview



Code M milk coupling 1", 1 1/2", 2" (NW25, 40, 50) DIN11851.

Series 8000-SAN-RANGE-M offers a choice of dairy fittings. The 1" (NW25) version has an extra tough diaphragm specially developed for pressure measurement in the food and pharmaceutical industries.

1" (NW25)	Code E, F, G.
1 1/2" & 2" (NW40/50)	Code B, C, D, E, F, G

**NOTE: 2" S.M.S., I.D.F. = APV/RJT fittings are also available.**



Code W Sanitary weld-on nipple 62mm or 85mm O.D.

The ideal connection for level measurement. The nipple is directly welded to the tank, the transmitter being engaged by means of a locking ring. This provides a virtually flush mounted measuring diaphragm.

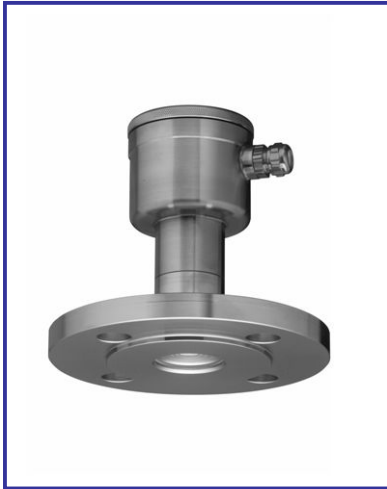
Range / Connection	62 and 85mm
Options	Code B, C, D, E, F, G



Code L Tri-clamp fittings 1", 1 1/2", & 2".

Tri-clamp connections are extensively used in the food and pharmaceutical industries. The transmitter can be supplied with matching clamp ring, seals and mating connector.

Range / Connection	1", 1 1/2"	Code E, F, G
Options	2"	Code B, C, D, E, F, G

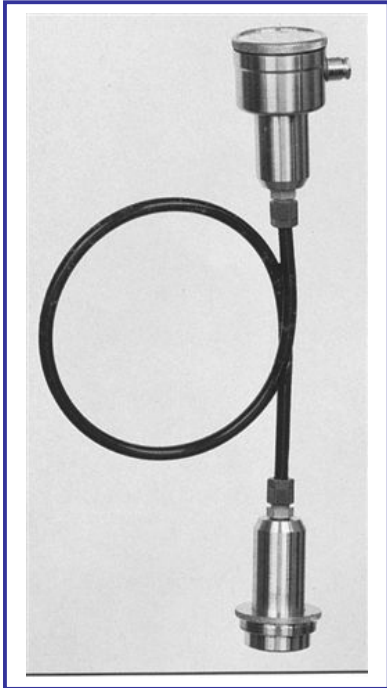


Code F Flange Connection 1 ½", 2" & 3".

This design utilizes the same weld-on fitting as Code W factory welded to the process flange. This allows easy removal of the transmitter.

All standard flanges are available to DIN PN10/16 (NW40/50 & 80) and ANSI 150LB (1 ½", 2" & 3"). Other standards are available to special order.

Range / Connection	1 ½", 2" & 3"
Options	Code B, C, D, E, F, G.



8000 SAN Cable

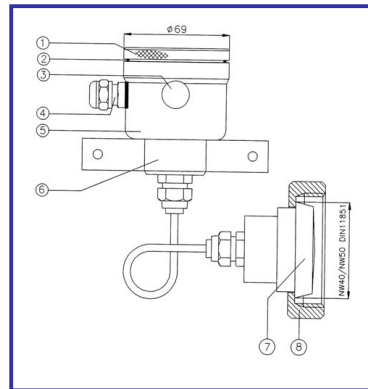
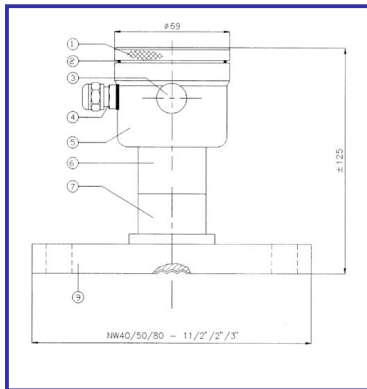
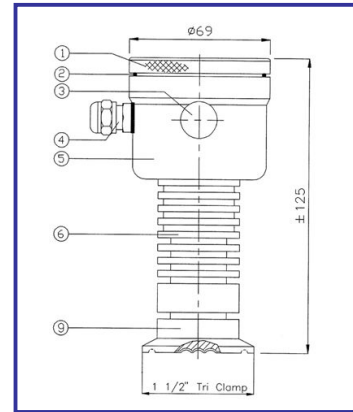
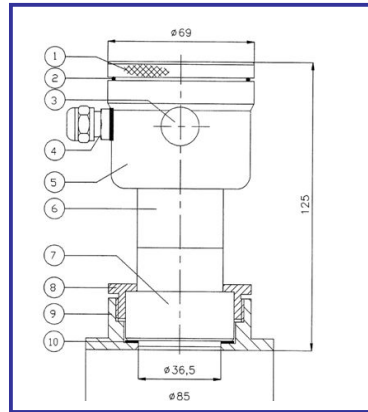
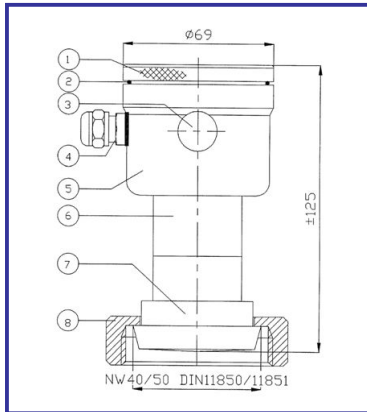
This version offers separate electronics and measuring sensor for applications where remote mounting is desirable, i.e underground storage tanks.

The sensor is fully potted and offers protection against full immersion up to 100 metres depth. For level applications requiring top of tank entry where a rigid sensor mounting is needed a stainless steel interconnecting tube up to max. length of 4 metres can be offered. This is ideal for tanks / vessels with agitators / stirrers which would be unsuitable for cable only mounting.

The 8000 San Cable option is offered for all process connection styles detailed.

Please specify process connections style and range required when ordering.

## Dimensions



### Parts Description:

- |                          |           |
|--------------------------|-----------|
| 1. Cover                 | st st 304 |
| 2. O-ring                | EPDM      |
| 3. Vent                  |           |
| 4. Cable entry           |           |
| 5. Electr. Compartment   | st st 304 |
| 6. Connecting part       | st st 304 |
| 7. Diaphragm ring        | st st 316 |
| 8. Lockring              | st st 304 |
| 9. Weld-on nipple/flange | st st 316 |
| 10. Packing ring         | PTFE      |

## Ordering Code

Model Number	8000 SAN 8000 SAN CABLE +LENGTH	Code	Code	Code	Code
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RANGES, bar	Min. Span	Max. Span	Max. Overpressure	Code
Unless otherwise specified all instruments are despatched with range set to maximum span	0 to 0.08	0 to 0.04	6.4 bar	B
	0 to 0.4	0 to 0.7	6.4 bar	C
	0 to 0.7	0 to 1.5	10.5 bar	D
	0 to 1	0 to 4	16 bar	E
	0 to 2.5	0 to 10	30 bar	F
	0 to 7.5	0 to 16	60 bar	G

Process Connections						Code
Diary fitting to DIN 11851	Size	NW25	NW40	NW50		
	Code	M25	M40	M50		M
Hygenic Weld fitting	Size	Plain 62mm			Flanged 85mm	
	Code	W			W85	W
Tri-clamp Connection	Size	1"	1 1/2"	2"	3"	
	Code	L10	L15	L20	L30	L
ANSI Flange 150#	Size	1"	1 1/2"	2"	3"	
	Code	F10	F15	F20	F30	F
Special	Specify in full					X

OPTIONS	Code
Standard Enclosure	S
Integral Digital Indicator	I

Extras (List in order)	Code
Vacuum Ranges (relative or absolute)	V
Intrinsically Safe	Ex
Electrical Entry to M20	M

## Performance Data

	(Standard)	(Optional)
<b>Measuring Ranges</b>	: 0.08 – 16 Bar G	Vacuum, compound & special high ranges.
<b>Output Signal</b>	: 4 to 20mA proportional to pressure/level 2 wire system	
<b>Power Supply</b>	: 13 to 40V DC at instruments terminals	
<b>Permissible Load</b>	: Up to 2500 ohms at max 40V DC input.	
<b>Electrical Connection</b>	: Standard PG9 or ½" NPT (please specify)	M20
<b>Process Temperature</b>	: Standard –30 to + 100°C (max to 150°C for max 45 mins permissible)	Max working temperature 300°C
<b>Accuracy</b>	: ± 0.2% of adjusted span.	
<b>Ambient Temperature</b>	: -30 to + 70°C	
<b>Temperature Effect</b>	: ±0.015% per 1°C change	
<b>Housing</b>	: Robust st.st 304. Protection to IP65.	Alternative materials.
<b>Wetted parts</b>	: AISI 316 laser welded diaphragm. PTFE seals.	Hastelloy B & C, Ceramic possible.
<b>RFI Effect</b>	: Fitted with RFI filters as standard and in accordance with IEC 801 regulations.	
<b>Span Adjustment</b>	: 4:1	
<b>Zero Adjustment</b>	: ±5%	Extended zero elevations & suppression.
<b>Process Connections</b>	: As pages 2 and 3	Special customised designs

**NOTE:** *Not all optional features are available with every combination of connection and range etc. Please provide full details of operating medium, min. and max. working pressure and temperature to enable our engineers to evaluate your requirements.*

## Indicator Options

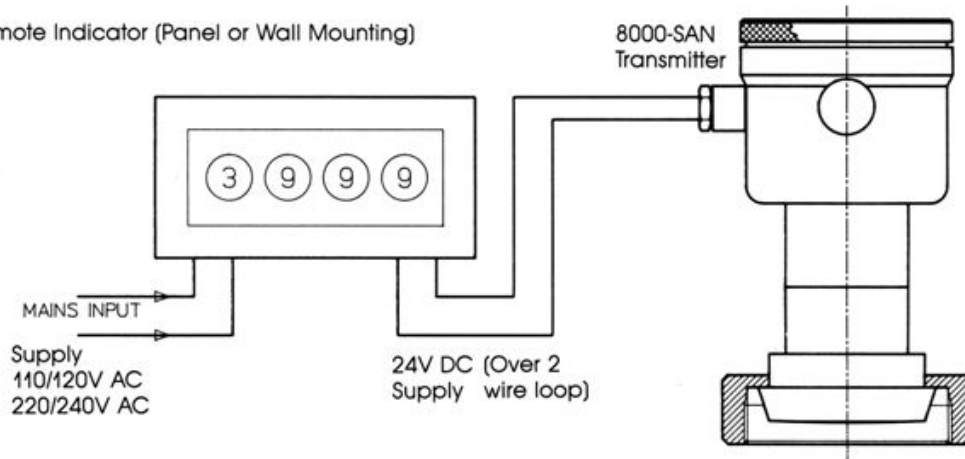
Integral 3 ½ digit LCD indicator

Please state unit of measurement and calibration required when ordering.



(Top View)

Remote Indicator (Panel or Wall Mounting)



Please specify requirements to enable us to offer suitable indicator. Options with alarms and linearization for irregular shaped tank contents measurements are available.

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