



Digital Process Indicator

Series 176

INTRODUCTION:

Digital Process Indicators play an important role in Process Industries. 176 Digital Process Indicators accepts 4-20 mA input. It is a Control Room Instrument and provides Remote Indication of the signal transmitted by SBEM two wire Transmitters such as 103 CLT, 103 HPT, 104 ROF, 104 LOH, 136 ULT, etc.

It is a Microcontroller based programmable Indicator designed for accurate measurement/ control. It has an inbuilt 24 VDC Power Supply that can be used as Transmitter Supply.

SPECIFICATIONS:

- Input: 4 - 20 mA DC
- Optional Relay Output: Upto 4 Nos. Potential free relay contact max upto 2 , rated 5 A
- Optional Current Output: 4 - 20 mA @ 600 E
- Optional MODBUS RTU, RS 232/ RS 485 output.
- Display: 4 Digit, Red LED, 12.5 mm
- Range : Std. - 0 - 100 %
Optional- To be specified by Customer (-1999 to 9999)
- Accuracy: +/- 0.1 % of span, +/- 1 digit
- Power Supply: 110 VAC, +/- 10 %, 50 Hz OR
230 VAC, +/- 10 %, 50 Hz
- Ambient Temperature: 0 to 50° C
- Transmitter Supply: 24 VDC, +/- 0.1 V @ 50 mA
- Dimensions:
Front Fascia (mm) : 96 X 96
Cut out (mm) : 92 X 92
Depth (mm) : 110
- Mounting : Panel Mounting

APPLICATIONS:

176 Digital Process Indicators can be used for remote indication of level ,flow, etc proportional to the signal transmitted by SBEM transmitters mounted in the field such as 103 CLT-Capacitance level Transmitter, 103 HPT- Hydrostatic Pressure Transmitter, 104 ROF -Rate of Flow Indicator Transmitter, 104 LOH -Loss of Head Indicator Transmitter , 136 ULT - Ultrasonic Level Transmitter, etc.



FEATURES:

- Microprocessor based
- Proven trouble-free field performance.
- Highly compact
- Highly accurate
- Dust proof enclosure with epoxy powder coating
- LED display gives better readability at long range
- Fast Response time.
- Designed for 4 - 20 mA input
- User friendly programming
- Wide supply variation
- RS 232 / RS 485 MODBUS RTU protocol - optional
- Immune to mechanical vibrations

ORDER CODE:

176 -

Type:

9 - Single channel Indicator with 4 - 20 mA input
8 - 2 channel Indicator with 4 - 20 mA inputs (differential)

Output:

0 - Not applicable
1 - 4 - 20 mA current O/P
2 - MODBUS RTU RS 232
3 - MODBUS RTU RS 485
4 - 4 - 20 mA Current O/P + MODBUS RTU RS 232
5 - 4 - 20 mA Current O/P + MODBUS RTU RS 485

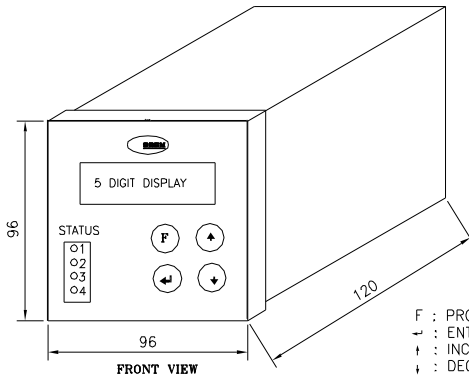
No. Of Set points:

0 - Zero
1 - Two
2 - Four

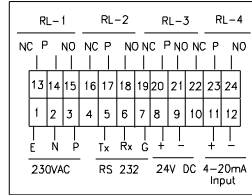
Power Supply:

1 - 110 VAC, 50 Hz
2 - 230 VAC, 50 Hz
3 - 24 VDC

MECHANICAL DIMENSION:



PANEL CUT OUT SIZE : 96 X 96 mm.



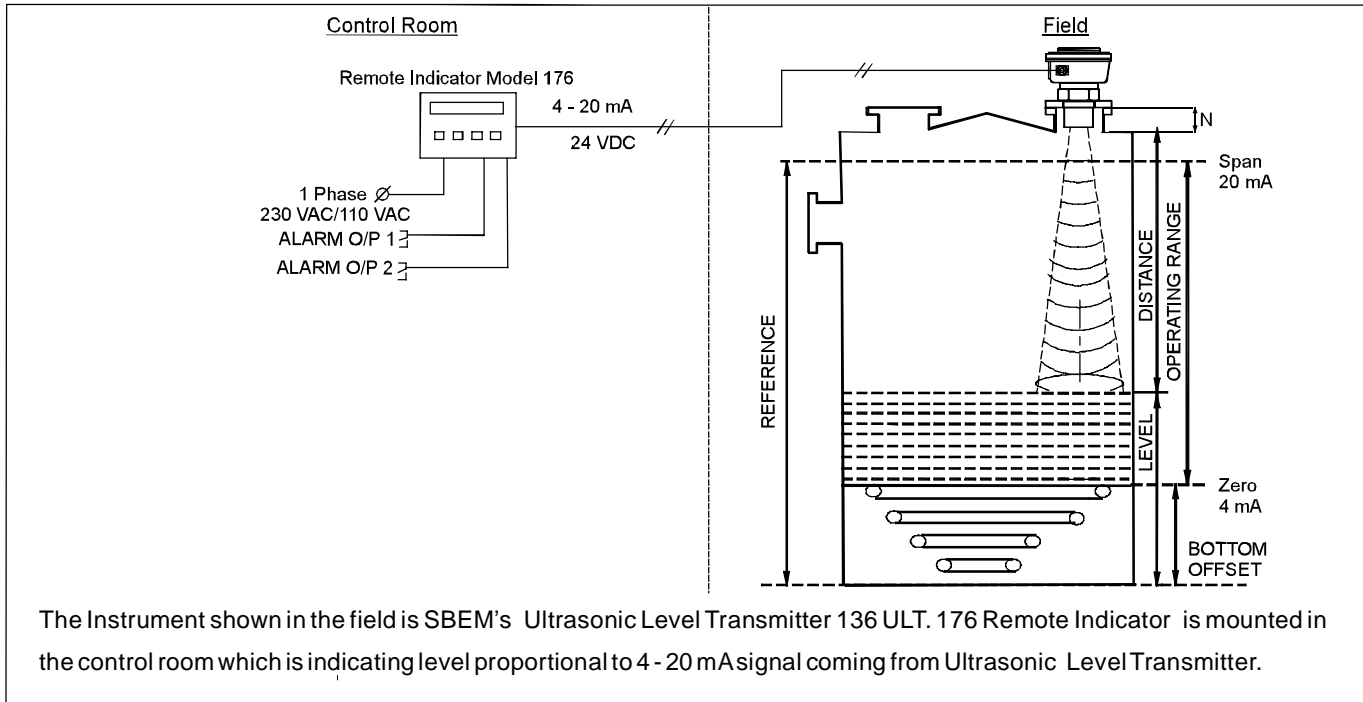
TERMINAL VIEW (BACK SIDE)

F : PROGRAMME KEY
↵ : ENTER KEY
↑ : INCREMENT KEY
↓ : DECREMENT KEY
1-4 : RELAY STATUS LED'S

The Terminal view shown is for Model No. 176 - 9142 i.e., A single channel indicator with 4 - 20 mA input, retransmission current output of 4 - 20 mA, Four C/O relay outputs (Four Set points) and operating on 230 VAC Power Supply.

+ I/P } 4 - 20 mA Input from Transmitter
- I/P }
TX } MODBUS Output
RX }
GND }
24VDC+ } 24VDC Power Supply (Transmitter supply)
24VDC- }
Supply Voltage = 230 VAC

APPLICATION DRAWING (AN EXAMPLE):



Continuous developments may necessitate changes without prior notice

LF-176- 0804 R01 09/2012

LF-DigProcessInd_176



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