11101

Description

The 11 101 is a 4 - 20mA loop powered pressure transmitter capable of measuring gauge pressure for a variety of applications including liquids, gases and vapors. The 11 101s compact size, simplistic installation and economical cost make it an ideal choice for most pressure applications with measurement ranges up to 35 MPa. The 11 101 can be mounted in any orientation and uses a 1/2" NPT or M20 x 1.5 process connection.

Features

- Two-wire, 4-20 mA loop powered transmitter.
- Measure Gauge Pressure for a variety of applications including liquids gases and vapors.
- Pressure ranges from 0-2 Bar (200 KPa) up to 0-350 Bar (35 MPa).
- Based on industry proven silicon sensor with long term stability.
- Accuracy of less then 0.5% of full scale.
- Input power of 24V (+ 10%).
- Low cost and compact design.
- Easy installation.
- No calibration required.
- Configured to customer specifications prior to shipping.

The purpose of this document is assist with the setup, installation, operation and maintenance of the *11 101* as well as providing technical specifications and basic data, for further information about this product can be found at www.springres.com

Table of Contents

1 General Information

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The purpose of this document is to provide an overview of the 11 101 and its various technical specifications.
For more information on the 11 101 and all other Springfield Research products, please visit our web site at www.springres.us.

2 Safety Information

Basic Safety Information

The 11 101 is a continuous pressure transmitter for use in applications within the range of technical specifications
as outlined in the Technical Specifications section of this document. The 11 101 is to be installed and operated by trained personnel with proper authorization. All instructions in this manual should be performed
by such personnel only. The 11 101 is a self contained unit and any internal work on the 11 101 must be performed by Springfield Research and its authorized partners only. Failure to adhere to the instructions
in this manual could result in application specific hazards, and/or equipment damage, and will void the 11 101 warranty. Please adhere to specific governmental and/or company regulations and guidelines
before installing any equipment. When installing the 11 101 in Ex environments, be sure to follow the Ex standard guidelines as well as the Ex specific instructions contained throughout this document.

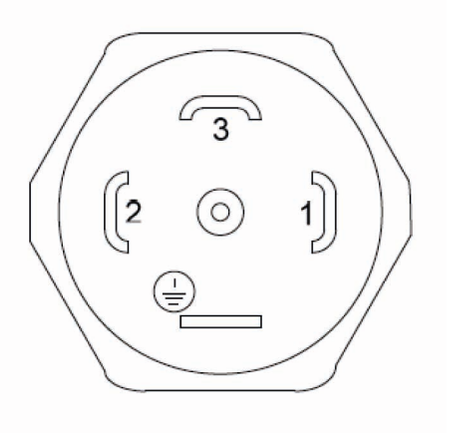
Safety Approvals

The 11 101 meets CE conformity with the following standards:

- EMC (89/336/EWG)
- NSR (73/23/EWG)
- R & TTE guideline (1999/5/EC)
- Namur NE 21 recommendation

3 Connection Information

Figure 1.1 shows the connection descriptions of the 11 101.



Connection	Description
1	Signal +
2	Signal -
3	NC
GND	Chassis Ground

Fig. 1.1 – Connections and description of the 11 101 Top View

The 11 101 may be mounted in any orientation to provide easy installation into any process. It can be ordered to fit an 1/2" NPT or an M20 x 1.5 process connection. Connection of the 11 101 should be as indicated in Fig. 1.2.

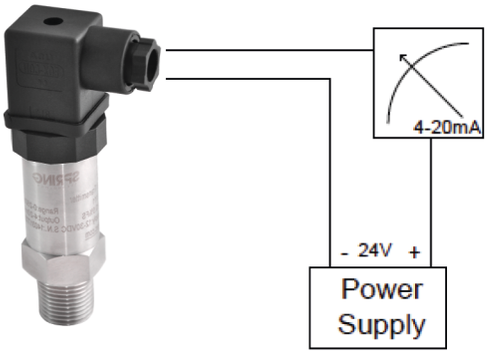


Fig. 1.2 – Wiring Diagram for the 11 101

4 Technical Specifications

Functional Specifications

Output Signal

Two-wire, 4-20 mA

Power Supply

24V +- 10%

Measurement Range

From 0-2 Bar (200 KPa) up to 0-350 Bar (35MPa)

See figure 1.4 for all options

Max Allowed Overpressure

2.5 times full scale

Pressure Form

Gauge Pressure

Hazardous Location

Available both in Explosion proof and

Non Explosion Proof

Mechanical Dimensions

See Fig. 1.3

Temperature Limits

Compensated Temperature:

-10 to 60oC (14 to 140oF)

Working Temperature:

-40 to 80oC (-40 to 176oF)

Humidity Limits

10 to 100% RH

Turn-on Time

Approximately 10mS

Update Time

10mS

Mounting

Available with process connection 1/2" NPT or

M20 x 1.5 (others available on request)

Performance Specifications

Accuracy

0.5% of Full Scale (including linearity,

repeatability and hysterics)

Long Term Stability

+- 0.2% Full Scale per year

Vibration Effect

Meets SAMA PMC 31.1

Electro-Magnetic Interference Effect

Designed to comply with IEC 801

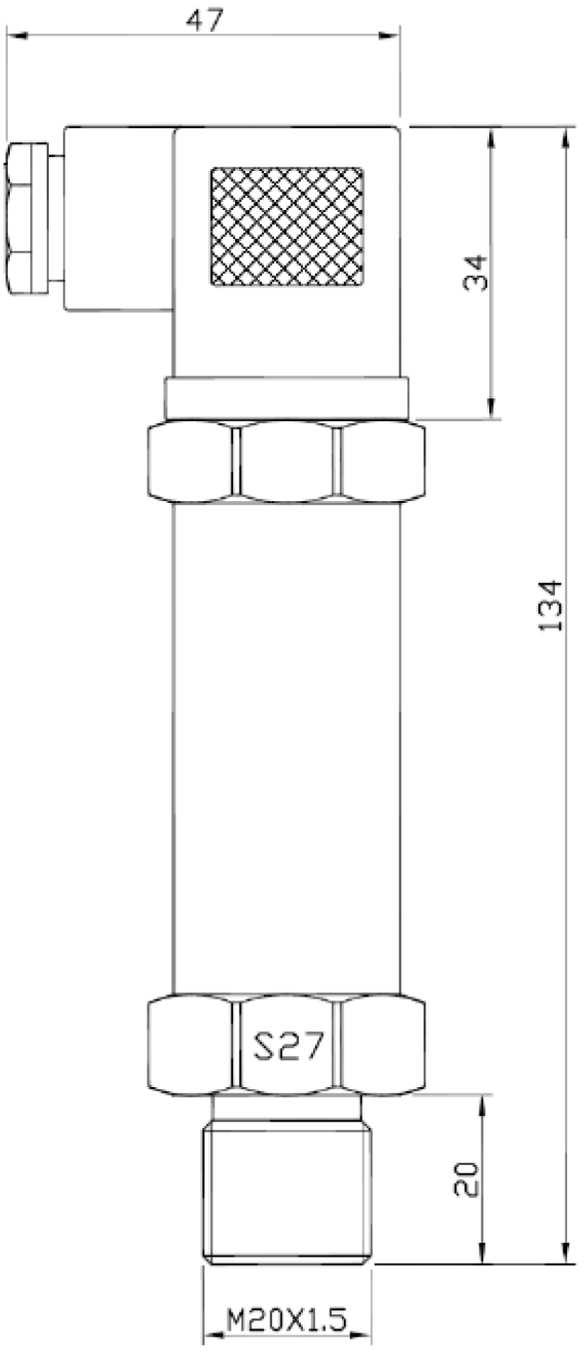
Physical Specifications

Electrical Connection

3 Pin connector accommodates conductors up

to 2.5mm2 (12 AWG)

5 Mechanical Dimensions



Note:
All Units are mm

Fig. 1.3 – Mechanical Dimensions

6 Ordering Information

Output Signal	PRESSURE TRANSMITTER				
:	**CODE**	**MEASUREMENT RANGE**			
:	01	0~2 Bar (0~200 KPa)			
:	02	0~4 Bar (0~400 KPa)			
:	03	0~10 Bar (0~1 MPa)			
:	04	0~35 Bar (0~3.5 MPa)			
:	05	0~60 Bar (0~6 MPa)			
:	06	0~100 Bar (0~10 MPa)			
:	07	0~160 Bar (0~16 MPa)			
:	08	0~250 Bar (0~25 MPa)			
:	09	0~350 Bar (0~35 MPa)			
:	10	Others On Request			
:	:	**CODE**	**Process Connection**		
:	:	01	M20 x 1.5		
:	:	02	1.2" NPT		
:	:	03	G 1/4"		
:	:	04	G 1/2"		
:	:	05	Others On Request		
:	:		**CODE**	**Explosion Proofing**	
:	:	:	O	Non-Anti-Explosion	
:	:	:	E	Anti-Explosion	
:	:	:	:	**CODE**	**Explosion Proofing**
:	:	:	:	A	Shielded PVC Cable
:	:	:	:	B	3-pin Connector
:	:	:	:	C	Hirschmann Connector
:	:	:	:	:	:
11 101	1	1	E	B	*indicates factory default

Fig. 1.4 – 11101 Ordering Codes

Datasheet
11 101
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