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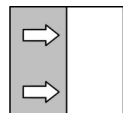


Operating manual

ME12 ... R/S

Remotely configurable digital pressure transducer
for use in explosive areas

Gas explosion protection Zone 2
Dust explosion zone 22



Masthead

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Subject to technical amendments.



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Version history

Rev. ST4-A 09/15	Version 1 (first edition)
Rev. ST4-B 07/18	Version 2 (new ATEX classification)
Rev. ST4-C 12/18	Version 3 (correction accessories, connection cables)
Rev. ST4-D 04/22	Version 4 (UKCA Declaration of conformity)
Rev. ST4-E 10/22	Version 5 (field housing omitted)

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1 Safety guidelines

1.1 General

This operating manual contains basic instructions for the installation, operation and maintenance of the device that must be followed without fail. It must be read by the installer, the operator and the responsible specialist personnel before installing and commissioning the device.

This operating manual is an integral part of the product and therefore needs to be kept close to the instrument in a place that is accessible at all times to the responsible personnel.

The following sections, in particular instructions about the assembly, commissioning and maintenance, contain important information, non-observance of which could pose a threat to humans, animals, the environment and property.

The instrument described in these operating instructions is designed and manufactured in line with the state of the art and good engineering practice.

1.2 Personnel Qualification

The instrument may only be installed and commissioned by specialized personnel familiar with the installation, commissioning and operation of this product.

Specialized personnel are persons who can assess the work they have been assigned and recognize potential dangers by virtue of their specialized training, their skills and experience and their knowledge of the pertinent standards.

For explosion-proof models the specialized personnel must have received special training or instruction or be authorized to work with explosion-proof instruments in explosion hazard areas.

1.3 Risks due to Non-Observance of Safety Instructions

Non-observance of these safety instructions, the intended use of the device or the limit values given in the technical specifications can be hazardous or cause harm to persons, the environment or the plant itself.

The supplier of the equipment will not be liable for damage claims if this should happen.

1.4 Safety Instructions for the Operating Company and the Operator

The safety instructions governing correct operation of the instrument must be observed. The operating company must make them available to the installation, maintenance, inspection and operating personnel.

Dangers arising from electrical components, energy discharged by the medium, escaping medium and incorrect installation of the device must be eliminated. See the information in the applicable national and international regulations.

Please observe the information about certification and approvals in the Technical Data section.

The instrument must be decommissioned and secured against inadvertent re-operation if a situation arises in which it must be assumed that safe operation is no longer possible. Reasons for this assumption could be:

- evident damage to the instrument
- failure of the electrical circuits
- longer storage outside the approved temperature range.
- considerable strain due to transport

Repairs may be carried out by the manufacturer only.

A professional single conformity inspection as per DIN EN 61010, section 1, must be carried out before the instrument can be re-commissioned. This inspection must be performed at the manufacturer's location. Correct transport and storage of the instrument are required.

1.5 Unauthorised Modification

Modifications of or other technical alterations to the instrument by the customer are not permitted. This also applies to replacement parts. Only the manufacturer is authorised to make any modifications or changes.

1.6 Inadmissible Modes of Operation

The operational safety of this instrument can only be guaranteed if it is used as intended. The instrument model must be suitable for the medium used in the system. The limit values given in the technical data may not be exceeded.

The manufacturer is not liable for damage resulting from improper or incorrect use.

1.7 Safe working practices for maintenance and installation work

The safety instructions given in this operating manual, any nationally applicable regulations on accident prevention and any of the operating company's internal work, operating and safety guidelines must be observed.

The operating company is responsible for ensuring that all required maintenance, inspection and installation work is carried out by qualified specialized personnel.

1.8 Pictogram explanation



DANGER

Type and source of danger

This indicates a **direct** dangerous situation that could lead to death or **serious injury** (highest danger level).

1. Avoid danger by observing the valid safety regulations.



WARNING

Type and source of danger

This indicates a **potentially** dangerous situation that could lead to death or **serious injury** (medium danger level).

1. Avoid danger by observing the valid safety regulations.



CAUTION

Type and source of danger

This indicates a **potentially** dangerous situation that could lead to slight or serious injury, damage or **environmental pollution** (low danger level).

1. Avoid danger by observing the valid safety regulations.



NOTICE

Note / advice

This indicates useful information of advice for efficient and smooth operation.

2 Product and functional description

2.1 Product overview

The following provide an overview of the possible connectors and process connections. The code stated corresponds to the respective code in the order code.

Electrical plug

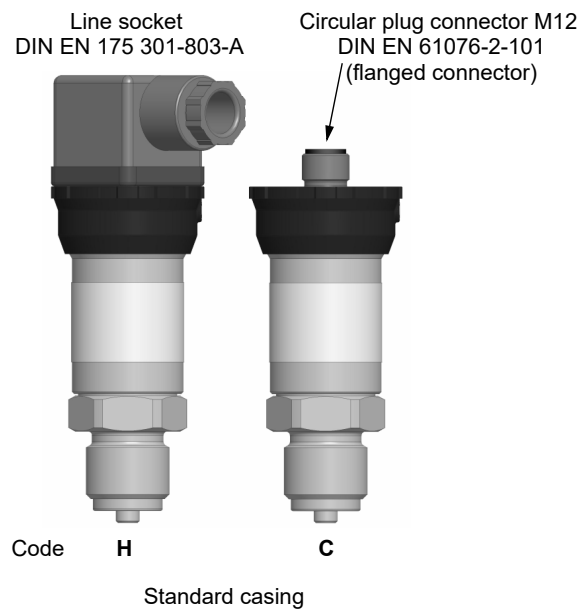
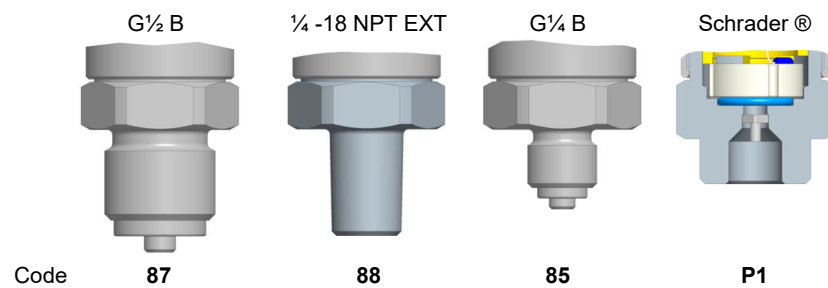


Fig. 1: Electrical plug

Process connections



Near flush-mounted front sensor

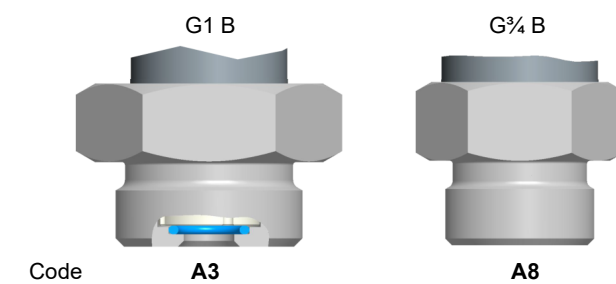


Fig. 2: Process connections

2.1.1 Type plate

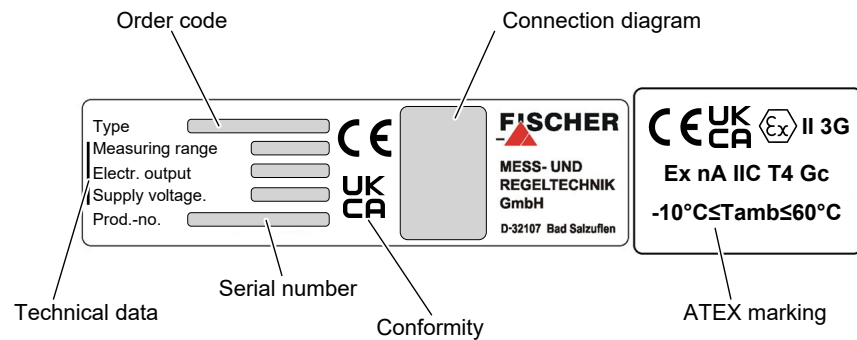


Fig. 3: Type plate

2.2 Use as intended

The ME12 is a pressure transmitter with a ceramic measuring cell for over-pressure and under-pressure and can be used for both relative and also absolute pressure measurements. The pressure transmitter can be used with non-aggressive liquid and gaseous media. Please see the technical data for the respective measuring ranges.



NOTICE

Soiled or aggressive media

Please contact the manufacturer before using this unit with dirty or aggressive media because the unit needs to be adapted for the specific customer in terms of the parts that come into contact with the media.

The device may only be used for the purpose stipulated by the manufacturer.

ATEX classification

Zone 22

ME12 pressure transmitters are suitable for use as 'Electrical equipment for use in areas with combustible dust', zone 22 - dry dust.

The units are identified with

CE UKCA Ex II 3D Ex tc IIIB T125°C Dc

Zone 2

ME12 pressure transmitters are suitable for use as 'Electrical equipment for use in areas with combustible gases', zone 2.

The units are identified with

CE UKCA Ex II 3G Ex nA IIC T4 Gc

2.3 Function diagram

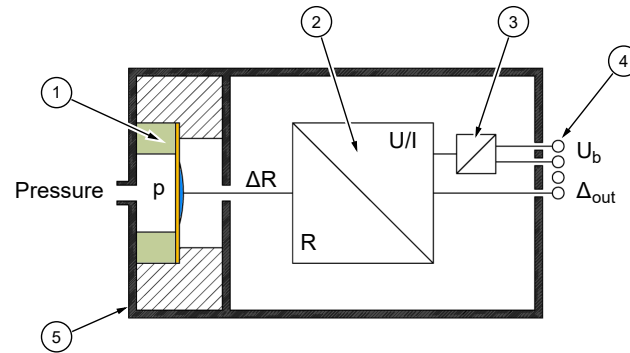


Fig. 4: Function diagram

1	Ceramic sensor	2	Electronics
3	Auxiliary energy	4	Electrical connection
5	Process connection		

2.4 Design and mode of operation

The pressure sensor works on the thick layer technology DMS principle. The measured pressure acts directly onto a ceramic membrane that deforms when under pressure. This changes the resistance of the attached DMS bridge. Electronics integrated into the device convert this bridge signal into an electronic output signal.

Every pressure transmitter is programmed according to the code in the order code on delivery. Also, the electrical connections can be used to configure the pressure transmitter, adapting it ideally to suit the process conditions. You will need a Transmitter PC Interface available as an accessory.

3 Installation and assembly

3.1 Generalities

The instrument may only be installed and commissioned by specialized personnel familiar with the installation, commissioning and operation of this product.

Specialized personnel are persons who can assess the work they have been assigned and recognize potential dangers by virtue of their specialized training, their skills and experience and their knowledge of the pertinent standards.



WARNING

Mounting pressure transmitters

During assembly, observe the respective national and international guidelines and safety regulations.

Only mount the unit to systems that are depressurized. Only ever operate the unit within the permitted measuring range or below the maximum overload.

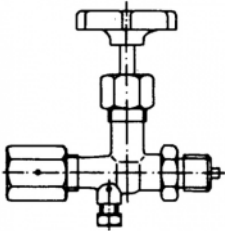


Fig. 5: Shutoff valve.

The device is set ex-works for vertical installation, however any installation position is possible.

To guarantee safe working conditions during installation and maintenance, suitable stop valves must be fitted in the system (see accessories). By means of the manometer shutoff, the unit

- Can be depressurized or taken out of operation.
- Be disconnected from the power supply within the applicable system for repairs or inspections.

3.2 Process connection

- By authorized and qualified specialized personnel only.
- The pipes need to be depressurized when the instrument is being connected.
- Appropriate steps must be taken to protect the device from pressure surges.
- Check that the device is suitable for the medium being measured.
- Maximum pressures must be observed (cf. Tech. data)



WARNING

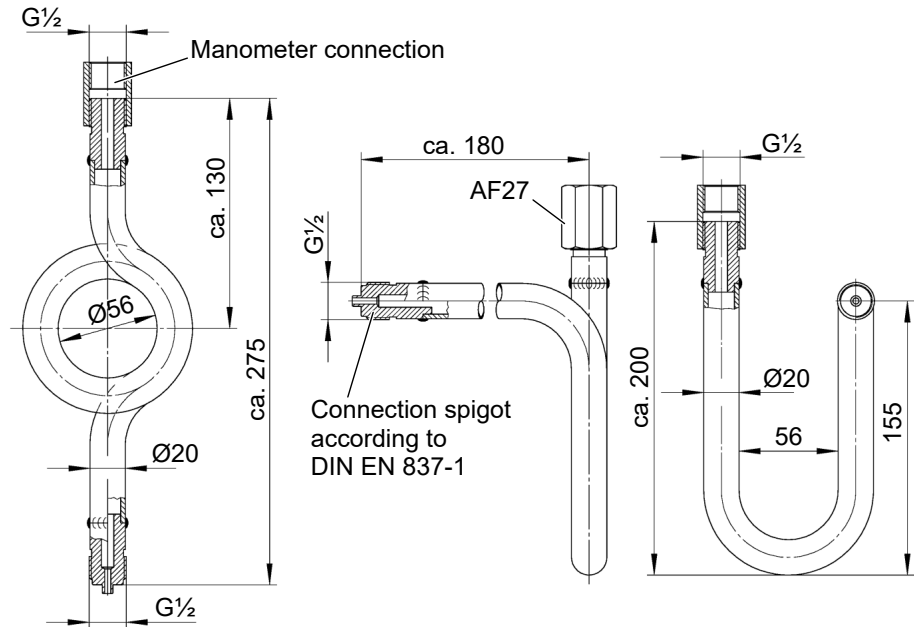
Earth connection via the system earth

During assembly, ensure that the earth connection between the unit and the system earth is ensured. The connection to the system earth is realised via the process connection. Therefore, never use an insulated Teflon tape or similar. Design the process connection acc. to EN 837 and use a suitable flat seal.

3.2.1 Measuring lines that need to be connected

The following points need to be observed when connecting the pressure line:

- To ensure there is no influence on the measured values, severe bends and coils in the wire should be avoided.
- To prevent deposits, there should be a continuous incline or drop of at least 8%.
- When measuring steam pressure, a water bag-forming loop must be provided due to the temperature (see accessories).



Round shape

U-shape

Fig. 6: Siphon MZ1###

- The transmitter must be positioned below the measuring point for liquid measurements. Vent the pressure line before commissioning.
- The transmitter must be positioned above the measuring point for gas measurements.

3.2.2 Pressure surge absorption

Pulsating pressure on the system side can lead to functional problems. We recommend installing a damping element in the pressure connection lines as a protective measure.

a) Capillary throttle

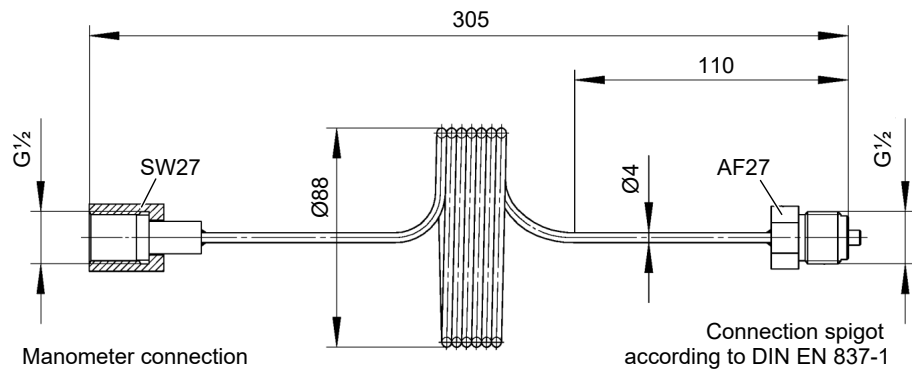


Fig. 7: Capillary throttle MZ400#

b) Settable damping reactor

In operating mode, the damping throttle must be set so that the output signal follows the pressure changes with a delay.

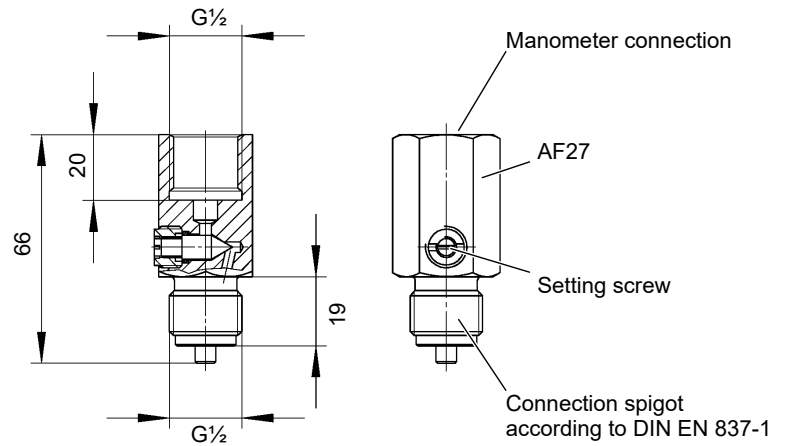


Fig. 8: Damping reactor MZ410#

3.3 Electrical connections

- By authorized and qualified specialized personnel only.
- When connecting the unit, the national and international electro-technical regulations must be observed.
- Disconnect the system from the mains, before electrically connecting the device.
- Install the consumer-adapted fuses.
- Do not connect the connector if strained.



⚠ WARNING

Operation in areas at risk of explosion

If operated in explosive areas, the electrical data of the unit and the valid local regulations and guidelines for the installation and operation of electrical systems in explosive areas must be observed. (e.g. DIN EN 60079)

2-wire connection

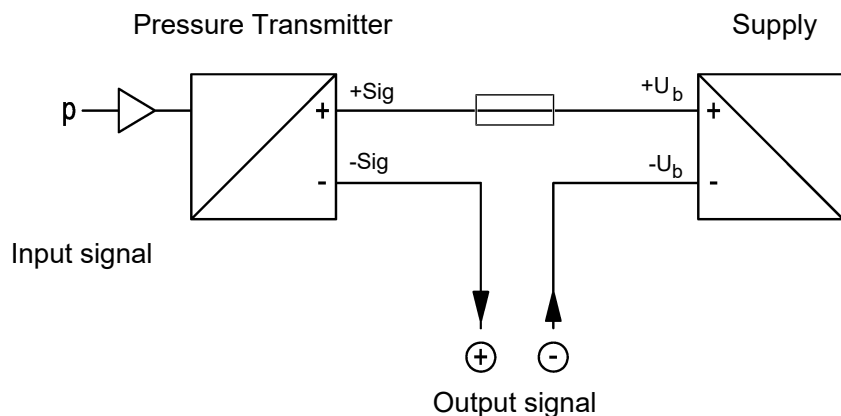


Fig. 9: 2-wire Circuitry

3.3.1 Standardised plug DIN EN 175 301-803-A

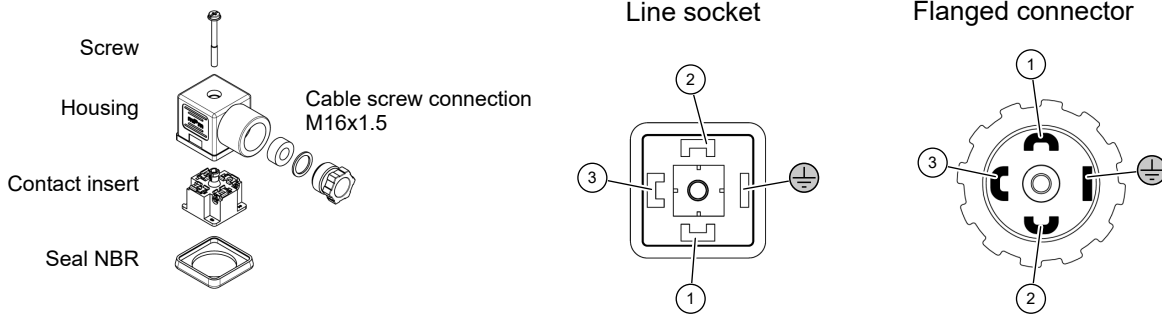


Fig. 10: Line socket DIN EN 175 301-803-A

Ter- minal	Signal name	DC	Cable colour
1	Supply /Output	+U _b	+Sig red
2	Supply /Output	-U _b	-Sig blue
3	n.c.		
⊕	n.c.		

Table 1: 2-wire connection 4 ... 20 mA

The earth connection in the standardized plug is not connected.

3.3.2 M12 flanged connector DIN EN 61076-2-101

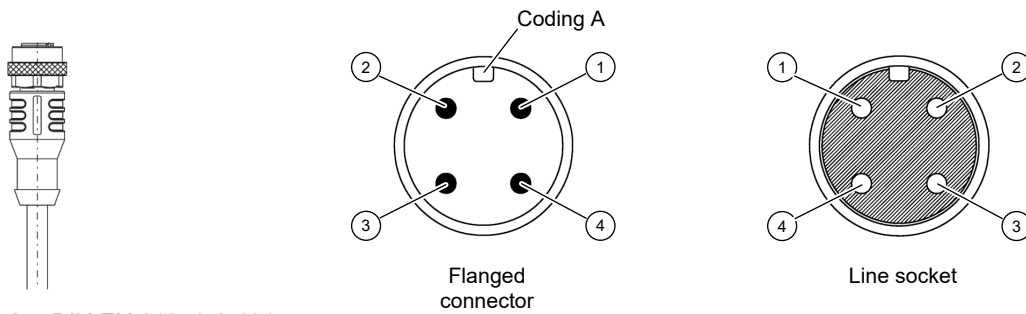


Fig. 11: M12 plug DIN EN 61076-2-101

Pin	Signal name	DC	Cable colour
1	Supply /Output	+U _b	+Sig brown
2	n.c.		
3	Supply /Output	-U _b	-Sig blue
4	n.c.		

Table 2: 2-wire connection 4 ... 20 mA

3.4 Commissioning

All electrical supply, operating and measuring lines and the pressure connections must have been correctly installed before commissioning. All supply lines are arranged so that there are no mechanical forces acting on the device.

- If liquid measuring media are used the pressure connection lines must be vented, as liquid columns of different heights in the pipes can cause measuring errors. The instrument must be protected against frost, if water is used as a measuring medium.
- Appropriate shutoff valves must be provided to ensure safety during installation, maintenance and inspection

3.5 Servicing

3.5.1 Maintenance

The instrument is maintenance-free. We recommend the following regular inspection to guarantee reliable operation and a long service life:

- Check the function in combination with downstream components.
- Check the leak-tightness of the pressure connection lines.
- Check the electrical connections.

The exact test cycles need to be adapted to the operating and environmental conditions. In combination with other devices, the operating instructions for the other devices also need to be observed.

3.5.2 Transport

The measuring device must be protected against impacts. It should be transported in the original packaging or a suitable transport container.

3.5.3 Service

All defective or faulty devices should be sent directly to our repair department. Please coordinate all shipments with our sales department.



WARNING

Process media residues

Process media residues in and on dismantled devices can be a hazard to people, animals and the environment. Take adequate preventive measures. If required, the devices must be cleaned thoroughly.

Return the device in the original packaging or a suitable transport container.

3.5.4 Accessories

- Prefabricated M12 connection lines (see Order Codes).
- Siphons MZ1###
- Capillary throttle coil MZ400#
- Settable damping reactor MZ410#
- Manometer shutoff valves MZ5###, MZ6###

Please see here the data sheet MZ measuring devices accessories. Here you will find more detailed information about the technical data and the order codes of the accessory parts MZ.

3.5.5 Disposal

Please help to protect the environment by always disposing of the work pieces and packaging materials in compliance with the valid national waste and recycling guidelines or reuse them.

4 Technical data

4.1 Generalities

Reference conditions (acc. to IEC 61298-1)		
Temperature error	+15 ... +25 °C	
Relative humidity	45 ... 75 %	
Air pressure	86 ... 106 kPa	860 ... 1060 mbar
Auxiliary energy	24 V DC	
Installation position	User-defined	

4.2 Input variables

Messgröße

Pressure in non-aggressive liquid and gaseous media.

Relative pressure

Measuring		Pressure safety		Characteristic curve deviation
<i>[bar]</i>	<i>[kPa]</i>	<i>Overpressure</i>	<i>Bursting pressure</i>	<i>Option</i>
0 ... +0.6	0 ... 60	4 bar	7 bar	---
0 ... +1	0 ... 100	4 bar	7 bar	0.5%FS
0 ... +1,6	0 ... 160	4 bar	7 bar	0.5%FS
0 ... +2.5	0 ... 250	10 bar	15 bar	0.5%FS
0 ... +4	0 ... 400	10 bar	15 bar	0.5%FS
0 ... +6	0 ... 600	20 bar	35 bar	0.5%FS
0 ... +10	0 ... 1000	40 bar	70 bar	0.5%FS
0 ... +16	0 ... 1600	40 bar	70 bar	0.5%FS
0 ... +25	0 ... 2500	100 bar	150 bar	---
0 ... +40	0 ... 4000	100 bar	150 bar	---
0 ... +60	0 ... 6000	200 bar	250 bar	---

Absolutdruck

Measuring		Pressure safety		Characteristic curve deviation
<i>[bar]</i>	<i>[kPa]</i>	<i>Overpressure</i>	<i>Bursting pressure</i>	<i>Option</i>
0 ... +1	0 ... 100	4 bar	7 bar	0.5%FS
0 ... +1.6	0 ... 160	4 bar	7 bar	0.5%FS
0 ... +2.5	0 ... 250	10 bar	15 bar	0.5%FS
0 ... +4	0 ... 400	10 bar	15 bar	0.5%FS
0 ... +6	0 ... 600	10 bar	15 bar	0.5%FS
0 ... +10	0 ... 1000	20 bar	35 bar	0.5%FS
0 ... +16	0 ... 1600	20 bar	35 bar	0.5%FS

**Vakuum und
± Messurige**

Measuring		Pressure safety		Characteristic curve deviation
[bar]	[kPa]	Overpressure	Bursting pressure	Option
0 ... -1	0 ... -100	4 bar	7 bar	---
-1 ... 0	-100 ... 0	4 bar	7 bar	---
-1 ... +0.6	-100 ... +60	4 bar	7 bar	---
-1 ... +1.5	-100 ... +150	4 bar	7 bar	---
-1 ... +3	-100 ... +300	10 bar	15 bar	---
-1 ... +5	-100 ... +500	20 bar	35 bar	---
-1 ... +9	-100 ... +900	40 bar	70 bar	---
-1 ... +15	-100 ... +1500	40 bar	70 bar	---
-1 ... +24	-100 ... +2400	100 bar	150 bar	---

4.3 Output parameters

2-Conductor	
Output range	4 ... 20 mA
Limits	ca. 26 mA
Apparent ohmic resistance	$(U_b - 6V)/0.02A$

4.4 Measurement accuracy

Non-linearity	Maximum	0.5 % FS
	Typical	0.2 % FS
Hysteresis	Maximum	0.5 % FS
	Typical	0.2 % FS
Characteristic curve deviation ²⁾	Standard	1.0 %
	Option ¹⁾	0.5 %
Temperature drift	Zero point	0.07 % FS/K
	Measuring range	0.05 % FS/K

¹⁾ only possible for certain measuring ranges

²⁾ incl. non-linearity and hysteresis

4.5 Auxiliary energy

2-Conductor	
Rated Voltage	24 V DC
Admissible operating voltage	6 ... 30 V DC
Power consumption	≤ 1 W

4.6 Application conditions

Ambient temperature range	-10 °C ... +70 °C
Storage temperature range	-20 °C ... +85 °C
Medium temperature range	-10 °C ... +85 °C
ATEX	EN 60079-0:2012 + A11:2013 EN 60079-15:2010 EN 60079-31:2014
EMV	EN 61326-1:2013 EN 61326-2-3:2013
RoHS	EN IEC 63000:2018
Protection type	IP 65 acc. to EN 60529

Materials of the parts that come into contact with the surroundings

Housing	CrNi Steel 1.4305
Device plug screw lid	Polypropylene, black
Device plug	Polyamide, brass, zinc
Cable socket	Polyamide, polycarbonate, brass, zinc

Materials of the parts that come into contact with the measuring medium

Process connection	CrNi Steel 1.4404
Sensor membrane	Ceramic Al ₂ O ₃
Seal ¹⁾	FKM Fluorinated rubber, Viton®
	CR Chloroprene rubber, Neopren®
	EPDM Ethylene propylene diene rubber
	H-NBR Hydrogenated acrylonitrile butadiene rubber
	FFPM Perfluorinated rubber, Kalrez®

¹⁾ see order code

4.7 Parameters

The ME12 pressure transmitter is fully configured on delivery, however it can also be remotely configured on site. A PC, an interface, which is available as an accessory and the PC software [transmitter programmer](#) are required for configuration.

The EU13 with a USB interface is used for pressure transmitters with 2-line connections.

The following parameters can be set

Characteristic curve	Increasing / decreasing
Attenuation	0 ... 200 s
Offset correction	±25 %FS
Margin correction	±25 %FS

Signal limits	Current output (settable)
Upper limit	3.5 ... 22.5 mA
Lower limit	3.5 ... 22.5 mA
Error signal	3.5 ... 22.5 mA

4.8 Construction design

4.8.1 Dimensional picture

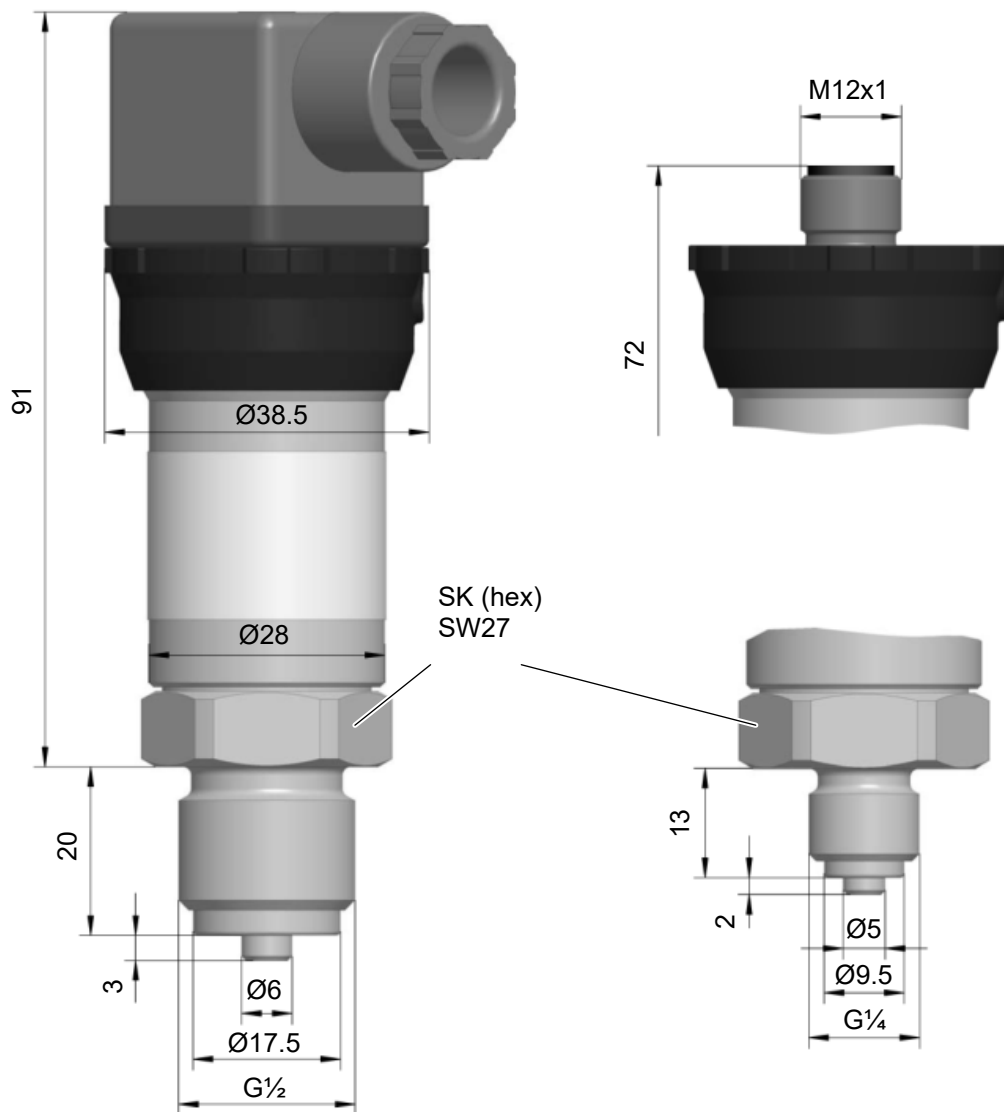


Fig. 12: Standard casing dimensional drawing

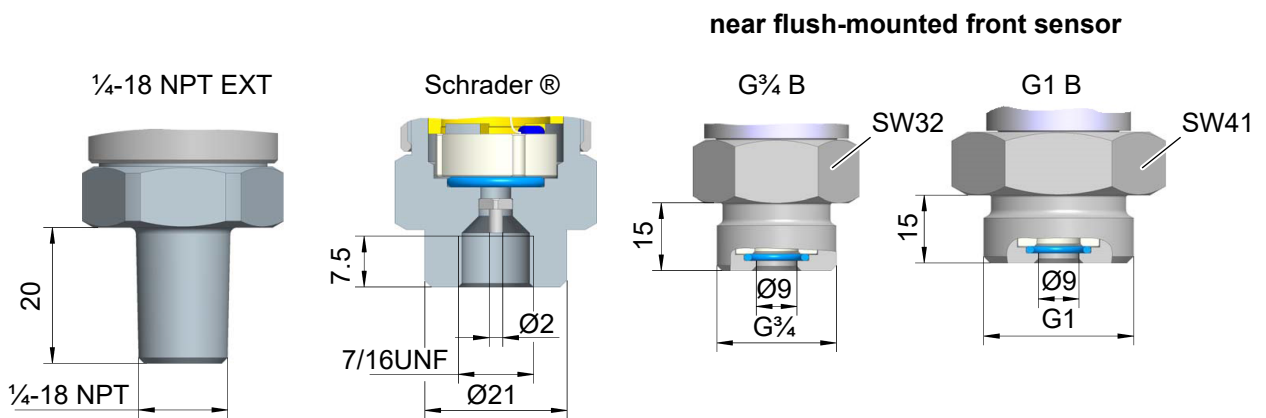


Fig. 13: Process connections dimensional drawing

4.8.2 Process connection

Port		Material
G $\frac{1}{2}$ B	Connection shanks with external thread	1.4404
G $\frac{1}{4}$ B	Connection shanks with external thread	1.4404
$\frac{1}{4}$ -18 NPT EXT	Connection shanks with external thread	1.4404
7/16 UNF	Connection with inner thread for the Schrader®- screw connection >	1.4404
G $\frac{3}{4}$ B	Connection shanks with external thread near flush-mounted front sensor	1.4404
G1 B	Connection shanks with external thread near flush-mounted front sensor	1.4404

4.8.3 Electrical connection

Unit connector and cable socket DIN EN 175 301-803 Form A, 4 pin

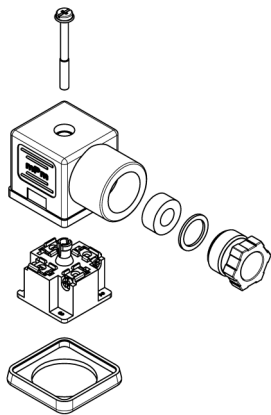
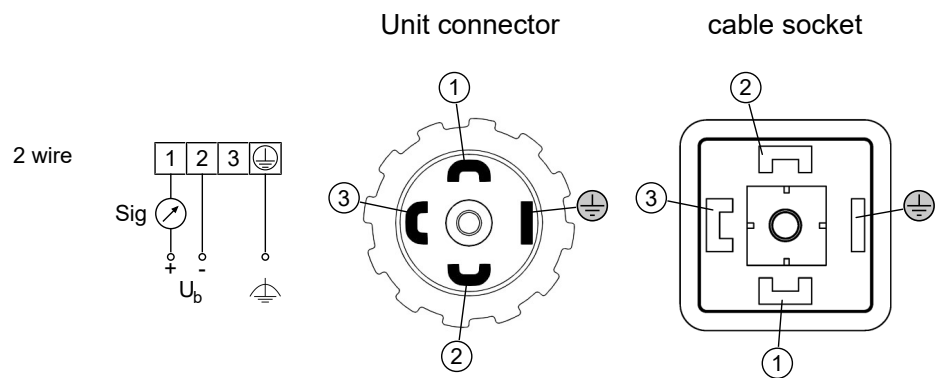


Fig. 14: Cable socket DIN EN 175 301-803A



M12 flanged connector DIN EN 61076-2-101 coding A, 5 pin

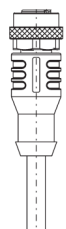
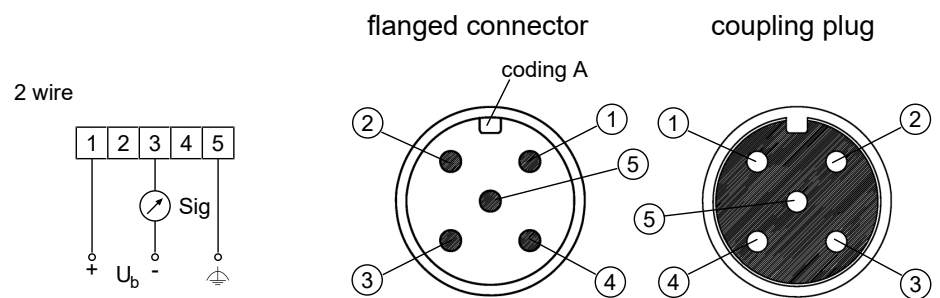
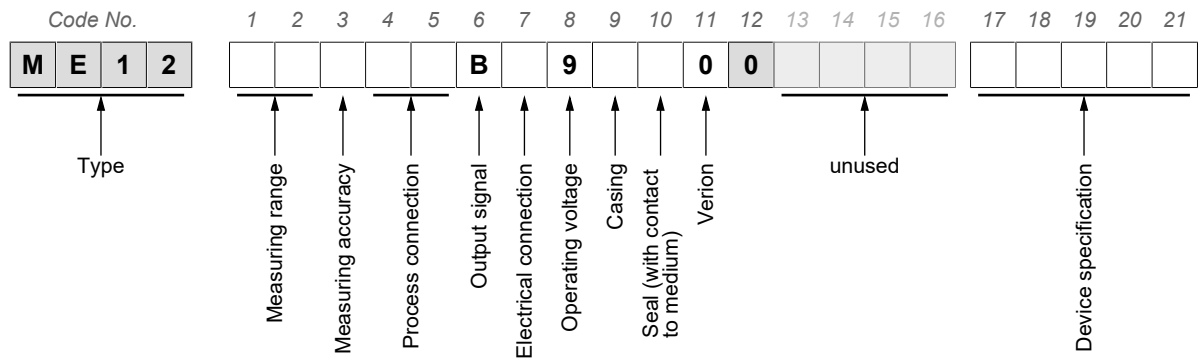


Fig. 15: M12 coupling plug DIN EN 61076-2-101



5 Order Codes



[1,2]	Measuring range	[1,2]	Messbereich	Abs.	Rel.
01	0...0.6 bar	F1	0 ... 60 kPa		•
02	0...1 bar	F2	0 ... 100 kPa	•	•
03	0...1.6 bar	F3	0 ... 160 kPa	•	•
04	0...2.5 bar	F4	0 ... 250 kPa	•	•
05	0...4 bar	F5	0 ... 400 kPa	•	•
06	0...6 bar	F6	0 ... 600 kPa	•	•
07	0...10 bar	F7	0 ... 1000 kPa	•	•
08	0...16 bar	F8	0 ... 1600 kPa	•	•
09	0...25 bar	G1	0 ... 2500 kPa		•
10	0...40 bar	G2	0 ... 4000 kPa		•
11	0...60 bar	G3	0 ... 6000 kPa		•
31	-1...0 bar				•
32	-1...0.6 bar				•
33	-1...1.5 bar				•
34	-1...3 bar				•
35	-1...5 bar				•
36	-1...9 bar				•
37	-1...15 bar				•
38	-1...24 bar				•
39	0...-1 bar				•

Abs. = Absolute pressure measurement

Rel. = relative pressure measurement.

[3]	Measurement accuracy
M	1.0 % Characteristic curve deviation during relative pressure measurement
0	0.5 % Characteristic curve deviation during relative pressure measurement
S	1.0 % characteristic curve deviation for absolute pressure measurement
T	0.5 % characteristic curve deviation for absolute pressure measurement

[4.5] Process connection		Material
85	Connection shanks with external thread G $\frac{1}{4}$ B	1.4404
87	Connection shanks with external thread G $\frac{1}{2}$ B	
88	Connecting port with outer thread $\frac{1}{4}$ -18 NPT EXT	
P1	Schrader® screw connection inner thread 7/16 UNF	
A3	Near flush-mounted front sensor outer thread G1 B	
A8	Near flush-mounted front sensor outer thread G $\frac{3}{4}$ B	
[6] Output signal		
B	4 ... 20 mA	2-wire version
[7] Electrical connection		
H	Cable socket DIN EN 175 301-803	
M	M12 coupling device DIN EN 61076-2-101	
[8] Operating voltage		
9	24 V DC	2-wire version
[9] Casing		Protection class (DIN EN 60 529)
0	Standard casing	IP65
V	Standard casing, cast version	
[10] Seal (with contact to medium)		
V	FKM	Fluororubber, Viton®
C	CR	Chloroprene rubber (Neopren®)
E	EPDM	Ethylene propylene diene rubber
H	H-NBR	Hydrogenated acrylonitrile butadiene rubber
K	FFPM	Perfluorinated rubber (Kalrez®)
[11] Version		
0	Standard	
[17] Device specification		
S	Dust explosion protection Zone 22; dry dusts	
R	Gas explosion protection zone 2, flammable gases	
[18 ... 21] Device specification		
####	Ser. no. (Customer-specific model)	

5.1 Accessories

Order no.	Planned measures	No. of Poles	Length
06401993	PUR cable with M12-coupling	4-pin	2m
06401994	PUR cable with M12-coupling	4-pin	5m
06401563	PUR cable with M12-coupling	4-pin	7m
06401572	PUR cable with M12-coupling	4-pin	10m
MZ1###	Siphons		
MZ400#	Capillary throttle coil		
MZ410#	Settable damping reactor		
MZ5###	Manometer shutoff valve acc. to DIN 16270/16271		
MZ6###	Manometer shutoff valve acc. to DIN 16272		
EU03	3-wire transmitter PC Interface incl. PC software		
EU13	2-wire transmitter PC Interface incl. PC software		

A data sheet is available on our website www.fischermesstechnik.de or on request.



(Translation)

EU Declaration of Conformity

For the product described as follows

Product designation **Pressure transmitter**

Type designation **ME12 ... R/S**

it is hereby declared that it corresponds with the basic requirements specified in the following designated directives:

2014/30/EU	EMC Directive
2014/34/EU	ATEX Directive
2011/65/EU	RoHS Directive
(EU) 2015/863	Delegated Directive amending Annex II to Directive 2011/65/EU

The products were tested in compliance with the following standards.

Electromagnetic compatibility (EMC)

DIN EN 61326-1:2013-07 EN 61326-1:2013	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements
DIN EN 61326-2-3:2013-07 EN 61326-2-3:2013	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-3: Particular requirements - Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning

Explosive atmospheres (ATEX)

DIN EN IEC 60079-0:2019-09 EN IEC 60079-0:2018 Correction 1 IEC 60079-0:2017/COR1:2020	Explosive atmospheres - Part 0: Equipment - General requirements
DIN EN 60079-15:2011-02 EN 60079-15:2010	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
DIN EN 60079-31:2014-12 EN 60079-31:2014	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

RoHS Directive (RoHS3)

DIN EN IEC 63000:2019-05 EN IEC 63000:2018	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
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Also they were subjected to the conformity assessment procedure „Internal production control“.

Sole responsibility for the issue of this declaration of conformity in relation to fulfilment of the fundamental requirements and the production of the technical documents is with the manufacturer.

Manufacturer **FISCHER Mess- und Regeltechnik GmbH**
Bielefelder Str. 37a
32107 Bad Salzufflen, Germany
Tel. +49 (0)5222 974 0

Documentation representative Torsten Malischewski
General Manager R&D

The devices are marked with: II 3G Ex nA IIC T4 Gc **Zone 2**
 II 3D Ex tc IIIB T125°C Dc **Zone 22**

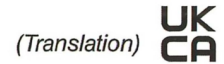
Bad Salzufflen
29 March 2022 G. Gödde
Managing director

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Fig. 16: CE_EN_ME12_ATEX



UKCA Declaration of Conformity

For the product described as follows

Product designation **Pressure transmitter**
Type designation **ME12 ... R/S**

is hereby declared to comply with the essential requirements, specified in the following UK regulations:

Statutory regulation No.	Description
2016 No. 1107	<i>The Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016</i>
2016 No. 1091	<i>The Electromagnetic Compatibility Regulations 2016</i>
2021 No. 422	<i>The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (Amendment) Regulations 2021</i>
2022 No. 1647	<i>The Hazardous Substances and Packaging (Legislative Functions and Amendment) (EU Exit) Regulations 2020</i>

The products have been tested according to the following standards.

Explosive atmospheres (ATEX):

<i>BS EN IEC 60079-0:2018-07-09</i>	<i>Explosive atmospheres. Equipment. General requirements</i>
<i>BS EN IEC 60079-15:2019-05-03</i>	<i>Explosive atmospheres. Equipment protection by type of protection "n"</i>
<i>BS EN 60079-31:2014-07-31</i>	<i>Explosive atmospheres. Equipment dust ignition protection by enclosure "t"</i>

Electromagnetic compatibility (EMC):

<i>BS EN 61326-1:2013-02-28</i>	<i>Electrical equipment for measurement, control and laboratory use. EMC requirements. General requirements</i>
<i>BS EN 61326-2-3:2013-02-28</i>	<i>Electrical equipment for measurement, control and laboratory use. EMC requirements. Particular requirements. Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning.</i>

Restriction of Hazardous Substances (RoHS):

<i>BS EN IEC 63000:2018-12-10</i>	<i>Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances</i>
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The sole responsibility for drawing up this declaration of conformity in relation to the fulfilment of the essential requirements and the preparation of the technical documentation lies with the manufacturer.

Manufacturer **FISCHER Mess- und Regeltechnik GmbH**
 Bielefelder Str. 37a
 32107 Bad Salzufflen, Germany
 Tel. +49 (0)5222 974 0

The devices are marked with:

	II 3G Ex nA IIC T4 Gc	Zone 2
	II 3D Ex tc IIIB T125°C Dc	Zone 22

Bad Salzufflen **G. Götde**
29 March 2022 **Managing director**



Fig. 17: UKCA_EN_ME12_ATEX



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