



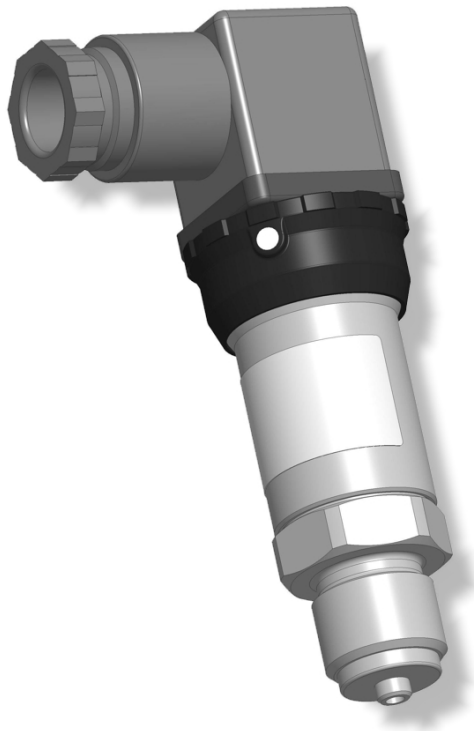
Ex II 3G Ex ec IIC T4 Gc

Ex II 3D Ex tc IIIB T125°C Dc

$-10^{\circ}\text{C} \leq T_{\text{amb}} \leq 60^{\circ}\text{C}$



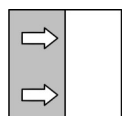
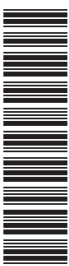
RoHS III
COMPLIANT ✓



Operating manual

ME14

Pressure transmitter



Masthead

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Subject to technical amendments.



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Version history

Rev. ST4-A 05/24	Version 1 (first edition)
Rev. ST4-B 06/24	Version 2 (Schrader process connection added)
Rev. ST4-C 02/25	Version 3 (Supply to the ATEX model changed)
Rev. ST4-D 04/25	Version 4 (Update/new edition)
Rev. ST4-H 10/25	Version 5 (Correction of technical data)

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1 Safety instructions

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.

1.3 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.

1.4 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.

1.5 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.

1.6 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.

1.7 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.

1.8 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.

1.9 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 Delivery scope

- Pressure transmitter ME14
- Operating Manual

2.2 Use as intended

The ME14 is a pressure transmitter with a ceramic measuring cell for over-pressure and under-pressure measurements and can be used for relative pressure measurements.

The pressure transmitter is suitable for use with non-aggressive liquid and gaseous media. Please see the technical data for the respective measuring ranges.

NOTICE! Please contact the manufacturer before using this unit with dirty or aggressive media because the media compatibility of the unit needs to be checked.

ATEX classification

The pressure transmitter **ME14 ### ## ## 0 R ### 0 ##** is suitable as electrical operating equipment

- either for use in areas with flammable gases, Zone 2
- or in areas with flammable dust, Zone 22 – dry dusts.

The devices are marked with

CE  II 3G Ex ec IIC T4 Gc

CE  II 3D Ex tc IIIB T125°C Dc

$-10\text{ °C} \leq T_{\text{amb}} \leq 60\text{ °C}$

Great Britain (UKCA):

The appliance does not have ATEX approval for this market. It may only be used there as an industrial device.



2.3 Product summary

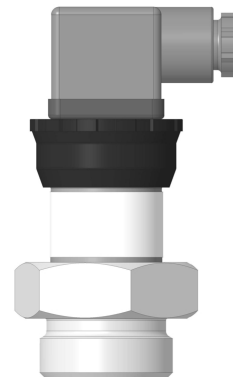
NOTICE! For use in particularly moist areas, all devices are also available in a grouted version.

The following illustrations provide an overview of the different models, process and electrical connection options.



**Standard model
Ceramic sensor**

up to 100 bar



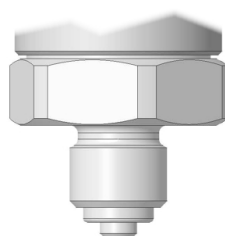
**Near flush-mounted
Ceramic sensor**

up to 100 bar

Fig. 1: Product summary

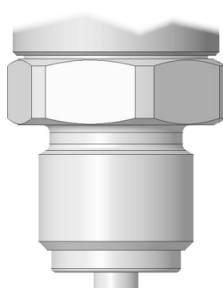
2.3.1 Process connection

Standard



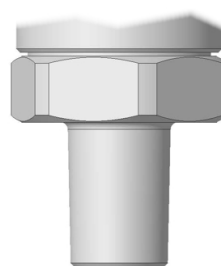
G 1/4 B

Code 85



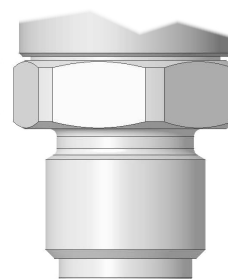
G 1/2 B

87

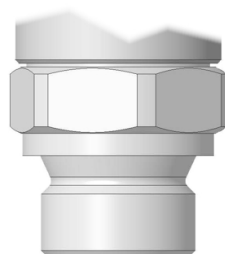


1/4 - 18 NPT

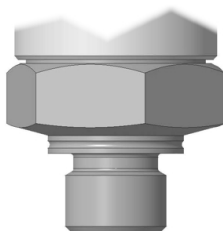
88



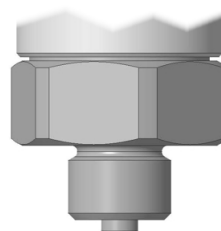
**G 1/2 B
with 9 mm drill hole
S8**



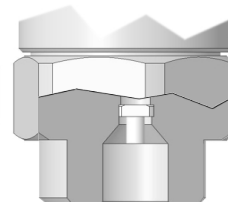
**G 1/2 A
DIN 3852 Form A
Code K1**



**M14 x 1.5
ISO 6149-2
K2**

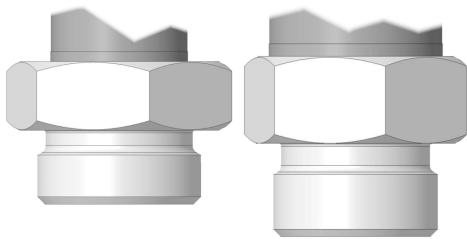


**M14 x 1.5
with centring pin
K3**



**Schrader®
S1**

Near flush-mounted



G 1 B

G 3/4 B

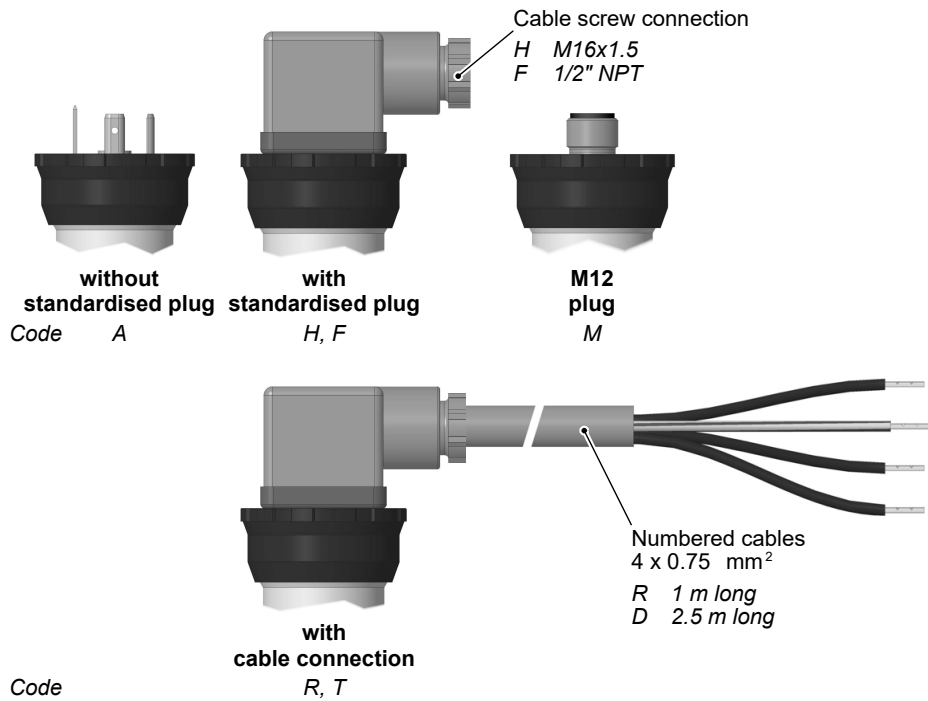
Code A3

A8

Fig. 2: Options for the process connection

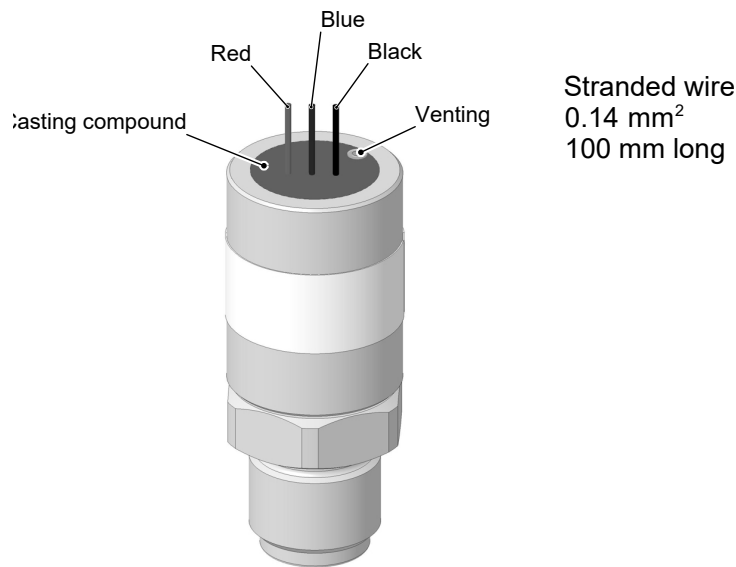
2.3.2 Electrical connection

Plug



Free strands

NOTICE! Only in grouted design. An ATEX model is not possible with this connection variant.



Code V
Fig. 3: Electrical connection options

2.4 Type plate

This type plate serves as an example of the information that is stated. For more information, please see the order code at the end of these instructions.

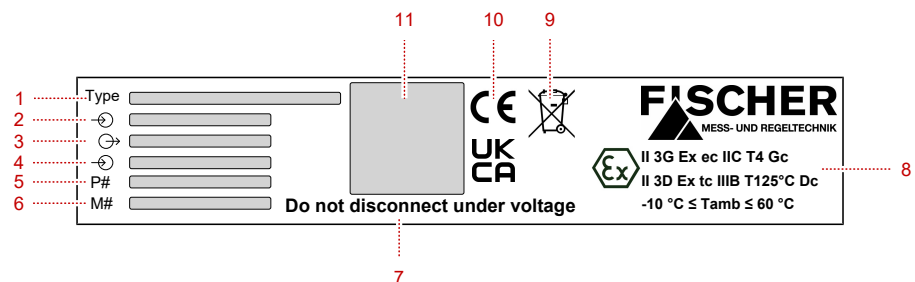


Fig. 4: Type plate

1	Device type (order number)	2	Measuring range
3	Output signal	4	Auxiliary energy
5	Serial number	6	Customer spec. Article number
7	Safety information (ATEX)	8	ATEX marking
9	Disposal	10	Conformity
11	Circuit diagram		

Key

	Input	Input
	Output	Output
P#	Production No.	Production number

P# 23 03618.03.123

Production year 2023 →

2.5 Function diagram

NOTICE! This illustration shows a functional diagram of a 3-wire with standardised plug connection as an example for all models.

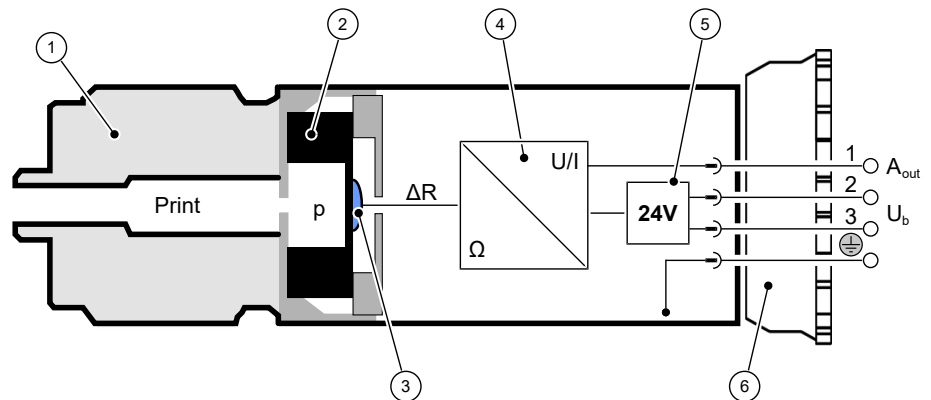


Fig. 5: Functional diagram (3-wire)

1	Process connection	2	Sensor element
3	Resistance bridge	4	Converter electronics
5	Power supply	6	Connection plug

2.6 Design and mode of operation

The standard model with ceramic measuring cell works according to the thick layer technology DMS principle. The measured pressure acts directly onto the membrane, which 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.

3 Installation

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.

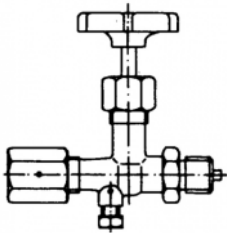


Fig. 6: Shutoff valve.

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)

Measuring lines that need to be connected

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

- To ensure there is no influence on the measured values, significant 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 loop forming a water bag must be provided due to the temperature (see accessories).
- The transmitter must be positioned above the measuring point for gas measurements.
- The transmitter must be positioned below the measuring point for liquid measurements.
- If water is used as a measuring medium, the unit must be protected against frost.

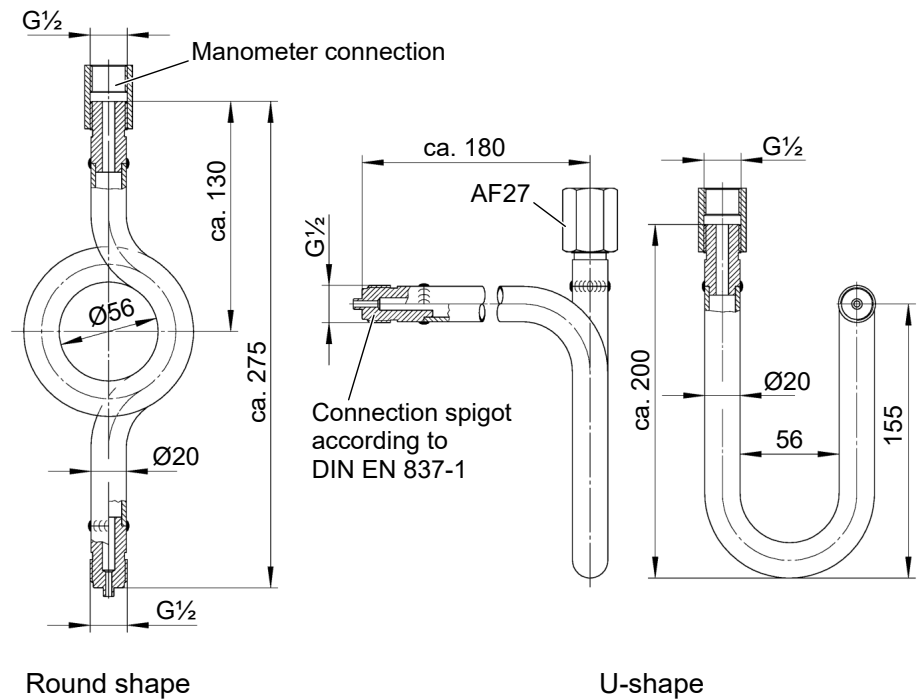


Fig. 7: Siphon MZ1###

Pressure surge absorption

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

a) Capillary throttle

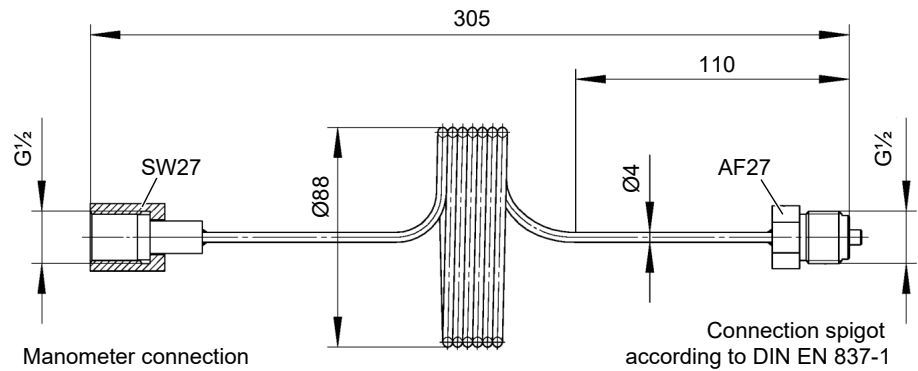


Fig. 8: Capillary throttle MZ400#

b) Adjustable damping throttle

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

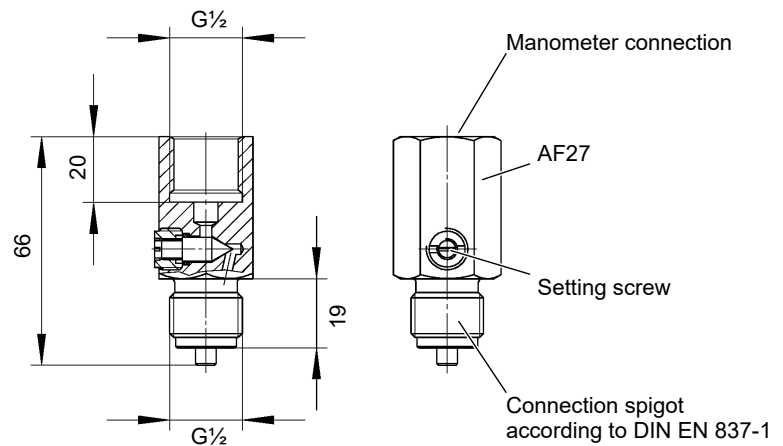


Fig. 9: Damping throttle MZ410#

3.3 Electrical connection

3.3.1 Default model

- 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.
- **NOTICE!** For standardised devices, the user is free to decide whether to install the earthing.

Standardised plug [DIN EN 175 301-801-A]

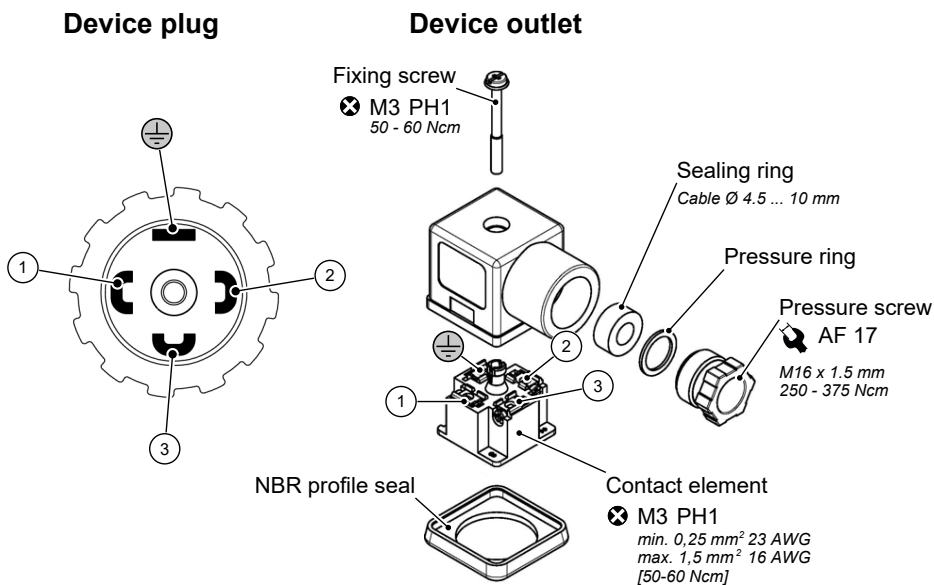
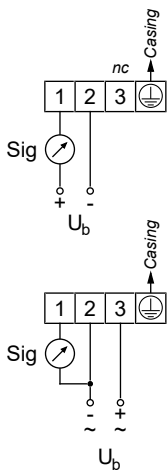


Fig. 10: Standardised plug DIN EN 175 301-803 form A

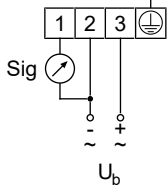
NOTICE! A number cable is used in models with a connection cable. The pin numbers correspond to the cable numbers.

2 wire connection [DC]



PIN	Signal	Cable connection		
1	Supply/output signal	+U _b	+Sig	1
2	Supply/output signal	-U _b	-Sig	2
3	Not connected			3
⊕	Earthing connection	PE		Green/yellow

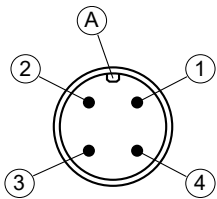
3 wire connection [AC/DC]



PIN	Signal	Cable connection		
1	Output signal		+Sig	1
2	Supply	~	-U _b	-Sig
3	Supply	~	+U _b	3
⊕	Earthing connection	PE		Green/yellow

M12 plug [IEC 61076-2-101]

Flanged connector
Coding A



M12 Connection cable
Accessories

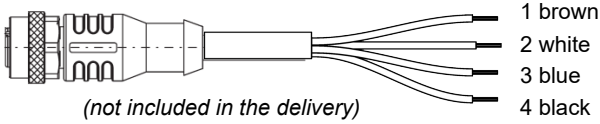
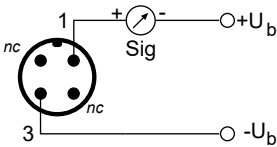


Fig. 11: M12 plug, standard version

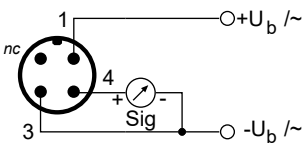
Standard version



2 wire connection [DC]

PIN	Signal	Cable colour
1	Supply/output signal +U _b +Sig	Brown
2	Not connected	White
3	Supply/output signal -U _b -Sig	Blue
4	Not connected	Black

3 wire connection [AC/DC]



PIN	Signal	Cable colour
1	Supply ~ +U _b	Brown
2	Not connected	White
3	Supply ~ -U _b -Sig	Blue
4	Output signal +Sig	Black

Connect with free strands

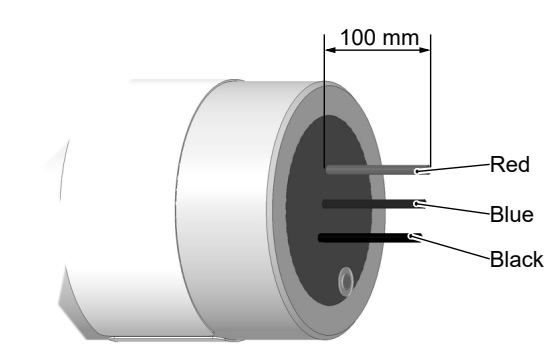
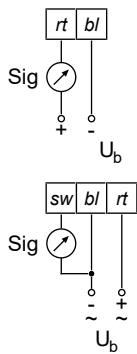


Fig. 12: Electrical connection with free strands

NOTICE! Depending on the model, only the cables necessary for connection may be present.

Standard version



2 wire connection [DC]

Signal		Cable colour	
Supply/output signal	+U _b +Sig	Red	
Supply/output signal	-U _b -Sig	Blue	

3 wire connection [AC/DC]

Signal		Cable colour	
Output signal	+Sig	Black	
Supply	~ -U _b -Sig	Blue	
Supply	~ +U _b	Red	

3.3.2 ATEX version



⚠ DANGER

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.

- The electrical connection may only be completed by authorised and qualified specialists that have undergone additional training or briefings or have a permit to work on explosion-protected devices in potentially explosive systems.
- Risks emanating from electrical current or voltage should be prevented by means of suitable measures.
- Disconnect the system from the mains before electrically connecting the device.
- When the device is connected, national and international electrotechnical regulations must be observed.
- Do not connect the connector if strained.
- A CE-conforming mains adapter with a slow 32 mA fuse only may be used in the power supply circuit.
- **WARNING! For ATEX devices, the earthing must always be installed.**

Standardised plug [DIN EN 175 301-801-A]

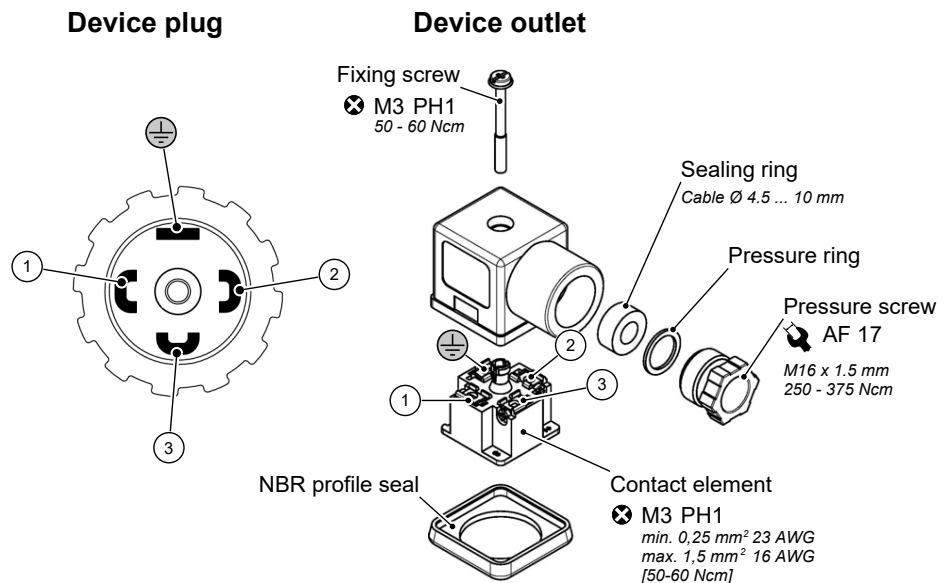
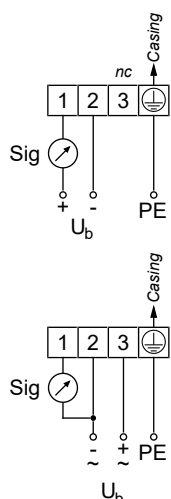


Fig. 13: Standardised plug DIN EN 175 301-803 form A

NOTICE! A number cable is used in models with a connection cable. The pin numbers correspond to the cable numbers.

ATEX model



2 wire connection [DC]

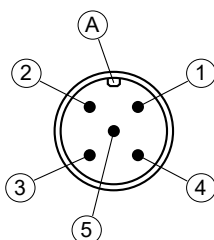
PIN	Signal	Cable connection
1	Supply/output signal	$+U_b$ +Sig 1
2	Supply/output signal	$-U_b$ -Sig 2
3	Not connected	3
⊕	Earthing connection	PE Green/yellow

3 wire connection [AC/DC]

PIN	Signal	Cable connection
1	Output signal	+Sig 1
2	Supply	$\sim$ $-U_b$ -Sig 2
3	Supply	$\sim$ $+U_b$ 3
⊕	Earthing connection	PE Green/yellow

M12 plug [IEC 61076-2-101]

Flanged connector
Coding A



M12 connection cable
Accessories

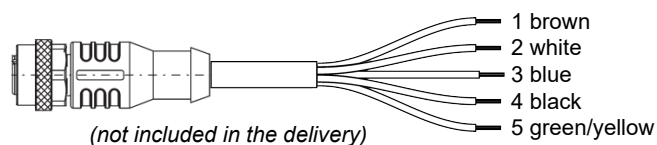
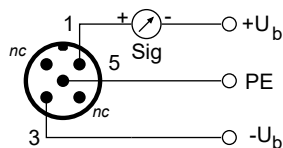


Fig. 14: M12 plug ATEX version

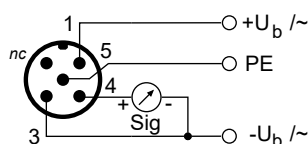
ATEX model



2 wire connection [DC]

PIN	Signal	Cable colour
1	Supply/output signal	$+U_b$ +Sig Brown
2	Not connected	White
3	Supply/output signal	$-U_b$ -Sig Blue
4	Not connected	Black
5	Earthing connection	PE Green/yellow

3 wire connection [AC/DC]



PIN	Signal	Cable colour
1	Supply	$\sim$ $+U_b$ Brown
2	Not connected	White
3	Supply	$\sim$ $-U_b$ -Sig Blue
4	Output signal	+Sig Black
5	Earthing connection	PE Green/yellow

Connect with free strands

NOTICE! An ATEX model is not possible with this connection variant.

3.4 Commissioning

A prerequisite for commissioning is correct installation of all electrical supply lines and the pressure lines. All connections are arranged so that there are no mechanical forces acting on the device.

**⚠ CAUTION****Leakage test**

The pressurized lines need to be checked for leaks before commissioning.

- 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 medium.
- Appropriate shutoff valves must be provided to ensure safety during installation, maintenance and inspection.

4 Servicing

4.1 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.

4.2 Transport

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

4.3 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.

4.4 Disposal

WEEE-Reg.-No. DE 31751293

Please help to protect our environment and dispose of the workpieces and packaging materials used in an environmentally friendly manner. Observe the country-specific waste treatment and disposal regulations.

The year of production can be found in the production number (serial number):

P# **23** 03618.03.123

Production year 2023 

Further information on disposal can be found on our website
[www.fischermesstechnik.de]



5 Technical data

5.1 Generalities

Reference conditions (acc. to IEC 61298-1)		
Temperature	+15 ... +25 °C	
Relative humidity	45 ... 75%	
Air pressure	86 to 106 kPa	860 to 1060 mbar
Auxiliary energy	24 V DC	
Installation position	User-defined	
General information		
Type designation	ME14	
Pressure type	Relative pressure and absolute pressure	
Measurement principle	SGS	
Media	Non-aggressive liquid and gaseous media	

5.2 Input parameters [relative pressure]

Positive measuring ranges [bar]

Measuring range	Pressure safety [bar]		Characteristic curve deviation	
	Overpressure	Bursting pressure	option.	Default
0 ... 250 mbar	1	1.5	-	1.0%
0 ... 400 mbar	1	1.5	0.5%	1.0%
0 ... 0.6 bar	1.5	2.5	-	1.0%
0 ... 1.0 bar	3	5	0.5%	1.0%
0 ... 1.6 bar	3	5	0.5%	1.0%
0 ... 2.5 bar	7.5	15	0.5%	1.0%
0 ... 4 bar	7.5	15	0.5%	1.0%
0 ... 6 bar	15	30	0.5%	1.0%
0 ... 10 bar	30	60	0.5%	1.0%
0 ... 16 bar	30	60	0.5%	1.0%
0 ... 25 bar	75	150	-	1.0%
0 ... 40 bar	75	150	-	1.0%
0 ... 60 bar	150	250	-	1.0%
0 ... 100 bar	150	250	0.5%	1.0%

Positive measuring ranges [psi]

Measuring range	Pressure safety [bar]		Characteristic curve deviation	
	Overpressure	Bursting pressure	option.	Default
0 ... 15 psi	3	5	0.5%	1.0%
0 ... 30 psi	7.5	15	0.5%	1.0%
0 ... 60 psi	7.5	15	0.5%	1.0%
0 ... 100 psi	15	30	0.5%	1.0%
0 ... 160 psi	30	60	0.5%	1.0%
0 ... 250 psi	30	60	0.5%	1.0%
0 ... 500 psi	75	150	-	1.0%
0 ... 1000 psi	150	250	-	1.0%
0 ... 1500 psi	150	250	0.5%	1.0%

Vacuum measuring ranges [bar]

Measuring range	Pressure safety [bar]		Characteristic curve deviation	
	Overpressure	Bursting pressure	option.	Default
0 ... -1 bar	3	5	-	1.0%
-1 ... 0 bar	3	5	-	1.0%
-1 ... 0.6 bar	3	5	-	1.0%
-1 ... 1.0 bar	3	5	-	1.0%
-1 ... 1.5 bar	7.5	15	-	1.0%
-1 ... 3 bar	7.5	15	-	1.0%
-1 ... 5 bar	15	30	-	1.0%
-1 ... 9 bar	30	60	-	1.0%
-1 ... 15 bar	30	60	-	1.0%
-1 ... 24 bar	75	150	-	1.0%

Special measuring ranges

Measuring range	Pressure safety [bar]		Characteristic curve deviation	
	Overpressure	Bursting pressure	option.	Default
-30 in Hg vac ... +15 psi	3	5	-	1.0%
-30 in Hg vac ... +100 psi	15	30	-	1.0%

5.3 Input parameters [absolute pressure]

Positive measuring ranges [bar]

Measuring range	Pressure safety [bar]		Characteristic curve deviation	
	Overpressure	Bursting pressure	option.	Default
0 ... 1.0 bar	3	5	0.5%	1.0%
0 ... 1.6 bar	3	5	0.5%	1.0%
0 ... 2.5 bar	7.5	15	0.5%	1.0%
0 ... 4 bar	7.5	15	0.5%	1.0%
0 ... 6 bar	15	30	0.5%	1.0%
0 ... 10 bar	30	60	0.5%	1.0%

5.4 Output parameters

Voltage output		3-conductor
Output range		0 ... 10 V DC
Limit		approx. 10.5 V DC
Load impedance	15 V ≤ U _b < 20 V 20 V ≤ U _b ≤ 30 V	≥ 5 kΩ ≥ 2 kΩ
Current output	2-conductor	3-conductor
Output range	4 ... 20 mA	0 to 20 mA 4 to 20 mA
Limit	26 mA	23 mA
Load impedance	(U _b -6V)/0.02A	(U _b -10V)/0.02A + 300Ω
Step response [T90]		
Typ.	50 ms	
Max.	100 ms	

5.5 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

5.6 Auxiliary energy

3-conductor current output	Default	ATEX
Rated voltage	24 V AC/DC	24 V AC/DC
Permitted op. voltage	15 ... 30 V AC/DC	15 ... 28 V AC 15 ... 30 V DC
Absorbed power	≤ 1,5 W (VA)	≤ 1,5 W (VA)
3-conductor voltage output	Default	ATEX
Rated voltage	24 V AC/DC	24 V AC/DC
Permitted op. voltage	15 ... 30 V AC/DC	15 ... 28 V AC 15 ... 30 V DC
Absorbed power	≤ 1 W (VA)	≤ 1 W (VA)
2-wire current output	Default	ATEX
Rated voltage	24 V DC	24 V DC
Permitted op. voltage	6 ... 30 V DC	6 ... 30 V DC
Absorbed power	≤ 1 W	≤ 1 W

5.7 Application conditions

	Default	ATEX
Ambient temperature range	-10 °C ... +70 °C	-10 °C ... +60 °C
Storage temperature range	-20 °C ... +70 °C	-20 °C ... +70 °C
Medium temperature range	-10 °C ... +85 °C	-10 °C ... +60 °C
ATEX	EN IEC 60079-0:2018 Corrigendum 1: EN IEC 60079-0:2018/AC:2020-02 EN IEC 60079-7 :2015/A1:2018 EN 60079-31:2014	
EMC	EN IEC 61326-1:2021 EN IEC 61326-2-3:2021	
RoHS	EN IEC 63000:2018	
Type of protection	IP 65 as per EN 60529	
Materials of parts in contact with surroundings		
Casing	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	FKM	Fluorinated rubber, Viton®
(acc. to model)	CR	Chloroprene rubber, Neoprene®
	EPDM	Ethylene propylene diene rubber
	H-NBR	Hydrogenated acrylonitrile butadiene rubber
	FFPM	Perfluorinated rubber, Kalrez®

5.8 Construction design

5.8.1 Standard version

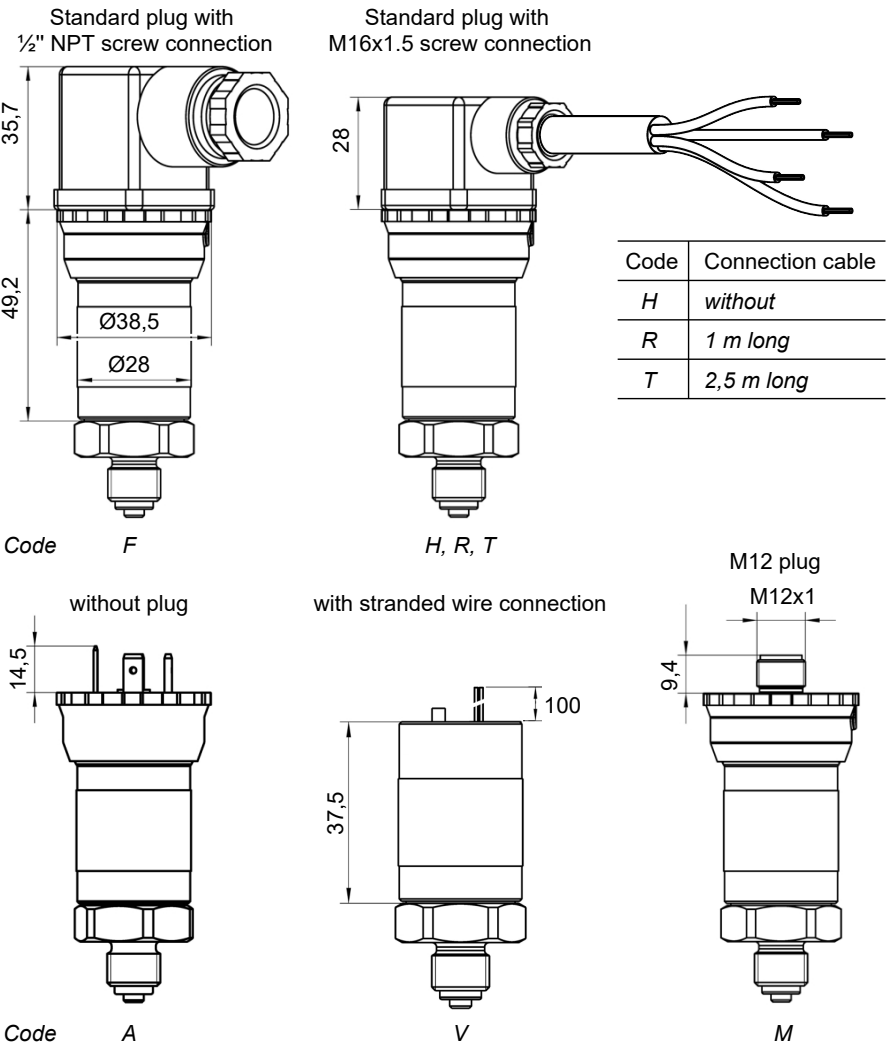


Fig. 15: Dimensional drawing with electrical connection options

5.8.2 Near flush-mounted front sensor

Please note! All electrical connection options (see above) are available.

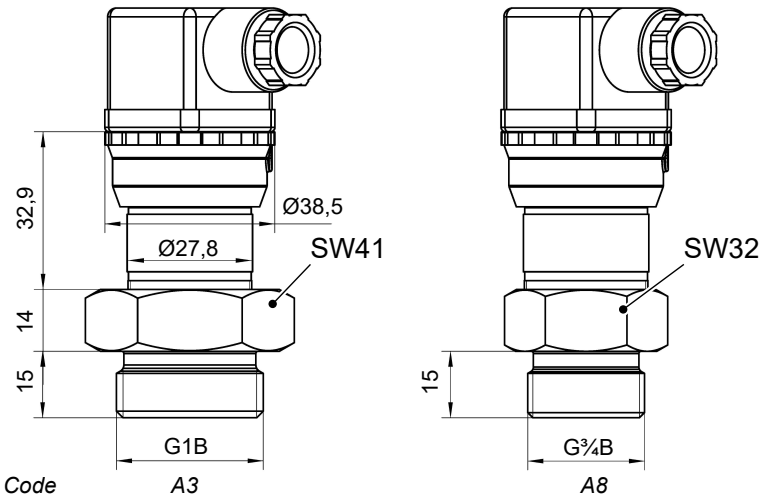


Fig. 16: Dimensional drawing 'almost front-flush sensor'

5.8.3 Process connections

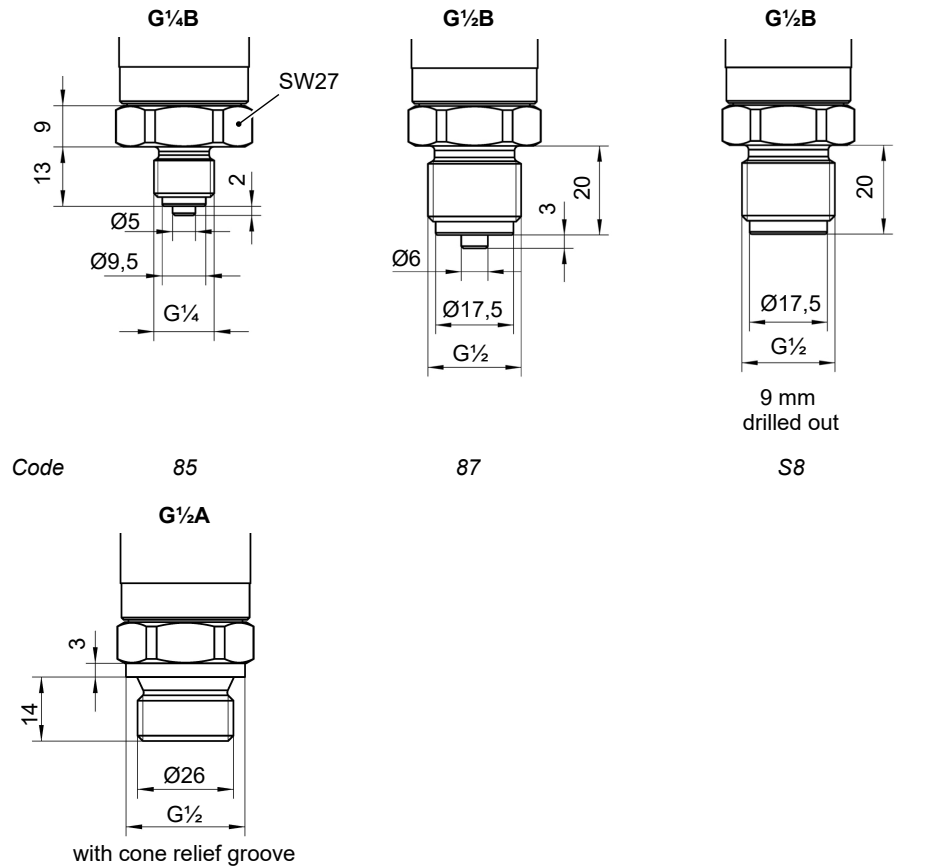


Fig. 17: Process connections with imperial thread

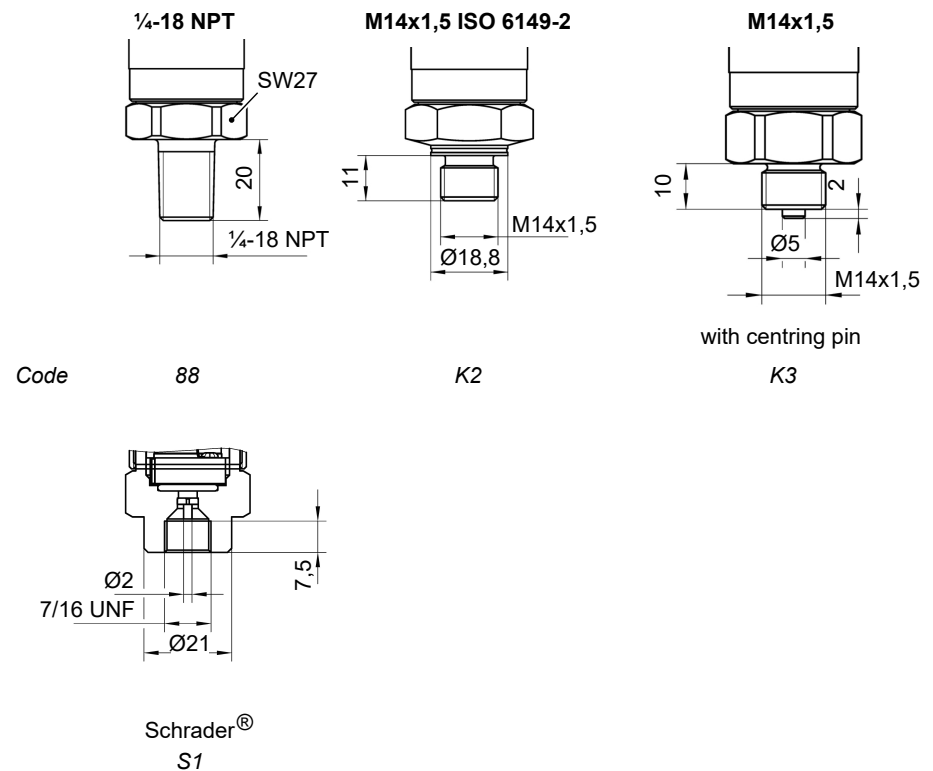
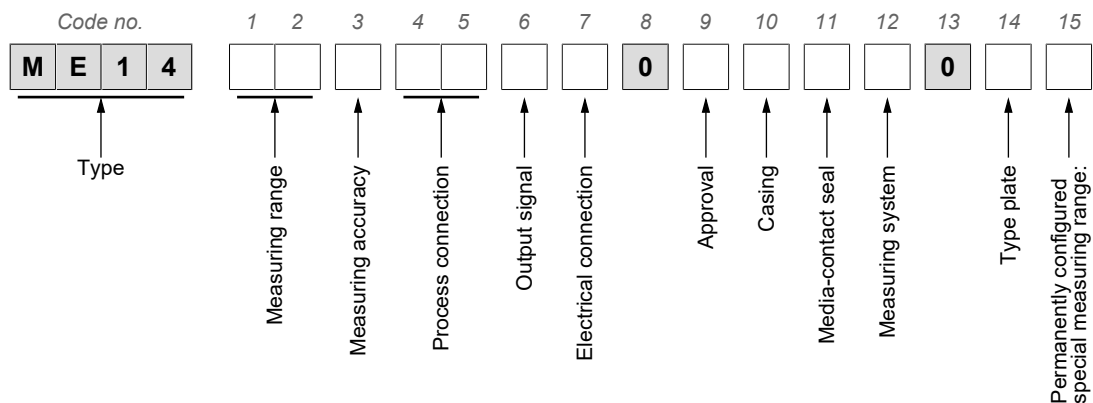


Fig. 18: Process connections with imperial and metric thread

6 Order codes



Measuring range: [mbar]

[1.2]	(Code no.)
82	0 ... 250 mbar
83	0 ... 400 mbar
01	0 ... 0.6 bar
02	0 ... 1.0 bar
03	0 ... 1.6 bar
04	0 ... 2.5 bar
05	0 ... 4 bar
06	0 ... 6 bar
07	0 ... 10 bar
08	0 ... 16 bar
09	0 ... 25 bar
10	0 ... 40 bar
11	0 ... 60 bar
12	0 ... 100 bar
31	-1 ... 0 bar
32	-1 ... 0.6 bar
27	-1 ... 1.0 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

Measuring range: [psi]

[1.2]	(Code no.)
H4	0 ... 15 psi
H5	0 ... 30 psi
H6	0 ... 60 psi
H7	0 ... 100 psi
H9	0 ... 160 psi
Q1	0 ... 250 psi
P9	0 ... 500 psi
P3	0 ... 1000 psi
P4	0 ... 1500 psi

Measuring range: [special measuring ranges]

[1.2]	(Code no.)
S2	-30 in Hg vac ... +15 psi no front-flush process connection A3, A8
S5	-30 in Hg vac ... +100 psi possible

Measuring accuracy:

[3]	(Code no.)
M	Characteristic curve deviation relative pressure 1.0%
0	Characteristic curve deviation relative pressure 0.5% (special measuring ranges on request)

Process connection:

[4.5]	(Code no.)
85	Connecting pin with male thread G ¼ B
87	Connecting pin with male thread G ½ B
88	Connecting pin with male thread ¼ –18 NPT EXT
A3	G 1 B with near flush-mounted front pressure sensor
A8	G ¾ B with near flush-mounted front pressure sensor
S1	Connection for the Schrader® screw connection
S8	Connecting pin with male thread G ½ B interior 9 mm drilled
K1	Connecting pin with male thread G ½ A with taper undercut
K2	Connecting pin with male thread M14 x 1.5 ISO 6149-2
K3	Connecting pin with male thread M14 x 1.5 with centring pin

Output signal:

[6]	(Code no.)	Auxiliary energy	Type of connection
A	0 ... 20 mA	24 V AC/DC	3-conductor
B	4 ... 20 mA	24 V DC	2-conductor
C	0 ... 10 V	24 V AC/DC	3-conductor
P	4 ... 20 mA	24 V AC/DC	3-conductor

Electrical connection:

[7]	(Code no.)
A	4-pin plug connection without device outlet
H	4-pin plug connection with device outlet (M16*1.5)
F	4-pin plug connection with device outlet (½" NPT)
R	4-pin plug connection with device outlet and 1 m connection cable
T	4-pin plug connection with device outlet and 2.5 m connection cable
V	Connect with free strands only with the following restrictions Approval [9] = 0 (default) housing model [10] = V (grouted, IP65)
M	M12 plug connection, 4-pin (5-pin with ATEX)

Approval:

[9]	(Code no.)
0	Default
R	ATEX Zone 2 and Zone 22

Casing:

[10]	(Code no.)
0	Default IP 65
V	Grouted design IP 65

Media contact seal:

[11]	(Code no.)
V	FKM Viton® (fluororubber) Default
C	CR Neoprene, chloroprene rubber
E	EPDM Ethylene propylene diene rubber
H	H-NBR Hydrogenated acrylonitrile butadiene rubber -25°C ... +100 °C
K	FFPM Kalrez® (perfluorinated rubber)

Measuring system:

[12]	(Code no.)
0	Default
3	System suitable for measuring O ₂ (only with VITON® seal)

Type plate:

[14]	(Code no.)
0	FISCHER with FISCHER operating instructions
1	Customer-specific with neutral operating instructions
2	Customer-specific without operating instructions

Permanently configured special measuring range:

[15]	(Code no.)
0	Without configuration
1	With configuration

6.1 Accessories

Order No.	Designation	No. of pins	Length
06401993	PUR cable with M12-coupling	4-pin	2 m
06401994	PUR cable with M12-coupling	4-pin	5 m
06401563	PUR cable with M12-coupling	4-pin	7 m
06401572	PUR cable with M12-coupling	4-pin	10 m
06401566	PUR cable with M12-coupling	4-pin	15 m
Order No.	Designation	No. of pins	Length
06401995	PUR cable with M12-coupling	5-pin	2 m
06401996	PUR cable with M12-coupling	5-pin	5 m
06401564	PUR cable with M12-coupling	5-pin	7 m
06401573	PUR cable with M12-coupling	5-pin	10 m
06401567	PUR cable with M12-coupling	5-pin	15 m
MZ1###	Siphons		
MZ400#	Capillary throttle coil		
MZ410#	Settable damping reactor		
MZ5###	Manometer shut-off valve acc. to DIN 16270/16271		
MZ6###	Manometer shut-off valve acc. to DIN 16272		
09002385	Deflagration volume protector		

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

6.2 Information about the document

This document contains all technical data about the device. Great care was taken when compiling the texts and illustrations. nevertheless, errors cannot be ruled out.

Subject to technical amendments.

7 Annex



(Translation)

EU Declaration of Conformity

For the product described as follows

Product designation **Pressure transmitter**
Type designation **ME14 ## # ## # # 0 0 # # # # #**

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

2014/30/EU
2011/65/EU
(EU) 2015/863

EMC Directive
RoHS Directive
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 IEC 61326-1:2022-11
EN IEC 61326-1:2021
DIN EN IEC 61326-2-3:2022-11
EN IEC 61326-2-3:2021

Electrical equipment for measurement, control and laboratory use - EMC requirements - Part
1: General requirement
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

RoHS Directive (RoHS3)

DIN EN IEC 63000:2019-05
EN IEC 63000:2018

Technical documentation for the assessment of electrical and electronic products with re-
spect to the restriction of hazardous substances

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 re-
quirements and the production of the technical documents is with the manufacturer.

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

Documentation representative Torsten Malischewski
General Mager R&D / Managing Director

**The devices bear the
following marking:**



Bad Salzufen
21 Okt 2024

T. Malischewski
Managing Director



(Translation) **CE**

EU Declaration of Conformity

For the product described as follows

Product designation **Pressure transmitter**
Type designation **ME14 ## # ## # # 0 R # # # # # #**

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 IEC 61326-1:2022-11	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirement
EN IEC 61326-1:2021	
DIN EN IEC 61326-2-3:2022-11	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
EN IEC 61326-2-3:2021	

Explosive atmospheres (ATEX)

DIN EN IEC 60079-0:2019-09	Explosive atmospheres - Part 0: Equipment - General requirements
EN IEC 60079-0:2018	
Correction1	
IEC 60079-0:2017/COR1:2020	
DIN EN IEC 60079-7/A1:2018-07	Explosive atmospheres - Part 7: Equipment protection by increased safety "e" (IEC 60079-7:2015/A1:2017)
EN IEC 60079-7:2015/A1:2018	
DIN EN 60079-31:2014-12	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
EN 60079-31:2014	

RoHS Directive (RoHS3)

DIN EN IEC 63000:2019-05	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
EN IEC 63000:2018	

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

The devices are marked with :	CE II 3G Ex ec IIC T4 Gc	Zone 2
	CE II 3D Ex tc IIIB T125°C Dc	Zone 22
	-10°C ≤ T _{amb} ≤ 60°C	

Bad Salzufflen
21 Okt 2024

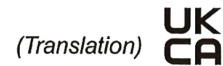
T. Malischewski
 Managing Director

09010873 • CE_EN_ME14_ATEX • Rev. ST4-B • 10/24



1 / 1

Fig. 20: CE_EN_ME14_ATEX



UKCA Declaration of Conformity

For the product described as follows

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

Product designation	Pressure transmitter
Type designation	ME14 ## # ## # # 0 0 # # # # #
Statutory regulation No.	Description
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.

Electromagnetic compatibility (EMC):

<i>BS EN IEC 61326-1:2021-06-07</i>	<i>Electrical equipment for measurement, control and laboratory use. EMC requirements. General requirements</i>
<i>BS EN IEC 61326-2-3:2021-06-10</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 bear the following marking:



Bad Salzufflen
17 Feb. 2025


T. Malischewski
Managing Director



Fig. 21: UKCA_EN_ME14

Notes



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