

The manufacturer is awarded the following type test approval mark in virtue of a component test report:

Category type test approval mark:

[component](#)

Technical inspection and surveillance organisation and test report:

TÜV Rheinland dated 2023-12-19

Manufacturer/Distributor:

[Geberit International AG](#)  
[Schachenstrasse 77](#)  
[8645 Jona](#)  
[SWITZERLAND](#)

Type test approval mark:

[TÜV . K . 23 - 017](#)

Design:

non-detachable pipe connection by mechanical pressing of Geberit Mapress pressfitting and Geberit Mapress system pipe

Type:

[Mapress](#)

The award is made pursuant to:

- VdTÜV-Merkblatt Komponenten 100, edition 2017-03-20
- TÜV-Verband-Merkblatt Armatur 100, edition 2022-12-14
- TÜV-Verband Technical Leaflet General 002, edition 2022-09-20
- Directive 2014/68/EU dated 15.05.2014 (Pressure Equipment Directive)
- AD 2000 Code
- Betriebssicherheitsverordnung (BetrSichV) – Ordinance on Industrial Safety and Health in the current version

based on TRR 100 „Rohrleitungen aus metallischen Werkstoffen (Pipelines made of metallic materials)“, edition 1993-05:

- TRbF 131 Part 1, edition 1981-03 as well as successor TRbF 50, edition 2002-06
- TRbF 231 Part 1, edition 1982-12 as well as successor TRbF 50, edition 2002-06

Valid until:

[2027-04-30](#)

The award may be revoked. The previous certificate is replaced herewith.

Note: The manufacturer or importer must task the authorised inspector with conducting a yearly random check of components from the production line to establish their conformity with the approved type.

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**English translation of German edition 2024-01-19:**

This translation has been produced externally on behalf of the TÜV-Verband (TÜV Association). The TÜV-Verband takes no responsibility for any errors in the translation. Any comments or suggestions for improvement should be addressed to the TÜV-Verband. In the event of any doubt or dispute, the latest edition of the German text shall prevail.

**1 Manufacturer/Distributor**

Geberit International AG  
Schachenstrasse 77  
8645 Jona  
SWITZERLAND

**Manufacturing plant**

- a) Geberit Mapress GmbH  
Kronprinzstraße 40  
40764 Langenfeld  
GERMANY
- b) Geberit Ozorków Sp. z o.o.  
Adamówek 25  
90-035 Ozorków  
POLAND

**2 Type**

**Mapress**

**Models**

Mapress stainless steel or carbon steel as well as copper (see table 1)

**3 Type test approval mark**

**TÜV . K . 23 - 017**

**4 Range of application**

suitable for applications especially for heating, cooling and industrial plants

**5 Normative references**

- VdTÜV-Merkblatt Komponenten 100, edition 2017-03-20
- TÜV-Verband-Merkblatt Armatur 100, edition 2022-12-14
- TÜV-Verband Technical Leaflet General 002, edition 2022-09-20
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based on TRR 100 „Rohrleitungen aus metallischen Werkstoffen (Pipelines made of metallic materials)“, edition 1993-05:

- TRbF 131 Part 1, edition 1981-03 as well as successor TRbF 50, edition 2002-06
- TRbF 231 Part 1, edition 1982-12 as well as successor TRbF 50, edition 2002-06

## 6 Technical description

### 6.1 Design

non-detachable pipe connection by mechanical pressing of Geberit Mapress pressfitting and Geberit Mapress system pipe

Pressfitting and system pipe are made of unalloyed or alloyed steel or copper. Special electro-mechanical or electrohydraulic Geberit Mapress pressing tools, which are regularly tested by the manufacturer, are used to produce the connection. Monitoring of the test dates is made possible by means of a sticker.

The tightness of the connection is achieved by means of an O-ring.

#### Variants

Mapress stainless steel or carbon steel as well as copper (see table 1 and table 2)

### 6.2 Operating medium

|                          |   |
|--------------------------|---|
| 1. Fluids:               | Stainless steel for fluids of group 1 and group 2 according to Directive 2014/68/EU (Pressure Equipment Directive) only after consultation with or approval by Geberit Mapress                            |
|                          | Carbon steel for fluids of group 2 and oils only after consultation with or approval by Geberit Mapress   |
|                          | Copper for fluids of group 1 and group 2 according to directive 2014/68/EU (Pressure Equipment Directive) only after consultation with or approval by Geberit Mapress                                     |
| 2. Media compatibility:  | The use of carbon steel for aqueous media is restricted to closed circuits. The use of stainless steel, carbon steel as well as copper for other media requires approval of the media by Geberit Mapress. |
| 3. Corrosion protection: | Carbon steel pipes must be protected against external corrosion. For details, please refer to the Geberit International AG product information.   |

## 6.3 Pressure rating/operating pressure

Table 1: Nominal sizes and nominal pressures

| Operating pressures according to TÜV component certificate |            |           |                              |                              |                              |         |        |
|--|------------|-----------|------------------------------|------------------------------|------------------------------|---------|--------|
| Pressing jaws/<br>slings<br>[Geberit<br>compatibility]     | Dimensions |           | Operating pressures          |                              |                              |         |        |
|  | DN         | d<br>[mm] | stainless<br>steel<br>1.4401 | stainless<br>steel<br>1.4301 | stainless<br>steel<br>1.4520 | C-steel | copper |
| Pressing jaws<br>[1]/[2]/[3]                               | 10         | 12        | 75                           | 75                           | 75                           | 40      | 40     |
|  | 12         | 15        | 63                           | 63                           | 63                           | 40      | 40     |
|  | 15         | 18        | 63                           | 63                           | 63                           | 40      | 25     |
|  | 20         | 22        | 40                           | 40                           | 40                           | 25      | 16     |
|  | 25         | 28        | 25                           | 25                           | 25                           | 25      | 16     |
|  | 32         | 35        | 16                           | 16                           | 16                           | 16      | 16     |
| Pressing slings<br>[2]/[2XL]/[3]                           | 32         | 35        | 25                           | 25                           | 25                           | 25      | 16     |
|  | 40         | 42        | 25                           | 25                           | 25                           | 16      | 16     |
|  | 50         | 54        | 25                           | 25                           | 16                           | 16      | 16     |
|  | 65         | 76.1      | 16                           | 16                           | 16                           | 12      | 10     |
|  | 80         | 88.9      | 12                           | 12                           | 12                           | 12      | 10     |
|  | 100        | 108       | 12                           | 12                           | 12                           | 12      | 8      |
| Pressing slings<br>[4]                                     | 65         | 76.1      | 16                           | 16                           | 16                           | 16      | –      |
|  | 80         | 88.9      | 16                           | 16                           | 16                           | 16      | –      |
|  | 100        | 108       | 16                           | 16                           | 16                           | 12      | –      |
| Pressing slings<br>[HCP]<br>(expiring)                     | 65         | 76.1      | 16                           | 16                           | 16                           | 16      | –      |
|  | 80         | 88.9      | 16                           | 16                           | 16                           | 12      | –      |
|  | 100        | 108       | 16                           | 16                           | 16                           | 12      | –      |

## 6.4 Allowable temperature range

The compatibility of the sealing ring as well as the suitability of the respective Geberit Mapress pressfitting system for the respective feed medium must be agreed in advance with Geberit Mapress; the proof of suitability of the sealing ring manufacturer must be submitted in writing before commissioning a system.

## 6.5 Materials

Table 2: Materials of the individual components

| Designation             | Material               |
|-------------------------|------------------------|
| Stainless steel pipe    | 1.4401, 1.4301, 1.4520 |
| Stainless steel fitting | 1.4401 <sup>1)</sup>   |
| C-steel pipe            | 1.0034, 1.0215         |
| C-steel fitting         | 1.0034 and 1.0718      |

| Designation    | Material                           |
|----------------|------------------------------------|
| Sealing ring   | Elastomer (CIIR, FKM, HNBR, FEPDM) |
| Copper pipe    | Copper (CU-DHP)                    |
| Copper fitting | Copper (CU-DHP)                    |

1) For transition connectors, the materials 1.4571 (turned parts) and 1.4581 (cast parts) can also be used.

## 7 Particular requirements

Proof of the quality properties for the stainless steel pipes and copper pipes is provided by an acceptance test certificate 3.1 in accordance with DIN EN 10204. Geberit Mapress C-steel pipes are supplied with a works certificate 2.2 according to DIN EN 10204.

The manufacturer has been inspected by TÜV Rheinland with regard to the proper processing of stainless steel pipes, copper pipes and carbon steel pipes for the production of press fittings on the basis of the documentation submitted.

The welding procedures used for the manufacture of press fittings have also been checked and submitted to the expert with the required documentation.

It is recommended to determine additional forces in accordance with TRR 100. Pipe supports must not be used additionally for fixing other installations in order to avoid possible additional loads.

The pressure resistance of the connection was checked by a large number of burst tests. When approving the maximum permissible operating pressures, sufficient safety against component failure was taken into account.

Geberit International AG is certified according to DIN EN ISO 9001:2000.

The assembly is carried out in accordance with the assembly instructions, i.e. in accordance with the respective variant-related application brochures of Geberit International AG.

The press fitting connections are subjected to random dimensional and leak tests during production. The corresponding specifications are adequately regulated in QM test instructions.

The operating instructions of the respective press tool must always be observed. These devices are able to control the pressing process.

The actual insertion depth of the line pipe in the fitting can and must be checked by means of marking.

In accordance with Directive 2014/68/EU (Pressure Equipment Directive), proof of "Grouting Technology" expertise must be provided by training at Geberit or in a manner recognized by Geberit International AG and must be documented by a training certificate.

In the context of obtaining the component mark, it has been demonstrated that the press fittings have been designed and manufactured in accordance with good engineering practice and the requirements of Category I of Directive 2014/68/EU (Pressure Equipment Directive). The remarks in section 8 of this TÜV-Verband Type Test Leaflet on manufacture must be observed.

## 8 Remarks

### 8.1 Fabrication

The characteristic fitting form is fabricated by cold forming or machining. To demonstrate compliance with the requirements of Directive 2014/68/EU (Pressure Equipment Directive), the manufacturer shall, if necessary, submit an explicit manufacturer's declaration.

In particular, for the use of seamless pipes in Cu-DHP (copper) in the area of application according to Directive 2014/68/EU (Pressure Equipment Directive) in connection with AD 2000 data sheet W 6/2, minimum wall thicknesses of 3 mm must be used for the dimensions 88.9 mm and 108 mm according to the table in section 4.

## 8.2 Marking

on the system pipe:

- manufacturer's mark
- dimension
- nominal pressure
- component identification

on the press fittings:

- manufacturer's mark
- dimension

## 8.3 Annual tests by the authorized inspector

Within the scope of the annual inspection by the TÜV authorized inspector, the results with regard to sufficient dimensioning are checked by means of measurement checks and bursting pressure tests on at least two different nominal sizes.

## 8.4 Tasks of the authorized inspector prior to commissioning

a) The following must be checked on site

- the suitability of the Geberit Mapress pressfitting system and the compatibility of the sealing ring with the medium to be conveyed on the basis of the documents and evidence provided by Geberit International AG,
- compliance with the installation instructions and the product information supplied,
- existing or conceivable additional forces acting on the installation with regard to admissibility.

b) Performance of a pressure test:

A pressure test must be performed.