

# EW Water Meter Pit



... proven in every detail!



## EWE Water Meter Pit

Wide variety of uses, e.g.

- for domestic supply
- in allotments
- water supply to building sites
- on campsites
- in parks
- in cemeteries



The compact dimensions of the EWE water meter pit make it easy to install in pipe trenches without the need for extensive earthwork.

It is splashproof, hygienically clean and ensures frostproof operation of the EWE water meter system and the water meter.

**There is no need to enter the EWE water meter pit, nor is this even possible.** Instead, the EWE water meter system simply pulls out, allowing you to easily install, remove or just read the meter. This feature ensures that installation costs are kept to a minimum.

The pit is tested to Load Class A 15 and B125 according to DIN EN 124.

### Tested traffic loading of the EWE Water Meter Pit

The EWE Water Meter Pit has been certified by the Braunschweig Materials Testing Institute (MPA) to the following load classes:

- A 15 based on DIN EN 124 and
  - B 125 in conjunction with the EWE pit surround
- (see page 11, order no. 0399301) according to DIN EN 124

Our installation instructions and user information must be observed.



Worksheet W 358 from the German Association of Gas and Water Engineers (DVGW) states the following under Section 4.1:

“Pit and manhole structures should be located away from the crown of the road. Preference should be given to systems alongside public highways to ensure access at all times.”

Therefore, while load class requirements play a secondary role, they should be taken into account during planning. Besides, it is important to have the security of a pit with a certified loading capacity. To withstand higher loads, special measures have to be taken, for instance, installing additional pit cover surrounds and underground foundations. Other engineering solutions for traffic loading our pits are suggested in the following pages or are available on individual request from our field staff – just ask!

Tests involving trucks driving over the EWE water meter pit and load tests conducted on our premises and at customer installation sites did not damage the pit or pit cover.



### EWE Water Meter Pit Qn 2.5

Suitable for installing horizontal water meters Qn 2.5 with an overall length of 190 mm, G 1" connection, comprising:

Polyethylene pit body, black, watertight, sturdy round form, maximum outside diameter 550 mm, inside diameter at cover 384 mm.

Cast iron cover, round, with seal, outside diameter of 425 mm, with stainless steel bar, including "EWE Water Meter Pit" label and a 70 x 80 mm area for individual engraving, can be closed using the included EWE pit key, with protective cap. EWE insulation seal provides additional low temperature insulation and inhibits the formation of condensation. A PA perimeter protector ring protects the cover from earth and makes for easy and clean opening. The pit inlet and outlet connections have an internal thread pursuant to DIN EN 10226-1 as well as EWE's proven O-ring system. Thread size is Rp 1". The silicone hoses of the water meter pit system feature a hard-wearing stainless steel braided sheath for optional mechanical protection. It goes without saying that the hoses have KTW-A and W270 approval.

**Thus all EWE pits with flexible hoses fulfil the strict hygienic requirements for drinking water.**

Optimised flow values are ensured thanks to the use of special brass fittings and ball joints on the inlet and outlet side of the water meter system. The guide and bar handle are made of stainless steel.



### EWE Water Meter Pit Qn 6

Pit features and measurements are the same as described above for the pit Qn 2.5, except for the installation of horizontal or ascending pipe water meters Qn 6, inlet and outlet connecting sleeves with thread pursuant to DIN EN 10226-1 and EWE's proven O-ring system, thread size G 1 1/4". The various water meter system models are listed in the next pages.



1. After removing the cover and insulation seal, take out the meter system, turning the wheel slightly while doing so.



2. The flexible hose allows the meter system to be conveniently placed next to the pit opening and a reading taken or the meter replaced.



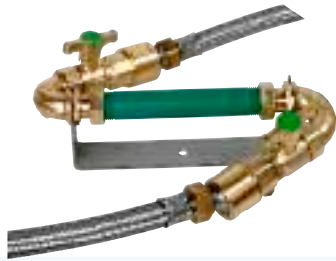
3. Lower the meter system back into the pit, turning the wheel slightly as it goes.



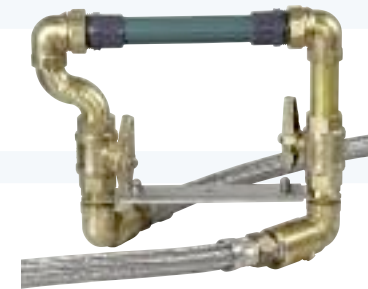
4. Do not forget to put in the insulation cushion before closing the cover.

### Model with ball valve/ball valve

EWE water meter pit as described above, featuring a water meter system with ball shut-off fittings, polyethylene adapter as a placeholder for the water meter (not suitable for continuous operation) and push-in backflow preventer for subsequent installation in the water meter.

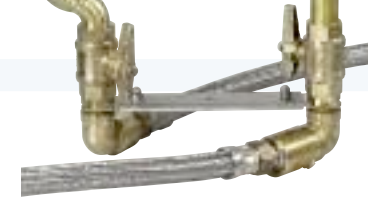


| Qn  | Internal thread | Cover depth | Order number |
|-----|-----------------|-------------|--------------|
| 2.5 | Rp 1"           | 1.00 m      | 0399831      |



|     |       |        |         |
|-----|-------|--------|---------|
| 2.5 | Rp 1" | 1.25 m | 0399832 |
|-----|-------|--------|---------|

|     |       |        |         |
|-----|-------|--------|---------|
| 2.5 | Rp 1" | 1.50 m | 0399833 |
|-----|-------|--------|---------|



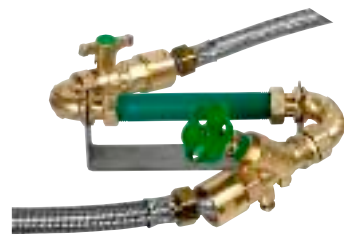
|   |           |        |         |
|---|-----------|--------|---------|
| 6 | Rp 1 1/4" | 1.00 m | 0399441 |
|---|-----------|--------|---------|

|   |           |        |         |
|---|-----------|--------|---------|
| 6 | Rp 1 1/4" | 1.25 m | 0399442 |
|---|-----------|--------|---------|

|   |           |        |         |
|---|-----------|--------|---------|
| 6 | Rp 1 1/4" | 1.50 m | 0399443 |
|---|-----------|--------|---------|

### Model with ball valve/combined slanted-seat backflow preventer (CSBP)

EWE water meter pit as described above, featuring a water meter system with a ball shut-off fitting on the inlet side and an EWE combined slanted-seat backflow preventer on the outlet side. Polyethylene adapter as a placeholder for the water meter (not suitable for continuous operation).

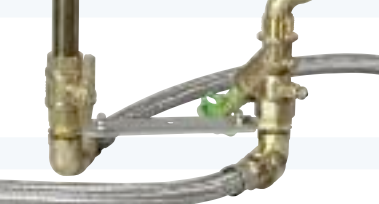


| Qn  | Internal thread | Cover depth | Order number |
|-----|-----------------|-------------|--------------|
| 2.5 | Rp 1"           | 1.00 m      | 0399139      |



|     |       |        |         |
|-----|-------|--------|---------|
| 2.5 | Rp 1" | 1.25 m | 0399140 |
|-----|-------|--------|---------|

|     |       |        |         |
|-----|-------|--------|---------|
| 2.5 | Rp 1" | 1.50 m | 0399141 |
|-----|-------|--------|---------|



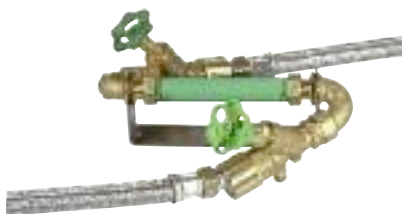
|   |           |        |         |
|---|-----------|--------|---------|
| 6 | Rp 1 1/4" | 1.00 m | 0399446 |
|---|-----------|--------|---------|

|   |           |        |         |
|---|-----------|--------|---------|
| 6 | Rp 1 1/4" | 1.25 m | 0399447 |
|---|-----------|--------|---------|

|   |           |        |         |
|---|-----------|--------|---------|
| 6 | Rp 1 1/4" | 1.50 m | 0399448 |
|---|-----------|--------|---------|

### Model with slanted-seat/combined slanted-seat backflow preventer (CSBP)

EWE water meter pit as described above, featuring a water meter system with an EWE slanted-seat valve on the inlet side and an EWE combined slanted-seat backflow preventer on the outlet side. Polyethylene adapter as a placeholder for the water meter (not suitable for continuous operation).



| Qn  | Internal thread | Cover depth | Order number |
|-----|-----------------|-------------|--------------|
| 2,5 | Rp 1"           | 1,00 m      | 0399145      |



|     |       |        |         |
|-----|-------|--------|---------|
| 2,5 | Rp 1" | 1,25 m | 0399146 |
|-----|-------|--------|---------|

|     |       |        |         |
|-----|-------|--------|---------|
| 2,5 | Rp 1" | 1,50 m | 0399147 |
|-----|-------|--------|---------|



|   |           |        |         |
|---|-----------|--------|---------|
| 6 | Rp 1 1/4" | 1,00 m | 0399451 |
|---|-----------|--------|---------|

|   |           |        |         |
|---|-----------|--------|---------|
| 6 | Rp 1 1/4" | 1,25 m | 0399452 |
|---|-----------|--------|---------|

|   |           |        |         |
|---|-----------|--------|---------|
| 6 | Rp 1 1/4" | 1,50 m | 0399453 |
|---|-----------|--------|---------|

### Model with ball valve/conical diaphragm backflow preventer/ball valve

EWE water meter pit as described above, featuring a water meter system with ball shut-off fittings, polyethylene adapter as a placeholder for the water meter (not suitable for continuous operation), EWE conical diaphragm backflow preventer upstream of the outlet ball valve.

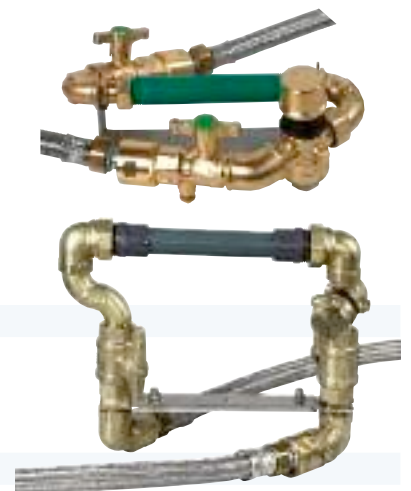
| Qn  | Internal thread | Cover depth | Order number |
|-----|-----------------|-------------|--------------|
| 2.5 | Rp 1"           | 1.00 m      | 0399135      |
| 2.5 | Rp 1"           | 1.25 m      | 0399136      |
| 2.5 | Rp 1"           | 1.50 m      | 0399137      |
| 6   | Rp 1 1/4"       | 1.00 m      | 0399436      |
| 6   | Rp 1 1/4"       | 1.25 m      | 0399437      |
| 6   | Rp 1 1/4"       | 1.50 m      | 0399438      |



### Model with ball valve/pressure reducer/ball valve

EWE water meter pit as described above, featuring a water meter system with ball shut-off fittings, polyethylene adapter as a placeholder for the water meter (not suitable for continuous operation), a pressure reducer installed between the water meter and outlet ball valve and push-in backflow preventer for subsequent installation in the water meter.

| Qn  | Internal thread | Cover depth | Order number |
|-----|-----------------|-------------|--------------|
| 2.5 | Rp 1"           | 1.00 m      | 0399131      |
| 2.5 | Rp 1"           | 1.25 m      | 0399132      |
| 2.5 | Rp 1"           | 1.50 m      | 0399133      |
| 6   | Rp 1 1/4"       | 1.00 m      | 0399456      |
| 6   | Rp 1 1/4"       | 1.25 m      | 0399457      |
| 6   | Rp 1 1/4"       | 1.50 m      | 0399458      |



### Model for installing ascending pipe water meters

| Qn | Internal thread | Cover depth | Order number |
|----|-----------------|-------------|--------------|
| 6  | Rp 1 1/4"       | 1.00 m      | 0399431      |
| 6  | Rp 1 1/4"       | 1.25 m      | 0399432      |
| 6  | Rp 1 1/4"       | 1.50 m      | 0399433      |

Delivered complete with all seals, including insulation seal and one key for the cover, installed, sealed and pressure-tested. Water meter not included in the delivery!  
If the models shown are not exactly what you want or need, we would be happy to put together an individual solution for you. We are unable to show all the possible variants of our modular system here.

Our office-based and field team are on hand to provide you with a customised model. We would be delighted to help – just ask!





An old pit is replaced



Levelling of the EWE telescopic pit



Compaction in layers at installation



### EWE Telescopic Water Meter Pit

For installing horizontal water meters Qn 2.5, with an overall length of 190 mm and G 1" connection or water meters Qn 6, with an overall length 260 mm and G 1 1/4" connection.

The model and measurements of the pit body are essentially the same as the normal EWE water meter pit. However, this pit is telescopic, i.e. its overall length can be infinitely adjusted on the spot within a range of 50 cm altogether to cater for any cover depth.

The handle for lifting the water meter system is also telescopic and is fixed at the desired height with a split-pin at the place of installation.

A specially developed moulded seal between the pit insert and pit body effectively prevents moisture from seeping in from the surrounding earth. For further technical information, see page 03.

#### Model with ball valve/ball valve

| Qn  | Cover depth   | Order number |
|-----|---------------|--------------|
| 2.5 | 1.20 - 1.70 m | 0399550      |
| 6   | 1.20 - 1.70 m | 0399565      |

#### Model with ball valve/CSBP

| Qn  | Cover depth   | Order number |
|-----|---------------|--------------|
| 2.5 | 1.20 - 1.70 m | 0399552      |
| 6   | 1.20 - 1.70 m | 0399567      |

#### Model with slanted-seat/CSBP

| Qn  | Cover depth   | Order number |
|-----|---------------|--------------|
| 2.5 | 1.20 - 1.70 m | 0399554      |
| 6   | 1.20 - 1.70 m | 0399569      |

#### Model with ball valve/conical diaphragm BP/ball valve

| Qn  | Cover depth   | Order number |
|-----|---------------|--------------|
| 2.5 | 1.20 - 1.70 m | 0399551      |
| 6   | 1.20 - 1.70 m | 0399566      |

#### Model with ball valve/pressure reducer/ball valve

| Qn  | Cover depth   | Order number |
|-----|---------------|--------------|
| 2.5 | 1.20 - 1.70 m | 0399553      |
| 6   | 1.20 - 1.70 m | 0399568      |

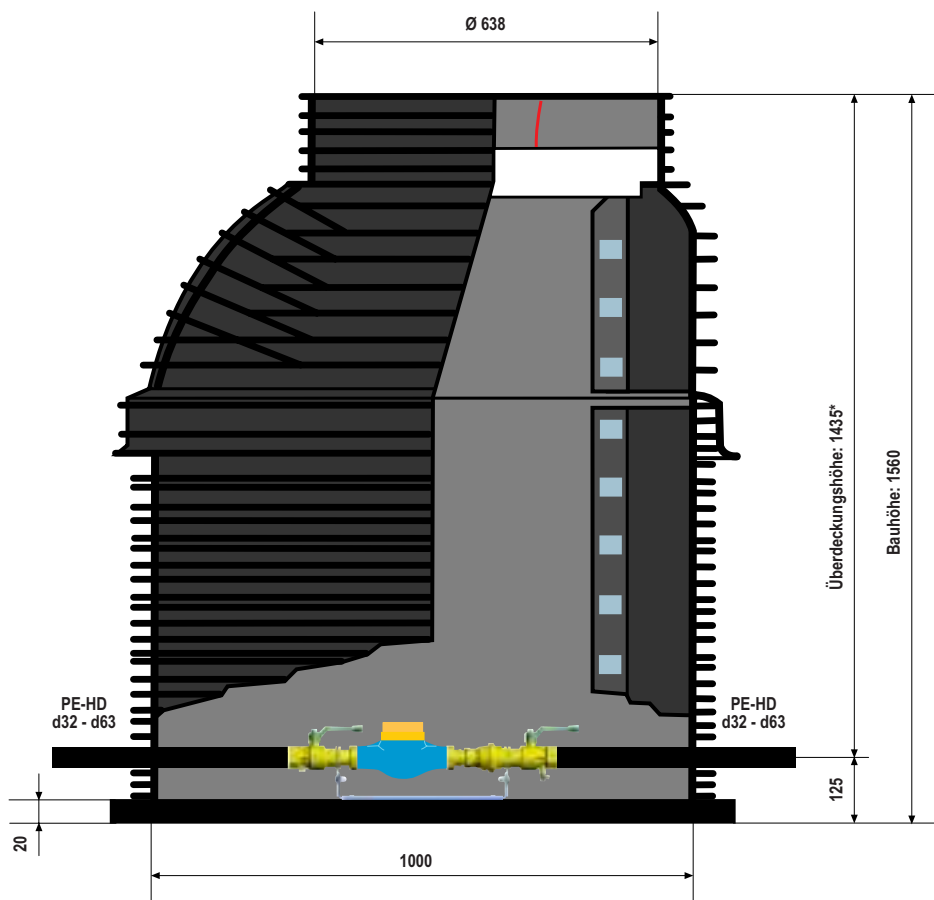
## EWE Water Meter Pit Qn 10

Consisting of external ribbed polyethylene prefabricated parts. With eccentric access, integrated ladder, inlet seal and outlet seal, EPS block frost protection (100 mm thick) with 2 lifting loops, pit pipe connections with multiple lip seal element. PE pipe ends (d 32 mm to d 63 mm available) on both the inlet and outlet side, long enough for smooth welding outside the water meter pipe. The base of the pit is made of a pipe riser with a double extrusion-welded HDPE base plate. Suitable for water meter systems Qn 2.5 – Qn 10; also see our line of EWE water meter systems.

**Special models, e.g. with more than one water meter system, available on request!**

**The following essential accessories are not included in the delivery:**

- Concrete ring for supporting commercially available cover A 15 to F 900.  
*alternatively*
  - Pit cover Class B 125, consisting of cast iron frame and cover closed in accordance with DIN 19596-3, for direct placement on the water meter pit. Concrete support ring not necessary.
- Request if required!



\*Überdeckungshöhe:  
+ 70 mm beim Betonring + handelsübliche Abdeckung + 0-50 mm Höhenspiel;  
+ 35 mm bei der Schachtabdeckung B 125



## EWE Pit Hydrant for the EWE Water Meter Pit

### EWE Pit Hydrant for EWE WM Pit Qn 2.5

For drawing off water directly at the pit, self-emptying, e.g. for use on building sites. Coupling at the pit outlet via threaded connection and O-ring system. With a 3/4" outlet valve made of brass and a GEKA hose connection. The conduit projects 50 cm above the pit cover with all pit cover depths.



| Cover depth | with backflow preventer<br>Order number | with system separator BA<br>Order number |
|-------------|---|--|
| 1.00 m      | 0397051                                 | 0397151                                  |
| 1.25 m      | 0397061                                 | 0397161                                  |
| 1.50 m      | 0397071                                 | 0397171                                  |



### EWE Pit Hydrant for EWE WM Pit Qn 2.5

Model as described above, but with two 3/4" outlet valves.

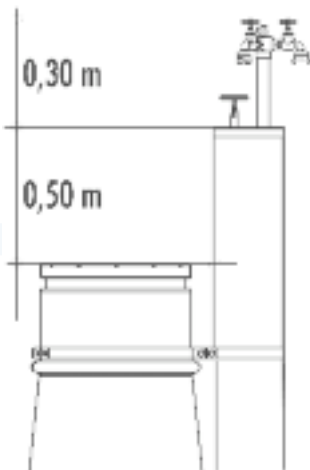
| Cover depth | with backflow preventer<br>Order number | with system separator BA<br>Order number |
|-------------|---|--|
| 1.00 m      | 0397052                                 | 0397152                                  |
| 1.25 m      | 0397062                                 | 0397162                                  |
| 1.50 m      | 0397072                                 | 0397172                                  |



### EWE Pit Hydrant for EWE WM Pit Qn 2.5

Model as described above, but with three outlet valves 3/4".

| Cover depth | with backflow preventer<br>Order number | with system separator BA<br>Order number |
|-------------|---|--|
| 1.00 m      | 0397053                                 | 0397153                                  |
| 1.25 m      | 0397063                                 | 0397163                                  |
| 1.50 m      | 0397073                                 | 0397173                                  |



### EWE Connection Adapter for EWE WM Pit Qn 6

For the transition between EWE WM pits Qn 6 to the above pit hydrants, double nipple made of brass, with EWE O-ring system for easy installation of the hydrant at the pit.

|              |         |
|--------------|---------|
| Order number | 2020314 |
|--------------|---------|

Detailed advice about the connection adapter, special solutions featuring other designs, e.g. with concealed operating device, system separator or without outlet valves for garden standpipes is available from our office-based and field team.

## EWE Water Meter Pit

### Operating principle



Cross-section with insulation seal and closed cover



Cross-section with cover taken off and insulation seal taken out



Cross-section with lift handle half pulled out

## Guidelines for Working in Containers

### - do not apply to EWE Water Meter Pit Qn 2.5 and Qn 6!

The German Employer's Liability Insurance Association for Gas and Water Works "BGFW" and the Guidelines for Working in Containers and Confined Spaces (ZH 1/77) 4.85 outline the important aspects of job safety when inspecting, carrying out maintenance work or cleaning in manholes, pits and containers. Such work almost always involves certain risks that may lead to accidents. Frequently, this also presents major safety issues that supervisors and managers must take into account.

Before entering a manhole or pit it is necessary to perform some checks.

The air in the pit must always be checked using gas detectors with regard to:

- oxygen content,
- CO<sub>2</sub> concentration,
- combustible gases and vapours.

Supervisors and managers must ensure that only experienced, reliable employees who are familiar with handling and using measuring equipment are allowed to conduct measurements. No one is allowed to enter the manhole or pit until all the relevant measurements, tests and/or checks have been conducted to ensure that the measurements are within the safe limits.

To bypass these problems and thus eliminate any possible health risks, we have designed and fitted the EWE water meter pit with an extractable water meter system.

Thanks to this design, it is possible to easily read and/or replace the meter above ground, in fresh air, without being exposed to any potential risks.

**The above regulations do not apply to the EWE water meter pit Qn 2.5 und Qn 6 since there is no need to enter the pit.**



## EWE Garden Water Meter Pit for 500 mm cover depth

The compact dimensions of this EWE water meter pit make it easy to install without the need for extensive earthwork.

It is connected directly to the two 1" internal threads by means of the EWE O-ring system.

It is splashproof, hygienically clean and ensures that the EWE water meter system and water meter operate reliably.

The water meter is easy to read, install or remove with the aid of EWE's length compensating union piece.

Traffic loading of the pit is limited in accordance with the standards DIN 1229 and DIN EN 124, Class A15, Group 1.

Therefore, usage in public thoroughfares is only permitted if they are only used by pedestrians and cyclists.

### Note:

**This EWE garden water meter pit has been designed exclusively for "summer pipelines", i.e. pipelines that must be drained before the first frost and not used again until there is no longer any risk of frost!**

### EWE Garden Water Meter Pit

Suitable for the installation of horizontal water meters Qn 2.5, overall length 190 mm, Rp 1" connection, comprising:

Polyethylene pit body, black, watertight, round, maximum outside diameter of 430 mm, minimum inside diameter of 380 mm.

Cast iron cover, round, with seal, outside diameter of 425 mm, with stainless steel bar, including "EWE Water Meter Pit" label and a 70 x 80 mm area for individual engraving, can be closed using the included EWE pit key, with protective cap.

A PE perimeter protector ring protects the cover from earth and makes for easy and clean opening.

Inlet and outlet connecting sleeves are equipped with an internal thread pursuant to DIN EN 10226-1 and EWE's proven O-ring system.

Thread size is Rp 1".

EWE water meter system with DIN-DVGW-approved ball shut-off fitting, with EWE's 1" x 190 mm plastic adapter as a placeholder for the water meter (not suitable for continuous operation).

Delivered complete with all seals, one key for the cover, installed, sealed and tested.

**Water meter not included in the scope of delivery!**

Order number 0399629



## EWE Water Meter Pit Accessories and spare parts



### EWE Pit Surround for traffic loading corresponding to Class B 125

This pit surround can be used to upgrade all EWE water meter pit models Qn 2.5 and Qn 6 (Class A 15) to Class B 125. The existing, robust cast iron pit cover is still used with the upgrade; it is not necessary to replace it or get another cover. The surround is made of bitumen-painted grey cast iron, maximum outside diameter of 550 mm, inside diameter of 435 mm, approx. 50 kg, includes foam rubber seal for setting on top of the pit in question.

Order number 0399301



### EWE extension

Made of polyethylene, round, for placement on the pit body. The extension is used to increase height of the pit on-site to bring it in line with the conditions on the premises. The pit body is sealed on the building site using commercially available sealants, e.g. silicone, which are not included in the scope of delivery.

| Extension | Order number |
|-----------|--------------|
| 100 mm    | 0399310      |
| 150 mm    | 0399315      |
| 200 mm    | 0399320      |



Other extensions are available on request!

### EWE Pit Top Attachment

Made of polyethylene, round, for placement on the pit body. Attachment is used to increase height of the pit on-site to bring it in line with the conditions on the premises. The pit body is sealed on the building site using the seal mentioned below (Order number 0399974).

| Top attachment         | Order number            |
|------------------------|-------------------------|
| 250 mm                 | 0399975                 |
| Seal<br>for attachment | Order number<br>0399974 |



### EWE Pit Key

Spare for the EWE water meter pit, as of model year 2007

Order number 0399809



### EWE Insulation Seal

Spare for the EWE water meter pit.

Order number 0399985



### Packing set

For individual shipment (credited on return).

Order number 9000090

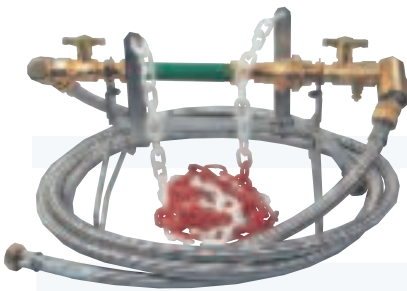


## EWE Pit Set for installing water meters in pits/manholes

### EWE Pit Set

for installing water meters in existing pits/manholes,  
comprising:

- EWE water meter system, order number 38486 ..., with stainless steel bracket, with ball shut-off fittings DIN-DVGW, and conical diaphragm backflow preventer, with form-fit length compensation,
- upright design with stainless steel handle, with a plastic chain approx. 4 m long,
- special ball joints on the water meter system, with connections for flexible hose union nuts, for absorbing torsional forces acting on the hoses,
- W-270/KTW-A approved flexible hoses, inlet and outlet equipped with union nuts.



| WM Qn | WM system | Hose connection union nut | Overall length | Order number |
|-------|-----------|---------------------------|----------------|--------------|
| 2.5   | 1"        | G 1"                      | 645 mm         | 3310013      |
| 2.5   | 1"        | G 1 1/4"                  | 690 mm         | 3310017      |
| 6     | 1 1/4"    | G 1 1/4"                  | 785 mm         | 3310033      |
| 6     | 1 1/4"    | G 1 1/2"                  | 805 mm         | 3310036      |

### EWE Pit Adapter Qn 2.5

Special adapter for pit set, closed in the middle, can be turned 360°, with two connections for flexible hose union nuts at the inlet and outlet side of the pit set.



| Qn  | Size G x mm  | Side connection | Order number |
|-----|--------------|-----------------|--------------|
| 2.5 | 1" x 190     | G 1"            | 3380760      |
| 6   | 1 1/4" x 260 | G 1 1/4"        | 3380761      |

**WILHELM EWE GmbH & Co. KG**  
 Volkmaroder Strasse 19, 38104 Braunschweig, Germany  
 Postfach 18 18, 38104 Braunschweig, Germany  
 Tél. +49 (0)531 37 00 50, Fax +49 (0)531 37 00 555  
 E-mail : [info@ewe-armaturen.de](mailto:info@ewe-armaturen.de), Internet : [www.ewe-armaturen.de](http://www.ewe-armaturen.de)