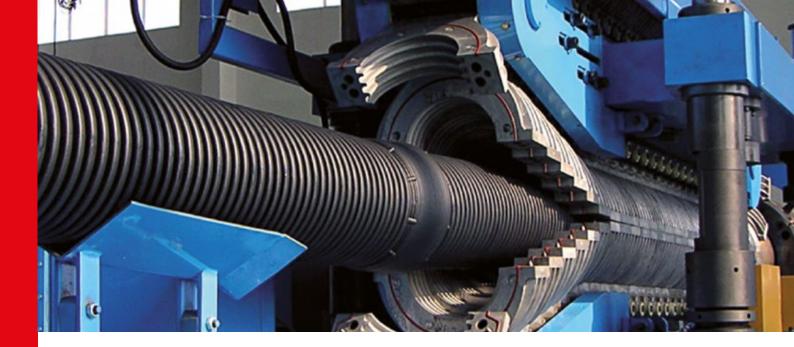




# **Pipes and Chambers**



# Culvert pipes

A reliable solution for ditching, underpassing and rainwater drainage

Culvert pipes are used to convey drain pipe water or rainwater under the ground. The smallest (110 mm) culvert pipes are used to convey rainwater falling on buildings from the rainwater chamber to the water chamber and for technical drain pipe systems around buildings. A wide range of different couplings and chambers is available for the 110 mm system, enabling the use of the product in a variety of environments. Larger culvert pipes are used as joint culverts or extensions of ditches. Culvert pipes can also be applied for other purposes, such as drain pipe inspection chambers or column moulds.

The pipes are made of durable polyethylene, and their ring stiffness class is SN4 or SN8, depending on the application. The culvert pipes are twin-wall pipes with a corrugated outer surface and smooth inner surface. The twin-wall structure enables higher ring stiffness and a good flow rate without compromising the low weight that makes the culverts easy to handle.



### **Technical data**

Pipes in the SN4 strength class are suitable for applications with lighter loads, such as fields, private road junctions and yards and green areas.

Pipes in the SN8 strength class are used in traffic areas, road construction and other applications with heavier loads.

The selection of the strength class depends on the load, installation depth and earth material.

Material	polyethylene (HDPE)		
Ring stiffness	SN4 or SN8		
Outer surface colour	black		
Inner surface colour	SN8 culvert pipe - blue SN8 drain pipe - white SN4 culvert pipe and drain pipe - black		

### SN4 and SN8 culvert pipes

#### Outer/inner diameter

110 / 95 mm	400 / 347 mm
160 / 140 mm	450 / 400 mm
200 / 178 mm	560 / 500 mm
250 / 223 mm	670 / 600 mm
315 / 275 mm	900 / 800 mm

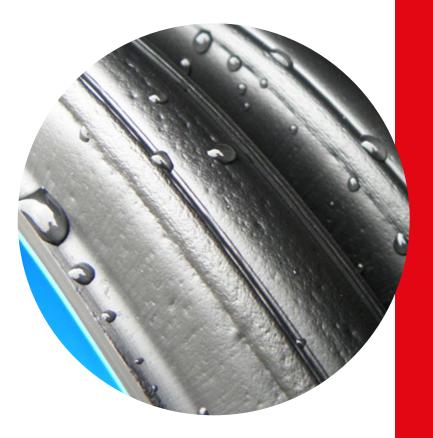
Lengths 6 m, 8 m, 9 m and 10 m, and 12 m by separate order.

6 m pipes have a socket; other lengths do not. 315 mm and 400 mm SN4 culvert pipes are also available without a socket.

We also manufacture pipes with a fixed socket.

### **Culvert pipe components**

- » Rainwater funnel 315/110 mm
- » MX rainwater chamber SVK 300/100-110 mm
- » Flexible pipe bend 110 SN8
- » Flexible pipe bend 110 mm, with seal SN8
- » Flexible pipe branch 110 mm SN8
- » Drain bends and branches, reducers
- » Solid plastic and stainless steel covers and bottoms
- » Bottom element with connections 315 mm
- » Drain pipe inspection chamber 315 mm
- » Sealing rings
- » Pipe couplers





Drain bend



Drain pipe inspection chamber



MX rainwater chamber SVK 300/100-110 mm



Inspection chamber bottom element with connections





Rainwater funnel

Flexible pipe bend and branch SN8

Pipe couplers

# Pressure and sewer pipes

Pressure pipes are used as water pipes in conveying cold water, as pressure and gradient drains and in the tight-in-pipe renovation of old pipe systems.

Traditional applications for pressure pipes include feed water lines in detached house construction, water and drain pipes in water co-operatives and municipal infrastructure as well as watering and irrigation pipes in agricultural applications. Pressure pipes are also used in various industrial applications.

In addition to traditional applications, pressure pipes are now used in the increasingly popular geothermal heating systems, where the pipes are used to accumulate heat in systems based on ground, water and rock heat.

We manufacture our pressure pipes in accordance with the EN 12201 standard.



Nominal sizes	PE 80 PN 12,5 SDR 11	PE 80 PN 10 SDR 13,6	PE 100 PN 16 SDR 11	PE 100 PN 10 SDR 17
(mm)	e <sub>nom</sub> (mm)	e <sub>nom</sub> (mm)	e <sub>nom</sub> (mm)	e <sub>nom</sub> (mm)
20	2	-	2	-
25	2,3	-	2,3	-
32	3	-	3	-
40	3,7	-	3,7	-
50	4,6	-	4,6	-
63	5,8	4,7	5,8	3,8
75	-	5,6	6,8	4,5
90	-	6,7	8,2	5,4
110	-	8,1	10	6,6
140	-	10,3	12,7	8,3
160	-	11,8	14,6	9,5
180	-	13,3	16,4	10,7
200	-	14,7	18,2	11,9
225	-	16,6	20,5	13,4
250	-	18,4	22,7	14,8
280	-	20,6	25,4	16,6
315	-	23,2	28,6	18,7
355	-	26,1	32,2	21,1
400	-	29,4	36,3	23,7
450	-	33,1	40,9	26,7
500	-	36,8	45,4	29,7
560	-	41,2	50,8	33,2

# Building and underground sewer pipes

## Building sewer pipes, diameter:

32 mm 50 mm 75 mm 110 mm **diameter:** 160 mm 200 mm

Underground sewer pipes,

We manufacture our building sewer pipes in accordance with the EN 1451 standard and underground sewer pipes in accordance with the EN 1852 standard.



# Water chambers

Water chambers are used as branch chambers for drain pipe water and rainwater, in both areas covered by municipal infrastructure and at properties not covered by it.

When rainwater and drain pipe water are conveyed into one discharge pipe, it must be ensured that rainwater cannot enter the drain pipe in the event of problems, causing the ground by the foundations to become wet instead of draining it. Water chambers are equipped with a ball float valve for this purpose. If the water level in the chamber rises due to a blockage or unusually heavy rainfall, the ball float valve blocks the inlet connection of the drain pipe and ensures that the drain pipe system works even in extreme conditions.

The dimensioning of a water chamber is influenced by the size and roof area of the building. The roof area of a large building, such as a terraced house or an industrial building, collects a lot of rainwater, and a large amount of drain pipe water is collected around the foundations of the building. Due to this, the amount of water flowing through the water chamber is larger than for detached houses or holiday homes.

## PVK 400/315 mm with a ball float valve

- » Frame 400 x 1500 and telescope 315 x 750: material polyethylene
- » Solid cast-iron cover, 40 tonnes
- » Sediment chamber, about 70 litres
- » 2 inlet connections, diameter 110 mm, ball float valve in the lower one
- » 1 outlet connection, diameter 110 mm

### PVK 600/315 R with a ball float valve

- » Rotationally moulded frame 400/600 x 1500 and telescope 315 x 750: material polyethylene
- » Solid cast-iron cover, 40 tonnes
- » Sediment chamber, about 150 litres
- $\,$  » 1 inlet connection, diameter 110mm, ball float value
- » 1 outlet connection, can be cut to 110, 160 or 200 mm

Both water chamber models are also available without the cast-iron cover, in which case the chamber can be equipped with a stainless steel or plastic cover or a 5-tonne plastic cover.





# Sewer inspection chamber package

The sewer inspection chamber package can be used to combine intersecting sewer lines, with the chamber working as an inspection, service and branch chamber.

The sewer inspection chamber packages have an intersecting PRO bottom element in which the bottoms of the inlet connections are at slightly different heights, enabling the inspection of the sewer line flow rates. The inspection chamber packages feature a telescopic pipe and cast-iron cover, so the chamber can also be installed on a vehicle route.

#### **Properties:**

- » Frame 400 x 1500, telescope 315 x 750: material polyethylene
- » Solid cast-iron cover, 40 tonnes
- » PRO bottom, material polypropylene
- » 3 inlet connections, 1 outlet connection, connection size 110, 160 or 200 mm

VTK 400/315/110, VTK 400/315/160, VTK 400/315/200



# Oil sump OH-02

Oil sumps are used as floor chambers in garages and under shelters.

#### **Properties:**

- » Frame diameter 660 mm and height 700 mm
- » Cast-iron grating cover, 40 tonnes
- » Separation volume 110 litres
- » Separation rate 0.20 litres/second





# Rainwater chambers

Rainwater chambers are used to collect rainwater, storm water and melt water from the surface of the ground.

The chambers are equipped with a cast-iron grating cover and a large sediment chamber, which prevents sand and other fine materials that pass through the grating from getting into the pipe system. The rainwater chambers have one discharge connection. In addition, the required number of inlet connections can be added to the chamber on the site using lead-through seals.

## SVK 400/315

- » Frame 400 x 1500 and telescope 315 x 750: material polyethylene
- » Cast-iron grating cover, 40 tonnes
- » Sediment chamber, about 70 litres
- » 1 outlet connection, diameter 110 mm

## SVK 600/315 R

- » Rotationally moulded frame 400/600 x 1500 and telescope 315 x 750: material polyethylene
- » Cast-iron grating cover, 40 tonnes
- » Sediment chamber, about 150 litres
- » 1 outlet connection, can be cut to 110, 160 or 200

## **SVK 315**

- » Frame 315 x 1000: material polyethylene
- » Cast-iron grating cover, 40 tonnes
- » Sediment chamber, about 15 litres
- » 1 outlet connection, diameter 110 mm

### Rainwater chamber package

- » Frame 315 x 500: material polyethylene
- » Cast-iron grating cover
- » Sediment chamber
- » 1 outlet connection, diameter 110 mm



# Sewer inspection pipe package

The sewer inspection pipe package is used as an inspection and service pipe for a single sewer line. A straight sewer line must be equipped with inspection pipes at certain distances, so any clogging or breakage of the sewer line can be located and serviced.

#### **Properties:**

- » Frame 200 x 1500, telescope 160 x 950: material polyethylene
- » Solid cast-iron cover
- » Inspection branch bottom for a 110, 160 or 200 mm pipeline
- » TPP 200/160/110, TPP 200/160/160 or TPP 200/160/200



VTP 200/160/110, VTP 200/160/160, VTP 200/160/200



The SVK 400/315, SVK 600/315 R and SVK 315 rainwater chambers may alternatively be equipped with a 5-tonne plastic grating cover.

# **Pipes and Chambers**



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