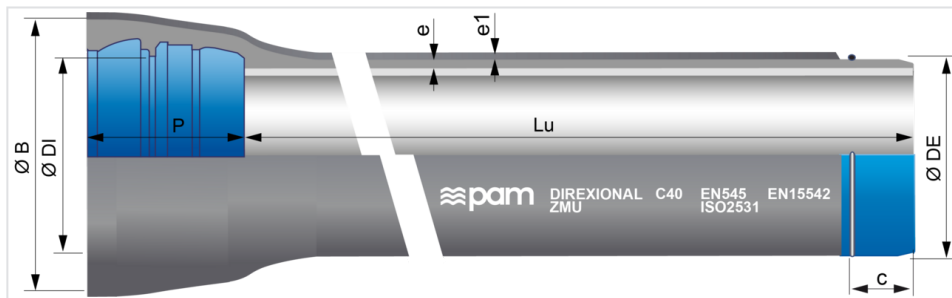


## DIREXIONAL ZMU pipes DN350 to 600 with UNIVERSAL STANDARD socket + Weld bead Ve



| DN  | Lu (m) | Class | e (mm) | e1 (mm) | ØDE (mm) | ØDI (mm) | P (mm) | ØB (mm) | Bead position c (mm) | Mass (kg/m) | References |
|-----|--------|-------|--------|---------|----------|----------|--------|---------|----------------------|-------------|------------|
| 350 | 5.97   | C40   | 7.7    | 5       | 378      | 380.9    | 184    | 463     | 115                  | 95.30       | 224310     |
| 400 | 5.97   | C40   | 8.1    | 5       | 429      | 431.9    | 176    | 510     | 113                  | 111.60      | 224311     |
| 500 | 5.97   | C40   | 9.3    | 5       | 532      | 535      | 200    | 625     | 125                  | 155.80      | 224312     |
| 600 | 5.97   | C40   | 10.9   | 5       | 635      | 638.2    | 209    | 740     | 135                  | 208.10      | 224313     |

### Legend

- DN: nominal diameter
- Lu: laying length, in m
- Class: pressure class according to EN 545 and ISO 2531
- e: nominal thickness according to ISO 2531, in mm
- e1: external thickness of ZMU coating, in mm (cement mortar with acrylic fibers and resin) according to EN15542
- ØDE: external nominal diameter of the barrel according to EN 545 and ISO 2531, in mm
- ØDI: internal nominal diameter of the socket, in mm
- P: nominal depth of the socket, in mm
- ØB: nominal diameter of the socket, in mm
- c: weld bead position, in mm
- Mass: total mass per meter (including cement coating and socket), determined with the nominal thickness, in kg/m
- Reference: commercial reference Saint-Gobain PAM

### Field of use:

- For drinking water networks
- High durability
- Total compatibility with drinking water
- For most of the soils, including rocky soils, those pipes can be laid with the native soils backfill.
- Resistivity of the soils > 250 Ohm.cm
- Joint protection with elastomer sleeve and HDD metal cone
- Adapted to the trenchless pipe laying in rocky soils (horizontal directional drilling and pipe bursting)

### Main characteristics:

- Elastomer quality: EPDM
- External coating: a layer of zinc-aluminium 85/15 alloy, enriched with copper, with a minimum surface density of 400g/m<sup>2</sup>, applied by spraying molten metal onto the surface of the iron, using an electric arc spray gun, from ZnAl (Cu) alloy wire + a protective layer of Aquacoat (semi-permeable), a water-based blue acrylic of average thickness 80 microns applied using a spray gun + cement mortar ZMU with polymeric additiv and reinforced with PE fibers
- Internal coating in cement mortar CHF (thickness 5mm)
- ZMU pipes in accordance with EN 545
- ZMU coating according to EN 15542

### Type of water:

Ductile iron pipes with internal coating of sulphate resisting blast furnace cement mortar are adapted to convey all types of drinking water in conformity with Directive EU 2020/2184.

In case of other type of water, please refer to below information:

|           | Minimum value | Maximum value  |          |           |          |
|-----------|---------------|----------------|----------|-----------|----------|
| Parameter | pH            | CO2 aggressive | Sulphate | Magnesium | Ammonium |
| Unit      | -             | mg/l           | mg/l     | mg/l      | mg/l     |
| Value     | 5,5           | 15             | 3000     | 500       | 30       |

Blast furnace cement mortar is a sulphate resisting cement (SRC).

## Accessories



Elastomer Sleeve -  
Protection of joints of ZMU  
pipes DN100-1200

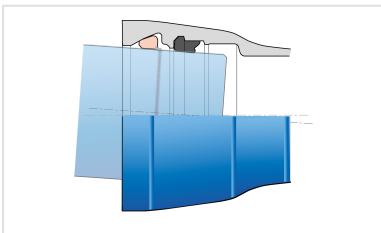


HDD metal protection cone  
for DIREXIONAL Universal  
Ve pipes

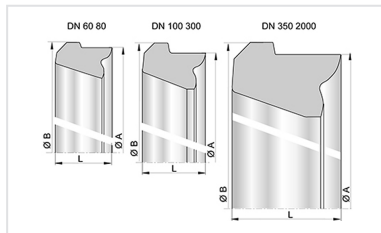


Pulling head for horizontal  
directional drilling

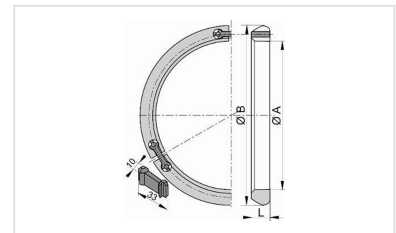
## Linked products



Kit Universal Standard Ve  
Pipe + Universal Standard  
Ve Joint



Standard gasket for Pipes  
and Fittings DN60-2000



Locking Ring for UNI Ve  
joint DN80-1800



Lubricating paste -  
BLUPAM



Lubricating paste -  
NATURAL, INTEGRAL, and  
PLUVIAL ranges

*The information on this sketch is, to the best of our knowledge correct at the time of printing. However Saint-Gobain are constantly looking at ways of improving their products and services therefore reserve the right to change without prior notice, any of the data shown. Any orders placed will be subject to our Standard Conditions of Sale, available on request.*