

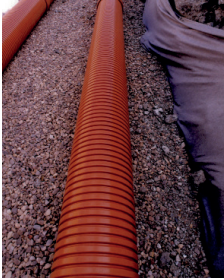


Double wall corrugated grooved draining pipe

High durability and capacity in drainage networks



Description



Double-walled (smooth on the inside, corrugated on the outside) heat fusion welded during the continuous extrusion manufacturing process. The groove marking equipment, together with the corrugating, produces the grooves for the draining in the troughs of the piping, which are the areas of least thickness, thus minimising the retention as the water passes.

Physical characteristics

Density: $1,350 \div 1,520 \text{ kg/m}^3$

Vicat Temperature: $\geq 79 \text{ }^\circ\text{C}$ UNE-EN 727

Linear expansion coefficient: $8 \times 10^{-5} \text{ }^\circ\text{C}$

Thermal conductivity: $0.13 \text{ kcal/m.h. }^\circ\text{C}$

Specific heat: $0.2 \div 0.3 \text{ cal/g.}^\circ\text{C}$

Equivalent roughness (Prandtl-Colebrook):

$K = 0.01 \text{ mm}$ (aguas limpias)

$K = 0.1 \div 0.25 \text{ mm}$ (aguas residuales)

Mechanical characteristics

SCR (Specific circumferential rigidity):

$\text{SCR} \geq 4 \text{ kN/m}^2$ UNE-EN ISO 9969

Creep coefficient PVC-U:

≤ 2.5 at 2 years UNE-EN ISO 9967

Chemical characteristics

pH limits: $3 \div 9$ a $20 \text{ }^\circ\text{C}$

Resistance to dichloromethane: $15 \text{ }^\circ\text{C}$, 30 min UNE-EN 580

Fittings

Extension sleeves and cones

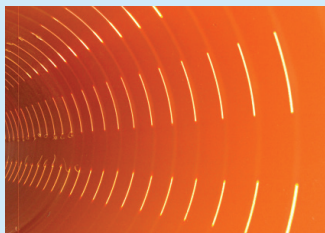
Elbows: 45° and $87,5^\circ$

Tee fitting: 45° and $87,5^\circ$

Clip junctions: 45° and $87,5^\circ$

Applications

- Road drainage (minor roads, main roads, railway lines)
- Agricultural drainage
- Drainage for buildings (foundation, floors)
- Playing fields
- Canals
- Retaining walls



Composition

U-PVC (Unplasticised polyvinyl chloride).

Joint between pipes

By means of an elastic joint fitted to the end of the pipe.

Colour

Orange brown RAL 8023

Overall length

6 metres

Range

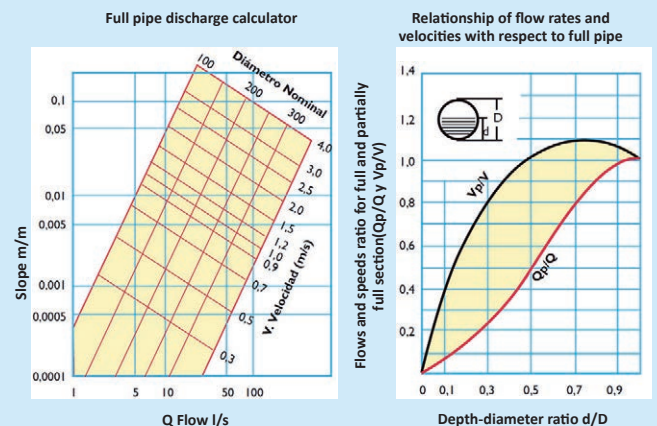
- Nominal Diameter (ND, mm) 110-160-200-250-315-400
- Internal Diameter (ID, mm) 101,5-146-182,4-227,9-285,2-364,1

Draining characteristics

ND	ID (mm)	Corrugated steps (per linear m)	No. of grooves on perimeter	Half length slot (cm)	Slot width (cm)	Filtering surface (cm ² /m)
110	101,5	110	2 *	4	0,13	114,4
160	146,0	60	2 *	4	0,13	62,4
200	182,4	50	4	4	0,13	104,0
250	227,9	40	5	4	0,13	104,0
315	285,2	30	5	5,8	0,13	112,1
400	364,1	25	5	6,8	0,13	109,7

*Alternate grooves in consecutive troughs.

Flows and speeds for full and partially full sections.



Reference regulations

- **UNE 53994:** Plastics. PVC-U, PE and PP pipes and fittings for drainage in building and civil engineering and agricultural drainage.
- **UNE-EN 13476-3:** Plastics piping systems for non-pressure underground drainage and sewerage - Structured-wall piping systems of unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE) - Part 3: Specifications for pipes and fittings with smooth internal and profiled external surface and the system, Type B.