

TECHNICAL DATA SHEET

DRENTER PIPE 1000

Drainage module with very high hydraulic-mechanical performances with patented male-female joint

EXTERNAL CONTAINMENT CAGE

Type: square mesh electro-welded mesh
Height: 1,000 mm
Length: 2,000 mm
Thickness: 300 mm
Mesh: 100mm x 100mm
Tensile strength: 46 KN/m
Wire thickness: 2.85mm
Wire galvanization: in accordance with EN 10244

GEOTEXTILE COATING

Type: spunbonded continuous filament geotextile
mechanically needled
Raw material: polypropylene
Weight: between 125 and 155 g/ m²
Thickness (at 2kPa): between 1.0 and 1.2 mm
Water permeability (at 2kPa): 100 l/m²/s with D h=50 mm
between 85 and 105 µm
Tensile strength: between 9.5 and 11.5 kN/m
Elongation (long/transv): 90 / 75 %





PLASTIC GEOGRID COATING ON THE HEADS

Type: UV stabilized HDPE net

Warp: 0.285 mm monofilament, 8 threads

Weft: 0.285 mm monofilament, 5.5 threads

Weight: approx. 96 g/ m²

Effective pore diameter: sufficient to retain every fragment of the draining core and avoid any leakage

GEOTEXTILE/GEOGRID BINDING ON THE HEADS

The covering geotextile will be sewn to the geogrid of the heads using filament multifilament polyethylene and a monofilament polypropylene, in order to prevent leakage of the drainage material.

DRAINING CORE (LOOSE SHAPED SYNTHETIC RESIN ELEMENTS)

Raw material: expanded polystyrene blocks

HYDRAULIC PERFORMANCE OF THE 2 X 1 X 0.3 m BASIC DRAINAGE MODULE

*extrapolated from tests on a module with dimensions 0.3 x 0.5 x 1, carried out with a batten constant hydraulic H=320 mm in 12 m long channel.

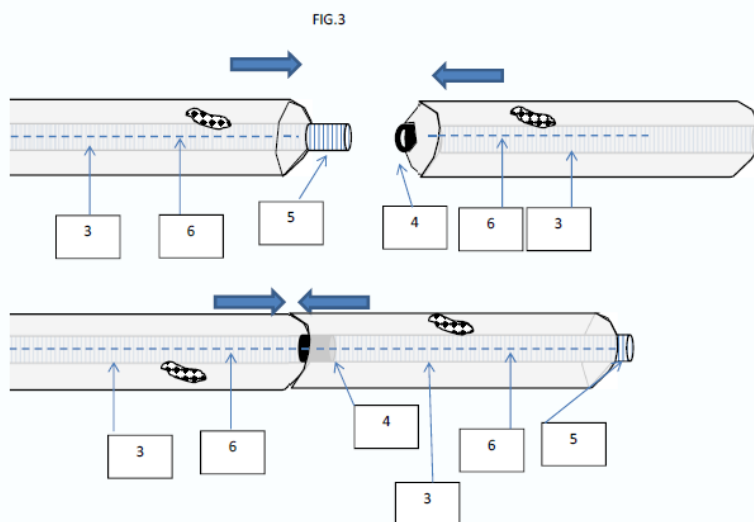
i (Dh/L)	Q (m ³ /s)(l/s)
0.009	0.006 (6)
0.020	0.012 (12)
0.037	0.019 (19)
0.060	0.023 (23)
0.092	0.033 (33)
0.141	0.040 (40)

PIPE AT THE BOTTOM

Double-wall corrugated pipe, provided with slots arranged in rows at 60° intervals along the entire circumference Material: HDPE – high density polyethylene Manufacturing company certification: UNI EN ISO 9001-2008 Environmental certification compliant with UNI EN ISO 14001:2004 External diameter DE/DI: 160/137 mm Thickness at the perforation point: 1.5 mm Number of corrugations per linear metre: 66 Number of holes per groove: 6 Number of holes per linear metre: 198 Collection surface: >110 cm²/ml Crush resistance: 300N/ml

PATENTED MALE-FEMALE CONNECTION SYSTEM

Joint fitting on each module to ensure perfect hydraulic sealing of the system Material: polypropylene External diameter 160 mm



The joint is created by extending the pipe on the bottom of the drainage panel to create a male connection, which will be inserted into a female connection made with a plastic sleeve on the opposite side of the panel, to ensure a perfect hydraulic seal. Material: polypropylene. External diameter: 160 mm.

MECHANICAL PERFORMANCE OF THE 2 X 1 X 0.3 BASE MODULE

Operating load 4.6kN (11.5 kN/m²)

Maximum deformation: 40 mm

