SOLENO
Mastering Storm Water

# DATA SHEET

## PERFORATED DRAIN OR PERFORATED AND FILTERED DRAIN

**PRODUCT DESCRIPTION :** Perforated flexible single wall pipe, with corrugated interior and exterior walls for drainage application use.

**FUNCTION :** Used to collect surface runoff and control the ground water level.

**MANUFACTURING STANDARD :** BNQ 3624-115 Type 2, Type 3* and meets the OPSS 1840 requirements.

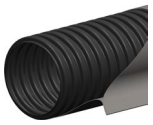
**RAW MATERIAL :** Made from high-density polyethylene (HDPE) complies with properties classification of ASTM D3350 standard.

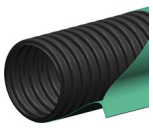
**TECHNICAL DATA :** Diameter : 50 mm (2 in) to 250 mm (10 in)
Length : 3 m (9.8 ft) to 1200 m (3,937 ft)
Strength in compression: 210 kPa
Manning : 0.015 to 0.017
Perforations** : Type 2, 1.8 mm sluice
Type 3, 3.0 mm sluice
Mega 3 (Type 3), more than 3.0 mm sluice
Filter : Needle punched nonwoven TXC-10 geotextile, FOS 100 µm
Needle punched nonwoven TXC-250 geotextile, FOS 250 µm
Woven, FOS 450 µm
Maximum backfill depth : 3 m (9.8 ft)

**AVAILABLE COUPLERS :** Soil tight: see technical data table


TYPE 2 perforated DRAIN


TYPE 3 perforated DRAIN


TYPE 2 perforated DRAIN filtered with TXC-10


TYPE 3 (MEGA 3) perforated DRAIN filtered with TXC-250

## TECHNICAL DATA TABLE

| Diameter | | | | | | Length | | Manning | Type | | Filter FOS | | | HDPE soil tight connectors | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal | | Interior | | Exterior | | | | | | | | | | | | |
| mm | in | mm | in | mm | in | m | ft | n | 2 | 3 | 100 µm | 250 µm | 450 µm | IC | DBS | SC |
| 50 | 2 | Voir note 2 | | | | 250 | 820,2 | 0,015 | X | | X | | | | | |
| 75 | 3 | 73 | 2,9 | 91 | 3,6 | 30,5 | 100 | 0,015 | X | | | | X | | X | |
| 100 | 4 | 99 | 3,9 | 116 | 4,6 | 3/15/30/45/75/600/1200 | 9,8/49,2/98,4/147,6/ 246,1/1968,1/3937 | 0,015 | X | X | X | X | X | X | X | |
| 150 | 6 | 150 | 5,9 | 176 | 6,9 | 30/300 | 98,4/984,3 | 0,016 | X | X | X | X | X | X | X | X |
| 200 | 8 | 198 | 7,8 | 235 | 9,3 | 6/30/120 | 19,7/98,4/393,7 | 0,016 | X | X | X | X | X | | X | X |
| 250 | 10 | 250 | 9,8 | 295 | 11,6 | 6/120 | 19,7/393,7 | 0,017 | X | | X | X | X | | X | X |

Note 1: Values in the table are approximate and may change without notice.
Note 2: Values are available on request.

LEGEND
IC: internal coupler
DBS: double bell snap
SC: split coupler

*The Canadian General Standards Board has adopted in 1992 the BNQ Standard 3624-115 for implementation across the country (replacing the CGSB-41-GP-29-M76 standard).
** Several factors enter into the selection of the product to be used. Therefore Soleno recommends a granulometric analysis before undertaking a drainage project in order to choose the right pipe according to the type of soil.

# DATA SHEET

## PERFORATED DRAIN OR PERFORATED AND FILTERED DRAIN (CONT'D)

## FILTER PROPERTIES TABLE

| | Properties | Test method | FOS 100 µm | FOS 250 µm | FOS 450 µm |
|---|---|---|---|---|---|
| Mecanical | Tensile strength (N) | CAN-148.1 - No 7.3 | 95 | 200 | n/a |
| | Elongation at break (%) | CAN-148.1 - No 7.3 | Min.:65, Max.:105 | Min.:65, Max.:100 | n/a |
| Hydraulic | Permeability (cm/s) | CAN-148.1 - No 4 | 0,15 | 0,46 | 0,4 |
| | Permittivity ($S^{-1}$) | CAN-148.1 - No 4 | 2 | 8 | >2,4 |
| | Filtration opening size (FOS, µm) | CAN-148.1 - No 10 | 110 | 250 | 450 |
| | Wettability (cm) | CAN-4.2 - No 26.3 | <1,0 | <1,0 | n/a |
| | Flow rate ($l/s/m^2$) | ASTM D4491 | 131 | 270 | 238 |
| Construction | Raw material | | Polyester | Polypropylene | Polyester |
| | Manufacturing process | | Non-woven needle punched | Non-woven needle punched | Knit |

**APPLICATIONS :** Trench drain
Foundation and basement drainage
Agricultural subsurface drainage
Turf and recreation drainage
Drainage collector and outlet

**OPTION:** Specific perforations are available upon request (minimum volume required).

**ACCESSORIES :** Consult the Drain Couplers and Accessories section in this technical catalogue to obtain more information about our complete line of drain accessories.