SOLENO
MASTERING WATER SUSTAINABLY

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*, compliant to ASTM F667 and meets the OPSS 1840 requirements.

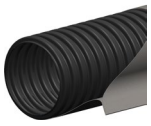
RAW MATERIAL : Made from high-density polyethylene (HDPE) complies with properties classification of ASTM D3350 standard.

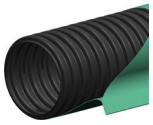
TECHNICAL DATA : Diameter : 50 mm (2 in) to 250 mm (10 in)
Length : 3 m (9.8 ft) to 1250 m (4101 ft)
Strength in compression: 210 kPa
Manning : 0.015 to 0.017
Perforations** : Type 2, 1.8 mm sluice
Type 3, 3.0 mm sluice
Mega 3 (Type 3), more than 3.0 mm sluice
Filter : Needle punched nonwoven TXC-10 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	3/15/30/45/75/650/1250	9,8/49,2/98,4/147,6/246,1/2132,5/4101	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	6/30/120	19,7/98,4/393,7	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.