GeoScreen™

Applications

- Water wells
- Groundwater monitoring
- Groundwater control
- Groundwater remediation
- Geotechnical investigation

Features

- Manufactured to DIN 4925
- Diameters 27mm – 450mm
- Flush and BSP joints
- Slots 0.3 – 3mm
- Lengths 1.0, 2.0, 2.9, 3.0, 5.8m

Casing and Screen with Smooth Surface in Accordance with DIN 4925								
Nominal Diameter ND (inch)	Dimension ND (mm)	Outside Diameter DO (mm)	Inside Diameter DI (mm)	Wall Thickness S (mm)	Weight (kg/m)	Collapse Resistance (bar)	Joint Strength (kN)	Maximum Installation Depth (m)
3/4"	19*	27	22	2.5	0.3	20	6	200
1"	25*	33	25	4.0	0.5	32	6	300
1 1/4"	35	42	35	3.5	0.64	32	3.8	300
11/2"	40	48	41	3.5	0.73	32	4.4	300
2"	50	60	52	4.0	1.0	24	6.6	230
3"	80	90	81	4.5	1.6	7.5	9.5	110
4"	100	113	103	5.0	2.5	7.5	11.1	110
4.5"	115	125	115	5.0	3	7.5	12.0	110
5"	125	140	126	7.0	4.05	7.5	18.0	110
6"	150	165	155	5.0	5.5	7.0	26.5	110
8"	200	225	203	11.0	10.0	7.0	47.0	100
10"	250	280	255	12.5	15.6	7.0	66.7	100
12"	300	330	301	14.5	21.2	7.0	75.2	100
14"	350	400	365	17.5	31.0	7.0	109	100
16"	400	450	411	19.5	38.9	7.0	137.2	100

* BS 3505 dimension.

Marton Geotechnical Services Ltd
www.mgs.co.uk **e** sales@mgs.co.uk **t** +44(0)1359 271167

Installation Depth

The maximum installation depth is determined by the collapse resistance and will vary up or down in accordance with actual ground conditions.

In solid unbroken strata, the suspended length equivalent to the joint strength can be approached or even exceeded if there is a high-water table.

In unconsolidated formations, the installation depth is variable, and consideration must be given to ground water and formation pressures and the presence, or otherwise, of a gravel pack.

During grouting, consideration must be given to temperature increase and density.

Values for collapse resistance are determined using the minimum wall thickness and average modulus of elasticity and are based on testing and theoretical calculations in accordance with BS 879 Part 2 for casing.

Open Area Rating OD Screens According to Slot Dimension - In Accordance With DIN 4925 (Based on Pipe I.D.)

Nominal Size DN	Slot 0.3mm	Slot 0.5mm	Slot 0.75mm	Slot 1mm	Slot 1.5mm	Slot 2mm	Slot 3mm
35	5.2%	6%	9.1%	9.4%	9.7%	12.1%	-
40	5.2%	6%	9.1%	9.4%	9.7%	12.1%	-
50	5.2%	6%	9.1%	9.4%	9.7%	12.1%	-
80	5.2%	6%	9.1%	9.4%	9.7%	12.1%	-
100	5.2%	6%	9.1%	9.4%	9.7%	12.1%	-
115	5.2%	6%	9.1%	9.4%	9.7%	12.1%	-
125	4.7%	5.6%	8.2%	8.5%	8.8%	11%	13.5%
150	-	5.6%	8.2%	8.5%	8.8%	11%	13.5%
200	-	-	8.3%	8.5%	8.8%	11%	13.5%
250	-	-	7.6%	7.9%	8.1%	10.2%	12.5%
300	-	-	7.6%	7.9%	8.1%	10.2%	12.5%
350	-	-	-	7.9%	8.1%	10.2%	12.5%
400	-	-	-	7.9%	8.1%	10.2%	12.5%

Material

Property	Standard	Unit	Value
Density	DIN 53479	g/cm^3	1.4
Modulus of elasticity	EN ISO 178	N/mm^2	2500 - 3000
Tensile strength	EN ISO 527	N/mm^2	45 - 55
Vicat softening temp	EN ISO 306	°C	80
Impact strength (charpy)	EN ISO 179	kJ/m^2	3 - 5

Accessories

Well screens and casings can also be supplied with accessories including:

- Top caps
- Bottom plugs
- Reducers
- Lifting clamps
- Geofilters

Slot Selection According to Formation Analysis		
Soil Analysis mm	Filter Size mm	Slot Width mm
0.20 - 0.80	0.85 – 2.00	0.75
0.30 – 1.25	1.00 – 2.00	1
0.40 – 2.00	1.70 – 4.00	1.5
0.5 – 3.00	3 - 6	2
0.60 – 4.00	5 - 10	3