

81 Series Noflote Electrodes – Light (NEL), Multiple (NEM) & Borehole (NEB)
Data Sheet Issue 3.0 Feb 13

Function: The Noflote System detects the electrical resistance between a Noflote electrode and an earth electrode. The earth reference connected to a controller (see below) may be the walls of a metal vessel, pipework within the vessel, the earth rod of a multiple sensor or another Noflote electrode. The 81NEL and 81NEB have a single electrode and the 81NEM has two or three electrodes.

Compatible Lee-Dickens Controllers: **BM906, BD906, BD926 and 81NC** (please see separate data sheets). All of the above Noflote Electrodes can also be used with other types of controllers (please contact our sales office).



SPECIFICATIONS

Insulation resistance
20MΩ min.

Insulant materials
81NEL – PTFE.
81NEM - Acetal and PVC moulding and heat-shrunk PVC (6mm o.d.)
81NEB - Gland for suspension cable.

Insulant length
81NEL - 80mm from boss, or as specified.
81NEM - None on earth rod, 20mm (0.79 in.) from tips of upper and lower rods.
81NEB - Not applicable.

Electrical connection
81NEL & 81NEM - Threaded for 20mm conduit entry.
81NEB - Gland for cable suspension.

Electrode rod
81NEL - 6mm (0.24 in.) o.d. stainless steel.
81NEM - 5mm (0.19 in.) o.d. stainless steel.
81NEB - 8mm (0.31 in.) o.d. stainless steel.

Rod length 81 NEL
Insertion Length
100mm (3.93 in.) to 2500mm in 20mm (0.78 in.) steps.

Rod lengths 81 NEM
Standard:
Lower Rod = Insertion length 100mm (3.93 in.) to 2500mm in 20mm (0.78 in.) steps.
Upper Rod = Insertion length Less 100mm.
Earth Rod = Insertion length Plus 60mm.
(other lengths to order)

Rod length 81 NEB
See Mechanical Details, below

Electrode head
81NEL & 81NEM - Die-cast aluminium alloy with threaded cover, waterproof with silicone rubber 'O' ring.
81NEB - Not applicable.

Range of adjustment within head
None

Mounting
81NEL - Stainless steel boss screwed ½" BSP. with nut and washer.
81NEM - stainless steel boss screwed 1¼" BSP with nut and washer, or mild steel mounting bracket.
81NEB - Cable suspension

(for other types of mounting, please contact our Sales Office)

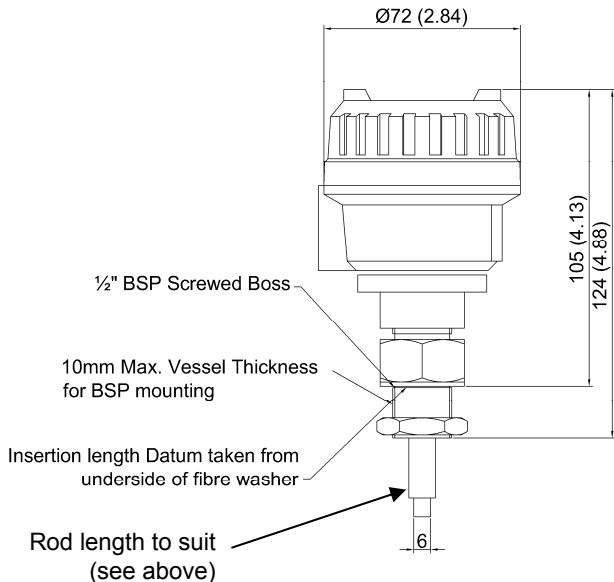
Maximum working pressure
81NEL - 10 bar at 20°C (145 psi at 68°F).
81NEM - 6 bar at 20°C (87 psi at 68°F).

Protection
81NEL & 81NEM - IP55.

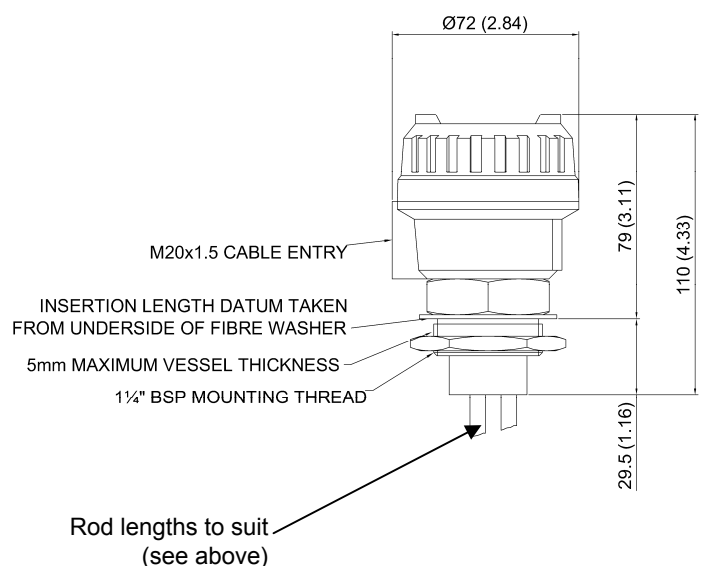
Weight
81NEL - 0.7kg (1.54 lb), with 500mm rod length.
81NEM - 0.8kg (1.76 lb), with 3 rods approx. 500mm long.
81NEB - 0.5kg.

81NEB Suspension Cable
Single core comprising 5 stainless steel strands and 2 copper strands.
5mm diameter rubber cover.
10m to 300m on 1m lengths.
Resistance - 0.122Ω/m.
Weight - 2.8kg/100m.

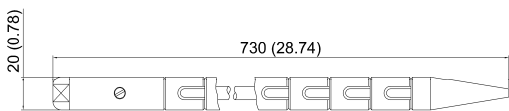
Mechanical Details – 81NEL



Mechanical Details – 81NEM



Mechanical Details – 81NEB



ORDERING DETAILS

- Specify type: 81NEL, 81NEM or 81NEB.
- Specify insertion length: 81NEL & 81NEM only.
- Specify No. of electrodes 81NEM only: 2 or 3.
- Specify Suspension Cable length (if required) 81NEB only.



81 Series Noflote Probes - Order Guide

Noflote Electrodes 81NE	X/	X	X	X	X/	XXXX
Electrode Type						
Light Single	L					
Light Multiple	M					
Standard	O					
Waterproof	W					
Borehole – for Borehole 81NEB is all the code that you need	B					
Mounting						
Light Single type - ½ in. BSP stainless steel boss with nut and washer		B				
Light Multiple type - 1¼ in. BSP stainless steel boss with nut and washer		B				
Light Multiple type - Mild steel mounting bracket		M				
Light Single, Light Multiple, Standard or Waterproof - 65mm (2.56 in.) cast iron flange 160mm (6.3 in.) o.d. to BS4504 table 6/8		F				
Insulant Material						
PTFE (light single type only)			1			
Acetyl and Polythene (not Borehole type)			3			
Acetyl and PVC (light multiple type)			4			
Insulant Length						
Light Single or Multiple type - 80mm (3.15 in.) from boss				1		
Standard type - 25mm (0.98 in.) from flange face				1		
Waterproof type - 760mm (29.9 in.) from flange face				1		
Other specified length – light single, multiple or standard type				X		
Electrode Material						
None (not light single type)					0	
Mild Steel (standard and waterproof types only)					A	
Stainless steel (light single, multiple, standard and waterproof types only)					B	
Electrode Length – Light Single or Light Multiple						
Minimum 100mm (3.93 in.) [in 20mm (0.78 in.) increments]						0100
↓						↓
Maximum 2500mm (8.2 ft)						2500
Electrode Length – Standard or Waterproof						
No electrodes fitted						0
Minimum 200mm (7.87 in.) [in 100mm (3.93 in.) increments]						0200
↓						↓
Maximum 4500mm (14.72 ft)						4500

Note: -M on the end of the code is for Military Customers only

