

Open Bell

Installation and user manual

Description

The Flygt Open Bell system is primarily intended for use in LPSS domestic sewer systems.

The measuring method is based on the compression of atmospheric air that is captured in the system by the hydrostatic pressure of a liquid column.

The Open Bell acts as a measuring probe, connected by an air tube to a pressure sensor (Flygt LTU 301). This in turn generates an analog signal that is processed by a Flygt FGC or similar pump controller.

Connecting the tube to the bell

When connecting the pneumatic tube to the bell piece, proceed as follows:

1. Both ends of the pneumatic tube must be precisely cut at right angles. If needed, make a fresh cut with e.g. a sharp razor knife or tube cutter. Side cutting pliers are not recommended!
2. Push the screw cap, which will be used for supporting the weight of the hanging bell piece, over the pneumatic tube.
3. A nipple is screwed into the top of the bell piece. Use a wrench to tighten the fit in order to prevent the bell piece from coming loose.
4. Detach the screw nut and slide it over the tube end.
5. Push the tube end firmly over the nipple and carefully tighten the screw nut by hand. Double check that the tube is now securely fastened.

Connecting the tube to the controller

Please refer to the installation manual of the corresponding pump controller.

Positioning in the pump sump

Observe the following pointers:

- The Open Bell is mounted hanging freely from the end of the pneumatic tube.
- The screw cap is needed for supporting the weight of the bell piece. The exact positioning in the pump sump depends on both the type of control panel and the layout of the pump sump.
- Please refer to the instructions in the Flygt Compit C&M manual when applicable.



Laying of the tube

Observe the following precautions:

- Sharp bends and squeeze spots must be avoided.
- In ground and other mechanically sensitive areas, the pneumatic tube must additionally be laid in a protective pipe.
Note: 90° corners are not allowed for the protective pipe!
- The pneumatic tube must be laid in a continuously rising pattern; Any loops are to be avoided. To this end, the tube may have to be shortened to suitable length.
- The tube must not be exposed to ultra violet rays (i.e. direct sunlight).

Maintenance

The Open Bell and pneumatic tube require regular inspections with regard to pollution. To this end the pneumatic tube has to be detached at the pressure sensor/control panel end and compressed air be blown in the direction of the bell piece. Thereafter the bell piece should be cleaned inside and out.

Technical data

Material, bell piece:	cast iron, enamel painted
Material, pneumatic tube	polyether polyurethane
Temperature range:	0 – 104 °F
Difference in temperature:	+68 °F within 2h
Transmission length/Max tube length:	65 ft
Measurement range:	0 – 8 ft (0 – 0.25 bar)
Connection fitting/Nipple:	1/4" x 10 mm pneumatic tube
Screw cap, dimension	PG 11
Weight, complete:	approximately 1.13 lbs.

Denomination

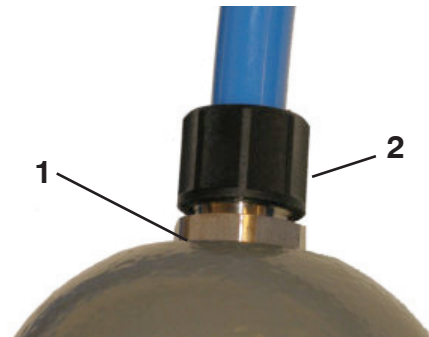
Open Bell	Part no.
Tube length: 5 m (16.4 ft)	834518
Tube length: 10 m (32.8 ft)	834519
Tube length: 20 m (65.6 ft)	834520

Open Bell



The components of the Open Bell system:

1. cast bell piece
2. tube fitting
3. pneumatic tube (10 mm)
4. screw cap



Components of the tube fitting:

1. nipple
2. screw nut

