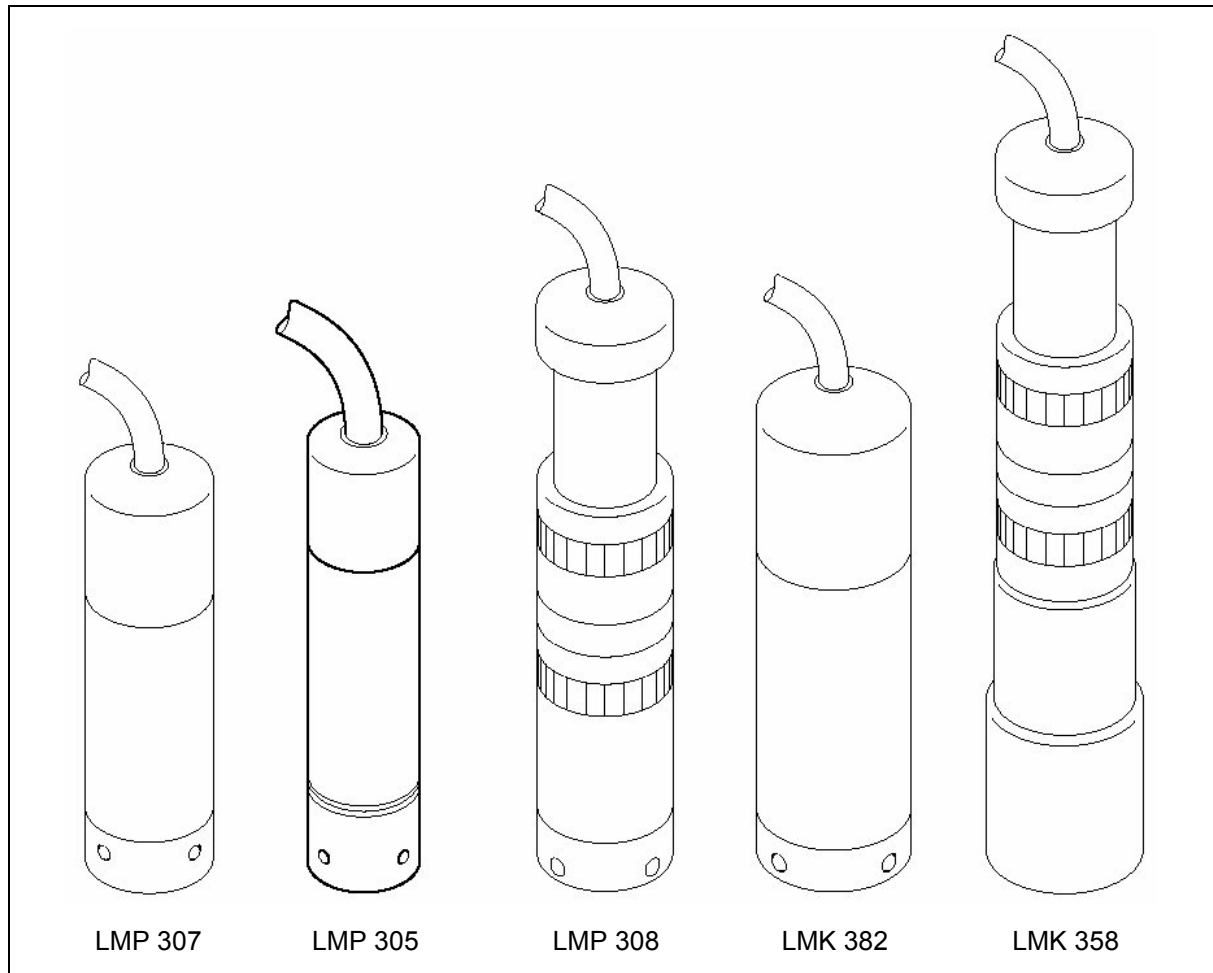


Assembly and Connection Manual



Submersible Transmitters, Series LMP and LMK

Types



General

Please read this manual carefully prior to assembly and operation of the submersible transmitter. Handle the devices carefully – they are sensitive measuring devices.

The devices may only be installed, used and serviced by people are familiar with this manual, as well as the valid regulations for work safety and accident prevention.

For technical data of transmitter look actual data sheet.

Assembly

General Notes

- Install a safety fuse between the power supply and/or switching cabinet and the submersible sensor.
- Send in the device for recalibration every 12 months, if it is subjected to greater demands.

Special Notes

Protective cap

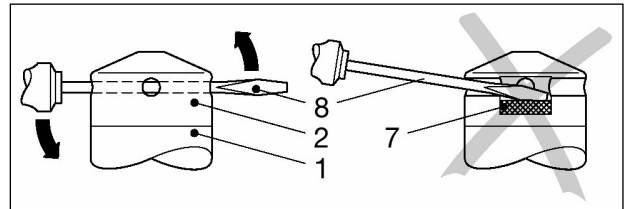
Most of the BD SENSORS submersible sensors have a protective cap to protect the measuring membrane from damage. On removal of the cap the sensor becomes flush and can thus be used in high-viscosity media such as sewage.

Removal by hand

- Hold the sensor firmly (1) tip the cap (2) and remove it.

Removal using tool

- slide a small tool such as a screwdriver (8), straight through two drill holes in the protective cap (2) and lever this off
- take care that the measuring cell (7) under the cap is not damaged.



Separable submersible sensors

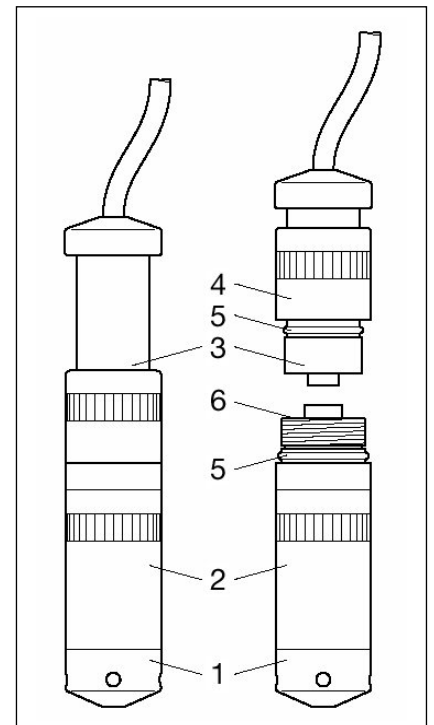
Some submersible sensors are separable version, i.e. LMP 308, LMK 858. The manner of separation is the same for all types.

Disassembly

- turn the nut (4) carefully by hand to the left and release it from the sensor section (1).
- **⚠ Attention:** Do not turn the cable section (3)!
- Hold the cable section (3) perpendicular while turning and remove it perpendicularly when it has been released (plug connection).

Inspection and Assembly

- Inspect the O-Rings (5) and (6) for damage and replace defective O-Ring if required.
- Lubricate the radial O-Rings (5) with Vaseline or O-Ring grease.
- Remove any grease residue from the axial-O-Ring (6)
- Plug the cable section (3) straight into the plug of the sensor section (1) and tighten the nut (4) by hand.



Mechanical Installation

Normally the submersible sensors are supplied without fastening material. BD SENSORS offers, however, several possible accessories, i.e. a cable clamp, as well as different screws, flanges and ring clamps. Please BD SENSORS in case of special requirements.

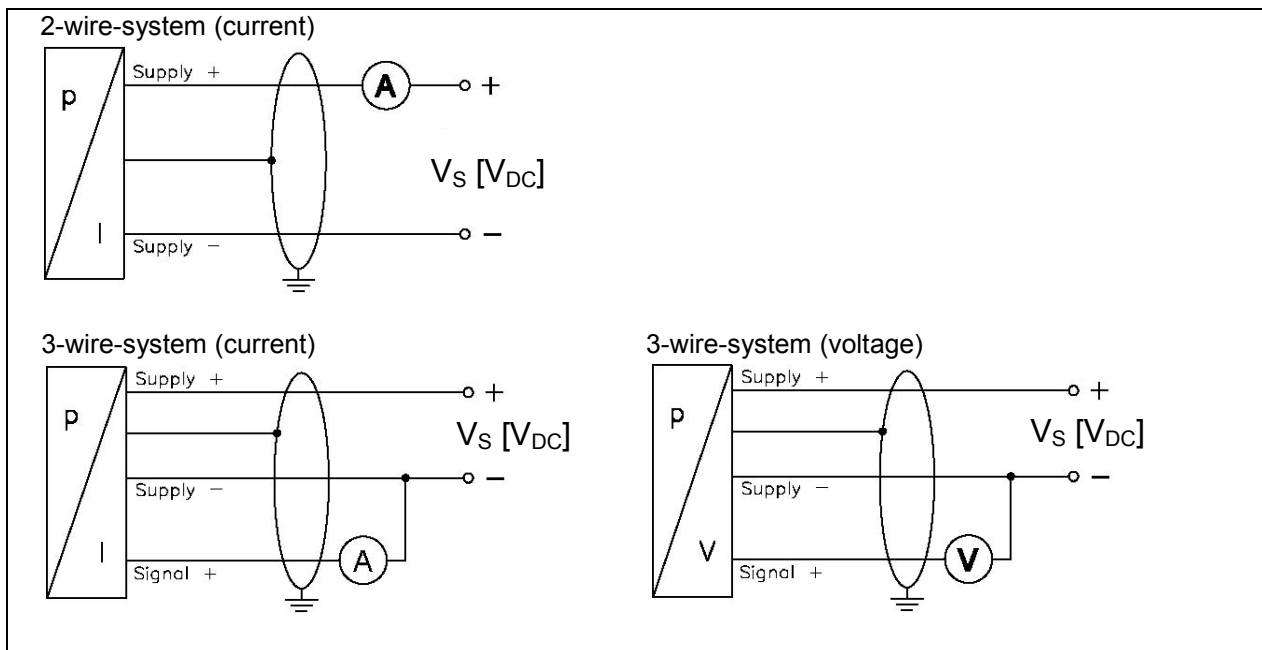
Electrical connection

Pin configuration

		Electrical connection
		Cable colour (DIN 47100)
2-wire-system		
	Supply +	white
	Supply -	brown
	Ground	cable shield
3-wire-system		
	Supply +	white
	Supply -	brown
	Signal +	green
	Ground	cable shield

Wirings diagrams

The supply V_S stand on the type label of transmitter and muss be abided.



Maintenance

The devices require no maintenance.

On contamination of the pressure sensor clean the pressure connection regularly, independently of the medium and degree of contamination. Use a non-aggressive cleaning solution for this purpose.

Important! Never touch the membrane of stainless steel sensors!!! Important! Never touch the membrane of the stainless steel sensors!!!

Ex-Note

Attention: For safe operation of the pressure measuring devices according to regulation in exterior areas, two manuals are required:

This Assembly and Connection Manual specifically for "Submersible Sensors, Series DMP and DMK" as well as the Manual "Installation in Ex-area". Both are valid only when used together!!!

CE-Note

The devices listed in this manual are in accordance with the EMC-standard 89/336/EEG including its amendments, as well as the norms EN 50081-2/1993, EN 55011/3/1991, EN 50082-2/3/1995.

BD SENSORS has acquired certification that the requirements of DIN EN ISO 9001:2000 have been fulfilled.