

**Návod k montáži /  
Mounting instructions** 

Ponorné sondy DCL s komunikací RS485 Modbus RTU  
Ponorné sondy LMK/LMP

Probe DCL with Modbus RTU interface RS485  
Probe LMK/LMP

DCL 531, DCL 551, DCL 571, LMK 306, LMK 307,  
LMK 307T, LMK 309, LMK 358, LMK 358H, LMK 382,  
LMK 382H, LMK 387, LMK 387H, LMK 806, LMK 807,  
LMK 808, LMK 809, LMK 858, LMP 305, LMP 307,  
LMP 307i, LMP 307T, LMP 308, LMP 308i, LMP 808



LMP 308

www.bdsensors.com

**Centrála východní Evropa  
Headquarters Ostern Europe**

BD SENSORS s.r.o.  
Hradištská 817  
CZ - 687 08 Buchlovice  
Česká republika / Czech Republic  
Tel.: +420 572 411 011  
Fax: +420 572 411 497

**Centrála /  
Headquarters**

BD SENSORS GmbH  
BD-Sensors-Str. 1  
D - 95199 Thierstein  
Německo / Germany  
Tel.: +49 (0) 92 35 / 98 11-0  
Fax: +49 (0) 92 35 / 98 11-11

**Rusko /  
Russia**

BD SENSORS RUS  
39a, Varshavskoe shosse  
RU - Moscow 117105  
Rusko / Russia  
Tel.: +7 (0) 9 59 81 / 09 63  
Fax: +7 (0) 9 57 95 / 07 21

Tento návod k montáži je výtah z podrobného návodu k obsluze. Ten si prosím stáhněte z našich internetových stránek, pokud nejste s výrobkem dobře seznámeni.



These mounting instructions are an excerpt from the complete operating manual. It may be downloaded from our homepage, if you are not familiar with the device.

www.bdsensors.cz  
www.bdsensors.com

– Technické změny vyhrazeny –  
– Technical modifications reserved –

**English**

**⚠ WARNING!** In order to avoid hazards to operators and damages to the device, the following instructions have to be performed by qualified technical personnel.

**⚠ WARNING!** Adhere to the safety and operating instructions stated in the operation manual. Effective regulations on occupational safety, accident prevention as well as national installation standards and approved engineering techniques must in addition be complied with.

**Limitation of liability**

If the instructions in the mounting instructions /operating manual are not adhered to or if the device is inappropriately used, modified or damaged, liability is not assumed and warranty claims will be excluded.

**Intended use**

Ensure that the medium is compatible with the media-wetted parts and that the device is suitable for the application without restrictions. The technical data listed in the current data sheet is binding.

**Product identification**

Nominal pressure range	Type designation	Ordering code	Serial number
Signal	Supply	Cable colours	

**Mounting**

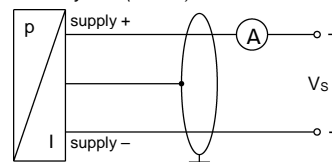
- Carefully remove the pressure measuring device from the package and dispose of the package properly.
  - Mount the device according to your demands.
  - Flange version has to be tightened by an open-end wrench. (approx. 25 Nm).
- ☞ Usually, the probe has been delivered without mounting accessories. For different mounting demands, BD SENSORS offers as accessories mounting clamps, terminal clamps and mounting flanges.

**Pin configuration**

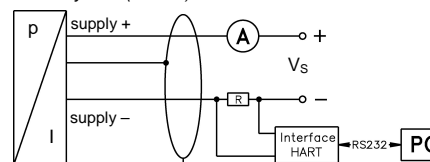
Electrical connections	cable colours
Supply +	wh (white)
Supply -	bn (brown)
Signal + (only 3-wire)	gn (green)
Shield	gnye (green yellow)
LMK 307T and LMP307T	
Supply P+	wh (white)
Supply P-	bn (brown)
Supply T+	gy (gray)
Supply T-	pk (pink)
Shield	gnye (green yellow)
DCL 531, DCI 551, DCL 571	
Supply +	wh (white)
Supply -	bn (brown)
A +	gn (green)
B -	ye (yellow)
Shield	

**Wiring diagrams**

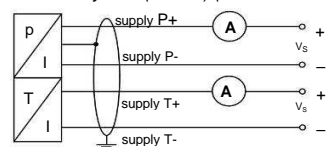
**2-wire-system (current)**



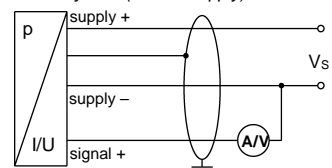
**2-wire-system (current) HART®**



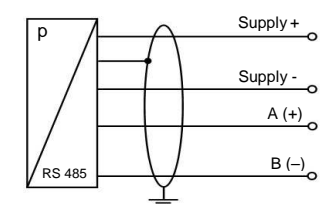
**2x2-wire-system (current) (LMK 307T / LMP 307T)**



**3-wire-system (current/supply)**



**RS 485 / Modbus RTU**



☞ Gauge / relative devices are equipped with cable with integrated air tube for atmospheric pressure reference. Install cable end in a control cabinet or suitable terminal box in dry area which is free of aggressive gasses to avoid damages.

☞ For the electrical connection a shielded and twisted multicore cable is recommended.

**Removing the protection cap (if necessary)**

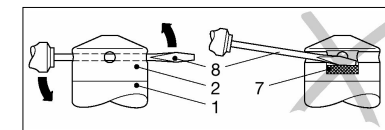
If the device shall be used in high-viscosity media, a careful removal of the cap before start-up is necessary (if existing).

☞ To prevent a damage of the diaphragm, please follow these instructions.

**Removal by hand**

- Hold the probe in a way that the protection cap points upwards.
- Hold the probe with one hand on the sensor section (1).
- Remove the protection cap (2) with the other hand.

**Removal with a tool (recommended)**



- Hold the probe in a way that the protection cap points upwards.
- Slide a small tool such as a screwdriver (8) straight through two opposite drill holes in the protective cap (2).
- Lever it off by moving up the handle of the screwdriver.

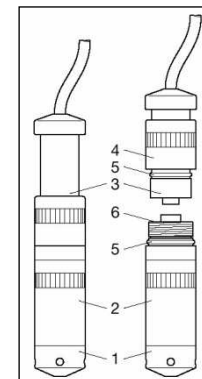
☞ Make sure that the sensor (7) under the protection cap will not be damaged!

**Separability (with LMK 358, LMK 358H, LMK 808, LMK 858, LMP 308, LMP 308i and LMP 808)**

In order to facilitate stock keeping and maintenance, the probe head is plugged to the cable assembly with a connector and can be easily changed.

**Disassembly**

- Hold the probe on the sensor section (2) with one hand and turn the nut (4) carefully to the left with the other hand. Prevent torsion of the cable section (3) against the housing!
- While screwing and pulling off the sensor section (2) from the cable section (3), hold it straight to prevent damages on the plugs.



**Assembly**

- Check the o-rings (5, 6) and exchange damaged o-rings if necessary.
- 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 (2).
- Hold the probe onto the sensor section (2) with one hand. Screw on and tighten the nut (4) carefully with the other hand. Prevent torsion of the cable section (3) against the housing!

**Pin configuration of plug**

Electrical connections	Binder series 723 (5-pin)	Binder series 723 (7-pin)
2-wire system		
Supply +	3	3
Supply -	1	1
Shield	5	2
3-wire system		
Supply +	3	3
Supply -	4	1
Signal +	1	6
Shield	5	2
Communication interface		
RxD	-	4
TxD	-	5
GND	-	7