



# Montageanleitung / Mounting instructions

Druckmessumformer / Pressure Transmitter, Einschraubsonde / Screw-in Transmitter OEM-Druckmessumformer / OEM Pressure Transmitter

DMK 331, DMK 331P, DMK 351, DMK 351P, DMK 387, DMP 311, DMP 320, DMP 321, DMP 331, DMP 331i, DMP 331P, DMP 331Pi, DMP 333, DMP 333i, DMP 334, DMP 334i, DMP 335, DMP 336, DMP 336P, DMP 339, DMP 339P, DMP 343, LMK 331, LMK 351, LMP 331, LMP 331i, 17.6XX, 17.6XX G, 18.6XX, 18.6XX G, 26.6XX, 26.6XX G, 30.6XX, 30.6XX G





**DMP 331** 

# VOR GEBRAUCH SORGFÄLTIG LESEN AUFBEWAHREN FÜR SPÄTERES NACHSCHLAGEN READ THOROUGHLY BEFORE USING THE DEVICE

KEEP FOR FUTURE REFERENCE

ID: MA\_DMU-ES-OEM\_D-E | Version: 07.2021.0

Diese Montageanleitung stellt einen Auszug aus der ausführlichen Betriebsanleitung dar. Laden Sie sich diese auf unserer Homepage herunter, falls Sie nicht mit dem Produkt vertraut sind.



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.

#### http://www.bdsensors.de

Technische Änderungen vorbehalten –
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.

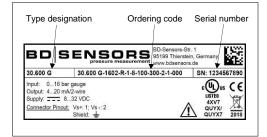
#### Limitation of liability and warranty

Failure to observe mounting instructions / operating manual or technical regulations, improper use and use not as intended, and alteration of or damage to the device will result in the forfeiture of warranty and liability claims.

#### Intended use

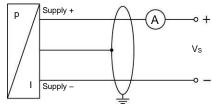
Ensure that the medium is compatible with the media-wetted parts and that the device is suitable for the application without restrictions. The technical data listed in the current data sheet is binding.

#### Product identification

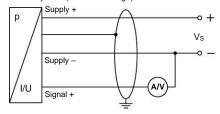


#### Wiring diagrams

2-wire-system (current)



#### 3-wire-system (current / voltage)



**NOTE** - For the electrical connection a shielded and twisted multicore cable is recommended.

#### Pin configuration

optionally with communication interface RS232 for DMP 331i / DMP 331Pi / DMP 333i / DMP 334i / LMP 331i:

Electrical connection	Binder 723 (7-pin)
Supply +	3
Supply + Supply –	1
Signal + (for 3-wire)	6
Shield	2
RxD	4
TxD	5
GND	7

**NOTE** - The communication interface RS232 may not be connected directly to the PC. A suitable adapter is available as an accessory.



E	Electrical connection	ISO 4400	Binder 723 (5-pin)	cable colours (IEC 60757)	field housing	Buccaneer (4-pin)	TRIM TRIO® (4-pin)	Bayonet MIL-C-26482 (10-6)	
								2-wire	3-wire
	Supply +	1	3	WH (white)	IN +	1	1	Α	Α
	Supply –	2	4	BN (brown)	IN –	2	2	В	D
	Signal + (for 3-wire)	3	1	GN (green)	OUT +	3	3	-	В
	Shield	ground	5	GNYE	<b>⊕</b>	4	4	pressu	re port

Electrical connection	M12x1 metal (4-pin)		Micro	
Code	M10 / M20	M13 (17.620G)	C10	CB0 (17.620G)
Supply +	1	1	1	1
Supply –	2	3	2	3
Signal + (for 3-wire)	3	2	3	2
Shield	4	plug housing	ground contact 🕀	ground contact 🕀

NOTE - The pin configuration for different electrical connections can be found on the manufacturing label.

#### Mounting

DANGER

#### Danger of death from airborne parts, leaking fluid, electric shock

Always mount the device in a depressurized and de-energized condition!
Operate the device only within the specification! (according to data sheet)

#### Danger of death from improper installation

 Installation must be performed only by appropriately qualified persons who have read and understood the operating manual.

#### Danger of death from explosion in oxygen applications when used improperly

- Follow the instructions in the operating manual!

NOTE - For devices with 3-A symbol, EHEDG certificate or UL marking the corresponding specifications in the operating manual must be observed.

NOTE - Use a suitable seal for the medium and the pressure to be measured, if necessary.

NOTE - For connections according to DIN 3852 do not use any additional sealing material such as yarn, hemp or Teflon tape.

**NOTE** - The permissible tightening torque depends on the conditions on site (material and geometry of the mounting point). The specified tightening torques are valid for the transmitters and must not be exceeded!

# connection according to DIN 3852



knurled ring: only tighten by hand wrench size of metal:

	G1/4":	approx. 5 Nm
_	G1/2":	approx. 10 Nn
	G3/4":	approx. 15 Nn
	G1":	approx. 20 Nn
	G1 1/2":	approx. 25 Nn

wrench size of plastic: max. 3 Nm

# dairy pipe connection



- Centre the dairy pipe connection in the counterpart.
- Screw the cup nut onto the mounting part.
- Then tighten it using a hook wrench.

#### G1" cone



p<sub>N</sub> < 10 bar: 30 Nm p<sub>N</sub> ≥ 10 bar: 60 Nm

#### connection according to EN 837



G1/4": approx. 20 Nm G1/2": approx. 50 Nm 1/4" NPT: approx. 30 Nm 1/2" NPT: approx. 70 Nm

**NPT** connections

**NOTE** - note the permitted pressure and material acc. to EN 837.

#### Clamp- and Varivent® connections



- Centre the connection above the counterpart with seal.
- Fit the device with a suitable fastening element (e. g. semi-ring or retractable ring clamp) according to the supplier's instructions.

# flange connections



1/4" flare

max, 10 Nm

Install the flange with 4 resp. 8 screws (depending on flange version) on the counter flange.

### internal threads M20x1.5 and 9/16" UNF (for DMP 334 / DMP 334i)

Screw the high-pressure fitting into the internal thread of the pressure transmitter and tighten it properly. (permissible tightening torque for transmitter: max 120 Nm)



Danger of injury due to wrong installation

- Do not use any seal!