



## Pressure transducers DMU 04 Industrial version



### Benefits

- DMU 04 CP/MR for hygienic processes
- Small temperature error
- Options: ATEX, field housing or high temperature version (up to 300 °C) and SIL 2

### Application

For applications requiring hygienic process connections, materials or processing, especially food technology, pharmaceutical and biotechnology applications.

### Description

Pressure transducers convert physical pressure into an electrical signal proportional to the pressure. DMU 4 is equipped with an oil-filled piezo-resistive silicon measuring cell. DMU 04 has safety integrity level SIL 2 (IEC 61508/61511).



## Technical specifications

### Measuring accuracy

Deviation from the characteristic curve according to IEC 60770 – limit point calibration (non-linearity, hysteresis, repeatability)

< ± 0.35 % FSO  
 > 0/40 bar < ± 0.5 % FSO  
 ≤ 0/400 mbar < ± 0.5 % FSO

### Measuring range

See ordering table

### Overpressure safety

At least 3 x FS  
 40 bar: 105 bar

### Burst pressure

At least 5 x FS  
 25 bar: 120 bar

### Operating temperature range

Medium: -10/+125 °C  
 Medium: short-term (60 min) up to 150 °C  
 Ambient: -40/+85 °C  
 Storage: -40/+100 °C

### Temperature error band

< 400 mbar: ≤ ± 1.5 % FSO/10 K In compensated range  
 0/50 °C  
 ≥ 400 mbar: ≤ ± 0.75 % FSO/10 K In compensated range  
 -20/+85 °C

### Dynamic characteristics

Response time: ≤ 10 ms

### Process connection

G½B DIN 3852 type E with flush diaphragm  
 G1B DIN 3852 type E with flush diaphragm  
 Clamp 1" ISO 2852  
 Conical dairy fitting DN 25 DIN 11851

## Options

- Other process connections
- Other electrical connections
- Field housing (stainless steel 303)
- High temperature version up to 300 °C
- Higher accuracy
- Union nut DN 25/40/50
- EX version (II 1G Ex ia IIC T4 Ga, II 1D Ex ia IIIC T85°C Da)
- SIL 2 (IEC 61508/61511) 2-wire

### Material

Housing: Stainless steel 316 L  
 Pressure connection: Stainless steel 316 L  
 Diaphragm: Stainless steel 316 L

### Pressure transmission liquid

Food oil, FDA-compliant

### Supply voltage

DC 8 – 32 V

### Output signal

2-wire, 4–20 mA

### Load

$R_{Max} = [(UB - UB_{Min})/0.02 A] \Omega$

### Current input

< 25 mA

### Electrical protection

Short circuit proof and protected against reverse polarity

### Electrical connection

Connector and junction box as per ISO 4400 (DIN 43650-A)

### Degree of protection

IP 65 (EN 60529)

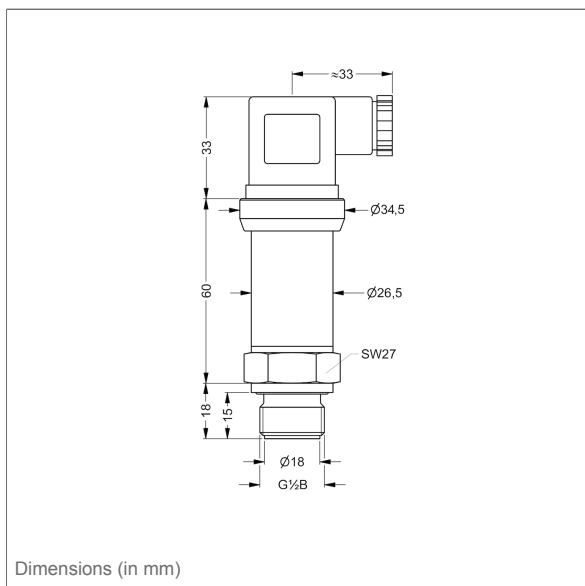
### CE conformity

EMC Directive 2014/30/EU  
 RoHS Directive 2011/65/EU  
 Pressure Equipment Directive 2014/68/EU

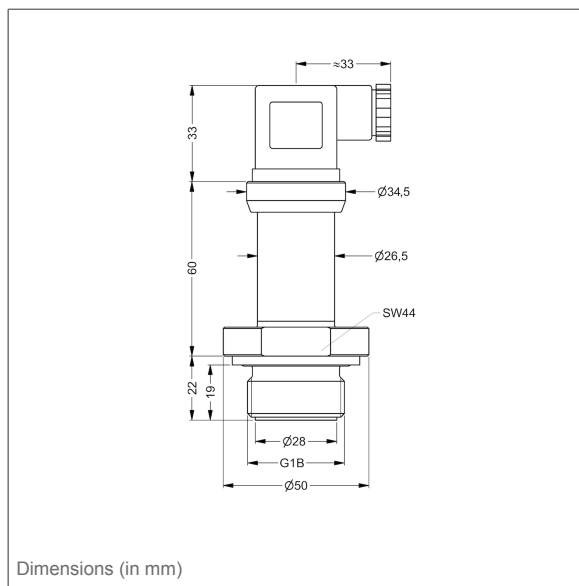


## Technical drawings

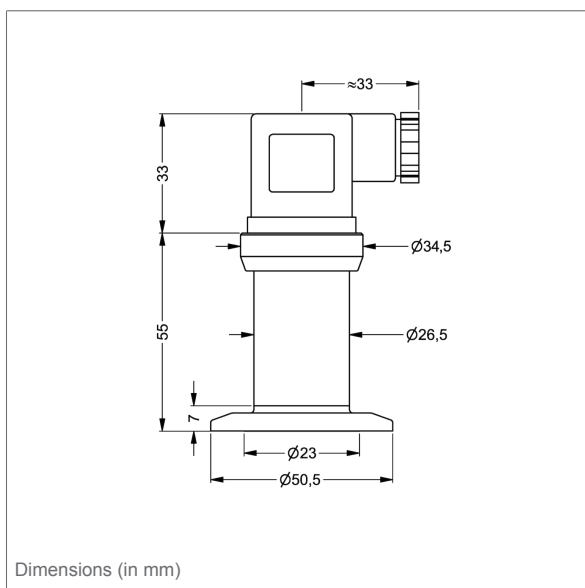
DMU 04 - connection G $\frac{1}{2}$ B – with flush diaphragm



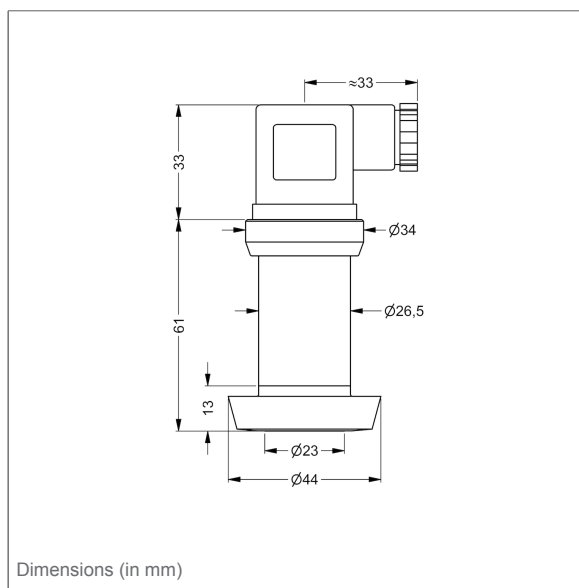
DMU 04 - connection G1B – with flush diaphragm



DMU 03 - clamp connection ISO 2852



DMU 04 - dairy cone DIN 11851 DN 25





## Versions

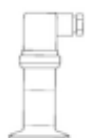
Type	Connection	Measuring range	Part no.
DMU 04	G½B DIN 3852 type E	-1/+1.5 bar	31647
DMU 04	G½B DIN 3852 type E	-1/+3 bar	31648
DMU 04	G½B DIN 3852 type E	-1/+5 bar	31649
DMU 04	G½B DIN 3852 type E	0/600 mbar	33018
DMU 04	G½B DIN 3852 type E	0/1 bar	33019
DMU 04	G½B DIN 3852 type E	0/1.6 bar	33020
DMU 04	G½B DIN 3852 type E	0/2.5 bar	31651
DMU 04	G½B DIN 3852 type E	0/4 bar	31652
DMU 04	G½B DIN 3852 type E	0/6 bar	31653
DMU 04	G½B DIN 3852 type E	0/10 bar	31654
DMU 04	G½B DIN 3852 type E	0/16 bar	31655
DMU 04	G½B DIN 3852 type E	0/25 bar	31656
DMU 04	G½B DIN 3852 type E	0/40 bar	31657
DMU 04	G½B DIN 3852 type E	0/60 bar	31658
DMU 04	G½B DIN 3852 type E	0/100 bar	31659
DMU 04	G½B DIN 3852 type E	0/160 bar	31660
DMU 04	G½B DIN 3852 type E	0/250 bar	31661
DMU 04	G½B DIN 3852 type E	0/400 bar	31662
DMU 04	G1B DIN 3852 type E	-1/0 bar	31663
DMU 04	G1B DIN 3852 type E	-1/+1.5 bar	31664
DMU 04	G1B DIN 3852 type E	-1/+3 bar	31665
DMU 04	G1B DIN 3852 type E	-1/+5 bar	31666
DMU 04	G1B DIN 3852 type E	0/100 mbar	33021
DMU 04	G1B DIN 3852 type E	0/160 mbar	33022
DMU 04	G1B DIN 3852 type E	0/250 mbar	31669
DMU 04	G1B DIN 3852 type E	0/400 mbar	31670



Blue part no. = in-stock items



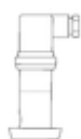
Type	Connection	Measuring range	Part no.
DMU 04	G1B DIN 3852 type E	0/600 mbar	31671
DMU 04	G1B DIN 3852 type E	0/1 bar	31672
DMU 04	G1B DIN 3852 type E	0/1.6 bar	31673
DMU 04	G1B DIN 3852 type E	0/2.5 bar	31674
DMU 04	G1B DIN 3852 type E	0/4 bar	31675
DMU 04	G1B DIN 3852 type E	0/6 bar	31676
DMU 04	G1B DIN 3852 type E	0/10 bar	31677
DMU 04	G1B DIN 3852 type E	0/16 bar	31678
DMU 04	G1B DIN 3852 type E	0/25 bar	31679
DMU 04	G1B DIN 3852 type E	0/40 bar	31680
DMU 04	G1B DIN 3852 type E	0/60 bar	31681
DMU 04	G1B DIN 3852 type E	0/100 bar	31682
DMU 04	G1B DIN 3852 type E	0/160 bar	31683
DMU 04	G1B DIN 3852 type E	0/250 bar	31684
DMU 04	G1B DIN 3852 type E	0/400 bar	31685
DMU 04 CP	Clamp 1" ISO 2852	-1/0 bar	31686
DMU 04 CP	Clamp 1" ISO 2852	-1/+1.5 bar	31687
DMU 04 CP	Clamp 1" ISO 2852	-1/+3 bar	31688
DMU 04 CP	Clamp 1" ISO 2852	-1/+5 bar	31689
DMU 04 CP	Clamp 1" ISO 2852	0/250 mbar	33023
DMU 04 CP	Clamp 1" ISO 2852	0/400 mbar	33024
DMU 04 CP	Clamp 1" ISO 2852	0/600 mbar	31694
DMU 04 CP	Clamp 1" ISO 2852	0/1 bar	31695
DMU 04 CP	Clamp 1" ISO 2852	0/1.6 bar	31696
DMU 04 CP	Clamp 1" ISO 2852	0/2.5 bar	31697
DMU 04 CP	Clamp 1" ISO 2852	0/4 bar	31698
DMU 04 CP	Clamp 1" ISO 2852	0/6 bar	31699
DMU 04 CP	Clamp 1" ISO 2852	0/10 bar	31710



Blue part no. = in-stock items



Type	Connection	Measuring range	Part no.
DMU 04 CP	Clamp 1" ISO 2852	0/16 bar	31711
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	-1/0 bar	31719
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	-1/+1.5 bar	31720
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	-1/+3 bar	31721
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	-1/+5 bar	31722
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/250 mbar	33025
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/400 mbar	31726
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/600 mbar	31727
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/1 bar	31728
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/1.6 bar	31729
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/2.5 bar	31730
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/4 bar	31731
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/6 bar	31732
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/10 bar	31733
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/16 bar	31734
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/25 bar	31735
DMU 04 MR	Conical dairy fitting DN 25 DIN 11851	0/40 bar	31736



Blue part no. = in-stock items