



Pressure transducers DMU 02 Vario BC NEUMO BioControl®

Part no. 32974

Pressure transducers

benefits

- ideal for hygienic processes
- connection technology with numerous versions
- extremely resistant to shock, pulsation and vibration
- best dynamic pressure resistance at high load changes
- Zero calibration via magnet

Application

For electronic pressure measurement in mechanical and plant engineering, and for gas and medical applications. With flush diaphragm, the pressure transducers are also suitable for use with viscous, highly viscous or crystallising media.

Description

Pressure transducers convert physical pressure into an electrical signal proportional to the pressure. DMU 02 Vario is equipped with a piezo-resistive polysilicon thin-film measuring cell. DMU 02 Vario is available in a virtually unlimited number of versions. All standard and customer-specific connections can be connected to the electronic precision measuring system. All standard electrical connection types are available. The zero point can be corrected from the outside via a permanent magnet after voltage has been supplied and within a given time window.

Technical Specifications

Measuring accuracy

Deviation from the characteristic curve according to IEC 60770 – limit point calibration (non-linearity, hysteresis, repeatability)
 $< \pm 0.3 \% \text{ FSO}$

Measuring range

0/10 bar

Overpressure safety

$\leq 250 \text{ bar}$
 at least 2 x FS

Burst pressure

$\leq 250 \text{ bar}$
 at least 3 x FS

Operating temperature range

Medium: $-10/+125 \text{ }^{\circ}\text{C}$
 Ambient: $-10/+105 \text{ }^{\circ}\text{C}$
 Storage: $-10/+125 \text{ }^{\circ}\text{C}$

Temperature error band

$\leq \pm 0.15 \% \text{ FSO}/10 \text{ K}$ In compensated range 0/70 °C

dynamic characteristics

Response time: $< 20 \text{ ms}$

Process connection

NEUMO BioControl® D25

material

Housing: Stainless steel 304

pressure connection: Stainless steel 316 L

diaphragm: Stainless steel 316 L

pressure transmission liquid

multi-grade oil, FDA-compliant

Supply voltage

DC 10 – 32 V

Output signal

2-wire, 4–20 mA

Load

$R_{\max} = [(UB - UB_{\min})/0.02 \text{ A}] \Omega$

Options

- other process connections
- other electrical connections
- Field housing (stainless steel)
- Filling for oxygen
- other output signals
- customer-specific setting (damping, unit)

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

Versions

Range	Measuring range	Type	Version	Part no.
	0/10 bar	DMU 02 Vario BC	NEUMO BioControl®	32974

- in-stock items
- Non-stock items