



## Pressure transducers DMU 02 Vario FBO



### 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)  
< ± 0.3 % FSO

### Measuring range

See ordering table

### Overpressure safety

≤ 250 bar: At least 2 x FS  
> 250 bar: At least 1.5 x FS

### Burst pressure

≤ 250 bar: At least 3 x FS  
> 250 bar: At least 2 x FS

### Operating temperature range

Medium: -10/+125 °C  
Ambient: -10/+105 °C  
Storage: -10/+125 °C

### Temperature error band

≤ ± 0.15 % FSO/10 K in compensated range 0/70 °C

### Dynamic characteristics

Response time: < 20 ms

### Process connection

NEUMO BioControl® D25  
Clamp 1" ISO 2852  
Clamp 1½" ISO 2852  
G½B DIN 3852 type A  
Flange connection DN 25 PN 40 EN 1092-1 type B 1  
Conical dairy fitting DN 25 DIN 11851  
VARIVENT® F (DN 25 and 1")

### 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

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

### 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

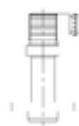
EMC Directive 2014/30/EU  
RoHS Directive 2011/65/EU  
Pressure Equipment Directive 2014/68/EU

## Options

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

## Versions

Type	Connection	Measuring range	Part no.
DMU 02 Vario BC	NEUMO BioControl® D25	-1/0 bar	32960
DMU 02 Vario BC	NEUMO BioControl® D25	-1/+1.5 bar	32961
DMU 02 Vario BC	NEUMO BioControl® D25	-1/+3 bar	32962
DMU 02 Vario BC	NEUMO BioControl® D25	-1/+5 bar	32963
DMU 02 Vario BC	NEUMO BioControl® D25	-1/+9 bar	32964



Blue part no. = in-stock items



Type	Connection	Measuring range	Part no.
DMU 02 Vario BC	NEUMO BioControl® D25	-1/+24 bar	32965
DMU 02 Vario BC	NEUMO BioControl® D25	0/1 bar	32969
DMU 02 Vario BC	NEUMO BioControl® D25	0/1.6 bar	32970
DMU 02 Vario BC	NEUMO BioControl® D25	0/2.5 bar	32971
DMU 02 Vario BC	NEUMO BioControl® D25	0/4 bar	32972
DMU 02 Vario BC	NEUMO BioControl® D25	0/6 bar	32973
DMU 02 Vario BC	NEUMO BioControl® D25	0/10 bar	32974
DMU 02 Vario BC	NEUMO BioControl® D25	0/16 bar	32975
DMU 02 Vario CP	Clamp 1" ISO 2852	-1/0 bar	32892
DMU 02 Vario CP	Clamp 1" ISO 2852	-1/+1.5 bar	32893
DMU 02 Vario CP	Clamp 1" ISO 2852	-1/+3 bar	32894
DMU 02 Vario CP	Clamp 1" ISO 2852	-1/+5 bar	32895
DMU 02 Vario CP	Clamp 1" ISO 2852	-1/+9 bar	32896
DMU 02 Vario CP	Clamp 1" ISO 2852	-1/+24 bar	32897
DMU 02 Vario CP	Clamp 1" ISO 2852	0/1 bar	32901
DMU 02 Vario CP	Clamp 1" ISO 2852	0/1.6 bar	32902
DMU 02 Vario CP	Clamp 1" ISO 2852	0/2.5 bar	32903
DMU 02 Vario CP	Clamp 1" ISO 2852	0/4 bar	32904
DMU 02 Vario CP	Clamp 1" ISO 2852	0/6 bar	32905
DMU 02 Vario CP	Clamp 1" ISO 2852	0/10 bar	32906
DMU 02 Vario CP	Clamp 1" ISO 2852	0/16 bar	32907
DMU 02 Vario CP	Clamp 1" ISO 2852	0/25 bar	32908
DMU 02 Vario CP	Clamp 1" ISO 2852	0/40 bar	32909
DMU 02 Vario CP	Clamp 1½" ISO 2852	-1/0 bar	33080
DMU 02 Vario CP	Clamp 1½" ISO 2852	-1/+1.5 bar	33081
DMU 02 Vario CP	Clamp 1½" ISO 2852	-1/+3 bar	33082
DMU 02 Vario CP	Clamp 1½" ISO 2852	-1/+5 bar	33083
DMU 02 Vario CP	Clamp 1½" ISO 2852	-1/+9 bar	33084



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Type	Connection	Measuring range	Part no.
DMU 02 Vario CP	Clamp 1½" ISO 2852	-1/+24 bar	33085
DMU 02 Vario CP	Clamp 1½" ISO 2852	0/1 bar	33089
DMU 02 Vario CP	Clamp 1½" ISO 2852	0/1.6 bar	33090
DMU 02 Vario CP	Clamp 1½" ISO 2852	0/2.5 bar	33091
DMU 02 Vario CP	Clamp 1½" ISO 2852	0/4 bar	33092
DMU 02 Vario CP	Clamp 1½" ISO 2852	0/6 bar	33093
DMU 02 Vario CP	Clamp 1½" ISO 2852	0/10 bar	33094
DMU 02 Vario CP	Clamp 1½" ISO 2852	0/16 bar	33095
DMU 02 Vario CP	Clamp 1½" ISO 2852	0/25 bar	33096
DMU 02 Vario CP	Clamp 1½" ISO 2852	0/40 bar	33097
DMU 02 Vario FBO	G½B DIN 3852 type A	-1/0 bar	32863
DMU 02 Vario FBO	G½B DIN 3852 type A	-1/+1.5 bar	32864
DMU 02 Vario FBO	G½B DIN 3852 type A	-1/+3 bar	32865
DMU 02 Vario FBO	G½B DIN 3852 type A	-1/+5 bar	32866
DMU 02 Vario FBO	G½B DIN 3852 type A	-1/+9 bar	32867
DMU 02 Vario FBO	G½B DIN 3852 type A	-1/+24 bar	32868
DMU 02 Vario FBO	G½B DIN 3852 type A	0/1 bar	32872
DMU 02 Vario FBO	G½B DIN 3852 type A	0/1.6 bar	32873
DMU 02 Vario FBO	G½B DIN 3852 type A	0/2.5 bar	32874
DMU 02 Vario FBO	G½B DIN 3852 type A	0/4 bar	32875
DMU 02 Vario FBO	G½B DIN 3852 type A	0/6 bar	32876
DMU 02 Vario FBO	G½B DIN 3852 type A	0/10 bar	32877
DMU 02 Vario FBO	G½B DIN 3852 type A	0/16 bar	32878
DMU 02 Vario FBO	G½B DIN 3852 type A	0/25 bar	32879
DMU 02 Vario FBO	G½B DIN 3852 type A	0/40 bar	32880
DMU 02 Vario FBO	G½B DIN 3852 type A	0/60 bar	32881
DMU 02 Vario FBO	G½B DIN 3852 type A	0/100 bar	32882
DMU 02 Vario FBO	G½B DIN 3852 type A	0/160 bar	32883



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Type	Connection	Measuring range	Part no.
DMU 02 Vario FBO	G½B DIN 3852 type A	0/250 bar	32884
DMU 02 Vario FBO	G½B DIN 3852 type A	0/400 bar	32885
DMU 02 Vario FBO	G½B DIN 3852 type A	0/600 bar	32886
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	-1/0 bar	32981
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	-1/+1.5 bar	32982
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	-1/+3 bar	32983
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	-1/+5 bar	32984
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	-1/+9 bar	32985
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	-1/+24 bar	32986
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	0/1 bar	32990
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	0/1.6 bar	32991
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	0/2.5 bar	32992
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	0/4 bar	32993
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	0/6 bar	32994
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	0/10 bar	32995
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	0/16 bar	32996
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	0/25 bar	32997
DMU 02 Vario FL	Flange connection DN 25 PN 40 EN 1092-1 type B 1	0/40 bar	32998
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	-1/0 bar	32915
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	-1/+1.5 bar	32916
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	-1/+3 bar	32917
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	-1/+5 bar	32918
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	-1/+9 bar	32919
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	-1/+24 bar	32920
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	0/1 bar	32924
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	0/1.6 bar	32925
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	0/2.5 bar	32926
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	0/4 bar	32927



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Type	Connection	Measuring range	Part no.
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	0/6 bar	32928
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	0/10 bar	32929
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	0/16 bar	32930
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	0/25 bar	32931
DMU 02 Vario MR	Conical dairy fitting DN 25 DIN 11851	0/40 bar	32932
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	-1/0 bar	32938
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	-1/+1.5 bar	32939
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	-1/+3 bar	32940
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	-1/+5 bar	32941
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	-1/+9 bar	32942
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	-1/+24 bar	32943
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	0/1 bar	32947
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	0/1.6 bar	32948
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	0/2.5 bar	32949
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	0/4 bar	32950
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	0/6 bar	32951
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	0/10 bar	32952
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	0/16 bar	32953
DMU 02 Vario VT	VARIVENT® F (DN 25 and 1")	0/25 bar	32954



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