

JUMO AS

Street address: Solheimveien 50, 1470 Lørenskog , Norway
 Delivery address: Solheimveien 50, 1470 Lørenskog , Norway
 Postal address: Solheimveien 50, 1470 Lørenskog , Norway

Phone: +47 67 97 37 10
 Fax: +47 67 97 37 11
 e-mail: info.no@jumo.net
 Internet: www.jumo.no



Product data sheet

JUMO MIDAS Pressure Transmitter

Product data sheet

40.1001

Sales No.

43006710

Order code

401001/000-459-405-502-20-601-61



401001/000	model MIDAS; pressure transmitter
459	input 0...+10 bar g
405	output 4 to 20 mA 2-wire
502	process connection (not front flush) G 1/4 to DIN EN 837
20; 601	process connection material; seal material stainless steel; FPM
61	electrical connection with terminal box

JUMO GmbH & Co. KG
 Delivery address: Mackenrodtstraße 14,
 36039 Fulda, Germany
 Postal address: 36035 Fulda, Germany
 Phone: +49 661 6003-0
 Fax: +49 661 6003-607
 e-mail: mail@jumo.net
 Internet: www.jumo.net

JUMO Instrument Co. Ltd.
 JUMO House
 Temple Bank, Riverway
 Harlow, Essex CM 20 2TT, UK
 Phone: +44 1279 635533
 Fax: +44 1279 635262
 e-mail: sales@jumo.co.uk
 Internet: www.jumo.co.uk

JUMO Process Control, Inc.
 8 Technology Boulevard
 Canastota, NY 13032, USA
 Phone: 315-697-JUMO
 1-800-554-JUMO
 Fax: 315-697-5867
 e-mail: info@jumo.us
 Internet: www.jumo.us



Pressure transmitter

JUMO MIDAS

Type 401001

Brief description

Pressure transmitters are used for measuring the relative (gauge) pressure in liquids and gases. The pressure transmitter incorporates a thick-film strain gauge as a measuring device. The pressure sensor has an aluminium-oxide (Al₂O₃) ceramic base material. The pressure is converted into an electrical signal.

Technical data

Reference conditions

to DIN 16 086 and IEC 770/5.3

Ranges

see order details

Overload limits

for ranges

0 – 40 bar 3 x full scale

ranges

0 – 60 to 0 – 100 bar 2 x full scale

Bursting pressure

ranges 0 – 40 bar ≤ 5 x full scale

ranges

0 – 60 to 0 – 100 bar 3 x full scale

Parts in contact with medium

standard: st. steel, Mat. Ref. 1.4305,
 (Al₂O₃) 96%

seal: FPM or FFPM
 or CR

Output

4 – 20 mA

2-wire burden ≤ (U_B-10 V) / 0.02A

0.5 – 4.5 V burden ≥ 20 kΩ

1 – (5)6 V burden ≥ 10 kΩ

0 – 10 V burden ≥ 10 kΩ

Burden error

< 0.5% max.

Zero offset

≤ 0.3% of full scale

Thermal hysteresis

≤ ± 0.8% of full scale

Ambient temperature error

within range -20 to +85°C

(compensated temperature range)

zero: ≤ 0.02%/°C typical,
 ≤ 0.04%/°C max.

span: ≤ 0.02%/°C typical,
 ≤ 0.04%/°C max.

Deviation from characteristic

≤ 0.5% of full scale

(limit point adjustment)

Hysteresis

≤ 0.2% of full scale

Repeatability

≤ 0.1% of full scale

Response time

≤ 3 msec max.

Stability per year

≤ 1% of full scale

Supply

10 – 30 V DC (for output 4 – 20 mA
 and 1 – (5)6 V)

5 V DC (for output 0.5 – 4.5 V)

11.5 – 30 V DC (for output 0 – 10 V)

Ripple: the voltage spikes must not go
 above or below the values specified for the
 supply

max. current drawn: approx. 25 mA

Supply voltage error

≤ 0.02% per V

(nominal supply voltage 24 V DC)

ratiometric with supply 5 V DC (±0.5 V)

Permissible ambient temperature

for version with plug:

-20 to +125°C

for version with attached cable:

-20 to +100°C

Storage temperature

-40 to +125°C

for version with attached cable

-20 to +100°C

Permissible temperature of medium

-30 to +125°C

Electromagnetic compatibility (EMC)

to EN 61 326

Mechanical shock

(to IEC 68-2-27)

100 g/1 msec

Mechanical vibration

(to IEC 68-2-6)

20 g max. at 15 – 2000 Hz



Type 401001/000-xxx-xxx-xx-xxx-61



Type 401001/000-xxx-xxx-xx-xxx-36