

Datasheet for

SITRANS P300 pressure transmitters for relative and absolute pressure, single-chamber measuring housing, rating plate inscription in English

Ordering data: **7MF80231DA041AA2**

General

Manufacturer	Siemens
Supplier	Siemens
Product designation	gauge pressure transmitter
Brand name	SITRANS P300
Type designation	SITRANS P300 pressure transmitters for relative and absolute pressure, single-chamber measuring housing, rating plate inscription in English
Article number	7MF80231DA041AA2
Net weight	0,966 kg
Slogan	Controlling sanitary processes with flush-mounted process connections: SITRANS P300

Mode of operation and application

Measuring principle	piezo-resistive
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Input

Measuring range

Measuring range, relative	
Measuring range, relative (minimum)	-970 mbar
Measuring range, relative (maximum)	16 bar
Measuring range, absolute (minimum)	30 mbar

Output

Current output

Signal range	4 ... 20 mA
Failure signal (maximum)	23 mA

Operating conditions

Medium temperature	
Medium temperature (minimum)	-40 °C
Medium temperature (maximum)	100 °C

Pressure

Test pressure, relative (maximum)	32 bar
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Environmental conditions

Ambient temperature during operation	
Ambient temperature during operation (minimum)	-40 °C
Ambient temperature during operation (maximum)	85 °C

Degree of protection

IP rating	IP65
NEMA Enclosure Type	NEMA Type 4X

Electromagnetic compatibility EMC

Standard for EMC	The appropriate directives and standards applied, including the relevant versions, can be found in the EC Declaration of Conformity on the Siemens Internet pages.
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The information provided in this datasheet contains descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Availability and technical specifications are subject to change without notice.

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Structural Design

Mechanical design

Model of the measuring transmitter	compact version, sensor integrated
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Process connection

Design	male thread
Standard	EN 837-1
Nominal size	G1/2 inch B
Pressure rating	PN 21

Material

Process connection

Material	stainless steel
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Enclosure

Material	stainless steel
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Separation & Measuring Membrane

Material of the separation membrane	stainless steel
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Miscellaneous

Filling liquid in the measuring cell	silicone oil
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Electrical connections

Connection technology	2-wire connection
Design of the cable entry	M20 x 1.5
Design of the electrical connection	screw-type terminals

Power supply

Electrical

Voltage type	DC
Nominal voltage, DC	24 V
Supply voltage, DC	
Supply voltage, DC (minimum)	10,5 V
Supply voltage, DC (maximum)	45 V

Communication

Protocol	HART
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Certificates and approvals

EC declaration of conformity	The appropriate directives and standards applied, including the relevant versions, can be found in the EC Declaration of Conformity on the Siemens Internet pages.
Pressure device category according to PED 97/23/EC	Article 3.3
Fluid group according to PED 97/23/EG	gas group 1
Fluid group according to PED 97/23/EG	liquid group 1

Reliability (MTBF)

MTBF	207 a
Standard for MTBF	SN 29500
Determination procedure	Number of registered failures

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Applicability

Measuring device

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