

Datasheet for

SIPART PS2 Smart, electropneumatic positioner, 4...20mA, Ex/nEx, single-acting, polycarbonate enclosure, for pneumatic linear and part-turn actuators. Non-contacting (wear-free) position detection (NCS).

Ordering data: 6DR50100NM210AA0

| General | | |
|---------------------|--|--|
| Manufacturer | Siemens | |
| Supplier | Siemens | |
| Product designation | Electropneumatic positioner | |
| Brand name | SIPART PS2 | |
| Type designation | SIPART PS2 Smart, electropneumatic positioner, 420mA, Ex/nEx, single-acting, polycarbonate enclosure, for pneumatic linear and part-turactuators. Non-contacting (wear-free) position detection (NCS). | |
| Net weight | 0.9 kg | |
| Slogan | One that masters everything: SIPART PS2 | |

Input

Analog input

Signal range at the analog input

Operating conditions

4 ... 20 mA

Environmental conditions

Ambient temperature during operation -30 °C...+80 °C

Degree of protection

IP rating IP66
NEMA Enclosure Type NEMA 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.

Structural Design

Mechanical design

Design of the positioner single-acting

Rotation angle of the part-turn actuator 30 Degree...100 Degree

Stroke range of the linear actuator 3 mm...130 mm

Material

Enclosure

Material polycarbonat, glass-fiber reinforced (PC)

Mounting

Mounting kit for linear actuator

Using mounting kit 6DR4004-8V and where necessary with an additional

lever arm 6DR4004-8L on actuators according to IEC 534-6 (NAMUR) with

ribs, bars or flat face

Mounting kit for part-turn actuator "Using mounting kit 6DR4004-8D on actuators with mounting plane

according to VDI/VDE 3845 and DIN 3337: The required mounting console has to be provided on the actuator side; shaft with groove and female $\frac{1}{2}$

thread M6"

Type of the assembly With a suitable mounting kit, depending on use as a linear actuator or a

part-turn actuator and process environment

Design of connection for actuating pressure 1/4"-18 NPT

Electrical connections

Connection technology 2-wire connection

Design of the cable entry M20 x 1.5

This is only an extract from the technical data. For more details, see the FI 01 catalog or the Industry Mall. Creation date: 02/02/2025

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| Power supply | | | | |
|---|--|--|--|--|
| Type of the auxiliary power supply | pneumatical | | | |
| Pneumatic | | | | |
| Operating medium | Compressed air, natural gas (purified), Nitrogen | | | |
| Operating pressure of the supply air (maximum) | 7 bar | | | |
| Compressed air purity class for humidity and liquid water | Class 2 | | | |
| Air consumption | 0.01 m³/h | | | |
| 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 | | | |
| | | | | |

Reliability (MTBF)

Fluid group according to PED 97/23/EG

| Reliability (MTBF) | | | | |
|--------------------|-------------------------|-------------------------------|--|--|
| | MTBF | 359 a | | |
| | Standard for MTBF | SN 29500 | | |
| | Determination procedure | number of registered failures | | |
| | Applicability | positioner | | |
| | | | | |

gas group 1

The information provided in this data sheet 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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