

Datasheet for

SIPART PS2 Smart, electropneumatic positioner, 4...20mA, Ex/nEx, single-acting, SST enclosure, no window, for pneumatic linear and part-turn actuators. Non-contacting (wear-free) position detection (NCS).

Ordering data: **6DR50120DN130AA3**

General

Manufacturer	Siemens
Supplier	Siemens
Product designation	Electropneumatic positioner
Brand name	SIPART PS2
Type designation	SIPART PS2 Smart, electropneumatic positioner, 4...20mA, Ex/nEx, single-acting, SST enclosure, no window, for pneumatic linear and part-turn actuators. Non-contacting (wear-free) position detection (NCS).
Net weight	4.265 kg
Slogan	One that masters everything: SIPART PS2

Input

Analog input

Signal range at the analog input	4 ... 20 mA
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Operating conditions

Environmental conditions

Ambient temperature during operation	-30 °C...+80 °C
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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.
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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	stainless steel
Material number according to DIN EN 10027-2	1.4581
Material number according to AISI	316Ti

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 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
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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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Design of the cable entry	1/2"-14 NPT
Design of the electrical connection	screw terminals 2.5 AWG28-12
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 total oil according to ISO 8573-1	Class 2
Compressed air purity class for humidity and liquid water	Class 2
Compressed air purity class for particles according to ISO 8573-1	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
Fluid group according to PED 97/23/EG	gas group 1

Reliability (MTBF)

MTBF	359 a
Standard for MTBF	SN 29500
Determination procedure	number of registered failures
Applicability	positioner

Explosion protection

Ex-marking (IECEX & ATEX)	Ex ec IIC T6...T4 Gc
Ex-marking (IECEX & ATEX)	Ex tb IIIC T100 °C Db
Ex-marking (IECEX & ATEX)	II 3 G Ex ec IIC T6...T4 Gc
Ex-marking (IECEX & ATEX)	II 2 D Ex tb IIIC T100 °C Db

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.