

## Overview



SIPART PS100 positioner with polycarbonate lid and inspection window



SIPART PS100 electropneumatic positioner in aluminum enclosure without inspection window

The SIPART PS100 electropneumatic positioner is used to control the process valve or damper position of pneumatic linear or part-turn actuators. The SIPART PS100 electropneumatic positioners control the process valve according to the setpoint value.

## Benefits

The SIPART PS100 positioners offer the following advantages:

- Fast commissioning at the push of a button
- Simple operation via the display and four buttons
- Display symbols according to NAMUR NE 107
- Negligible air consumption in stationary operation
- Setting the application profile based on predefined selection options, e.g. tight-closing valve, open/close valve, small valve
- Fast response in end positions ensures short positioning times and tight valves
- Insensitive to vibrations and steam hammer
- Leakage compensation ensures a constant actual value and protects the actuator
- Only one device version for linear and part-turn actuators
- Consistent parameter assignment with HART communication
- Safe use in hazardous areas

## Application

The SIPART PS100 positioner is used, for example, in the following industries:

- Valve manufacturing
- Chemical industry
- Power stations
- Paper and glass
- Water and wastewater
- Food and pharmaceuticals

The SIPART PS100 positioner can be used with pneumatic actuators and an analog input (AI), 4 to 20 mA.

**Selection and ordering data**

	Article No.
<b>SIPART PS100</b> electropneumatic positioner without explosion protection	6 DR 7 1 77 - 0 7777 - 777 0
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.	
<b>Enclosure material</b>	
Polycarbonate, lid with inspection window	0
Aluminum, lid without inspection window	1
<b>Actuator type</b>	
For single-acting actuators	1
For double-acting actuators	2
<b>Communication</b>	
2-wire, 4 ... 20 mA	N
2-wire, 4 ... 20 mA, HART	AN
<b>Device option 1</b>	
Without device option 1	N
With digital input (DI) and digital output (DQ)	A
<b>Device option 2</b>	
Without device option 2	0
With analog output (AQ) 4 ... 20 mA	1
<b>Thread of the lower cable entry/ cable gland</b>	
M20 x 1.5/without cable gland	0
M20 x 1.5/with plastic cable gland	1
M20 x 1.5/with metal cable gland	2
½-14 NPT/without cable gland	4
<b>Thread of the upper cable entry/ cable gland</b>	
M20 x 1.5/with blanking plug	0
M20 x 1.5/with plastic cable gland	1
M20 x 1.5/with metal cable gland	2
½-14 NPT/without cable gland	4
<b>Pneumatic thread</b>	
G¼	A
¼-18 NPT	B
<b>Pneumatic accessories</b>	
Without gauge block	A
Gauge made of plastic, block made of aluminum	C
Gauge made of metal, block made of aluminum	D
Gauge made of stainless steel, block made of stainless steel	E

	Article No.
<b>SIPART PS100</b> electropneumatic positioner with explosion protection	6 DR 7 1 77 - 77 N 77 - 777 0
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.	
<b>Enclosure material</b>	
Polycarbonate, lid with inspection window	0 1
Aluminum, lid without inspection window	1
<b>Actuator type</b>	
For single-acting actuators	1
For double-acting actuators	2
<b>Degree of protection</b>	
Ex i (ATEX, IECEx,...) <sup>1)</sup>	1
Ex i; Ex e (ATEX, IECEx,...) <sup>1)</sup>	2
Ex i; Ex e; Ex t (ATEX, IECEx,...) <sup>1)</sup>	3
<b>Communication</b>	
2-wire, 4 ... 20 mA	N
2-wire, 4 ... 20 mA, HART	A
<b>Device option 2</b>	
Without device option 2	0
With analog output (AQ) 4 ... 20 mA	1
<b>Thread of the lower cable entry/ cable gland</b>	
M20 x 1.5/without cable gland	0
M20 x 1.5/with plastic cable gland	1
M20 x 1.5/with metal cable gland	2
½-14 NPT/without cable gland	4
<b>Thread of the upper cable entry/ cable gland</b>	
M20 x 1.5/with blanking plug	0
M20 x 1.5/with plastic cable gland	1
M20 x 1.5/with metal cable gland	2
½-14 NPT/without cable gland	4
<b>Pneumatic thread</b>	
G¼	A
¼-18 NPT	B
<b>Pneumatic accessories</b>	
Without gauge block	A
Gauge made of plastic, block made of aluminum	C
Gauge made of metal, block made of aluminum	D
Gauge made of stainless steel, block made of stainless steel	E

<sup>1)</sup> You will find all currently available certificates on <http://www.siemens.com/processinstrumentation/certificates>.



Options	Order code
Append suffix "-Z" to Article No., add order code and plain text.	
<b>TAG plate made of stainless steel, 3-line</b> Input fields Text line 1: Plain text from Y15 Text line 2: Plain text from Y16 Text line 3: Plain text from Y17	<b>A20</b>
<b>Version with stainless steel sound absorbers</b>	<b>A40</b>
<b>Measuring point description</b> Input field: Max. 16 characters; specify in plain text	<b>Y15</b>
<b>Measuring point text</b> Input field: Max. 24 characters; specify in plain text	<b>Y16</b>
<b>Measuring point number (TAG no.)</b> Input field: Max. 32 characters; specify in plain text	<b>Y17</b>

Accessories	Article No.
<b>Gauge block</b> With gauges made of plastic IP31 (MPa, bar) • Block made of aluminum, single-acting, G $\frac{1}{4}$ • Block made of aluminum, double-acting, G $\frac{1}{4}$ With gauges made of plastic IP31 (MPa, psi) • Block made of aluminum, single-acting, $\frac{1}{4}$ -18 NPT • Block made of aluminum, double-acting, $\frac{1}{4}$ -18 NPT With gauges made of metal IP44 (MPa, bar, psi) • Block made of aluminum, single-acting, G $\frac{1}{4}$ • Block made of aluminum, double-acting, G $\frac{1}{4}$ • Block made of aluminum, single-acting, $\frac{1}{4}$ -18 NPT • Block made of aluminum, double-acting, $\frac{1}{4}$ -18 NPT With gauges made of stainless steel 316 IP54 (MPa, bar, psi) • Block made of stainless steel 316, single-acting, G $\frac{1}{4}$ • Block made of stainless steel 316, double-acting, G $\frac{1}{4}$ • Block made of stainless steel 316, single-acting, $\frac{1}{4}$ -18 NPT • Block made of stainless steel 316, double-acting, $\frac{1}{4}$ -18 NPT	<b>6DR4004-1M</b> <b>6DR4004-2M</b>  <b>6DR4004-1MN</b> <b>6DR4004-2MN</b>  <b>6DR4004-1P</b> <b>6DR4004-2P</b> <b>6DR4004-1PN</b> <b>6DR4004-2PN</b>  <b>6DR4004-1Q</b> <b>6DR4004-2Q</b> <b>6DR4004-1QN</b> <b>6DR4004-2QN</b>
<b>Venting gauge block</b> Depressurizing of Y2 on compressed air failure with gauges made of metal IP44 (MPa, bar, psi). The DA actuator with springs moves into the safety position. • Block made of aluminum, double-acting, G $\frac{1}{4}$ • Block made of aluminum, double-acting, $\frac{1}{4}$ -18 NPT	<b>6DR4004-2RE</b> <b>6DR4004-2RF</b>
<b>Booster (Cv = 2)</b> Aluminum with gauges made of metal IP44 (MPa, bar, psi) • Single-acting, G $\frac{1}{2}$ • Double-acting, G $\frac{1}{2}$ • Single-acting, $\frac{1}{2}$ -14 NPT • Double-acting, $\frac{1}{2}$ -14 NPT	<b>6DR4004-1RJ</b> <b>6DR4004-2RJ</b> <b>6DR4004-1RK</b> <b>6DR4004-2RK</b>
<b>Mounting kit for NAMUR part-turn actuators</b> VDI/VDE 3845, with plastic coupling wheel, without mounting console VDI/VDE 3845, with stainless steel coupling, without mounting console Console for mounting on Namur part-turn actuators VDI/VDE 3845 • 80 x 30 x 20 mm (3.15 x 1.18 x 0.79 inch) • 80 x 30 x 30 mm (3.15 x 1.18 x 1.18 inch) • 130 x 30 x 30 mm (5.12 x 1.18 x 1.18 inch) • 130 x 30 x 50 mm (5.12 x 1.18 x 1.97 inch)	<b>6DR4004-8D</b>  <b>TGX:16300-1556</b>  <b>6DR4004-1D</b> <b>6DR4004-2D</b> <b>6DR4004-3D</b> <b>6DR4004-4D</b>
<b>Mounting kit for other part-turn actuators</b> The following mounting consoles can be used together with the NAMUR part-turn actuator mounting kit 6DR4004-8D. SPX (DEZURIK) Power Rack, sizes R1, R1A, R2, R2A Masoneilan Camflex II Fisher 1051/1052/1061, sizes 30, 40, 60 to 70 Fisher 1051/1052, size 33	<b>TGX:16152-328</b> <b>TGX:16152-350</b> <b>TGX:16152-364</b> <b>TGX:16152-348</b>

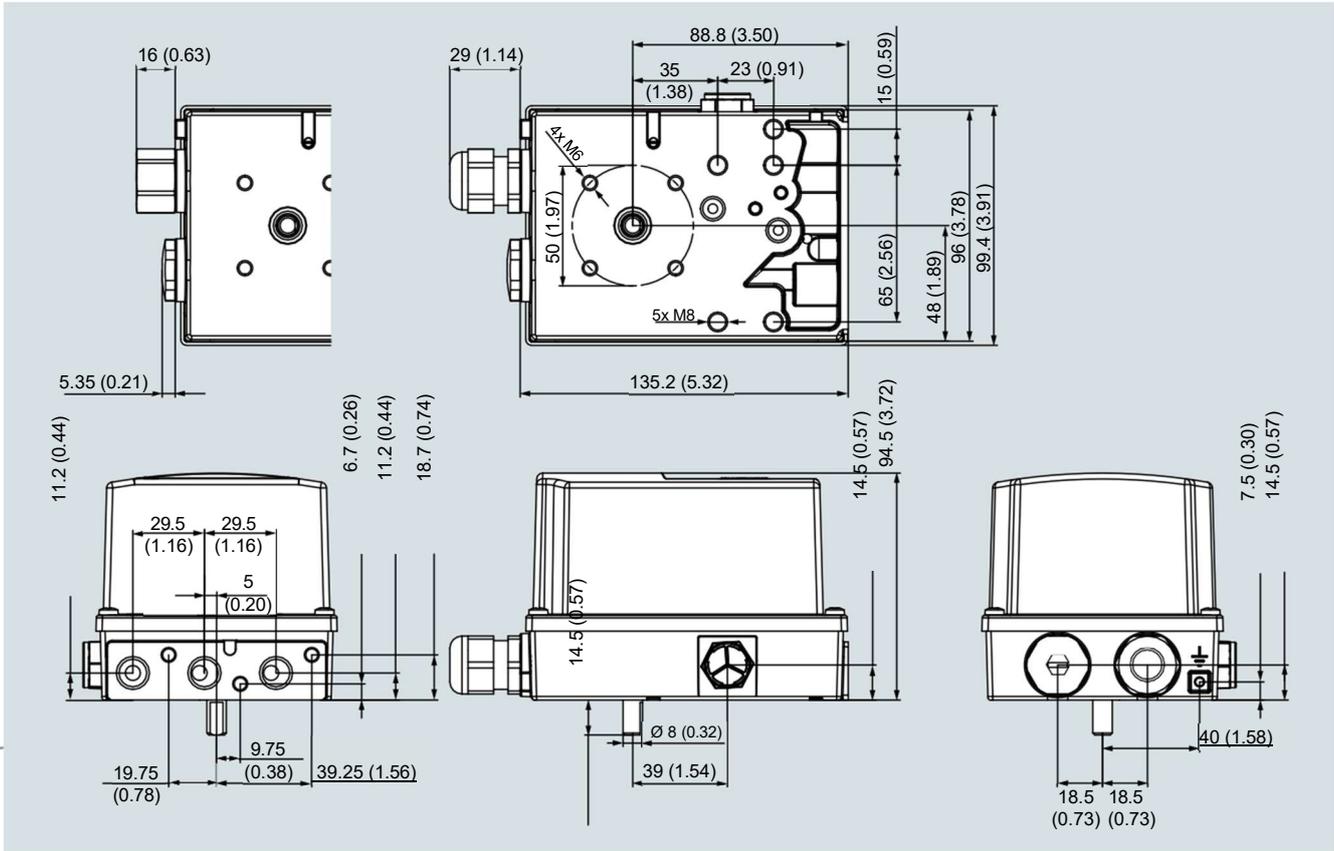
Accessories	Article No.
<b>Mounting kit for NAMUR linear actuators</b> NAMUR linear actuator mounting kit with short lever arm (2 ... 35 mm (0.08 ... 1.38 inch)) Lever arm for strokes of 35 ... 130 mm (1.38 ... 5.12 inch) without NAMUR mounting bracket Reduced mounting kit (as for 6DR4004-8V but without fixing angle and U-bracket), with short lever with up to 35 mm (1.38 inch) stroke Reduced mounting kit (as for 6DR4004-8V but without fixing angle and U-bracket), with long lever > 35 mm (1.38 inch) stroke Roll and disk made of stainless steel 316 for replacement of the Teflon roll and aluminum disk in the 6DR4004-8, -8VK and -8VL mounting kits for NAMUR linear actuators Two terminal blocks made of stainless steel 316 for replacement of the aluminum terminal blocks in the 6DR4004-8V, -8VK and -8VL mounting kits for NAMUR linear actuators	<b>6DR4004-8V</b> <b>6DR4004-8L</b> <b>6DR4004-8VK</b> <b>6DR4004-8VL</b>  <b>6DR4004-3N</b>  <b>6DR4004-3M</b>
<b>Mounting kit for other linear actuators</b> MASONEILAN type 87/88 MASONEILAN type 37/38, all sizes Fisher type 657/667, sizes 30 ... 80	<b>TGX:16152-1210</b> <b>TGX:16152-1215</b> <b>TGX:16152-900</b>
<b>OPOS interface according to VDI/VDE 3847</b> OPOS adapter with interface VDI/VDE 3847, blanketing, not for flameproof enclosures	<b>6DR4004-5PB</b>
<b>SITRANS I100 isolating power supply HART</b> (see "SITRANS I supply units and isolation amplifiers") With 24 V DC auxiliary power	<b>7NG4124-1AA00</b>
<b>SITRANS I200 output isolator HART</b> (see "SITRANS I supply units and isolation amplifiers") With 24 V DC auxiliary power	<b>7NG4131-0AA00</b>

<sup>1)</sup> Only together with 6DR4004-8S.

**Scope of delivery for positioner**

1 SIPART PS100 positioner as ordered

Dimensional drawings



charge in various languages at:  
<http://www.siemens.com/processinstrumentation/documentation>