

# SIEMENS



PROCESS INSTRUMENTATION

## SIPART PS2: Advanced & Flexible Valve Control.

[usa.siemens.com/positioners](http://usa.siemens.com/positioners)

From standard applications to the fastest particle accelerator in the world – SIPART PS2 masters all control tasks



## The proven multi-talent SIPART PS2

**SIPART PS2 is currently the most widely used positioner for linear and part-turn actuators in a wide range of process industries. This is not without reason. The proven all-rounder offers comprehensive functionality and diagnostics capability, controls a wide range of valves both safely and dependably and also fulfills a multitude of specific requirements optimally.**

For reliable control of final control elements in chemical or oil and gas sectors, or for precise control of valves in the pharmaceutical or food industry: SIPART PS2 provides the right solution for every valve.

Another point in favor of our positioner is the low consumption of compressed air. SIPART PS2 minimizes it as well as the CO<sub>2</sub> emission which is caused by the compressors. This means our positioner offers savings of up to 90 percent compared to conventional devices.

### The Siemens promise:

- **Quality:** Production and development based on the latest standards
- **Know-how:** 80+ years of experience in valve positioners
- **Control performance:** Precise control with a large variety of valves
- **Ruggedness:** Depending on application in matching enclosure
- **Reliability:** With diagnostics functions comprehensive view of valve
- **Integration:** Seamless integration into control systems
- **Service:** Modular design of device for easier servicing



# Product highlights

## Flexible in any position

SIPART PS2 is the most widely used positioner for linear and part-turn actuators as well as for single-acting and double-acting actuators in all process industries. Regardless if “mini valves” with very small strokes or steam valves with large strokes – the intelligent positioner masters any task without problems. In addition to linear actuators, SIPART PS2 also controls part-turn actuators with a rotary angle range from 30° to 100°. For easier mounting of the SIPART PS2 to standardized or manufacturer-specific actuators, you can choose from 400 mounting kits. You start initialization using three push buttons and the display, and commissioning is complete within a few minutes.

## Protected against hostile environments

In an optional Makrolon, aluminum or stainless steel enclosure, SIPART PS2 is best equipped to withstand any conditions. With degree of protection IP66 or NEMA 4X as standard, it withstands the most hostile environmental conditions. Thanks to its large number of international certificates, the positioner is well-equipped for use in hazardous, maritime applications. The flameproof version can be conveniently operated thanks to a display and push buttons that are protected by bulletproof glass. In addition to the flameproof device, SIPART PS2 is also available as intrinsically safe version.

## Extremely communicative

In dialog with host systems, the SIPART PS2 demonstrates its communicative side. It can be integrated in the communication landscape by means of the PROFIBUS PA, Foundation Fieldbus or HART protocols. SIPART PS2 supports both commonly used parameterization concepts EDD (Enhanced Device Description) and DTM (Device Type Manager). It also stands out through its proven interoperability with the Siemens process control system SIMATIC PCS 7 and SIMATIC PDM, and with process control systems and asset management systems from other vendors. Plant operators therefore benefit from the complete diagnostics range of the positioner.

## Always the right diagnostics

During operation or in the workshop – SIPART PS2 offers the correct, standard diagnostics functions for each operating state. During operation, our positioner monitors the following properties of the valve, among other things: pneumatic leaks, number of strokes, stiction of the stuffing box or wear of the valve seat. With a regular partial stroke test, the SIPART PS2 ensures that ESD (Emergency Shut Down) valves and other open/close valves remain free to move in emergency situations. For ongoing operation to not be affected, the timing of the PST can be set.

## Technical specifications

Construction	Compact
Setpoint signal	0/4–20 mA without/with HART 7 signal or PROFIBUS PA/Foundation Fieldbus protocol
Range of stroke	0.11" to 5.11" (3 to 130 mm) (larger strokes on request)
Rotary angle range	30° to 100° (optional 180°)
Ambient temperature	-22 F° to 176F° (-30°C to +80°C) (other temperature ranges on request)
Required air quality	Class 3 in accordance with ISO 8573-1
Max. air bleed in settled state	0.006 SCFM (0.01 Nm <sup>3</sup> /h )
Pneumatic auxiliary power	20 - 102 PSI (1.4 to 7 bar)
Airflow	
– Supply to actuator (for Δp = 6 bar)	9.8 m <sup>3</sup> n/h
– Actuator to exhaust (for Δp = 6 bar)	19.2 m <sup>3</sup> n/h
– Integrated booster option	Cv 2.0
Types of protection	EX d; Ex i; Ex n; Ex t; XP; IS; NI;
Certificates and approvals	Explosion protection: IECEx; ATEX; FM; CSA; NEPSI; INMETRO; EAC; KCS General safety: CE; FM Functional safety: SIL2 Shipbuilding: ABS; BV; GL; LR; DNV

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