Positioners
SIPART PS2

Selection and ordering data	Article No.	Order code
SIPART PS2 electropneumatic positioner, in flameproof aluminum enclosure, without cable gland	**6 D R 5** ■■ 5 - 0 E ■■■ - ■■ A ■ ■■■	

Version		
2-wire (4 to 20 mA)		
• Without HART	0	
• With HART	1	
2-, 3-, 4-wire (0/4 to 20 mA)		
• With HART ▶🕊	2	
• Without HART	3	
PROFIBUS PA connection	5	
FOUNDATION Fieldbus connection	6	

For actuator		
Single-acting ▶🕊	1	
Double-acting ▶🕊	2	

Connection thread electrical/pneumatic		
M20 x 1.5 / G¼ ▶🕊	G	
½-14 NPT / ¼-18 NPT ▶🕊	N	
M20 x 1.5 / ¼-18 NPT	M	
½-14 NPT / G¼	P	
M25x1.5 / G¼	Q	

Limit monitor Built-in		
Without ▶🕊	0	
Alarm module; electronic (6DR4004-8A)	1	

Option modules Built-in		
Without ▶🕊	0	
Iy module for position feedback signal (4 ... 20 mA) (6DR4004-8J)	1	
EMC filter module for external position sensor	2	
Iy module and EMC filter module for external position sensor	3	

Customer-specific design		
Without ▶🕊	0	

Brief instructions		
German/English ▶🕊	A	
French/Spanish/Italian	B	

▶ Available ex stock

🕊 We can offer shorter delivery times for configurations designated with the Quick Ship Symbol 🕊. For details see page 9/5 in the appendix.

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Mounted pressure gauge block		
Without ▶🕊	0	
Gauge made of plastic, block made of aluminium, single-acting G¼, scaled in MPa and bar	1	
Gauge made of plastic, block made of aluminium, double-acting G¼, scaled in MPa and bar	2	
Gauge made of plastic, block made of aluminium, single-acting ¼-18 NPT, scaled in MPa and psi	3	
Gauge made of plastic, block made of aluminium, double-acting ¼-18 NPT, scaled in MPa and psi	4	
Gauge made of steel		
block made of aluminium, single-acting G¼, scaled in MPa, bar, psi	9	R 1 A
Block made of aluminium, double-acting G¼, scaled in MPa, bar, psi	9	R 2 A
Block made of aluminium, single-acting ¼-18 NPT, scaled in MPa, bar, psi	9	R 1 B
Block made of aluminium, double-acting ¼-18 NPT, scaled in MPa, bar, psi	9	R 2 B
Gauge made of stainless steel 316		
Block made of stainless steel 316, single-acting G¼, scaled in MPa, bar, psi	9	R 1 C
Block made of stainless steel 316, double-acting G¼, scaled in MPa, bar, psi	9	R 2 C
Block made of stainless steel 316, single-acting ¼-18 NPT, scaled in MPa, bar, psi	9	R 1 D
Block made of stainless steel 316, double-acting ¼-18 NPT, scaled in MPa, bar, psi	9	R 2 D

Further designs	Order code
Add "-Z" to Article No. and specify Order Code.	
TAG plate made of stainless steel, 3-line Text line 1: Plain text from Y17 Text line 2: Plain text from Y15 Text line 3: Plain text from Y16	A20
Functional safety (SIL 2) only for 6DR5.1. (single-action positioners) Device suitable for use according to IEC 61508 and IEC 61511	C20
Measuring point description Max. 16 characters for HART, max. 32 characters for PROFIBUS PA and FOUNDATION Fieldbus, specify in plain text: **Y15: ....**	Y15
Measuring point text Max. 24 characters for HART, max. 32 characters for PROFIBUS PA and FOUNDATION Fieldbus, specify in plain text: **Y16: ....**	Y16
Measuring point number (TAG No.) Max. 8 characters for HART, max. 32 characters for PROFIBUS PA and FOUNDATION Fieldbus, specify in plain text: **Y17: ....**	Y17
Preset bus address Specify in plain text: **Y25: ....** only for 6DR55.. and 6DR56..)	Y25

▶ Available ex stock (select combinations)

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Selection and ordering data | Article No.

Accessories

ly module for position feedback signal (4 ... 20 mA)

• Without explosion protection ►	6DR4004-8J
• With explosion protection ATEX/IECEx ►	6DR4004-6J
• With explosion protection FM/CSA	6DR4004-7J

Alarm unit for 3 alarm outputs and 1 binary input (functionality: 2 limit monitors, 1 fault alarm, 1 binary input)

• Without explosion protection ►	6DR4004-8A
• With explosion protection ATEX/IECEx ►	6DR4004-6A
• With explosion protection FM/CSA	6DR4004-7A

SIA module (slot-type initiator alarm unit, not for Ex d version)

• Without explosion protection ►	6DR4004-8G
• With ATEX/IECEx and FM/CSA explosion protection ►	6DR4004-6G

Mechanical limit switch module (with mechanical ground contacts, not for Ex d version)

• Without explosion protection ►	6DR4004-8K
• With explosion protection ►	6DR4004-6K

EMC filter module for connection of external position sensor (10 kΩ) or NCS sensor ► C73451-A430-D23

► Available ex stock.

Selection and ordering data | Article No.

Accessories

NCS sensor for non-contacting detection of position (not for Ex d version) — 6DR4004 - ■N■■0

Explosion protection

Not explosion-proof	8
With protection type (ATEX/IECEx/FM) • Intrinsic safety • Non-sparking	6

Cable length

6 m (19.68 ft)	N
20 m (65.67 ft)	P
40 m (131,23 ft)	R

Actuator type

For part-turn actuators, glass fiber-reinforced polyester magnet holders[1]	1
For linear actuators up to 14 mm (0.55 inch)[2]	2
For linear actuators > 14 ... 130 mm (0.55 ... 5.12 inch)[3]	3
For part-turn actuators, anodized aluminum magnet holders	4

[1] Fitted with mounting console, available for order separately as accessory.

[2] Mounted without NAMUR interface, individual mounting solution. Or mounted with NAMUR interface. Only a NAMUR mounting bracket can be used as mounting base (order separately as accessory).

[3] Mounted with NAMUR interface. Article No. either 6DR4004-8V or 6DR4004-8V + 6DR4004-8L depending on stroke range. Or mounted without NAMUR interface, individual mounting solution. Article No. 6DR4004-8VK or 6DR4004-8VL can be used as individual mounting solution depending on the stroke range.

Selection and ordering data | Article No.

External position detection system (with explosion protection to ATEX/IECEx) for separate mounting of position sensor and controller unit (not for Ex d version), comprising SIPART PS2 Makrolon enclosure with integral potentiometer and sliding clutch (without electronics and valve block) ► C73451-A430-D78

The EMC filter module is additionally required for the controller unit. (separate ordering item, see above).

Gauge block with

2 gauges made of plastic, block made of aluminium, single-acting G¼, scaled in MPa and bar ►	6DR4004-1M
3 gauges made of plastic, block made of aluminium, double-acting G¼, scaled in MPa and bar ►	6DR4004-2M
2 gauges made of plastic, block made of aluminium, single-acting ¼-18 NPT, scaled in MPa and psi ►	6DR4004-1MN
3 gauges made of plastic, block made of aluminium, double-acting ¼-18 NPT, scaled in MPa and psi ►	6DR4004-2MN
2 gauges made of steel Block made of aluminum, single-acting G¼, scaled in MPa, bar, psi ►	6DR4004-1P
3 gauges made of steel Block made of aluminum, double-acting G¼, scaled in Mpa, bar, psi ►	6DR4004-2P
2 gauges made of steel Block made of aluminum, single-acting ¼-18 NPT, scaled in MPa, bar, psi ►	6DR4004-1PN
3 gauges made of steel Block made of aluminum, double-acting ¼-18 NPT, scaled in MPa, bar, psi ►	6DR4004-2PN
2 gauges made of stainless steel 316 Block made of stainless steel 316, single-acting G¼, scaled in MPa, bar, psi ►	6DR4004-1Q
3 gauges made of stainless steel 316 Block made of stainless steel 316, double-acting G¼, scaled in MPa, bar, psi ►	6DR4004-2Q
2 gauges made of stainless steel 316 Block made of stainless steel 316, single-acting ¼-18 NPT, scaled in MPa, bar, psi ►	6DR4004-1QN
3 gauges made of stainless steel 316 Block made of stainless steel 316, double-acting ¼-18 NPT, scaled in MP, bar, psi ►	6DR4004-2QN

Pneumatic terminal block made of stainless steel 316

to replace the pneumatic terminal block made of aluminium for SIPART PS2 with Makrolon enclosure

Single-acting with G¼ ►	6DR4004-1R
Double-acting with G¼ ►	6DR4004-2R
Single-acting with ¼-18 NPT ►	6DR4004-1RN
Double-acting with ¼-18 NPT ►	6DR4004-2RN

Mounting kit for NAMUR part-turn actuators

(VDI/VDE 3845, with plastic coupling wheel, without mounting console) ►	6DR4004-8D
(VDI/VDE 3845, with stainless steel coupling, without mounting console) ►	TGX:16300-1556

The following mounting consoles can be used with the NAMUR part-turn actuator mounting kit 6DR4004-8D.
Size W x L x H (H = height of shaft butt)

• 30 x 80 x 20 mm ►	TGX:16152-105
• 30 x 80 x 30 mm ►	TGX:16300-147
• 30 x 130 x 30 mm ►	TGX:16300-149
• 30 x 130 x 50 mm ►	TGX:16300-151

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Positioners
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Mounting kit for other part-turn actuators

The following mounting consoles can be used together with the NAMUR part-turn actuator mounting kit 6DR4004-8D.

• SPX (DEZURIK) Power Rac, sizes R1, R1A, R2 and R2A ►	**TGX:16152-328**
• Masoneilan Camflex II ►	**TGX:16152-350**
• Fisher 1051/1052/1061, sizes 30, 40, 60 to 70 ►	**TGX:16152-364**
• Fisher 1051/1052, size 33 ►	**TGX:16152-348**

Mounting kit for NAMUR linear actuators

• NAMUR linear actuator mounting kit with short lever (2 ... 35 mm (0.08 ... 1.38 inch) ►	**6DR4004-8V**
• Long lever for travels from 35 ... 130 mm (1.38 ... 5.12 inch) ►	**6DR4004-8L**
• Reduced mounting kit (like 6DR4004-8V but without fixing angle and U-bracket), with short lever with up to 35 mm travel (1.38 inch) ►	**6DR4004-8VK**
• Reduced mounting kit (like 6DR4004-8V but without fixing angle and U-bracket), with long lever with > 35 mm travel (1.38 inch) ►	**6DR4004-8VL**
• 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 ►	**6DR4004-3N**
• 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 ►	**6DR4004-3M**

Mounting kit for other linear actuators

• Retrofitting kit for Moore series 72 and 750 valve positioners ►	**TGX:16152-117**
• Masoneilan type 87/88 ►	**TGX:16152-620**
• Fisher type 657/667, size 30 to 80 ►	**TGX:16152-110**
• Samson actuator type 3277 (yoke dimension (H5) = 101 mm^2 (integrated connection without tube), not for Ex d ►	**6DR4004-8S**

OPOS Interface according to VDI/VDE 3847

• OPOS adapter with interface VDI/VDE 3847, blanketing, not for flameproof aluminum enclosure ►	**6DR4004-5PA**
• OPOS/NAMUR mounting kit with short lever (complete), base plate, rail, mounting parts ►	**6DR4004-5PL**

Connection block, for safety solenoid valve with extended mounting flange to NAMUR

• For mounting to IEC 534-6 ►	**6DR4004-1B**
• For SAMSON actuator (integrated mounting) see above ►	**6DR4004-1C**[1]

Pipe mounting

Mounting bracket for pipe mounting of the SIPART PS2 positioner (e. g. when using the NCS sensor) ►	**TGX:16152-336**

Additional actuator components can be found at the following Internet address: www.siemens.de/sipartps2

Customer-specific mounting kits available on request.

Documentation (see notes below)

Operating Instructions

• SIPART PS2 HART German	**A5E00074630**
• SIPART PS2 HART English	**A5E00074631**
• SIPART PS2 PROFIBUS PA German	**A5E00127924**
• SIPART PS2 PROFIBUS PA English	**A5E00127926**
• SIPART PS2 FOUNDATION Fieldbus German	**A5E00214568**
• SIPART PS2 FOUNDATION Fieldbus English	**A5E00214569**

SIPART PS2 Compact Instruction Manual

• English, French, German, Spanish, Italian, Dutch	**A5E03436620**
• English, Estonian, Latvian, Lithuanian, Polish, Romanian	**A5E03436655**
• English, Bulgarian, Czech, Finnish, Slovakian, Slovenian	**A5E03436664**
• English, Danish, Greek, Portuguese, Swedish, Hungarian	**A5E03436683**

Operating Instructions for NCS Sensor

• German/English/French/Spanish/Italian	**A5E00097485**

SIPART PS2 device documentation

• DVD with complete documentation for all device versions	**A5E00214567**

SITRANS I200 output isolator HART
(see SITRANS I supply units and isolation amplifiers") with

• 24 V DC power supply ►	**7NG4131-0AA00**

HART modem for connecting to PC or laptop

• with RS232 interface ►	**7MF4997-1DA**
• with USB interface ►	**7MF4997-1DB**

► Available ex stock.

[1] Only together with 6DR4004-8S and 6DR4004-1M.

Note:

All the above-mentioned manuals are included on DVD and can be downloaded from www.siemens.de/sipartps2.

Scope of delivery for positioner

- 1 SIPART PS2 positioner as ordered
- 1 DVD with the complete documentation for all versions and accessories
- Short manual "SIPART PS2 - Configuration At a Glance"

Selection and ordering data	Article No.
NCS-Sensor spare parts	
Magnet holder made of fiberglass-reinforced polyester including magnet for non-contacting position detection for part-turn actuators	**A5E00078030**
Magnet holder made of anodized aluminum including magnet for non-contacting position detection for part-turn actuators	**A5E00524070**

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