

## Data sheet

## 6AG1972-0BA12-2XA0

### product type designation

product description



### PROFIBUS connector

PROFIBUS bus connector, RS 485, screw, without programming port, 90°

SIPLUS DP PROFIBUS plug with R - without PG - 90 degrees based on 6ES7972-0BA12-0XA0 with conformal coating, -25...+70 °C, connection plug for PROFIBUS up to 12 Mbps, 90° cable outlet, terminating resistor with isolating function, without PG socket

Technical Product Detail Page

<https://i.siemens.com/1P6AG1972-0BA12-2XA0>

suitability for use

for connecting PROFIBUS stations to the PROFIBUS bus cable

### transfer rate

transfer rate / with PROFIBUS DP

9.6 kbit/s ... 12 Mbit/s

### interfaces

number of electrical connections

- for PROFIBUS cables
- for network components or terminal equipment

2

1

type of electrical connection

- for PROFIBUS cables
- for network components or terminal equipment

Screw

9-pin sub D connector

### mechanical data

design of terminating resistor

Resistor combination integrated and connectable via slide switch

material / of the enclosure

plastic

locking mechanism design

Screwed joint

### design, dimensions and weights

type of cable outlet

90 degree cable outlet

width

15.8 mm

height

64 mm

depth

35.6 mm

net weight

10 g

### ambient conditions

ambient temperature

- during operation
- during storage
- during transport
- in horizontal mounting position / during operation
- during storage and transport

-40 ... +70 °C

-40 ... +70 °C

-40 ... +70 °C

70 ... -40 °C

70 ... -40 °C

installation altitude / at height above sea level / maximum

5000 m

ambient condition / relating to ambient temperature - air pressure - installation altitude

Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)

relative humidity

- with condensation / maximum
- with condensation / according to IEC 60068-2-38 / maximum

100 %; RH incl. condensation/frost permitted (no commissioning in bedewed state)

100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation

resistance to biologically active substances

• conformity according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
• conformity according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
resistance to chemically active substances • conformity according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
• conformity according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
resistance to mechanically active substances • conformity according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
• conformity according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
environmental category / according to IEC 60721 / note	* The supplied plug covers must remain in place over the unused interfaces during operation!
coating / for equipped printed circuit board / according to EN 61086	Yes; Class 2 for high reliability
type of coating • protection against pollution according to EN 60664-3	Yes; Type 1 protection
• for electronic devices in railway applications according to EN 50155	Yes; protective coating of the Class PC2 according to EN 50155:2020
type of test / of the coating / according to MIL-I-46058C	Yes; Discoloration of coating possible during service life
product conformity / of the coating / Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A
protection class IP	IP20
<b>product features, product functions, product components / general</b>	
product feature • silicon-free	Yes
product component • PG connection socket • strain relief	No Yes
<b>standards, specifications, approvals</b>	
certificate of suitability • RoHS conformity	Yes
resistance to air pollution / conformity according to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
<b>further information / internet links</b>	
internet link • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to web page: SiePortal • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a> <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a> <a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a> <a href="https://sieportal.siemens.com">https://sieportal.siemens.com</a> <a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a> <a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit <a href="http://www.siemens.com/cybersecurity-industry">www.siemens.com/cybersecurity-industry</a> . Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <a href="https://www.siemens.com/cert">https://www.siemens.com/cert</a> . (V4.7)

## Approvals / Certificates

### General Product Approval



[Manufacturer Declaration](#)



[China RoHS](#)



EMV

For use in hazardous locations



[CCC-Ex](#)

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