# SIEMENS

### Data sheet

## 6AG1972-0BA42-7XA0

#### product type designation

product description



#### **PROFIBUS** connector

PROFIBUS bus connector, RS 485, screw, without programming port, 35°

SIPLUS DP PROFIBUS plug with R - without PG - inclined based on 6ES7972-0BA42-0XA0 with conformal coating, -40...+70 °C, connection plug for PROFIBUS up to 12 Mbps, with inclined cable outlet, terminating resistor with isolating function, without PG socket

Figure similar

suitability for use	for connecting PROFIBUS nodes to the PROFIBUS bus cable
transfer rate	
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s
interfaces	
number of electrical connections	
<ul> <li>for PROFIBUS cables</li> </ul>	2
<ul> <li>for network components or terminal equipment</li> </ul>	1
type of electrical connection	
<ul> <li>for PROFIBUS cables</li> </ul>	Screw
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector
type of electrical connection / FastConnect	No
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	35 degree cable outlet
width	15.8 mm
height	54 mm
depth	39.5 mm
net weight	60 g
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +70 °C
<ul> <li>during storage</li> </ul>	-40 +70 °C
<ul> <li>during transport</li> </ul>	-40 +70 °C
<ul> <li>in horizontal mounting position / during operation</li> </ul>	7040 °C
during storage and transport	7040 °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	
<ul> <li>with condensation / maximum</li> </ul>	100 %; RH incl. condensation/frost permitted (no commissioning in bedewed state)
<ul> <li>with condensation / according to IEC 60068-2-38 / maximum</li> </ul>	100 %; RH including condensation/frost (no commissioning when condensation is present), horizontal installation

resistance to biologically active substances	
<ul> <li>conformity according to EN 60721-3-3</li> </ul>	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
<ul> <li>conformity according to EN 60721-3-6</li> </ul>	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
resistance to chemically active substances	
<ul> <li>conformity according to EN 60721-3-3</li> </ul>	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	
<ul> <li>conformity according to EN 60721-3-3</li> </ul>	Yes; Class 3S4 incl. sand, dust, *
<ul> <li>conformity according to EN 60721-3-6</li> </ul>	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	
<ul> <li>protection against pollution according to EN 60664- 3</li> </ul>	Yes; Type 1 protection
<ul> <li>for electronic devices in railway applications according to EN 50155</li> </ul>	Yes; protective coating of the Class PC2 according to EN 50155:2022
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
product features, product functions, product components	/ general
product reader of product randdons, product components	, general
product feature	
	Yes
product feature	
product feature <ul> <li>silicon-free</li> </ul>	
product feature <ul> <li>silicon-free</li> </ul> <li>product component</li>	Yes
product feature <ul> <li>silicon-free</li> </ul> <li>product component <ul> <li>PG connection socket</li> </ul> </li>	Yes No
product feature • silicon-free product component • PG connection socket • strain relief	Yes No
product feature • silicon-free product component • PG connection socket • strain relief standards, specifications, approvals	Yes No
product feature <ul> <li>silicon-free</li> </ul> <li>product component <ul> <li>PG connection socket</li> <li>strain relief</li> </ul> </li> <li>standards, specifications, approvals</li> <li>certificate of suitability</li>	Yes No Yes
product feature <ul> <li>silicon-free</li> </ul> <li>product component <ul> <li>PG connection socket</li> <li>strain relief</li> </ul> </li> <li>standards, specifications, approvals</li> <li>certificate of suitability <ul> <li>RoHS conformity</li> </ul> </li>	Yes No Yes Yes
product feature • silicon-free product component • PG connection socket • strain relief standards, specifications, approvals certificate of suitability • RoHS conformity • UL approval reference code • according to IEC 81346-2	Yes No Yes Yes
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product feature • silicon-free product component • PG connection socket • strain relief standards, specifications, approvals certificate of suitability • RoHS conformity • UL approval reference code • according to IEC 81346-2 further information / internet-Links Internet-Link • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall	Yes No Yes Yes Yes XG http://www.siemens.com/snst http://www.siemens.com/simatic-net http://www.siemens.com/simatic-net
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product feature         • silicon-free         product component         • PG connection socket         • strain relief         standards, specifications, approvals         certificate of suitability         • RoHS conformity         • UL approval         reference code         • according to IEC 81346-2         further information / internet-Links         Internet-Link         • to web page: selection aid TIA Selection Tool         • to website: Industrial communication         • to website: Industry Mall         • to website: Selection guide for cables and connectors         • to website: Image database	Yes No Yes Yes Yes XG http://www.siemens.com/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb