SIEMENS

Data sheet 6AG1972-0BB42-7XA0

product type designation	**PROFIBUS connector**
product description	PROFIBUS bus connector, RS 485, screw, with programming port, 35°



Figure similar

SIPLUS DP PROFIBUS plug with R - with PG - inclined based on 6ES7972-0BB42-0XA0 with conformal coating, -40…+70 °C, connection plug for PROFIBUS up to 12 Mbps, with inclined cable outlet, terminating resistor with isolating function, with PG socket

Technical Product Detail Page	https://i.siemens.com/1P6AG1972-0BB42-7XA0
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	2
● for network components or terminal equipment	1
type of electrical connection	
● for PROFIBUS cables	Screw
● for network components or terminal equipment	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	67 g
ambient conditions	
ambient temperature	
● during operation	-40 ... +70 °C
● during storage	-40 ... +70 °C
● during transport	-40 ... +70 °C
● in horizontal mounting position / during operation	70 ... -40 °C
● during storage and transport	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	100 %; RH incl. condensation/frost permitted (no commissioning in bedewed state)
● with condensation / according to IEC 60068-2-38 /	100 %; RH incl. condensation / frost (no commissioning in bedewed state),

Subject to change without notice
© Copyright Siemens

maximum	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 50155:2025
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 feature	
● silicon-free	Yes
product component	
● PG connection socket	Yes
● strain relief	Yes
standards, specifications, approvals	
certificate of suitability	
● RoHS conformity	Yes
● UL approval	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)
further information / internet links	
internet link	
● to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to website: Industrial communication	https://www.siemens.com/simatic-net
● to web page: SiePortal	https://sieportal.siemens.com
● to website: Image database	https://www.automation.siemens.com/bilddb
● to website: CAx-Download-Manager	https://www.siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com
security information	
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 www.siemens.com/cybersecurity-industry. 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

© Copyright Siemens

customer’s exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

Approvals / Certificates

General Product Approval

EG-Konf.

Manufacturer Declaration

UKCA

China RoHS

UL

EMV

RCM

For use in hazardous locations

IECEx

ATEX

CCC-Ex

last modified: 10/30/2025

Subject to change without notice
© Copyright Siemens