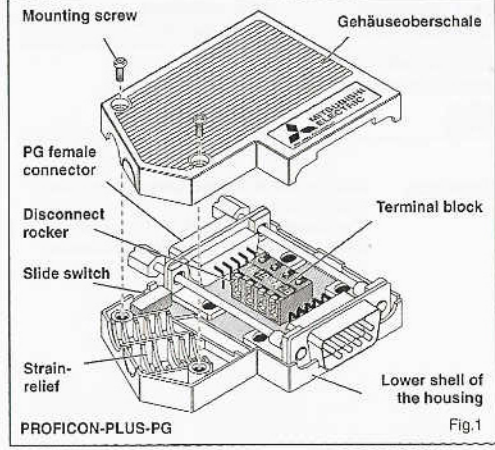


ENGLISH
SUB-D Plug PROFICON-PLUS With Spring-Cage Connection for PROFIBUS up to 12 Mbit/s

1. Description

PROFICON-PLUS-plug with/without PG female connector, with spring-cage connection up to 12 Mbit/s.

The plug allows fast and convenient connection of incoming and outgoing bus cables. Its contacts are routed onto clearly color labeled spring-cage terminal blocks.

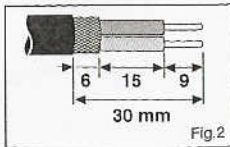
The integrated terminal resistor can be connected and simultaneously connects/disconnects the outgoing bus cable when de/activating. This allows the easy start up of the bus system one segment at a time.

The strain relief is integrated into the housing shells and is designed to hold a standard Profibus cable type A with solid conductor. The cable can be entered from either the left or right.

The additionally integrated programming contact of the PROFICON-PLUS-PG version (Fig.1) allows the connection of a programming or service device without interrupting bus operation.

2. Notes on Connecting

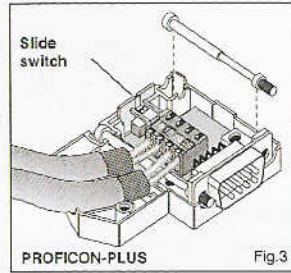
2.1. Stripping length
Please observe the recommended stripping lengths (Fig.2).


2.2. Connection

Push the stripped conductor into the corresponding contacts of the terminal block. The conductor automatically makes contact when inserted.

To disconnect the conductor, it is necessary to implement the orange disconnect rocker.

Mount the upper shell of the housing to build up strain relief and shield bonding for the bus cable.


3. Cable Entry

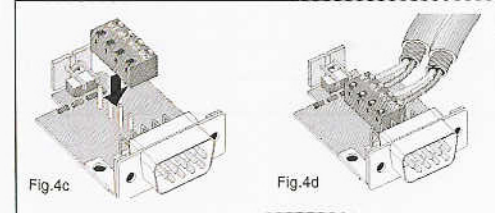
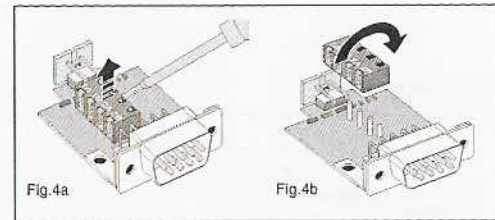
The PROFICON-PLUS plug without PG connection allows the choice of cable entry from either the left or right. The plug is supplied pre-assembled for left-hand entry (Fig.3).

The cable entry side of the PROFICON-PLUS-PG cannot be changed!

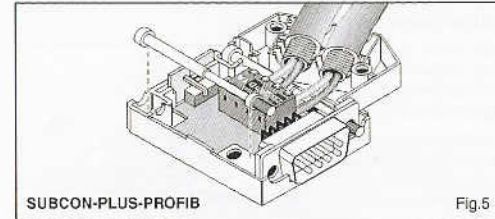
• Mounting the SUB-D-plug for right-hand cable entry

Should you require cable entry from the right, lever the p.c.b. out of the lower housing using a screwdriver, applying it in the vicinity of the rivets.

Then remove the terminal block from the p.c.b. as shown in Fig. 4 and turn it by 180°.



Lay the printed circuit board into the upper shell of the housing and connect the bus cables (Fig.5).


4. Bus Terminating Resistor

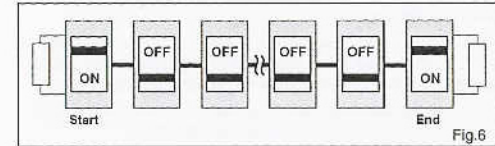
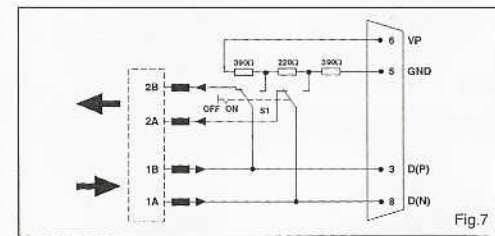
The terminating resistors are activated via the slide switch (Fig.1) at the starting and final point of the bus system. At the same time the connection points (2A/2B) for the outgoing bus cables are switched off.

At all other nodes of the bus system the corresponding terminating resistor must be deactivated!

Bus Cable Connection

Always connect the incoming bus cable to the connection points 1A/1B (also at the starting point of the bus system).

The outgoing bus cable is always connected to the connection points 2A/2B (see Fig.7).


5. Function Block Diagram


6. Technical Data	PROFICON-PLUS	140008
Type / Order No.	PROFICON-PLUS-PG	140009

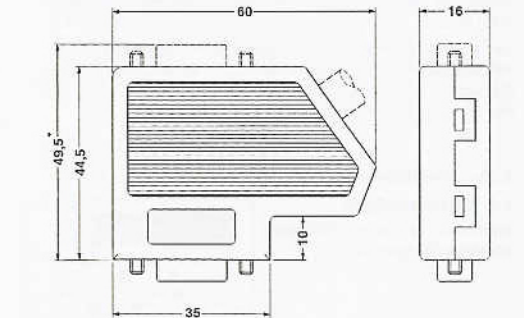
Plug connection	9-pos. SUB-D male connector
Programming connection	9-pos. SUB-D female connector
Insertion/withdrawal	min. 200
Cable cross section	8 mm (± 0.4 mm)
Mounting screws / Max. torque	4-40 UNC / 0.4 Nm
Housing material	ABS, metal-plated
Temperature range	-20°C bis +75°C

Spring-cage connection	
Connection cross section	
• rigid	0.12-0.5 mm ²
• AWG	28-20

Bus cable The plug is specified for the cable type A according to EN 50 170. Cable type B, also described in EN 50 170, is outdated and must not be used anymore.

Linear extension acc. to the PROFIBUS specification

Transmission rate in kbit/s	corresponding segment length in m
9.6 / 19.2 / 45.45 / 93.75	1,200 m
187.5	1,000 m
500	400 m
1,500	200 m
3,000 / 6,000 / 1,2000	100 m

7. Dimensions


* Plug with PG-SUB-D female connector to connect a programming device