



- Surge protective adapter for easy retrofitting
- 9-, 15- or 25-pole units, shielded
- UNC 4/40 screws for fixing at the interface

Surge protective adapter D-SUB with plug-in terminal as socket – pin unit.

Surge protective adapter in metallised plastic enclosure with D-SUB plug-in terminal as socket – pin unit. The UNC screws can be exchanged in any way so that either the pin or the socket is the threaded unit according to

the application. Special versions with a different pinning or circuit are also available.

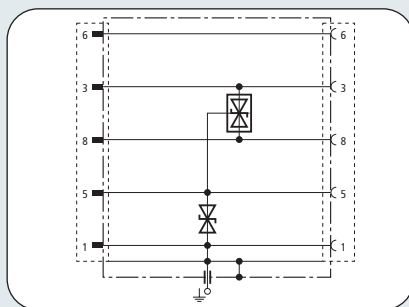


FS, 9-, 15- and 25-pole

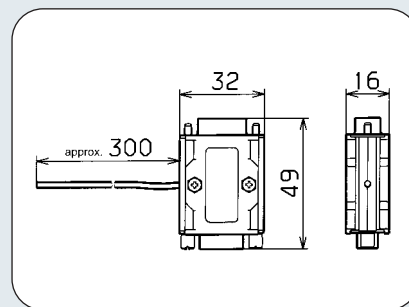
The SPDs can be provided in three different designs covering the most frequent applications. Because of the small dimension they can be easily integrated into the cabling. If the discharge capacity is not sufficient, energy-coordinated BLITZDUCTOR® VT GS can be installed upstream of the device.



- Designed for Profibus-DP
- Transmission possible up to 12 MBit/s
- For use according to the lightning protection zones concept at boundaries 1 – 2 and higher



Diode protective circuit with very low capacity.
Pins 5 and 6 without protection for programming interface.



Dimension drawing FS 9E PB

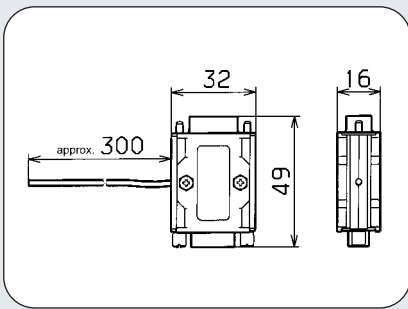
D-SUB, 9-pole device. Unit for Profibus-DP.

FS 9E PB 6

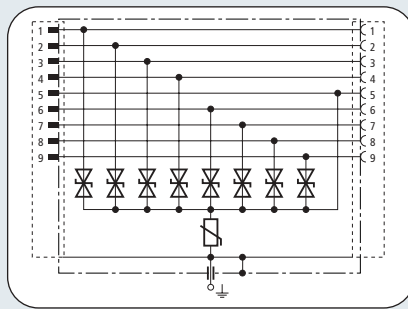
Nominal voltage U_N	6 V
Max. continuous dc voltage U_c	7 V
C2 Nominal discharge current (8/20) line-line I_n	0.2 kA
C2 Nominal discharge current (8/20) line-SG I_n	0.2 kA
C2 Nominal discharge current (8/20) SG-PG I_n	0.4 kA
Voltage protection level line-line at I_n C2 U_p	≤ 25 V
Voltage protection level line-SG at I_n C2 U_p	≤ 25 V
Voltage protection level SG-PG at I_n C2 U_p	≤ 25 V
Voltage protection level line-line at 1 kV/ μ s C3 U_c	≤ 18 V
Voltage protection level line-SG at 1 kV/ μ s C3 U_p	≤ 18 V
Voltage protection level SG-PG at 1 kV/ μ s C3 U_p	≤ 18 V
Bandwidth f_G	90 MHz
Parasitic capacitance line-line C	25 pF
Capacitance line-SG C	35 pF
Response time line-line t_a	≤ 1 ns
Response time line-SG t_a	≤ 1 ns
Response time SG-PG t_a	≤ 1 ns
Operating temperature range	-40°C...+80°C
Degree of protection	IP 40
Mounting on	D-Sub (2 threaded screws 4/40 UNC)
Connection input/output	D-Sub 9 plug / D-Sub 9 socket
Pinning	Line: 3/8, SG: 5, PG: 1, 6: unprotected
Earthing via	via outgoing earth conductor 0.75 mm ² , 0.3 m long (PG)
Enclosure material	plastic, metallised
Colour	silver
Test standards	VDE 0845-2, IEC 61643-21

Ordering information

Type	FS 9E PB 6
Part No.	924 017
Packing unit	1 pc(s)



Dimension drawing FS 9E HS



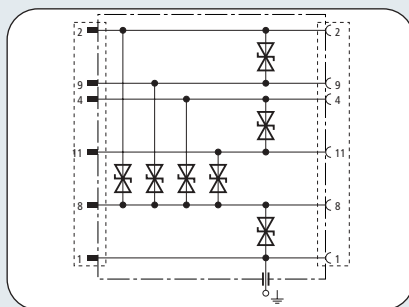
8-pole fine protection against common SG.



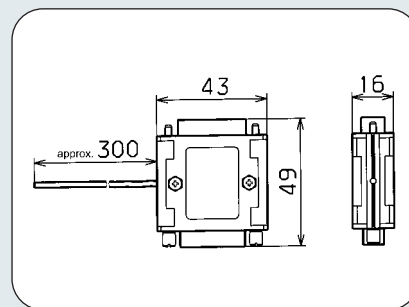
- All pins protected
- Low voltage protection level
- For use according to the lightning protection zones concept at boundaries 1 – 2 and higher

D-SUB, 9-pole device. V-24 unit with handshake function.

FS 9E HS 12	
Nominal voltage U_N	12 V
Max. continuous dc voltage U_c	15 V
C2 Nominal discharge current (8/20) line-SG I_n	0.1 kA
C2 Nominal discharge current (8/20) SG-PG I_n	0.1 kA
Voltage protection level line-SG at I_n C2 U_p	≤ 24 V
Voltage protection level SG-PG at I_n C2 U_p	≤ 200 V
Voltage protection level line-SG at 1 kV/ μ s C3 U_p	≤ 21 V
Voltage protection level SG-PG at 1 kV/ μ s C3 U_p	≤ 90 V
Bandwidth f_G	10 MHz
Capacitance line-SG C	300 pF
Capacitance SG-PG C	700 pF
Response time line-SG t_a	≤ 1 ns
Response time SG-PG t_a	≤ 25 ns
Operating temperature range	-40°C...+80°C
Degree of protection	IP 40
Mounting on	D-Sub (2 threaded screws 4/40 UNC)
Connection input/output	D-Sub 9 plug / D-Sub 9 socket
Pinning	line: 1/2/3/4/6/7/8/9, SG: 5
Earthing via	via outgoing earth conductor 0.75 mm ² , 0.3 m long (PG)
Enclosure material	plastic, metallised
Colour	silver
Test standards	VDE 0845-2, IEC 61643-21
Ordering information	
Type	FS 9E HS 12
Part No.	924 019
Packing unit	1 pc(s)



Fine protection for 2 TC to common SG.



Dimension drawing FS 15E

- For 4-wire interfaces
- Low voltage protection level
- For use according to the lightning protection zones concept at boundaries 1 – 2 and higher

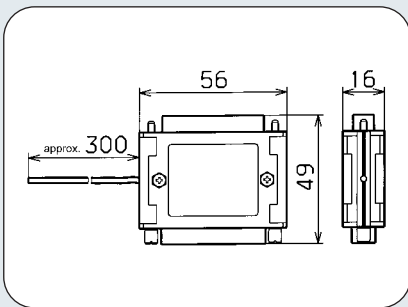
D-SUB, 15-pole device. RS-422, V.11 unit.

FS 15E 5

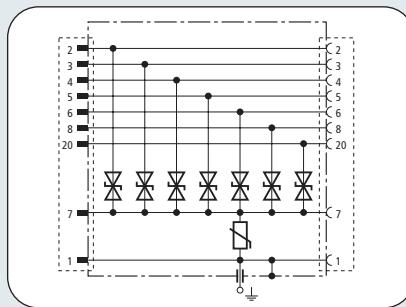
Nominal voltage U_N	5 V
Max. continuous dc voltage U_c	8 V
C2 Nominal discharge current (8/20) line-SG I_n	0.2 kA
C2 Nominal discharge current (8/20) SG-PG I_n	0.8 kA
Voltage protection level line-line at I_n C2 U_p	≤ 16 V
Voltage protection level line-SG at I_n C2 U_p	≤ 16 V
Voltage protection level SG-PG at I_n C2 U_p	≤ 16 V
Voltage protection level line-line at 1 kV/ μ s C3 U_c	≤ 11 V
Voltage protection level line-SG at 1 kV/ μ s C3 U_p	≤ 11 V
Voltage protection level SG-PG at 1 kV/ μ s C3 U_p	≤ 11 V
Bandwidth f_G	4 MHz
Parasitic capacitance line-line C	1500 pF
Capacitance line-SG C	1500 pF
Capacitance line-PG C	800 pF
Response time line-line t_a	≤ 1 ns
Response time line-SG t_a	≤ 1 ns
Response time SG-PG t_a	≤ 1 ns
Operating temperature range	-40°C...+80°C
Degree of protection	IP 40
Mounting on	D-Sub (2 threaded screws 4/40 UNC)
Connection input/output	D-Sub 15 plug / D-Sub 15 socket
Pinning	line: 2/9, 4/11, SG: 8, PG: 1
Earthing via	via outgoing earth conductor 0.75 mm ² , 0.3 m long (PG)
Enclosure material	plastic, metallised
Colour	silver
Test standards	VDE 0845-2, IEC 61643-21

Ordering information

Type	FS 15E 5
Part No.	924 016
Packing unit	1 pc(s)



Dimension drawing FS 25E HS



8-pole fine protection to common SG.



- All lines interconnected
- Low voltage protection level
- For use according to the lightning protection zones concept at boundaries 1 – 2 and higher

D-SUB, 25-pole device. V.24 unit with handshake function.

FS 25E HS 12	
Nominal voltage U_N	12 V
Max. continuous dc voltage U_c	15 V
C2 Nominal discharge current (8/20) line-SG I_n	0.1 kA
C2 Nominal discharge current (8/20) SG-PG I_n	0.1 kA
Voltage protection level line-SG at I_n C2 U_p	≤ 24 V
Voltage protection level SG-PG at I_n C2 U_p	≤ 200 V
Voltage protection level line-SG at 1 kV/ μ s C3 U_p	≤ 21 V
Voltage protection level SG-PG at 1 kV/ μ s C3 U_p	≤ 90 V
Bandwidth f_G	10 MHz
Capacitance line-SG C	300 pF
Capacitance SG-PG C	700 pF
Response time line-SG t_a	≤ 1 ns
Response time SG-PG t_a	≤ 25 ns
Operating temperature range	-40°C...+80°C
Degree of protection	IP 40
Mounting on	D-Sub (2 threaded screws 4/40 UNC)
Connection input/output	D-Sub 25 plug / D-Sub 25 socket
Pinning	line: 2/3/4/5/6/8/20, SG: 7, other lines are unprotected
Earthing via	via outgoing earth conductor 0.75 mm ² , 0.3 m long (PG)
Enclosure material	plastic, metallised
Colour	silver
Test standards	VDE 0845-2, IEC 61643-21
Ordering information	
Type	FS 25E HS 12
Part No.	924 018
Packing unit	1 pc(s)