

ACC/DSUBM-ESD filter plug

Retrofit adapter plug for improved reliability



Data Sheet Version 3.4

When deploying measurement equipment in electromagnetically “polluted” industrial environments, careful installation and cabling is essential (proper grounding, shielding etc.). As an additional provision, this ESD filter plug can be applied between measurement amplifiers and the sensor installation. It is intended to suppress transient disturbance and discharge and thus make the system more robust and reliable. The plug is equipped with identical filter elements for each of the 15 DSUB pins, providing a “neutral” 1:1 connection from input to output. The uniform filter design makes it suitable for all types of measurement modules such as analog inputs, outputs, pulse counter, digital IO. While providing effective filtering and protection, it is not associated with any functional restrictions and in particular does not involve limitations of signal bandwidth within the relevant scope of the measurement.

Properties

- Retrofit adapter plug for suppression of conducted interference on measurement inputs
- Preventing possible malfunction of measurement amplifiers due to discharge and transient voltage spikes
- Passive HF filtering elements
- Easy retrofit for flexible solutions providing robust test and measurement under demanding industrial conditions
- Suitable for any type of imc modules equipped with DSUB-15 connectors
- No limitations to functionality and bandwidth within the relevant baseband of the measurement



ACC/DSUBM-ESD

Order Code

ACC/DSUBM-ESD

remarks

metal housing

article number

1350211

Technical Specs - ACC/DSUBM-ESD

Intermediate filter-plug for ESD suppression for any module with DSUB-15 connections.

Data Sheet Version 3.4

Parameter	Value	Remarks
Suitable for modules	for any module type, e.g.: analog inputs analog outputs (DAC) counter modules (ENC) digital (DIO)	modules with DSUB-15 connectors
Inputs	15 uniformly filtered lines	usable independent of actual channel count and connected signal type
ESD-filter topology	T-filter: ferrite – capacitor - T-ferrite	uniform filter for 15 signal lines at the DSUB (inputs or outputs)
Filter components	ferrite: 500 Ω @ 100 MHz capacitor: 1 nF T-ferrite: 1 nF, 35 dB @ 100 MHz	
DC-resistance (ferrite)	65 m Ω 2 A	max. DC current for serial components
Nominal voltage	33 V _{AC} 70 V _{DC}	common-mode voltage to CHASSIS suitable for operation in circuits with such specified voltages
Filter attenuation	no details (in MHz range)	depending on module type, source impedance, shielding etc. for practically relevant source impedances: no significant impact of relevant signal bandwidth
Terminal connection	DSUB-15 intermediate connector (male / female)	