

Connecting cables with M12 plug connectors according to AIDA standard

- ▶ **Connecting cable with M12 plug connector at each end**
- ▶ **Yellow connecting cables for safety functions**
- ▶ **Gray connecting cables for non-safe control of guard locking devices**
- ▶ **For connecting safety switches to PROFIsafe IP67 bus modules**

AIDA (Automation Initiative of German Domestic Automobile manufacturers) aims to standardize the automation of production processes. The AIDA working group elected to use PROFINET as the network standard for automating production facilities. Based on this, sensors and actuators are connected according to an AIDA-compliant wiring concept. The use of compact PROFINET bus modules with IP67 degree of protection permits simple connection of the sensors and actuators via M12 plug connectors. The pin assignment of the 5-pin M12 plug connectors is standardized according to AIDA.

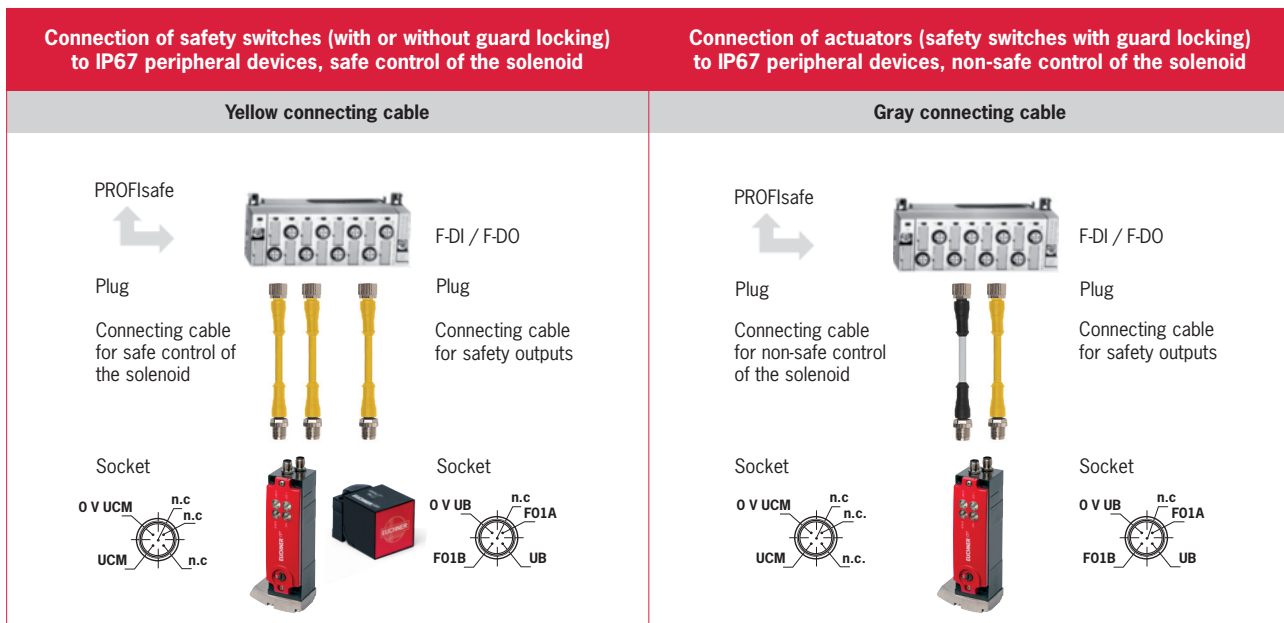
If fail-safe communication for safety-related functions is required, external peripheral devices with the safe PROFIsafe bus system are used.

The safety engineering specialist EUCHNER offers safety switches with or without guard locking for direct connection to these IP67 bus modules. Connecting cables with M12 plug connector at each end as specified according to the AIDA standard are now available from EUCHNER. In accordance with the AIDA standard, yellow cables are required for connecting safety switches and for safe control of guard locking devices. Gray connecting cables are to be used for non-safe control of guard locking devices. Standardizing these interfaces reduces the installation and wiring work and permits rapid component replacement during servicing.



Benefits for you

- ▶ Standardized connecting cables reduce assembly effort
- ▶ Consistent wiring concept
- ▶ Connection of safety switches via M12 plug connectors with standardized pin assignment
- ▶ Sheath color permits simple allocation of the connected device
- ▶ Various cable lengths available
- ▶ Halogen-free, highly flexible, welding-spark-resistant PUR cable sheath



Connecting cables with 5-pin M12 plug connector at each end					
Yellow connecting cable			Gray connecting cable		
Cable lengths	Designation	Order no.	Cable lengths	Designation	Order no.
1.0 m	C-M12F05-05X034PU1,0-M12M05	159362	1.0 m	C-M12F05-05X034PU1,0-M12M05	159355
1.5 m	C-M12F05-05X034PU1,5-M12M05	159363	1.5 m	C-M12F05-05X034PU1,5-M12M05	159356
3.0 m	C-M12F05-05X034PU3,0-M12M05	159364	3.0 m	C-M12F05-05X034PU3,0-M12M05	159357
5.0 m	C-M12F05-05X034PU5,0-M12M05	159365	5.0 m	C-M12F05-05X034PU5,0-M12M05	159358
8.0 m	C-M12F05-05X034PU8,0-M12M05	159919	8.0 m	C-M12F05-05X034PU8,0-M12M05	159359
10.0 m	C-M12F05-05X034PU10,0-M12M05	159920	10.0 m	C-M12F05-05X034PU10,0-M12M05	159360
15.0 m	C-M12F05-05X034PU15,0-M12M05	159921	15.0 m	C-M12F05-05X034PU15,0-M12M05	159361
Technical data					
Sheath color	Yellow	Gray			
Sheath	Welding spark resistant, PUR				
Special properties	Silicone free, halogen free, flame retardant, wear resistant				
Conductor cross-section	5 x 0.34 mm ²				
Plug connector	M12 5-pin plug/M12 5-pin socket				
M12 plug housing	UL TPU GF/yellow	UL TPU GF/black			
Plug connector degree of protection	IP65/IP67				
Approval	UL				