

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Data connector, VARAN, 6-position, shielded, Plug straight M12, Coding: A, Insulation displacement connection, knurl material: Nickel-plated brass, external cable diameter 4 mm ... 8 mm

### Your advantages

- Safe use in the field, thanks to a high degree of protection
- ☑ Insulation displacement connection: innovative and time-saving assembly without stripping the single wire
- Reliable signal transmission 360° shielding in environments with electromagnetic interference



## **Key Commercial Data**

Packing unit	1 pc
GTIN	4 0 4 6 3 5 6 3 2 3 0 9 3
GTIN	4046356323093

## Technical data

### Dimensions

External cable diameter	4 mm 8 mm
Stripping length of the sheath	≥ 35 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C 85 °C
Degree of protection	IP67

#### General

Note	NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties.
Rated current at 40°C	2 A
Rated voltage	30 V AC



## Technical data

### General

	30 V DC
Number of positions	6
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector according to IEC 61076-2-101
Signal type/category	VARAN
Status display	No
Overvoltage category	II
Degree of pollution	3
Connection method	Insulation displacement connection
Conductor cross section	0.14 mm² 0.34 mm²
Conductor cross section AWG	26 22
Wire diameter including insulation	1 mm 1.6 mm
Frequency of connections between conductors of the same cross section	≥ 10
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 knurl)
	0.8 Nm (Connector with coupling sleeve)
	3 Nm (Pressure nut with coupling sleeve)

### Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA6
Material of grip body	Zinc die-cast, nickel-plated
Material, knurls	Nickel-plated brass
Sealing material	Neoprene

### Cable

Standards/specifications	M12 connector according to IEC 61076-2-101

### Standards and Regulations

Standards/specifications	M12 connector according to IEC 61076-2-101
Flammability rating according to UL 94	V0

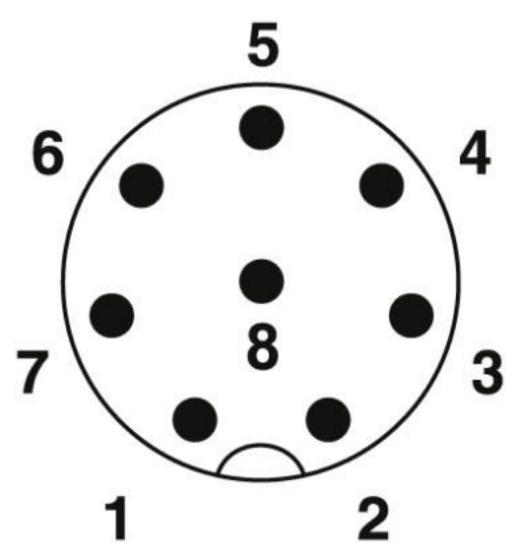
## Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings



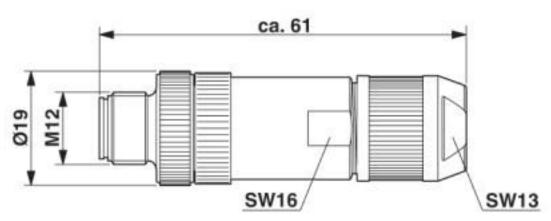
Schematic diagram



M12 plug pin assignment, 6-pos., pin side view



### Dimensional drawing



Plug, M12 x 1, straight, shielded

### Classifications

## eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCl@ss 5.0	27143400
eCl@ss 5.1	27143400
eCl@ss 6.0	27279200
eCl@ss 7.0	27440104
eCl@ss 8.0	27440104
eCl@ss 9.0	27440102

### **ETIM**

ETIM 3.0	EC002062
ETIM 4.0	EC002062
ETIM 5.0	EC002062
ETIM 6.0	EC002062

### **UNSPSC**

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	39121413
UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413



Approvals		
Approvals		
Approvals		
EAC / EAC		
Ex Approvals		
Approval details		
EAC	EHC	EAC-Zulassung
EAC	EAC	RU C- DE.BL08.B.00511
Accessories		
Accessories		
Electronics pliers		
Diagonal cutter - MICRO	DFOX-SB - 1212489	
A	Electronic diagonal cutter, round head, without chamfer, with op grip, cutting capacity: soft 0.2 - 2.0 mm; medium hard 1.2 mm; h	ening spring, mirror-polished and oiled, 2-component ard 0.5 mm diameter
Protective cap		
Sealing cap - PROT-M1	2 FS-PA-CHAIN - 1430873	
	M12 sealing cap made of plastic with fixing band, for sensor cab	oles, for free M12 plugs

Screwdriver tools



### Accessories

Tool - SACC BIT M12-D20 - 1208445



Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

#### Shield connection

Shielding foil - ALU-SB - 1404531

Shielding foil, for fixing the braided shield of shielded cables. Length: 4 cm, width: 1.2 cm



#### Stripping tool

Stripping tool - WIREFOX-D 40 - 1212161



Stripping tool, for stripping cables of 4.5 mm - 40 mm- $\varnothing$ , insulation thickness of up to 4.5 mm, pivoting blade for round, lengthwise, and spiral cuts

### Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors  $\,$ 



### Accessories

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

Torque screwdriver - TSD 08 SAC - 1212597



Torque screw driver with preset torque of 0.8 Nm, with 4 mm hexagon for accommodating SAC bits, two-component handle with non-slip grip

Phoenix Contact 2020 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany Tel. +49 5235 300 Fax +49 5235 3 41200

http://www.phoenixcontact.com