

SACC-P12FR-5PL-CM SH - Connector



1438181

<https://www.phoenixcontact.com/gb/products/1438181>

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 documentation. Our general terms of use for downloads are valid.



Connector, Universal, 5-position, shielded, Socket angled M12 Push-Pull, coding: A, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Your advantages

- Time-saving Push-Lock connection: Tool-free connection and disconnection of conductors by opening the contact levers
- Intuitive connection: Easy assignment of individual litz wires with color-coded and numerical identification of the contact levers
- Integrated Push-in Technology: Wire rigid and pretreated conductors easily by means of simple, direct insertion
- Shock- and vibration-resistant connection: Proven spring-cage technology guarantees secure and reliable contacting
- Safely shielded: Reliable 360° shield connection even under extreme mechanical strain
- Flexible cable outlets with angled connectors
- Save time, thanks to installation with push-pull fast locking

Commercial data

Item number	1438181
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AF2CFA
Product key	AF2CFA
GTIN	4063151813192
Weight per piece (including packing)	41.7 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85366990
Country of origin	DE

SACC-P12FR-5PL-CM SH - Connector



1438181

<https://www.phoenixcontact.com/gb/products/1438181>

Technical data

Notes

Assembly note	NOTE: Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties.
---------------	---

Product properties

Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	A
Cable outlet	angled

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Dimensions

External dimensions

Outside diameter	4 mm ... 8 mm
------------------	---------------

Material specifications

Material	TPE-U (Clamping cage, weight: 1.1 g)
	PA 6 (Actuation lever)
Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated
Standards/regulations	PA 6.6
	PA 6

Connection data

Conductor connection

Connection method	Push-lock spring connection
Connection cross section	0.14 mm ² ... 0.75 mm ² (without ferrule)
	0.08 mm ² ... 0.5 mm ² (with ferrule)
	0.14 mm ² ... 0.75 mm ² (solid)

SACC-P12FR-5PL-CM SH - Connector



1438181

<https://www.phoenixcontact.com/gb/products/1438181>

Connection cross section AWG	26 ... 18 (without ferrule)
	28 ... 20 (with ferrule)
Stripping length of the individual wire	7 mm
Tightening torque	0.8 Nm (Connector with coupling sleeve)
	3 Nm (Pressure nut with coupling sleeve)

Pin assignment

Contact Color (signal designation) Contact (optional)	1 = BN
	2 = WH
	3 = BU
	4 = BK
	5 = GY

Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	$\leq 8 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A (2 A when using 0.14 mm^2 conductors)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
-----------------------------	------------

Connector

Connection 1

Head design	Socket
Head cable outlet	angled
Head thread type	M12
Head locking type	Push-Pull
Coding	A

Cable/line

Signal type/category	Universal
Stripping length of the individual wire	7 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C (Plug / socket)
---------------------------------	----------------------------------

Standards and regulations

Testing

SACC-P12FR-5PL-CM SH - Connector



1438181

<https://www.phoenixcontact.com/gb/products/1438181>

Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, R25, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)
	PA 6: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	Shock, vibration
Standards/specifications	EN 50155 Cat. 1B
Standard designation	M12-Push-Pull
Standards/specifications	IEC 61076-2-010

SACC-P12FR-5PL-CM SH - Connector

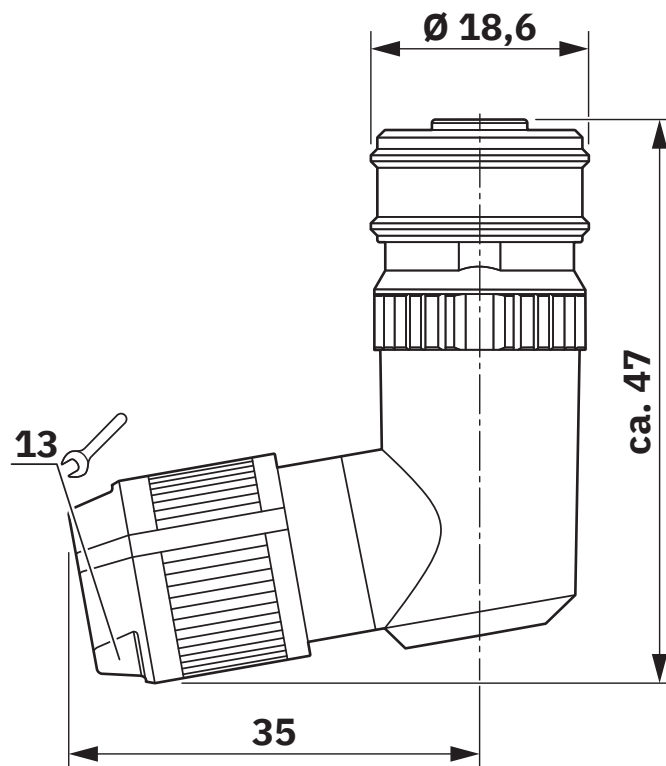
1438181

<https://www.phoenixcontact.com/gb/products/1438181>



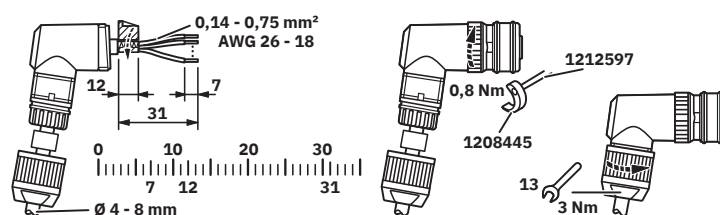
Drawings

Dimensional drawing



Dimensional drawing

Functional drawing

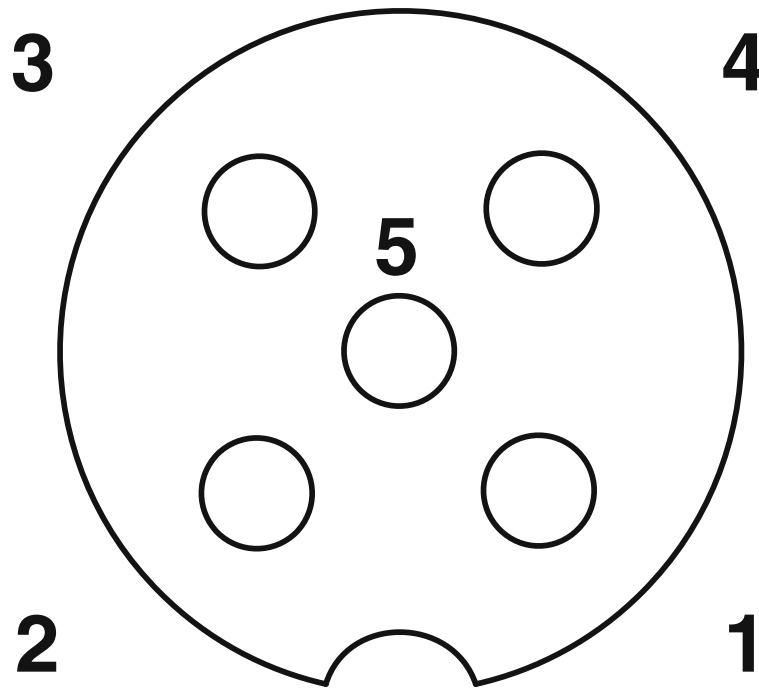


Functional drawing

1438181

<https://www.phoenixcontact.com/gb/products/1438181>

Schematic diagram



Pin assignment M12 socket, 5-pos., A-coded, socket side view

SACC-P12FR-5PL-CM SH - Connector



1438181

<https://www.phoenixcontact.com/gb/products/1438181>

Classifications

ECLASS

ECLASS-13.0	27440116
-------------	----------

ETIM

ETIM 9.0	EC002635
----------	----------

SACC-P12FR-5PL-CM SH - Connector



1438181

<https://www.phoenixcontact.com/gb/products/1438181>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk