

# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut



1607543

<https://www.phoenixcontact.com/us/products/1607543>

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.



Device connector front mounting with knurled nut, application: Power, angled fixed, Screw locking mechanism, M40, number of positions: 4+3+PE, contact connection type: Socket, Axial O-ring, shielded: yes, flange dimensions: 40 mm x 40 mm, number of positions: 8, connection method: Crimp connection, series: SM, this item is expected to be lead-free from Q3 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

## Commercial data

Item number	1607543
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	AB32
Product key	ABRBGO
GTIN	4046356271578
Weight per piece (including packing)	547.5 g
Weight per piece (excluding packing)	534.301 g
Customs tariff number	85366990
Country of origin	DE

# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut



1607543

<https://www.phoenixcontact.com/us/products/1607543>

## Technical data

### Notes

Order information:	Order crimp contacts 4 x Ø 2 mm, 4 x Ø 3.6 mm separately
--------------------	--

### Safety note

Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	• The products are suitable for applications in plant, controller, and electrical device engineering.
	• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
	• Assembled products may not be manipulated or improperly opened.
	• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> ).
	• When using the product in direct connection with third-party manufacturers, the user is responsible.
	• For operating voltages > 50 V AC, conductive connector housings must be grounded
	• Ensure that the protective or functional ground has been properly connected.
	• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector
	• Only use tools recommended by Phoenix Contact
	• The installation notes/Design In documents online on the download page at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> must be observed for this product.
	• Operate the connector only when it is fully plugged in and interlocked.

# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut



1607543

<https://www.phoenixcontact.com/us/products/1607543>

ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

## Mounting

Mounting type	Front mounting/square flange (4x Ø 4,2 mm)
---------------	--

## Product properties

Product type	Circular connectors (device side)
Series	SM
Application	Power
Number of positions	8
Connection profile	4+3+PE
Shielded	yes
Coding	N
Thread type	M40

## Dimensions

### Housing

Flange dimensions	40 mm x 40 mm
-------------------	---------------

## Material specifications

Material Housing	GD-Zn
Material Rotating parts	CuZn
Material Housing surface	Ni
Material Insulating body	PA 6.6
Material Seal	FPM (O-ring)

## Electrical properties

### Contact: Contact group 1

Contact diameter	3.6 mm
Nominal current $I_N$	70 A
Nominal voltage $U_N$	630 V
Overvoltage category	III
Degree of pollution	3
Rated surge voltage	6 kV

### Contact: Contact group 2

Contact diameter	2 mm
Nominal current $I_N$	30 A
Nominal voltage $U_N$	250 V
Overvoltage category	III
Degree of pollution	3

# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut



1607543

<https://www.phoenixcontact.com/us/products/1607543>

Rated surge voltage	4 kV
---------------------	------

## Connection data

### Conductor connection

Connection method	Crimp connection
Contact connection type	Socket

## Connector

Type	angled fixed
------	--------------

### Connection 1

Head design	Socket
-------------	--------

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-40 °C ... 125 °C
Altitude	3000 m

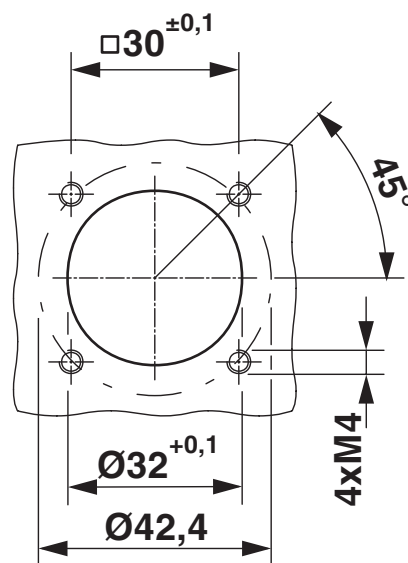
# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut

1607543

<https://www.phoenixcontact.com/us/products/1607543>

## Drawings

Dimensional drawing



## Installation dimensions

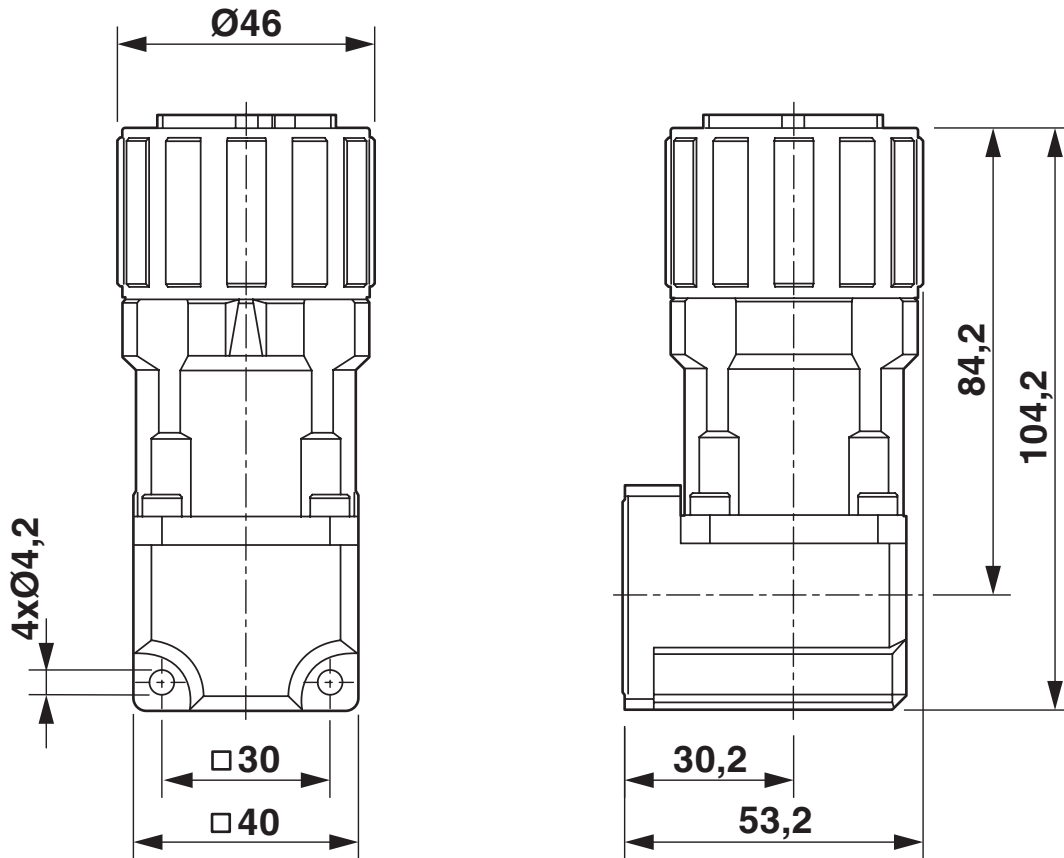
# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut



1607543

<https://www.phoenixcontact.com/us/products/1607543>

Dimensional drawing



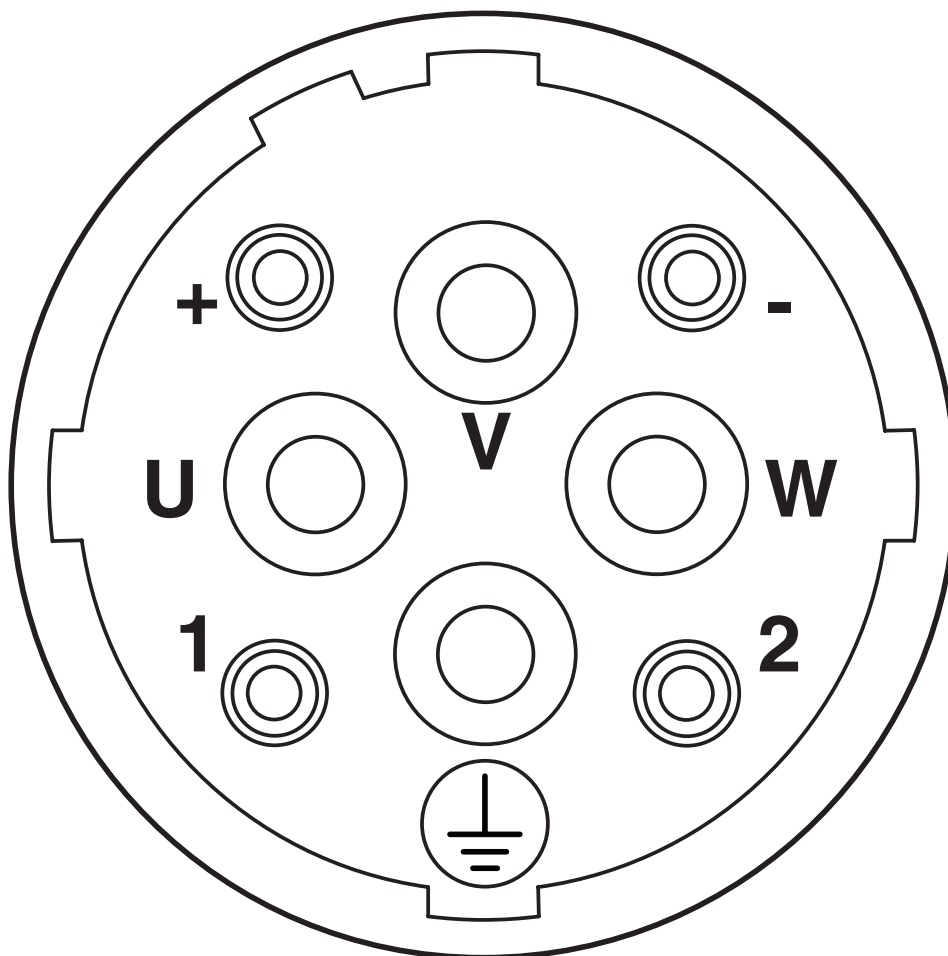
Dimensional drawing

# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut

1607543

<https://www.phoenixcontact.com/us/products/1607543>

Schematic diagram



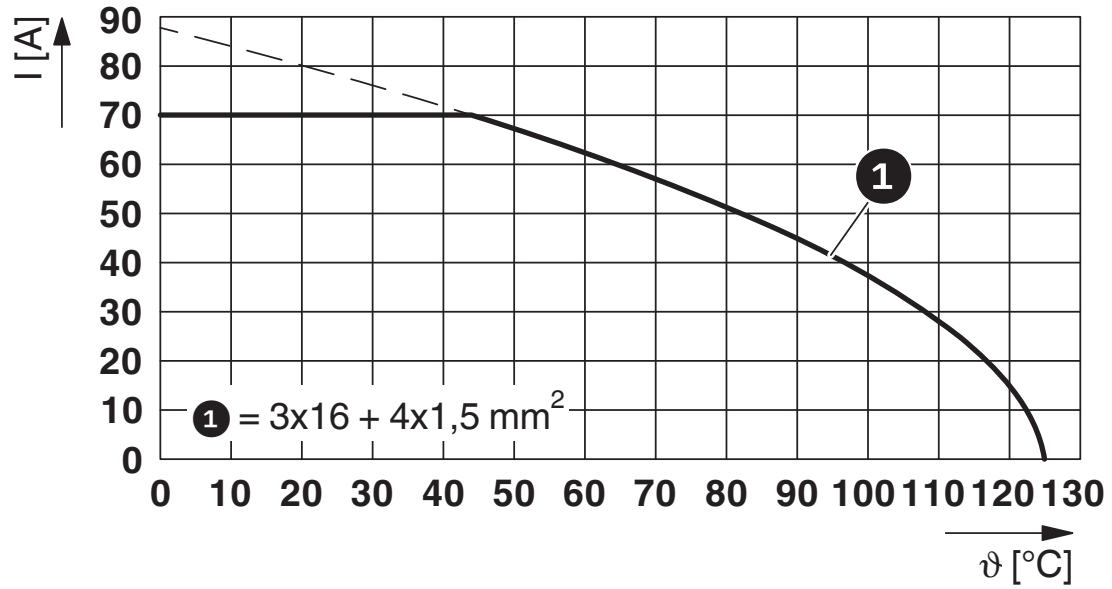
Connector pin assignment

# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut

1607543

<https://www.phoenixcontact.com/us/products/1607543>

Diagram



$I$  = current strength,  $T$  = ambient temperature

# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut





1607543

<https://www.phoenixcontact.com/us/products/1607543>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1607543>

 <b>cUL Recognized</b> Approval ID: E153698-20150903				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
Power	600 V	40 A	-	-
Signal	600 V	20 A	-	-

 <b>UL Recognized</b> Approval ID: E153698-20150903				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
Power	600 V	65 A	-	-
Signal	600 V	30 A	-	-

# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut



1607543

<https://www.phoenixcontact.com/us/products/1607543>

## Classifications

### ECLASS

ECLASS-13.0	27440109
ECLASS-15.0	27440109

### ETIM

ETIM 10.0	EC003569
-----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# SM-7ES1N8AYW00 - Device connector front mounting with knurled nut



1607543

<https://www.phoenixcontact.com/us/products/1607543>

## 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 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)