

# FS 0,635/ 40-FV-R-10,0 - SMD female connectors

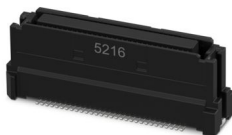


1334090

<https://www.phoenixcontact.com/us/products/1334090>

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.

SMD female connector, nominal current: 0.5 A, Test voltage: 500 V AC, number of positions: 40, pitch: 0.635 mm, color: black, contact surface: Gold, contact connection type: Socket, mounting: SMD soldering



## Your advantages

- Design-in support during device development through M-CAD/E-CAD data and a free sample service
- Cost and space savings with the comprehensive portfolio available in various stack heights
- Easy mating with integrated keyways and tolerance compensation for error-free production
- Time savings during the development process with customer-specific simulations for data integrity
- High-speed data transmission up to 30 Gbps for various possible applications

## Commercial data

Item number	1334090
Packing unit	350 pc
Minimum order quantity	350 pc
Sales key	AA23
Product key	AAWACB
GTIN	4063151633004
Weight per piece (including packing)	2.32 g
Weight per piece (excluding packing)	2.404 g
Customs tariff number	85366930
Country of origin	CN

1334090

<https://www.phoenixcontact.com/us/products/1334090>

## Technical data

### Product properties

Product type	SMD female connector
Product family	FS 0,635/...FV-R-10,0
Number of positions	40
Pitch	0.635 mm
Number of rows	2
Pin layout	Linear pad geometry

### Electrical properties

Nominal current $I_N$	0.5 A IEC 60512-5-2:2002-02 (40-pos. / 60-pos.)
Degree of pollution	3
Contact resistance	70 mΩ
Test voltage	500 V AC IEC 60512-4-1:2003
Rated voltage (I/1)	125 V
Rated surge voltage (I/1)	0.8 kV

### Mounting

Mounting type	SMD soldering
Pin layout	Linear pad geometry

### Processing notes

Process	Reflow soldering
Moisture Sensitive Level	MSL 1
Classification temperature $T_c$	260 °C
Solder cycles in the reflow	3

### Material specifications

#### Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Selective coating
Metal surface contact area (top layer)	Gold (Au)
Metal surface contact area (middle layer)	Nickel (Ni)
Metal surface soldering area (top layer)	Tin (Sn)
Metal surface soldering area (middle layer)	Nickel (Ni)

#### Material data - housing

Color (Housing)	black (9005)
Insulating material	LCP
Insulating material group	IIIb
CTI according to IEC 60112	160

# FS 0,635/ 40-FV-R-10,0 - SMD female connectors



1334090

<https://www.phoenixcontact.com/us/products/1334090>

Flammability rating according to UL 94	V0
--	----

## Notes

Notes on operation	The permissible voltage during operation depends on the application, taking into consideration the air clearances and creepage distances within the scope of insulation requirements in accordance with IEC 60664-1.
--------------------	--

## Dimensions

Dimensional drawing	
Pitch	0.635 mm
Width [w]	20.57 mm
Height [h]	10.6 mm
Length [l]	6.4 mm
Installed height	10 mm

## Application

Contact cover	0.6 mm
Center offset	± 0.5 mm in longitudinal and transverse direction
Stack height	12 mm Tolerance: +0.6 mm (in combination with Range of articles:FS 0,635/..-MV-R- 5,0)
	15 mm Tolerance: +0.6 mm (in combination with Range of articles:FS 0,635/..-MV-R- 8,0)
	16 mm Tolerance: +0.6 mm (in combination with Range of articles:FS 0,635/..-MV-R- 9,0)
Wipe length	0.6 mm
Angular tolerance	± 10 ° in longitudinal and transverse direction (when plugging in)
	± 2 ° in longitudinal and transverse direction (when plugged in)

## PCB design

Pad geometry	0.35 x 2.5 mm
Hole diameter	0.9 mm

## Electrical tests

### Thermal test | Test group C

Specification	IEC 60512-5-2:2002-02
Tested number of positions	60

### Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	≥ 5 GΩ

### Air clearances and creepage distances |

# FS 0,635/ 40-FV-R-10,0 - SMD female connectors



1334090

<https://www.phoenixcontact.com/us/products/1334090>

Specification	IEC 60664-1:2007-04
Insulating material group	IIIb
Minimum value for clearance and creepage distance	0.19 mm

## Environmental and real-life conditions

### Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 55 - 10 Hz
Sweep speed	1 octave/min
Amplitude	1.52 mm
Acceleration	181 m/s <sup>2</sup>
Test duration per axis	2 h

### Durability test

Specification	IEC 60512-9-1:2010-03 (following)
Contact resistance R <sub>1</sub>	70 mΩ
Contact resistance R <sub>2</sub>	70 mΩ
Insertion/withdrawal cycles	50
Insulation resistance, neighboring positions	≥ 5 GΩ

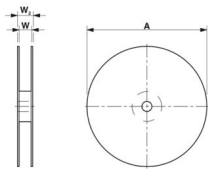
### Climatic test

Specification	IEC 60068-2-60:2015-06
Corrosive stress	Method 4, 10 days
Thermal stress	125 °C/168 h
Power-frequency withstand voltage	500 V

### Ambient conditions

Ambient temperature (operation)	-55 °C ... 125 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

## Packaging specifications

Dimensional drawing	
Type of packaging	44 mm wide tape
[W] tape width	44 mm
[W2] coil overall dimension	50.4 mm
[A] coil diameter	330 mm
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive

# FS 0,635/ 40-FV-R-10,0 - SMD female connectors



1334090

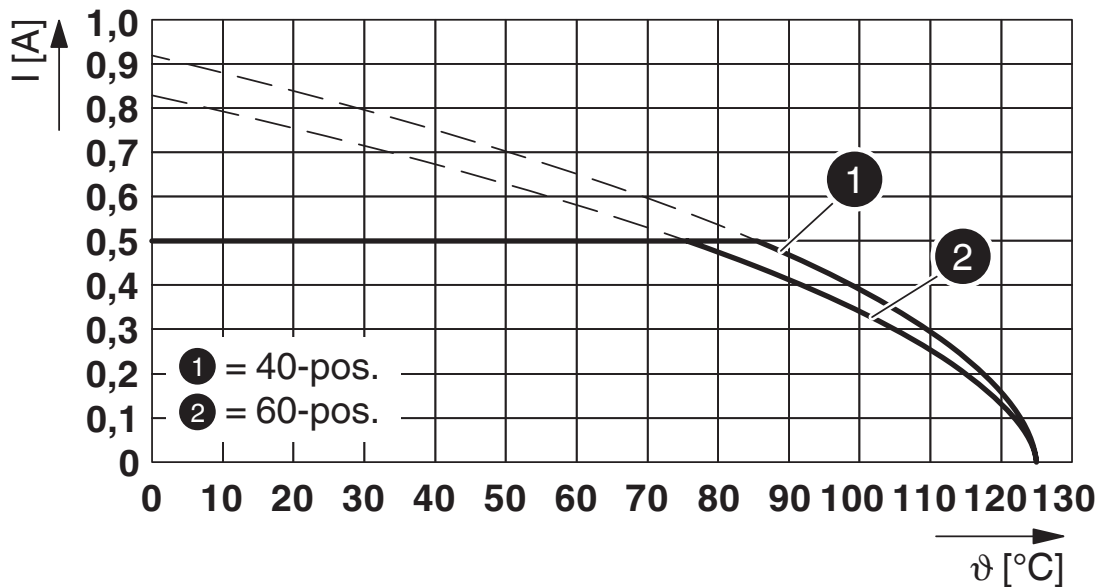
<https://www.phoenixcontact.com/us/products/1334090>

Specification

DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07

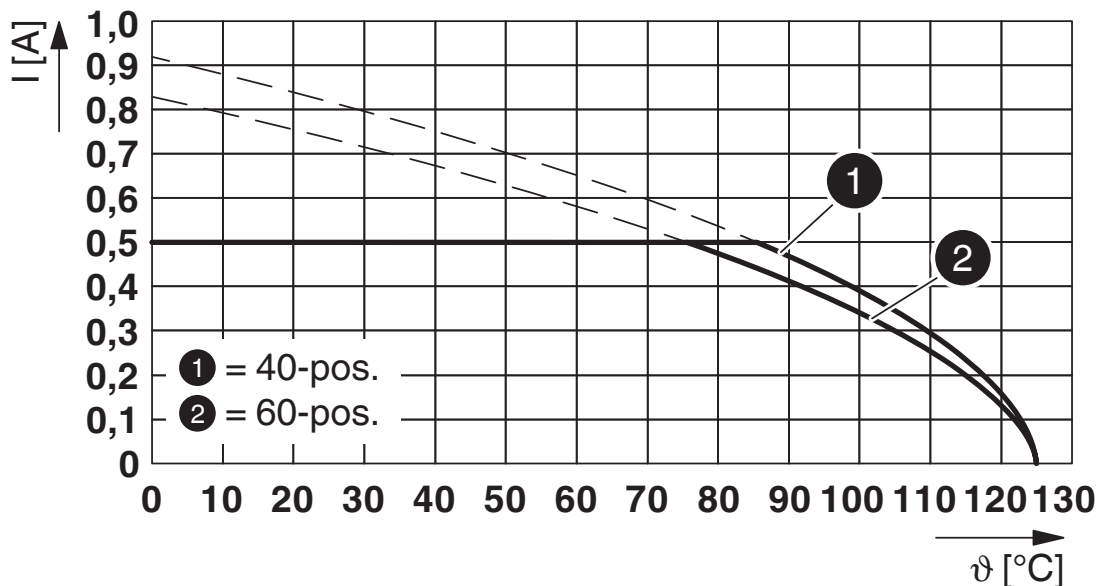
Drawings

Diagram



Type: FS 0,635/...-MV-R- 8,0 with FS 0,635/...-FV-R-10,0

Diagram



Type: FS 0,635/...-MV-R- 9,0 with FS 0,635/...-FV-R-10,0

# FS 0,635/ 40-FV-R-10,0 - SMD female connectors




1334090

<https://www.phoenixcontact.com/us/products/1334090>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1334090>

 <b>cULus Recognized</b> Approval ID: E118976-20230512	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	29.9 V	0.5 A	-	-

# FS 0,635/ 40-FV-R-10,0 - SMD female connectors



1334090

<https://www.phoenixcontact.com/us/products/1334090>

## Classifications

### ECLASS

ECLASS-11.0	27460201
ECLASS-12.0	27460201
ECLASS-13.0	27460201

### ETIM

ETIM 9.0	EC002637
----------	----------

### UNSPSC

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



# FS 0,635/ 40-FV-R-10,0 - SMD female connectors



1334090

<https://www.phoenixcontact.com/us/products/1334090>

## 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%
-------------------------------------	----------------------------

# FS 0,635/ 40-FV-R-10,0 - SMD female connectors



1334090

<https://www.phoenixcontact.com/us/products/1334090>

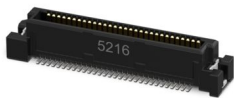
## Mandatory accessories

### FS 0,635/ 40-MV-R- 5,0 - SMD male connectors

1332121

<https://www.phoenixcontact.com/us/products/1332121>

SMD male connector, nominal current: 0.5 A, Test voltage: 500 V AC, number of positions: 40, pitch: 0.635 mm, color: black, contact surface: Gold, contact connection type: Pin, mounting: SMD soldering



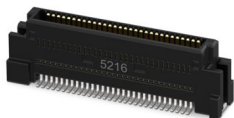
---

### FS 0,635/ 40-MV-R- 8,0 - SMD male connectors

1332125

<https://www.phoenixcontact.com/us/products/1332125>

SMD male connector, nominal current: 0.5 A, Test voltage: 500 V AC, number of positions: 40, pitch: 0.635 mm, color: black, contact surface: Gold, contact connection type: Pin, mounting: SMD soldering



# FS 0,635/ 40-FV-R-10,0 - SMD female connectors



1334090

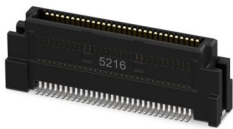
<https://www.phoenixcontact.com/us/products/1334090>

## FS 0,635/ 40-MV-R- 9,0 - SMD male connectors

1332196

<https://www.phoenixcontact.com/us/products/1332196>

SMD male connector, nominal current: 0.5 A, Test voltage: 500 V AC, number of positions: 40, pitch: 0.635 mm, color: black, contact surface: Gold, contact connection type: Pin, mounting: SMD soldering



---

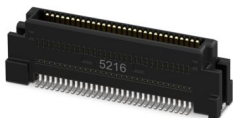
## Accessories

### FS 0,635/ 40-MV-R- 8,0 - SMD male connectors

1332125

<https://www.phoenixcontact.com/us/products/1332125>

SMD male connector, nominal current: 0.5 A, Test voltage: 500 V AC, number of positions: 40, pitch: 0.635 mm, color: black, contact surface: Gold, contact connection type: Pin, mounting: SMD soldering



---

Phoenix Contact 2024 © - 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)