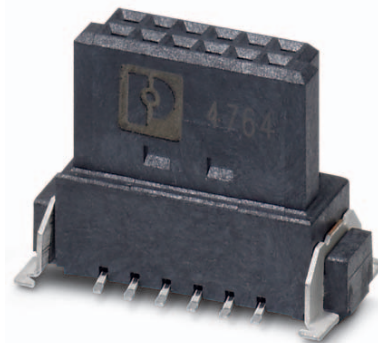


# Data sheet

Order No.: 1714884

Type: FP 1,27/ 32-FV 9,05

SMD female connector, Reflow soldering



The figure shows a 12-pos. version with 12 contacts

## 1 Main features



• No. of pos.	32	• Nominal current	1.4 A
• Test voltage	500 V AC	• Mounting type	SMD soldering
• Color	black (9005)	• Connection direction	90 °
• Pitch	1.27 mm	• Type of packaging	44 mm wide tape

## 2 Your advantages

- ✓ Gold-plated contacts ensure transfer quality remains stable over the long term
- ✓ Compact, high-position board-to-board or wire-to-board connectors for space-saving device designs
- ✓ Stacked, coplanar or orthogonal PCB connections enable maximum flexibility in the device
- ✓ Male and female connectors of different height can be combined – for individual PCB spacing of 8 mm ... 13.8 mm



Make sure you always use the latest documentation.

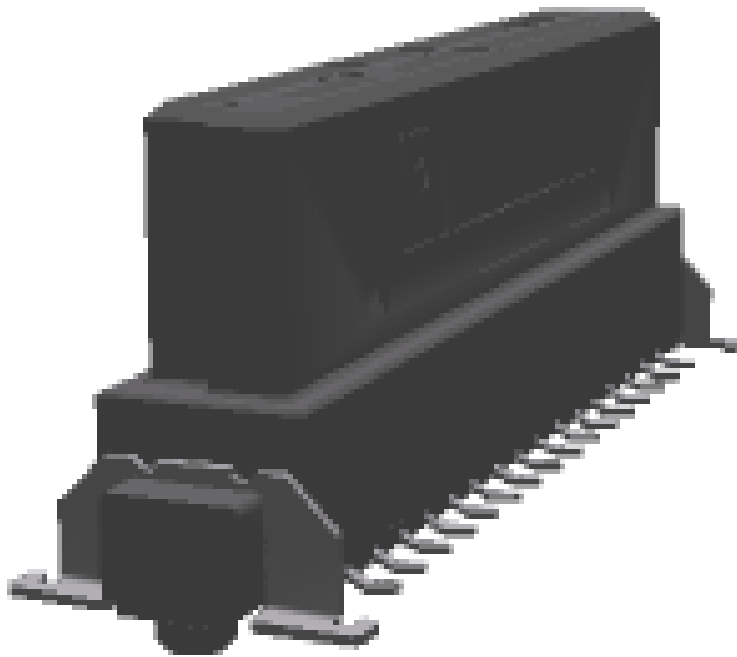
It can be downloaded at: [phoenixcontact.net/product/1714884](https://phoenixcontact.net/product/1714884)

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1714884 FP 1,27/ 32-FV 9,05

**4 3D model in PDF can be activated (Acrobat Reader only)**



**1714884 FP 1,27/ 32-FV 9,05****5 General Technical Data****5.1 item properties**

Order No.	1714884
Type	FP 1,27/ 32-FV 9,05
Plug-in system	Fine Pitch 1,27 mm
Product type	SMD female connector
Type of contact	Female connector
Range of articles	FP 1,27/...-FV 9,05
Pitch	1.27 mm
Range of positions	12...80
Number of positions	32
Number of levels	2
Number of potentials	32
Mounting type	SMD soldering
Connection direction of the connector to the PCB	90 °
Pin layout	Linear pad geometry

**5.2 Material data**

<b>Material of metal parts</b>	
Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface contact area	Nickel (Ni), Palladium nickel (PdNi) , Gold (Au)
Surface characteristics	Selective coating
<b>Insulating material data</b>	
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0
Color	black (9005)

**1714884 FP 1,27/ 32-FV 9,05****6 Dimensions****6.1 Dimensions for the product**

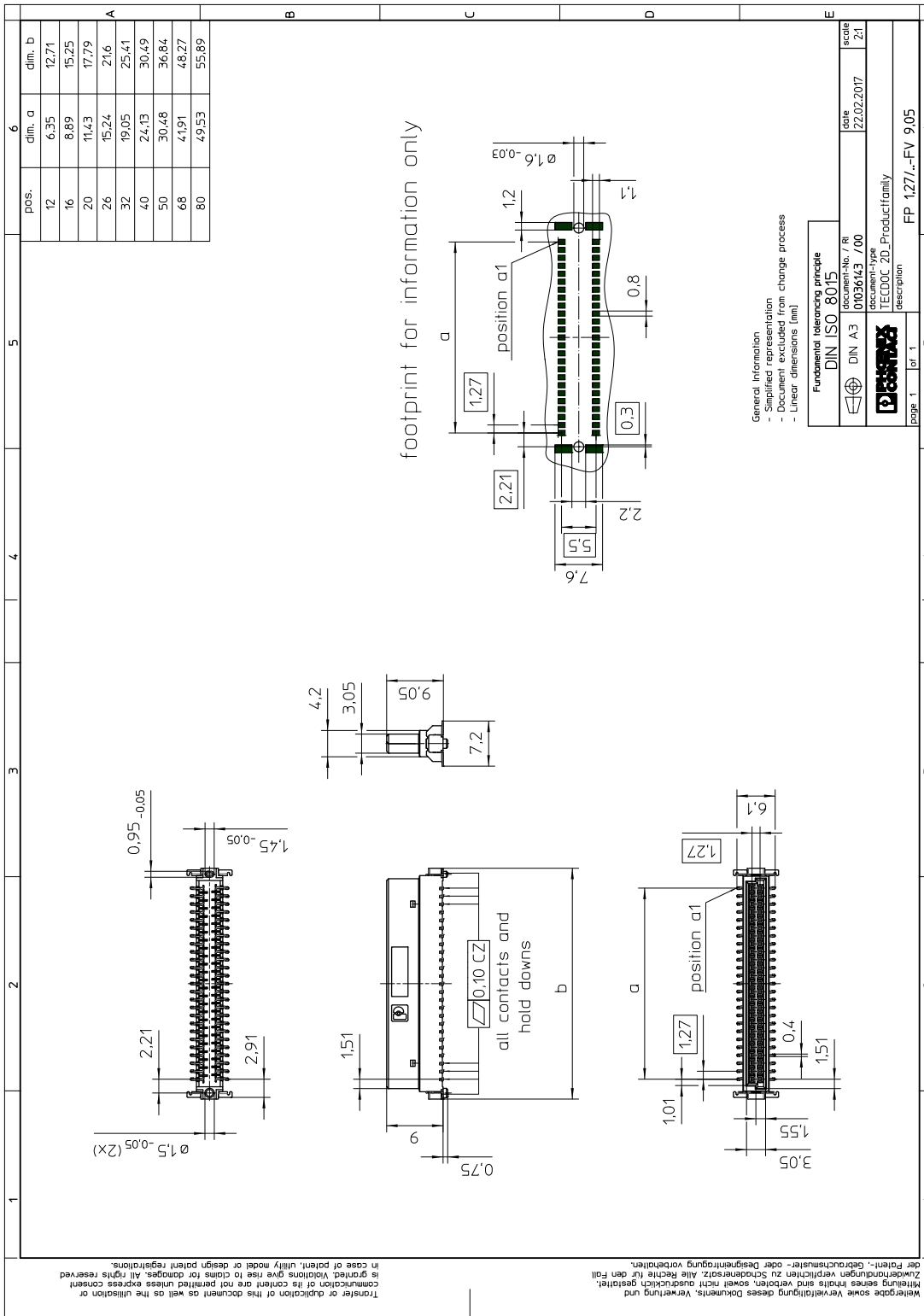
Length	7.2 mm
Width	25.41 mm
Total height	9.75 mm
Height	9.05 mm
Base height	9.05 mm
Positioning pin geometry	ø 1.5-0.05 mm, Length of positioning pin: 0.75 mm ø 1.5-0.05 mm, Length of positioning pin: 0.75 mm
Positioning pin geometry	ø 1.5-0.05 mm, Length of positioning pin: 0.75 mm ø 1.5-0.05 mm, Length of positioning pin: 0.75 mm
Coplanarity	≤ 0.1 mm

**6.2 Dimensions for the application**

Contact cover	0.9 mm
Overlap length	1.5 mm
Medium offset	± 0.7 mm in longitudinal and transverse direction
Angular tolerance	± 4 ° in longitudinal direction
Angular tolerance	± 2 ° in transverse direction
Stacking height	10.8 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 1,27/...-MV 1,75)
Stacking height	12.3 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 1,27/...-MV 3,25)

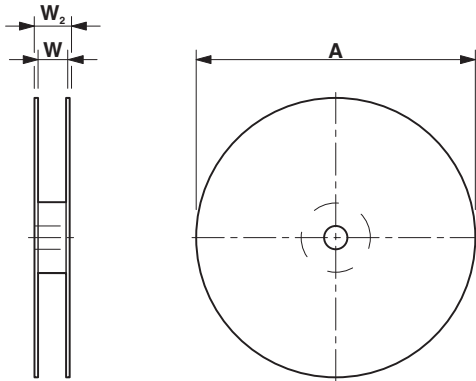
1714884 FP 1,27/ 32-FV 9,05

7 Series drawing



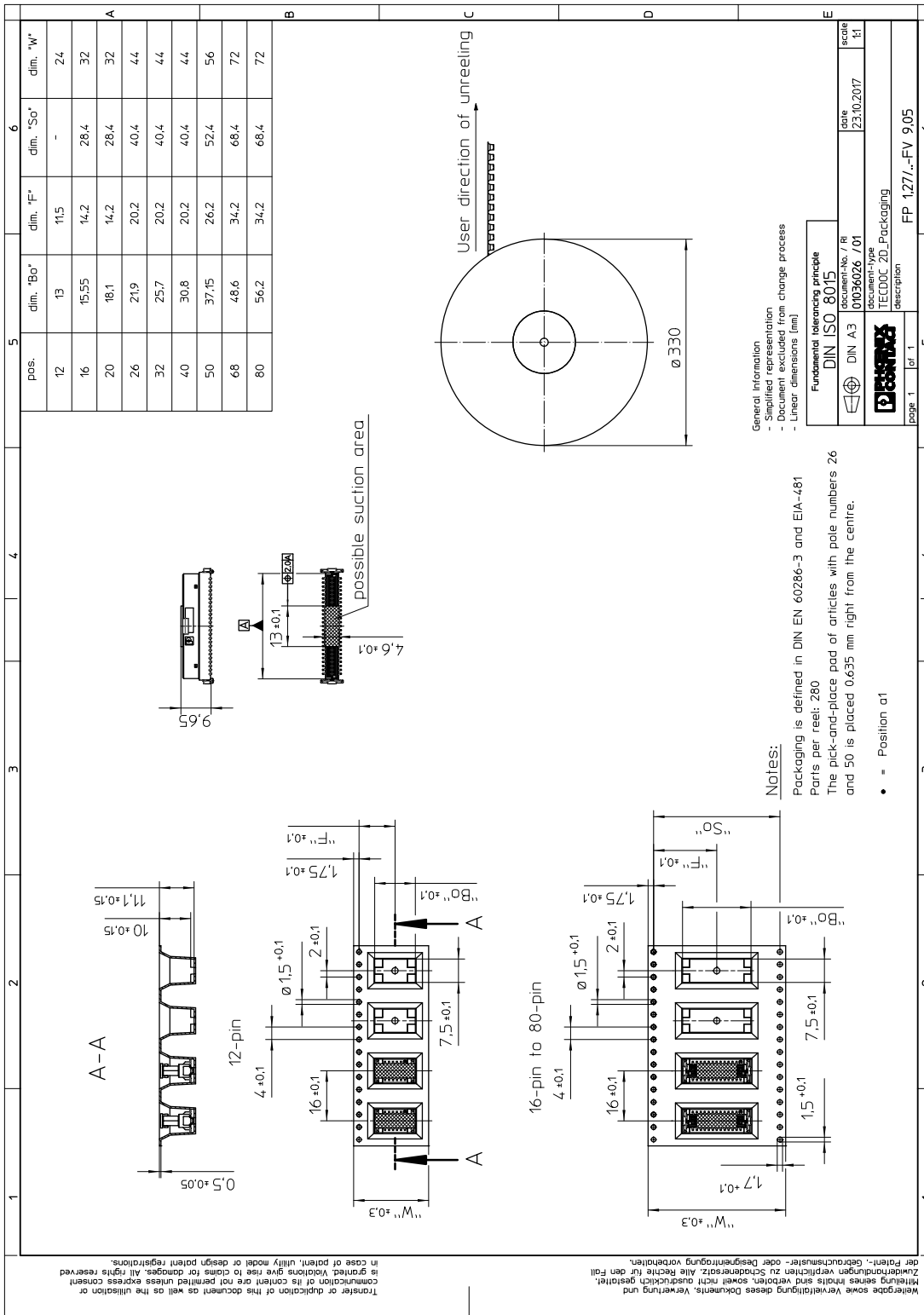
**1714884 FP 1,27/ 32-FV 9,05****8 Packaging information**

Type of packaging	44 mm wide tape
Note on packaging	Tape-on-reel packaging in accordance with standard DIN EN 60286-3 and EIA-481
Pieces per package	280
Outer packaging type	Transparent-Bag
[W] tape width	44 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	50.4 mm
Number of products per coil	280



1714884 FP 1,27/ 32-FV 9,05

9 Blister drawing





## 10 Application

### 10.1 Temperature limit values

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

## 11 General tests

### 11.1 Specification

Brief description

Board-to-board connectors

**1714884 FP 1,27/ 32-FV 9,05**

## 12 Mechanical tests

### 12.1 Insertion and withdrawal force per contact

Insertion and withdrawal force per contact	approx. 0.5 N
--	---------------

### 12.2 Service life

Specification	IEC 60512-9-1:2010-03 (following)
Service life	500 Insertion/withdrawal cycles, Performance level 1

**1714884 FP 1,27/ 32-FV 9,05****13 Electrical tests****13.1 Electrical data**

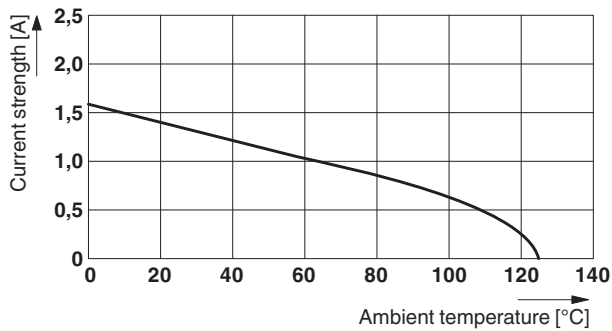
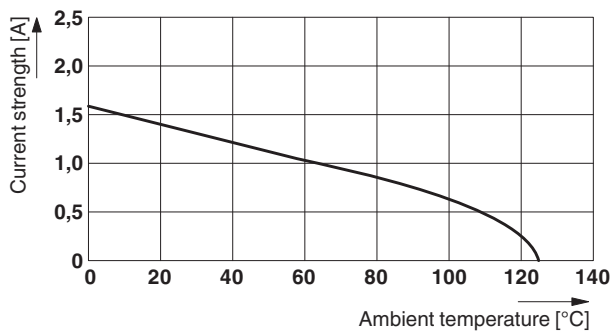
Nominal current at 20 °C	1.4 A IEC 60512-5-2:2002-02 (50-pos.)
Test voltage	500 V AC IEC 60512-4-1:2003

**13.2 Air and creepage distances**

Minimum value for clearance and creepage distance	0.4 mm
---	--------

**1714884 FP 1,27/ 32-FV 9,05****14 Current carrying capacity/derating curves**

Specification	IEC 60512-5-2:2002-02
Note	Representation based on IEC 60512-5-2:2002-02
Reduction factor	0.8
Number of positions	See diagram

**Type: FP 1,27/...-FV 9,05 with FP 1,27/...-MV 1,75****Type: FP 1,27/...-FV 9,05 with FP 1,27/...-MV 3,25****14.1 Insulation resistance**

Insulation resistance	≥ 10 GΩ, (IEC 60512-3-1:2002-02)
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**14.2 forward resistance**

Contact resistance	≤25 mΩ, (IEC 60512-2-1:2002-02)
--------------------	---------------------------------

**14.3 Vibration test**

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 2000 - 10 Hz
Sweep speed	1 octave/min
Amplitude	1.5 mm (10 - 60.1 Hz)
Acceleration	20g (60.1 - 2000 Hz)

## 1714884 FP 1,27/ 32-FV 9,05

Test duration per axis


2.5 h

Test directions

X-, Y- and Z-axis

Note

## 15 Approvals

cULus Recognized  US

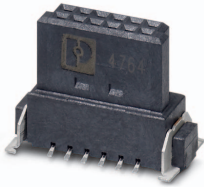


**1714884 FP 1,27/ 32-FV 9,05****16 Commercial Data**

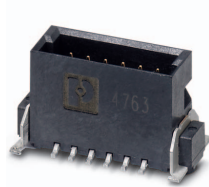
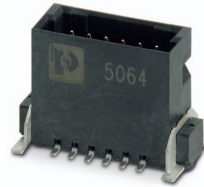
Order No.	1714884
Type	FP 1,27/ 32-FV 9,05
Pieces per package	280
Net weight	2.22 g
GTIN	4055626400464
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

## 1714884 FP 1,27/ 32-FV 9,05

## 17 Combination tests



FP 1,27/...-FV 9,05

FP 1,27/...-MV  
1,75FP 1,27/...-MV  
3,25

Mechanical tests				
Insertion/withdrawal force per position	approx. 0.5 N / 0.5 N	approx. 0.5 N / 0.5 N		
Durability tests				
Contact resistance R <sub>1</sub>	25 mΩ	25 mΩ		
Insertion/withdrawal cycles	500	500		
Contact resistance R <sub>2</sub>	25 mΩ	25 mΩ		
Test voltage	500 V AC	500 V AC		
Thermal tests				
Tested number of positions	50	50		
Test current	1.4 A	1.4 A		