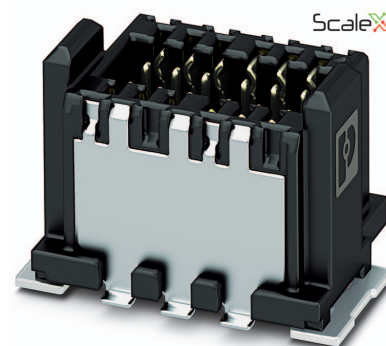


# Data sheet

Order No.: 1043787

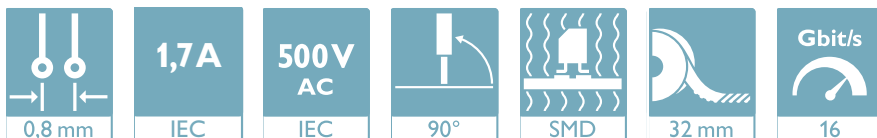
Type: FP 0,8/ 32-MV-SH 1,15

shielded SMD male connector, Reflow soldering



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

## 1 Main features



- |                |              |                        |                 |
|----------------|--------------|------------------------|-----------------|
| • No. of pos.  | 32           | • Nominal current      | 1.7 A           |
| • Test voltage | 500 V AC     | • Mounting type        | SMD soldering   |
| • Color        | black (9005) | • Connection direction | 90 °            |
| • Pitch        | 0.8 mm       | • Type of packaging    | 32 mm wide tape |

## 2 Your advantages

- ✓ Gold-plated contacts ensure transfer quality remains stable over the long term
- ✓ Reliable mechanical and electrical connections, thanks to the double-sided ScaleX contact system
- ✓ Robustness: ScaleX technology for high tolerance compensation and protection of contacts
- ✓ Flexible device design: various numbers of positions, designs, and stack heights with high wipe lengths



Make sure you always use the latest documentation.

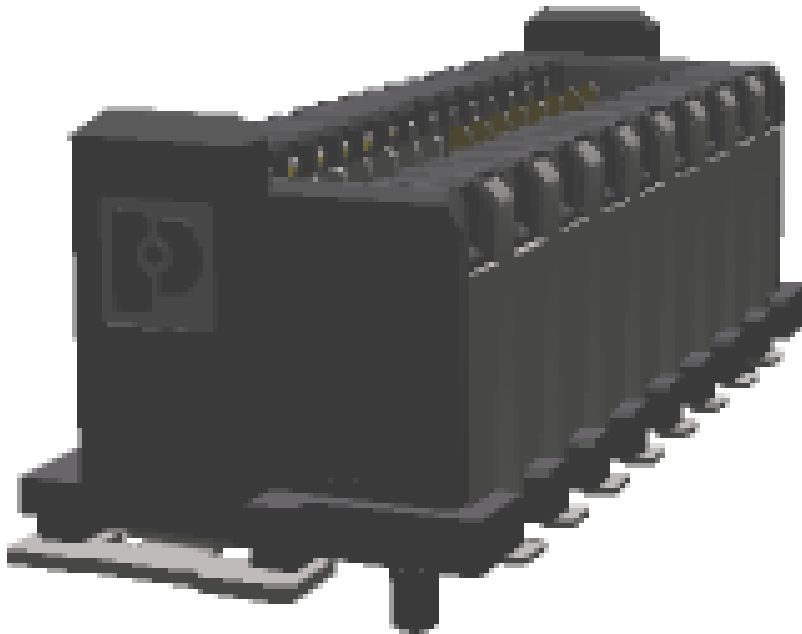
It can be downloaded at: [phoenixcontact.net/product/1043787](https://phoenixcontact.net/product/1043787)

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1043787 FP 0,8/ 32-MV-SH 1,15

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



**1043787 FP 0,8/ 32-MV-SH 1,15****5 General Technical Data****5.1 item properties**

Order No.	1043787
Type	FP 0,8/ 32-MV-SH 1,15
Plug-in system	Fine Pitch 0,8 mm
Product type	shielded SMD male connector
Type of contact	Male connector
Range of articles	FP 0,8/...-MV-SH 1,15
Pitch	0.8 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 °

**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), , Gold (Au)
Soldering area surface	Nickel (Ni) , Tin (Sn)
Surface characteristics	Selective coating
<b>Insulating material data</b>	
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	150
Flammability rating according to UL 94	V0
Color	black (9005)

**1043787 FP 0,8/ 32-MV-SH 1,15****6 Dimensions****6.1 Dimensions for the product**

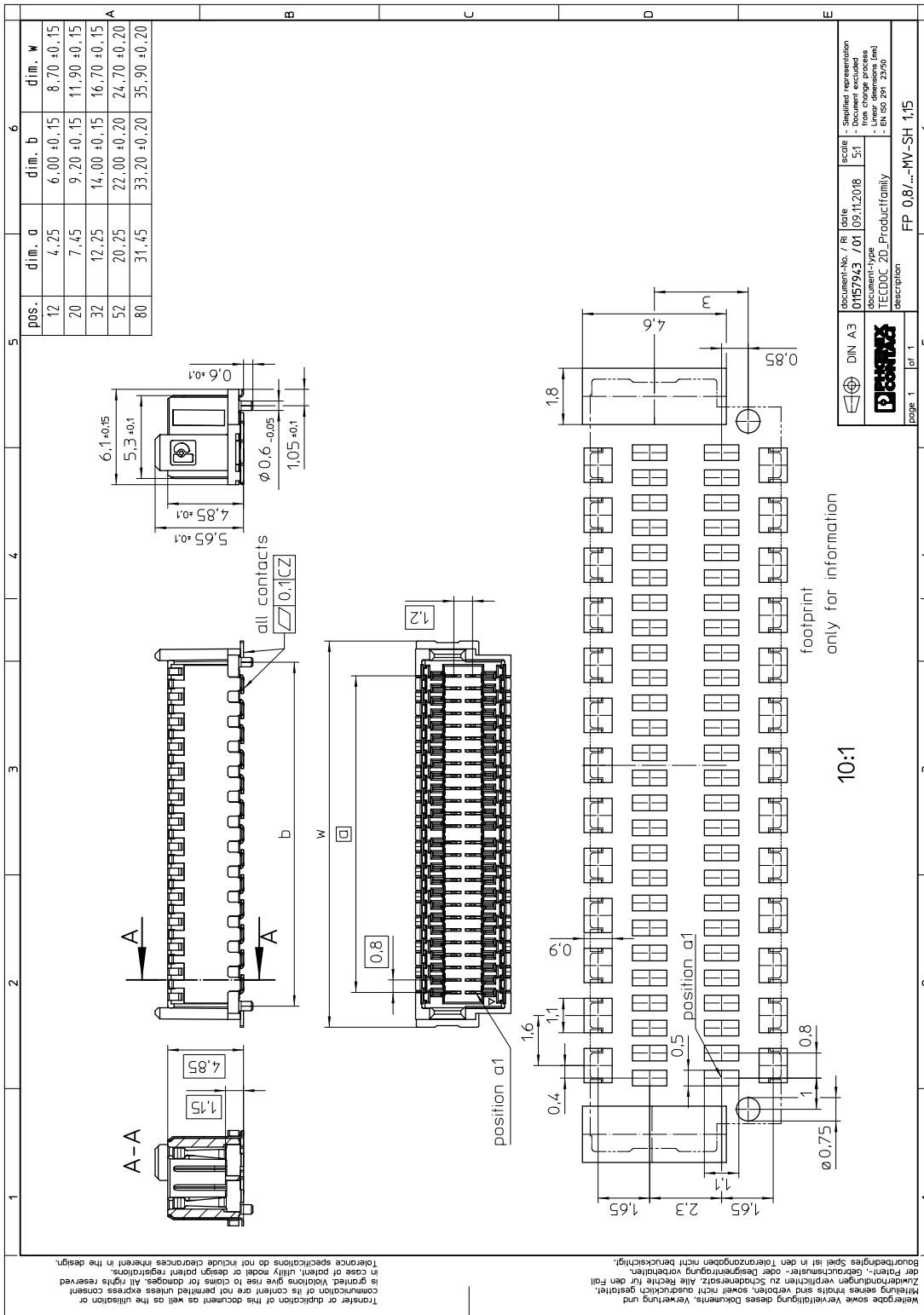
Length	6.1 mm
Width	16.7 mm
Total height	6.25 mm
Height	5.65 mm
Base height	1.15 mm
Positioning pin geometry	, Length of positioning pin: 0.6 mm
Coplanarity	≤ 0.1 mm

**6.2 Dimensions for the application**

Contact cover	0.8 mm
Overlap length	1.5 mm
Medium offset	± 0.7 mm in longitudinal and transverse direction
Angular tolerance	± 2 ° in longitudinal direction
Angular tolerance	± 4 ° in transverse direction
Stacking height	6 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 0,8/...-FV-SH 4,85)
Stacking height	9 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 0,8/...-FV-SH 7,85)

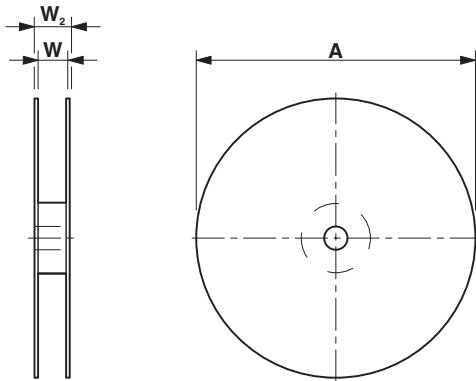
1043787 FP 0,8/ 32-MV-SH 1,15

7 Series drawing



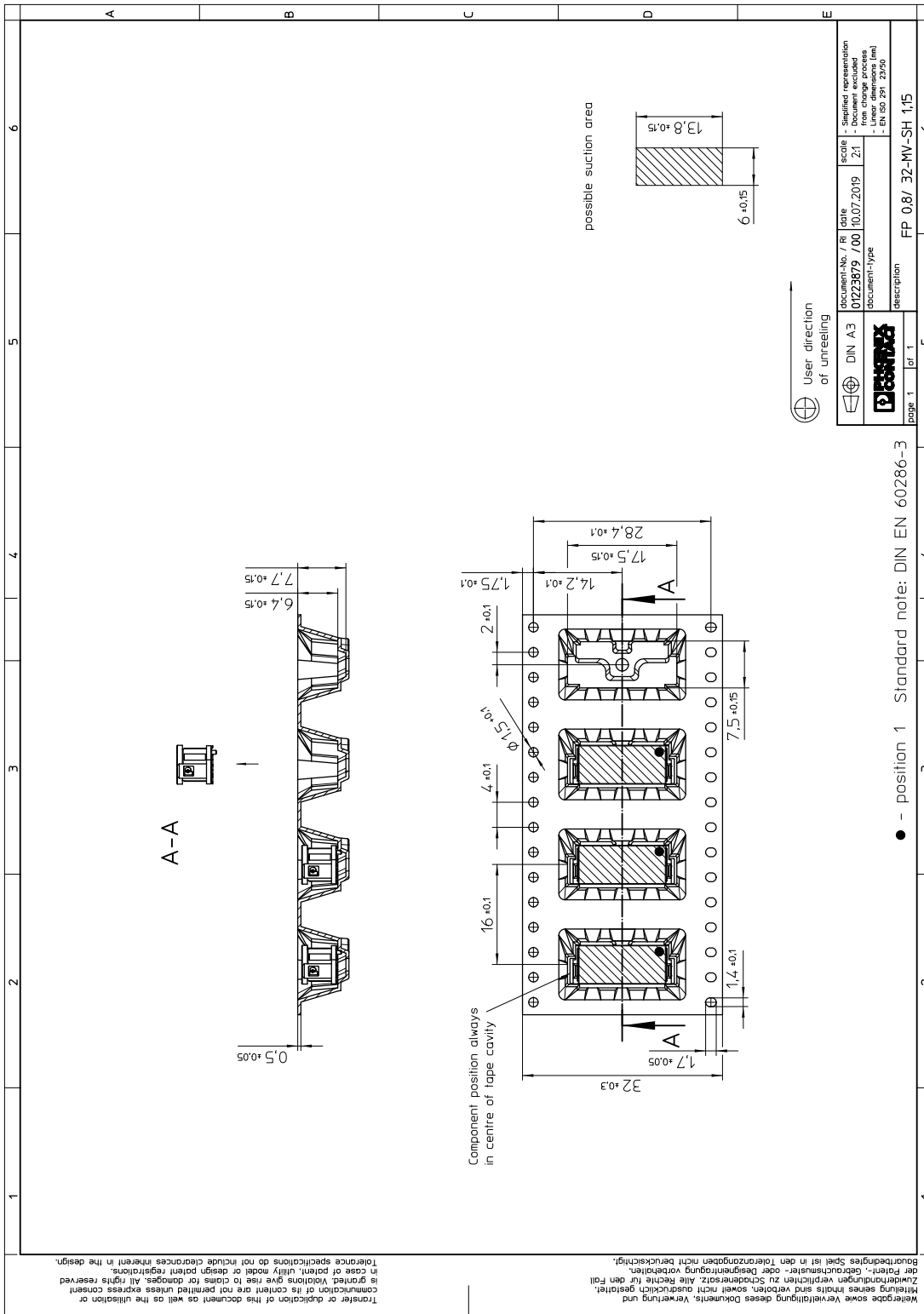
**1043787 FP 0,8/ 32-MV-SH 1,15****8 Packaging information**

Type of packaging	32 mm wide tape
Pieces per package	500
Outer packaging type	Transparent-Bag
[W] tape width	32.4 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	38.4 mm
Number of products per coil	500



1043787 FP 0,8/ 32-MV-SH 1,15

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

**1043787 FP 0,8/ 32-MV-SH 1,15****12 Mechanical tests****12.1 Insertion and withdrawal force per contact**

Insertion and withdrawal force per contact	≤ 1.2 N
--	---------

**12.2 Service life**

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

**1043787 FP 0,8/ 32-MV-SH 1,15****13 Electrical tests****13.1 Electrical data**

Nominal current at 20 °C	1.7 A (52-pos.)
Test voltage	500 V AC IEC 60512-4-1:2003

**13.2 Air and creepage distances**

Minimum value for clearance and creepage distance	0.25 mm
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**1043787 FP 0,8/ 32-MV-SH 1,15**

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**14 Current carrying capacity/derating curves****14.1 Insulation resistance**

Insulation resistance  $\geq 5 \text{ G}\Omega$ , (IEC 60512-3-1:2002-02)

**14.2 forward resistance**

Contact resistance  $\leq 20 \text{ m}\Omega$ , (IEC 60512-2-1:2002-02)

## 1043787 FP 0,8/ 32-MV-SH 1,15

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### 15 Data transmission

#### 15.1 Data transmission rate

Data rate

up to 16 Gbps

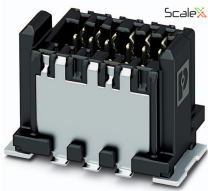
### 16 Approvals

**1043787 FP 0,8/ 32-MV-SH 1,15****17 Commercial Data**

Order No.	1043787
Type	FP 0,8/ 32-MV-SH 1,15
Pieces per package	500
Net weight	1.6 g
GTIN	4055626616803
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

1043787 FP 0,8/ 32-MV-SH 1,15

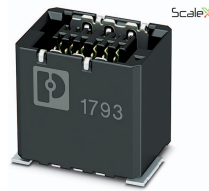
18 Combination tests



FP 0,8/...-MV-SH 1,15



FP 0,8/...-FV 4,85



FP 0,8/...-FV-SH 7,85

Mechanical tests				
Durability tests				
Contact resistance $R_1$	20 m $\Omega$	20 m $\Omega$		
Insertion/withdrawal cycles	500	500		
Contact resistance $R_2$	20 m $\Omega$	20 m $\Omega$		
Thermal tests				