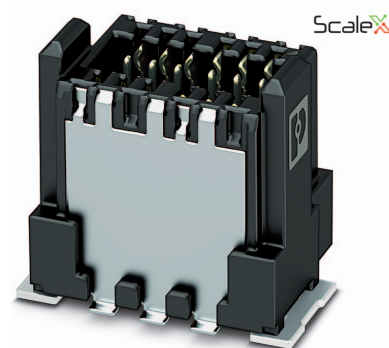


Order No.: 1043733

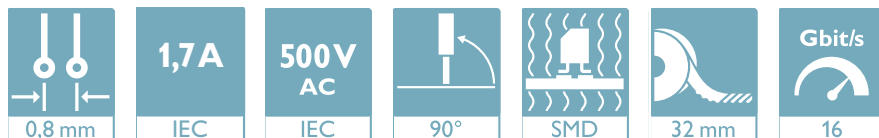
Type: FP 0,8/ 32-MV-SH 2,65

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



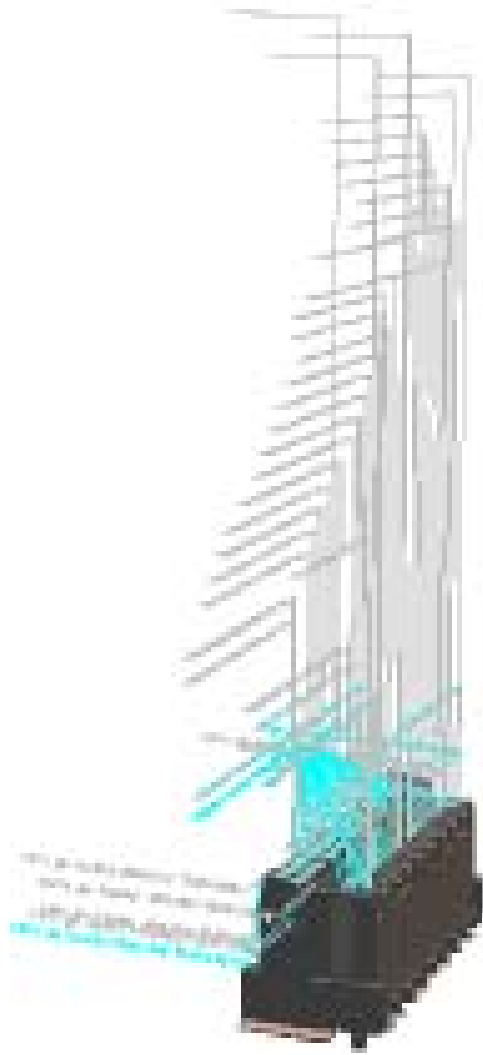
Make sure you always use the latest documentation.  
It can be downloaded at: [phoenixcontact.net/product/1043733](https://phoenixcontact.net/product/1043733)

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1043733 FP 0,8/ 32-MV-SH 2,65

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



**1043733 FP 0,8/ 32-MV-SH 2,65****5 General Technical Data****5.1 item properties**

Order No.	1043733
Type	FP 0,8/ 32-MV-SH 2,65
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 2,65
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)

**1043733 FP 0,8/ 32-MV-SH 2,65****6 Dimensions****6.1 Dimensions for the product**

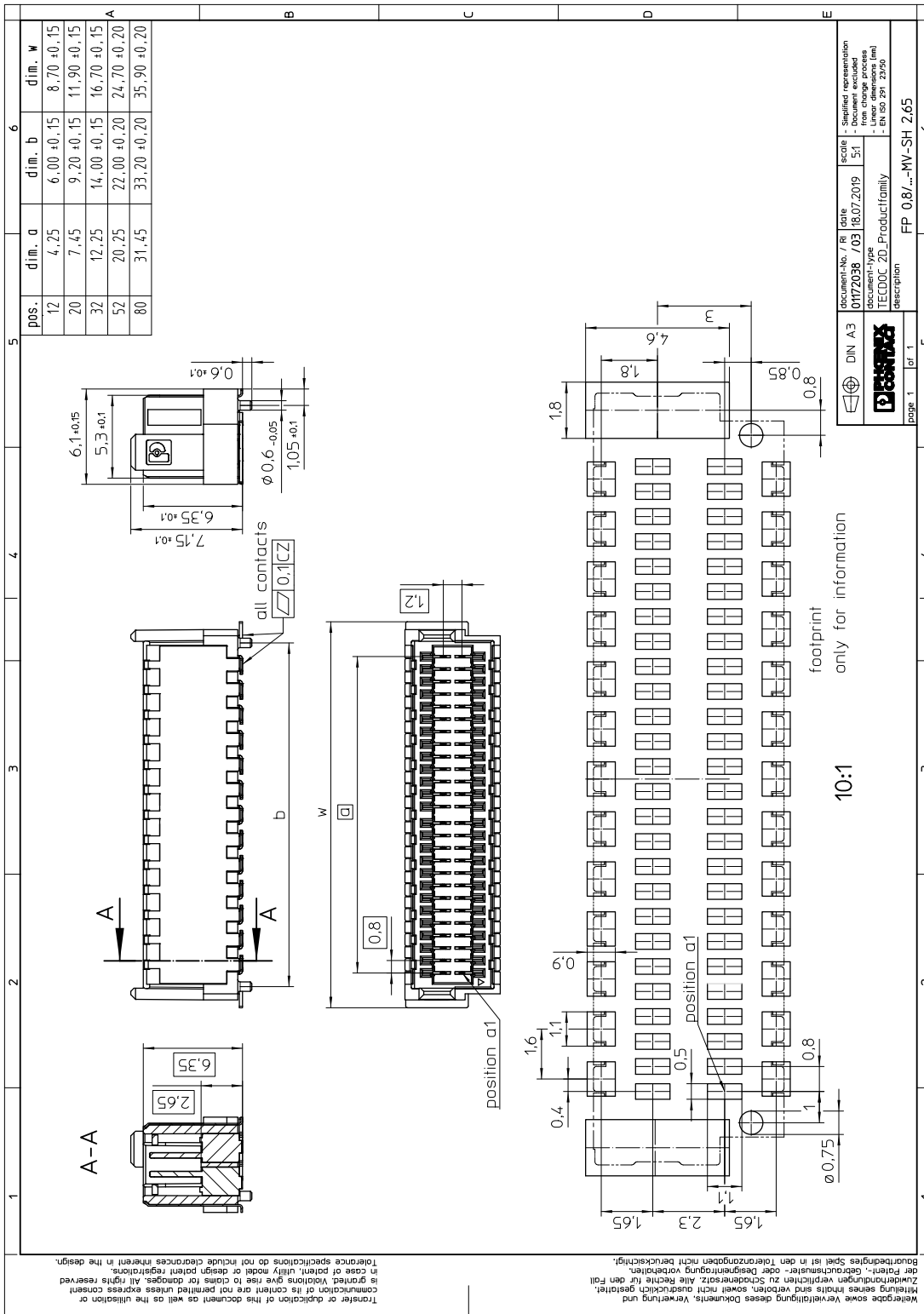
Length	6.1 mm
Width	16.7 mm
Total height	7.75 mm
Height	7.15 mm
Base height	2.65 mm
Positioning pin geometry	, Length of positioning pin: 0.6 mm
Coplanarity	≤ 0.1 mm

**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	7.5 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 0,8/...-FV-SH 4,85)
Stacking height	10.5 mm Tolerance: +1,5 mm (in combination with Range of articles:FP 0,8/...-FV-SH 7,85)

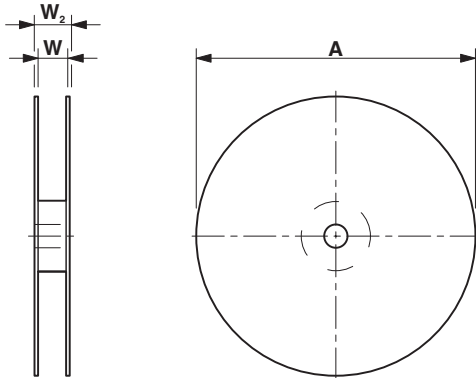
1043733 FP 0,8/ 32-MV-SH 2,65

7 Series drawing



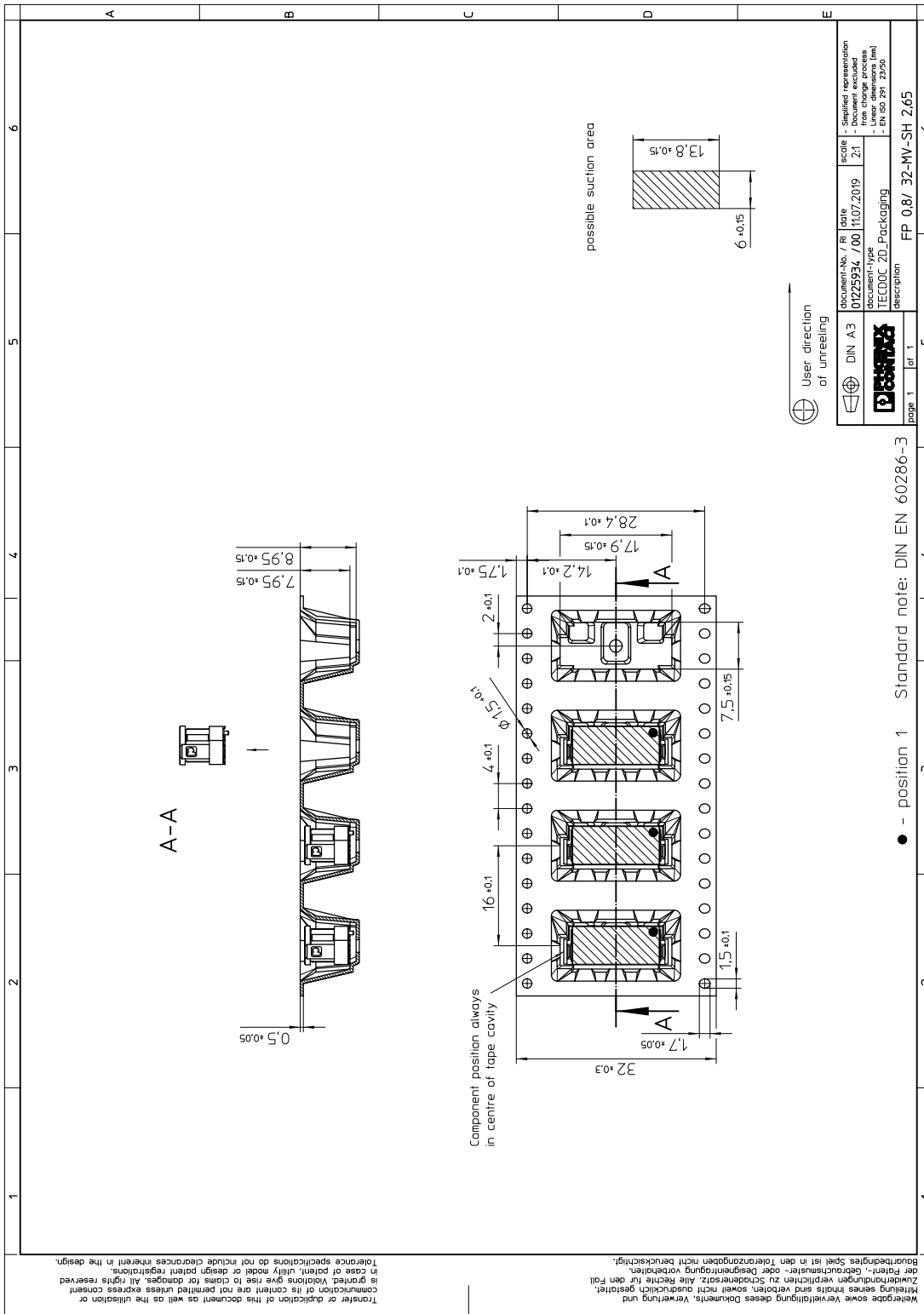
**1043733 FP 0,8/ 32-MV-SH 2,65****8 Packaging information**

Type of packaging	32 mm wide tape
Pieces per package	250
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07
[W] tape width	32.4 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	40.4 mm
Number of products per coil	250



1043733 FP 0,8/ 32-MV-SH 2,65

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

## 1043733 FP 0,8/ 32-MV-SH 2,65

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# 11 General tests

## 11.1 Specification

Brief description

Board-to-board connectors

**1043733 FP 0,8/ 32-MV-SH 2,65****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

**1043733 FP 0,8/ 32-MV-SH 2,65****13 Electrical tests****13.1 Electrical data**

Nominal current at 20 °C	1.7 A (80-pos.)
Test voltage	500 V AC IEC 60512-4-1:2003

**13.2 Air and creepage distances**

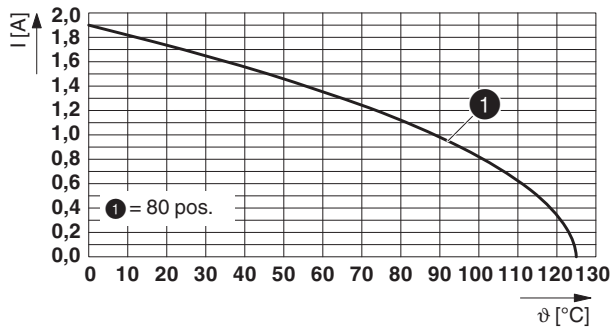
Minimum value for clearance and creepage distance	0.25 mm
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## 1043733 FP 0,8/ 32-MV-SH 2,65

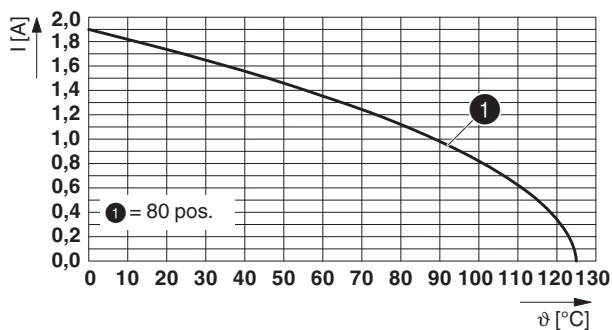
## 14 Current carrying capacity/derating curves

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 0,8/...-MV-SH 2,65 with FP 0,8/...-FV-SH 4,85



## Type: FP 0,8/...-MV-SH 2,65 with FP 0,8/...-FV-SH 7,85



## 14.1 Insulation resistance

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

## 14.2 forward resistance

Contact resistance  $\leq 15 \text{ m}\Omega$ , (IEC 60512-2-1:2002-02)

**1043733 FP 0,8/ 32-MV-SH 2,65****15 Environmental and durability tests****15.1 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	200 m/s <sup>2</sup> (58 - 2000 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis
Note	

1043733 FP 0,8/ 32-MV-SH 2,65

16 Data transmission

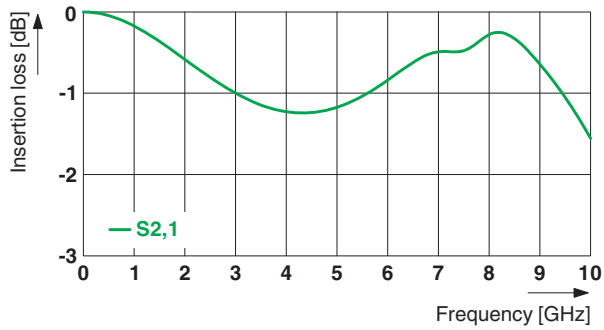
16.1 Data transmission rate

Data rate up to 16 Gbps

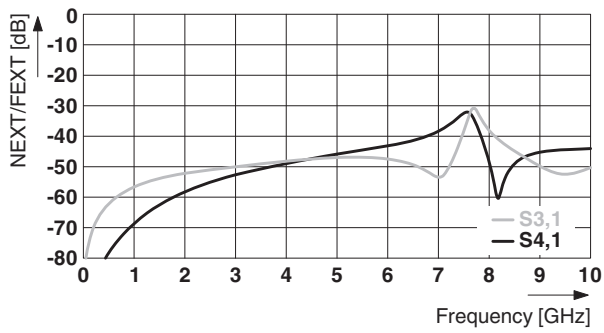
16.2 PIN assignment

Pin assignment G, S, S, G, S, S, G

Differential pair - 12 mm height



Differential pair - 12 mm height



17 Approvals

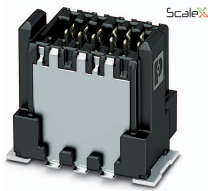
**1043733 FP 0,8/ 32-MV-SH 2,65****18 Commercial Data**

Order No.	1043733
Type	FP 0,8/ 32-MV-SH 2,65
Pieces per package	250
Net weight	3.585 g
GTIN	4055626608365
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1



## 1043733 FP 0,8/ 32-MV-SH 2,65

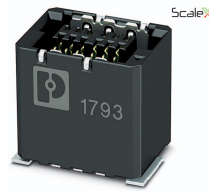
## 19 Combination tests



FP 0,8/...-MV 2,65



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

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

Mechanical tests				
Durability tests				
Contact resistance $R_1$	15 m $\Omega$	15 m $\Omega$		
Insertion/withdrawal cycles	500	500		
Contact resistance $R_2$	15 m $\Omega$	15 m $\Omega$		
Test voltage	500 V AC	500 V AC		
Thermal tests				
Tested number of positions	80	80		
Test current	1.7 A	1.7 A		