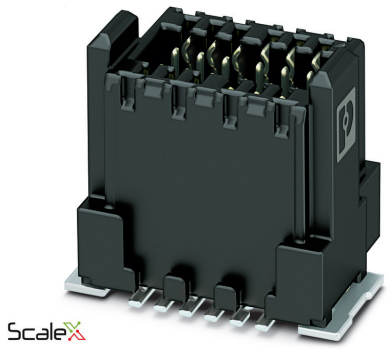
2020-03-04
Product version 00
Document revision 02

Data sheet

Order No.: 1061700

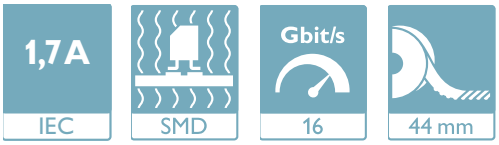
Type: FP 0,8/ 52-MV 2,65

SMD male connector, Reflow soldering



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

1 Main features



- No. of pos. 52
- Test voltage 500 V AC
- Color black (9005)
- Pitch 0.8 mm
- Nominal current 1.7 A
- Mounting type SMD soldering
- Connection direction 90 °
- Type of packaging 44 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/1061700

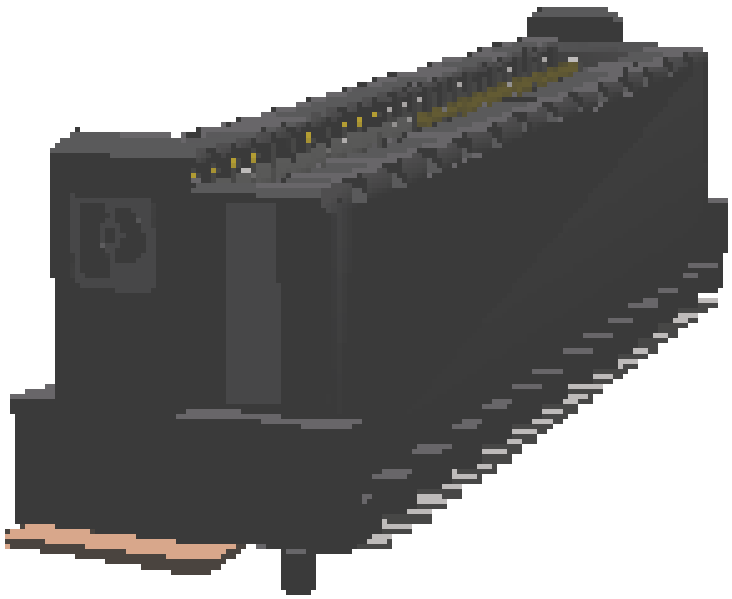
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4 3D model in PDF can be activated (Acrobat Reader only)



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5 General Technical Data

5.1 item properties

Order No.	1061700
Type	FP 0,8/ 52-MV 2,65
Plug-in system	FINEPITCH 0,8 mm
Product type	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	52
Number of levels	2
Number of potentials	52
Mounting type	SMD soldering
Connection direction of the connector to the PCB	90 °
Pin layout	Linear pad geometry

5.2 Material data

Material of metal parts	
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

Insulating material data	Housing
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	150
Flammability rating according to UL 94	V0
Color	black (9005)

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6 Dimensions

6.1 Dimensions for the product

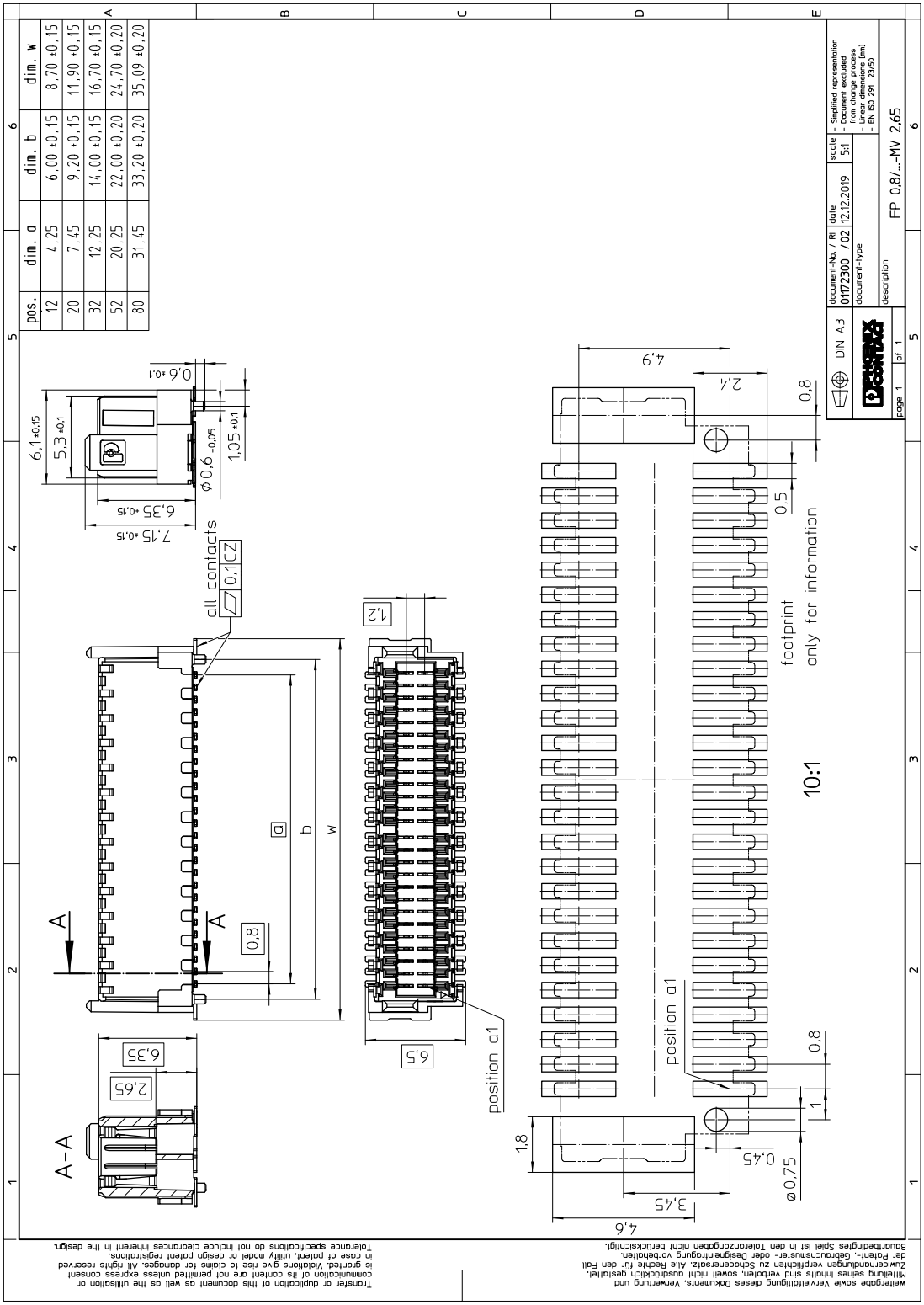
Length	6.1 mm
Width	24.7 mm
Total height	7.75 mm
Height	7.15 mm
Positioning pin geometry	, Length of positioning pin: 0.6 mm
Coplanarity	≤ 0.1 mm

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

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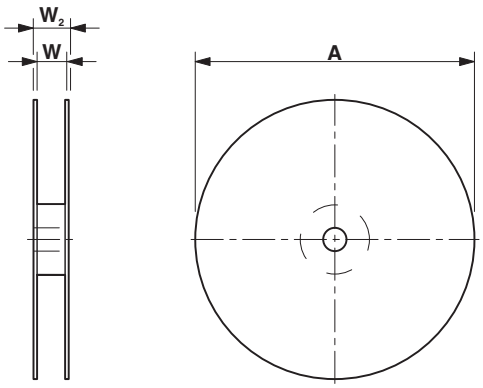
7 Series drawing



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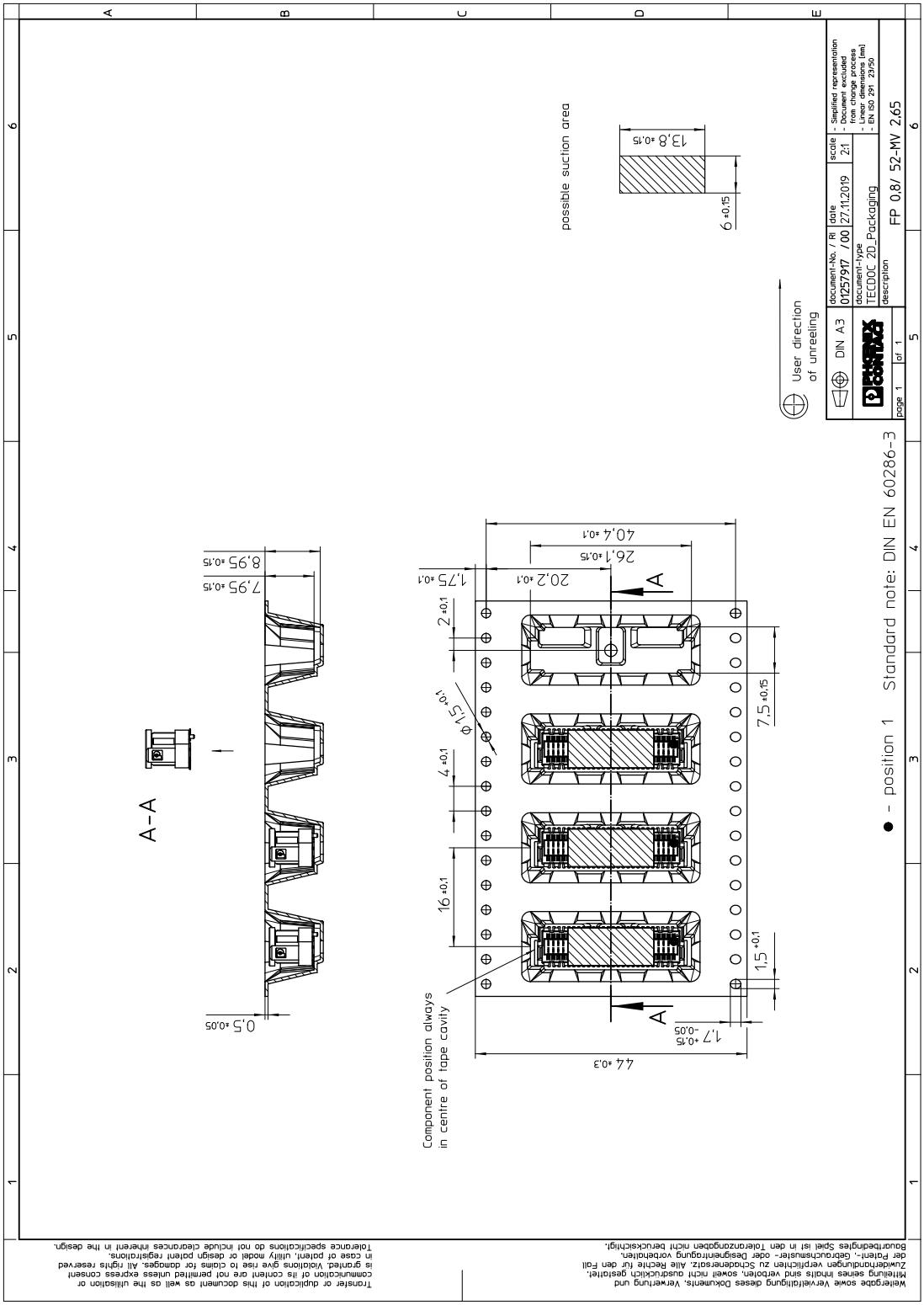
8 Packaging information

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	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	44.4 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	50.4 mm
Number of products per coil	250



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9 Blister drawing



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Tolerance specifications do not include clearances inherent in the design.

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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

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11 General tests

11.1 Specification

Brief description	Board-to-board connectors

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12 Mechanical tests

12.1 Insertion and withdrawal force per contact

Insertion and withdrawal force per contact	≤ 0.6 N

12.2 Service life

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

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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

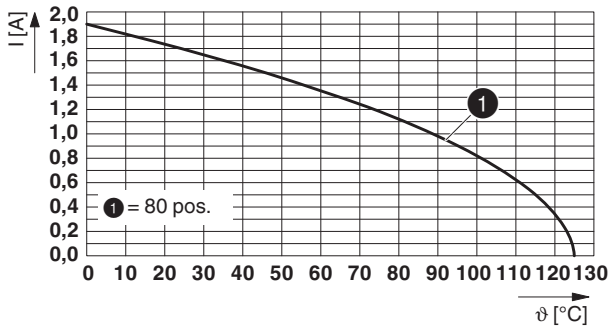
Minimum value for clearance and creepage distance	0.25 mm

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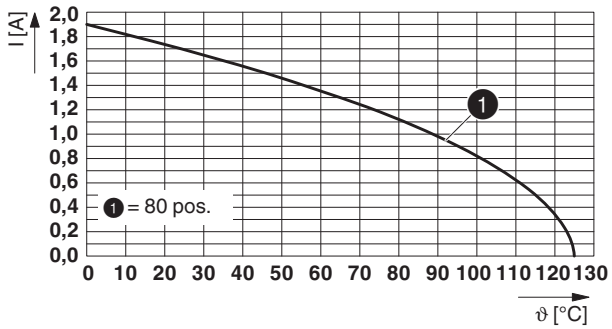
14 Current carrying capacity/derating curves

Specification	IEC 60512-5-2:2002-02
Note	max. 1.7 A at 20 °C (80-pos.)
Reduction factor	0.8

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



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



14.1 Insulation resistance

Insulation resistance	≥ 5 GΩ, (IEC 60512-3-1:2002-02)

14.2 forward resistance

Contact resistance	≤20 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	200 m/s^2 (58 - 2000 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis
Note	

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14.4 Shock test

Specification	IEC 60068-2-27:2008-02
Result	Test passed
Pulse shape	Semi-sinusoidal
Peak acceleration	490 m/s^2
Shock duration	11 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)

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15 Approvals / Certificates

cULus Recognized	Voltage [V]	Current [A]	Cross section [AWG]	Cross section [mm²]
	-	-	-	-

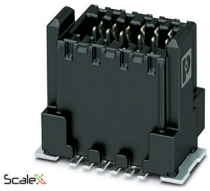
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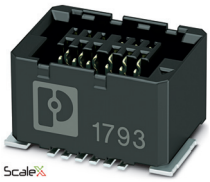
16 Commercial Data

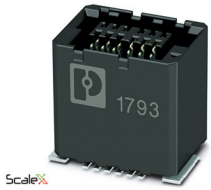
Order No.	1061700
Type	FP 0,8/ 52-MV 2,65
Pieces per package	250
Net weight	3.97 g
GTIN	4055626716213
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

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17 Combination tests







	FP 0,8/...-MV 2,65	FP 0,8/...-FV 4,85	FP 0,8/...-FV 7,85		
Mechanical tests					
Durability tests					
Contact resistance R_1	20 mΩ	20 mΩ			
Insertion/withdrawal cycles	500	500			
Contact resistance R_2	20 mΩ	20 mΩ			
Thermal tests					
Tested number of positions	80	80			
Test current	1.7 A	1.7 A			

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