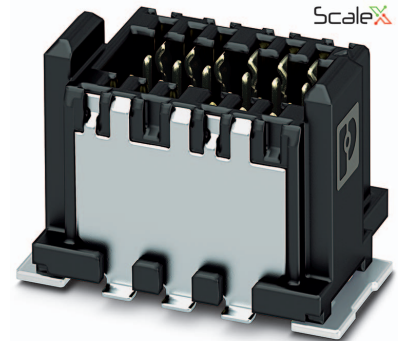


Order No.: 1043790

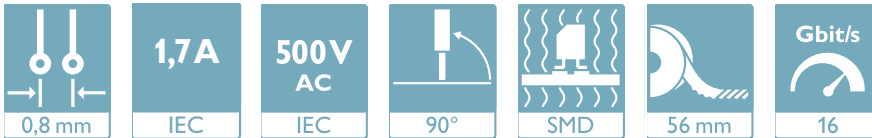
Type: FP 0,8/ 80-MV-SH 1,15

shielded SMD male connector, Reflow soldering



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

1 Main features



- | | | | |
|----------------|--------------|------------------------|-----------------|
| • No. of pos. | 80 | • 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 | 56 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/1043790

1043790 FP 0,8/ 80-MV-SH 1,15**3 Table of contents**

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1043790 FP 0,8/ 80-MV-SH 1,15

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



1043790 FP 0,8/ 80-MV-SH 1,15**5 General Technical Data****5.1 item properties**

Order No.	1043790
Type	FP 0,8/ 80-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	80
Number of levels	2
Number of potentials	80
Mounting type	SMD soldering
Connection direction of the connector to the PCB	90 °

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

1043790 FP 0,8/ 80-MV-SH 1,15**6 Dimensions****6.1 Dimensions for the product**

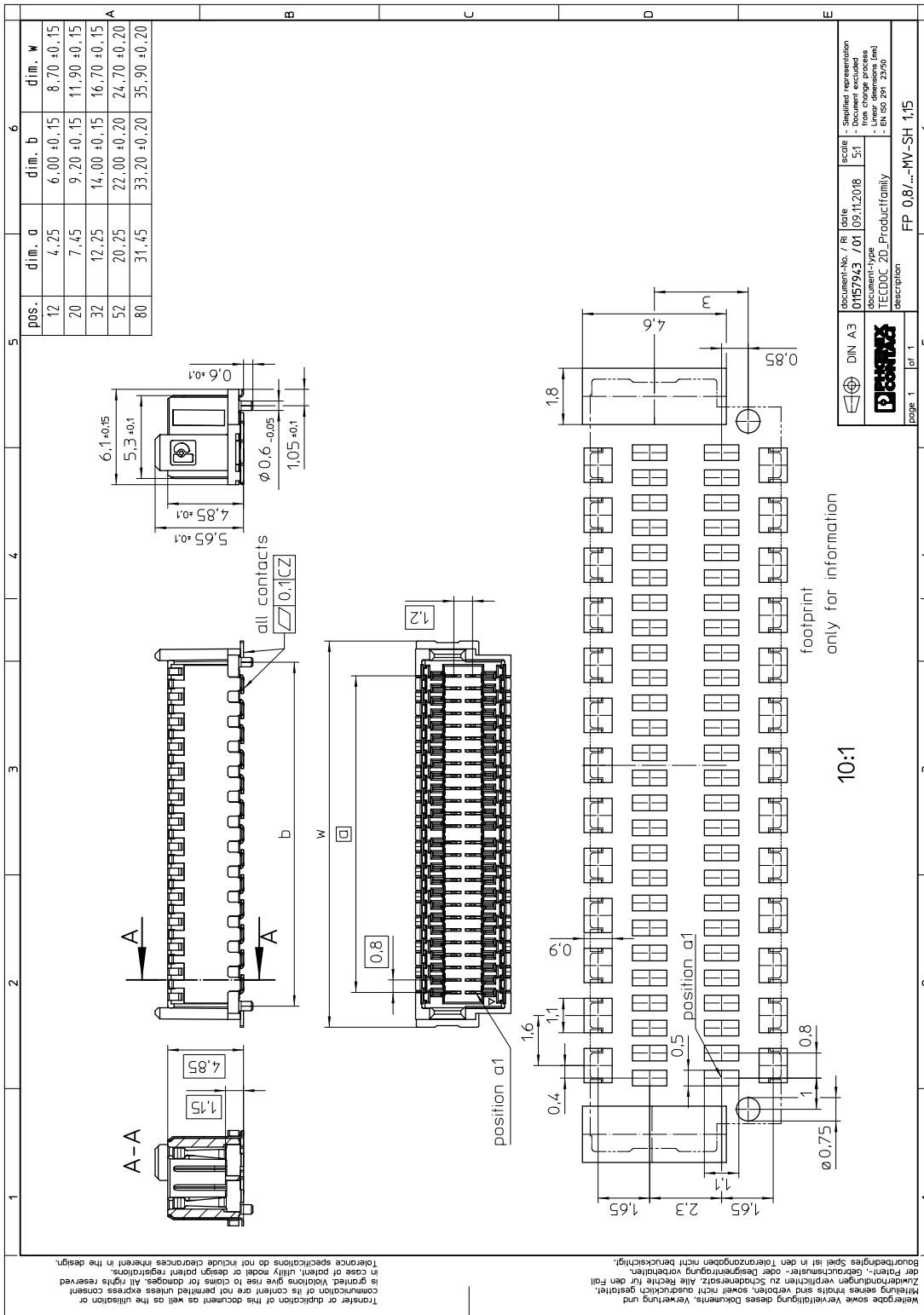
Length	6.1 mm
Width	35.9 mm
Total height	6.25 mm
Height	5.65 mm
Base height	1.15 mm
Positioning pin geometry	, Length of positioning pin: 0.6 mm
Coplanarity	≤ 0.1 mm

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)

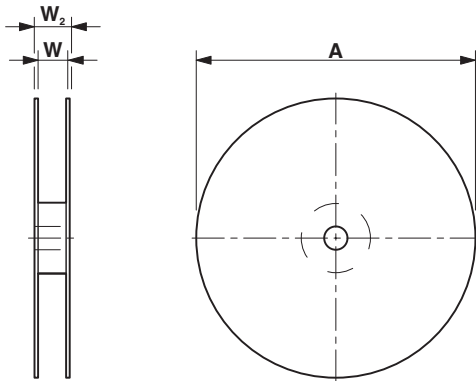
1043790 FP 0,8/ 80-MV-SH 1,15

7 Series drawing



1043790 FP 0,8/ 80-MV-SH 1,15**8 Packaging information**

Type of packaging	56 mm wide tape
Pieces per package	500
Outer packaging type	Transparent-Bag
[W] tape width	56.4 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	62.4 mm
Number of products per coil	500



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

1043790 FP 0,8/ 80-MV-SH 1,15

11 General tests

11.1 Specification



Brief description

Board-to-board connectors

1043790 FP 0,8/ 80-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

1043790 FP 0,8/ 80-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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1043790 FP 0,8/ 80-MV-SH 1,15

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)

1043790 FP 0,8/ 80-MV-SH 1,15

15 Data transmission

15.1 Data transmission rate

Data rate

up to 16 Gbps

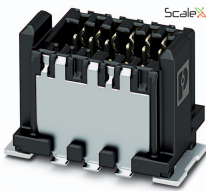
16 Approvals

1043790 FP 0,8/ 80-MV-SH 1,15**17 Commercial Data**

Order No.	1043790
Type	FP 0,8/ 80-MV-SH 1,15
Pieces per package	500
Net weight	2.572 g
GTIN	4055626616902
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

1043790 FP 0,8/ 80-MV-SH 1,15

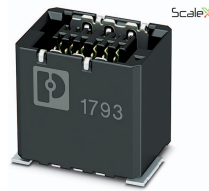
18 Combination tests



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 Ω	20 m Ω		
Insertion/withdrawal cycles	500	500		
Contact resistance R_2	20 m Ω	20 m Ω		
Thermal tests				