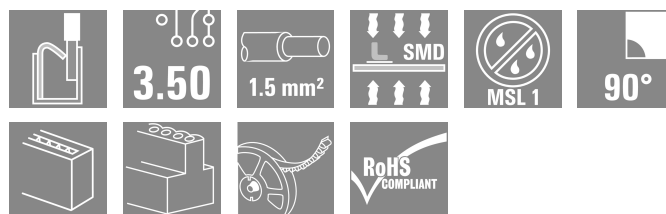
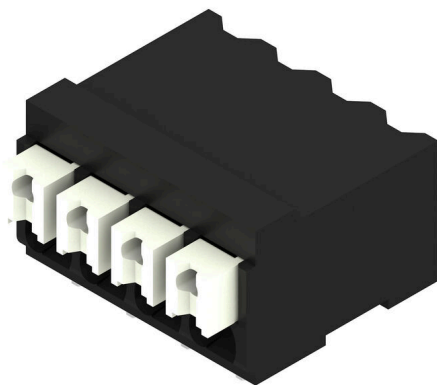


LSF-SMD 3.50/04/90 SN BK RL
Weidmüller Interface GmbH & Co. KG

 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com
Product image


The innovative quick connector - simple, safe and economical:

PCB terminals with spring connection and direct PUSH IN technology. A milestone in connection technology.

Amazingly simple and simply amazing in practice:

- Connect and easily detach solid wires or wires with wire-end ferrules without using tools
- Processed automatically in the reflow or vapour phase
- Potentials and clamping points marked clearly by coloured push buttons

World-class design-in and processing phases, and suitable for a vast range of applications.

PCB terminal for fully automatic assembly using reflow soldering (SMD), with PUSH IN wire connections. Conductor insertion and slider operation from the same direction (TOP).

- Solid & flexible conductors with wire-end ferrules need only to be inserted and they are ready.
- When connecting stranded wires without wire-end ferrules the actuating element is used to open the terminal point
- Intuitive handling – since the wire-entry area and handling area are clearly separated.
- Packaged in tape-on-reel
- Conductor outlet direction 90°

General ordering data

Version	Printed circuit board terminals, 3.50 mm, Number of poles: 4, 90°, black, PUSH IN with actuator, Clamping range, max.: 1.5 mm², Tape
Order No.	1473510000
Type	LSF-SMD 3.50/04/90 SN BK RL
GTIN (EAN)	4050118280029
Qty.	320 items
Product data	IEC: 320 V / 17.5 A / 0.2 - 1.5 mm² UL: 300 V / 12 A / AWG 28 - AWG 14
Packaging	Tape

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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Dimensions and weights

Depth	14.75 mm	Depth (inches)	0.5807 inch
Height	9.65 mm	Height (inches)	0.3799 inch
Height of lowest version	9.65 mm	Width	14.7 mm
Width (inches)	0.5787 inch	Net weight	3.21 g

Temperatures

Continuous operating temp., max.	120 °C
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Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%
Product Carbon Footprint	Cradle to gate 0.021 kg CO2 eq.

System parameters

Product family	OMNIMATE Signal - series LSF	Wire connection method	PUSH IN with actuator
Mounting onto the PCB	SMD solder connection	Conductor outlet direction	90°
Pitch in mm (P)	3.50 mm	Pitch in inches (P)	0.138 "
Number of poles	4	Pin series quantity	1
Fitted by customer	No	Number of rows	1
Coplanarity:	100 µm	Number of solder pins per pole	2
Stripping length	8 mm	L1 in mm	10.50 mm
L1 in inches	0.414 "	Touch-safe protection acc. to DIN VDE 0470	IP 20
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Protection degree	IP20
Volume resistance	1.60 mΩ		

Material data

Insulating material	LCP GF	Colour	black
Colour of operational elements	white	Colour chart (similar)	RAL 9011
Insulating material group	IIla	Comparative Tracking Index (CTI)	≥ 175
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Layer structure of solder connection	4...6 µm Sn matt
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-30 °C	Temperature range, installation, max.	120 °C

Conductors suitable for connection

Clamping range, min.	0.13 mm²
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Clamping range, max.	1.5 mm ²		
Wire connection cross section AWG, min.	AWG 28		
Wire connection cross section AWG, max.	AWG 14		
Solid, min. H05(07) V-U	0.2 mm ²		
Solid, max. H05(07) V-U	1.5 mm ²		
Flexible, min. H05(07) V-K	0.2 mm ²		
Flexible, max. H05(07) V-K	1.5 mm ²		
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.25 mm ²		
w. plastic collar ferrule, DIN 46228 pt 4, max.	0.75 mm ²		
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm ²		
w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm ²		
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.25 mm ²
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire-end ferrule	H0.25/12 HBL
	Cross-section for conductor connection	Type	fine-wired
		nominal	0.34 mm ²
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire-end ferrule	H0.34/12 TK
	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm ²
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire-end ferrule	H0.5/14 OR
	Cross-section for conductor connection	Type	fine-wired
		nominal	0.75 mm ²
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire-end ferrule	H0.75/14T HBL
Reference text	Length of ferrules is to be chosen depending on the product and the rated voltage., The outside diameter of the plastic collar should not be larger than the pitch (P)		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current at min. number of poles (Tu = 20 °C)	17.5 A
Rated current, max. number of poles (Tu=20°C)	16 A	Rated current, min. number of poles (Tu=40°C)	17.5 A
Rated current at max. number of poles (Tu = 40 °C)	14 A	Rated voltage for surge voltage class (pollution degree II/2)	320 V
Rated voltage for surge voltage class (pollution degree III/2)	160 V	Rated voltage for surge voltage class (pollution degree III/3)	160 V
Rated impulse voltage for surge voltage class (pollution degree II/2)	2.5 kV	Rated impulse voltage for surge voltage class (pollution degree III/2)	2.5 kV
Rated impulse voltage for surge voltage class (contamination degree III/3)	2.5 kV	Short-time withstand current resistance	3 x 1s with 80 A

Rated data acc. to CSA

Institute (CSA)	CSA	Certificate No. (CSA)	200039-1664286
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	10 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 14

Creation date 02.08.2026 07:50:50 MEZ

Catalogue status / Drawings

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Technical data

Reference to approval values

Specifications are
maximum values, details -
see approval certificate.

Rated data acc. to UL 1059

Institute (cURus)	CURUS	Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	12 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

ESD Level packaging	static dissipative	Packaging	Tape
VPE length	330.00 mm	VPE width	328.00 mm
VPE height	41.00 mm	Tape depth (T2)	10.90 mm
Tape width (W)	32 mm	Tape pocket depth (K0)	10.40 mm
Tape pocket height (A0)	15.10 mm	Tape pocket width (B0)	16.50 mm
Tape pocket separation (P1)	20.00 mm	Tape hole separation (E)	1.75 mm
Tape pocket separation (F)	14.20 mm	Tape reel diameter ϕ (A)	330 mm
Surface resistance	Rs = 109 - 1012 Ω		

Type tests

Test: Durability of markings	Test	mark of origin, type identification, pitch, approval marking UL, durability	
Test: Clampable cross section	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 12.02	
	Conductor type	Type of conductor and conductor cross-section	solid 0.14 mm ²
		Type of conductor and conductor cross-section	stranded 0.14 mm ²
		Type of conductor and conductor cross-section	solid 1.5 mm ²
		Type of conductor and conductor cross-section	stranded 1.5 mm ²
		Type of conductor and conductor cross-section	AWG 24/1
		Type of conductor and conductor cross-section	AWG 22/19
		Type of conductor and conductor cross-section	AWG 16/1
		Type of conductor and conductor cross-section	AWG 16/19
Test for damage to and accidental loosening of conductors	Evaluation	passed	
	Standard	DIN EN 60999-1 section 9.4 / 12.00	
	Requirement	0.2 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 24/1

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Pull-out test		Type of conductor and conductor cross-section	AWG 24/19
	Evaluation	passed	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	stranded 0.25 mm ²
		Type of conductor and conductor cross-section	solid 0.5 mm ²
	Evaluation	passed	
	Requirement	0.4 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 1.5 mm ²
		Type of conductor and conductor cross-section	stranded 1.5 mm ²
		Type of conductor and conductor cross-section	AWG 16/1
		Type of conductor and conductor cross-section	AWG 16/19
	Evaluation	passed	
	Standard	DIN EN 60999-1 section 9.5 / 12.00	
	Requirement	≥10 N	
	Conductor type	Type of conductor and conductor cross-section	AWG 24/1
		Type of conductor and conductor cross-section	AWG 24/19
	Evaluation	passed	
	Requirement	≥20 N	
	Conductor type	Type of conductor and conductor cross-section	stranded 0.25 mm ²
		Type of conductor and conductor cross-section	H05V-U0.5
	Evaluation	passed	
	Requirement	≥40 N	
	Conductor type	Type of conductor and conductor cross-section	H07V-U1.5
		Type of conductor and conductor cross-section	H07V-K1.5
		Type of conductor and conductor cross-section	AWG 16/1
		Type of conductor and conductor cross-section	AWG 16/19
	Evaluation	passed	

Important note

IPC conformity

Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp.

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Technical data

fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

Notes

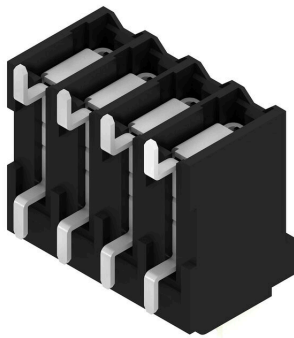
- Additional push button colours on request
- Operating force of slider max. 40 N
- Rated current related to rated cross-section & min. No. of poles.
- Wire end ferrule with plastic collar to DIN 46228/4
- Wire end ferrule without plastic collar to DIN 46228/1
- P on drawing = pitch
- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
- Crimping shape "A" for wire end ferrules with PZ 6/5 crimping tool recommended.
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

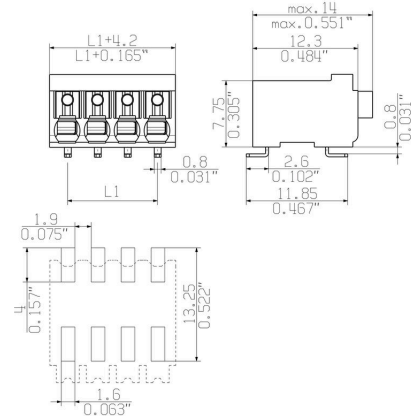
ETIM 8.0	EC002643	ETIM 9.0	EC002643
ETIM 10.0	EC002643	ECLASS 14.0	27-46-01-01
ECLASS 15.0	27-46-01-01		

Drawings

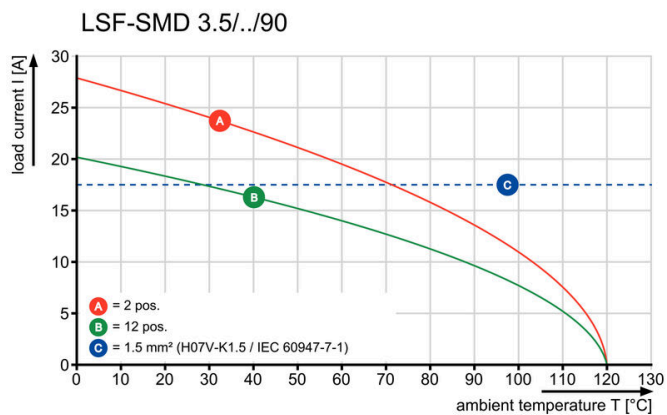
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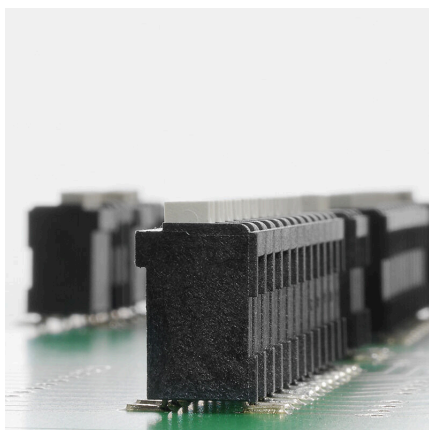
Dimensional drawing



Graph

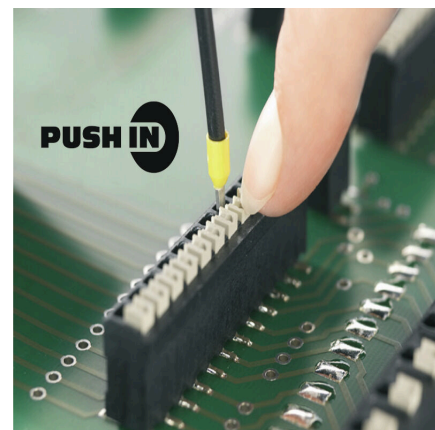


Product benefits



Stable solder connection

Product benefits



PUSH IN wire connection

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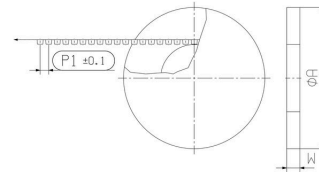
Drawings

Product benefits



Packaged in tape-on-reel

Dimensional drawing



Dimensional drawing

