

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

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OMNIMATE® - Board-to-Board connectors Flexible engineering of compact devices

The use of future-proof contact systems, as well as the optimisation of manufacturing processes, are increasingly important in the development of efficient industrial devices, especially in the field of Industry 4.0. OMNI-MATE® board-to-board connectors feature a 1.27 mm pitch and offer maximum flexibility due to different designs.

- Flexible device design Industrial suitable density combined with high flexible connection combinations (Mezzanine, Mother-to-Daughter, Extender-card, Cable-to-Board)
- Automation-Ready Developed for automatic assembly with high precise pin coplanarity and SMT-fixation
- Reliable contact Up to 500 mating cycles due to industry suitable gold-surface (PdNi-Au)
- Process-Ready High performance LCP material for reflow soldering
- Scalability Different heights with high contact overlapping ensure various solutions from 12 80 poles.
- Robust miniaturisation simple and safe connection even possible under unfavorable mating conditions – e.g. inclination or offset.

#### **General ordering data**

Version	PCB plug-in connector, female plug, Pitch in mm (P): 1.27 mm, Number of poles: 26, Tray (manual
	assembly)
Order No.	<u>2747550000</u>
Туре	FFP D1/26H S1 B TY
GTIN (EAN)	4050118895971
Qty.	120 ST
Product data	IEC: / 1.9 A
	UL: 150 V / 1 A / AWG 30 sol - AWG 30 sol
Packaging	Tray (manual assembly)





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# Technical data

Approvals			
Approvals			
	C US		
ROHS	Conform		
JL File Number Search	<u>UL Website</u>		
Certificate No. (cURus)	E92202		
Dimensions and weights			
Depth	5.6 mm	Depth (inches)	0.2205 inch
Height	14.05 mm	Height (inches)	0.5531 inch
Width	24.29 mm	Width (inches)	0.9563 inch
Net weight	2.54 g	viidii (monoo)	0.0000 111011
Environmental Product Comp	oliance		
RoHS Compliance Status	Compliant without exemptio	n	
REACH SVHC	No SVHC above 0.1 wt%		
System Parameters			
Product family	OMNIMATE Signal - Board-	Type of connection	Insulation displacemen
·	to-Board		connection (IDC)
Nire connection method	IDC terminal	Pitch in mm (P)	1.27 mm
Pitch in inches (P)	0.050 "	Conductor outlet direction	90°/270°
Number of poles	26	Number of rows	1
Pin series quantity	2	Protection degree	IP20
Volume resistance	<25 mΩ	Plugging cycles	500
Plugging force/pole, max.	0.6 N	Pulling force/pole, max.	0.6 N
Material data			
Insulating material	LCP	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	Illa
nsulation strength	≥ 10 <sup>10</sup> Ω	Moisture Level (MSL)	1
UL 94 flammability rating	V-0	Contact base material	Copper alloy
Contact material	Cu-alloy	Contact surface	Ni/Au
Layer structure of plug contact	≥ 2 µm Ni / ≥ 0.4 µm PdNi / ≥ 0.05 µm Au	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-55 °C
Operating temperature, max.	125 °C		
Conductors suitable for conn	ection		
IAlina annua di annua di ANAIO	AVAIC 20 /1 00 /7	Mina and a street of the stree	ANA/C 20 /4 20 /7
Wire connection cross section AWG, min.	AWG 30/1, 30/7	Wire connection cross section AWG, max.	AWG 30/1, 30/7
Outer diameter of insulation, min.	0.55 mm	Outer diameter of insulation, max.	0.75 mm
Rated data acc. to IEC			
Rated current, min. number of poles	1.9 A	Rated current, max. number of poles	2.3 A
Tu=20°C) Rated current, min. number of poles	2.5 A	(Tu=20°C) Creepage distance, min.	0.4 mm
(Tu=40°C)	2.3 A	Greepage distance, IIIII.	0.4 11111

Creation date 25.07.2025 01:06:31 MEZ

(Tu=40°C)

Clearance, min.

Catalogue status / Drawings 2

0.4 mm





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# **Technical data**

Rated data acc. to UL 1977			
Reference to approval values	Specifications are maximum values, details - see approval certificate.	Rated voltage (UL 1977) (obsolete)	150 V
Rated current (UL 1977) (obsolete)	1 A	AWG-conductor, min. (UL 1977)	30 sol
AWG-conductor, max. (UL 1977)	30 sol		
Packing			
Dookoaina	Tray (manual assembly)	VDE longth	179.00 mm
Packaging VPE width	117.00 mm	VPE length VPE height	65.00 mm
Important note			
	recognized standards and no	re developed, manufactured and delivered orms and comply with the assured prope n accordance with IPC-A-610 "Class 2". F	erties in the data sheet resp
PC conformity	recognized standards and no	orms and comply with the assured prope n accordance with IPC-A-610 "Class 2". F	erties in the data sheet resp
	recognized standards and no fulfill decorative properties i	orms and comply with the assured prope n accordance with IPC-A-610 "Class 2". F	erties in the data sheet resp
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PC conformity  Notes  Classifications	recognized standards and no fulfill decorative properties i can be evaluated on request	orms and comply with the assured prope n accordance with IPC-A-610 "Class 2". F t.	erties in the data sheet resp Further claims on the produ
PC conformity  Notes  Classifications  ETIM 6.0	recognized standards and no fulfill decorative properties is can be evaluated on request EC002638	orms and comply with the assured prope n accordance with IPC-A-610 "Class 2". F t. ETIM 7.0	erties in the data sheet resp Further claims on the produced EC002638
Notes Classifications ETIM 6.0 ETIM 8.0	recognized standards and no fulfill decorative properties is can be evaluated on request EC002638	orms and comply with the assured propen accordance with IPC-A-610 "Class 2". Fit.  ETIM 7.0  ETIM 9.0	erties in the data sheet respondenties in the data sheet respondential in the production of the produc
PC conformity  Notes  Classifications  ETIM 6.0  ETIM 8.0  ETIM 10.0	recognized standards and no fulfill decorative properties is can be evaluated on request EC002638	orms and comply with the assured prope n accordance with IPC-A-610 "Class 2". F t. ETIM 7.0	erties in the data sheet respondenties in the data sheet respondent in the production on the production of the productio
Notes Classifications ETIM 6.0 ETIM 8.0 ETIM 10.0 ECLASS 9.1	recognized standards and no fulfill decorative properties is can be evaluated on request EC002638  EC002638  EC002638	erms and comply with the assured propen accordance with IPC-A-610 "Class 2". Fig. 1. ETIM 7.0  ETIM 9.0  ECLASS 9.0  ECLASS 10.0	EC002638 EC002638 27-44-03-09
IPC conformity  Notes	recognized standards and no fulfill decorative properties is can be evaluated on request EC002638 EC002638 EC002638 27-44-03-09	erms and comply with the assured prope n accordance with IPC-A-610 "Class 2". F it.  ETIM 7.0  ETIM 9.0  ECLASS 9.0	EC002638 EC002638 27-44-03-09 27-44-03-09



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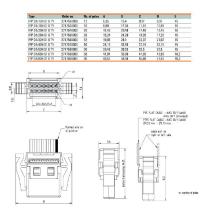
# **Drawings**



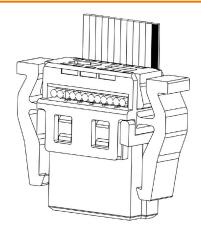


With optional strain relief

#### **Dimensional drawing**



### **Detailed drawing**





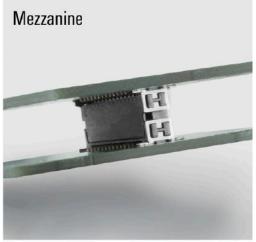
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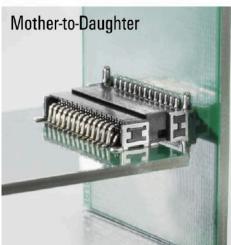
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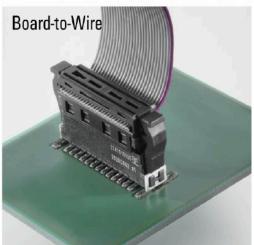
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# **Drawings**











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### Accessories

#### FC/FFP - Strain relief (Accessory)



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Туре	FC/FFP ZE/26 B BX	Version
Order No.	2853120000	PCB plug-in connector, Accessories, Pitch in mm (P): 1.27 mm,
GTIN (EAN)	4064675475798	Number of poles: 26, Box
Qty.	100 ST	

Creation date 25.07.2025 01:06:31 MEZ



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## Counterpart

#### FMH - Male header, Board connection



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### **General ordering data**

Туре	FMH S1/26H F1 B RL	Version
Order No.	<u>2747190000</u>	PCB plug-in connector, male header, SMD solder connection, Pitch in
GTIN (EAN)	4064675000976	mm (P): 1.27 mm, Number of poles: 26, 90°, Tape
Qty.	560 ST	

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# Counterpart

#### FMH1 - Male header, Board connection (stack height 1.75 mm)



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### **General ordering data**

Туре	FMH1 S1/26V F1 B RL	Version
Order No.	2747010000	PCB plug-in connector, male header, SMD solder connection, Pitch in
GTIN (EAN)	4064675001225	mm (P): 1.27 mm, Number of poles: 26, 180°, Tape
Qty.	280 ST	

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# Counterpart

#### FMH3 - Male header, Board connection (stack height 3.25 mm)



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### **General ordering data**

Туре	FMH3 S1/26V F1 B RL	Version
Order No.	2747100000	PCB plug-in connector, male header, SMD solder connection, Pitch in
GTIN (EAN)	4064675001218	mm (P): 1.27 mm, Number of poles: 26, 180°, Tape
Qty.	280 ST	

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