

FP 1,27/ 16-FWL - IDC female connectors



1714903

<https://www.phoenixcontact.com/us/products/1714903>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



IDC female connector, nominal current: 1.2 A, Test voltage: 500 V AC, number of positions: 16, pitch: 1.27 mm, color: black, contact surface: Au, contact connection type: Socket, For preassembled samples, see the "Accessories" tab.

Your advantages

- Gold-plated contacts ensure transfer quality remains stable over the long term
- Compact, high-position board-to-board or wire-to-board connectors for space-saving device designs
- Can be ordered pre-assembled: IDC female connectors with flat-ribbon cable enable immediate use in the device

Commercial data

Item number	1714903
Packing unit	400 pc
Minimum order quantity	400 pc
Sales key	AA24
Product key	AAXMAA
GTIN	4055626402833
Weight per piece (including packing)	1.86 g
Weight per piece (excluding packing)	1.757 g
Customs tariff number	85366990
Country of origin	CZ

Technical data

Notes

Note on application	Please observe the application note on self-assembly in the download area.
Note regarding documentation	Current documents such as 3D models, products family drawings, data sheets or packaging drawings are available in the Download Center.
Notes on operation	The permissible voltage during operation depends on the application, taking into consideration the air clearances and creepage distances within the scope of insulation requirements in accordance with IEC 60664-1.

Product properties

Product type	IDC female connector
Product family	FR 1,27/...-FWL
Number of positions	16
Pitch	1.27 mm
Number of rows	2
Number of potentials	16

Data management status

Article revision	01
------------------	----

Electrical properties

Nominal current I_N	1.2 A IEC 60512-5-2:2002-02 (at 20°C 50-pos.)
Contact resistance	10 mΩ
Test voltage	500 V AC IEC 60512-4-1:2003

Connection data

Conductor connection

Connection method	Displacement connection
Conductor cross section AWG	30

Interlock

Locking type	Snap-in locking
Mounting flange	Latching flange

Dimensions

Pitch	1.27 mm
Width [w]	16.32 mm
Height [h]	4.2 mm
Length [l]	13.65 mm

Application

Center offset	± 0.7 mm in longitudinal and transverse direction
---------------	---

Angular tolerance	± 4 ° in longitudinal direction
	± 2 ° in transverse direction

Material specifications

Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Selective coating
Metal surface contact area (top layer)	Gold (Au)
Metal surface contact area (middle layer)	Nickel (Ni) Palladium nickel, (PdNi)

Material data - housing

Color (Housing)	black (9005)
Insulating material	LCP
Insulating material group	IIIb
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

Connector

Connection 1

Insulating material	LCP
CTI according to IEC 60112	175

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-2:2002-02
Tested number of positions	50

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	≥ 10 GΩ

Mechanical tests

Insertion and withdrawal forces

Result	Test passed
No. of cycles	500
Insertion strength per pos. approx.	0.5 N
Withdraw strength per pos. approx.	0.5 N

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
---------------	-----------------------

FP 1,27/ 16-FWL - IDC female connectors



1714903

<https://www.phoenixcontact.com/us/products/1714903>

Frequency	10 - 2000 - 10 Hz
Sweep speed	1 octave/min
Amplitude	1.5 mm (10 Hz ... 60.1 Hz)
Acceleration	20g (60.1 Hz ... 2000 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Durability test

Specification	IEC 60512-9-1:2010-03 (following)
Impulse withstand voltage at sea level	0.8 kV
Contact resistance R_1	10 m Ω
Contact resistance R_2	10 m Ω
Insertion/withdrawal cycles	500
Insulation resistance, neighboring positions	≥ 10 G Ω

Climatic test

Specification	IEC 60512-11-7:2003-05
Corrosive stress	Method 1, 10 days
Power-frequency withstand voltage	500 V AC

Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	50g
Shock duration	11 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)

Ambient conditions

Ambient temperature (operation)	-55 °C ... 125 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	Tray
-------------------	------

FP 1,27/ 16-FWL - IDC female connectors



1714903

<https://www.phoenixcontact.com/us/products/1714903>

Classifications

ECLASS

ECLASS-11.0	27460202
ECLASS-12.0	27460202
ECLASS-13.0	27460202

ETIM

ETIM 8.0	EC002638
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

FP 1,27/ 16-FWL - IDC female connectors



1714903

<https://www.phoenixcontact.com/us/products/1714903>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com