SPE-T1-M12MRM-90 - SPE PCB connector

1363338

https://www.phoenixcontact.com/us/products/1363338

PHŒNIX CONTACT

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.

SPE PCB connector, design: SPE, degree of protection: IP65/IP67, number of positions: 2, material: LCP, connection method: THR solder connection, cable outlet: straight, color: black, Single Pair Ethernet

Your advantages

- Easily integrated: M12 male and female versions for established inductive sensors and flying leads
- Cross-application: range of up to 1000 m, data rates of up to 1 Gbps, and power of up to 50 W
- Totally protected: Advanced Shielding Technology provides a reliable shield connection for network cables, even under extreme environmental conditions
- Future-proof: standardized connectors and cables in accordance with IEC 63171-5

Commercial data

Item number	1363338
Packing unit	80 pc
Minimum order quantity	80 pc
Sales key	AB13
Product key	ABNBEA
GTIN	4063151708429
Weight per piece (including packing)	9.625 g
Weight per piece (excluding packing)	9.625 g
Customs tariff number	85366930
Country of origin	DE

SPE-T1-M12MRM-90 - SPE PCB connector

1363338

https://www.phoenixcontact.com/us/products/1363338

Technical data

Product properties

Product type		Data connector (device side)
Type		SPE
Sensor type		Single Pair Ethernet
Number of positions		2
Type of packaging		Tape and Reel
[W] tape width		44.00 mm
[A] coil diameter		330.00 mm
[W2] coil overall dimension		50.40 mm
Number of slots		1
Cable outlet		straight
Thread type		M12

Data management status

Article revision	02

Insulation characteristics

Overvoltage category	II
Degree of pollution	2

Electrical properties

Maximum load current	4 A
Rated voltage (III/2)	72 V DC
Rated surge voltage	2250 V DC
Rated surge voltage (III/2)	1500 V
Rated current	4 A
Frequency range	600 MHz
Insulation resistance	min. 1 TΩ
Contact resistance	20 mΩ
Transmission medium	Copper
Transmission characteristics (category)	CAT B (IEC 63171)
Transmission speed	1 Gbps
Power transmission	PoDL

Output data

Transmission frequency	600.00 MHz

Connection data

Connection technology

Connection method	THR solder connection

Interfaces

Transmission speed	1 Gbps1 Gbps

Dimensions

Width	15.3 mm
Height	14.4 mm
Length	31.6 mm
Installed height	12.00 mm
Orientation to	90.00 °

Material specifications

Color	black
Color of the housing part	black
Flammability rating according to UL 94	V0
Housing material	LCP
Housing surface material	Ni/Sn
Contact material	Cu alloy
Contact surface material	Au/Ni

Cable/line

Test voltage Core/Core	1000 V DC
Test voltage Core/Shield	2250.00 V DC
Test voltage, cable	300 V

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100
Insertion force per signal contact	< 30.00 N (in accordance with IEC 63171)
Extraction force per signal contact	< 30 N (in accordance with IEC 63171)
Smallest bending radius	21,2 mm

Environmental and real-life conditions

Test specification

Type of test	Vibration test
Specification	IEC 60068-2-6
Frequency	10-500 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm
Acceleration	50.00 m/s²
Test duration	2.00 h

Test specification

Specification	IEC 63171
Corrosive stress	IEC 60512-11-7
Contact resistance R_1	20.00 mΩ

Test specification

Type of test	Mechanical service life with corrosion test
Specification	DIN EN 60512-9-1

Test specification

Type of test	Shock testing
Specification	IEC 60068-2-27
Acceleration	150.00 m/s²
Number of shocks per direction	2000.00

Ambient conditions

Degree of protection	IP65/IP67
Ambient temperature (operation)	-40 °C ... 85 °C (Harsh environment)
Ambient temperature (storage/transport)	-40 °C ... 85 °C (DIN EN 60512-6-3)
Resistance to UV radiation	yes

Mounting

Mounting type	PCB mounting

Processing notes

Process	Reflow
Moisture Sensitive Level	MSL 1
Classification temperature T_c	260 °C
Solder cycles in the reflow	3

Classifications

ECLASS

ECLASS-11.0	27440190
ECLASS-12.0	27440190
ECLASS-13.0	27440190

ETIM

ETIM 9.0	EC002943

SPE-T1-M12MRM-90 - SPE PCB connector

https://www.phoenixcontact.com/us/products/1363338

Accessories

SACC-BP-M-M12-SMD PP - Housing screw connection

1107993

https://www.phoenixcontact.com/us/products/1107993

Housing screw connection, Pin, M12-Push-pull external locking, Rear mounting, SMD, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1308006

SACC-FP-M-M12-SMD PP - Housing screw connection

1107999

https://www.phoenixcontact.com/us/products/1107999

Housing screw connection, Pin, M12-Push-pull external locking, Front mounting, SMD

SPE-T1-M12MRM-90 - SPE PCB connector

1363338

https://www.phoenixcontact.com/us/products/1363338

SPE-T1-M12MS/ 5,0-99B/M12FS - Network cable

1478373

https://www.phoenixcontact.com/us/products/1478373

Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position, PUR halogen-free, green, shielded (Advanced Shielding Technology), Plug straight M12-SPE / IP67, on Socket straight M12-SPE / IP67, cable length: 5 m

SPE-T1-M12MS/ 2,0-97B/M12FS - Network cable

1364626

https://www.phoenixcontact.com/us/products/1364626

Network cable, Single Pair Ethernet CAT A (10 Mbps), 2-position, PVC, black, shielded (Advanced Shielding Technology), Plug straight M12-SPE / IP67, on Socket straight M12-SPE / IP67, cable length: 2 m

SPE-T1-M12MRM-90 - SPE PCB connector

1363338

https://www.phoenixcontact.com/us/products/1363338

SPE-T1-M12FS/ 2,0-97B/M12FS - Network cable

1364631

https://www.phoenixcontact.com/us/products/1364631

Network cable, Single Pair Ethernet CAT A (10 Mbps), 2-position, PVC, black, shielded (Advanced Shielding Technology), Socket straight M12-SPE / IP67, on Socket straight M12-SPE / IP67, cable length: 2 m

SPE-T1-M12FS/ 2,0-99B/M12FS - Network cable

1364623

https://www.phoenixcontact.com/us/products/1364623

Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position, PUR halogen-free, green, shielded (Advanced Shielding Technology), Socket straight M12-SPE / IP67, on Socket straight M12-SPE / IP67, cable length: 2 m

SPE-T1-M12MRM-90 - SPE PCB connector

1363338

https://www.phoenixcontact.com/us/products/1363338

SPE-T1-M12MS/ 2,0-99B/M12FS - Network cable

1364621

https://www.phoenixcontact.com/us/products/1364621

Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position, PUR halogen-free, green, shielded (Advanced Shielding Technology), Plug straight M12-SPE / IP67, on Socket straight M12-SPE / IP67, cable length: 2 m

SPE-T1-M12MS/10,0-99B/M12FS - Network cable

1478375

https://www.phoenixcontact.com/us/products/1478375

Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position, PUR halogen-free, green, shielded (Advanced Shielding Technology), Plug straight M12-SPE / IP67, on Socket straight M12-SPE / IP67, cable length: 10 m

SPE-T1-M12MRM-90 - SPE PCB connector

1363338

https://www.phoenixcontact.com/us/products/1363338

SPE-T1-M12MS/ 1,0-99B/M12FS - Network cable

1478372

https://www.phoenixcontact.com/us/products/1478372

Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position, PUR halogen-free, green, shielded (Advanced Shielding Technology), Plug straight M12-SPE / IP67, on Socket straight M12-SPE / IP67, cable length: 1 m

SPE-T1- 1,0-99B/M12FS - Network cable

1478368

https://www.phoenixcontact.com/us/products/1478368

Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position, PUR halogen-free, green, shielded (Advanced Shielding Technology), free cable end, on Socket straight M12-SPE / IP67, cable length: 1 m

SPE-T1-M12MRM-90 - SPE PCB connector

1363338

https://www.phoenixcontact.com/us/products/1363338

SPE-T1-10,0-99B/M12FS - Network cable

1478371

https://www.phoenixcontact.com/us/products/1478371

Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position, PUR halogen-free, green, shielded (Advanced Shielding Technology), free cable end, on Socket straight M12-SPE / IP67, cable length: 10 m

SPE-T1- 2,0-99B/M12FS - Network cable

1478369

https://www.phoenixcontact.com/us/products/1478369

Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position, PUR halogen-free, green, shielded (Advanced Shielding Technology), free cable end, on Socket straight M12-SPE / IP67, cable length: 2 m

SPE-T1-M12MRM-90 - SPE PCB connector

1363338

https://www.phoenixcontact.com/us/products/1363338

SPE-T1- 5,0-99B/M12FS - Network cable

1478370

https://www.phoenixcontact.com/us/products/1478370

Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position, PUR halogen-free, green, shielded (Advanced Shielding Technology), free cable end, on Socket straight M12-SPE / IP67, cable length: 5 m