

Technical data sheet

IO-Link master

Part no.: 50138211

MD 748i-11-82/L5-2222

Contents

- Technical data
- Electrical connection
- Accessories



For illustration purposes only



Technical data

Basic data

Series	MD 700i
Type	IO-Link master
Suitable for	IO-Link sensors

Electrical data

Performance data	
Supply voltage U_B	20 ... 30 V, DC
Current consumption, max.	12,000 mA
Outputs	
Number of digital switching outputs for each sensor connection	1 Piece(s)

Interface

Type	IO-Link PROFINET
IO-Link	
COM mode	COM1 COM2 COM3
Port type	A
Specification	V1.0.1 V1.1
SIO-mode support	Yes
PROFINET	
Conformance class	B
Protocol	PROFINET RT
Switch functionality	Integrated
Transmission speed	10 Mbit/s 100 Mbit/s

Connection

Number of connections	12 Piece(s)
Sensor connections	8 Piece(s)
Connections for voltage supply	2 Piece(s)
Number of interface connections	2 Piece(s)

Connection 1

Function	Connection to 8 sensors
Type of connection	Connector, Applies for the sensor connections 1 - 8
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Connection 2

Function	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	L-coded

Connection 3

Function	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	L-coded

Connection 4

Function	Data interface
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	4 -pin
Encoding	D-coded

Connection 5

Function	Data interface
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	4 -pin
Encoding	D-coded

Mechanical data

Dimension (W x H x L)	65 mm x 30 mm x 212 mm
Housing material	Plastic
Net weight	454 g

Environmental data

Ambient temperature, operation	-25 ... 60 °C
Ambient temperature, storage	-40 ... 70 °C

Certifications

Degree of protection	IP 67
Certifications	c UL US

Classification

Customs tariff number	85176200
ECLASS 5.1.4	19030117
ECLASS 8.0	19170106
ECLASS 9.0	19170106
ECLASS 10.0	19170490
ECLASS 11.0	19170490
ECLASS 12.0	19170490
ECLASS 13.0	19170490
ECLASS 14.0	19170490
ETIM 5.0	EC002585
ETIM 6.0	EC002585
ETIM 7.0	EC003558
ETIM 8.0	EC000734
ETIM 9.0	EC000734

Electrical connection

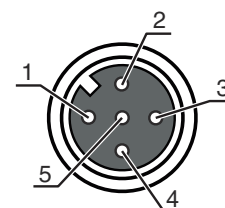
Connection 1

1 - 8

Function	Connection to 8 sensors
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Pin Pin assignment

Pin	Pin assignment
1	L+
2	IN1
3	L-
4	IO-Link / OUT 1 / IN 1
5	n.c.



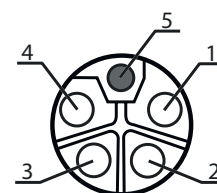
Connection 2

PWR IN

Function	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	L-coded

Pin Pin assignment

Pin	Pin assignment
1	US+
2	UA-
3	US-
4	UA+
5	N/A



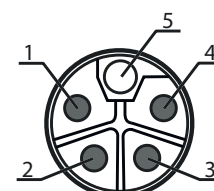
Connection 3

PWR OUT

Function	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	L-coded

Pin Pin assignment

Pin	Pin assignment
1	US+
2	UA-
3	US-
4	UA+
5	N/A



Electrical connection

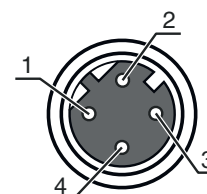
Connection 4

ETH1

Function	Data interface
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	4 -pin
Encoding	D-coded

Pin	Pin assignment
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1	Tx+
2	Rx+
3	Tx-
4	Rx-



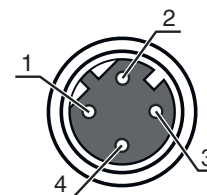
Connection 5

ETH2

Function	Data interface
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	4 -pin
Encoding	D-coded

Pin	Pin assignment
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1	Tx+
2	Rx+
3	Tx-
4	Rx-







Accessories

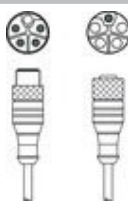
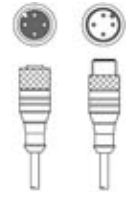

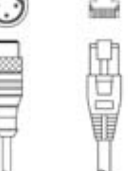
Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50141463	KD PL-M12-5A-P0-050	Connection cable	Connection 1: Connector, M12, Axial, Female, L-coded, 5 -pin Connector, LED: No Shielded: No Cable length: 5.000 mm Sheathing material: PUR
	50143054	KD PL-M12-5A-P0-100	Connection cable	Connection 1: Connector, M12, Axial, Female, L-coded, 5 -pin Connector, LED: No Shielded: Yes Cable length: 10.000 mm Sheathing material: PUR




Accessories

	Part no.	Designation	Article	Description
	50143055	KD PL-M12-5A-P0-150	Connection cable	Connection 1: Connector, M12, Axial, Female, L-coded, 5 -pin Connector, LED: No Shielded: Yes Cable length: 15.000 mm Sheathing material: PUR
	50143056	KD PL-M12-5A-P0-250-2.5	Connection cable	Connection 1: Connector, M12, Axial, Female, L-coded, 5 -pin Connector, LED: No Shielded: No Cable length: 25.000 mm Sheathing material: PUR
	50130657	KD U-M12-4A-P1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5.000 mm Sheathing material: PUR
	50130694	KD U-M12-4W-P1-050	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5.000 mm Sheathing material: PUR

Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	50141462	KDS PL-M12-5A-M12-5A-P0-020	Interconnection cable	Connection 1: Connector, M12, Axial, Male, L-coded, 5 -pin Connection 2: Connector, M12, Axial, Female, L-coded, 5 -pin Shielded: No Cable length: 2,000 mm Sheathing material: PUR
	50130743	KDS U-M12-4A-M12-4A-P1-050	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 4 -pin Shielded: No Cable length: 5,000 mm Sheathing material: PUR
	50130761	KDS U-M12-4A-M12-4W-P1-050	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Connector, M12, Angled, Male, A-coded, 4 -pin Shielded: No Cable length: 5,000 mm Sheathing material: PUR
	50135081	KSS ET-M12-4A-RJ45-A-P7-050	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

Accessories

	Part no.	Designation	Article	Description
  	50136183	KSS ET-M12-4W- RJ45-A-P7-050	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Angled, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

Note

A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.