

Technical data sheet

Distribution box

Part no.: 50131482

MD 748i-11-42/L5-2222

Contents

- Technical data
- Electrical connection
- Accessories



Figure can vary



Technical data

Basic data

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

Electrical data

Protective circuit	Overvoltage protection
	Short circuit protected

Performance data

Supply voltage U_B	20 ... 30 V, DC
Current consumption, max.	4,000 mA

Outputs

Number of digital switching outputs for each sensor connection	1 Piece(s)
Switching element	Transistor, PNP / NPN reversible

Switching outputs

Switching current, max.	500 mA
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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
Dual-core operating mode	Yes
PROFINET	
Function	Process
Conformance class	B
Protocol	PROFINET RT
Switch functionality	Integrated
Transmission speed	10 Mbit/s 100 Mbit/s

Connection

Number of connections	8 Piece(s)
Sensor connections	4 Piece(s)
Connections for voltage supply	2 Piece(s)
Number of interface connections	2 Piece(s)

Connection 1

Function	Configuration interface
	Data interface
Type of connection	Connector, Applies for the sensor connections 1-4
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Connection 2

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

Connection 3

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

Connection 4

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

Connection 5

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

Mechanical data

Design	Cubic
Dimension (W x H x L)	51.8 mm x 42.7 mm x 154 mm
Housing material	Plastic
Net weight	454 g
Housing color	Black
Type of fastening	Through-hole mounting

Operation and display

Type of display	LED
Number of LEDs	13 Piece(s)
Operational controls	Rotary switch
Function of the operational control	Setting the IP address

Environmental data

Ambient temperature, operation	0 ... 55 °C
Ambient temperature, storage	-40 ... 70 °C

Certifications

Degree of protection	IP 67
Certifications	c UL US

Technical data

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
ETIM 5.0	EC002585
ETIM 6.0	EC002585
ETIM 7.0	EC003558
ETIM 8.0	EC000734

Electrical connection

Connection 1

ETH1

Function	Configuration interface Data interface
Type of connection	Connector
Type of connection	Applies for the sensor connections 1-4
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Pin Pin assignment

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

Connection 2

ETH2

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

Pin Pin assignment

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

Electrical connection

Connection 3

PWR IN

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

Pin	Pin assignment
1	L+
2	L2+
3	L-
4	L2-
5	n.c.

Connection 4

PWR OUT

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

Pin	Pin assignment
1	L+
2	L2+
3	L-
4	L2-
5	n.c.

Connection 5

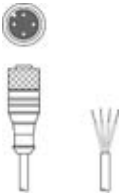

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Function	Connection to sensor
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

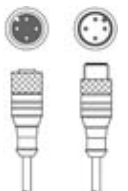


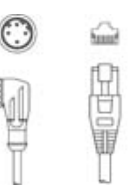
Pin	Pin assignment
1	L+
2	IN 1
3	L-
4	IO-Link / OUT 1 / IN 1
5	n.c.

Accessories

Connection technology - Connection cables

	Part no.	Designation	Article	Description
	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
	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
	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.