

**Part no.: 50138212**  
**MD 748iC-11-82/L5-2222 F001**  
**Distribution box**



Figure can vary

## Contents

- Technical data
- Electrical connection
- Accessories

## Technical data

<b>Basic data</b>	
Type	IO-Link master

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

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

<b>Connection</b>	
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)
<b>Connection 1</b>	
Type of connection	Connector
Function	Connection to 8 sensors
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	A-coded
<b>Connection 2</b>	
Type of connection	Connector
Function	Voltage supply
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	L-coded

**Connection 3**

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

**Connection 4**

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

**Connection 5**

Type of connection	Connector
Function	Data interface
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

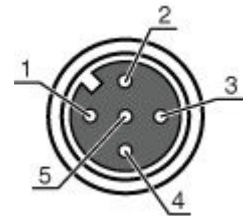
**Classification**

Customs tariff number	85176200
eCl@ss 8.0	19170106
eCl@ss 9.0	19170106
ETIM 5.0	EC000734
ETIM 6.0	EC000734

## Electrical connection

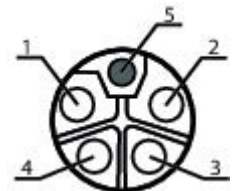
Connection 1	1 - 8
Type of connection	Connector
Function	Connection to 8 sensors
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

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



Connection 2	PWR IN
Type of connection	Connector
Function	Voltage supply
Thread size	M12
Type	Female
Material	Metal
No. of pins	5 -pin
Encoding	L-coded

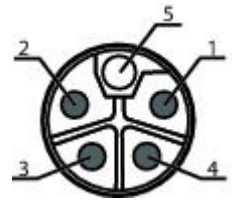
Pin	Pin assignment
1	US+
2	UA-
3	US-
4	UA+
5	N/A



Connection 3	PWR OUT
Type of connection	Connector
Function	Voltage supply
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	L-coded

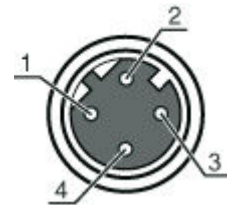
Part no.: 50138212 – MD 748iC-11-82/L5-2222 F001 – Distribution box

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



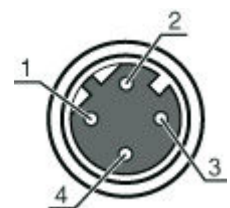
Connection 4	ETH1
Type of connection	Connector
Function	Data interface
Thread size	M12
Type	Female
Material	Metal
No. of pins	4 -pin
Encoding	D-coded

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












Connection 5	ETH2
Type of connection	Connector
Function	Data interface
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-






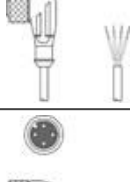
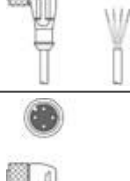



**Accessories**

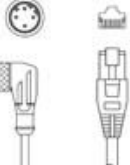
## Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50141463	KD PL-M12-5A-P0-050	Connection cable	Connection 1: Connector, M12, Axial, Male, L-coded, 5 -pin Shielded: No Cable length: 5,000 mm Sheathing material: PUR
	50130654	KD U-M12-4A-P1-020	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PUR
	50130656	KD U-M12-4A-P1-030	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 3,000 mm Sheathing material: PUR
	50130657	KD U-M12-4A-P1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PUR
	50130658	KD U-M12-4A-P1-100	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PUR
	50130648	KD U-M12-4A-V1-020	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PVC
	50130651	KD U-M12-4A-V1-030	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 3,000 mm Sheathing material: PVC
	50130652	KD U-M12-4A-V1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC
	50130653	KD U-M12-4A-V1-100	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PVC

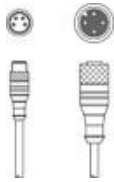
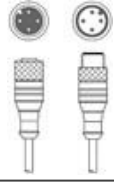
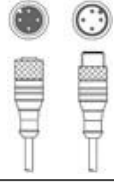
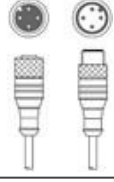
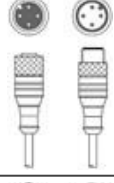
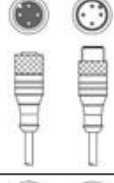

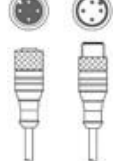
**Part no.: 50138212 – MD 748iC-11-82/L5-2222 F001 – Distribution box**

	Part no.	Designation	Article	Description
	50130692	KD U-M12-4W-P1-020	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PUR
	50130693	KD U-M12-4W-P1-030	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 3,000 mm Sheathing material: PUR
	50130694	KD U-M12-4W-P1-050	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PUR
	50130695	KD U-M12-4W-P1-100	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PUR
	50130688	KD U-M12-4W-V1-020	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 2,000 mm Sheathing material: PVC
	50130689	KD U-M12-4W-V1-030	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 3,000 mm Sheathing material: PVC
	50130690	KD U-M12-4W-V1-050	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC
	50130691	KD U-M12-4W-V1-100	Connection cable	Connection 1: Connector, M12, Angled, Female, A-coded, 4 -pin Connection 2: Open end Shielded: No Cable length: 10,000 mm Sheathing material: PVC

**Connection technology - Interconnection cables**

	Part no.	Designation	Article	Description
	50136183	65S 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

Part no.: 50138212 – MD 748iC-11-82/L5-2222 F001 – Distribution box



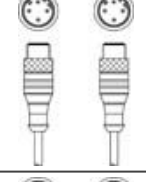
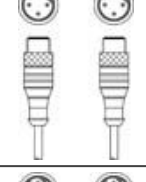
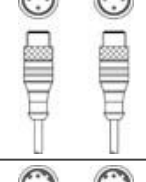
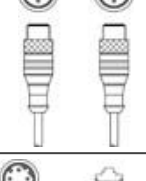
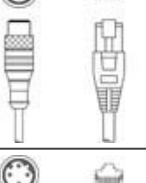
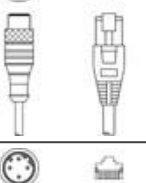
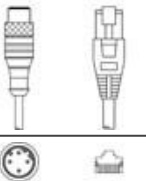
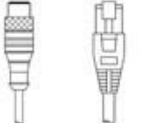
	Part no.	Designation	Article	Description
	50116738	K-DS M12A-M8A-4P-0,3m-PVC	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 4 -pin Connection 2: Connector, M8, Axial, Male, 4 -pin Shielded: No Cable length: 300 mm Sheathing material: PVC
	50141462	KDS PL-M12-5A-M12-5A-P0-020	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
	50130737	KDS U-M12-4A-M12-4A-P1-003	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: 300 mm Sheathing material: PUR
	50130738	KDS U-M12-4A-M12-4A-P1-006	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: 600 mm Sheathing material: PUR
	50130739	KDS U-M12-4A-M12-4A-P1-010	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: 1,000 mm Sheathing material: PUR
	50130740	KDS U-M12-4A-M12-4A-P1-015	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: 1,500 mm Sheathing material: PUR
	50130741	KDS U-M12-4A-M12-4A-P1-020	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: 2,000 mm Sheathing material: PUR
	50130742	KDS U-M12-4A-M12-4A-P1-030	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: 3,000 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
	50130744	KDS U-M12-4A-M12-4A-P1-100	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: 10,000 mm Sheathing material: PUR



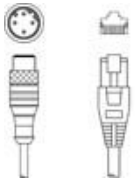
**Part no.: 50138212 – MD 748iC-11-82/L5-2222 F001 – Distribution box**

	Part no.	Designation	Article	Description
	50130756	KDS U-M12-4A-M12-4W-P1-003	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: 300 mm Sheathing material: PUR
	50130757	KDS U-M12-4A-M12-4W-P1-006	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: 600 mm Sheathing material: PUR
	50130758	KDS U-M12-4A-M12-4W-P1-010	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: 1,000 mm Sheathing material: PUR
	50130759	KDS U-M12-4A-M12-4W-P1-020	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: 2,000 mm Sheathing material: PUR
	50130760	KDS U-M12-4A-M12-4W-P1-030	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: 3,000 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
	50130750	KDS U-M12-4A-M12-4W-V1-003	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: 300 mm Sheathing material: PVC
	50130751	KDS U-M12-4A-M12-4W-V1-006	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: 600 mm Sheathing material: PVC
	50130752	KDS U-M12-4A-M12-4W-V1-010	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: 1,000 mm Sheathing material: PVC
	50130753	KDS U-M12-4A-M12-4W-V1-020	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: 2,000 mm Sheathing material: PVC

**Part no.: 50138212 – MD 748iC-11-82/L5-2222 F001 – Distribution box**

	Part no.	Designation	Article	Description
	50130754	KDS U-M12-4A-M12-4W-V1-030	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: 3,000 mm Sheathing material: PVC
	50130755	KDS U-M12-4A-M12-4W-V1-050	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: PVC
	50137077	KSS ET-M12-4A-M12-4A-P7-020	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: Connector, M12, Axial, Male, D-coded, 4 -pin Shielded: Yes Cable length: 1,000 mm Sheathing material: PUR
	50137078	KSS ET-M12-4A-M12-4A-P7-050	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: Connector, M12, Axial, Male, D-coded, 4 -pin Shielded: Yes Cable length: 1,000 mm Sheathing material: PUR
	50137079	KSS ET-M12-4A-M12-4A-P7-100	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: Connector, M12, Axial, Male, D-coded, 4 -pin Shielded: Yes Cable length: 10,000 mm Sheathing material: PUR
	50137080	KSS ET-M12-4A-M12-4A-P7-150	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: Connector, M12, Axial, Male, D-coded, 4 -pin Shielded: Yes Cable length: 15,000 mm Sheathing material: PUR
	50130632	KSS ET-M12-4A-RJ45-A-P7-010	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 1,000 mm Sheathing material: PUR
	50135080	KSS ET-M12-4A-RJ45-A-P7-020	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 2,000 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
	50135082	KSS ET-M12-4A-RJ45-A-P7-100	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 10,000 mm Sheathing material: PUR

Part no.: 50138212 – MD 748iC-11-82/L5-2222 F001 – Distribution box

	Part no.	Designation	Article	Description
	50135083	KSS ET-M12-4A-RJ45-A-P7-150	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 15,000 mm Sheathing material: PUR