

## Technical data sheet

### Optical data transmission

Part no.: 50113046  
DDLS 200/120.1-50-M12

#### Contents

- Technical data
- Electrical connection
- Operation and display
- Suitable receivers
- Accessories



For illustration purposes only



CANopen

DeviceNet

## Technical data

### Basic data

Series	DDLS 200
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### Special version

Special version	Not influenced by reflective surfaces Operation of parallel light axes
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### Optical data

Working range	200 ... 120,000 mm
Light source	LED
Transmission frequency	F1
Opening angle	1 °

### Electrical data

#### Performance data

Supply voltage $U_B$	18 ... 30 V, DC
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#### Inputs

Number of digital switching inputs	1 Piece(s)
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#### Outputs

Number of digital switching outputs	1 Piece(s)
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### Interface

Type	CANopen, DeviceNet
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#### CANopen

Transmission speed	10 ... 1,000 kBit/s
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#### DeviceNet

Transmission speed	125 ... 500 kBit/s
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### Connection

Number of connections	3 Piece(s)
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#### Connection 1

Type of connection	Connector
Designation on device	BUS IN
Thread size	M12
Type	Male
No. of pins	5 -pin
Encoding	A-coded

#### Connection 2

Type of connection	Connector
Designation on device	BUS OUT
Thread size	M12
Type	Female
No. of pins	5 -pin
Encoding	A-coded

#### Connection 3

Type of connection	Connector
Designation on device	PWR
Thread size	M12
Type	Male
No. of pins	5 -pin
Encoding	A-coded

### Mechanical data

Dimension (W x H x L)	89.25 mm x 196.5 mm x 111.8 mm
Housing material	Metal
Net weight	1,245 g

### Operation and display

Type of display	Bar graph LED
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### Environmental data

Ambient temperature, operation	-5 ... 50 °C
Ambient temperature, storage	-30 ... 70 °C

### Certifications

Degree of protection	IP 65
Approvals	c UL US
Test procedure for EMC in accordance with standard	EN 61000-6-2:2005 EN 61000-6-4:2001
Test procedure for noise in accordance with standard	EN 60068-2-64
Test procedure for oscillation in accordance with standard	EN 60068-2-6
Test procedure for shock in accordance with standard	EN 60068-2-27 EN 60068-2-29

### Classification

Customs tariff number	84718000
ECLASS 5.1.4	19039001
ECLASS 8.0	19179090
ECLASS 9.0	19179090
ECLASS 10.0	19170506
ECLASS 11.0	19170506
ECLASS 12.0	19170506
ECLASS 13.0	19170506
ECLASS 14.0	19170506
ECLASS 15.0	19170506
ETIM 5.0	EC000515
ETIM 6.0	EC000515
ETIM 7.0	EC000515
ETIM 8.0	EC000515
ETIM 9.0	EC000515
ETIM 10.0	EC000515

## Electrical connection

### Connection 1

### BUS IN

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

Pin	Pin assignment
1	OUT WARN
2	PE
3	GND
4	VIN
5	IN 1

### Connection 2

### BUS OUT

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

Pin	Pin assignment
1	Drain
2	V+
3	V-
4	CAN H
5	CAN L

### Connection 3

### PWR

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	VIN
2	OUT WARN
3	GND
4	IN 1
5	FE


## Operation and display

LED	Display	Meaning
1	Green	Operating mode
2	Green	PWR

## Operation and display


LED	Display	Meaning
3	Green	TRANSMIT DATA (Tx)
4	Green	RECEIVE DATA (Rx)
5	Yellow	BUF
6	Yellow	ERPA
7	Yellow	BOFF

## Suitable receivers


	Part no.	Designation	Article	Description
	50113045	DDLS 200/120.2-50-M12	Optical data transmission	Special version: Operation of parallel light axes, Not influenced by reflective surfaces Working range: 200 ... 120,000 mm Transmission frequency: F2 Interface: CANopen, DeviceNet Connection: Connector, M12

## Accessories

### Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50132079	KD U-M12-5A-V1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5.000 mm Sheathing material: PVC

### Connection technology - Terminating resistors

	Part no.	Designation	Article	Description
	50040099	TS 01-5-SA	Terminator plug	Suitable for: DeviceNet, CANopen Function: Bus termination Connection 1: Connector, M12, Axial, Male, A-coded, 5 -pin

#### Note



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