



Part no.: 50143528
CMS748i-0960-0800-0720
Contour measurement system








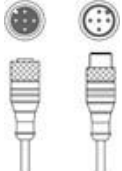


Figure can vary

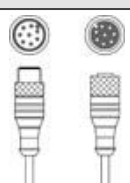

Contents

- . Set consists of
- . Technical data
- . Dimensioned drawings
- . Electrical connection
- . Diagrams
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- . Accessories

Set consists of

	Quantity	Part no.	Designation	Article	Description
	6	424417	BT-2P40	Mounting bracket set	Contains: BT-P40 clamp bracket, 2x Bore hole 1: M6 Bore hole 2: M6 Design of mounting device: Mounting clamp Fastening, at system: Groove mounting Mounting bracket, at device: Groove mounting Type of mounting device: Clampable Material: Metal
	1	50118745	CML730i-R05-720.A/L-M12	Light curtain receiver	Operating range: 0.1 ... 4.5 m Interface: IO-Link Connection: Connector, M12, Axial, 8 -pin
	1	50118746	CML730i-R05-800.A/L-M12	Light curtain receiver	Operating range: 0.1 ... 4.5 m Interface: IO-Link Connection: Connector, M12, Axial, 8 -pin
	1	50118748	CML730i-R05-960.A/L-M12	Light curtain receiver	Operating range: 0.1 ... 4.5 m Interface: PROFINET, IO-Link Connection: Connector, M12, Axial, 8 -pin
	1	50118584	CML730i-T05-720.A-M12	Light curtain transmitter	Operating range: 0.1 ... 4 m Connection: Connector, M12, Axial, 5 -pin
	1	50118585	CML730i-T05-800.A-M12	Light curtain transmitter	Operating range: 0.1 ... 4 m Connection: Connector, M12, Axial, 5 -pin
	1	50118587	CML730i-T05-960.A-M12	Light curtain transmitter	Operating range: 0.1 ... 4 m Connection: Connector, M12, Axial, 5 -pin
	3	50129781	KDS DN-M12-5A-M12-5A-P3-050	Interconnection cable	Suitable for interface: IO-Link, DeviceNet, CANopen Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 5 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

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	Quantity	Part no.	Designation	Article	Description
	3	50135146	KDS S-M12-8A-M12-8A-P1-050	Interconnection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 8 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 8 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR
	1	50142331	LSC748-000-100	Switch cabinet	Supply voltage: 100 ... 263 V, AC Switching inputs: 4 Piece(s) Switching outputs: 4 Piece(s) Connections: 7 Piece(s)

Technical data

Basic data

Series	CMS 7xxi
Contains	1x dongle CMS700
Order guide	Additional models on request

Functions

Optical data

Operating range	Guaranteed operating range
Operating range	0.1 ... 4.5 m
Operating range, transparent media	0.1 ... 1.75 m
Operating range limit	Typical operating range
Operating range limit	0.1 ... 6 m
Measurement field length 1	960 mm
Measurement field length 2	800 mm
Measurement field length 3	720 mm
Beam spacing	5 mm

Electrical data

Protective circuit	Polarity reversal protection Short circuit protected Transient protection
Output current, continuous current per channel, max.	100 mA

Performance data

Supply voltage U_B	100 ... 263 V , AC
Open-circuit current	250 mA

Inputs

Number of digital switching inputs	4 Piece(s)
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Switching inputs

Type	Digital switching input
Voltage type	DC
Switching voltage	24 V, VIN

Outputs

Number of digital switching outputs 4 Piece(s)

Switching outputs

Type Digital switching output

Voltage type AC

Switching voltage 24 V, VIN

Interface

Type EtherNet TCP/IP , PROFINET

Ethernet

Function Configuration / process data

Profinet

Function Configuration / process data

Connection

Number of connections 9 Piece(s)

Connection 1

Function Earthing

Type of connection Earthing strap

Material Metal

Connection 2

Function Voltage supply

Type of connection Harting connector

Material Metal

Connection 3

Function Length measuring light curtain connection (not in combination with rotation encoder)

Type of connection Connector

Thread size M12

Type Male

Material Metal

No. of pins 8 -pin

Encoding A-coded

Connection 4

Function Width measuring light curtain connection

Type of connection Connector

Thread size M12

Type Male

Material Metal

No. of pins 8 -pin

Encoding A-coded

Connection 5

Function Height measuring light curtain connection

Type of connection Connector

Thread size M12

Type Male

Material Metal

No. of pins 8 -pin

Encoding A-coded

Connection 6	
Function	Rotation encoder connection (not in combination with length measuring light curtain)
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

Connection 7	
Function	External Ethernet TCP/IP connection
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	4 -pin
Encoding	A-coded

Connection 8	
Function	PROFINET IN connection (optional)
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	4 -pin
Encoding	A-coded

Connection 9	
Function	PROFINET OUT connection (optional)
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	4 -pin
Encoding	A-coded

Mechanical data	
Design	Cubic
Housing material	Metal , Aluminum
Lens cover material	Plastic
Housing color	Gray Red
Note	Dimensions of individual set items, see dimensioned drawings

Operation and display	
Note	This information refers to the switch cabinet
Type of display	LED
Number of LEDs	3 Piece(s)
Type of configuration	performed via webConfig
Operational controls	Rotary switch

Environmental data	
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Ambient temperature, operation	0 ... 45 °C
Ambient temperature, storage	-20 ... 70 °C

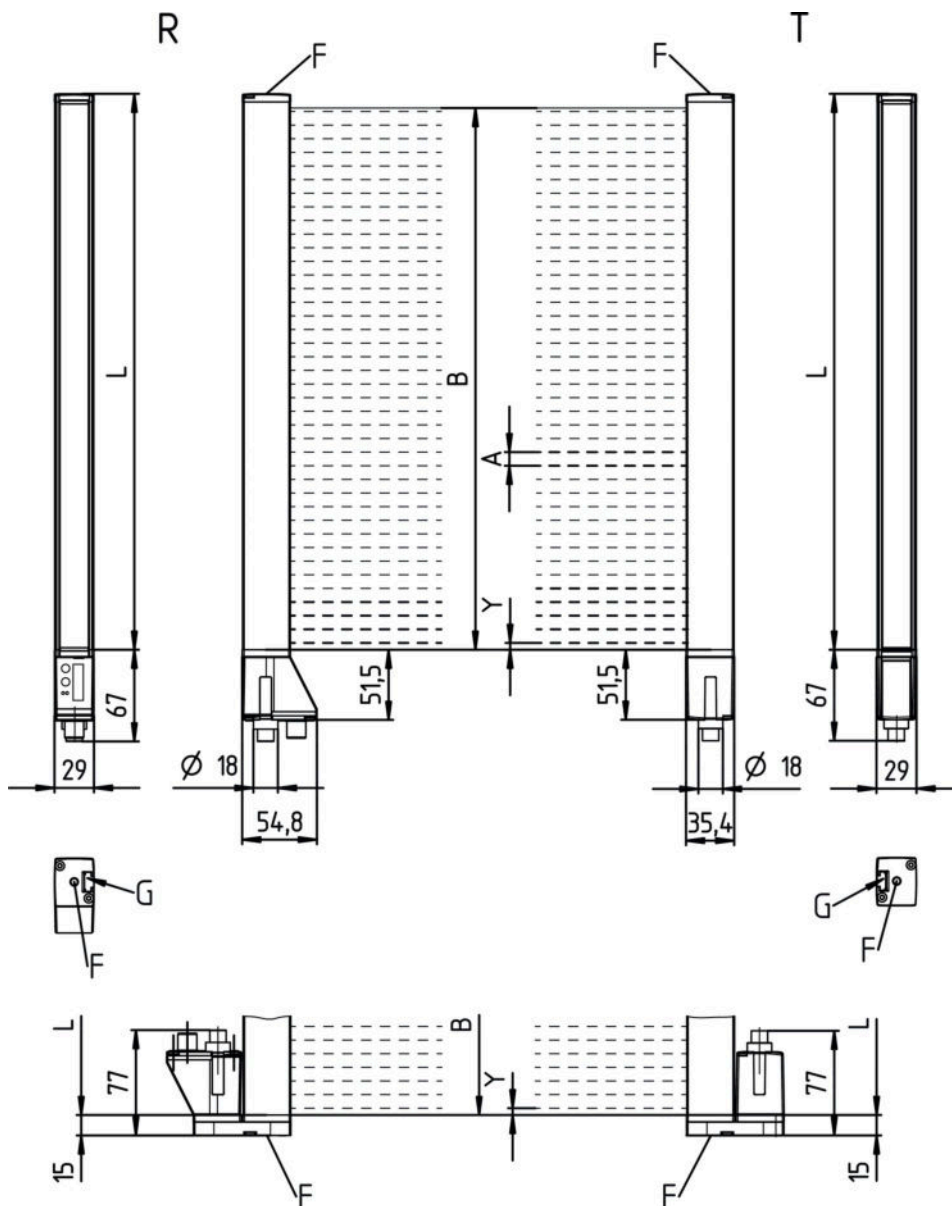
Certifications	
Certifications	CSA

Classification	
Customs tariff number	90314990

Dimensioned drawings

All dimensions in millimeters

Light curtain transmitter and receiver



A Beam spacing 5 mm

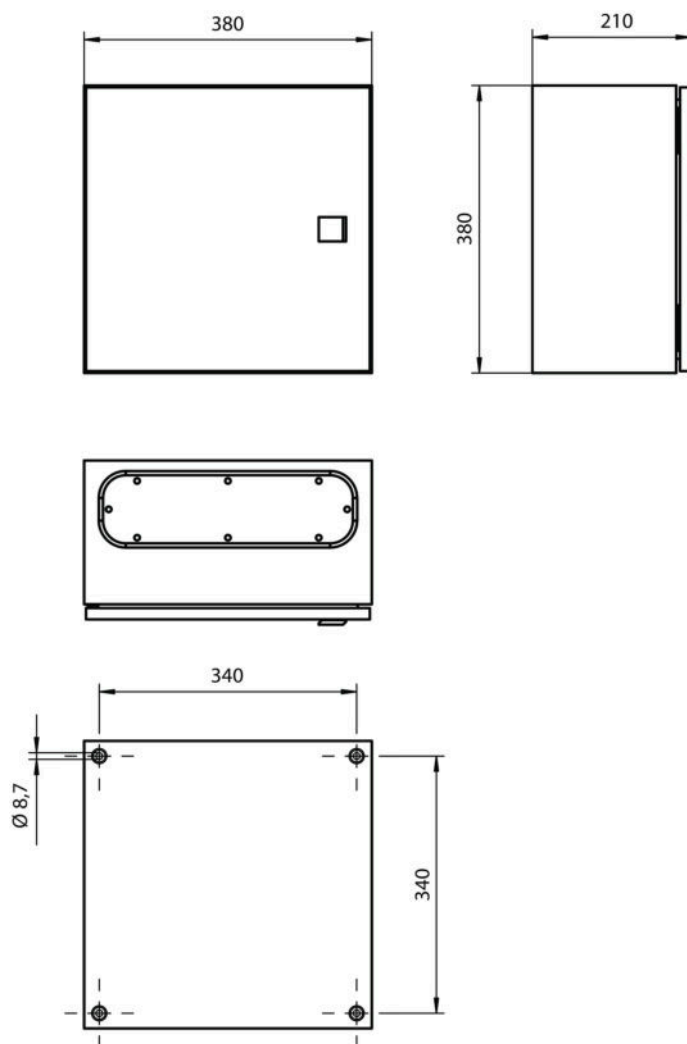
Measurement field length 1 = 960 mm
B Measurement field length 2 = 800 mm
Measurement field length 3 = 720 mm

F M6 thread
G Fastening groove

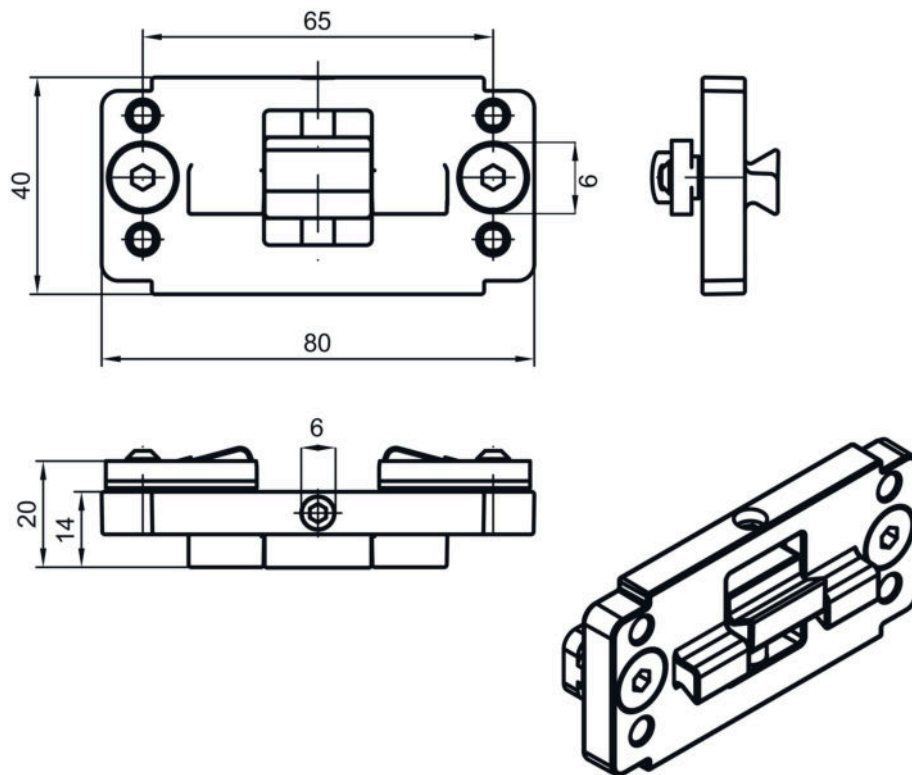
Profile length 1 = 968 mm
L Profile length 2 = 808 mm
Profile length 3 = 728 mm

T Transmitter
R Receiver
Y 2.5 mm

Switch cabinet



Mounting bracket



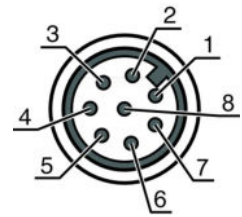
Electrical connection

Connection 1	
Function	Earthing
Type of connection	Earthing strap
Material	Metal

Connection 2	
	XS1000
Function	Voltage supply
Type of connection	Harting connector
Material	Metal

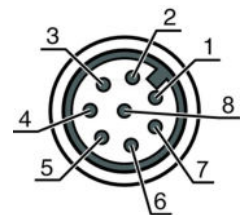
Connection 3	
	XS1300
Function	Length measuring light curtain connection (not in combination with rotation encoder)
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

Pin	Pin assignment
1	V+
2	IO1
3	GND
4	IO-Link
5	IO2
6	IO3
7	IO4
8	GND



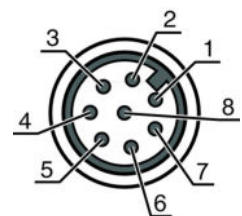
Connection 4	XS1301
Function	Width measuring light curtain connection
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

Pin	Pin assignment
1	V+
2	IO1
3	GND
4	IO-Link
5	IO2
6	IO3
7	IO4
8	GND



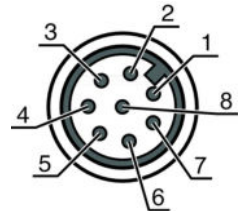
Connection 5	XS1302
Function	Height measuring light curtain connection
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

Pin	Pin assignment
1	V+
2	IO1
3	GND
4	IO-Link
5	IO2
6	IO3
7	IO4
8	GND



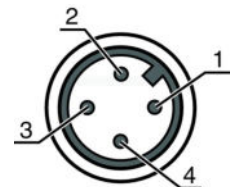
Connection 6	XS1400
Function	Rotation encoder connection (not in combination with length measuring light curtain)
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	8 -pin
Encoding	A-coded

Pin	Pin assignment
1	U-
2	U+
3	A
4	B
5	N
6	A inv.
7	B inv.
8	N inv.
9	Shield



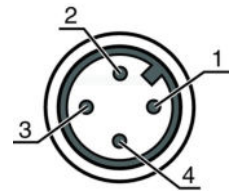
Connection 7	XETH1
Function	External Ethernet TCP/IP connection
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	4 -pin
Encoding	A-coded

Pin	Pin assignment
1	TD+
2	RD+
3	TD-
4	RD-



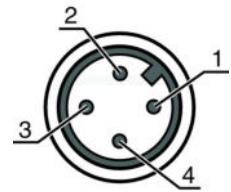
Connection 8	XS1100
Function	PROFINET IN connection (optional)
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	4 -pin
Encoding	A-coded

Pin	Pin assignment
1	TD+
2	RD+
3	TD-
4	RD-

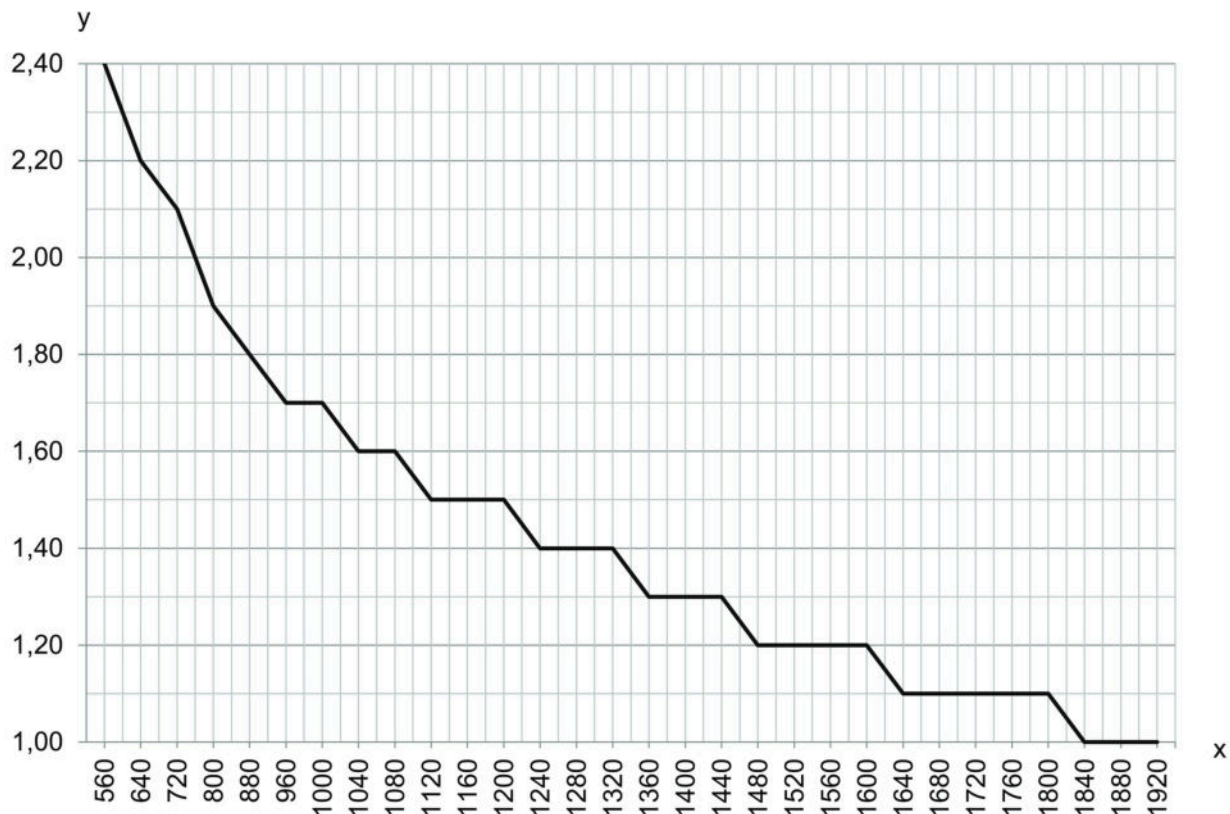


Connection 9	XS1101
Function	PROFINET OUT connection (optional)
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	4 -pin
Encoding	A-coded

Pin	Pin assignment
1	TD+
2	RD+
3	TD-
4	RD-



Diagrams



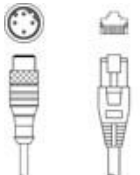
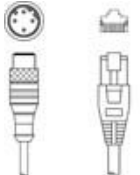
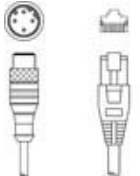
- x Total measuring length from width and height measuring light curtain [mm]
- y Max. conveyor speed [m/s]

Notes

Observe intended use!
<ul style="list-style-type: none"> • This product is not a safety sensor and is not intended as personnel protection. • The product may only be put into operation by competent persons. • Only use the product in accordance with its intended use.

Accessories

Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	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
	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
	50135084	KSS ET-M12-4A-RJ45-A-P7-300	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: RJ45 Shielded: Yes Cable length: 30,000 mm Sheathing material: PUR

Mounting technology - Other

	Part no.	Designation	Article	Description
	50143670	BT 708M-MRSET	Mounting device set	Contains: Mounting material, Mounting profiles Design of mounting device: Profile kit Fastening, at system: Screw type / vertical Mounting bracket, at device: Groove mounting Type of mounting device: Rigid Material: Aluminum
	50143669	BT 710M-MRSET	Mounting device set	Contains: Mounting profiles, Mounting material Design of mounting device: Profile kit Fastening, at system: Screw type / vertical Mounting bracket, at device: Groove mounting Type of mounting device: Rigid Material: Aluminum
	50142039	BT 712M-MRSET	Mounting device set	Contains: Mounting profiles, Mounting material Design of mounting device: Profile kit Fastening, at system: Screw type / vertical Mounting bracket, at device: Groove mounting Type of mounting device: Rigid Material: Aluminum

Note

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