4 m

24 V
DC

- Throughbeam principle with high performance reserve
- Beam spacings 5 / 10 / 20mm
- External system controller for up to 4 light strip pairs with up to 512 beams
- System-controller interface to RS232, RS485, ModBus, PROFIBUS, CANopen as well as a PNP switching output
- Can be configured via PC or PLC
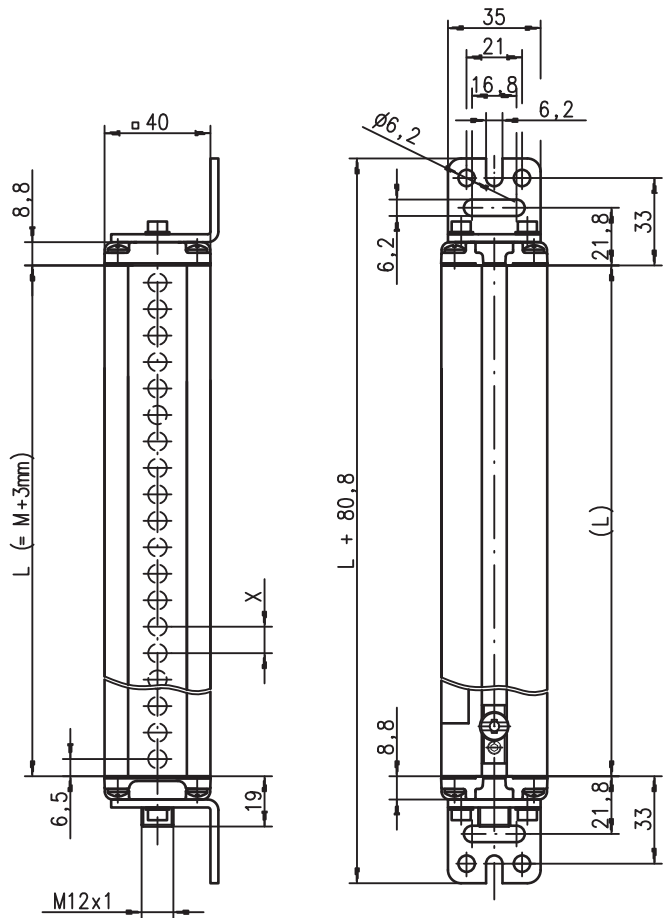- Integrated, configurable data compression
- Ex - model

CE   ISO 9001   IP 65

c UL us LISTED

Accessories:

(available separately)

- K-CB-SUBP-3000 diagnostic connection cable (RS232)
- Pin diaphragm profiles
- Mounting accessories
- Sliding block BT-NC
  Sliding blocks (recom. 1 piece/0.3m)
- K2-CB-xxx [x m]
  M12 cable controller -- light strip
  see order guide
- PC configuration software
  KONTURflexsoft, download from:
  http://www.leuze.com -> Country selection -> Download -> detect -> Measuring and switching light curtains -> KONTURflexSoftSetup.zip
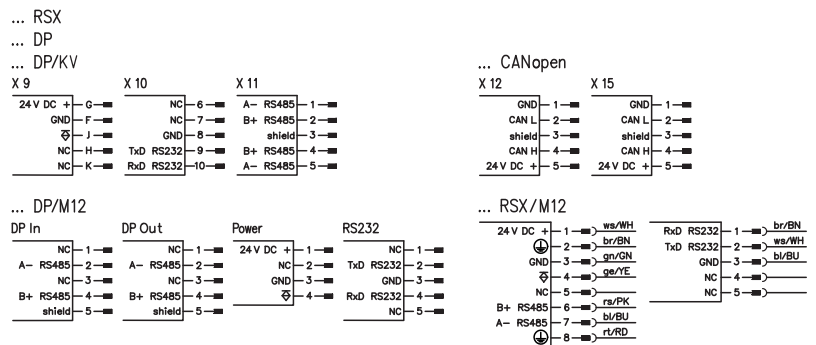
Dimensioned drawing

L   Profile length
M   Meas. field length
X   Beam spacing
See table on reverse!

	Beam spacing [mm]	Measurement field length [mm]	Profile width [mm]
K 5	5	80 … 2560	40
K 10	10	160 … 3200	40
K 20	20	160 … 3200	40

Electrical connection

KONTUR*flex*

Specifications

KONTUR*flex* measuring light curtain

Meas. field length with 5mm grid	80mm - 2560mm in increments of 80mm
Measurement field length at 10/20/40mm	160 … 3200mm
Resolution	10mm, 15mm, 25mm
Width of field measured	max. 4m
Beam spacing	5mm, 10mm, 20mm
Max. number of beams (total)	512
Time overhead per beam	50µs
Light source (transmitter)	IR LEDs, exempt group (in acc. with EN 62471)
Transmitter wavelength	880nm
Measurement field display	LEDs in the receiver
Supply voltage	from the KONTUR*flex*-QUATTRO (12VDC)
Connection	M12 plug connector
Connection cable [1]	5-pole, shielded, 20m max.
Housing	continuous-cast Al
Covering plate	PMAA dark grey
Protection class	IP 65
VDE safety class	III
Standards applied	IEC 60947-5-2, UL 508
Ambient temperature	0 … 55°C
Ground	40mm x 40mm
Fastening	lateral sliding block or face-mounted corner bracket

QUATTRO control device

Supply voltage	24VDC ±20%
Safeguarding	1AT (current consumption: 100mA + approx. 150mA per pair of light curtains)
Connectable light curtains	4 with up to max. 512 beams
Connection (light curtain)	M12 plug connector
Interface	RS 485 or PROFIBUS-DP (optical coupler)
Configuration interface	RS 232
Switching output	1 bit (optical coupler, event can be configured)
Connection	pluggable screw terminals (interfaces and supply voltage)
Operating modes	automatic and triggered scanning
Housing	plastic (fieldbus housing)
Protection class	IP 65
Certifications	UL 508 [2]
Ambient temperature	0 … 55°C
Dimensions	W = 60mm, L = 180mm, H = 40mm (w/o plug)

1) The shield must be laid flat on and in electrical contact with both sides of the connector housing!
2) With regard to power supply and wiring, observe the safety and installation instructions.

Order guide

	Designation	Part no.
Transmitter bar (see type code)	KT X-M	
Receiver bar (see type code)	KR X-M	
Controller		
RS232, RS485, MODBus	QUATTRO-RSX	670001
RS232, RS485, MODBus, M12 connection	QUATTRO-RSX/M12	670003
RS232, RS485, PROFIBUS	QUATTRO-DP	670002
RS232, RS485, PROFIBUS, screwed cable gland	QUATTRO-DP/KV	670005
RS232, RS485, PROFIBUS, M12 connection	QUATTRO-DP/M12	50111868
RS232, RS485, CANopen	QUATTRO-CANopen	670004
Accessories		
Sliding blocks	BT-NC	425720
Face-mounted retaining bracket set, standard	BT-Kflex standard	345899
Face-mounted retaining bracket set, long	BT-Kflex long version	345907
Retaining bracket set	BT-S	560120
Swivelling retaining bracket set	BT-SSD	560300
Connection cable 1 m	CB-M12-1000S-5GF/GM	678031
Connection cable 2.5 m	CB-M12-2500S-5GF/GM	678033
Connection cable 5 m	CB-M12-5000S-5GF/GM	678035
Connection cable 10 m	CB-M12-10000S-5GF/GM	678040
Connection cable 15 m	CB-M12-15000S-5GF/GM	678045
Connection cable 20 m	CB-M12-20000S-5GF/GM	678032
Configuration cable 3m (for 670001, 670002, 670005)	K-CB-SUBP-3000	678100
Connection cap	QUATTRO-DP M12 cap	50111864
PROFIBUS cable IN	KB PB-5000-BA	50104180
PROFIBUS cable OUT	KB PB-5000-SA	50104187
Power cable	K-D M12A-4P-5m-PVC	50104544
Configuration cable (for all M12 models)	KB-ROD4 plus-5000	50106881

Tables

Type code

Transmitter bar:	KT **X-M**
Receiver bar:	KR **X-M**

Beam spacing X [mm]			Measurement field length M [mm]
5	**10**	**20**	
●			80
●	●	●	160
●			240
●	●	●	320
●			400
●	●	●	480
●			560
●	●	●	640
●			720
●	●	●	800
●	●	●	960
●	●	●	1120
●	●	●	1280
●	●	●	1440
●	●	●	1600
●	●	●	1760
●	●	●	1920
●	●	●	2080
●	●	●	2240
●	●	●	2400
●	●	●	2560
	●	●	2720
	●	●	2880
		●	3040
	●	●	3200

Remarks

- **Approved purpose:**
  This product may only be used by qualified personnel and must only be used for the approved purpose. This sensor is not a safety sensor and is not to be used for the protection of persons.