

Data in connection with Data Carrier (mounted in clear zone)	At v = 0 (static condition)				
	distance [mm] read / write	Shift between center axis by distance			
		0...30mm	0..40mm	0..55mm	0..25mm
BIS L-100-01	0-30 / 0-30	± 18	-	-	-
BIS L-101-01	0-40 / 0-40	-	± 28	-	-
BIS L-102-01	0-55 / 0-55	-	-	± 30	-
BIS L-103-05	0-25 / 0-25	-	-	-	± 15

Data in connection with Data Carrier (mounted in clear zone)	At v = 0 (static condition)				
	distance [mm] read	Shift between center axis by distance			
		0..40mm	0..50mm	0..70mm	0..25mm
BIS L-200-03	0-40	± 25	-	-	-
BIS L-201-03	0-50	-	± 28	-	-
BIS L-202-03	0-70	-	-	± 35	-
BIS L-203-03	0-25	-	-	-	± 13

Mechanical Data

Housing material	Plastic
	PVDF
Read head connections	8 pin connector
Enclosure per DIN 40 050	IP 67
Weight	[g] 130
Operating temperature	[°C] 0...+70
Storage temperature	[°C] -20...+85

EMC

EN 61000-4-2/3/4/5/6	Level	4A/XA/3A/1B/XA
EN 55011		Gr. 1,Cl. A

Shaking/Shock

EN 60068 Part 2-6/27/29/64/32

Remarks

For use only with BIS L-6...
 For Installation in metal : Note clear zone
 For mounting use the included nuts

First ordering you need the cable:

- BIS L-500-PU-05
- BIS L-500-PU-10
- BIS L-501-PU1-25
- BIS L-502-PU1-25



Technical data according to normal conditions

General installation notes for BIS L

All read/write distances presume ambient temperature +20°C

If BIS L components are mounted in or on steel, or there is metal within the active field of the read/write head, the field data will be reduced and communication may be compromised.

When installing data carriers on or in steel, note the reduced read/write distances.

Precise distance data available on request.

Please note that ambient electrical fields can reduce the read/write distance.

Always observe the clear zones when installing read heads!

Otherwise, fault-free operating cannot be guaranteed.

Refer page 1 for exact distances.

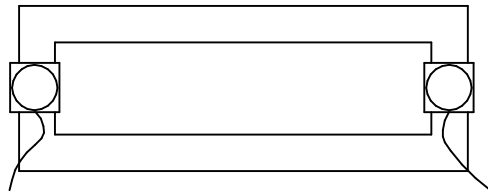
Minimum separation between read heads:

BIS L-300-S115 => min. 80cm

BIS L-301-S115 => min. 80cm

BIS L-302-S115 => min. 20cm

When mounting 2 BIS L-301-S115 on metal, there will not normally be any mutual interference. Under adverse conditions when the heads are mounted on a metal frame, there could be problems when reading BIS L-20X data carriers. In such cases the read distance is reduced to 80% of the maximum value.



Test beforehand in critical applications!

Distance from data carrier to data carrier

	BIS L-100-01/L	BIS L-101-01/L	BIS L-102-01/L	BIS L-103-05/L
BIS L-300-S115	> 25 cm	> 30 cm	> 40 cm	> 25 cm
BIS L-301-S115	> 30 cm	> 40 cm	> 50 cm	> 30 cm
BIS L-302-S115	> 15 cm	> 20 cm	> 20 cm	> 15 cm

	BIS L-200-03/L	BIS L-201-03/L	BIS L-202-03/L	BIS L-203-03/L
BIS L-300-S115	> 25 cm	> 30 cm	> 40 cm	> 25 cm
BIS L-301-S115	> 35 cm	> 40 cm	> 50 cm	> 35 cm
BIS L-302-S115	> 18 cm	> 20 cm	> 25 cm	> 18 cm

When a data carrier is being processed by a read head, the next data carrier must wait 400ms before entering the active field.

If stoppers are not used, here is an approximate formula which takes into account the conveyor speed.

Distance between data carriers in m = $(0,4 * \text{conveyor speed in m/s}) + 0,25\text{m}$

Example: Conveyor speed = 1 m/s

Distance = $(0,4 * 1\text{m/s}) + 0,25\text{m} = 0,65\text{m}$ distance between data carriers.

This is an approximation, for the worst case.

When using small data carriers and/or small read heads, the separation distance is significantly reduced!

Technical data according to normal conditions