

## General installation notes for BIS M

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

If BIS M 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!

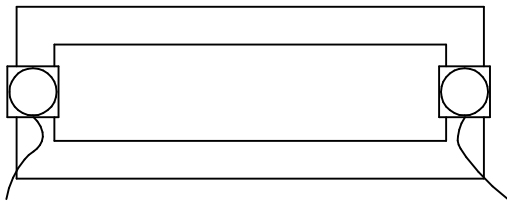
Otherwise, fault-free operating cannot be guaranteed.

Refer page 1 for exact distances.

Minimum separation between read heads:

BIS M-300-001-S115 => min. 20cm

When mounting 2 BIS M-30x-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 M-10X 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

data carrier type	BIS M-101-01/L	BIS M-102-01/L	BIS M-105-01/A
	BIS M-108-02/L	BIS M-112-02/L	BIS M-105-02/A
	BIS M-110-02/L		
	BIS M-111-02/L		
BIS M-300-001-S115	> 10 cm	> 15 cm	> 10 cm

Dynamic values BIS M-300-001-S115, measured in clear zone from min. distance up to 70% of par value

	speed in m/s							
	read							
min. Distance	9	10	3,5	3,5	9	8	9	14
DT BIS M-...	101-01/L	102-01/L	105-01/A	105-02/A	108-02/L	110-02/L	111-02/L	112-02/L
ID-Nr.	2,00	2,40	1,30	0,50	1,70	1,10	1,70	2,30
Nr. of byte 16	1,20	1,44	0,56	0,30	0,65	0,58	0,65	1,13
32	0,87	1,09	0,40	0,20	0,58	0,43	0,58	0,85
48	0,70	0,88	0,32	0,16	0,43	0,35	0,43	0,72
64	0,56	0,74	0,26	0,08	0,38	0,27	0,38	0,58
	write							
min. Distance	9	10	3,5	3,5	9	8	9	14
Nr. of byte 16	0,54	0,72	0,22	0,20	0,45	0,32	0,45	0,60
32	0,30	0,40	0,14	0,11	0,28	0,21	0,28	0,42
48	0,22	0,34	0,09	0,07	0,18	0,11	0,18	0,28
64	0,16	0,26	0,06	0,03	0,10	0,08	0,10	0,18

Values are for nominal operating conditions unless otherwise indicated.