

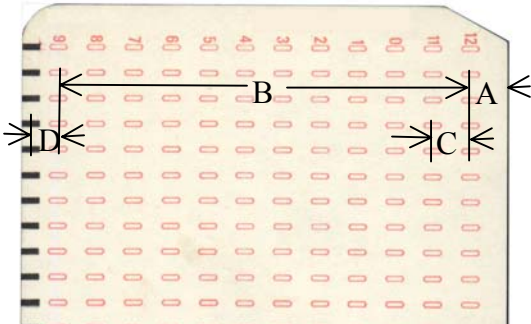
Form Specification

DATAWIN OMR

Edition 060914

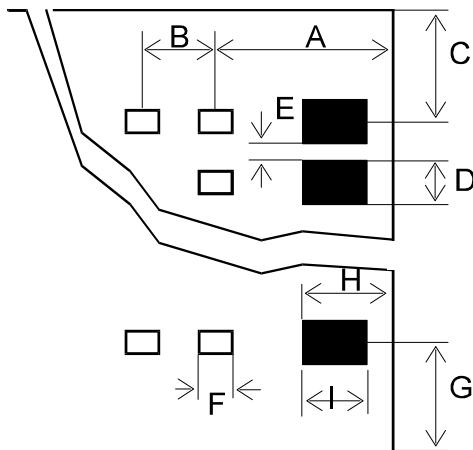
Standard form 16 (18) tracks, spacing 1/4"

(all measures in mm)



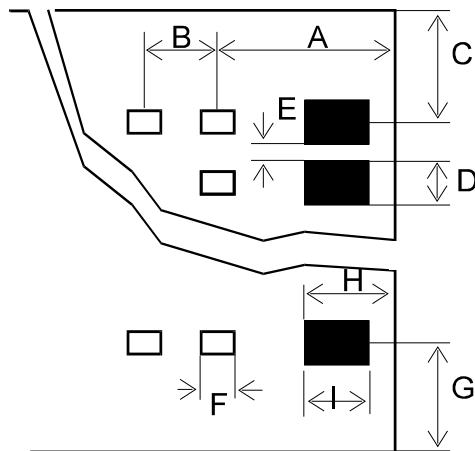
	norm.
A	6,35
B	n x A
C	6,35
D	5,0

Standard form 40 tracks, spacing 1/5"
Standard form 16 (18) tracks, spacing 1/5"
(all measures in mm)



	min.	norm.	max.
A		13,97 ²⁾	
B		5,08	
C	10		
D	1		4
E	1,5 ¹⁾		
F		3,0	
G	10		
H		7,62 ²⁾	
I		5,08	

Standard form 48 tracks, spacing 1/6"
(all measures in mm)



	min.	norm.	max.
A		11,43 ²⁾	
B		4,23	
C	10		
D	1		4
E	1,5 ¹⁾		
F		3,0	
G	10		
H		8,89 ²⁾	
I		3,81	

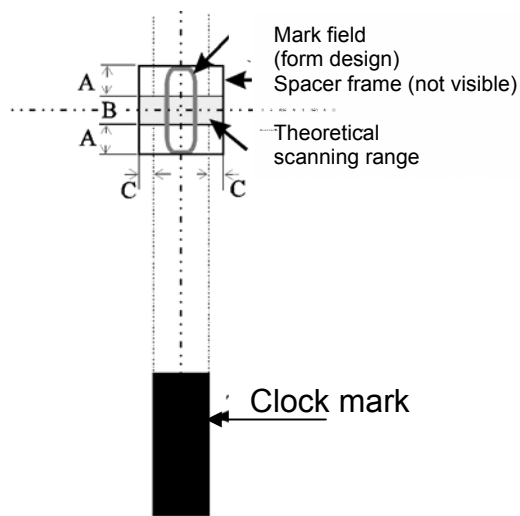
- 1) Can become smaller for special coding techniques, according to the manufacturer.
- 2) DATAWIN mark readers allow a scanning displacement of -1 +3 mm. But then A and H must deviate in the same direction and by the same values.

Form quality: Mechanical properties as per DIN 6723/6724
Optical features: OCR quality as per DIN 66223
PCS value for clock marks: > 60%

Form format: For all types of OMR: Length in transport direction > width!

Type of OMR	Min. Form (mm)		Max. Form (mm)		Paper weight (g/qm)
OMR 19E	70	x 25	210	x 105	80 - 140
OMR 50E	100	x 40	320	x 220	80 - 140
OMR 15S	75	x 70	320	x 110	120 - 140
OMR 200S	115	x 100	305	x 230	120 - 140
OMR 300S	110	x 50	305	x 230	80 - 140
OSR 300H	110	x 50	305	x 230	80 - 140
HS 3000	150	x 54	356	x 216	60 - 140
OMR 18E	70	x 25	320	x 120	120 - 140
OMR 33E	80	x 40	320	x 105	80 - 140
OMR 100E	80	x 60	320	x 220	80 - 140
OMR 12S	75	x 70	320	x 110	120 - 140
OMR 2000	115	x 100	305	x 230	80 - 140
OMR 4000	115	x 100	305	x 230	80 - 140
OMR 100S	100	x 80	320	x 220	80 - 140

Scan window:



Measures: A = min. 1,0 mm
B = 1,0 mm
C = min. 0,5 mm

Marks (and readable document design) are identified in the "theoretical scanning range" shown on the left. If no specific scanning procedures are used to mask black print (Scanmode, window definition) it is recommendable not to apply readable inscriptions and graphics in the area of the shown "spacer frame".

The spacer frame is dimensioned in a way that balances minor tolerances in form design, cut and transport.

Barcode Labels and Imprints:

Measure	Designation	min. mm	max. mm	Comment
A (see below)	Distance to form end	35	--	Pitch between last barcode module and lower form edge
B (see below)	White margin	10	--	Area before the first and after the last barcode module which must be executed in white or in blind print
C (see below)	Pitch of 2 barcode tracks	11	55	Only for option double barcode. Larger pitches on request. Please consider: The distance given by the customer is in the factory adjusted and is not changeable.
D (see below)	Pitch between barcode track and the right form edge OMR15S OMR18E OMR19E OMR33E OMR36S OMR50E OMR100E,S OMR200S OMR300S OSR300H HS3000	15 (30)* 15 45 15 21 20 10 (23)* 21 18 18 18	70 (80)* 70 70 65 (78)* 190 195 190 (200)* 190 195 195 195	The area of the double form recognition and form decollation should remain free if possible. The area of the feed track must always remain free. * In exceptional cases, only possibly after consultation with the manufacturer

During input of the barcode via the mark reader the barcode read head must be able to scan the whole barcode in at least one diagonal. So in any case, it is best to print the barcode as high as possible e.g. to be able to compensate gluing inaccuratenesses.

Admissible Form Colours for Ruby Light or I.R. Light Scanning

Measurements with blind colours "Zeller & Gmelin"
(% correspond to the blind colour unwanted signal)

Scanning:

I.R. light: 950 nm

Ruby light: 635 nm

Print colour	Col. No.	Value %	Comment	Value %	Comment
paper	white	< 1		< 1	
yellow	63376	3	good	4	still good
yellow	64400	3	good	4	still good
yellow	64401	< 1	very good	< 1	very good
orange	63079	2	very good	4	very good
red	62429	2	very good	< 1	very good
red	63082	2	very good	4	still good
red	63112	2	very good	4	still good
red	65108	< 1	very good	< 1	very good
red	65204	< 1	very good	4	still good
red	65205	2	very good	4	still good
violet	63081	3	good	12	dubious
blue	62432	3	good	44	useless
blue	63893	2	very good	32	useless
blue	65107	2	very good	16	bad
blue-green	63892	3	good	44	useless
blue-green	65109	< 1	very good	24	useless
green	62431	3	good	48	useless
green	63483	< 1	very good	44	useless
green	63505	3	good	36	useless
green	64513	3	good	80	useless
yellow-green	63891	3	good	48	useless
brown	62433	4	still good	16	bad
shade of brown (1 g/m ²)	18482	2	very good	24	useless
shade of brown (2 g/m ²)	18482	2	very good	40	useless

The blind colours specified "*dubious*" should be avoided whenever possible or only be used after consultations with the manufacturer!