



ArtFlex Barcode User Guide

ArtFlex Barcode - User Guide



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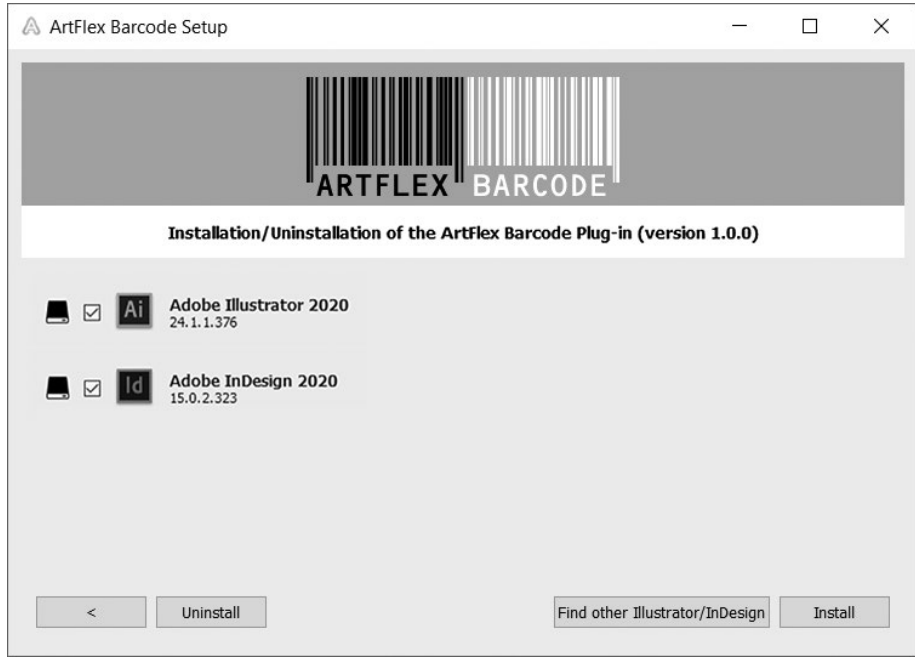
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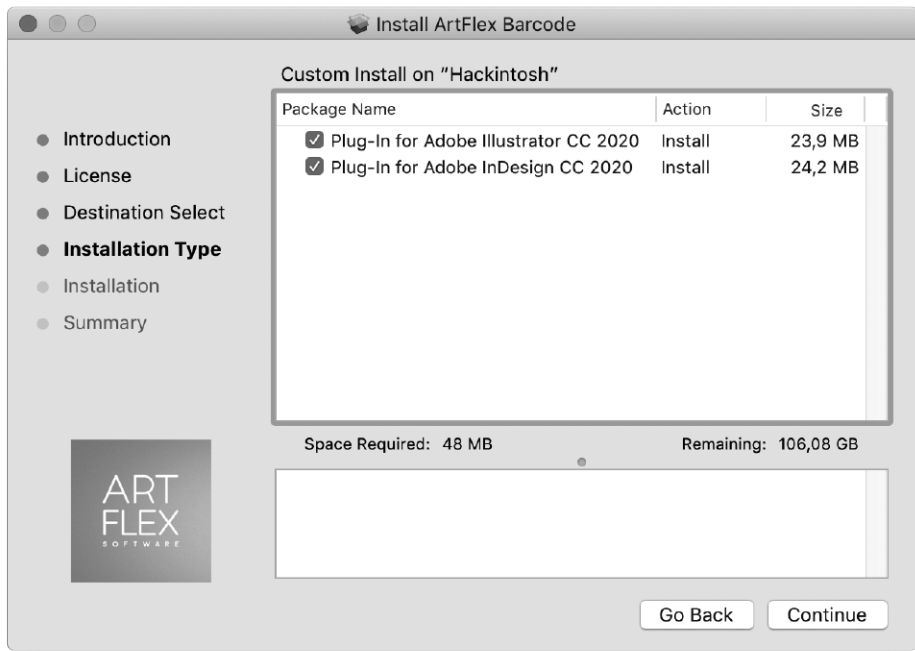
Plug-in installers

The plug-in is installed via Windows or macOS installers. The installers will guide you through the entire installation process. They will find all Adobe Illustrator/InDesign compatible applications. You can choose the applications where the plug-in should be installed.

Win installer - Example of Adobe apps list where the plug-in can be installed



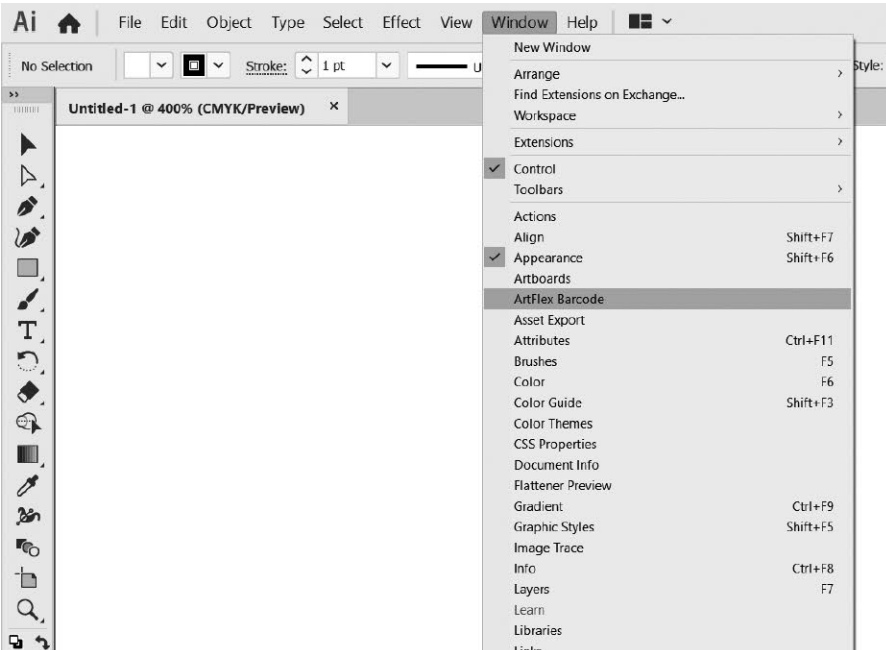
macOS installer - Example of Adobe apps list where the plug-in can be installed



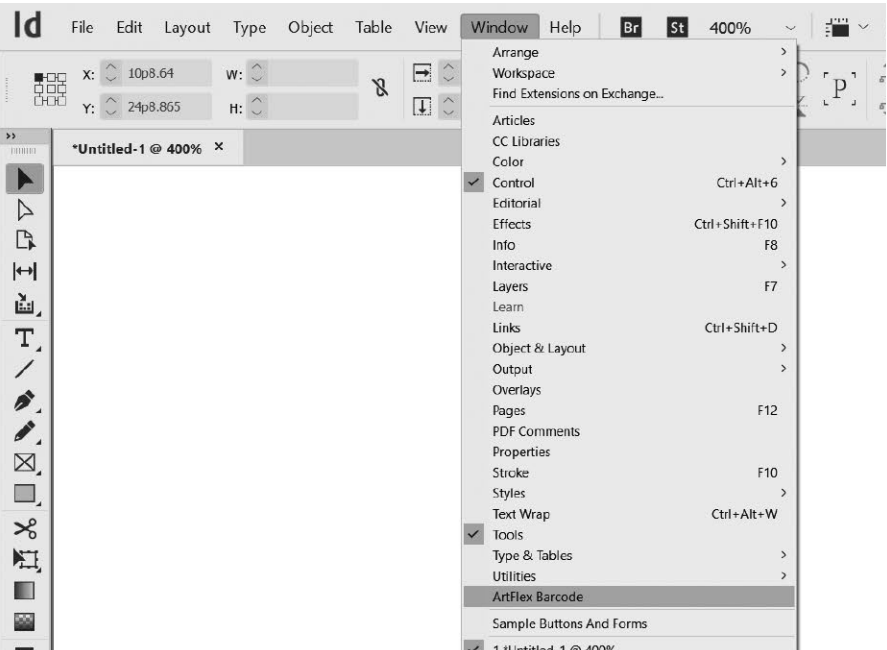
Plug-in location

After the successful installation please run your Adobe Illustrator or Adobe Indesign. You will find the plug-in at the following locations:

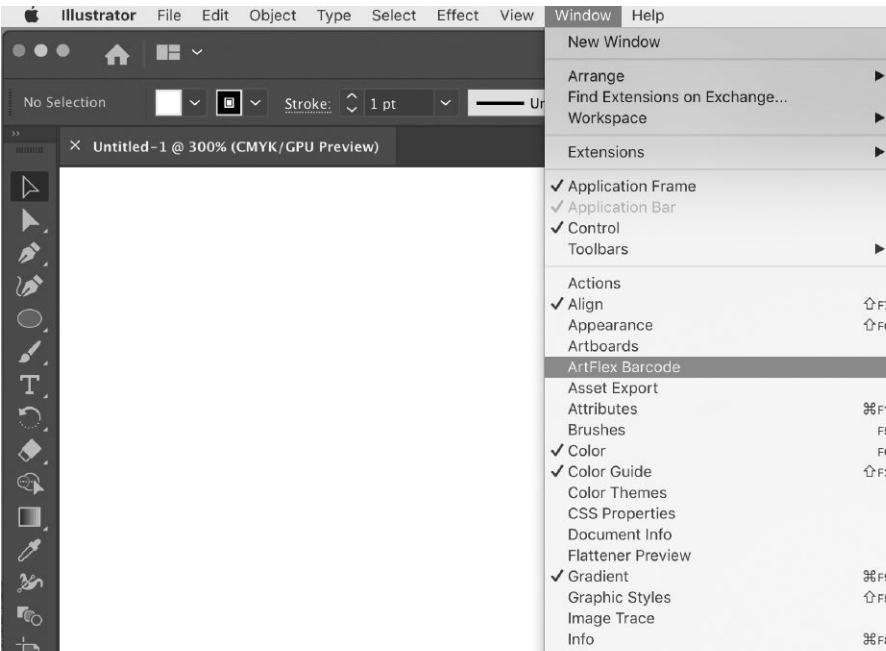
Adobe Illustrator (Windows)



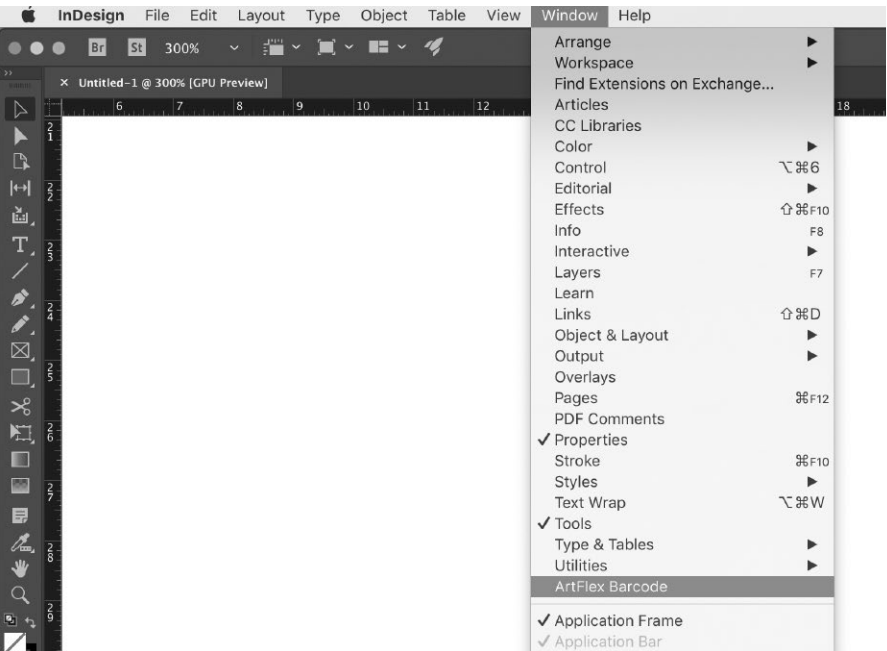
Adobe InDesign (Windows)



Adobe Illustrator (macOS)



Adobe InDesign (macOS)



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Demo mode

Unlicensed plug-in

Unlicensed plug-in can be used only in **Demo mode**. The demo mode allows any user to test all features of selected code types with limitations applied on typing input in the Code field (for details see the Demo mode input limitations below).

When is the Demo mode active?

Demo mode is on in the following cases:

- User makes first (fresh) installation.
- User does not have a valid license.
- User intentionally deactivates a license (e.g. the license to another computer).
- User does not have internet connection for a long period.

Demo mode banner

As soon as the plug-in is in the Demo mode, a warning banner appears at the bottom of the plug-in window. It reminds the user that Demo mode is active and it describes the Demo mode limitations.

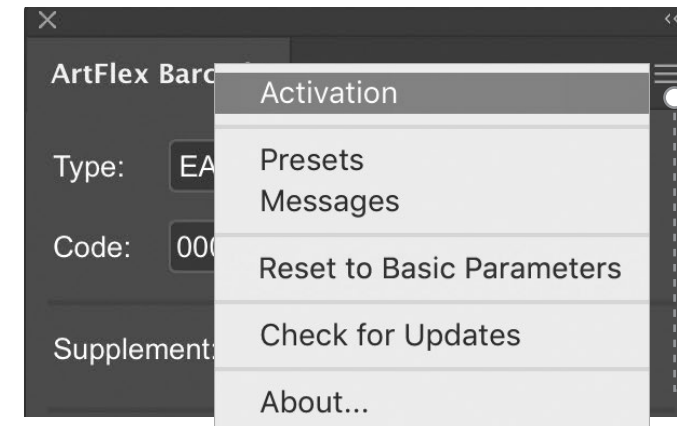
Demo mode available code types

- The following codes can be created in the Demo mode: EAN-13, EAN-8, UPC-A, UPC-E, ITF-14, Code 39, Code 128, Codabar, MSI.
- The following codes are available only in activated plug-in: ISBN, ISSN, Code 39 HIBC, Code 128 HIBC, GS1-128.

Demo mode input limitations

- 1) EAN-13, EAN-8, UPC-A, UPC-E, ITF-14, MSI - The Code field accepts only **0** digit
- 2) Code-39, Code-128 - The Code field accepts only **0Aa** characters.
- 3) Codabar - The Code field accepts only **ABCDENT*0** characters.

Plug-in licensing and activation



Purchasing a license

To purchase a license enter the ArtFlex Software e-shop website:

<https://artflex.software/en/eshop>

The website will guide you through our easy purchasing process.

Opening the Activation window

Press the plug-in menu button and select Activation.

License activation process

- 1) In the Activation window fill out your Name, E-mail and the License Key you have received in the **ArtFlex Software - License(s) and invoice** email.
- 3) Press the Activate button and wait until the license is validated (it can take a few seconds).
- 4) When the License expiration and Deactivate button appear in the Activation window, activation is complete.

License deactivation process

- 1) Press the Deactivate button in the Activation window.
- 2) The plug-in will start the deactivation process (it can take a few seconds).
- 3) After successful deactivation, the Demo mode banner will appear on the bottom of the plug-in window.

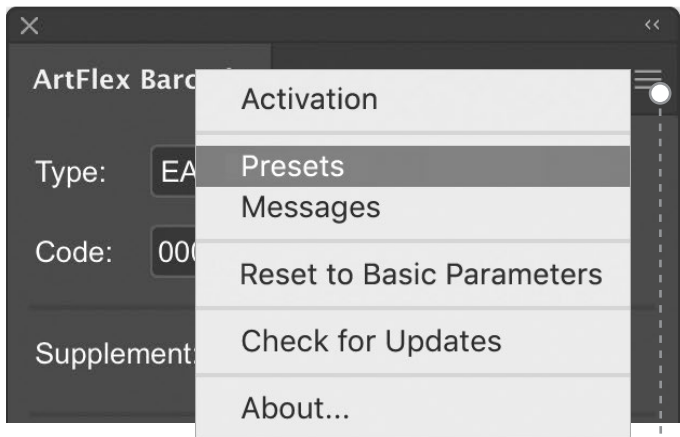
Good to know

An internet connection is required to activate the plug-in. As the plug-in periodically checks the license validity, a permanent internet connection is recommended. The plug-in can work also offline but it will automatically switch to Unlicensed Mode after a period without internet connection. If your license is stolen or you are cannot deactivate the license (e.g. if your workstation is not functioning) please contact us on <https://artflex.software/en/support>. We can deactivate the old license and issue a new one.

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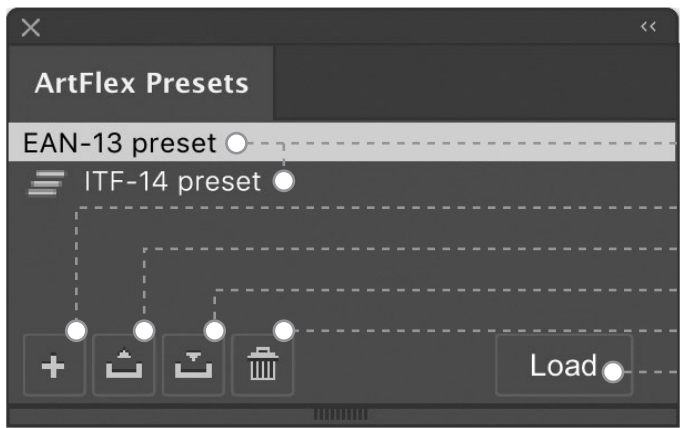


Using Presets



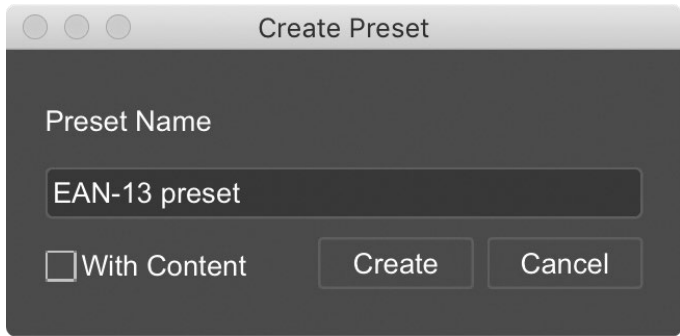
What is ArtFlex Barcode preset
You can save all your barcode specifications to presets. A preset contains values specified in the main Artflex Barcode plug-in window. The presets let you create a barcode in Illustrator and open it in InDesign and vice versa. The presets together with ArtFlex Barcode Illustrator and InDesign compatibility ensure that all barcodes have identical specification, look identical and can be handled identically in both Illustrator and InDesign.

Opening the Presets window
Press the plug-in menu button and select Presets.

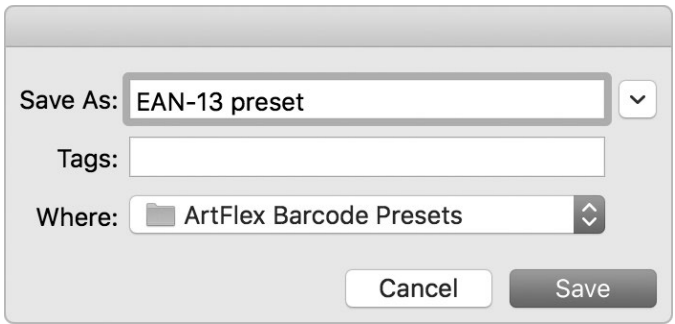


Presets window description
List of created and imported presets

Create Preset button
Export Preset button
Import Preset button
Delete Preset button
Load Preset button



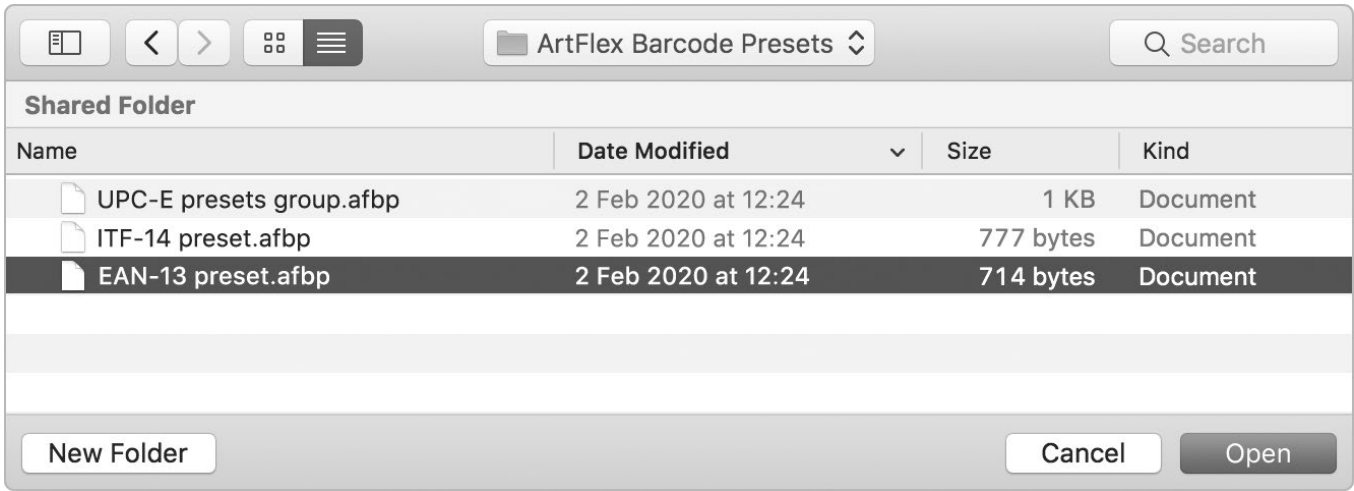
Creating a preset
1) Press the Create Preset button in the Presets window. It opens the Create Preset dialog window.
2) Choose a name for the preset.
3) Optionally you can choose whether the code content should be included in the preset (tick the With Content option).
4) Press the Create button.
5) The new preset appears in the list of presets in the presets window. If ticked the With Content option a small sign ≡ next to the preset name will appear.



Exporting a preset
1) Select a preset in the Preset window (presets group can be selected by holding cmd key in macOS or ctrl key in Windows).
2) Press the Export Presets button. It will open the export dialog window (see image on the left).
3) Type the name of your preset or preset group in the Save As field and click on Save.
4) An .afbp preset file is created.

Importing a preset
1) Press the Import Preset button. It will open the import dialog window (see image below).
2) Select a preset or preset group you wish to import and click on Open.
3) The new preset(s) appears in your list of presets in the Preset window.

Loading a preset to the plug-in window
1) In the list of presets select the preset you wish to use and click on the Load button. The preset can also be loaded by double clicking on the preset name.
2) The plug-in reads the preset content and displays the new settings immediately in the main plug-in window.



i Good to know

Two examples how presets can help:
1) Create one central barcode specifications repository to allow unified barcodes creation across your company and applications.
2) Organize barcodes according to different specifications. For example creation of sets which correspond to various print or scanning requirements (eg. bar width reduction, output resolution or wide to narrow ratio).

EAN-13, EAN-8, UPC-A, UPC-E, ISBN, ISSN codes interface

[illegible]

Create Button - Generates barcode based on the values specified above.

ISBN/ISSN specific features

Type:

ISBN

Code:

9781782808084

☒ ISBN Code:

1782808084

Choose ISBN code type and type the code digits in the Code field, the ISBN Code field will be completed automatically.

 ISBN Code: 978-1782808084

Inserting a hyphen on the beginning of the ISBN 10 changes the code to ISBN 13.

Type:

ISSN

Code:

9770317847001

☒

ISSN Code:

0317-8471

Choose ISSN code type and type the code digits in the Code field, the ISSN Code field will be completed automatically. A hyphen can be inserted manually in the ISSN Code.

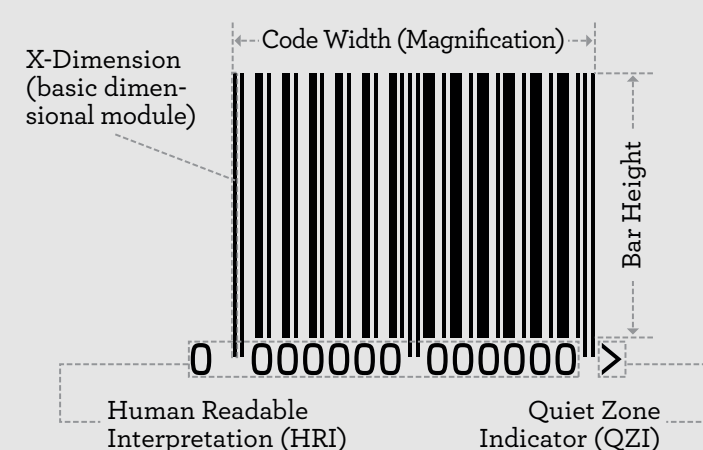
03	03	03	VA
03	03	03	0

Aligns the code with the barcode on left, center or right.

i Good to know

EAN-13, EAN-8, UPC-A, UPC-E, ISBN, ISSN

ISBN 10 code with 5 digits supplement



ISBN 1782808086

50998 >

9 781782 808084

The BWR reduces the thickness of bars to compensate the print pressure

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Sizes of EAN/UPC symbols and their modules at dif. levels of recommended magnif. (80-200%)

MAGNIF. [%]	X-DIMENSION width [mm](inches)	EAN-13/UPC-A DIMENSIONS		EAN-8 DIMENSIONS		UPC-E DIMENSIONS	
		width [mm](inches)	height [mm](inches)	width [mm](inches)	height [mm](inches)	width [mm](inches)	height [mm](inches)
80	0.264 (0.010)	29.83 (1.174)	18.28 (0.720)	21.38 (0.842)	14.58 (0.574)	13.47 (0.530)	18.28 (0.720)
85	0.281 (0.011)	31.70 (1.250)	19.42 (0.765)	22.72 (0.894)	15.50 (0.610)	14.31 (0.563)	19.42 (0.765)
90	0.297 (0.011)	33.56 (1.321)	20.57 (0.810)	24.06 (0.947)	16.41 (0.646)	15.15 (0.596)	20.57 (0.810)
95	0.314 (0.012)	35.43 (1.395)	21.71 (0.855)	25.39 (1.000)	17.32 (0.682)	15.99 (0.630)	21.71 (0.855)
100	0.330 (0.013)	37.29 (1.468)	22.85 (0.900)	26.73 (1.052)	18.23 (0.718)	16.83 (0.663)	22.85 (0.900)
105	0.347 (0.013)	39.15 (1.541)	23.99 (0.944)	28.07 (1.105)	19.14 (0.753)	17.67 (0.696)	23.99 (0.944)
110	0.363 (0.014)	41.02 (1.615)	25.14 (0.990)	29.40 (1.157)	20.05 (0.789)	15.51 (0.611)	25.14 (0.990)
115	0.380 (0.014)	42.88 (1.688)	26.28 (1.035)	30.74 (1.210)	20.96 (0.825)	19.36 (0.762)	26.28 (1.035)
120	0.396 (0.015)	44.75 (1.762)	27.42 (1.080)	32.08 (1.263)	21.88 (0.861)	20.20 (0.795)	27.42 (1.080)
125	0.413 (0.016)	46.61 (1.835)	28.56 (1.124)	33.41 (1.315)	22.79 (0.897)	21.04 (0.828)	28.56 (1.124)
130	0.429 (0.016)	48.48 (1.909)	29.71 (1.170)	34.75 (1.368)	23.70 (0.933)	21.88 (0.861)	29.71 (1.170)
135	0.446 (0.017)	50.34 (1.982)	30.85 (1.215)	36.09 (1.421)	24.61 (0.969)	22.72 (0.894)	30.85 (1.215)
140	0.462 (0.018)	52.21 (2.056)	31.99 (1.259)	37.42 (1.473)	25.52 (1.005)	23.56 (0.928)	31.99 (1.259)
145	0.479 (0.017)	54.07 (2.129)	33.13 (1.304)	38.76 (1.526)	26.43 (1.041)	24.40 (0.961)	33.13 (1.304)
150	0.495 (0.019)	55.94 (2.202)	34.28 (1.350)	40.10 (1.579)	27.35 (1.077)	25.25 (0.994)	34.28 (1.350)
155	0.512 (0.020)	57.80 (2.276)	35.42 (1.394)	41.43 (1.631)	28.26 (1.113)	26.09 (1.027)	35.42 (1.394)
160	0.528 (0.020)	59.66 (2.349)	36.56 (1.439)	42.77 (1.683)	29.17 (1.148)	26.93 (1.060)	36.56 (1.439)
165	0.545 (0.021)	61.53 (2.422)	37.70 (1.484)	44.10 (1.736)	30.08 (1.184)	27.77 (1.093)	37.70 (1.484)
170	0.561 (0.022)	63.39 (2.496)	38.85 (1.530)	45.44 (1.789)	30.99 (1.220)	28.61 (1.126)	38.85 (1.530)
175	0.578 (0.022)	65.26 (2.569)	39.99 (1.574)	46.78 (1.842)	31.90 (1.256)	29.45 (1.159)	39.99 (1.574)
180	0.594 (0.023)	67.12 (2.643)	41.13 (1.619)	48.11 (1.894)	32.81 (1.292)	30.29 (1.193)	41.13 (1.619)
185	0.611 (0.024)	68.99 (2.716)	42.27 (1.664)	49.45 (1.947)	33.73 (1.328)	31.14 (1.226)	42.27 (1.664)
190	0.627 (0.024)	70.85 (2.789)	43.42 (1.709)	50.79 (2.000)	34.64 (1.364)	31.98 (1.259)	43.42 (1.709)
195	0.644 (0.025)	72.72 (2.863)	44.56 (1.754)	52.12 (2.052)	35.55 (1.400)	32.82 (1.292)	44.56 (1.754)
200	0.660 (0.026)	74.58 (2.936)	45.70 (1.800)	53.46 (2.105)	36.46 (1.435)	33.66 (1.325)	45.70 (1.800)

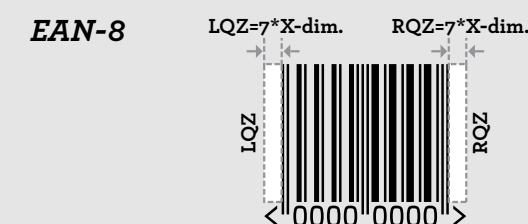
Source: GS1.com, GS1_General_Specifications.pdf

i Good to know

Quiet zones - The left (LQZ) and right (RQZ) quiet zones indicate free space on the barcode sides where no other elements should be placed. Quiet zones improve the barcode scanability.



For 100% magnification (X-dim: 0.33 mm) the LQZ is 3.63 mm and RQZ is 2.31 mm.



For 100% magnification (X-dim: 0.33 mm) the LQZ is 2.31 mm and RQZ is 2.31 mm.



For 100% magnification (X-dim: 0.33 mm) the LQZ is 2.97 mm and RQZ is 2.97 mm.



For 100% magnification (X-dim: 0.33 mm) the LQZ is 2.97 mm and RQZ is 2.31 mm.

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ITF-14 code interface

ArtFlex Barcode

Type: ITF-14

Code: 00000000000000

Grouping: 1 2 5 5 1

X-Dimension: 1,016 mm

Magnification: 100 %

Bar Width Reduction: 0 mm

Bar Height: 31,75 mm

Wide To Narrow Ratio: 2,5

Output Resolution

☐ Snap Barcode To 2540 ppi

☒ Human Readable Interpretation

Vertical Shift: 0 mm

☐ Use Custom Font

☒ Bearer Bars Full Box

☒ H Mark L: 1 R: 7

Create

Type - Barcode type ITF-14.

Code - Code digits field: 14 digits.

Grouping - See ITF-14 specific features.

Magnification Reference Point - Indicates fixed point for barcode scaling.

X-Dimension - Displays the size of the basic dimensional module. It is the width of the narrow bar.

Magnification - Changes the width of the bars/code. It correlates with the X-Dimension size.

Bar Width Reduction (BWR) - Compensates press gain during the printing process.

Bar Height - Changes the height of the bars.

Wide To Narrow Ratio - Sets the width ratio between wide and narrow bars. Helps to improve scannability.

Output Resolution - Snaps barcode to specified resolution for easier print tools preparation.

Human Readable Interpretation (HRI) - Appends the code characters to the barcode.

HRI Alignment/Placement - Aligns the HRI on left/center/right. Places the HRI above/under the bars.

HRI Tracking - Changes the distance between the HRI characters.

HRI Vertical Shift - Changes the vertical distance between the custom HRI and edge of the bars.

Use Custom Font - Replaces the default HRI by selected font.

Bearer Bars - see ITF-14 specific features.

H Mark - see ITF-14 specific features.

Create Button - Generates barcode based on the values specified above.

ITF-14 specific features

Grouping: 1 2 5 5 1

Grouping

The digits (HRI) Grouping is an optional feature. The Grouping usually helps to identify the item and its manufacturer more easily. Manufacturers use different types of Grouping. The Plug-in offers 5 types of common Groupings.

☒ Bearer Bars

Full Box

Bearer Bars

Bearer Bars help to equalise the pressure of the printing plate over the entire surface of the code and thus enhances readability. For printing methods that do not require printing plates the Bearer Bars can appear only at the top and bottom of the symbol.

☒ H Mark

L: 1

R: 7

H Mark

Two small H Mark characters can be included to allow the amount of ink spread to be checked by examining the gap between the verticals of the H Mark. The H Marks are optional and usually are used by older printing technologies/machines.

i Good to know

ITF-14 sample

The code below corresponds to the values specified in the plug-in screenshot on the left side of this page.

0 00 00000 00000 0

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Code 39 interface

ArtFlex Barcode

Type: Code 39

Code: ARTFLEX

Character Set: Standard

X-Dimension: 0,382 mm

Magnification: 200 %

Bar Width Reduction: 0 mm

Bar Height: 12,7 mm

Wide To Narrow Ratio: 2.5

Output Resolution

☐ Snap Barcode To 2540 ppi

☒ Human Readable Interpretation

Vertical Shift: 0 mm

☐ Use Custom Font

☐ Quiet Zone Indicator ☐ Check Digit

Create

- Type** - Barcode type Code 39.
- Code** - Field for the code characters.
- Character Set** - Specifies available characters. See Code 39 specific features.
- Magnification Reference Point** - Indicates fixed point for barcode scaling.
- X-Dimension** - Displays the size of the basic dimensional module. It is the width of the narrow bar.
- Magnification** - Changes the width of the bars/code. It correlates with the X-Dimension size.
- Bar Width Reduction (BWR)** - Compensates press gain during the printing process.
- Bar Height** - Changes the height of the bars.
- Wide To Narrow Ratio** - Sets the width ratio between wide and narrow bars. Helps to improve scannability.
- Output Resolution** - Snaps barcode to specified resolution for easier print tools preparation.
- Human Readable Interpretation (HRI)** - Appends the code characters to the barcode.
- HRI Alignment/Placement** - Aligns the HRI on left/center/right. Places the HRI above/under the bars.
- HRI Tracking** - Changes the distance between the HRI characters.
- HRI Vertical Shift** - Changes the vertical distance between the custom HRI and edge of the bars.
- Use Custom Font** - Replaces the default HRI by selected font.
- Check Digit** - See Code-39 specific features.
- Quiet Zone Indicator** - Marks zone where no other design can be placed. Helps to improve scannability.
- Create Button** - Generates barcode based on the values specified above.

Code 39 specific features

Character Set: Standard

Standard Character Set
The Code-39 Standard character set contains the following characters:
Digits 0-9
Letters A-Z
Symbols -. \$/+ %
Space is used as a special symbol

Character Set: Extended

Extended Character Set
The Code-39 Extended set contains the full 128 ASCII character table. Using the extended set requires bigger code space (see Code-39 samples below).

☐ Quiet Zone Indicator ☒ Check Digit

Check Digit
Code-39 does not contain an automatic built-in checking function. However, an optional check digit (Modulo 43) can be enabled. The check digit helps to eliminate mistakes, on the other hand it creates additional bars requiring more space (see Code-39 samples below).

Good to know

Code-39 samples
The size of the code varies depending on whether extended character set or check digit is used.



ARTFLEX

Standard character set
Check digit off.



ArtFlex

Extended character set
Check digit off.



ARTFLEXK

Standard character set.
Check digit on.



ArtFlexA

Extended character set.
Check digit on.

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Code 128 interface

ArtFlex Barcode

Type: Code 128

Code: ARTFLEX^JBARCODE

Character Set: Only A

X-Dimension: 0,4775 mm

Magnification: 250 %

Bar Width Reduction: 0 mm

Bar Height: 15,875 mm

Output Resolution

☐ Snap Barcode To 2540 ppi

☒ Human Readable Interpretation

Vertical Shift: 0 mm

☐ Use Custom Font

☐ Quiet Zone Indicator

Create

- Type** - Barcode type Code 128.
- Code** - Field for the code characters.
- Character Set** - Specifies available characters. See Code 128 specific features.
- Magnification Reference Point** - Indicates fixed point for barcode scaling.
- X-Dimension** - Displays the size of the basic dimensional module. It is the width of the narrow bar.
- Magnification** - Changes the width of the bars/code. It correlates with the X-Dimension size.
- Bar Width Reduction (BWR)** - Compensates press gain during the printing process.
- Bar Height** - Changes the height of the bars.
- Output Resolution** - Snaps barcode to specified resolution for easier print tools preparation.
- Human Readable Interpretation (HRI)** - Appends the code characters to the barcode.
- HRI Alignment/Placement** - Aligns the HRI on left/center/right. Places the HRI above/under the bars.
- HRI Tracking** - Changes the distance between the HRI characters.
- HRI Vertical Shift** - Changes the vertical distance between the custom HRI and edge of the bars.
- Use Custom Font** - Replaces the default HRI by selected font.
- Quiet Zone Indicator** - Marks zone where no other design can be placed. Helps to improve scannability.
- Create Button** - Generates barcode based on the values specified above.

Code 128 specific features

Character Set: Auto

Character Set: Only A

Character Set: Only B

Character Set: Only C

Character Set Auto
This is the default option. The best char. set combination to optimize the barcode width.

Character Set A
ASCII characters 00 to 95 (0-9,A-Z and control characters), special characters and FNC 1-4

Character Set B
ASCII characters 32 to 127 (0-9,A-Z,a-z), special characters and FNC 1-4

Character Set C
00-99 (encodes two digits with a single code point) and FNC1

For the full character sets please see the table on the following page.

Good to know

Control Characters
Non-printing characters included in the character set A. Scanning codes which contain control characters perform functions other than adding a printable text symbol (see the code example below).

The plug-in lets you add the control characters by right (secondary) clicking on the code field. It opens a list where an appropriate character can be selected (see the list on the right side).

Code 128 control character example:
The code below corresponds to the values specified in the plug-in screenshot on the left side of this page. The code contains Line feed (LF) character represented by ^J control key. It means that all the printable characters placed after the control key will be moved to a new text line.



The above code will be scanned as: ARTFLEX
BARCODE

Null character	NUL
Start of Header	SOH
Start of Text	STX
End of Text	ETX
End of Transmission	EOT
Enquiry	ENQ
Acknowledgment	ACK
Bell	BEL
Backspace	BS
Horizontal Tab	HT
Line feed	LF
Vertical Tab	VT
Form feed	FF
Carriage return	CR
Shift Out	SO
Shift In	SI
Data Link Escape	DLE
Device Control 1 (oft. XON)	DC1
Device Control 2	DC2
Device Control 3 (oft. XOFF)	DC3
Device Control 4	DC4
Negative Acknowledgment	NAK
Synchronous idle	SYN
End of Transmission Block	ETB
Cancel	CAN
End of Medium	EM
Substitute	SUB
Escape	ESC
File Separator	FS
Group Separator	GS
Record Separator	RS
Unit Separator	US
Space	SP
Delete	DEL

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Code 128 - Code sets A, B and C - Complete character table

Num. Value	Code Set A	Code Set B	Code Set C	Num. Value	Code Set A	Code Set B	Code Set C	Num. Value	Code Set A	Code Set B	Code Set C	Num. Value	Code Set A	Code Set B	Code Set C
00	space	space	00	27	;	;	27	54	V	V	54	81	DC1	q	81
01	!	!	01	28	<	<	28	55	W	W	55	82	DC2	r	82
02	"	"	02	29	=	=	29	56	X	X	56	83	DC3	s	83
03	#	#	03	30	>	>	30	57	Y	Y	57	84	DC4	t	84
04	\$	\$	04	31	?	?	31	58	Z	Z	58	85	NAK	u	85
05	%	%	05	32	@	@	32	59	[	[	59	86	SYN	v	86
06	&	&	06	33	A	A	33	60	\	\	60	87	ETB	w	87
07	'	'	07	34	B	B	34	61	]	]	61	88	CAN	x	88
08	(	(	08	35	C	C	35	62	^	^	62	89	EM	y	89
09	)	)	09	36	D	D	36	63	_	_	63	90	SUB	z	90
10	*	*	10	37	E	E	37	64	NUL	`	64	91	ESC	{	91
11	+	+	11	38	F	F	38	65	SOH	a	65	92	FS		92
12	,	,	12	39	G	G	39	66	STX	b	66	93	GS	}	93
13	-	-	13	40	H	H	40	67	ETX	c	67	94	RS	~	94
14	.	.	14	41	I	I	41	68	EOT	d	68	95	US	DEL	95
15	/	/	15	42	J	J	42	69	ENQ	e	69	96	FNC3	FNC3	96
16	0	0	16	43	K	K	43	70	ACK	f	70	97	FNC2	FNC2	97
17	1	1	17	44	L	L	44	71	BEL	g	71	98	SHIFT	SHIFT	98
18	2	2	18	45	M	M	45	72	BS	h	72	99	CODE C	CODE C	99
19	3	3	19	46	N	N	46	73	HT	i	73	100	CODE B	FNC4	CODE B
20	4	4	20	47	O	O	47	74	LF	j	74	101	FNC4	CODE A	CODE A
21	5	5	21	48	P	P	48	75	VT	k	75	102	FNC1	FNC1	FNC1
22	6	6	22	49	Q	Q	49	76	FF	l	76	103	START A	START A	START A
23	7	7	23	50	R	R	50	77	CR	m	77	104	START B	START B	START B
24	8	8	24	51	S	S	51	78	SO	n	78	105	START C	START C	START C
25	9	9	25	52	T	T	52	79	SI	o	79		STOP	STOP	STOP
26	:	:	26	53	U	U	53	80	DLE	p	80				

ArtFlex Barcode - User Guide



GS1-128 interface

ArtFlex Barcode

Type: GS1-128

Code: 11191122

GS1 Code Assistant

X-Dimension: 0,495 mm

Magnification: 100 %

Bar Width Reduction: 0 mm

Bar Height: 31,75 mm

Output Resolution

☐ Snap Barcode To 2540 ppi

☒ Human Readable Interpretation

☐ Use Custom Font

☐ Quiet Zone Indicator

Create

Type - Barcode type GS1-128.

Code - Field for the code characters.

GS1 Code Assistant - See GS1-128 specific features.

Magnification Reference Point - Indicates fixed point for barcode scaling.

X-Dimension - Displays the size of the basic dimensional module. It is the width of the narrow bar.

Magnification - Changes the width of the bars/code. It correlates with the X-Dimension size.

Bar Width Reduction (BWR) - Compensates press gain during the printing process.

Bar Height - Changes the height of the bars.

Output Resolution - Snaps barcode to specified resolution for easier print tools preparation.

Human Readable Interpretation (HRI) - Appends the code characters to the barcode.

HRI Alignment/Placement - Aligns the HRI on left/center/right. Places the HRI above/under the bars.

HRI Tracking - Changes the distance between HRI characters.

HRI Vertical Shift - Changes the vertical distance between the custom HRI and edge of the bars.

Use Custom Font - Replaces the default HRI by selected font.

Quiet Zone Indicator - Marks zone where no other design can be placed. Helps to improve scannability.

Create Button - Generates barcode based on the values specified above.

GS1-128 specific features

GS1 128-Code Assistant
The code assistant helps to create a GS-1 128 code. It contains all available Application Identifiers (AI). It shows how many characters and segments each AI requires and verifies that your code is correct. It can also concatenate codes made from more AIs.

GS1 Code Assistant

Data Title: PROD DATE

AI: 11 Data: 11191122 Add Data

Ready for Concatenation.

Data Format: 2 numeric digits + 6 numeric digits.

GS1 Code: 11191122 Set GS1

- Create code with GS1 128-Code Assistant**
- 1) Select the Data Title field which describes the AI function (rolling over the field shows full description of the selected Data Title).
 - 2) The AI number is auto-selected according to the chosen Data Title (rolling over the AI field shows full description of the selected AI number). You can also select any AI number directly without specifying the Data Title first. In this case the Data Title will be auto-selected according to the chosen AI number.
 - 3) The selected AI number is automatically copied to the Data field. If you are using 4 digit AI number containing the letter "n" on the end, only the first three digits are copied to the Data field and you must complete it by the fourth digit (this depends on your AI instructions).
 - 4) After setting the AI number in the Data field you complete the code by typing all remaining segments of the selected AI. The length of the segments depends on the selected AI specification. The two text lines below the the Data field tell you how many characters and code segments the selected AI requires and show you the current status of the code you are just typing.
 - 5) As soon as the code meets the AI specifications the Add Data button is activated. Pressing the button copies the code to the GS1-128 Code field. You can repeat the above procedure several times and concatenate more AIs to one GS1 128 code.
 - 6) Press the Set GS1 button to send the composed GS1 128 code to the main plug-in window. The code is ready for creation now.

i Good to know

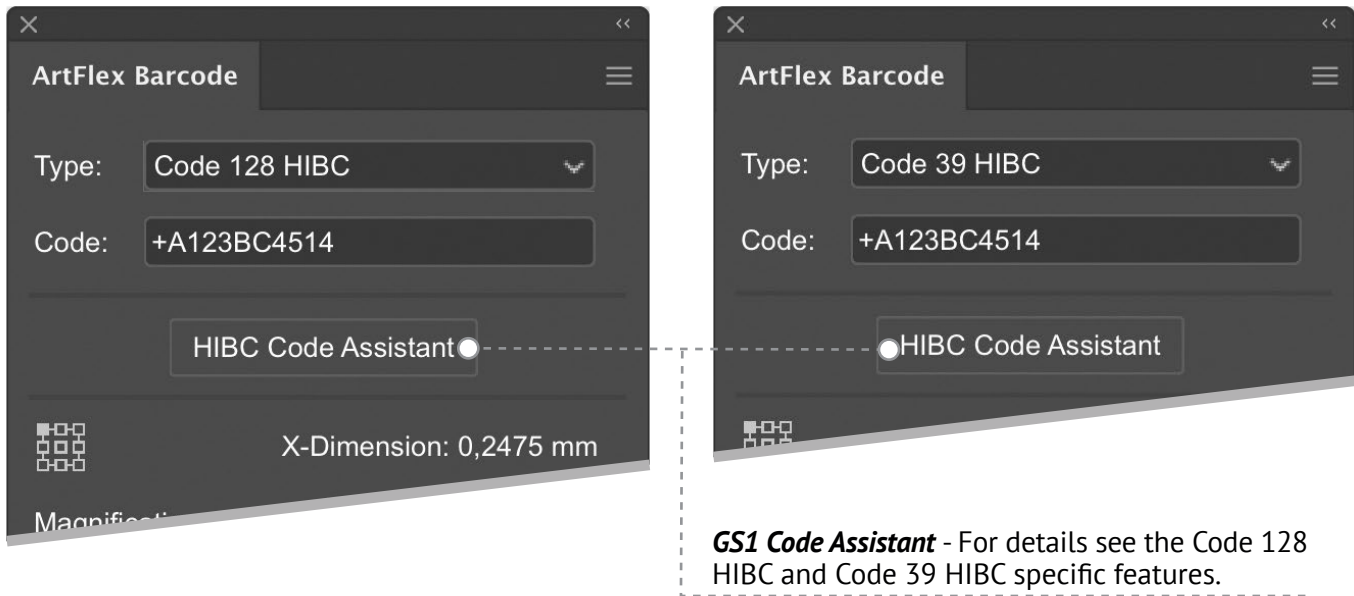
GS1 Application Identifiers (AIs) are prefixes used in barcodes and EPC/RFID-tags to define the meaning and format of data attributes. The AIs cover various industry sectors to include product data beyond the GTIN, such as the batch/lot number, serial number, best before date, expiration date etc. More information on <https://www.gs1.org/standards/barcodes/application-identifiers>

ArtFlex Barcode - User Guide



Code 128 HIBC/Code 39 HIBC interface

The interface of the 128 HIBC and 39 HIBC codes is almost identical to the GS1-128 interface described on the previous page. The only difference is the HIBC Code Assistant described on this page.



GS1 Code Assistant - For details see the Code 128 HIBC and Code 39 HIBC specific features.

i Good to know

Analysis of concatenated 128 HIBC code data structure based on the HIBC Code Assistant values from the plug-in screenshot on the right side of this page.

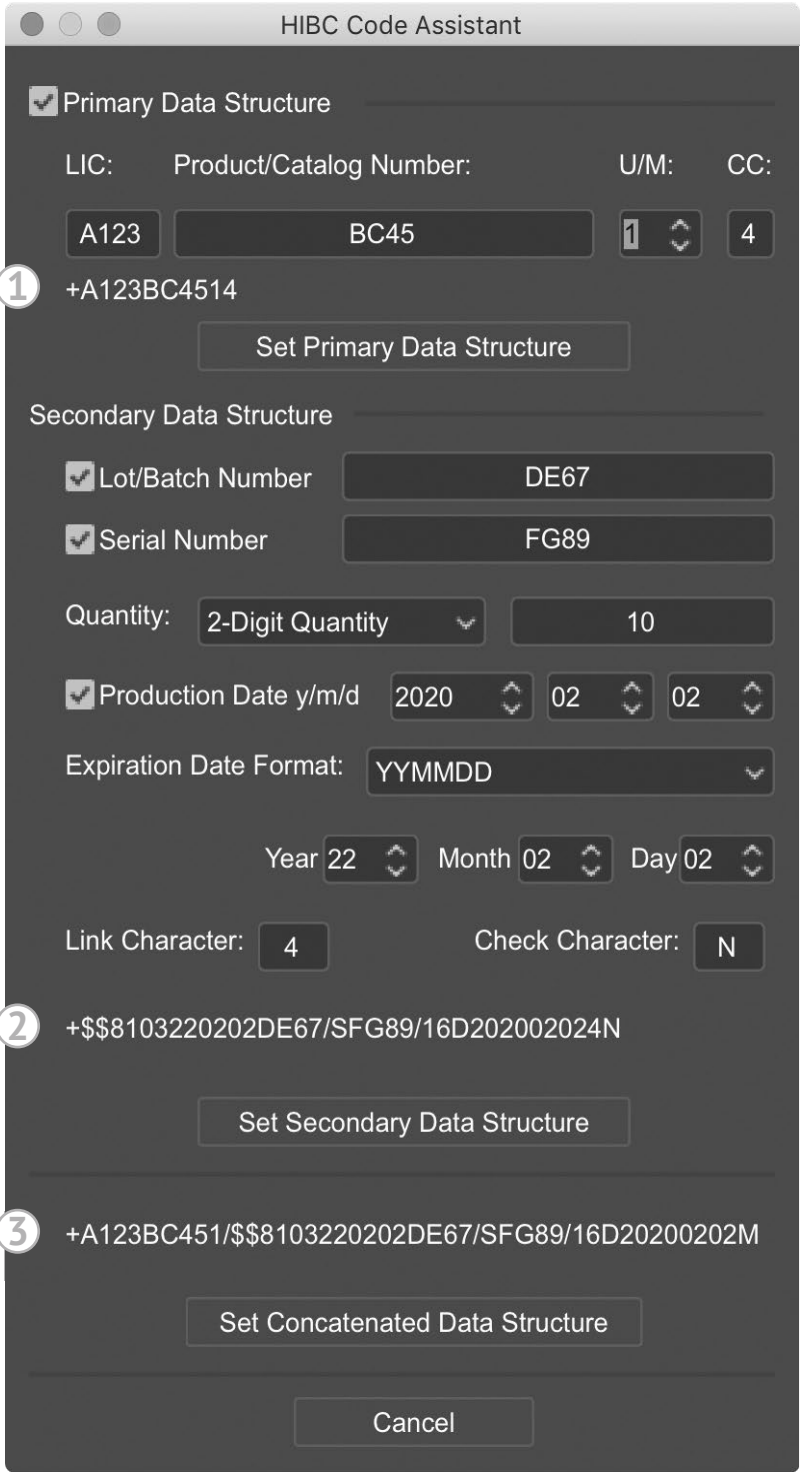


Primary Data Structure segments		Secondary Data Structure segments	
+	HIBC Supplier Labeling Flag	\$\$	Quantity/Date/Lot ref. identifier
A123	Labeller Identification Code (LIC)	8	Specifies the Quantity format
BC45	Product/Catalog Number (PCN)	10	Quantity
1	Unit of Measure (U/M)	3	Specifies the Expiration Date format
		220202	Expiration Date (yyymmdd)
		DE67	Lot/Batch Number
		/S	Data identifier for Serial Number
		FG89	Serial Number
		/16D	Data identifier for Production Date
		20200202	Production Date (yyyymmdd)
Other segments			
/	Concatenation symbol		
M	Modulo 43 Check Character		

Note: The code structure may differ depending on the input data used.

Code 128 HIBC/Code 39 HIBC spec. features

HIBC Code Assistant
The HIBC Code Assistant helps to create 128 HIBC and 39 HIBC codes. It contains all the settings required for correct HIBC codes composition. It automatically checks codes for mistakes. It can compose separated primary and secondary codes and also concatenated codes.



HIBC Code Assistant - Alphanumeric previews
The HIBC Code Assistant contains previews which display alphanumeric content of the composed code. The previews are instantly updated as soon as a user changes any of the input data.

If the data input contains a mistake, the previews will show a warning and suggest how to correct the code.

There are three alphanumeric previews. One for each data structure.
① Primary data structure preview
② Secondary data structure preview
③ Concatenated data structure preview

HIBC Code Assist. - Exporting composed code
Each data structure (primary, secondary or concatenated) can be exported to the code field of the main plug-in window for barcode creation. Just press the Set Data Structure button located under each alphanumeric preview for the export.

Creating HIBC barcode without HIBC Code Assistant
HIBC barcode can be also created by simply typing/copying a code directly to the code field of the main plug-in window and pressing the Create button.

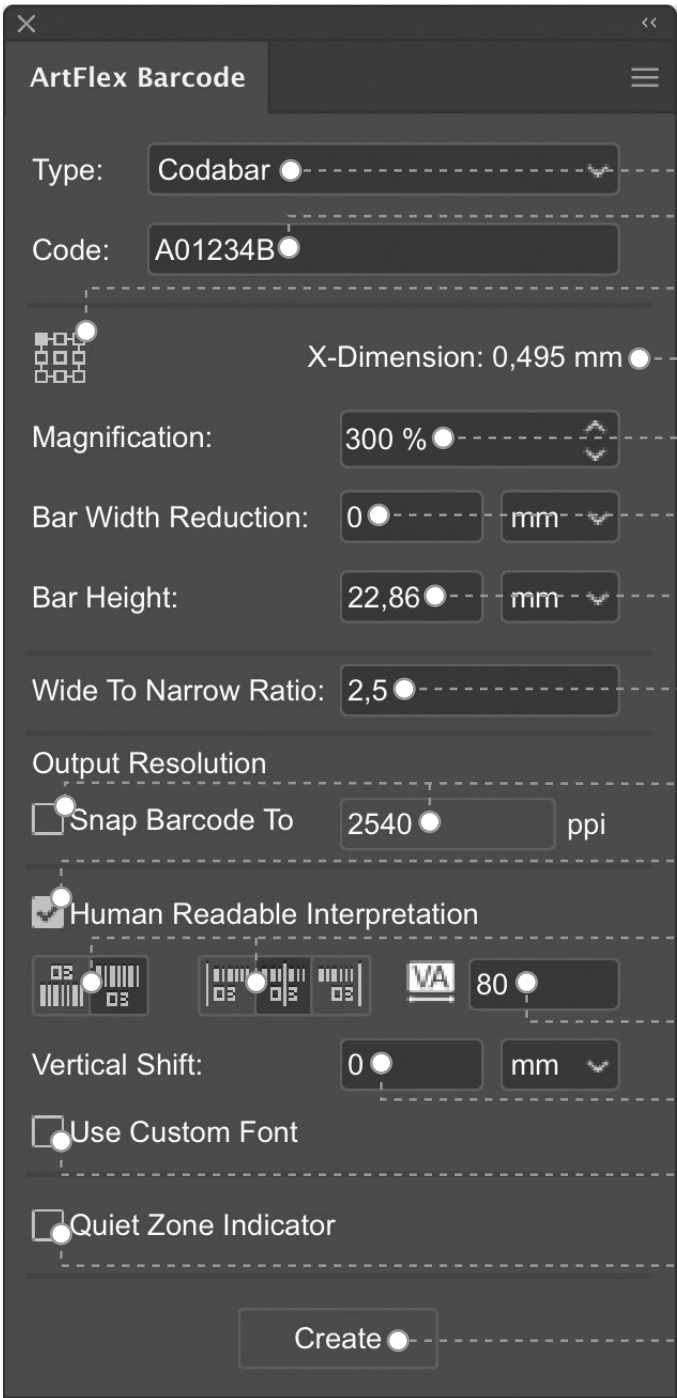
i Good to know

The HIBC Code Assistant is designed to be used by experienced users with a good HIBC code composition knowledge.

Detailed information about the HIBC codes composition:
www.hibcc.org/wp-content/uploads/SLS-2.6-Final.pdf

ArtFlex Barcode - User Guide

Codabar code interface



Type - Barcode type Codabar.

Code - Field for the code characters.

Magnification Reference Point - Indicates fixed point for barcode scaling.

X-Dimension - Displays the size of the basic dimensional module. It is the width of the narrow bar.

Magnification - Changes the width of the bars/code. It correlates with the X-Dimension size.

Bar Width Reduction (BWR) - Compensates press gain during the printing process.

Bar Height - Changes the height of the bars.

Wide To Narrow Ratio - Sets the width ratio between wide and narrow bars. Helps to improve scannability.

Output Resolution - Snaps barcode to specified resolution for easier print tools preparation.

Human Readable Interpretation (HRI) - Appends the code characters to the barcode.

HRI Alignment/Placement - Aligns the HRI on left/center/right. Places the HRI above/under the bars.

HRI Tracking - Changes the distance between the HRI characters.

HRI Vertical Shift - Changes the vertical distance between the custom HRI and edge of the bars.

Use Custom Font - Replaces the default HRI by selected font.

Quiet Zone Indicator - Marks zone where no other design can be placed. Helps to improve scannability.

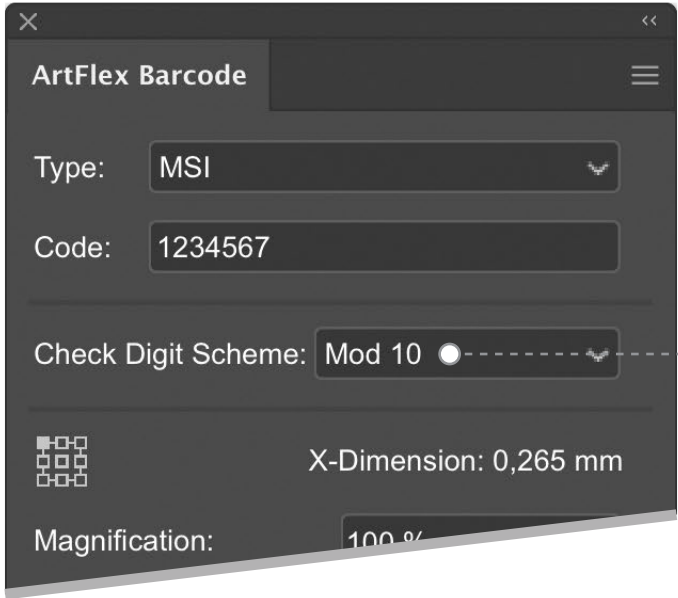
Create Button - Generates barcode based on the values specified above.

Good to know

The first and last characters of the Codabar are called start and stop signs. **ABCDEN*T** char. are allowed. The body of the code can consist of **0-9** digits and **-\$/+.** characters.

MSI code interface

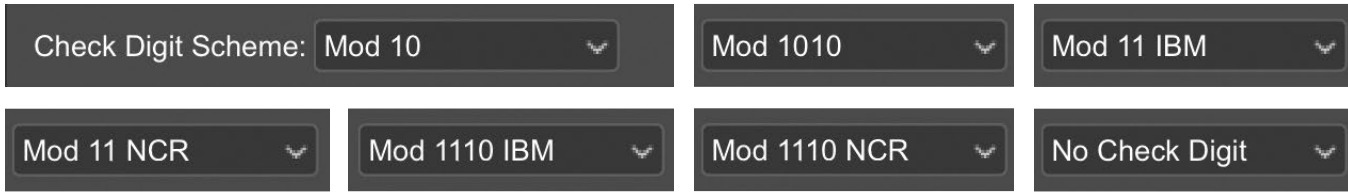
The interface of the MSI codes is almost identical to the Codabar interface (for details see the left-hand page.) The only MSI interface difference is the Check Digit Scheme option.



Check Digit Scheme - Adds a check digit(s) on the end of the code. See MSI code specific feature below.

MSI code specific feature

Check Digit Scheme
The plug-in offers seven check digit schemes for calculating the MSI code check digit. Check digits verify data integrity during the bar coding reading process. The most common Mod 10 scheme is used as default option.



Good to know

The check digit(s) are calculated automatically according to the selected scheme. They are added on the end of the code. See examples for code 1234567 below: Mod 10 scheme calculates 4 and Mod 1010 calculates 41 as check digits.





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