

GSCN #	GSCN Name	Effective Date
14-0000163	ITF Maximum X-Dimensions	

Instructions for completing the GSCN:

1. The GS1 Process Manager will complete the GSCN Name, Associated WO Number, Background and General Specification Change sections of the GSCN..

The *GSCN Name* is the short descriptive name used with the work order number.

The *WO Number* is the work order number associated with either a simple, complex or errata change request.

The *Background* is the description that is used when posting and announcing the public reviews for the GSCN.

The *General Specification Change* shall be a listing of the file names for attached documents that are copies of the current affected section(s) of the general specification revised with track changes to illustrate the changes to the GS1 General Specification; a description of changes to be made to the general specification for global changes or errata type changes; or both attachments and changes.

3. The GS1 Communications Director shall complete the GSCN# and Effective Data when posting the approved and ratified GSCN to the web site.

The *GSCN#* will be a consecutive number with a two digit prefix for the year in which the posting occurs.

The *Effective Date* is the date of ratification by the Process Group.

Associated WO Number:

14-000163

Background:

The maximum size of ITF-14 symbols is set in the GS1 General Specifications, GS1 Symbol Specifications Tables with the following note (since at least 2002):

- Packages and/or containers marked with ITF-14 Symbols with X-dimensions between 1.016 millimetres (0.0400 inch) and 1.219 millimetres (0.048 inch) are acceptable based on historical specifications, *but a migration to the 1.016 millimetres (0.0400 inch) maximum X-dimension should be made on new artwork.*

- Given that this migration statement has been there for over 10-years, the question is when this migration should be complete.

5.5.2.7 GS1 System Symbol Specification Tables

In order to find the correct bar code specification, you must:

- Find the appropriate GS1 System application area using Figure 5.5.2.6 - 1.
- If the application area references two Symbol Specification Tables, use the decision tree in Figure 5.5.2.6.1 - 2 to determine which one to use.

Figure 5.5.2.7 - 1 provides a quick reference list of the symbol quality parameters depending on their type and their application.

Figure 5.5.2.7 – 1. Quick Reference on Symbol Quality

Symbology	Application or ID Key	ISO (ANSI) Symbol Grade	Aperture	Wavelength
EAN/UPC	GTIN-8	1.5 (C)	6 mils	670 nm +/-10
EAN/UPC	GTIN-12	1.5 (C)	6 mils	670 nm +/-10
EAN/UPC	GTIN-13	1.5 (C)	6 mils	670 nm +/-10
GS1-128	Coupon Extended Code	1.5 (C)	6 mils	670 nm +/-10
GS1-128	GTIN-12, GTIN-13, GTIN-14	1.5 (C)	10 mils	670 nm +/-10
GS1-128	SSCC	1.5 (C)	10 mils	670 nm +/-10
GS1-128	Small Shipping Packages	1.5 (C)	10 mils	670 nm +/-10
GS1 DataBar Expanded GS1 DataBar Expanded Stacked	Small Shipping Packages	1.5 (C)	10 mils	670 nm +/-10
ITF-14 (<0.635 mm (0.025 in.) X)	GTIN-12, GTIN-13, GTIN-14	1.5 (C)	10 mils	670 nm +/-10
ITF-14 (≥0.635 mm (0.025 in.) X)	GTIN-12, GTIN-13, GTIN-14	0.5 (D)	20 mils	670 nm +/-10
GS1 DataBar and Composite	GTIN-8, GTIN-12, GTIN-13, GTIN-14 and other AIs	1.5 (C)	6 mils	670 nm +/-10
GS1 DataMatrix	Direct Part Marking, Regulated Healthcare Retail or Non-Retail Consumer Trade Items Extended Packaging	1.5 (C)	See Symbol Specification Tables 6, 7, 8 and 10 for values.	670 nm +/-10
GS1 QR Code	Extended Packaging limited use to AI (8200) in association with mandatory GTIN-8, GTIN-12, or GTIN-13	1.5 (C)	See Symbol Specification Table 1 Addendum for values.	670 nm +/-10



Note: An EAN/UPC-based symbol SHALL be verified using a 6 mils (0.006 inch) aperture, a 670 nanometres +/-10 nanometres wavelength of light, and requires a minimum symbol

grade of 1.5 (overall symbol grade on a 4.0 scale) equivalent to a “C” under the ANSI X3.182 standard. In the Symbol Specification Tables that follow, as well as on a typical bar code purchase order, this is expressed as 1.5/06/670.

Figure 5.5.2.7 – 2. GS1 System Symbol Specification Table 1

Primary Symbol(s) Specified	X-Dimension mm (inches)				** Minimum Symbol Height for Given X mm (inches)				Quiet Zone		Minimum Quality Specification
	* Minimum	Target	Maximum	Tol.	For Minimum X-dimension	For Target X-dimension	For Maximum X-dimension	Tol.	Left	Right	
EAN-13	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	± 0.025 (0.001")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	3X	11X	7X	1.5/06/670
EAN-8	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		14.58 (0.574")	18.23 (0.718")	36.46 (1.435")		7X	7X	1.5/06/670
UPC-A	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		18.28 (0.720")	22.85 (0.900")	45.70 (1.800")		9X	9X	1.5/06/670
UPC-E	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		18.28 (0.720")	22.85 (0.900")	45.70 (1.800")		9X	7X	1.5/06/670
GS1 DataBar Omnidirectional ****	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		12.14 (0.478")	15.19 (0.598")	30.36 (1.195")		None	None	1.5/06/670
GS1 DataBar Stacked Omnidirectional ***	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		25.10 (0.988")	31.37 (1.235")	62.70 (2.469")		None	None	1.5/06/670
GS1 DataBar Expanded	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		8.99 (0.354")	11.23 (0.442")	22.44 (0.883")		None	None	1.5/06/670
GS1 DataBar Expanded Stacked *****	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		18.75 (0.738")	23.44 (0.923")	46.86 (1.845")		None	None	1.5/06/670

Primary Symbol(s) Specified Plus Add-on 2 or 5	X-Dimension mm (inches)				** Minimum Symbol Height for Given X mm (inches)				Quiet Zone	Min separation between symbols	Max separation between symbols	Quiet Zone	Min. Quality Spec.
	*Minimum	Target	Maximum	Tol.	For Min. X-dimension	For Target X-dimension	For Max. X-dimension	Tol.	Left		Right		
EAN-13 + 2	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	± 0.025 (0.001")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	3X	11X	7X	12X	5X	1.5/06/670
EAN-13 + 5	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		18.28 (0.720")	22.85 (0.900")	45.70 (1.800")		11X	7X	12X	5X	1.5/06/670
UPC-A + 2	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		18.28 (0.720")	22.85 (0.900")	45.70 (1.800")		9X	9X	12X	5X	1.5/06/670
UPC-A + 5	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		18.28 (0.720")	22.85 (0.900")	45.70 (1.800")		9X	9X	12X	5X	1.5/06/670
UPC-E + 2	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		18.28 (0.720")	22.85 (0.900")	45.70 (1.800")		9X	7X	12X	5X	1.5/06/670
UPC-E + 5	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")		18.28 (0.720")	22.85 (0.900")	45.70 (1.800")		9X	7X	12X	5X	1.5/06/670



Note: See Section [5.5.2.6](#) to ensure the correct Symbol Specification Table is used.

- * These bar codes may only be printed using an X-dimension below 0.264 millimetre (0.0104 inch) or 80 percent magnification under the following conditions:
 - The allowance for X-dimensions between 0.249 millimetre (0.0098 inch) or 75 percent magnification and 0.264 millimetre (0.0104 inch) or 80 percent magnification is only applicable to on demand (e.g., thermal, laser) print processes. For all other printing processes, an X-dimension of 0.264 millimetre (0.0104 inch) is attainable and is the minimum allowable size.
 - When printing a minimum symbol with any method of printing, the area provided for printing the symbol and the required Quiet Zone should never be less than the area required for an X-dimension of 0.264 millimetre (0.0104 inch).
 - When printing a minimum symbol with any method of printing, the symbol height SHALL never be truncated below the minimum.
- ** The minimum symbol height dimensions listed for all symbologies including EAN/UPC Symbols do not include the Human Readable Interpretation. The minimum heights of EAN/UPC Symbols do not include the extended bars: see Section 5.2.1.4.2 for dimensions of the extended bars. Because of the operative scanning environment for EAN/UPC Symbols, there is a direct relationship between the symbol's height and width. This means the minimum symbol height listed is tied to the minimum, target, and maximum X-dimension listed. There is no maximum for the height, but if the maximum X-dimension is used, the symbol height must be equal to or greater than those listed in the Minimum Symbol Height column. For GS1 DataBar Expanded Stacked symbols, the table reflects the minimum symbol height for symbols that are two rows in height.
- *** In addition to the factors above related to digital printing, one other exception is permitted; For loose produce being weighed at the Point-of-Sale (POS) using GS1 DataBar Stacked Omnidirectional minimum X-dimension of 0.203 millimetre (0.0080 inch) is permitted but may produce scanning performance reduction. However, for POS, this performance drop off is not noticeable when the product must be weighed at the Point-of-Sale. Even with a slower scanning performance to conduct the transaction, the weighing process takes longer than the scanning process. For that reason, a lower minimum X-dimension should never be used on products crossing Point of Sale which are not weighed as loose produce during the scan event.
- **** The current symbol specification for GS1 DataBar Omni-directional (minimum height 33X) and GS1 DataBar Stacked Omni-directional (minimum height 69X) indicate a square aspect ratio for the symbol segments. To enhance scanning performance, in an omni-directional scanning environment, an over square aspect ratio shall be used following the example of the EAN/UPC symbology specification and rigorous field test of the GS1 DataBar symbology (46X or 95X).
- ***** For North American Coupon Codes using GS1 DataBar Expanded Stacked in 2 row and 3 row configurations the X Dimension may be as low as 0.0080" (0.203mm) as long as a minimum overall bar height of 1.020" (25.91mm) is maintained. X-dimensions less than 0.0100" (.254mm) might not always be feasible for all GS1 DataBar Coupon bar codes due to variables, such as printing process, symbol orientation, and material. Due to the time sensitive nature of the coupon printing process, these variables should be considered during the design and bar code origination processes. Bar code verification should always be done from printing press proofs.

In addition to the symbol used at general retail POS, an additional 2D symbol may be used to carry AI (8200). As AI (8200) has a mandatory association with GTIN, the GTIN within the symbol ensures compatibility with direct or indirect mode. GS1 DataMatrix is approved for all applications including regulated healthcare trade items covered by SSTs 6, 7, 8, and 10, but for general retail consumer trade items, either GS1 QR Code or GS1 DataMatrix are GS1 approved options. When using 2D symbols to carry AI (8200) on general retail trade items, the following specifications are required.

Figure 5.5.2.7 – 2.1. GS1 System Symbol Specification Table 1 Addendum for AI (8200)

Symbol(s) Specified ****	X-Dimension mm (inches)			Minimum Symbol Height for Given X mm (inches)			Quiet Zone	Minimum Quality Specification
	Minimum	Target	Maximum	For Minimum X-dimension	For Target X-dimension	For Maximum X-dimension	Surrounding Symbol	
GS1 DataMatrix (ECC 200) **	0.396 (0.0150")	0.495 (0.0195")	0.743 (0.0293")	Height is determined by X-Dimension for Data that is encoded			1X *	1.5/*** /670
GS1 QR Code **	0.396 (0.0150")	0.495 (0.0195")	0.743 (0.0293")	Height is determined by X-Dimension for Data that is encoded			4X *	1.5/*** /670

- * 2D Quiet Zones - Quiet Zones for GS1 DataMatrix are 1X on all four sides and 4X for GS1 QR Code.
- ** 2D X-dimension - Optical effects in the image capture process require that the GS1 DataMatrix and GS1 QR Code Symbols be printed at 1.5 times the equivalent X-dimension allowed for linear symbols.
- *** 2D Quality Measurement - The effective aperture for GS1 DataMatrix and GS1 QR Code quality measurements should be taken at 80% of the X-dimension.
- **** Where a linear symbol appears on the package, reverse and mirror-image representation of GS1 2D symbols shall not be permitted.

Figure 5.5.2.7 – 3. GS1 System Symbol Specification Table 2

Symbol(s) Specified		*X-Dimension mm (inches)		Tol.	** Minimum Symbol Height for Given X mm (inches)			Tol.	Quiet Zone		***Minimum Quality Specification
	Minimum	Target	Maximum		For Minimum X- dimension	For Target X- dimension	For Maximum X- dimension		Left	Right	
EAN-13	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	± 0.025 (0.001")	34.28 (1.350")	45.70 (1.800")	45.70 (1.800")	3X	11X	7X	1.5/06/670
EAN-8	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		27.35 (1.077")	36.46 (1.435")	36.46 (1.435")		7X	7X	1.5/06/670
UPC-A	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		34.28 (1.350")	45.70 (1.800")	45.70 (1.800")		9X	9X	1.5/06/670
UPC-E	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		34.28 (1.350")	45.70 (1.800")	45.70 (1.800")		9X	7X	1.5/06/670
ITF-14	0.495 (0.0195")	0.495 (0.0195")	1.016 (0.0400")		31.75 (1.250")	31.75 (1.250")	31.75 (1.250")		10X	10X	1.5/10/670
GS1-128	0.495 (0.0195")	0.495 (0.0195")	1.016 (0.0400")		31.75 (1.250")	31.75 (1.250")	31.75 (1.250")		10X	10X	1.5/10/670
GS1 DataBar Omnidirect ional	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		16.34 (0.644")	21.78 (0.858")	21.78 (0.858")		NA	NA	1.5/06/670
GS1 DataBar Stacked Omnidirect ional	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		34.16 (1.346")	45.54 (1.794")	45.54 (1.794")		NA	NA	1.5/06/670
GS1 DataBar Expanded	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		16.83 (0.663")	22.44 (0.884")	22.44 (0.884")		NA	NA	1.5/06/670
GS1 DataBar Expanded Stacked	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		35.15 (1.385")	46.86 (1.846")	46.86 (1.846")		NA	NA	1.5/06/670
GS1 DataBar Stacked	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		6.44 (0.254")	8.58 (0.338")	8.58 (0.338")		NA	NA	1.5/06/670
GS1 DataBar Limited	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		4.95 (0.195")	6.60 (0.260")	6.60 (0.260")		NA	NA	1.5/06/670
GS1 DataBar Truncated	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		6.44 (0.254")	8.58 (0.338")	8.58 (0.338")		NA	NA	1.5/06/670



Note: See Section [5.5.2.6](#) to ensure the correct Symbol Specification Table is used.

* UPC-E and EAN-8 Symbols are designed for use on small packages. Whenever space permits, UPC-A, EAN-13, ITF-14, or GS1-128 Symbols should be used in the General Distribution Scanning environment.

The minimum symbol height dimensions listed for all symbologies including EAN/UPC Symbols do not include the Human Readable Interpretation (or Bearer Bars for ITF-14 Symbols). The minimum heights of EAN/UPC Symbols do not include the extended bars: see Section 5.2.1.4.2 for dimensions of the extended bars. Because of the operative scanning environment for EAN/UPC Symbols, there is a direct relationship between the symbol's height and width. This means the minimum symbol height is tied to the minimum, target, and maximum X-dimension listed.

ITF-14 Symbols with X-dimensions below 0.635 millimetre (0.0250 inch) should not be printed directly on corrugate with conventional (plate-based) processes. ~~Packages and/or containers marked with ITF-14 Symbols with X-dimensions between 1.016 millimetres (0.0400 inch) and 1.219 millimetres (0.048 inch) are acceptable based on historical specifications, but a migration to the 1.016 millimetres (0.0400 inch) maximum X-dimension should be made on new artwork.~~ The ITF-14 Symbol's bar width ratio target is 2.5:1, and the acceptable range is 2.25:1 to 3:1.

GS1-128 Symbols have a maximum symbol length of 165.10 millimetres (6.500 inch), which may impact the maximum achievable X-dimension. For example, a GS1-128 Symbol containing an SSCC has a maximum achievable X-dimension for 0.940 millimetre (0.0370 inch)

** The minimum symbol height for General Distribution Scanning is always 31.75 millimetres (1.250 inch). The minimum symbol height dimensions for ITF-14 and GS1-128 Symbols relate to the bar heights only (do not include Human Readable Interpretation text or ITF-14 Symbol Bearer Bars). There is no maximum for the height, but if the maximum X-dimension is used, the symbol height must be equal to or greater than those listed in the Minimum Symbol Height column.

*** For ITF-14 Symbols printed on labels with off-set, thermal, or laser print with an X-dimension 0.495 millimetre (0.0195 inch), the minimum quality specification is 1.5/10/670. For ITF-14 Symbols printed directly on corrugate or labels with an X-dimension greater than or equal to 0.635 millimetre (0.0250 inch), the minimum quality specification is 0.5/20/670.

Figure 5.5.2.7 – 4. GS1 System Symbol Specification Table 3

Symbol(s) Specified		*X-Dimension mm (inches)		Tol.	** Minimum Symbol Height for Given X mm (inches)			Tol.	Quiet Zone		Minimum Quality Specification
	Minimum	Target	Maximum		For Minimum X- dimension	For Target X- dimens ion	For Maximum X- dimension		Left	Right	
EAN-13	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	± 0.025 (0.001")	34.28 (1.350")	45.70 (1.800")	45.70 (1.800")	3X	11X	7X	1.5/06/670
EAN-8	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		27.35 (1.077")	36.46 (1.435")	36.46 (1.435")		7X	7X	1.5/06/670
UPC-A	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		34.28 (1.350")	45.70 (1.800")	45.70 (1.800")		9X	9X	1.5/06/670
UPC-E	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		34.28 (1.350")	45.70 (1.800")	45.70 (1.800")		9X	7X	1.5/06/670
GS1 DataBar Omnidire ctional ***	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		22.77 (0.897")	30.36 (1.196")	30.36 (1.196")		None	None	1.5/06/670
GS1 DataBar Stacked Omnidire ctional ***	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		47.03 (1.853")	62.70 (2.470")	62.70 (2.470")		None	None	1.5/06/670
GS1 DataBar Expanded	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		16.83 (0.663")	22.44 (0.884")	22.44 (0.884")		None	None	1.5/06/670
GS1 DataBar Expanded Stacked	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")		35.15 (1.385")	46.86 (1.846")	46.86 (1.846")		None	None	1.5/06/670



Note: See Section [5.5.2.6](#) to ensure the correct Symbol Specification Table is used.

* UPC-E and EAN-8 Symbols are designed for use on small packages. Whenever space permits, UPC-A and EAN-13 Symbols should be used.

** The minimum symbol height dimensions listed for all symbologies including EAN/UPC Symbols do not include the Human Readable Interpretation. The minimum heights of EAN/UPC Symbols do not include the extended bars: see Section 5.2.1.4.2 for dimensions of the extended bars. Because of the operative scanning environment for EAN/UPC Symbols, there is a direct relationship between the symbol's height and width. This means the minimum symbol height listed is tied to the minimum, target, and maximum X-dimension listed.

There is no maximum for the height, but if the maximum X-dimension is used, the symbol height must be equal to or greater than those listed in the Minimum Symbol Height column.

*** The current symbol specification for GS1 DataBar Omni-directional (minimum height 33X) and GS1 DataBar Stacked Omni-directional (minimum height 69X) indicate a square aspect ratio for the symbol segments. To enhance scanning performance, in an omni-directional scanning environment, an over square aspect ratio shall be used following the example of the EAN/UPC symbology specification and rigorous field test of the GS1 DataBar symbology (46X or 95X).

Figure 5.5.2.7 – 5. GS1 System Symbol Specification Table 4

Symbol(s) Specified	*X-Dimension mm (inches)			** Minimum Symbol Height for Given X mm (inches)			Quiet Zone		Minimum Quality Specification
	Minimum	Target	Maximum	For Minimum X- dimension	For Target X- dimension	For Maximum X- dimension	Left	Right	
EAN-13	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	11X	7X	1.5/06/670
EAN-8	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	14.58 (0.574")	18.23 (0.718")	36.46 (1.435")	7X	7X	1.5/06/670
UPC-A	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	9X	9X	1.5/06/670
UPC-E	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	9X	7X	1.5/06/670
GS1 DataBar Omnidirectional	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	8.71 (0.343")	10.90 (0.429")	21.78 (0.858")	NA	NA	1.5/06/670
GS1 DataBar Stacked Omnidirectional	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.24 (0.718")	27.78 (0.897")	45.54 (1.794")	NA	NA	1.5/06/670
GS1 DataBar Expanded	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	8.99 (0.354")	11.23 (0.442")	22.44 (0.883")	NA	NA	1.5/06/670
GS1 DataBar Expanded Stacked	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.75 (0.738")	23.44 (0.923")	46.86 (1.845")	NA	NA	1.5/06/670
GS1 DataBar Stacked	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	3.43 (0.135")	4.29 (0.169")	8.58 (0.338")	N/A	N/A	1.5/06/670
GS1 DataBar Limited	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	2.64 (0.104")	3.30 (0.130")	6.60 (0.260")	N/A	N/A	1.5/06/670
GS1 DataBar Truncated	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	3.43 (0.135")	4.29 (0.169")	8.58 (0.338")	N/A	N/A	1.5/06/670
ITF-14	0.250 (0.00984")	0.495 (0.0195")	0.495 (0.0195")	12.70 (0.500")	12.70 (0.500")	12.70 (0.500")	10X	10X	1.5/10/670
GS1- 128	0.250 (0.00984")	0.495 (0.0195")	0.495 (0.0195")	12.70 (0.500")	12.70 (0.500")	12.70 (0.500")	10X	10X	1.5/10/670



Note: See Section [5.5.2.6](#) to ensure the correct Symbol Specification Table is used.

- * ITF-14 Symbols with X-dimensions below 0.635 millimetre (0.0250 inch) should not be printed directly on corrugate with conventional (plate based) processes. ~~Packages and/or containers marked with ITF-14 Symbols with X-dimensions between 1.016 millimetres (0.0400 inch) and 1.219 millimetres (0.048 inch) are acceptable based on historical specifications, but a migration to the 1.016 millimetres (0.0400 inch) maximum X-dimension should be made on new artwork.~~ The ITF-14 Symbol's bar width ratio target is 2.5:1, and the acceptable range is 2.25:1 to 3:1.

Section [5.5.3.4](#) gives full details on when bar codes can be printed at less than the minimum X-dimension. In general, bar codes may only be printed using an X-dimension below 0.264 millimetre (0.0104 inch) or 80 percent magnification under the following conditions:

- The allowance for X-dimensions between 0.249 millimetre (0.0098 inch) or 75 percent magnification and 0.264 millimetre (0.0104 inch) or 80 percent magnification is only applicable to on demand (e.g., thermal, laser) print processes. For all other printing processes, an X-dimension of 0.264 millimetre (0.0104 inch) is attainable and is the minimum allowable size.

- When printing a minimum symbol with any method of printing, the area provided for printing the symbol and the required Quiet Zone should never be less than the area required for an X-dimension of 0.264 millimetre (0.0104 inch).
- When printing a minimum symbol with any method of printing, the symbol height SHALL never be truncated.

** The minimum symbol height dimensions listed for all symbologies including EAN/UPC Symbols do not include the Human Readable Interpretation (or Bearer Bars for ITF-14 Symbols). The minimum heights of EAN/UPC Symbols do not include the extended bars: see Section 5.2.1.4.2 for dimensions of the extended bars.

Because of the operative scanning environment for EAN/UPC Symbols, there is a direct relationship between the symbol's height and width. This means the minimum symbol height listed is tied to the minimum, target, and maximum X-dimension listed.

The minimum bar height for ITF-14 and GS1-128 Symbols in this operative scanning environment is 12.70 millimetres (0.500 inch), but if the package is physically too small to accommodate this rule, further truncation is permitted. In no case shall the bar height be less than 5.08 millimetres (0.200 inch).

There is no maximum for the symbol height, but if the maximum X-dimension is used, the symbol height must be equal to or greater than those listed in the Minimum Symbol Height column.

Whereas, linear symbol heights are set at a fixed dimension, Composite Components are printed at the same X-dimension as the linear portion of the Composite Symbology, and the bar code height varies depending on the amount of data, the X-dimension, and which linear symbol is used in conjunction with the Composite Component. Note that Composite Components have to be printed with a linear symbol such as GS1 DataBar, GS1-128, UPC-A, or EAN-13. ITF-14 cannot be used with Composite Components.

Figure 5.5.2.7 – 6. GS1 System Symbol Specification Table 5

Symbol(s) Specified	*X-Dimension mm (inches)			** Minimum Symbol Height for Given X mm (inches)			Quiet Zone		Minimum Quality Specification
	Minimum	Target	Maximum	For Minimum X- dimension	For Target X- dimension	For Maximum X- dimension	Left	Right	
GS1-128	0.495 (0.0195")	0.495 (0.0195")	0.940 (0.0370")	31.75 (1.250")	31.75 (1.250")	31.75 (1.250")	10X	10X	1.5/10/670



Note: See Section [5.5.2.6](#) to ensure the correct Symbol Specification Table is used.

- * If the item is too small to accommodate the minimum X-dimension, the minimum X-dimension is 0.250 millimetre (0.0098 inch).
- ** The minimum symbol height indicated is for bar height only and does not include the Human Readable Interpretation. If the item is too small to accommodate the minimum, the minimum bar height is the greater of 15 percent of the symbol width including Quiet Zones or 12.70 millimetres (0.500 inch). If the package is physically too small to accommodate this rule, further truncation is permitted, but in no case shall the bar height be less than 5.08 millimetres (0.200 inch).

There is no maximum for the height, but if the maximum X-dimension is used, the symbol height must be equal to or greater than those listed in the Minimum Symbol Height column.

Figure 5.5.2.7 – 7. GS1 System Symbol Specification Table 6 – Regulated Healthcare Non-Retail Consumer Trade Items Not Scanned in General Distribution

Symbol(s) Specified	X-Dimension mm (inches)			Minimum Symbol Height for Given X mm (inches)			Quiet Zone		Minimum Quality Specificatio n
	Minimum	Target	Maximum	For Minimum X- dimension	For Target X- dimension	For Maximum X- dimension	Left	Right	
GS1- 128	0.170 (0.0067")	0.495 (0.0195")	0.495 (0.0195")	12.70 (0.500")	12.70 (0.500")	12.70 (0.500")	10X	10X	1.5/10/670
GS1 DataMatrix (ECC 200) **	0.255 (0.0100")	0.380 (0.0150")	0.495 (0.0195")	Height is determined by X-Dimension for Data that is encoded			1X *	1X *	1.5/670/670
GS1 DataBar Omnidirectional	0.170 (0.0067")	0.200 (0.0080")	0.660 (0.0260")	5.61 (0.221")	6.60 (0.260")	21.78 (0.858")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Truncated	0.170 (0.0067")	0.200 (0.0080")	0.660 (0.0260")	2.21 (0.087")	2.60 (0.102")	8.58 (0.338")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Stacked	0.170 (0.0067")	0.200 (0.0080")	0.660 (0.0260")	2.21 (0.087")	2.60 (0.102")	8.58 (0.338")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Stacked Omnidirectional	0.170 (0.0067")	0.200 (0.0080")	0.660 (0.0260")	11.73 (0.462")	13.80 (0.543")	45.54 (1.794")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Limited	0.170 (0.0067")	0.200 (0.0080")	0.660 (0.0260")	1.70 (0.067")	2.00 (0.079")	6.60 (0.260")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Expanded	0.170 (0.0067")	0.200 (0.0080")	0.660 (0.0260")	5.78 (0.228")	6.80 (0.268")	22.44 (0.884")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Expanded Stacked	0.170 (0.0067")	0.200 (0.0080")	0.660 (0.0260")	12.07 (0.475")	14.20 (0.559")	46.86 (1.846")	Not Applicable	Not Applicable	1.5/06/670
EAN-13	0.170 (0.0067")	0.330 (0.0130")	0.660 (0.0260")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	11X	7X	1.5/06/670
EAN-8	0.170 (0.0067")	0.330 (0.0130")	0.660 (0.0260")	14.58 (0.574")	18.23 (0.718")	36.46 (1.435")	7X	7X	1.5/06/670
UPC-A	0.170 (0.0067")	0.330 (0.0130")	0.660 (0.0260")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	9X	9X	1.5/06/670
UPC-E	0.170 (0.0067")	0.330 (0.0130")	0.660 (0.0260")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	9X	7X	1.5/06/670
ITF-14	0.170 (0.0067")	0.495 (0.0195")	0.495 (0.0195")	12.70 (0.500")	12.70 (0.500")	12.70 (0.500")	10X	10X	1.5/10/670
CC-A	All CCs need to be printed at the same X- dimensions as their linear components, therefore consult the appropriate row and column for the linear symbol to be used.			Height is determined by X-Dimension for data that is encoded			1X	1X	1.5/06/670
CC-B							1X	1X	1.5/06/670
CC-C							2X	2X	1.5/06/670



Note: See Section [5.5.2.6](#) to ensure the correct Symbol Specification Table is used.



Note: This table contains several symbol options. All are permitted to promote backward compatibility, but Section 2 Application Standards define which symbols are the preferred options for the future.

* 2D Quiet Zones - Quiet Zones for GS1 DataMatrix are 1X on all four sides.

** 2D X-dimension - Optical effects in the image capture process require that the GS1 DataMatrix symbol be printed at 1.5 times the equivalent printing X-dimension allowed for linear or Composite Symbols.

*** 2D Quality Measurement - The effective aperture for GS1 DataMatrix quality measurements should be taken at 80% of the X-dimension. An aperture of 8 is used for Regulated Healthcare Non-Retail Consumer Trade Items in this application.

Figure 5.5.2.7 – 8. GS1 System Symbol Specification Table 7 - Direct Part Marking

Symbol(s) Specified	X-Dimension mm (inches) Note 1 Note 6			Minimum Symbol Height for Given X mm (inches)			Quiet Zone	Minimum Quality Specification	
	Minimum	Target	Maximum	For Minimum X- dimension	For Target X- dimension	For Maximum X- dimension			
GS1 DataMatrix	0.255 (0.0100")	0.300 (0.0118")	0.615 (0.0242")	Height is determined by X-Dimension for data that is encoded			1X on all four sides	1.5/06/670 Note 5	For Direct Marking of items other than Small Medical/Surgical Instruments
GS1 DataMatrix Ink Based Direct Part Marking	0.255 (0.0100")	0.300 (0.0118")	0.615 (0.0242")	Height is determined by X-Dimension for data that is encoded			1X on all four sides	1.5/08/670 Note 5	For Small Medical / Surgical Instrument Direct Marking
GS1 DataMatrix Direct Part Marking - A Note 2	0.100 (0.0039")	0.200 (0.0079")	0.300 (0.0118")	Height is determined by X-Dimension for data that is encoded			1X on all four sides	1.5/03/ Note 3 Note 4 Note 5	For Small Medical / Surgical Instrument Direct Marking
GS1 DataMatrix Direct Part Marking - B Note 2	0.200 (0.0079")	0.300 (0.0118")	0.495 (0.0195")	Height is determined by X-Dimension for data that is encoded			1X on all four sides	1.5/06/ Note 3 Note 4 Note 5	For Small Medical / Surgical Instrument Direct Marking



Note 1: Optical effects in the image capture process require that label based GS1 DataMatrix symbols be printed at approximately 1.5 times the equivalent X-dimension allowed for linear symbols in the same application.



Note 2: There are two basic types of non ink based Direct Part Marks, those with “connected modules” in the “L” shaped finder pattern (GS1 DataMatrix Direct Part Marking – A) created by DPM marking technologies such as laser or chemical etching and those with “non connected modules” in the “L” shaped finder pattern (GS1 DataMatrix Direct Part Marking – B) created by DPM marking technologies such as dot peen. Due to the marking technologies and characteristics of reading they each have varied ranges of X-Dimensions and different quality criteria recommended and may require different reading equipment.

GS1 DataMatrix – A is suggested for marking of small medical / surgical instruments. The Minimum X-Dimension of 0.100mm is based upon the specific need for permanence in direct marking of small medical instruments which have limited marking area available on the instrument with a target useable area of 2.5mm x 2.5mm and a data content of GTIN (AI 01) plus Serial Number (AI 21).



Note 3: The wavelength for Direct Part Marked GS1 DataMatrix is based upon the practical scanning environment and thus must in the grade be matched to the scanner / imagers being used. See ISO/IEC 15415 and AIM DPM-1-2006.

- ✓ **Note 4:** The angle is an additional parameter defining the angle of incidence (relative to the plane of the symbol) of the illumination for Direct Part Marking verification. It shall be included in the overall symbol grade when the angle of incidence is other than 45 degrees. Its absence indicates that the angle of incidence is 45 degrees. See ISO/IEC 15415 and AIM DPM-1-2006.
- ✓ **Note 5:** The effective aperture for GS1 DataMatrix quality measurements should be taken at 80 percent of the minimum X-dimension allowed for the application. For Direct Part Marking - A this would equate to an aperture of 3; for Direct Park Marking – B this would equate to an aperture of 6 and for general healthcare label printing, an aperture of 8. See ISO/IEC 15415 and AIM DPM-1-2006.
- ✓ **Note 6:** The largest X-dimension in a given range that will allow a symbol with the needed data content to fit within the available marking area should be used to maximize marking and reading performance (depth of field, tolerance to curvature, etc.).
- ✓ **Note:** In small instrument marking, mixed marking technologies used within the same scanning environment should be avoided to ensure highest reading performance. Laser etching is recommended for small instrument marking.

Figure 5.5.2.7- 9. GS1 System Symbol Specification Table 8 - Trade Items Scanned in Retail Pharmacy and General Distribution or Non-Retail Pharmacy and General Distribution

Symbol(s) Specified	X-dimension mm (inches)			Minimum Symbol Height for Given X mm (inches)			Quiet Zone		Minimum Quality Specification
	Minimum	Target	Maximum	For Minimum X- dimension	For Target X- dimension	For Maximum X- dimension	Left	Right	
GS1- 128	0.495 (0.0195")	0.495 (0.0195")	1.016 (0.0400")	31.75 (1.250")	31.75 (1.250")	31.75 (1.250")	10X	10X	1.5/10/670
GS1 DataMatrix (ECC 200)	0.750 (0.0300")	0.750 (0.0300")	1.520 (0.0600")	Height is determined by X-Dimension for Data that is encoded			1X	1X	1.5*/670
EAN-13	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	34.28 (1.350")	45.70 (1.800")	45.70 (1.800")	11X	7X	1.5/06/670
EAN-8	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	27.35 (1.077")	36.46 (1.435")	36.46 (1.435")	7X	7X	1.5/06/670
UPC-A	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	34.28 (1.350")	45.70 (1.800")	45.70 (1.800")	9X	9X	1.5/06/670
UPC-E	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	34.28 (1.350")	45.70 (1.800")	45.70 (1.800")	9X	7X	1.5/06/670
ITF-14	0.495 (0.0195")	0.495 (0.0195")	1.016 (0.0400")	31.75 (1.250")	31.75 (1.250")	31.75 (1.250")	10X	10X	1.5/10/670
GS1 DataBar Omnidirectional	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	16.34 (0.644")	21.78 (0.858")	21.78 (0.858")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Truncated	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	6.44 (0.254")	8.58 (0.338")	8.58 (0.338")	Not Applicable	Not Applicable	1.5/06/670

GS1 DataBar Stacked	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	6.44 (0.254")	8.58 (0.338")	8.58 (0.338")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Stacked Omnidirectional	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	34.16 (1.346")	45.54 (1.794")	45.54 (1.794")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Limited	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	4.95 (0.195")	6.60 (0.260")	6.60 (0.260")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Expanded	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	16.83 (0.663")	22.44 (0.884")	22.44 (0.884")	Not Applicable	Not Applicable	1.5/06/670
GS1 DataBar Expanded Stacked	0.495 (0.0195")	0.660 (0.0260")	0.660 (0.0260")	35.15 (1.385")	46.86 (1.846")	46.86 (1.846")	Not Applicable	Not Applicable	1.5/06/670

- ✔ **Note:** See Section [5.5.2.6](#) to ensure the correct Symbol Specification Table is used.
- ✔ **Note:** This table contains several symbol options. All are permitted to promote backward compatibility, but Section 2 Application Standards define which symbols are the preferred options for the future.
- ✔ **Note:** See the asterisked notes on 2D Quiet Zone, 2D X-dimension, 2D Quality Measurement (for * above) that follow Figure 5.5.2.7 – 7 "GS1 System Symbol Specification Table 6 – Regulated Healthcare Non-Retail Consumer Trade Items Not Scanned in General Distribution"
- ✔ **Note:** Since June 2007 GS1 has recommended all trading partners in the healthcare sector invest exclusively in imaging-based scanners. Now that GS1 DataMatrix has been approved within the standard, it is important to inform all trading partners of a process within GS1 to establish target deployment dates. Without these dates, brand owners do not have a way know when to deploy GS1 DataMatrix on their packaging and those needing to invest in scanning equipment may inadvertently purchase equipment that will not support the standards. To see GS1 Healthcare's Position Paper on GS1 DataMatrix adoption, visit <http://www.gs1.org/healthcare>.

Figure 5.5.2.7 – 10. GS1 System Symbol Specification Table 9 – GS1 Keys Other than GTIN

Symbol(s) Specified	X-Dimensions mm(inches)			Minimum Symbol Height for Given X mm(inches)			Quiet Zone		Minimum Quality Specification
	Minimum	Target	Maximum	For Minimum X- Dimension	For Target X- Dimension	For Maximum X- Dimension	Left	Right	
GS1- 128	0.250 (0.0098")	0.250 (0.0098")	0.495 (0.0195")	12.70 (0.500")	12.70 (0.500")	12.70 (0.500")	10X	10X	1.5/10/670
GS1 DataMatrix (ECC 200)	0.380 (0.0150")	0.380 (0.0150")	0.495 (0.0195")	Height is determined by X-Dimension for Data that is encoded			1X	1X	1.5*/670

- ✔ **Note:** See Section [5.5.2.6](#) to ensure the correct Symbol Specification Table is used.



Note: This table contains several symbol options. All are permitted to promote backward compatibility, but Section 2 Application Standards define which symbols are the preferred options for the future.



Note: See the asterisked notes on 2D Quiet Zone, 2D X-dimension, 2D Quality Measurement (for * above) that follow Figure 5.5.2.7 – 7 “GS1 System Symbol Specification Table 6 – Regulated Healthcare Non-Retail Consumer Trade Items Not Scanned in General Distribution”

Figure 5.5.2.7 – 11. GS1 System Symbol Specification Table 10 – Regulated Healthcare Retail Consumer Trade Items Not Scanned in General Distribution

Symbol(s) Specified	X-Dimension mm (inches)			Minimum Symbol Height for Given X mm (inches)			Quiet Zone		Minimum Quality Specification
	Minimum	Target	Maximum	For Minimum X- dimension	For Target X- dimension	For Maximum X-dimension	Left	Right	
GS1- 128	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	12.70 (0.500")	12.70 (0.500")	12.70 (0.500")	10X	10X	1.5/10/670
GS1 DataMatrix (ECC 200)	0.396 (0.0156")	0.495 (0.0195")	0.990 (0.0390")	Height is determined by X-Dimension for Data that is encoded			1X	1X	1.5*/670
GS1 DataBar Omnidirectional	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	8.71 (0.343")	10.89 (0.429")	21.78 (0.858)	<i>Not Applicable</i>	<i>Not Applicable</i>	1.5/06/670
GS1 DataBar Truncated	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	3.43 (0.135")	4.29 (0.169")	8.58 (0.338")	<i>Not Applicable</i>	<i>Not Applicable</i>	1.5/06/670
GS1 DataBar Stacked	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	3.43 (0.135")	4.29 (0.169")	8.58 (0.338")	<i>Not Applicable</i>	<i>Not Applicable</i>	1.5/06/670
GS1 DataBar Stacked Omnidirectional	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.22 (0.718")	27.77 (0.897")	45.54 (1.794")	<i>Not Applicable</i>	<i>Not Applicable</i>	1.5/06/670
GS1 DataBar Limited	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	2.64 (0.104")	3.30 (0.130")	6.60 (0.260")	<i>Not Applicable</i>	<i>Not Applicable</i>	1.5/06/670
GS1 DataBar Expanded	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	8.98 (0.354")	11.22 (0.442")	22.44 (0.883")	<i>Not Applicable</i>	<i>Not Applicable</i>	1.5/06/670
GS1 DataBar Expanded Stacked	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.74 (0.738")	23.43 (0.923")	46.86 (1.846")	<i>Not Applicable</i>	<i>Not Applicable</i>	1.5/06/670
EAN-13	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	11X	7X	1.5/06/670
EAN-8	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	14.58 (0.574")	18.23 (0.718")	36.46 (1.435")	7X	7X	1.5/06/670
UPC-A	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	9X	9X	1.5/06/670
UPC-E	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	9X	7X	1.5/06/670
ITF-14	0.264 (0.0104")	0.330 (0.0130")	0.660 (0.0260")	18.28 (0.720")	22.85 (0.900")	45.70 (1.800")	10X	10X	1.5/10/670



Note: See Section [5.5.2.6](#) to ensure the correct Symbol Specification Table is used.



Note: See the asterisked notes on 2D Quiet Zone, 2D X-dimension, 2D Quality Measurement (for * above) that follow Figure 5.5.2.7 – 7 “GS1 System Symbol Specification Table 6 -- Regulated Healthcare Non-Retail Consumer Trade Items Not Scanned in General Distribution”



Note: Since June 2007 GS1 has recommended all trading partners in the healthcare sector invest exclusively in imaging-based scanners. Now that GS1 DataMatrix has been approved within the standard, it is important to inform all trading partners of a process within GS1 to establish target deployment dates. Without these dates, brand owners do not have a way know when to deploy GS1 DataMatrix on their packaging and those needing to invest in scanning equipment may inadvertently purchase equipment that will not support the standards. To see GS1 Healthcare's Position Paper on GS1 DataMatrix adoption, visit GS1.org/GS1Healthcare.

Figure 5.5.2.7 – 12. GS1 System Symbol Specification Table 11 – GS1 GSRNs

Symbol(s) Specified	X-Dimensions mm(inches)			Minimum Symbol Height for Given X mm(inches)			Quiet Zone		Minimum Quality Specification
	Minimum	Target	Maximum	For Minimum X- Dimension	For Target X- Dimension	For Maximum X- Dimension	Left	Right	
GS1- 128	0.170 (0.0067")	0.250 (0.0098")	0.495 (0.0195")	12.70 (0.500")	12.70 (0.500")	12.70 (0.500")	10X	10X	1.5/10/670
GS1 DataMatrix (ECC 200)	0.255 (0.0100")	0.380 (0.0150")	0.495 (0.0195")	Height is determined by X-Dimension for Data that is encoded			1X	1X	1.5*/670



Note: See Section [5.5.2.6](#) to ensure the correct Symbol Specification Table is used.



Note: This table contains several symbol options. All are permitted to promote backward compatibility, but Section 2 Application Standards define which symbols are the preferred options for the future.



Note: See the asterisked notes on 2D Quiet Zone, 2D X-dimension, 2D Quality Measurement (for * above) that follow Figure 5.5.2.7 – 7 “GS1 System Symbol Specification Table 6 — Regulated Healthcare Non-Retail Consumer Trade Items Not Scanned in General Distribution”