Barcodes: Variable GTIN

Variable GTIN barcodes are GTIN-14 barcodes, which contain information about a certain value encoded as a part of the 14 digit barcode. This value can have different purposes, such as weight, price, volume, dimensions. Produmex WMS supports variable measure item barcodes that contain the weight encoded.

The prefix in a GTIN barcode depends on the country where the product is used. Since it is not internationally used, a certain prefix can have a different meaning depending on the country. To be able to handle this difference, special configurations are required.

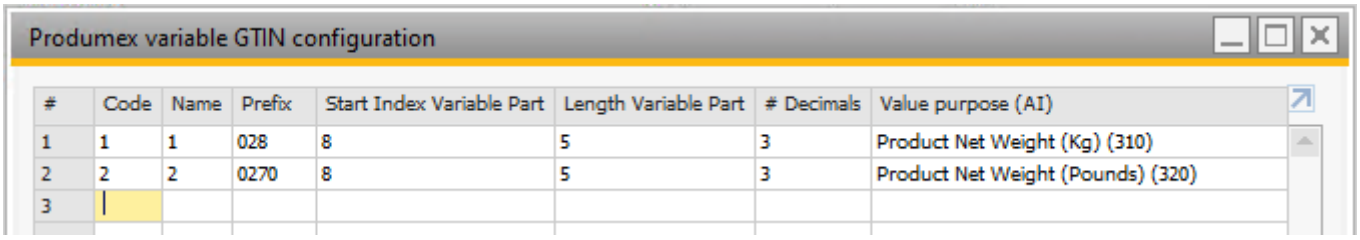
Supported flows:

- Purchase

1. Configuration

1.1. Produmex variable GTIN configuration user table

Open the user table via the path: Tools > Default Forms > PMX_VGTC - Produmex variable GTIN configuration. The configuration of what prefixes are a variable GTIN barcode, and what purpose of the variable value means are stored here. See: Produmex variable GTIN configuration (PMX_VGTC)



#	Code	Name	Prefix	Start Index Variable Part	Length Variable Part	# Decimals	Value purpose (AI)
1	1	1	028	8	5	3	Product Net Weight (Kg) (310)
2	2	2	0270	8	5	3	Product Net Weight (Pounds) (320)
3							

1.2. Item Master Data

On the Item Master Data set the barcode type as GTIN-variable.
Set the barcode as the fixed part. The fixed part is every digit before the *Start Index Variable Part* set on the PMX_VGTC table.

Produmex currently only supports variable weight for catch weight items. Configure the catch weight settings on the Produmex Catch Weight tab of the Item Master Data.

- Set the *GS1 AI for UoM1* to 'Count'.
- Set the *GS1 AI for UoM2* to the same value as the *Value purpose (AI)* on the 'Produmex variable GTIN configuration' user table.
- Configure the *UoM to Use for Purchase/Inventory/Sales* setting as well.
  Note: If it is set as '*Pieces*', then the number of pieces is calculated from the weigh in barcode, but the weight itself is not saved in the system. Instead a default weight is saved which is calculated based on the number of pieces and UoM conversion set on the Produmex Catch Weight tab.

2. Process

When a barcode is scanned, Produmex WMS first checks if the scanned barcode has a prefix available in the variable GTIN configuration table.

- If not, then the barcode is regarded as a normal GTIN and the whole barcode is matched against the Item Master Data.
- If there is such a prefix:
  - The variable part and the check digit are removed to retrieve the fixed part. The remaining digits are matched against the Item Master Data.
  - Then the system gets the value of the variable part and stores in the field defined in as the *Value purpose (AI)* field.

Example

PMX_VGTC UDT

- Prefix = 028
- Start Index Variable Part = 8
- #Decimals = 3
- Length = 5
- Value purpose (AI) = Net weight (kg)

Item Master Data

	CW_VGTIN	**CW_VGTIN2**
Header > Barcode	02801180	02801290
Header > Barcode type	GTIN-Variable	GTIN-Variable
Produmex Catch Weight tab > Catch Weight Item	Y	Y
Produmex Catch Weight tab > Catch Weight Item	Net weight kilo	Net weight kilo

Example barcode 1
0280118007040 5
It consists of the following parts:

- **02801180** - Fixed part
- **07040** - Variable part
- **5** - Check Digit

The fixed part identifies the item, as it is 02801180, the item is CW_VGTIN. As the value purpose AI is '*Net weight in Kg*', the variable part contains the weight. The variable part is 07040, and since the number of decimals is 3, the weight is 07.040 = **7.04 kg**.

Example barcode 2
02801290305237
It consists of the following parts:

- **02801290** - Fixed part
- **30523** - Variable part
- **7** - Check Digit

The fixed part identifies the item, as it is 02801290, the item is CW_VGTIN2. As the value purpose AI is '*Net weight in Kg*', the variable part contains the weight. The variable part is 15523, and since the number of decimals is 3, the weight is **30.523kg**.