

**Segment Requirements:**

Seg ID	Segment Name	LOG-NET		Notes
		Req	Req	
ISA	Interchange Control Header	M	✓	
GS	Functional Group Header	M	✓	
ST	Transaction Set Header	M	✓	
BEG	Beginning Segment for Purchase Order	M	✓	Order Number (Transaction ID)
REF	Reference Identification		✓	<i>GDX Version</i>
REF	Reference Identification			<i>Processing Instructions</i>
MSG	Message Text			Order Comments
<b>Item Level</b>				
PO1	Baseline Item Data	M	✓	Item Number
PID	Product/Item Description			Item Description
MEA	Measurements			Number of Cartons Ordered
MEA	Measurements			Total Volume Ordered
MEA	Measurements			Total Weight Ordered
PO4	Item Physical Details			Item Packaging
REF	Reference Identification			<i>Processing Instructions</i>
DTM	Date/Time Reference			Earliest Ship Date
DTM	Date/Time Reference			Last Ship Date
MSG	Message Text			Item Comments
N1	Name		✓	Origin Indicator
N4	Geographic Location		✓	Origin Location
N1	Name		✓	Destination Indicator
N4	Geographic Location		✓	Destination Location
N1	Name			Vendor
N3	Address Information			Vendor Address
N4	Geographic Location			Vendor Location
PER	Administrative Communications Contact			Vendor Contact
<b>Item Detail Level (optional)</b>				
SLN	Subline Item Detail		✓	Item Details
REF	Reference Identification			<i>Processing Instructions</i>
CTT	Transaction Totals		✓	
SE	Transaction Set Trailer	M		
GE	Functional Group Trailer	M		
IEA	Interchange Control Trailer	M		

## ISA Interchange Control Header

To start and identify an interchange of zero or more functional groups and interchange-related control segments.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	I01	Authorization Information Qualifier	M		ID	2/2	"00" = None
02	I02	Authorization Information	M		AN	10/10	not used
03	I03	Security Information Qualifier	M		ID	2/2	"00" = None
04	I04	Security Information	M		AN	10/10	not used
05	I05	Interchange ID Qualifier	M	✓	ID	2/2	Sender's Qualifier
06	I06	Interchange Sender ID	M	✓	AN	15/15	Sender's ID
07	I05	Interchange ID Qualifier	M	✓	ID	2/2	Receiver's Qualifier
08	I07	Interchange Receiver ID	M	✓	AN	15/15	Receiver's ID
09	I08	Interchange Date	M		DT	6/6	
10	I09	Interchange Time	M		TM	4/4	
11	I10	Interchange Control Standards Identifier	M		ID	1/1	"U" = U.S. EDI Community of ASC X12, TDCC, and USC
12	I11	Interchange Control Version Number	M		ID	5/5	"00400" = Standard Issued as ANSI X12.5-1997
13	I12	Interchange Control Number	M	✓	N0	9/9	Assigned by Sender
14	I13	Acknowledgement Requested	M		ID	1/1	"0" = No Acknowledgement Requested "1" = Interchange Acknowledgement Requested
15	I14	Usage Indicator	M		ID	1/1	"I" = Information "P" = Production Data "T" = Test Data "~"
16	I15	Component Element Separator	M			1/1	

## GS Functional Group Header

To indicate the beginning of a functional group and to provide control information.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	479	Functional Identifier Code	M	✓	ID	2/2	"PO" = Purchase Order
02	142	Application Sender's Code	M	✓	AN	2/15	Sender's ID
03	124	Application Receiver's Code	M	✓	AN	2/15	Receiver's ID
04	373	Date	M		DT	8/8	
05	337	Time	M		TM	4/8	
06	28	Group Control Number	M	✓	N0	1/9	Assigned by Sender
07	455	Responsible Agency Code	M		ID	1/2	"X" = Accredited Standards Committee X12
08	480	Version / Release / Industry Identifier Code	M		AN	1/12	"004010" = Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

## ST Transaction Set Header

To indicate the start of a transaction set and to assign a control number.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	143	Transaction Set Identifier Code	M	✓	ID	3/3	"850" = Purchase Order
02	329	Transaction Set Control Number	M	✓	AN	4/9	Assigned by Sender

## BEG Beginning Segment for Purchase Order

To indicate the beginning of the Purchase Order Transaction Set and transmit identifying numbers and dates.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	353	Transaction Set Purpose Code	M	✓	ID	2/2	"00" = Original ( <b>ADD</b> ) "03" = Delete ( <b>DELETE</b> ) "04" = Change ( <b>UPDATE</b> ) "05" = Replace ( <b>REPLACE</b> )  <i>The equivalent Processing Actions have been identified in parentheses. Refer to the <b>Specification Notes</b> section for additional information.</i>
02	92	Purchase Order Type Code	M	✓	ID	2/2	"NE" = New Order "CP" = Change to Purchase Order  <i>if BEG01 = "00", then "NE" if BEG01 ≠ "00", then "CP"</i>
03	324	Purchase Order Number	M	✓	AN	1/22	Order Number (Transaction ID)
04	328	Release Number	O		AN	1/30	not used
05	373	Date	M		DT	8/8	Order Date
06	367	Contract Number	O		AN	1/30	not used
07	587	Acknowledgement Type	O		ID	2/2	not used
08	1019	Invoice Type Code	O		ID	3/3	not used
09	1166	Contract Type Code	O		ID	2/2	not used
10	1232	Purchase Category	O		ID	2/2	not used
11	786	Security Level Code	O		ID	2/2	not used
12	640	Transaction Type Code	O		ID	2/2	not used

## REF Reference Identification

To specify identifying information.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	128	Reference Identification Qualifier	M	✓	ID	2/3	"ZZ" = Mutually Defined
02	127	Reference Identification	X	✓	AN	1/30	"GDX:VERSION"
03	352	Description	X	✓	AN	1/80	"1.0"
04	C040	Reference Identifier	O				not used

## PO1 Baseline Item Data

To specify basic and most frequently used line item data.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	350	Assigned Identification	O		AN	1/20	USED
02	330	Quantity Ordered	X		R	1/15	USED
03	355	Unit or Basis for Measurement Code	O		ID	2/2	USED
04	212	Unit Price	X		R	1/17	USED
05	639	Basis of Unit Price Code	O		ID	2/2	USED
06	235	Product/Service ID Qualifier	X	✓	ID	2/2	"IN" = Buyer's Item Number
07	234	Product/Service ID	X	✓	AN	1/48	Item Number
08	235	Product/Service ID Qualifier	X		ID	2/2	"UP"
09	234	Product/Service ID	X		AN	1/48	UPC Code
10	235	Product/Service ID Qualifier	X		ID	2/2	not used
11	234	Product/Service ID	X		AN	1/48	not used
12	235	Product/Service ID Qualifier	X		ID	2/2	not used
13	234	Product/Service ID	X		AN	1/48	not used
14	235	Product/Service ID Qualifier	X		ID	2/2	not used
15	234	Product/Service ID	X		AN	1/48	not used
16	235	Product/Service ID Qualifier	X		ID	2/2	not used
17	234	Product/Service ID	X		AN	1/48	not used
18	235	Product/Service ID Qualifier	X		ID	2/2	not used
19	234	Product/Service ID	X		AN	1/48	not used
20	235	Product/Service ID Qualifier	X		ID	2/2	not used
21	234	Product/Service ID	X		AN	1/48	not used
22	235	Product/Service ID Qualifier	X		ID	2/2	not used
23	234	Product/Service ID	X		AN	1/48	not used
24	235	Product/Service ID Qualifier	X		ID	2/2	not used
25	234	Product/Service ID	X		AN	1/48	not used

## PID Product/Item Description

To describe a product or process in coded or free-form format.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	349	Item Description Type	M		ID	1/1	"F" = Free-form
02	750	Product/Process Characteristic Code	O		ID	2/3	not used
03	559	Agency Qualifier Code	X		ID	2/2	not used
04	751	Product Description Code	X		AN	1/12	not used
05	352	Description	X		AN	1/80	Item Description
06	752	Surface/Layer/Position Code	O		ID	2/2	not used
07	822	Source Subqualifier	O		AN	1/15	not used
08	1073	Yes/No Condition or Response Code	O		ID	1/1	not used
09	819	Language Code	O		ID	2/3	not used

## MEA Measurements

To specify physical measurements or counts, including dimensions, tolerances, variances, and weights.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	737	Measurement Reference ID Code	O		ID	2/2	"CT" = Counts
02	738	Measurement Qualifier	O		ID	1/3	"QUR" = Reportable Quantity
03	739	Measurement Value	X		R	1/20	Number of Cartons Ordered
04	C001	Composite Unit of Measure	X				"CT" = Carton
05	740	Range Minimum	X		R	1/20	not used
06	741	Range Maximum	X		R	1/20	not used
07	935	Measurement Significance Code	O		ID	2/2	not used
08	936	Measurement Attribute Code	X		ID	2/2	not used
09	752	Surface/Layer/Position Code	O		ID	2/2	not used
10	1373	Measurement Method or Device	O		ID	2/4	not used

## MEA Measurements

To specify physical measurements or counts, including dimensions, tolerances, variances, and weights.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	737	Measurement Reference ID Code	O		ID	2/2	"PD" = Physical Dimensions
02	738	Measurement Qualifier	O		ID	1/3	"VOL" = Volume
03	739	Measurement Value	X		R	1/20	Total Volume Ordered
04	C001	Composite Unit of Measure	X				"CR" = Cubic Meters
05	740	Range Minimum	X		R	1/20	not used
06	741	Range Maximum	X		R	1/20	not used
07	935	Measurement Significance Code	O		ID	2/2	not used
08	936	Measurement Attribute Code	X		ID	2/2	not used
09	752	Surface/Layer/Position Code	O		ID	2/2	not used
10	1373	Measurement Method or Device	O		ID	2/4	not used

## MEA Measurements

To specify physical measurements or counts, including dimensions, tolerances, variances, and weights.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	737	Measurement Reference ID Code	O		ID	2/2	"WT" = Weights
02	738	Measurement Qualifier	O		ID	1/3	"G" = Gross Weight
03	739	Measurement Value	X		R	1/20	Total Weight Ordered
04	C001	Composite Unit of Measure	X				"KG" = Kilograms
05	740	Range Minimum	X		R	1/20	not used
06	741	Range Maximum	X		R	1/20	not used
07	935	Measurement Significance Code	O		ID	2/2	not used
08	936	Measurement Attribute Code	X		ID	2/2	not used
09	752	Surface/Layer/Position Code	O		ID	2/2	not used
10	1373	Measurement Method or Device	O		ID	2/4	not used

## PO4 Item Physical Details

To specify the physical qualities, packaging, weights and dimensions relating to the item.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	356	Pack	O		N0	1/6	Quantity per Carton
02	357	Size	X		R	1/8	not used
03	355	Unit or Basis for Measurement Code	X		ID	2/2	not used
04	103	Packaging Code	X		AN	3/5	not used
05	187	Weight Qualifier	O		ID	1/2	"G"
06	384	Gross Weight per Pack	X		R	1/9	Weight
07	355	Unit or Basis for Measurement Code	X		ID	2/2	USED
08	385	Gross Volume per Pack	X		R	1/9	not used
09	355	Unit or Basis for Measurement Code	X		ID	2/2	not used
10	82	Length	X		R	1/8	not used
11	189	Width	X		R	1/8	not used
12	65	Height	X		R	1/8	not used
13	355	Unit or Basis for Measurement Code	X		ID	2/2	not used
14	810	Inner Pack	O		N0	1/6	USED
15	752	Surface/Layer/Position Code	O		ID	2/2	not used
16	350	Assigned Identification	X		AN	1/20	not used
17	350	Assigned Identification	O		AN	1/20	not used
18	1470	Number	O		N0	1/9	not used

## REF Reference Identification

To specify identifying information.

Refer to the **Specification Notes** section for information on specifying *Processing Instructions*.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	128	Reference Identification Qualifier	M		ID	2/3	"ZZ" = Mutually Defined
02	127	Reference Identification	X		AN	1/30	Refer to the <b>Specification Notes</b> section for valid <i>Processing Instructions</i> .
03	352	Description	X		AN	1/80	Refer to the <b>Specification Notes</b> section for valid <i>Processing Instruction</i> values.
04	C040	Reference Identifier	O				not used

## DTM Date/Time Reference

To specify pertinent dates and times.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	374	Date/Time Qualifier	M		ID	3/3	"037" = Ship Not Before
02	373	Date	X		DT	8/8	Earliest Ship Date
03	337	Time	X		TM	4/8	not used
04	623	Time Code	O		ID	2/2	not used
05	1250	Date Time Period Format Qualifier	X		ID	2/3	not used
06	1251	Date Time Period	X		AN	1/35	not used

## DTM Date/Time Reference

To specify pertinent dates and times.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	374	Date/Time Qualifier	M		ID	3/3	"038" = Ship No Later
02	373	Date	X		DT	8/8	Last Ship Date
03	337	Time	X		TM	4/8	not used
04	623	Time Code	O		ID	2/2	not used
05	1250	Date Time Period Format Qualifier	X		ID	2/3	not used
06	1251	Date Time Period	X		AN	1/35	not used

## N1 Name

To identify a party by type of organization, name and code.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	98	Entity Identifier Code	M	✓	ID	2/3	"SF" = Ship From
02	93	Name	X	✓	AN	1/60	"ORIGIN"
03	66	Identification Code Qualifier	X		ID	1/2	not used
04	67	Identification Code	X		AN	2/80	not used
05	706	Entity Relationship Code	O		ID	2/2	not used
06	98	Entity Identifier Code	O		ID	2/3	not used

## N4 Geographic Location

To specify the geographic place of the named party.

Refer to the **Specification Notes** section for information on specifying *Locations*.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	19	City Name	O		AN	2/30	Origin City
02	156	State or Province Code	O		ID	2/2	Origin State
03	116	Postal Code	O		ID	3/15	Origin Postal Code
04	26	Country Code	O		ID	2/3	Origin Country (ISO code)
05	309	Location Qualifier	X	(see notes)	ID	1/2	"UN" = United Nations Location Code (UNLOCODE)
<i>Refer to the <b>Specification Notes</b> section for additional Location Types.</i>							
06	310	Location Identifier	O		AN	1/30	Origin Location Code

## N1 Name

To identify a party by type of organization, name and code.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	98	Entity Identifier Code	M	✓	ID	2/3	"ST" = Ship To
02	93	Name	X	✓	AN	1/60	"DESTINATION"
03	66	Identification Code Qualifier	X		ID	1/2	USED
04	67	Identification Code	X		AN	2/80	USED
05	706	Entity Relationship Code	O		ID	2/2	not used
06	98	Entity Identifier Code	O		ID	2/3	not used

## N4 Geographic Location

To specify the geographic place of the named party.

Refer to the **Specification Notes** section for information on specifying *Locations*.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	19	City Name	O		AN	2/30	Destination City
02	156	State or Province Code	O		ID	2/2	Destination State
03	116	Postal Code	O		ID	3/15	Destination Postal Code
04	26	Country Code	O		ID	2/3	Destination Country (ISO code)
05	309	Location Qualifier	X	(see notes)	ID	1/2	"UN" = United Nations Location Code (UNLOCODE)

Refer to the **Specification Notes** section for additional *Location Types*.

06	310	Location Identifier	O		AN	1/30	Destination Location Code
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## N1 Name

To identify a party by type of organization, name and code.

This segment is required if any of the following N3, N4 or PER segments possessing Vendor Information are provided.

If this segment is present, then elements N103 and N104 are required.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	98	Entity Identifier Code	M		ID	2/3	"VN" = Vendor
02	93	Name	X		AN	1/60	Vendor's Name
03	66	Identification Code Qualifier	X	(see notes)	ID	1/2	"ZZ" = Mutually Defined
04	67	Identification Code	X	(see notes)	AN	2/80	Vendor's ID
05	706	Entity Relationship Code	O		ID	2/2	not used
06	98	Entity Identifier Code	O		ID	2/3	not used

## N3 Address Information

To specify the location of the named party.

If this segment is provided, then the previous N1 segment (where N101 = "VN") and the following N4 segment (possessing the Vendor's Location) are required as well.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	166	Address Information	M		AN	1/55	Vendor's Address Line-1
02	166	Address Information	O		AN	1/55	Vendor's Address Line-2



## N4 Geographic Location

To specify the geographic place of the named party.

If this segment is provided, then the previous N1 segment (where N101 = "VN") is required as well.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	19	City Name	O		AN	2/30	Vendor's City
02	156	State or Province Code	O		ID	2/2	Vendor's State
03	116	Postal Code	O		ID	3/15	Vendor's Postal Code
04	26	Country Code	O		ID	2/3	Vendor's Country (ISO code)
05	309	Location Qualifier	X		ID	1/2	not used
06	310	Location Identifier	O		AN	1/30	not used

## SLN Subline Item Detail

To specify product subline detail item data.

Refer to the **Specification Notes** section for information pertaining to *Processing Actions* and on specifying *Item Details*.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	350	Assigned Identification	M		AN	1/20	Unique sequential number (starting with "1")
02	350	Assigned Identification	O		AN	1/20	not used
03	662	Relationship Code	M	✓	ID	1/1	"A" = Add ( <b>ADD</b> ) "D" = Delete ( <b>DELETE</b> ) "I" = Included ( <b>REPLACE, UPDATE</b> )
<i>The equivalent Processing Actions have been identified in parentheses. Refer to the <b>Specification Notes</b> section for additional information.</i>							
04	380	Quantity	X		R	1/15	USED
05	C001	Composite Unit of Measure	X				Same as PO103 (item level)
06	212	Unit Price	X		R	1/17	not used
07	639	Basis of Unit Price Code	O		ID	2/2	not used
08	662	Relationship Code	O		ID	1/1	not used
09	235	Product/Service ID Qualifier	X	✓	ID	2/2	"ZZ" = Mutually Defined
10	234	Product/Service ID	X	✓	AN	1/48	First Component
11	235	Product/Service ID Qualifier	X		ID	2/2	"ZZ" = Mutually Defined
12	234	Product/Service ID	X		AN	1/48	Optional Second Component
13	235	Product/Service ID Qualifier	X		ID	2/2	not used
14	234	Product/Service ID	X		AN	1/48	not used
15	235	Product/Service ID Qualifier	X		ID	2/2	not used
16	234	Product/Service ID	X		AN	1/48	not used
17	235	Product/Service ID Qualifier	X		ID	2/2	not used
18	234	Product/Service ID	X		AN	1/48	not used
19	235	Product/Service ID Qualifier	X		ID	2/2	not used
20	234	Product/Service ID	X		AN	1/48	not used
21	235	Product/Service ID Qualifier	X		ID	2/2	not used
22	234	Product/Service ID	X		AN	1/48	not used
23	235	Product/Service ID Qualifier	X		ID	2/2	not used
24	234	Product/Service ID	X		AN	1/48	not used
25	235	Product/Service ID Qualifier	X		ID	2/2	not used
26	234	Product/Service ID	X		AN	1/48	not used
27	235	Product/Service ID Qualifier	X		ID	2/2	not used
28	234	Product/Service ID	X		AN	1/48	not used

## CTT Transaction Totals

To transmit a hash total for a specific element in the transaction set.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	354	Number of Line Items	M		N0	1/6	Number of PO1 segments
02	347	Hash Total	O		R	1/10	not used
03	81	Weight	X		R	1/10	not used
04	355	Unit or Basis for Measurement Code	X		ID	2/2	not used
05	183	Volume	X		R	1/8	not used
06	355	Unit or Basis for Measurement Code	X		ID	2/2	not used
07	352	Description	O		AN	1/80	not used

## SE Transaction Set Trailer

To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	96	Number of Included Segments	M		N0	1/10	
02	329	Transaction Set Control Number	M		AN	4/9	Same as ST02

## GE Functional Group Trailer

To indicate the end of a functional group and to provide control information.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	97	Number of Transaction Sets Included	M		N0	1/6	
02	28	Group Control Number	M		N0	1/9	Same as GS06

## IEA Interchange Control Trailer

To define the end of an interchange of zero or more functional groups and interchange-related control segments.

Ref	Elem ID	Element Name	Req	LOG-NET Req	Data Type	Min/Max	Notes
01	116	Number of Included Functional Groups	M		N0	1/5	
02	112	Interchange Control Number	M		N0	9/9	Same as ISA13