

850 - Purchase Order

EDI Specification

X12/V4010/850: 850 Purchase Order

Version: 1.0

Company: Flexport
Publication: 06/20/2024

850 Ver 1.0	Purchase Order Functional Group=PO
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Purpose: This Draft Standard for Trial Use contains the format and establishes the data contents of the Purchase Order Transaction Set (850) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the placement of purchase orders for goods and services. This transaction set should not be used to convey purchase order changes or purchase order acknowledgment information.

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	ST	Transaction Set Header	M	1			Must use
020	BEG	Beginning Segment for Purchase Order	M	1			Must use
040	CUR	Currency	O	1			Used
060	PER	Administrative Communications Contact	O	3			Used
080	FOB	F.O.B. Related Instructions	O	>1			Must use
150	DTM	Date/Time Reference	O	10			Used
240	TD5	Carrier Details	O	12			Used
	LOOP ID - N9				1000		
295	N9	Reference Identification	O	1			Used
300	MSG	Message Text	O	1000			Used
	LOOP ID - N1				200		
310	N1	Name	O	1			Must use

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	LOOP ID - PO1				100000	N2/010L	
010	PO1	Baseline Item Data	M	1		N2/010	Must use
	LOOP ID - PID				1000		
050	PID	Product/Item Description	M	1			Must use
090	PO4	Item Physical Details	O	>1			Used
100	REF	Reference Identification	O	>1			Used
180	FOB	F.O.B. Related Instructions	O	>1			Used
210	DTM	Date/Time Reference	O	10			Used
250	TD5	Carrier Details	O	12			Used

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
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030	SE	Transaction Set Trailer	M	1			Must use		
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Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage		
	GE	Functional Group Trailer	M	1			Must use		
	IEA	Interchange Control Trailer	M	1			Must use		

Notes:

ISA	Interchange Control Header		
		Pos:	Max: 1
		Not Defined - Mandatory	
		Loop: N/A	Elements: 16

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
ISA01	I01	Authorization Information Qualifier Description: Code to identify the type of information in the Authorization Information		M	ID	2/2	Must use
		Code	Name				
		00	No Authorization Information Present (No Meaningful Information in I02)				
ISA02	I02	Authorization Information Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01) Note: *Must be Space.		M	AN	10/10	Must use
ISA03	I03	Security Information Qualifier Description: Code to identify the type of information in the Security Information		M	ID	2/2	Must use
		Code	Name				
		00	No Security Information Present (No Meaningful Information in I04)				

ISA04	I04	Security Information Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03) Note: *Must be Space.		M	AN	10/10	Must use
ISA05	I05	Interchange ID Qualifier		M	ID	2/2	Must use
		Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified					
		Code	Name				
		ZZ	Mutually Defined				
ISA06	I06	Interchange Sender ID Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element		M	AN	15/15	Must use
ISA07	I05	Interchange ID Qualifier		M	ID	2/2	Must use
		Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified					
ISA08	I07	Interchange Receiver ID Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them Notes: QA/Dev: FLEXPORAS2-TEST Prod: FLEXPORAS2		M	AN	15/15	Must use
		Code	Name				
		ZZ	Mutually Defined				
ISA09	I08	Interchange Date Description: Date of the interchange		M	DT	6/6	Must use
ISA10	I09	Interchange Time Description: Time of the interchange		M	TM	4/4	Must use
ISA11	I10	Interchange Control Standards Identifier		M	ID	1/1	Must use
		Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by					

		the interchange header and trailer					
		Code	Name				
		U	U.S. EDI Community of ASC X12, TDCC, and UCS				
ISA12	I11	Interchange Control Version Number Description: Code specifying the version number of the interchange control segments		M	ID	5/5	Must use
		Code	Name				
		00401	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997				
ISA13	I12	Interchange Control Number Description: A control number assigned by the interchange sender		M	N0	9/9	Must use
ISA14	I13	Acknowledgment Requested Description: Code sent by the sender to request an interchange acknowledgment (TA1)		M	ID	1/1	Must use
		Code	Name				
		0	No Acknowledgment Requested				
		1	Interchange Acknowledgment Requested				
ISA15	I14	Usage Indicator Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information		M	ID	1/1	Must use
		Code	Name				

		P	Production Data				
		T	Test Data				
ISA16	I15	Component Element Separator Description: The component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure		M		1/1	Must use

Example:

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ISA*00* *00* *ZZ*123456789 *ZZ*FLEXPORTEDI*080807*0830*U*00401*000000001*0*P*>
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GS	Functional Group Header		
		Pos:	Max: 1
		Not Defined - Mandatory	
		Loop: N/A	Elements: 8

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
GS01	479	Functional Identifier Code Description: Code identifying a group of application related transaction sets		M	ID	2/2	Must use
		Code	Name				
		PO	Purchase Order (850)				
GS02	142	Application Sender's Code Description: Code identifying party sending transmission; codes agreed to by trading partners		M	AN	2/15	Must use
GS03	124	Application Receiver's Code Description: Code identifying party receiving transmission; codes agreed to by trading partners Notes: QA/Dev: FLEXPORTAS2-TEST Prod: FLEXPORTAS2		M	AN	2/15	Must use
GS04	373	Date Description: Date expressed as CCYYMMDD		M	DT	8/8	Must use
GS05	337	Time Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds		M	TM	4/8	Must use

		(00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)					
GS06	28	Group Control Number Description: Assigned number originated and maintained by the sender		M	N0	1/9	Must use
GS07	455	Responsible Agency Code Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480		M	ID	1/2	Must use
		Code	Name				
		X	Accredited Standards Committee X12				
GS08	480	Version / Release / Industry Identifier Code Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and sub release level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed		M	AN	1/12	Must use
		Code	Name				
		004010	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997				

Semantics:

1.	GS04 is the group date.
2.	GS05 is the group time.
3.	The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Example:

GS*PO*123456789*FLEXPORTEDI*20080807*0830*1*X*004010~

ST	Transaction Set Header		
		Pos: 010	Max: 1
		Heading - Mandatory	
		Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
ST01	143	Transaction Set Identifier Code Description: Code uniquely identifying a Transaction Set		M	ID	3/3	Must use
		Code	Name				
		850	Purchase Order				
ST02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set		M	AN	4/9	Must use

Semantics:

1.	The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
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Example:

ST*850*000104660~

BEG	Beginning Segment for Purchase Order		
		Pos: 020	Max: 1
		Heading - Mandatory	
		Loop: N/A	Elements: 5

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
BEG01	353	Transaction Set Purpose Code Description: Code identifying purpose of transaction set		M	ID	2/2	Must use
		Code	Name				
		00	Original				
		01	Cancellation				
		04	Change (Flexport will replace original PO with the change PO)				
		05	Replace				
		53	Completion				
BEG02	92	Purchase Order Type Code Description: Code specifying the type of Purchase Order		M	ID	2/2	Must use
		Code	Name				
		KN	Purchase Order				
BEG03	324	Purchase Order Number		M	AN	1/22	Must use

			Description: Identifying number for Purchase Order assigned by the orderer/purchaser				
	BEG04	328	Release Number Description: Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	O	AN	1/30	Used
	BEG05	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use

Semantics:

1. BEG05 is the date assigned by the purchaser to the purchase order.

Example:

BEG*00*KN*708861*67654*20190812~

CUR	Currency		
		Pos: 040	Max: 1
		Heading - Optional	
		Loop: N/A	Elements: 2

User Option (Usage): Used

Purpose: To specify the currency (dollars, pounds, francs, etc.) used in a transaction

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
CUR01	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual		M	ID	2/3	Must use
		Code	Name				
		ZZ	Mutually Defined				
CUR02	100	Currency Code Description: Code (Standard ISO) for country in whose currency the charges are specified		M	ID	3/3	Must use

Example:

CUR*ZZ*USD~

PER	Administrative Communications Contact		
		Pos: 060	Max: 1
		Heading - Optional	
		Loop: N/A	Elements: 6

User Option (Usage): Used

Purpose: To identify a person or office to whom administrative communications should be directed

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
PER01	366	Contact Function Code Description: Code identifying the major duty or responsibility of the person or group named		M	ID	2/2	Must use
		Code	Name				
		VN	Vendor (Seller Contact)				
		BD	BD Buyer Name or Department (Buyer Contact)				
		OW	Owner				
		SH	Shipper Contact				
		ED	Emergency Contact-Consignee				
		FC	Forwarder Contact (Freight Forwarder)				
		NT	Notification				

			Contact (NotifyParty)				
		BA	Broker (Customs Broker)				
		TM	Transmitter (Carrier)				
		ME	Manufacturing				
		AG	Agent (Buyer/Seller Agent)				

PER02	93	Name	M	AN	1/60	Must use
		Description: Free-form name				

PER03	365	Communication Number Qualifier	C	ID	2/2	Used
		Description: Code identifying the type of communication number				

		Code	Name			
		TE	Telephone			

PER04	364	Communication Number	C	AN	1/80	Used
		Description: Complete communications number including country or area code when applicable				

PER05	365	Communication Number Qualifier	C	ID	2/2	Used
		Description: Code identifying the type of communication number				

		Code	Name			
		EM	Electronic Mail			

PER06	364	Communication Number	C	AN	1/80	Used
		Description: Complete communications number including country or area code when applicable				

PER07	365	Communication Number Qualifier	C	ID	2/2	Used
		Description: Code identifying the type of communication number				

		Code	Name			
		FX	Facsimile			

PER08	364	Communication Number	C	AN	1/80	Used
		Description: Complete communications number including country or area code				

		when applicable					
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Syntax Rules:

1.	If either PER03 or PER04 is present, then the other is required.
2.	If either PER05 or PER06 is present, then the other is required.
3.	If either PER07 or PER08 is present, then the other is required.

Example:

PER*BD*CUSTOMER PO CONTACT*TE*800-555-5555*EM*Test@test.com*FX*630-351-7334

FOB	F.O.B. Related Instructions		
		Pos: 080	Max: >1
		Heading - Mandatory	
		Loop: N/A	Elements: 7

User Option (Usage): Used

Purpose: To specify transportation instructions relating to shipment

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
FOB01	146	Shipment Method of Payment Description: Code identifying payment terms for transportation charges		M	ID	2/2	Must use
		Code	Name				
		CC	Collect				
		PP	Prepaid (by Seller)				
FOB02	309	Location Qualifier Description: Code identifying type of location		C	ID	1/2	Used
		Code	Name				
		OR	Origin (Shipping Point)				
FOB03	352	Description Description: A free-form description to clarify the related data elements and their content		C	AN	1/80	Used

		Notes: Use 3 char loc code, IATA Port, UNLOC Code or valid port name. One standard must be used and applied to all PO's that are transmitted. Enum: unlocode,iata,icao,us_cbp					
FOB04	334	Transportation Terms Qualifier Code Description: Code identifying the source of the transportation terms		C	ID	2/2	Used
		Code	Name				
		01	Incoterms				
FOB05	335	Transportation Terms Code Description: Code identifying the trade terms which apply to the shipment transportation responsibility		C	ID	3/3	Used
		Code	Name				
		CFR	Cost and Freight				
		CIF	Cost, Insurance, and Freight				
		CIP	Carriage and Insurance Paid To				
		CPT	Carriage Paid To				
		DAP	Delivered at Place				
		DAT	Delivered at Terminal				
		DDP	Delivered Duty Paid				
		EXW	Ex Works				
		FAS	Free Alongside Ship				
		FOB	Free on Board				
FOB06	309	Location Qualifier Description: Code identifying type of location		C	ID	1/2	Used
		Code	Name				
		DE	Destination (Shipping)				
FOB07	352	Description Description: A free-form description to clarify the related data elements and their content		C	AN	1/80	Used

		Notes: Use 3 char loc code, IATA Port, UNLOC Code or valid port name. One standard must be used and applied to all PO's that are transmitted . Enum: unlocode,iata,icao,us_cbp				
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Syntax Rules:

1.	C0302 - If FOB03 is present, then FOB02 is required.
2.	C0405 - If FOB04 is present, then FOB05 is required.
3.	C0706 - If FOB07 is present, then FOB06 is required.

Semantics:

1.	FOB01 indicates which party will pay the carrier.
2.	FOB02 is the code specifying transportation responsibility location.
3.	FOB06 is the code specifying the title passage location.

Example:

FOB*CC*OR*TWKHH*01*DAP*DE*SNJ~

DTM	Date/Time Reference		
		Pos: 150	Max: 10
		Heading - Optional	
		Loop: N/A	Elements: 3

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
DTM01	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time Notes: 038 "Ship no Later" is used as "Cargo Ready Date" 010 is used as "Must Arrive By Date"		M	ID	3/3	Must use
		Code	Name				
		038	Ship No Later				
		010	Requested Ship				
DTM02	373	Date Description: Date expressed as CCYYMMDD		M	DT	8/8	Must use
DTM03	337	Time Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or		C	TM	4/8	Not used

		HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)				
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Syntax Rules:

1. R020305 - At least one of DTM02 or DTM03 are required
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Example:

DTM*038*20241005~ DTM*010*20241210~
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TD5	Carrier Details (Routing Sequence/Transit Time)	
		Pos: 240 Max: 12
		Heading - Optional
		Loop: N/A Elements: 4

User Option (Usage): Used

Purpose: To specify the carrier and sequence of routing and provide transit time information

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
TD501	133	Routing Sequence Code Description: Code describing the relationship of a carrier to a specific shipment movement		M	ID	1/2	Must use
		Code	Name				
		O	Origin Carrier (Air, Motor, or Ocean)				
TD502	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)		C	ID	1/2	Not used
TD503	67	Identification Code Description: Code identifying a party or other code		C	AN	2/80	Not used
TD504	91	Transportation Method/Type		M	ID	1/2	Must Use

			Code					
			Description: Code specifying the method or type of transportation for the shipment					
			Code	Name				
			A	Air				
			M	Motor (Common Carrier)				
			R	Rail				
			S	Ocean				

Syntax Rules:

1.	R0204050612 - At least one of TD502, TD504, TD505, TD506 or TD512 is required.
2.	C0203 - If TD502 is present, then TD503 is required.

Example:

TD5*O***S~

Loop Reference Identification			
		Pos: 295	Repeat: 1000
		Optional	
		Loop: N9	Elements: N/A

User Option (Usage): Used

Purpose: To transmit identifying information as specified by the Reference Identification Qualifier

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
300	MSG	Message Text	O	1000		Used

MSG	Message Text			
			Pos: 300	Max: 1000
			Heading - Optional	
			Loop: N9	Elements: 1

User Option (Usage): Used

Purpose: To provide a free-form format that allows the transmission of text information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MSG01	933	Free-Form Message Text Description: Free-form message text	M	AN	1/264	Must use

Example:

MSG*PLEASE SHIP BY WEEK OF 9/29 THRU 10/5~

Loop Name		
	Pos: 310	Repeat: 200
	Optional	
	Loop: N1	Elements: N/A

User Option (Usage): Used

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
310	N1	Name	O	1		Used

N1	Name	
	Pos: 310	Max: 1
	Heading - Optional	
	Loop: N1	Elements: 4

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
N101	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual		M	ID	2/3	Must use
		Code	Name				
		SU	Supplier				
		BT	Bill To				
		HA	Owner				
		SH	Shipper				
		CN	Consignee				
		FW	Forwarder (Freight Forwarder)				
		NP	Notify Party for Shipper's Order				
		CB	Customs Broker				
		CA	Carrier				
		MF	Manufacturer of Goods				
		AG	Agent/Agency (Buyer Agent)				

		EV	Selling Agent				
N102	93	Name Description: Free-form name		O	AN	1/60	Not Used
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67) Notes: See notes below segment.		M	ID	1/2	Must use
		Code	Name				
		ZZ	Mutually Defined				
N104	67	Identification Code Description: Code identifying a party or other code Notes: Identification codes must represent origin location code and destination location codes.		M	AN	2/80	Must use

Syntax Rules:

1.	R0203 - At least one of N102 or N103 is required.
2.	P0304 - N103 is present, then N104 is required.

Notes:

When N101 = "SU" then N103 is "ZZ" and N104 is "origin_location_ref"
When N101 = "BT" then N103 is "ZZ" and N104 is "destination_location_ref"

Example:

N1*SU*DISTRIBUTING COMPANY*9*0154585215317~ N1*BT*CARDINAL HEALTH*US*21199~
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Loop Baseline Item Data					
				Pos: 010	Repeat: 100000
				Mandatory	
				Loop: PO1	Elements: N/A

User Option (Usage): Must use

Purpose: To specify basic and most frequently used line item data

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
010	PO1	Baseline Item Data	M	1		Must use
050		Loop PID	O		1000	Used

PO1		Baseline Item Data				
					Pos: 010	Max: 1
					Detail - Mandatory	
					Loop: PO1	Elements: 21

User Option (Usage): Must use

Purpose: To specify basic and most frequently used line item data

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage	
PO101	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set		M	AN	1/20	Must Use	
PO102	330	Quantity Ordered Description: Quantity ordered		M	R	1/15	Must use	
PO103	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		M	ID	2/2	Must use	
		Code	Name					
		"BBL","CAR","CGM","CKG","CM","CM2","CTN","CYK","DOZ","DPC","DPR","DS","FBM","G","GBQ","GR","GRL","HUN","IRG","JWL","K","KG","KM3","KM","KWH","L","LNM","M	Each					

			"M2","M3","MBQ","NO","OS G","PCS","PDG","PFL","PK", "PRS","PTG","PX","RHG","R UG","T","TDWB","THS","W"," X","20","21","2W","43","AS"," BA","BC","BD","BG","BJ","BK ","BN","BO","BU","BX","CA"," CB","CC","CF","CG","CI","CN ","CP","CQ","CR","CS","CT"," CX","CY","DF","DH","DIS","D R","DZ","EA","FT","GA","GR AM","GS","IN","JO","JR","LB" ","LF","LT","MM","MP","MR"," MT","OZ","PC","PQ","PR","P S","PT","QT","RA","RL","RM" ","RO","SC","SF","SH","SI","S J","SL","SM","SO","SQ","ST", "SV","SX","SY","TE","TN","T O","UN","YD","Z3"				
PO104	212	Unit Price Description: Price per unit of product, service, commodity, etc.		C	R	1/17	Used
PO105	639	Basis of Unit Price Code Description: Code identifying the type of unit price for an item		C	ID	2/2	Used
PO106	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)		C	ID	2/2	Used
		Code	Name				
		BP	Buyer's Part Number				
PO107	234	Product/Service ID Description: Identifying number for a product or service		C	AN	1/48	Used
PO108	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)		C	ID	2/2	Used
		Code	Name				
		VP	Vendor's (Seller's) Part Number				
PO109	234	Product/Service ID Description: Identifying number for a product or service		C	AN	1/48	Used

PO1010	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)		C	ID	2/2	Used	
		Code	Name					
		SK	Stock Keeping Unit (SKU)					
PO1011	234	Product/Service ID Description: Identifying number for a product or service		C	AN	1/48	Used	
PO1012	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)		C	ID	2/2	Used	
		Code	Name					
		UL	U.P.C. Coupon Code (1-5-5-1)					
PO1013	234	Product/Service ID Description: Identifying number for a product or service		C	AN	1/48	Used	
PO1014	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)		C	ID	2/2	Used	
		Code	Name					
		ST	Style Number					
PO1015	234	Product/Service ID Description: Identifying number for a product or service		C	AN	1/48	Used	
PO1016	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)		C	ID	2/2	Used	
		Code	Name					
		CL	Color					

PO1017	234	Product/Service ID Description: Identifying number for a product or service		C	AN	1/48	Used
PO1018	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)		C	ID	2/2	Used
		Code	Name				
		LT	Lot Number				
PO1019	234	Product/Service ID Description: Identifying number for a product or service		C	AN	1/48	Used
PO1020	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)		C	ID	2/2	Used
		Code	Name				
		CL	Country of Origin Code				
PO1021	234	Product/Service ID Description: Identifying number for a product or service		C	AN	1/48	Used

Syntax Rules:

1.	C0302 - If PO103 is present, then PO102 is required.
2.	C0504 - If PO105 is present, then PO104 is required.
3.	P0607 - If either PO106 or PO107 is present, then the other is required.
4.	P0809 - If either PO108 or PO109 is present, then the other is required.
5.	P1011 - If either PO110 or PO111 is present, then the other is required.
6.	P1213 - If either PO112 or PO113 is present, then the other is required.
7.	P1415 - If either PO114 or PO115 is present, then the other is required.
8.	P1617 - If either PO116 or PO117 is present, then the other is required.
9.	P1819 - If either PO118 or PO119 is present, then the other is required.
10.	P2021 - If either PO120 or PO121 is present, then the other is required.

Example:

PO1*1*630*EA***BP*QG20009-HDV*VP*AJ-QG20009~

Loop Product/Item Description			
		Pos: 050	Repeat: 1000
		Optional	
		Loop: PID	Elements: N/A

User Option (Usage): Used

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
050	PID	Product/Item Description	O	1		Used

PID	Product/Item Description			
			Pos: 050	Max: 1
			Detail - Optional	
			Loop: PID	Elements: 5

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
PID01	349	Item Description Type Description: Code indicating the format of a description		M	ID	1/1	Must use
		Code	Name				
		F	Free-form				
PID02	750	Product/Process Characteristic Code Description: Code identifying the general class of a product or process characteristic		O	ID	2/3	Not used
PID03	559	Agency Qualifier Code Description: Code identifying the agency assigning the code values		C	ID	2/2	Not used
PID04	751	Product Description Code Description: A code from an industry code list which provides specific data about a product characteristic		C	AN	1/12	Not used
PID05	352	Description Description: A free-form description to clarify the related data elements and their content		M	AN	1/80	Must Use

Syntax Rules:

1.	C0403 - If PID04 is present, then PID03 is required.
2.	R0405 - At least one of PID04 or PID05 is required.

Semantics:

1.	Use PID03 to indicate the organization that publishes the code list being referred to.
2.	PID04 should be used for industry-specific product description codes.

Example:

PID*F**** PRODUCT1~

PO4	Item Physical Details		
		Pos: 060	Max: >1
		Detail - Optional	
		P04	Elements: 13

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
PO405	187	Weight Qualifier Description: Code specifying the type of weight		C	ID	1/2	Must use
		Code	Name				
		G	Gross Weight				
		N	Net Weight				
PO406	384	Gross Weight per Pack Description: Numeric value of gross weight per pack		C	ID	1/9	Used
PO407	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		C	ID	2/2	Used
		Code	Name				
		EA	Each				
PO408	385	Gross Volume per Pack Description: Numeric value of gross volume per pack		C	R	1/9	Used
PO409	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		C	ID	2/2	Used
		Code	Name				
		"BBL", "CAR", "CGM", "CKG", "CM", "CM2", "CTN", "CYK", "D					

			OZ","DPC","DPR","DS","FB M","G","GBQ","GR","GRL"," HUN","IRG","JWL","K","KG"," "KM3","KM","KWH","L","LNM ","M","M2","M3","MBQ","NO" ,"OSG","PCS","PDG","PFL"," PK","PRS","PTG","PX","RH G","RUG","T","TDWB","THS" ,"W","X","20","21","2W","43" ,"AS","BA","BC","BD","BG","B J","BK","BN","BO","BU","BX" ,"CA","CB","CC","CF","CG"," CI","CN","CP","CQ","CR","C S","CT","CX","CY","DF","DH" ,"DIS","DR","DZ","EA","FT"," GA","GRAM","GS","IN","JO" ,"JR","LB","LF","LT","MM","M P","MR","MT","OZ","PC","PQ ","PR","PS","PT","QT","RA"," RL","RM","RO","SC","SF","S H","SI","SJ","SL","SM","SO" ,"SQ","ST","SV","SX","SY","T E","TN","TO","UN","YD","Z3"				
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PO410	82	Length Description: Largest horizontal dimension of an object measured when the object is in the upright position		C	R	1/8	Used	
PO411	189	Width Description: Shorter measurement of the two horizontal dimensions measured with the object in the upright position		C	R	1/8	Used	
PO412	65	Height Description: Vertical dimension of an object measured when the object is in the upright position		C	R	1/8	Used	
PO413	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		C	ID	2/2	Used	
		Code	Name					
		"BBL","CAR","CGM","CKG"," CM","CM2","CTN","CYK","D OZ","DPC","DPR","DS","FB M","G","GBQ","GR","GRL"," HUN","IRG","JWL","K","KG"," KM3","KM","KWH","L","LNM" ,"M","M2","M3","MBQ","NO"," OSG","PCS","PDG","PFL","P K","PRS","PTG","PX","RHG",						

		"RUG","T","TDWB","THS"," W","X","20","21","2W","43"," AS","BA","BC","BD","BG","BJ ","BK","BN","BO","BU","BX"," CA","CB","CC","CF","CG","CI ","CN","CP","CQ","CR","CS", "CT","CX","CY","DF","DH","D IS","DR","DZ","EA","FT","GA ","GRAM","GS","IN","JO","JR ","LB","LF","LT","MM","MP"," MR","MT","OZ","PC","PQ","P R","PS","PT","QT","RA","RL", "RM","RO","SC","SF","SH", SI","SJ","SL","SM","SO","SQ ","ST","SV","SX","SY","TE", TN","TO","UN","YD","Z3"					
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Syntax Rules:

1.	C0506: If PO4-05 is present, then PO4-06 is required.
2.	P0607: If either PO4-06 or PO4-07 is present, then the other is required.
3.	P0809: If either PO4-08 or PO4-09 is present, then the other is required
4.	C1013: If PO4-10 is present, then PO4-13 is required
5.	C1113: If PO4-11 is present, then PO4-13 is required
6.	C1213: If PO4-12 is present, then PO4-13 is required
7.	L13101112: If PO4-13 is present, then at least one of PO4-10, PO4-11 or PO4-12 is required
8.	PO413 defines the unit of measure for PO410, PO411, and PO412.

Example:

P04*****G*48.4*EA*56*EA*7*5*9*****~

REF	Reference Identification		
		Pos: 050	Max: >1
		Heading - Optional	
		Loop: N/A	Elements: 2

User Option (Usage): Used

Purpose: To specify transportation instructions relating to shipment

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification		M	ID	2/3	Must use
		Code	Name				
		PG	Product Group				

REF02	127	Reference Identification Description: Code identifying type of location		M	AN	1/30	Must use
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Syntax Rules:

1. At least one of REF02 or REF03 is required.
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Example:

REF*PG*Product Group~

FOB	F.O.B. Related Instructions		
		Pos: 080	Max: >1
		Heading - Mandatory	
		Loop: N/A	Elements: 7

User Option (Usage): Used

Purpose: To specify transportation instructions relating to shipment

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
FOB01	146	Shipment Method of Payment Description: Code identifying payment terms for transportation charges		M	ID	2/2	Must use
		Code	Name				
		CC	Collect				
		PP	Prepaid (by Seller)				
FOB02	309	Location Qualifier Description: Code identifying type of location		C	ID	1/2	Used
		Code	Name				
		OR	Origin (Shipping Point)				
FOB03	352	Description Description: A free-form description to clarify the related data elements and their content Notes: Use 3 char loc code, IATA Port, UNLOC Code or valid port name. One standard must be used and applied to all PO's that are transmitted. Enum: unlocode,iata,icao,us_cbp		C	AN	1/80	Used
FOB04	334	Transportation Terms Qualifier Code Description: Code identifying the source of the transportation terms		C	ID	2/2	Used
		Code	Name				

		01	Incoterms				
FOB05	335	Transportation Terms Code Description: Code identifying the trade terms which apply to the shipment transportation responsibility		C	ID	3/3	Used
		Code	Name				
		CFR	Cost and Freight				
		CIF	Cost, Insurance, and Freight				
		CIP	Carriage and Insurance Paid To				
		CPT	Carriage Paid To				
		DAP	Delivered at Place				
		DAT	Delivered at Terminal				
		DDP	Delivered Duty Paid				
		EXW	Ex Works				
		FAS	Free Alongside Ship				
		FOB	Free on Board				
FOB06	309	Location Qualifier Description: Code identifying type of location		C	ID	1/2	Used
		Code	Name				
		DE	Destination (Shipping)				
FOB07	352	Description Description: A free-form description to clarify the related data elements and their content Notes: Use 3 char loc code, IATA Port, UNLOC Code or valid port name. One standard must be used and applied to all PO's that are transmitted .Enum: unlocode,iata,icaao,us_cbp		C	AN	1/80	Used

Syntax Rules:

1.	C0302 - If FOB03 is present, then FOB02 is required.
2.	C0405 - If FOB04 is present, then FOB05 is required.
3.	C0706 - If FOB07 is present, then FOB06 is required.

Semantics:

1.	FOB01 indicates which party will pay the carrier.
2.	FOB02 is the code specifying transportation responsibility location.
3.	FOB06 is the code specifying the title passage location.

Example:

FOB*CC*OR*TWKHH*01*DAP*DE*SNJ~

DTM	Date/Time Reference		
		Pos: 150	Max: 10
		Heading - Optional	
		Loop: N/A	Elements: 3

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
DTM01	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time Notes: 038 "Ship no Later" is used as "Cargo Ready Date" 010 is used as "Must Arrive By Date"		M	ID	3/3	Must use
		Code	Name				
		038	Ship No Later				
		010	Requested Ship				
DTM02	373	Date Description: Date expressed as CCYYMMDD		M	DT	8/8	Must use
DTM03	337	Time Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)		C	TM	4/8	Not used

Syntax Rules:

1. R020305 - At least one of DTM02 or DTM03 are required
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Example:

DTM*038*20241005~
DTM*010*20241210~

TD5	Carrier Details (Routing Sequence/Transit Time)		
		Pos: 240	Max: 12
		Heading - Optional	
		Loop: N/A	Elements: 4

User Option (Usage): Used

Purpose: To specify the carrier and sequence of routing and provide transit time information

Element Summary:

Ref	Id	Element Name		Req	Type	Min/Max	Usage
TD501	133	Routing Sequence Code Description: Code describing the relationship of a carrier to a specific shipment movement		M	ID	1/2	Must use
		Code	Name				
		O	Origin Carrier (Air, Motor, or Ocean)				
TD502	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)		C	ID	1/2	Not used
TD503	67	Identification Code Description: Code identifying a party or other code		C	AN	2/80	Not used
TD504	91	Transportation Method/Type Code Description: Code specifying the method or type of transportation for the shipment		M	ID	1/2	Must Use
		Code	Name				
		A	Air				
		M	Motor (Common Carrier)				
		R	Rail				
		S	Ocean				

Syntax Rules:

1.	R0204050612 - At least one of TD502, TD504, TD505, TD506 or TD512 is required.
2.	C0203 - If TD502 is present, then TD503 is required.

Example:

TD5*O***S~

Loop Transaction Totals			
		Pos: 010	Repeat: 1
		Optional	
		Loop: CTT	Elements: N/A

User Option (Usage): Used

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
010	CTT	Transaction Totals	O	1		Used

CTT Transaction Totals			
		Pos: 010	Max: 1
		Summary - Optional	
		Loop: CTT	Elements: 2

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT01	354	Number of Line Items	M	N0	1/6	Must use
		Description: Total number of line items in the transaction set				
CTT02	347	Hash Total	O	R	1/10	Used
		Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs.				

Example:

CTT*10*11500~

SE	Transaction Set Trailer		
		Pos: 030	Max: 1
		Summary - Mandatory	
		Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE01	96	Number of Included Segments Description: Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

Example:

SE*43*000104660~

GE	Functional Group Trailer		
		Pos:	Max: 1
		Not Defined - Mandatory	
		Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GE01	97	Number of Transaction Sets Included Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use

Semantics:

1.	The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.
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IEA	Interchange Control Trailer		
		Pos:	Max: 1
		Not Defined - Mandatory	
		Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
	IEA01	I16	Number of Included Functional Groups Description: A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
	IEA02	I12	Interchange Control Number Description: A control number assigned by the interchange sender	M	N0	9/9	Must use

DATA FILE EXAMPLE: NEW PO

ST*850*000104660~
BEG*00*NE*708861**20190812~
CUR*BY*USD~
PER*IC*CUSTOMER PO CONTACT*TE*800-555-5555*EM*Test@test.com*FX*630-351-7334~
FOB*CC*OR*TWKHH*01*DAP*DE*SNJ~
DTM*038*20191005~
DTM*010*20191210~
TD5*O***S~
MSG*PLEASE SHIP BY WEEK OF 9/29 THRU 10/5~
N1*SU*VENDOR1*US*21199~
N1*BT*DISTRIBUTING COMPANY*9*0154585215317~
PO1*1*630*EA*3.94**BP*QG20009-HDV*VP*AJ-QG20009~
PID*F****PRODUCT1~
P04*****G*48.4*EA*56*EA*7*5*9*****~
REF*PG*Product Group/Category~
FOB*CC*OR*TWKHH*01*DAP*DE*SNJ~
DTM*038*20191005~
DTM*010*20191210~
TD5*O***S~
PO1*2*5000*EA*33.69**BP*QG2243CAM-HDV*VP*AJ-QG2243CAM~
PID*F****PRODUCT2~
P04*****G*18.4*EA*56*EA*7*5*9*****~
REF*PG*Product Group/Category~
FOB*CC*OR*TWKHH*01*DAP*DE*SNJ~
DTM*038*20191005~
DTM*010*20191210~
TD5*O***S~
PO1*3*100*EA***BP*QG4247CAM-HDV*VP*AJ-QG2249CAM~
PID*F****PRODUCT3~
P04*****G*8.4*EA*56*EA*7*5*9*****~
REF*PG*Product Group/Category~
FOB*CC*OR*TWKHH*01*DAP*DE*SNJ~
DTM*038*20191005~
DTM*010*20191210~
TD5*O***S~
CTT*3*11500~
SE*29*000104660~