

EDI GUIDE

XML - ORDERS01



Who should read this document?

This document is for EDI-administrators who will implement this EDI-guide to be able to send XML-IDOC orders to Bosch Rexroth AG.

Explanation of usage:

First of all, the usage of each segment has to be considered, so if a segment is mandatory (M), it has to appear in the data file.

It might happen, that a segment itself is optional (O), but the elements within the segment are declared as mandatory. This means, it is not required that the segment is included, but as soon as the segment is in data file, the mandatory fields must be filled.

The same procedure has to be applied to segment groups and segments: A segment group can be optional, while the contained segments are mandatory. In this case all mandatory segments of a segment group has to appear in the data file, if you decide to use this segment group.

The declaration as mandatory of certain segment groups, segments or fields may differ from the description of the standard SAP ORDERS01. We have changed the declaration of some elements from optional to mandatory as they are important for our processes. Organizational data such as AG, LF may differ from the examples provided, based on the relevant scenario of a customer relationship (Incoming ORDERS)

Attention:

This message structure is used for both Order messages (ORDERS) and Order Confirmation messages (ORDRSP)!

Note that

- **only MANDATORY (M) segments must contain a value!**
- **each segment/field with MIN > 0 must be created!**
- **with the exception that optional segments (e.g. <E1EDK14 segment=1>) can be completely omitted!**

If you have questions to this guide, send an e-mail to: SupportSales.EDI@de.bosch.com

tag	min	max	O/M	content/example	description
<?xml version="1.0" encoding="UTF-8" ?> <ORDERS01>	1	1			
<IDOC BEGIN=1>	1	-1			
<EDI_DC40 SEGMENT = 1>	1	1	M		Control record: addressing the message
<TABNAM></TABNAM>	1	1		EDI_DC40 or empty	
<MANDT></MANDT>	1	1			client
<DOCNUM></DOCNUM>	1	1			idoc number
<DOCREL></DOCREL>	1	1			release
<STATUS></STATUS>	1	1			status of idoc
<DIRECT></DIRECT>	0	1	O 2		direction
<OUTMOD></OUTMOD>	1	1			output mode
<EXPRSS></EXPRSS>	1	1			overriding in inbound processing
<TEST></TEST>	1	1			test flag
<IDOCTYP></IDOCTYP>	1	1	M	ORDERS01	name of basic type
<CIMTYP></CIMTYP>	1	1			extension
<MESTYP></MESTYP>	1	1	M	Either ORDERS or ORDRSP	message type
<MESCOD></MESCOD>	1	1			message code
<MESFCT></MESFCT>	1	1			message function
<STD></STD>	1	1			EDI standard, flag
<STDVRS></STDVRS>	1	1			EDI standard, version
<STDMES></STDMES>	1	1			message type
<SNDPOR></SNDPOR>	1	1			sender port
<SNDPRT></SNDPRT>	1	1	M	KU	partner type of sender
<SNDPFC></SNDPFC>	1	1	M	AG	partner function of sender
<SNDRPN></SNDRPN>	1	1	M	sender number in target system	sender address
<SNDSAD></SNDSAD>	1	1			logical address of sender
<SNDLAD></SNDLAD>	1	1			receiver port
<RCVPOR></RCVPOR>	1	1	M	LI	partner type of recipient
<RCVPRT></RCVPRT>	1	1	M	LF	partner number of recipient
<RCVPFC></RCVPFC>	1	1	M	recipient number in own system	recipient address
<RCVPRN></RCVPRN>	1	1			logical address of recipient
<RCVSAD></RCVSAD>	1	1	M	sending date (YYYYMMDD)	created on
<RCVLAD></RCVLAD>	1	1			time created
<CREDAT></CREDAT>	1	1			transmission file
<CRETIM></CRETIM>	1	1			message group
<REFINT></REFINT>	1	1			message
<REFGRP></REFGRP>	1	1			key for external archive
<REFMES></REFMES>	1	1			serialization
<ARCKEY></ARCKEY>	1	1			
<SERIAL></SERIAL>	1	1			
</EDI_DC40>					
<E1EDK01 SEGMENT=1>	1	1	M		E1EDK01 : Document header general data
<ACTION></ACTION>	0	1			Action code for the whole EDI message
<KZABS></KZABS>	0	1			Flag: order acknowledgment required
<CURCY></CURCY>	1	1	M	message currency e. g. EUR	Currency
<HWAER></HWAER>	0	1			EDI local currency
<WKURS></WKURS>	0	1			Exchange rate
<ZTERM></ZTERM>	0	1			Terms of payment key
<KUNDEUINR></KUNDEUINR>	0	1			VAT registration number
<EIGENUINR></EIGENUINR>	0	1			VAT registration number
<BSART></BSART>	0	1			Document type
<BELNR></BELNR>	1	1	M	order/order confirmation number	IDOC document number
<NTGEW></NTGEW>	0	1			Net weight
<BRGEW></BRGEW>	0	1			Net weight
<GEWEI></GEWEI>	0	1			Weight unit
<FKART_RL></FKART_RL>	0	1			Invoice list type
<ABLAD></ABLAD>	0	1			Unloading point
<BSTZD></BSTZD>	0	1			Purchase order number supplement
<VSART></VSART>	0	1			Shipping conditions
<VSART_BEZ></VSART_BEZ>	0	1			Description of the shipping type
<RECIPT_NO></RECIPT_NO>	0	1			Number of recipient (for control via the ALE model)
<KZAZU></KZAZU>	0	1			Order combination indicator
<AUTLF></AUTLF>	0	1			Complete delivery defined for each sales order?
<AUGRU></AUGRU>	0	1			Order reason (reason for the business transaction)
<AUGRU_BEZ></AUGRU_BEZ>	0	1			Description
<ABRVW></ABRVW>	0	1			Usage indicator
<ABRVW_BEZ></ABRVW_BEZ>	0	1			Description
<FKTYP></FKTYP>	0	1			Billing category
<LIFSK></LIFSK>	0	1			Delivery block (document header)
<LIFSK_BEZ></LIFSK_BEZ>	0	1			Description
<EMPST></EMPST>	0	1			Receiving point
<ABTNR></ABTNR>	0	1			Department number
<DELCO></DELCO>	0	1			Agreed delivery time

tag	min	max	O/M	content/example	description
<WKURS_M></WKURS_M> </E1EDK01>	0	1			Indirectly quoted exchange rate in an IDoc segment
<E1EDK14 SEGMENT=1> <QUALF></QUALF> <ORGID></ORGID> </E1EDK14>	0	-1	O		E1EDK14 : Document Header Organizational Data IDOC qualifier organization IDOC organization
<E1EDK03 SEGMENT=1> <IDDAT></IDDAT> <DATUM></DATUM> <UZEIT></UZEIT> </E1EDK03>	2	-1	M		E1EDK03 : Document header date segment Qualifier for IDOC date segment
	1	1	O	001 = order date	
			M	002 = requested delivery date	
			O	011 = creation date	
			M	012 = document date	
			O	013 = quotation date supplier	
	1	1			Date
	0	1			Time
<E1EDK04 SEGMENT=1> <MWSKZ></MWSKZ> <MSATZ></MSATZ> <MWSBT></MWSBT> <TXJCD></TXJCD> <KTEXT></KTEXT> </E1EDK04>	0	-1	O		E1EDK04 : Document header taxes VAT indicator VAT rate Value added tax amount Jurisdiction for tax calculation - tax jurisdiction code Text Field
	0	1			
	1	1	M		
	1	1	M		
	0	1			
	0	1			
<E1EDK05 SEGMENT=1> <ALCKZ></ALCKZ> <KSCHL></KSCHL> <KOTXT></KOTXT> <BETRG></BETRG> <KPERC></KPERC> <KRATE></KRATE> <UPRBS></UPRBS> <MEAUN></MEAUN> <KOBTR></KOBTR> <MWSKZ></MWSKZ> <MSATZ></MSATZ>	0	-1	O		E1EDK05 : Document header conditions Surcharge or discount indicator Condition type (coded) Condition text Fixed surcharge/discount on total gross Condition percentage rate Condition record per unit Price unit Unit of measurement IDoc condition end amount VAT indicator VAT rate
	0	1			
	0	1			
	0	1			
	0	1			
	0	1			
	0	1			
	0	1			
	0	1			
	0	1			
	0	1			
	0	1			
	0	1			
	0	1			

<KOEIN></KOEIN>
</E1EDK05>

0 1

Currency

tag

min max O/M content/example

description

<E1EDKA1 SEGMENT=1>

<PARVW></PARVW>

2 -1 M
1 1 M

AG = buyer
M LF = supplier
O WE = consignee (ship to)
O RE = party to be billed
O EK = buyers agent
O ZM = contact party
O RG = payer
O VR = sellers agent
O SP = carrier

E1EDKA1 : Document Header Partner Information
Partner function (e.g. sold-to party, ship-to party, ...)

<PARTN></PARTN>

1 1 M

partner number

Partner number

<LIFNR></LIFNR>

0 1

Vendor number at customer location

<NAME1></NAME1>

1 1 M

name1

Name 1

<NAME2></NAME2>

0 1 O

name2

Name 2

<NAME3></NAME3>

0 1 O

name3

Name 3

<NAME4></NAME4>

0 1 O

name4

Name 4

<STRAS></STRAS>

1 1 M

street

Street and house number 1

<STRS2></STRS2>

0 1

Street and house number 2

<PFACH></PFACH>

0 1

P.O. Box

<ORT01></ORT01>

1 1 M

city

City

<COUNC></COUNC>

0 1

County code

<PSTLZ></PSTLZ>

1 1 M

postal code

Postal code

<PSTL2></PSTL2>

0 1

P.O. Box postal code

<LAND1></LAND1>

1 1 M

country

Country key

<ABLAD></ABLAD>

0 1

Unloading point

<PERNR></PERNR>

0 1

Contact person's personnel number

<PARNR></PARNR>

0 1

Contact person's number (not personnel number)

<TELF1></TELF1>

0 1 O

phone

1st telephone number of contact person

<TELF2></TELF2>

0 1

2nd telephone number of contact person

<TELBX></TELBX>

0 1

Telebox number

<TELFX></TELFX>

0 1 O

fax

Fax number

<TELT></TELT>

0 1

Teletex number

<TELX1></TELX1>

0 1

Telex number

<SPRAS></SPRAS>

1 1 M

language
DE = Germany
FR = France
... (other ISO-Codes)

Language key

<ANRED></ANRED>

0 1

FormOfAddr

<ORT02></ORT02>

0 1

District

<HAUSN></HAUSN>

0 1

House number

<STOCK></STOCK>

0 1

Floor

<REGIO></REGIO>

0 1

Region

<PARGE></PARGE>

0 1

Partner's gender

<ISOAL></ISOAL>

0 1

Country ISO code

<ISONU></ISONU>

0 1

Country ISO code

<FCODE></FCODE>

0 1

Company key (France)

<IHREZ></IHREZ>

0 1

Your reference (Partner)

<BNAME></BNAME>

0 1 O

contact

IDoc user name

<PAORG></PAORG>

0 1

IDOC organization code

<ORGTX></ORGTX>

0 1

IDoc organization code text

<PAGRU></PAGRU>

0 1

IDoc group code

<KNREF></KNREF>

0 1

Customer description of partner (plant, storage location)

<ILNRR></ILNRR>

0 1

Character field, length 70

<PFORT></PFORT>

0 1

PO Box city

<SPRAS_ISO></SPRAS_ISO>

0 1

Language according to ISO 639

<TITLE></TITLE>

0 1

Title

</E1EDKA1>

<E1EDK02 SEGMENT=1>

<QUALF></QUALF>

1 -1 M
1 1 M

001 = customer order number
O 002 = vendor order (MANDATORY, if ORDRSP)
O 004 = vendor quotation
O 010 = internal number
O 044 = ship-to party's purchase order

E1EDK02 : Document header reference data
Idoc qualifier reference document

<BELNR></BELNR>

1 1 M

document number

Idoc document number

<POSNR></POSNR>

0 1

Item number

<DATUM></DATUM>

0 1 O

document date

Date

<UZEIT></UZEIT>

0 1

Time

</E1EDK02>

<E1EDK17 SEGMENT=1>

<QUALF></QUALF>

0 -1 O
0 1

E1EDK17 : Document Header Terms of Delivery
Idoc qualifier: Terms of delivery

<LKOND></LKOND>

0 1

Idoc delivery condition code

tag	min	max	O/M	content/example	description
<LKTEXT></LKTEXT> </E1EDK17>	0	1			Idoc delivery condition text
<E1EDK18 SEGMENT=1> <QUALF></QUALF> <TAGE></TAGE> <PRZNT></PRZNT> <ZTERM_TXT></ZTERM_TXT> </E1EDK18>	0	-1	O		E1EDK18 : Document Header Terms of Payment Idoc qualifier: Terms of payment Idoc Number of days Idoc percentage for terms of payment Text line
<E1EDKT1 SEGMENT=1> <TDID></TDID> <TSSPRAS></TSSPRAS> <TSSPRAS_ISO></TSSPRAS_ISO> <TDOBJECT></TDOBJECT> <TDOBNAME></TDOBNAME> <E1EDKT2 SEGMENT=1> <TDLINE></TDLINE> <TDFORMAT></TDFORMAT> </E1EDKT2> </E1EDKT1>	0	-1	O	001 for header text DE = German EN = English ... (other ISO-Codes)	E1EDKT1 : Document Header Text Identification Text ID Language key Language according to ISO 639 Texts: application object Name
<E1EDP01 SEGEMENT=1> <POSEX></POSEX> <ACTION></ACTION> <PSTYP></PSTYP> <KZABS></KZABS> <MENGE></MENGE> <MENE></MENE> <BMNG2></BMNG2> <PMENE></PMENE> <ABFTZ></ABFTZ> <VPREI></VPREI> <PEINH></PEINH> <NETWR></NETWR> <ANETW></ANETW> <SKFBP></SKFBP> <NTGEW></NTGEW> <GEWEI></GEWEI> <EINKZ></EINKZ> <CURCY></CURCY> <PREIS></PREIS> <MATKL></MATKL> <UEPOS></UEPOS> <GRKOR></GRKOR> <EVERS></EVERS> <BPUMN></BPUMN> <BPUMZ></BPUMZ> <ABGRU></ABGRU> <ABGRT></ABGRT> <ANTLF></ANTLF> <FIXMG></FIXMG> <KZAZU></KZAZU> <BRGEW></BRGEW> <PSTYV></PSTYV> <EMPST></EMPST> <ABTNR></ABTNR> <ROUTE_BEZ></ROUTE_BEZ> <LGORT></LGORT> <VSTEL></VSTEL> <DELCO></DELCO> <MATNR></MATNR> <VALTG></VALTG> <HIPOS></HIPOS> <HIEVW></HIEVW> <POSGUID></POSGUID> <E1EDP02 SEGMENT=1> <QUALF></QUALF> <BELNR></BELNR> <ZEILE></ZEILE> <DATUM></DATUM> <UZEIT></UZEIT>	1	-1	M	line item number quantity unit of measure price net value (quantity x price) currency	E1EDP01: Document Item General Data Documentation Item number Action code for the item Item Category Flag: order acknowledgment required Quantity Unit of measure Quantity in price unit Price unit of measure Agreed cumulative quantity Price (net) Price unit Item value (net) Absolute net value of item Amount qualifying for cash discount Net weight Weight unit Flag: More than one schedule line for the item Currency Gross price Idoc material class Higher-level item in BOM structures Delivery group (items delivered together) Shipping instructions Denominator for conv. of order price unit into order unit Numerator for conversion of order price unit into order unit Reason for rejection of quotations and sales orders Description Maximum number of partial deliveries allowed per item Delivery date and quantity fixed Order combination indicator Total weight Sales document item category Receiving point Department number Description Storage location Shipping point/receiving point Agreed delivery time Idoc material ID Additional value days Superior item in an item hierarchy Use of Hierarchy Item ATP: Encryption of DELNR and DELPS
<E1EDP02 SEGMENT=1> <QUALF></QUALF> <BELNR></BELNR> <ZEILE></ZEILE> <DATUM></DATUM> <UZEIT></UZEIT>	0	-1	O	001 = customer order number 002 = vendor order 010 = internal number 044 = ship to party's purchase order	E1EDP02 : Document Item Reference Data Idoc qualifier reference document Idoc document number Item number Date Time

<BSARK></BSARK>	0	1
<IHREZ></IHREZ>	0	1
</E1EDP02>		

Idoc organization
Your reference (Partner)

tag	min	max	O/M	content/example	description
<E1EDP03 SEGMENT=1>	1	-1	M		E1EDP03 : Document Item Date Segment
<IDDAT></IDDAT>	1	1	M	002 = requested delivery date	Qualifier for IDOC date segment
			O	011 = creation date	
<DATUM></DATUM>	1	1	M	date	Date
<UZEIT></UZEIT>	1	1	M		Time
</E1EDP03>					
<E1EDP04 SEGMENT=1>	0	-1	O		E1EDP04 : Document Item Taxes
<MWSKZ></MWSKZ>	0	1			VAT indicator
<MSATZ></MSATZ>	0	1			VAT rate
<MWSBT></MWSBT>	0	1			Value added tax amount
<TXJCD></TXJCD>	0	1			Jurisdiction for tax calculation - tax jurisdiction code
<KTEXT></KTEXT>	0	1			Text Field
</E1EDP04>					
<E1EDP05 SEGMENT=1>	0	-1	O		E1EDP05 : Document Item Conditions
<ALCKZ></ALCKZ>	0	1			Surcharge or discount indicator
<KSCHL></KSCHL>	0	1			Condition type (coded)
<KOTXT></KOTXT>	0	1			Condition text
<BETRG></BETRG>	0	1			Fixed surcharge/discount on total gross
<KPERC></KPERC>	0	1			Condition percentage rate
<KRATE></KRATE>	0	1			Condition record per unit
<UPRBS></UPRBS>	0	1			Price unit
<MEAUN></MEAUN>	0	1			Unit of measurement
<KOBTR></KOBTR>	0	1			Idoc condition end amount
<MENGE></MENGE>	0	1			Price scale quantity (SPEC2000)
<PREIS></PREIS>	0	1			Price by unit of measure (SPEC2000)
<MWSKZ></MWSKZ>	0	1			VAT indicator
<MSATZ></MSATZ>	0	1			VAT rate
<KOEIN></KOEIN>	0	1			Currency
<CURTP></CURTP>	0	1			Currency type and valuation view
<KOBAS></KOBAS>	0	1			Base value to which condition refers
</E1EDP05>					
<E1EDP20 SEGMENT=1>	1	1	M		E1EDP20 : IDoc schedule lines
<WMENG></WMENG>	1	1	M	quantity	Scheduled quantity
<AMENG></AMENG>	0	1			Previous scheduled quantity
<EDATU></EDATU>	1	1	M	delivery date	Date
<EZEIT></EZEIT>	0	1			Time
<EDATU_OLD></EDATU_OLD>	0	1			Date

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<EZEIT_OLD></EZEIT_OLD>
<ACTION></ACTION>
</E1EDP20>
```

```
0 1
0 1
```

Time
Action code for the item

tag	min	max	O/M	content/example	description
<E1EDPA1 SEGMENT=1>	0	-1	O		E1EDPA1 : item partner information
<PARVW></PARVW>	1	1	M	WE = consignee	Partner function (e.g. sold-to party, ship-to party, ...)
<PARTN></PARTN>	1	1	M		Partner number
<LIFNR></LIFNR>	0	1			Vendor number at customer location
<NAME1></NAME1>	1	1	M		Name 1
<NAME2></NAME2>	0	1			Name 2
<NAME3></NAME3>	0	1			Name 3
<NAME4></NAME4>	0	1			Name 4
<STRAS></STRAS>	1	1	M		Street and house number 1
<STRS2></STRS2>	0	1			Street and house number 2
<PFACH></PFACH>	0	1			P.O. Box
<ORT01></ORT01>	1	1	M		City
<COUNC></COUNC>	0	1			County code
<PSTLZ></PSTLZ>	0	1			Postal code
<PSTL2></PSTL2>	0	1			P.O. Box postal code
<LAND1></LAND1>	0	1			Country key
<ABLAD></ABLAD>	0	1			Unloading point
<PERNR></PERNR>	0	1			Contact person's personnel number
<PARNR></PARNR>	0	1			Contact person's number (not personnel number)
<TELF1></TELF1>	0	1	O		1st telephone number of contact person
<TELF2></TELF2>	0	1			2nd telephone number of contact person
<TELBX></TELBX>	0	1			Telebox number
<TELFX></TELFX>	0	1	O		Fax number
<TELTXT></TELTXT>	0	1			Teletex number
<TELX1></TELX1>	0	1			Telex number
<SPRAS></SPRAS>	0	1	M	DE = German, EN = English,	Language key, ISO-Code
<ANRED></ANRED>	0	1			FormOfAddr
<ORT02></ORT02>	0	1			District
<HAUSN></HAUSN>	0	1			House number
<STOCK></STOCK>	0	1			Floor
<REGIO></REGIO>	0	1			Region
<PARGE></PARGE>	0	1			Partner's gender
<ISOAL></ISOAL>	0	1			Country ISO code
<ISONU></ISONU>	0	1			Country ISO code
<FCODE></FCODE>	0	1			Company key (France)
<IHREZ></IHREZ>	0	1			Your reference (Partner)
<BNAME></BNAME>	0	1			Idoc user name
<PAORG></PAORG>	0	1			Idoc organization code
<ORGTX></ORGTX>	0	1			Idoc organization code text
<PAGRU></PAGRU>	0	1			Idoc group code
<KNREF></KNREF>	0	1			Customer description of partner (plant, storage location)
<ILNNR></ILNNR>	0	1			Character field, length 70
<PFORT></PFORT>	0	1			PO Box city
<SPRAS_ISO></SPRAS_ISO>	0	1			Language according to ISO 639
<TITLE></TITLE>	0	1			Title
</E1EDPA1>					
<E1EDP19 SEGMENT=1>	1	-1	M		E1EDP19 : Document Item Object Identification
<QUALF></QUALF>	1	1	M	001 = customer material O 002 = vendor material	Idoc object identification such as material no.,customer
<IDTNR></IDTNR>	1	1	M	material number	Idoc material ID
<KTEXT></KTEXT>	0	1	O	material description	Idoc short text
<MFRPN></MFRPN>	0	1			Manufacturer part number
<MFRNR></MFRNR>	0	1			Manufacturer number
</E1EDP19>					
<E1EDP17 SEGMENT=1>	0	-1	O		E1EDP17 : Document item terms of delivery
<QUALF></QUALF>	0	1			Idoc qualifier: Terms of delivery
<LKOND></LKOND>	0	1			Idoc delivery condition code
<LKTEXT></LKTEXT>	0	1			Idoc delivery condition text
<LPRIOR></LPRIOR>	0	1			Delivery priority
</E1EDP17>					
<E1EDP18 SEGMENT=1>	0	-1	O		E1EDP18 : Document Item Terms of Payment
<QUALF></QUALF>	0	1			Idoc qualifier: Terms of payment
<TAGE></TAGE>	0	1			Idoc Number of days
<PRZNT></PRZNT>	0	1			Idoc percentage for terms of payment
<ZTERM_TXT></ZTERM_TXT>	0	1			Text line
</E1EDP18>					
<E1EDPT1 SEGMENT=1>	0	-1	O		E1EDPT1 : Document Item Text Identification
<TDID></TDID>	0	1	M	004 for line item text	Text ID
<TSSPRAS></TSSPRAS>	0	1			Language key
<TSSPRAS_ISO></TSSPRAS_ISO>	0	1	M	DE = German, EN = English,	Language according to ISO 639
<E1EDPT2 SEGMENT=1>	0	-1	O		E1EDPT2 : Document Item Texts
<TDLINE></TDLINE>	0	1	M	text	Text line
<TDFORMAT></TDFORMAT>	0	1			Tag column
</E1EDPT2>					


```

</E1EDPT1>
</E1EDP01>
  
```

tag	min	max	O/M	content/example	description
<E1EDS01 SEGMENT=1>	0	-1	M		E1EDS01 : Summary segment totals.
<SUMID></SUMID>	1	1	M	001 = number of line items	Qualifier for totals segment for shipping notification
<SUMME></SUMME>	1	1	M	002 = document amount (net)	Total value of sum segment
<SUNIT></SUNIT>	0	1	M	amount	Total value unit for totals segment in the shipping notif.
<WAERQ></WAERQ>	0	1			Currency
</E1EDS01>					
</IDOC>					
</ORDERS01>					